

Integrated Report 2023

# ***JGC* Report**

***Enhancing planetary health***



Facing a critical phase for  
sustainable growth

Providing **"realistic solutions"** to  
further boost corporate value

Fiscal 2023 marks the third year since embarking on the JGC Group's medium-term business plan "Building a Sustainable Planetary Infrastructure 2025 (BSP 2025)." Over this time, the market environment that the JGC Group is involved in has undergone unforeseen changes, driven by the sudden increase in demand for LNG on the back of energy security and the rapid generation of markets in the sustainability sector toward low-carbon and decarbonization.

The JGC Group had leveraged its technical expertise to provide "realistic solutions" for responding properly to these changes in the market environment—today, we are aware that we are facing a critical phase for achieving sustainable growth.

We are committed to further enhancing corporate value toward accomplishing the goals of "BSP 2025" and achieving the purpose of "Enhancing planetary health" as raised in our long-term management vision, "2040 Vision."

# Enhancing planetary health

The JGC Group's purpose is defined to reflect its message of creating a more prosperous future by pursuing the intertwined health of humans and the earth.

## Editorial Policy

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### Purpose of This Report

The purpose of the JGC Report, which was first published in 2015, is to explain to stakeholders how the JGC Group works to generate sustainable growth and increase corporate value over the medium to long term. JGC uses this report as a tool to communicate with stakeholders as part of its efforts to deliver sustainable growth through continuous, constructive dialogue.

### Organizations Covered

In this report, "JGC Group" and "the Group" refer to JGC Holdings Corporation and its subsidiary operating companies.

### Period Covered

In principle, the report covers the period from April 2022 to March 2023 (fiscal 2022), but also includes information related to events from April 2023.

### Information Provided

The JGC Report summarizes and presents the most relevant information related to the JGC Group and society. For detailed and comprehensive financial and non-financial information about the Group, please visit the JGC website.

### Forward-Looking Statements

Data and forecasts disclosed in this report are based on judgments and information available at the time of publication. The Company provides no guarantee for targets, forecasts, and earnings projections, which may change due to a range of factors.

### Reference Guidelines

JGC Report 2023 was compiled referring to the disclosure framework of the IFRS Foundation and the World Intellectual Capital Initiative (WICI), as well as "Guidance for Collaborative Value Creation" of the Ministry of Economy, Trade and Industry (METI).

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## Message from the Chairman and CEO



### **Significant boost to ROE in fiscal 2022**

In JGC Report 2022, the previous fiscal year's integrated report, I outlined the fact that we are facing the challenge of having to address the two seemingly contradictory issues of responding to today's growing global demand for energy and accelerating decarbonization efforts toward building a sustainable society.

As we work toward enhancing the five business areas ("Energy transition," "Healthcare & life sciences," "High-performance functional materials," "Circular economy," and "Industrial & urban infrastructure") required by society and by industry as set forth in the 2040 Vision, through the processes for achieving a sustainable society, I outlined how the JGC Group, based on its technical expertise, needs to be an equal partner—a collaborator—providing realistic solutions, whether to countries, clients, or a range of other stakeholders who face these contradictory issues.

Looking back at fiscal 2022, I felt that it was a year marked by significant moves worldwide toward addressing these two pressing issues. Demand for LNG development soared in the

wake of the Russia-Ukraine situation, and there was major progress with new construction plans and expansion plans for existing LNG plants in the U.S., the Middle East, Africa and other regions. As energy demand recovers in the wake of COVID-19, efforts are being made for looking into restarting LNG plans that had been temporarily put on hold, while oil and gas development plans are starting to take shape in Middle East oil-producing countries in response to growing demand for energy. There are signs of new production plans for hydrogen/fuel ammonia and sustainable aviation fuel (SAF) becoming evident worldwide like the U.S., Australia and the Middle East, and progress has also been made here in Japan.

With such international moves to respond to growing energy demands and accelerate efforts toward decarbonization, the JGC Group fulfilled its role of playing an active role toward achieving these plans as a corporate group providing truly realistic solutions.

Specifically, the JGC Group secured contracts including a floating LNG (FLNG) plant in Malaysia, an ethylene plant in the U.S., and a gas and oil separation plant in Saudi Arabia, as well as a hydrogen production plant and SAF production

# CEO Message

## Critical phase for achieving sustainable growth

### Masayuki Sato

Representative Director, Chairman, and Chief Executive Officer (CEO)

Has worked in finance and accounting since joining JGC in 1979, overseeing finance for the Middle East, North Africa, Southeast Asia, and CIS projects.

Appointed as a director in June 2010, CFO and Managing Director, Senior General Manager of the Corporate Administrative & Financial Affairs Division in July 2011, and Executive Vice President in June 2012. Has served as Representative Director and Chairman as of June 2014 and additionally CEO as of June 2017.

plant in Japan, resulting in a high ¥824 billion in new contracts for the Total Engineering Business. The business had significantly higher sales and earnings compared to fiscal 2021 levels, as a result of ensuring proper risk management for projects already underway in Japan and overseas, as well as market recovery in the Functional Materials Manufacturing Business. Above all, net profit attributable to owners of the parent recovered to ¥30,665 million, following low figures in fiscal 2019 and 2020, and the net loss posted in fiscal 2021, while return of equity (ROE) improved to 7.8% from the low levels posted over the past several years.

### Setting our sights on achieving the financial targets of BSP 2025

Fiscal 2023 marks the third year of the BSP 2025 medium-term business plan covering the five-year period from fiscal 2021 to 2025, positioned as the first phase of the 2040 Vision. Over the past two years, we have made steady progress toward the three key BSP 2025 strategies of transforming EPC operations, expanding manufacturing business

for high-performance functional materials, and establishing future engines of growth. This is bringing about a shift in our business portfolio, which had been centered on the oil and gas sector, toward the five business areas set for expansion in the 2040 Vision.

Meanwhile, we secured ¥824 billion in contracts in fiscal 2022, and set our fiscal 2023 forecasts to net sales of ¥800 billion, operating profit of ¥38 billion and net profit attributable to owners of the parent of ¥32 billion. This means we are well on the way to achieving the financial targets of BSP 2025 of net sales of ¥800 billion, operating profit of ¥60 billion and net profit attributable to owners of the parent of ¥45 billion. We are anticipating ROE of around 7.8% for fiscal 2023, which also brings the BSP 2025 target of 10% into sight.

I feel that we are fulfilling our role of "Enhancing planetary health" that the JGC Group redefined as purpose in the long-term management vision, 2040 Vision, and we are now approaching a critical phase for achieving sustainable growth.

The current issues faced worldwide are those for which the JGC Group's 2040 Vision set out to develop solutions—balancing energy stability with decarbonization and reducing

## Message from the Chairman and CEO

the environmental impact of resource consumption. In order to achieve steady, ongoing growth, I firmly believe that the JGC Group needs to significantly increase corporate value into the future, as an engineering company wholeheartedly committed to expanding the five mentioned business areas, diversifying its business models, and providing realistic solutions with its technical expertise, on the course charted in the 2040 Vision.

The Russia-Ukraine situation has brought about sudden increases in demand for LNG, and markets in the sustainability sector are being developed at a rapid pace to create a sustainable society. Instead of viewing any unexpected changes like these that may arise going forward—or changes that are more intense than anticipated—as risks that adversely affect corporate value in markets closely associated with the JGC Group's business strategies, I feel that it will be vital to fully embrace such changes into our business strategies as opportunities to achieve sustained growth.

## Resources for sustainable growth — Further strengthening human capital

In addition to pushing ahead with business strategies by expanding business areas and diversifying business models, the JGC Group recognizes that reinforcing management resources that support these strategies is essential for achieving sustainable growth.

I view strengthening human capital as the most important issue to address among management resources that have a major impact on achieving sustainable growth for the JGC Group. Our existing efforts toward improving human capital involved systematic and ongoing training for design engineers and human resources associated with projects, such as project managers supervising the execution of projects under our main Total Engineering Business segment. I am confident that these human resources formed the linchpin of the JGC Group's prowess in the Total Engineering Business.

Implementing measures will be essential for securing more skilled human capital to expand into a broad range of business areas beyond the oil and gas sector and diversifying business





models that had been centered on the EPC Business under the 2040 Vision. With this in mind, we are currently clarifying the required human resources portfolio and developing diverse human resources training policies and specific training programs.

We are also working to ensure those human resources remain highly motivated, developing a workplace environment that brings growth in the human resources required by the Company. In fiscal 2022, the personnel system was changed to one based on the Pay for VALUE concept, where each individual's compensation reflects their roles and job responsibilities, and in fiscal 2023, compensation of employees at JGC Holdings Corporation, JGC Corporation and JGC Japan Corporation was increased by an average of 10%. We are also making a concerted effort toward inclusion and diversity, enhancing engagement with our employees, and implementing a wide array of measures to enable diverse human resources to make the most of their own capabilities.

I am acutely aware that human capital is the most important management foundation with which the JGC Group can achieve sustainable growth, and I intend to make further improvements in this area going forward.

## Wrapping up

I have worked for the JGC Group for more than 40 years, since joining the Company in 1979 and being appointed director in 2010, as well as in my capacity as Chairman and CEO starting from 2017.

The JGC Group has long been engaged in the EPC Business for plants in the oil and gas sector as its core operations in the Total Engineering Business, and has achieved close to consistent growth by constantly expanding markets and diversifying our targeted plants. I view the key corporate values created by the JGC Group to be its contributions toward the stable supply of energy, economic growth and employment opportunities in resource-rich countries, and the advancement of human resources.

As the world currently moves toward a sustainable society, I believe the corporate value that will be generated by the JGC Group will vastly and broadly exceed our past corporate value by providing realistic solutions for expanding the five business areas that includes energy transition, as a corporate group contributing to a healthy future for people and the planet by redefining the purpose of the 2040 Vision as "Enhancing planetary health."

Looking back over the past 95 years of the JGC Group, I strongly feel that fiscal 2023 represents a critical phase for the JGC Group in achieving sustainable growth for the future as a corporate group. As CEO, I am committed to fulfilling my responsibilities with the goals of sustainable growth and further increased corporate value.

I sincerely request the continued support of all our shareholders.

## Message from the President and COO

# COO Message

## Changes in the market environment considered to be a tailwind

### Tadashi Ishizuka

Representative Director, President and Chief Operating Officer (COO)

Managed numerous projects outside of Japan after initially working in the Domestic Project Construction Division in 1972. Appointed Managing Director and Senior General Manager of the Project Operation Services Division in June 2008, Senior Managing Director in 2010, Executive Vice President and Board Director in June 2011, Senior Executive Vice President and CPO in February 2017, President and COO in June of that year.

### Overview of fiscal 2022 — Second-highest level of new contracts recorded

As recovery of the post-pandemic resources market became evident, we made sure to tap into the increasing capital investments by oil majors and national oil companies in oil-producing countries, and secured contracts including a gas and oil separation plant in Saudi Arabia, an FLNG plant in Malaysia, and an ethylene plant in the U.S. As a result, we recorded the second-highest level of new contracts ever in fiscal 2022 for the Total Engineering Business, amounting to ¥824 billion—around 2.5-fold that of fiscal 2021—made up of ¥696 billion in the overseas sector and ¥128 billion in the domestic sector, against target contracts of ¥840 billion. Fiscal 2022 was also the year we made a concerted effort to carve out a market in the sustainability sector such as hydrogen/fuel ammonia and SAF, where we secured orders for EPC projects in Japan, as well as feasibility studies (FS) and front-end engineering and design (FEED) contracts overseas.

In terms of business performance, both net sales and profits for each quarter exceeded the business forecasts at the

beginning of the year. In particular, we achieved an 11.0% gross profit ratio—which indicates the potential profitability of an engineering company—two points higher than the 9.0% forecast at the start of the fiscal year. This was due to factors that included the impact of a weaker yen, greater profitability for projects underway in the Total Engineering Business, and the recovery of demand in the chemical catalyst and fine chemical markets in the Functional Materials Manufacturing Business. Ever since I was appointed President, I feel that the seeds of transformation have well and truly taken hold in the Total Engineering Business. This has been achieved by carefully examining and analyzing the risks of target projects and selecting those guaranteed to deliver profits, as well as ensuring the utmost risk management for projects that have been secured. Going forward, we will continue monitoring the various developments related to our projects, and continue focusing on curbing project risks to the extent possible.

### Steadily engaging in key BSP 2025 strategies

During fiscal 2022, the second year of the medium-term business plan BSP 2025, we continued to work on the



three key BSP 2025 strategies—transformation of EPC operations, expansion of manufacturing business for high-performance functional materials, and establishment of future engines of growth—in order to achieve the numerical targets of BSP 2025, as well as expanding the five business areas and diversifying business models. I commend the results we have accomplished.

For the transformation of EPC operations, we established JGC INDIA EPC PRIVATE LIMITED in August 2022 as a new operations center in Chennai, India, and added staff with a view to increasing capacity to work on EPC contracts that respond to the sudden growth in the market for LNG and other plants. From the stance of enhancing our EPC execution capabilities, the use of our proprietary J•I•Module™ (JGC Integrated Module) construction method in the LNG Canada Project currently in progress in Canada was successful for completing the modules forming part of the project. With an increase in projects calling for modular construction anticipated in the future, I feel that our advanced EPC execution capabilities left a strong positive impression amongst our customers. Fiscal 2023 marked the first year that EPC DX was rolled out of full-scale deployment, and it is already being used in projects underway in regions such as Canada, Iraq and Saudi Arabia, with further plans in place

for use in newly secured projects going forward. In pharmaceuticals where there remains a high level of capital investment, we secured numerous contracts in fiscal 2022 and established a strong position as an engineering company specializing in sectors where strong demand is anticipated in the future, such as vaccines and biopharmaceuticals. In light of this, the construction project for a facility for the manufacture of small and mid-size molecule drugs for Chugai Pharmaceutical Co., Ltd. was selected as the Category Winner for Innovation in the Facility of the Year Awards of the International Society for Pharmaceutical Engineering (ISPE), reinforcing our position as a top contractor in the pharmaceutical sector.

To address the objective of "expansion of manufacturing business for high-performance functional materials" the holding company JGC Holdings Corporation appointed a new Chief Manufacturing Officer (CMO) and highlighted our commitment to the Functional Materials Manufacturing Business. We developed systems for rolling out measures such as rapidly made capital investments in this business that is prone to significant changes. In the Catalysts and Fine Chemicals sector, we began full-scale investments in fiscal 2023 by acquiring new land in Fukuoka and Niigata prefectures with a view to achieving growth by 2030. In Fine

## Message from the President and COO

Ceramics sector, we made decisions on capital investments for increasing production of high thermal conductivity silicon nitride substrates for EV power semiconductors, and also acquired land for a new plant in Miyagi Prefecture. In this way, we are moving ahead with capital investments with an eye firmly on meeting growing demand in the future.

Toward "establishing future engines of growth," we accurately identified the rapid pace of growth of the market in the hydrogen/fuel ammonia and SAF sectors, and played a significant role as the leader in these sectors, by securing a contract for the blue hydrogen and ammonia production pilot facility for INPEX CORPORATION, establishing SAFFAIRE SKY ENERGY LLC with Cosmo Oil Co., Ltd. and Revo International Inc. to start the SAF project, as well as securing a contract for a SAF production plant planned at the Sakai Refinery of Cosmo Oil Co., Ltd. Overseas. In fiscal 2023, we secured a contract for a hydrogen production plant in Australia planned by Sumitomo Corporation and other partners, helping Japanese trading companies to achieve sustainable projects planned for overseas.

During fiscal 2023, we will continue to build on efforts toward the three key strategies.

### Fiscal 2023 order target and earnings forecast

We are targeting the same ¥800 billion level of orders as in fiscal 2022 for the Total Engineering Business in fiscal 2023, made up of ¥620 billion for the overseas EPC Business and ¥180 billion for the domestic EPC business, based on the continued strong appetite for investment by oil majors and national oil companies in oil-producing countries, as well as progress with plans for hydrogen/fuel ammonia and SAF in the sustainability sector in Japan and overseas, and the ongoing capital investment forecast in the pharmaceuticals sector for vaccine production and biopharmaceuticals in Japan.

For Energy Solutions of the overseas EPC business, we are aiming to secure LNG contracts in regions such as the Middle East and Africa, with a primary focus on the LNG sector, where demand is soaring.

I attended "LNG2023," the largest global LNG industry conference and exhibition held in Vancouver, Canada from July 10 to 13, where I had the opportunity to meet with numerous clients from oil majors and national oil companies in oil-producing countries. Clients planning investments in LNG developments to tap into the soaring demand for LNG highly praised the technical expertise and project execution

capabilities of the JGC Group. With many requesting our cooperation to achieve their plans, I gained a keen sense of anticipation going forward.

In Sustainable Solutions, we are aiming to secure FEED and other contracts for hydrogen/fuel ammonia projects planned by Japanese trading companies and local subsidiaries in regions that include the U.S., Australia, the Middle East, and Southeast Asia, and I hope to leverage these orders to secure EPC contracts in fiscal 2024 and beyond. For Facility Solutions, we are looking to secure contracts for renewable energy, semiconductors and chemical-related projects in the Middle East and the U.S. Following on from fiscal 2022, we are aiming to secure additional contracts for pharmaceuticals plants, hydrogen/fuel ammonia facilities and battery projects in the domestic EPC business.

Forecasts for fiscal 2023 are net sales of ¥800 billion, gross profit of ¥68 billion, operating profit of ¥38 billion, ordinary profit of ¥45 billion, and net profit attributable to owners of the parent of ¥32 billion. We recorded new contracts exceeding ¥824 billion in fiscal 2022, and as net sales are expected from these projects, we anticipate significantly higher sales compared to fiscal 2022, with increased profits forecast for each stage with the exception of ordinary profit.

Meanwhile, the gross profit ratio is forecast to drop 2.5 points to 8.5% from the 11% recorded in fiscal 2022. It is possible that this figure will rise going forward owing to factors such as greater profitability of projects underway and the weakening yen; however, the transient effects of employee benefits in the Total Engineering Business and worsening semiconductor market conditions in the Functional Materials Manufacturing Business are some of the factors behind the forecasted drop in the profit ratio.

In the Total Engineering Business, we will continue to examine and analyze the risks of target projects and move ahead with selecting contracts, as well as ensure the utmost risk management for secured projects in order to generate profits.

Despite less favorable market conditions for general-purpose chemical catalysts and semiconductor manufacturing equipment that spearheaded business performance in fiscal 2022, the net sales results for the Functional Materials Manufacturing Business is forecast to increase slightly in fiscal 2023 thanks to other product groups, but operating profit is expected to remain flat throughout the year. In the Catalysts sector, we will expand our business to overseas clients, with a focus on oil-related catalysts for which there is strong demand, as well as the advanced development of low-carbon and carbon-free products. In the Fine Chemicals sector, we will accelerate our efforts toward diversifying

sources of income by expanding applications. We will be revising production plans and systems for fine ceramics in anticipation of recovery in the semiconductor market from fiscal 2024. With the continuing strong demand for high thermal conductivity silicon nitride substrates for power semiconductors, we will be pressing ahead with our plans to increase production capacity as scheduled.

Fiscal 2025 will be the final year of BSP 2025 and, to achieve the set numerical targets, we recognize that it will first be essential to achieve the target orders and earnings forecasts for fiscal 2023. We will be doing our utmost to accomplish these goals.

## Making every effort to build a framework capable of responding to market changes

As COO, I am aware that the JGC Group needs to implement measures with a sense of speed to respond to changes in the market environment, such as the sudden growth in the market for plants and the rapid pace of development of markets in the sustainability sector. Accordingly, we have made every effort to increase our project execution capacity in response to the increase in projects following the sudden growth in the market for plants, as well as continuing to appropriately allocate resources in the sustainability sector where markets are being generated at a rapid pace while coordinating efforts with industry peers.

We implemented measures to increase our project execution capacity, including personnel increase at the aforementioned JGC INDIA EPC PRIVATE LIMITED located in Chennai, India from fiscal 2022. Plans are in place to raise the present approximate 400 staff to around 1,000 as soon as possible. Following on from the alliance we forged with Toyo Engineering Corporation in fiscal 2021 in the hydrogen/fuel ammonia sector in anticipation of market changes and growth in the sustainability sector, in fiscal 2022 we concluded another alliance with Toyo Engineering Corporation in the domestic SAF sector as part of measures to improve competitiveness in securing orders and reinforce project execution capacity.

To allocate suitable ongoing resources to the sustainability sector, in fiscal 2022 we established the "Sustainable Solutions" division to serve the sustainability sector of the overseas EPC operating company JGC Corporation. Further, we established the Renewable Energy Solutions department at the domestic EPC operating company JGC

Japan Corporation, as part of ongoing initiatives for the sustainability sector. New developments that are expected to have a significant impact on the status of future manufacturing industries include biomanufacturing. With this mind we began operations of the Integrated Biofoundry® business together with Bacchus Bio Innovation, Co., Ltd. Biomanufacturing is considered an area that could become a future growth engine for our company, and we are therefore planning to ramp up investments in this area.

We will continue to carefully monitor changes in the market environment of our company, and we will implement suitable measures with a sense of urgency.

## Wrapping up

We recognize that fiscal 2023 is a pivotal year for the JGC Group for achieving sustainable growth. As COO, I will be putting forth every effort toward achieving the fiscal 2023 order target and earnings forecast, while also viewing changes in the market environment of the JGC Group as an impetus for us. I will be implementing measures in a speedy manner to achieve the numerical targets of BSP 2025 and pressing ahead with business strategies.

More than simply focusing on fiscal 2025, the final year of BSP 2025, I will be fulfilling my responsibilities by setting my sights even further ahead. Thank you for your continued support.



## Message from the CFO



### Overview of fiscal 2022

In fiscal 2021, we formulated the 2040 Vision and commenced the medium-term business plan BSP 2025 as the first phase covering the span from fiscal 2021 to 2025. Since then, I have been actively focusing on my responsibility of implementing growth strategy investments for boosting net profit attributable to owners of the parent, considered crucial for maintaining a sturdy financial foundation, strategic capital policies for enhancing capital efficiency, and increasing ROE deemed essential for keeping the Total Engineering Business as the main business. During fiscal 2022, I feel that we moved ahead with effective financial strategies in all of these aspects.

As resource markets underpinning the Total Engineering Business showed signs of recovery in fiscal 2022 and clients began moving ahead in earnest with their capital investments, we recorded our second-highest level of new contracts of ¥824 billion. In terms of business performance, consolidated net sales and profits at each stage exceeded

the business forecasts at the beginning of the year, with significantly higher sales and earnings achieved compared to fiscal 2021 levels.

Going forward, we will continue to press ahead with a steady financial strategy while monitoring changes in the market environment, in order to achieve medium- to long-term growth for the JGC Group.

### Equity capital conditions

We believe that maintaining sound finances is essential for the Total Engineering Business, one of the JGC Group's core businesses, for business continuity and earning client trust from the standpoint of ensuring risk resilience, for continually expanding business. To achieve this, we are working in line with the approach of maintaining the equity ratio at a stable 50% or higher. The equity ratio as of March 31, 2023 was 55.7%, as we continued to maintain a sound financial foundation.

# CFO Message

## Driving financial strategies aimed at further enhancing capital efficiency

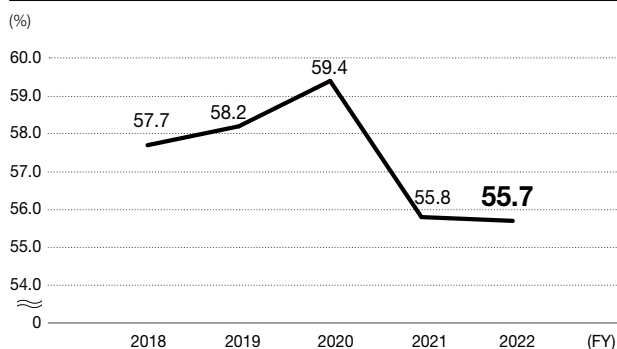
### Kiyotaka Terajima

Director, Senior Executive Vice President, and Chief Financial Officer (CFO)

After joining JGC in 1981, established business alliances and developed contracts for domestic and overseas projects in the Legal Department. Appointed Executive Officer and Deputy General Manager of the Corporate Administrative & Financial Affairs Division in 2014, Director, Executive Officer, and Senior General Manager of the division in 2016 (Senior Executive Officer in 2017), Executive Vice President and CFO in April 2018, and Senior Executive Vice President in April 2020.

In BSP 2025, the numerical target for fiscal 2025 had been set at net sales of ¥800 billion, but there is the possibility that we will exceed this figure based on the potential growth of the future market for plants. Accordingly, we are aware of the growing need to maintain an equity ratio of 50% or higher by further concentrating on our equity capital.

#### Equity ratio



### Utilizing capital in an effective manner

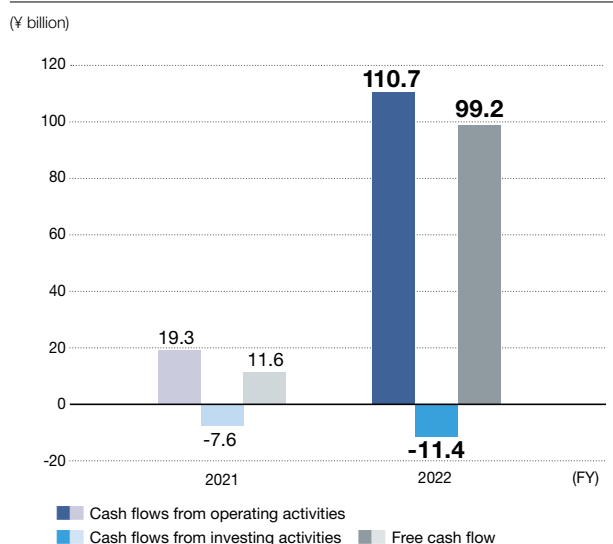
Cash and deposits as of March 31, 2023 was ¥332.9 billion, an increase of ¥44.7 billion from the beginning of the year due to collecting receivables following the settlement of disputes related to projects completed in the past.

The normal practice in our core operations of Total Engineering Business is to allocate cash received as advances from clients to projects that are already underway, meaning the amount of capital on hand varies depending on the contract conditions or degree of progress of current projects. To ensure steady operation of current projects even when subjected to changes in external factors such as sudden turmoil hitting financial markets, we ensure that we have working capital of around two months of annual net sales in addition to the cash received as advances. We view cash exceeding these advances and working capital as being positioned as capital that can be allocated to growth strategy investments.

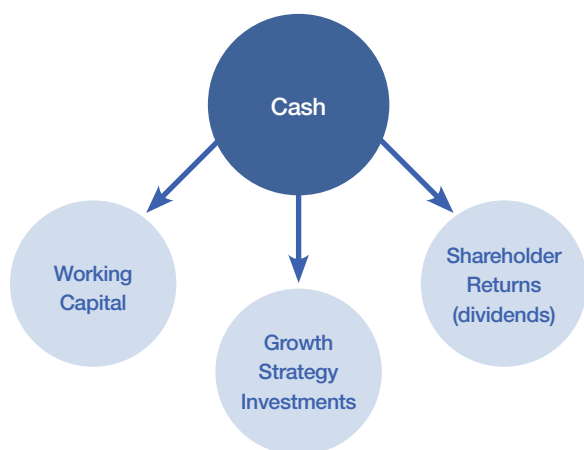
## Message from the CFO

We utilize cash flows from operating activities in addition to cash on hand for both expanding existing businesses and growth strategy investments, but in addition to the outlook for the business environment and medium-term cash flow, financing with the optimum amount and timing in line with trends in financial markets is also deemed to be a key option that is available. The main use of proceeds will be investments in SAF, biomanufacturing and high thermal conductivity silicon nitride substrates for EV power modules, and going forward, we will consider interest-bearing debt financing if necessary, similar to the Green Bonds issued in September 2023.

### Free cash flow



### Cash allocation

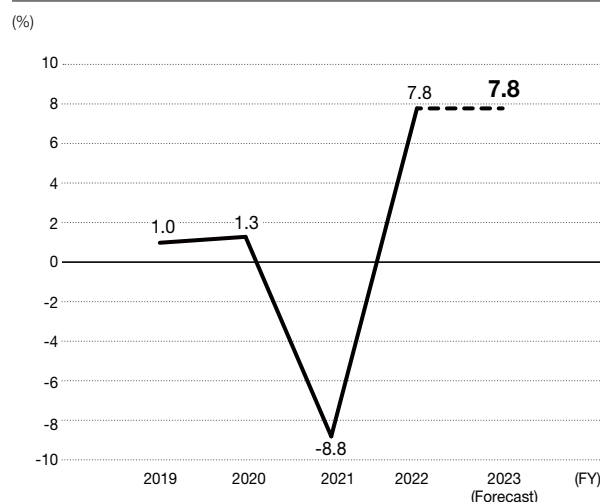


## Toward raising ROE

Capital efficiency is essential for expanding businesses and growth strategy investments, and we are targeting ROE of 10% or higher over the medium- to long-term span relative to capital costs. For the JGC Group with the Total Engineering Business as its core area of operations, as mentioned earlier, it will be vital to determine ways of increasing profit attributable to owners of the parent to maintain further equity capital while increasing ROE, and there is a priority on maximizing operating profit, the results of business activities.

In fiscal 2021, the first year of BSP2025, we recorded a net loss attributable to owner of the parent of ¥35.5 billion due to the extraordinary loss recorded for the LNG project in Australia, but this rebounded back into the black to the tune of ¥30.6 billion in fiscal 2022, leading to a significant improvement in our ROE from -8.8% to 7.8%. A figure of around 7.8% is anticipated for fiscal 2023 based on the business forecasts at the beginning of the year.

### ROE



By expanding the five business areas and diversifying business models under BSP 2025, we have set ourselves the numerical targets of ¥800 billion in net sales, ¥60 billion in operating profit, ¥45 billion in net profit attributable to owners of the parent, and 10% ROE. From fiscal 2021 that marked the beginning of BSP 2025, we have been working on the three key strategies of transforming EPC operations, expanding high-performance functional materials manufacturing, and establishing future engines of growth in order to achieve these numerical targets.



As CFO, I am seeking to increase ROE by working toward these key strategies with a credible and tactical financial approach. We are also planning growth strategy investments amount to around ¥200 billion over the five-year span of BSP 2025 from fiscal 2021 to fiscal 2025, and we have already invested around ¥32 billion over the two years of fiscal 2021 and fiscal 2022. The amount of investment by key strategy is around ¥5 billion for transforming EPC operations, around ¥17 billion for expanding high-performance functional materials manufacturing, and around ¥10 billion for stabilizing future engines of growth. Together with around ¥68 billion in investment projects for which decisions have already been made, growth strategy investments will amount to around ¥100 billion.

In selecting growth strategy investment projects, we are acutely aware of the sudden market changes that have occurred after fiscal 2021 when BSP 2025 began—such as future growth in the market for plants and the rapid pace of development of markets in the sustainability sector. We also invested in projects such as establishing an overseas operation center for increasing our project execution capacity, and getting the SAF business off the ground.

The Group Investment and Loan Committee established under the holding company JGC Holdings Corporation conducts quantitative analyses that factor in capital costs when making investment decisions, and also carefully and cautiously deliberates research and development projects based on their potential to lead to future business expansion. The Committee also monitors the progress of projects after investments are made, as part of a system that can properly study whether to withdraw from certain businesses.

## Greater shareholder returns

We view shareholder returns as a key management issue for the Company, and the shareholder return policy seeks a payout ratio of about 30% of net profit attributable to owners of the parent during the BSP 2025 period. Cash dividends are generally once per year, with a minimum annual dividend of ¥15 per share. The Company considers share buyback when needed, factoring aspects such as the business outlook and state of free cash flow.

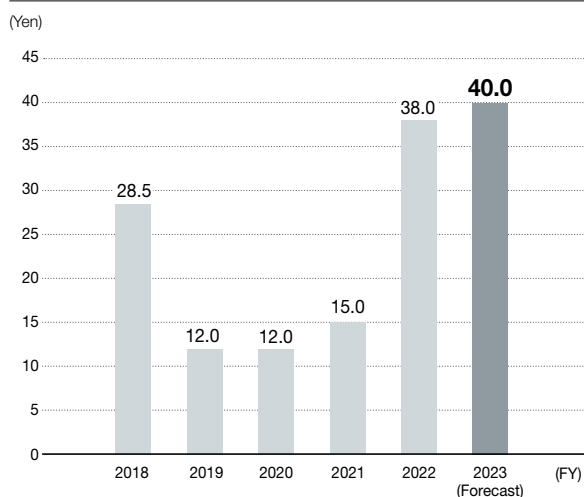
Cash dividends per share were increased due to improvements in business performance after fiscal 2021, the first year of BSP 2025. I hope to move ahead with effective financial strategies toward achieving net profit attributable to owners

of the parent of ¥45 billion in fiscal 2025, and achieve an even greater increase in cash dividends per share.

With this in mind, in February 2023 we purchased 12 million treasury shares totaling ¥20 billion for the first time in 20 years, after comprehensively taking into consideration aspects such as the current state of cash flow from operating activities and future outlook, as well as the future market environment and business outlook. The purchase of treasury shares is viewed by our Company as a crucial initiative for shareholder returns akin to shareholder dividends, and we will continue examining the feasibility of purchasing treasury shares based on the future outlook and cash flow outlook including growth strategy investments.

Thank you for your continued support.

### Cash dividends per share



# JGC Group's Growth Strategy

The JGC Group has made steady progress toward its long-term management vision "2040 Vision" defined in fiscal 2021 based on "Enhancing planetary health," our purpose as a corporate group, as well as toward "BSP 2025," the medium-term business plan spanning the next five years. Fiscal 2023 marks the third year and mid-point of BSP 2025. Here, we outline the key issues underlying the Group's value-creation mechanism and strategies, as well as progress of BSP 2025 and future policies aimed at achieving our goals.




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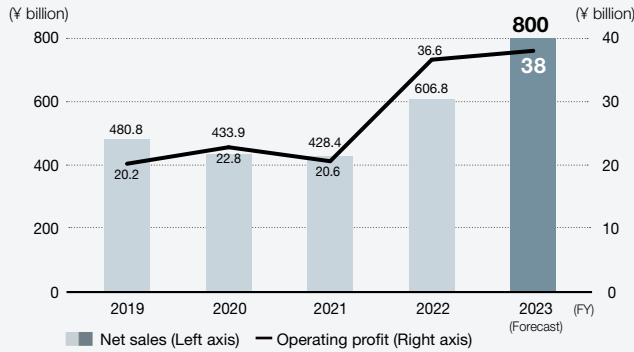


# JGC Group at a Glance

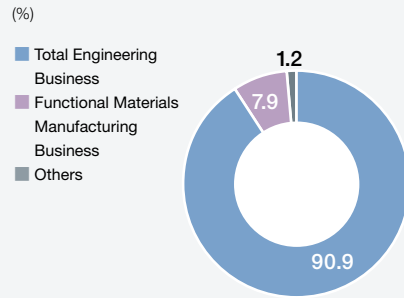
Through business focused on Total engineering and Functional materials manufacturing, the JGC Group is aiming to realize our purpose in "Enhancing planetary health," and ensuring continued growth of corporate value.

Main Operating Companies	Applicable Plants, Facilities, Products, etc.
 <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Total Engineering Business</p>	<p><b>Energy Solutions</b> LNG (liquefied natural gas), CCS (CO<sub>2</sub> capture and storage), petroleum refining, petrochemicals, chemicals, gas processing, crude oil and gas gathering, etc.</p>
	<p><b>Sustainable Solutions</b> SAF (sustainable aviation fuel), hydrogen/fuel ammonia, nuclear energy, etc.</p>
	<p><b>Facility Solutions</b> Industry related with semiconductor and storage batteries, data centers, LNG receiving terminals, transportation infrastructure, etc.</p>
<p>JGC Corporation (Overseas business)</p>	<p>JGC Japan Corporation (Domestic business)</p> <p><b>Domestic Sector</b> Pharmaceuticals, healthcare, SAF, hydrogen/fuel ammonia, chemical recycling, petroleum refining, petrochemicals and chemicals, nuclear energy, etc.</p>
 <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Functional Materials Manufacturing Business</p>	<p><b>Catalysts and Fine Chemicals Sector</b> Catalysts used in petroleum refining, chemicals, and environmental conservation, and fine chemical products used as materials in semiconductors, IT/electronics, optics, cosmetics, and other applications</p>
	<p>JGC Catalysts and Chemicals Ltd.</p>
 <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Others</p>	<p>Japan NUS Co., Ltd., etc.</p> <p>Energy and environmental consulting, etc.</p>

**Net sales and operating profit**



**Net sales by segment (FY2022)**



**Business Model**

▶ **EPC business (Engineering, Procurement, Construction)**

Provision of feasibility studies (FS), front-end engineering design (FEED), and EPC projects for plants and facilities

**Project execution flow**



▶ **Maintenance**

Provision of daily maintenance and shut-down maintenance services mainly for oil refinery and petrochemical plants in Japan

▶ **Project Management Consulting (PMC)**

Provision of consulting service supporting the development of plants and facilities, by leveraging extensive EPC-related knowledge and track record to mediate between clients and contractors

**Typical Products and Services**



Floating LNG plant (Malaysia)



Ammonia synthesis pilot project facility (Fukushima)



Pharmaceutical plant (Shizuoka)



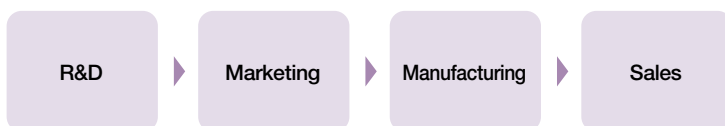
Hospital (Saitama)

**Number of Employees\***

6,103

Research and development, planning, and manufacturing of catalysts, fine chemicals, and fine ceramics products

**Business execution flow**



Oil refining catalysts



Silica sol for anti-reflective film on flat-screen TVs



Metal-matrix composites

1,013

▶ **Consulting, Licensing, Business Participation, Digital Platforms**

Consulting services such as various studies, analyses and assessments, and production support, business participation in various sectors, etc.

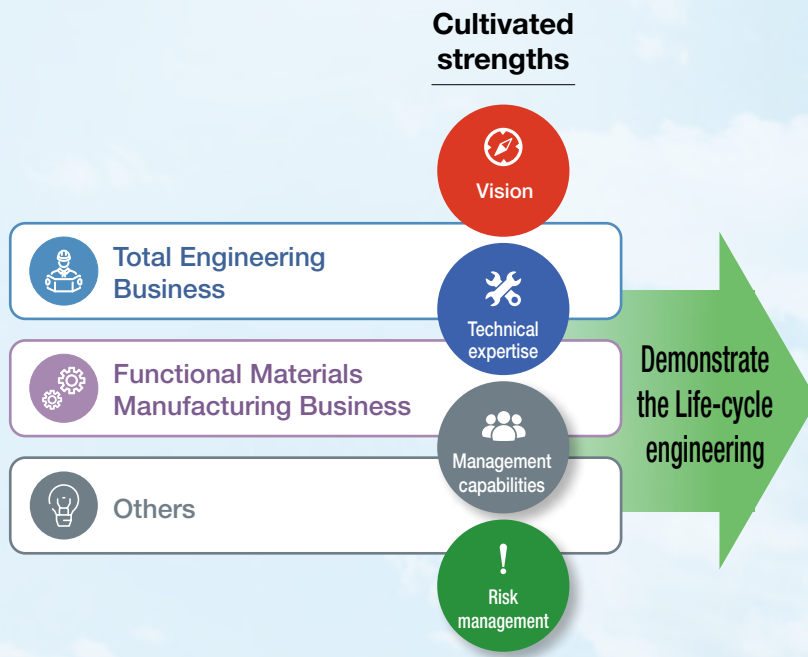


447

\* As of March 31, 2023. Does not include JGC Holdings, employees (313) or temporary staff in each segment

# JGC Group's Value-Creation Mechanism

The JGC Group is leveraging its unique strengths developed from its roots as an engineering company, to fulfill its purpose of "Enhancing planetary health." Social issues to be addressed have been identified as materiality (priority issues) in line with the "Basic Policy for Sustainability" formulated as its purpose, and is developing and implementing short-term and medium- to long-term strategies in order to resolve these issues. We are also continuing to work on strengthening our management foundation to ensure that we are able to achieve these strategies.

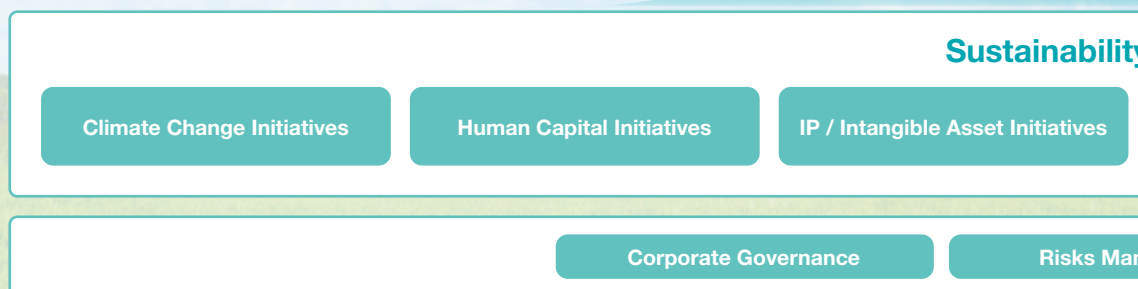


## Basic Policy for Sustainability

Identification

### JGC Group Materiality

- E** • Societies in harmony with environment
- S**
  - Materiality to address through business activities
  - Working with local communities around the world
  - Human rights, employee motivation
- G** • Corporate governance, risks management



Sustainability

Quality

Quality to achieve as a result of business activities

Energy access

Quality of life

### g Solutions

#### Management Vision

(2021 to 2025)

#### Improve planetary health

Through medical care and healthcare, contributing to human well-being

Establishing environmentally conscious industrial & urban infrastructure

Industrial & urban infrastructure



(2021 to 2025)

Achievement

**Purpose**  
**Enhancing planetary health**



**Improve Corporate Value**

Creating economic value  
Revenue growth

Solving social issues  
Health of Earth, Health of Humans

Health of Earth      Health of Humans

### Quality management

Respect for Human Rights in Supply Chains

Occupational Health and Safety


Quality Management System

Management

Compliance

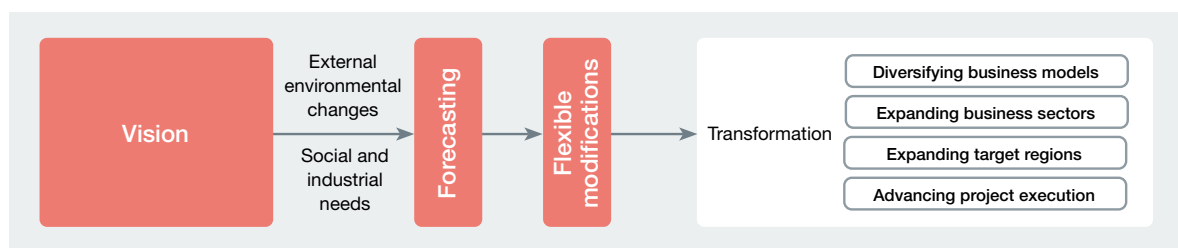
# Strengths Supporting Value Creation

Ever since the foundation in 1928, the JGC Group has continued to grow through corporate transformation. Our four unique strengths of "Vision," "Technical expertise," "Management capabilities," and "Risk management" developed through these transformations have been

 • Anticipating external environmental changes and future market needs, and achieving corporate transformation


Foresight originally led to the founding of the JGC Group, in expectation of changes in domestic energy demand and supply. Since then, the Group has continued to grow by constantly anticipating external environmental changes and social and industrial needs to expand our segments and global business areas, diversify business models, and advance project execution.

This Group strength of foresight suggests what the future may hold and enables agile corporate transformation as we discern occasional changes and adjust expectations accordingly. It will be increasingly valuable in the turbulent modern market environment and will drive sustained growth in times to come.



**Background**

- **Advent of the age of oil:** At a time of great industrial restructuring in the 1930s, JGC anticipated the leading role oil would play as an energy source in Japan.
- **Global energy market trends:** A trend that emerged in the mid-1960s was for oil-producing countries to develop their own resources. Soon, the JGC Group moved in markets such as South America, North Africa, and Southeast Asia as the next areas for expansion.
- **Interdisciplinary application of energy plant process engineering, further expansion:** Business area expansion is possible by applying technical expertise gained in designing energy plants—used in applications such as nuclear power, pharmaceuticals, nonferrous refining, and renewable energy—to design plants and factories in other promising areas where this expertise is relevant.

 • Techniques / technologies for plant and facility design, and project execution  
• Development and manufacturing of high-performance materials

The JGC Group's technical expertise supports the foundation of both the Total Engineering Business and Functional Materials Manufacturing Business.

<p><b>Plant / facility design</b></p> <p><b>Project execution</b></p> <p><b>Functional materials manufacturing</b></p> <p><b>Technical integration</b></p> <p><b>Open innovation</b></p>	<ul style="list-style-type: none"> <li>• Process engineering</li> <li>• Detailed design engineering, such as mechanical (piping, equipment, civil / structural, electrical / instrumentation and control, structural, IT, etc.)</li> <li>• Project management (managing costs, schedules, resources, and other elements)</li> <li>• Modular construction and other construction methods</li> <li>• Nanoparticle preparation</li> <li>• Nano pore structure control</li> </ul> <p>Plants and facilities form an organic whole that integrates many technologies in complex ways. The JGC Group's integration technology provides the ability to integrate these technologies and bring facilities to life.</p> <p>Acquiring unknown technologies by partnering with other companies that have promising technologies for entering new segments.</p>
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**Background**

- **Process technologies:** Acquired all patent and licensing rights for the Dubbs cracking process at Universal Oil Products Co. (U.S.) in the late 1920s. The current JGC Group technical expertise developed from knowledge and proficiency in essential refining process technologies.
- **Application and deployment of nanotechnology:** Nanotechnology, the foundation of catalyst development, applied to various sectors including semiconductor and electronic materials led to successful expansion of applicable sectors.



JGC Group  
Strengths

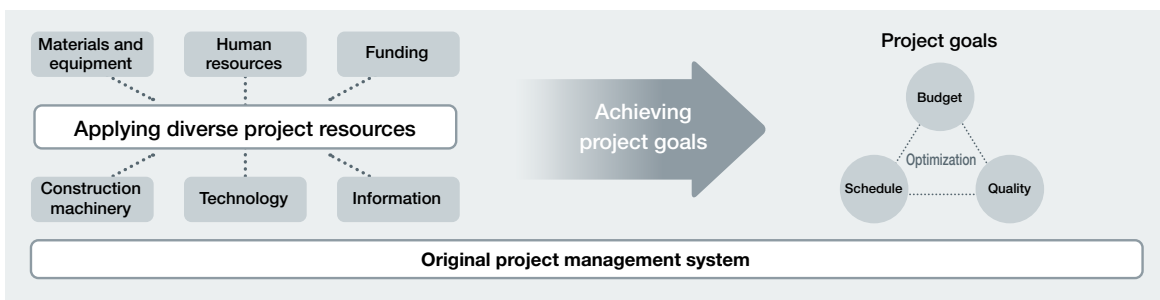


reinforced through interaction and further building on experiences and knowledge. We will continue to reinforce our strengths and apply them to business activities to enhance value creation at the Group.

- Leading and coordinating partners, vendors, and subcontractors as projects are executed
- Collaborating with and guiding diverse stakeholders to create new business



Management capabilities—for project management in particular—are a core competency of the JGC Group as an EPC-focused enterprise. We efficiently manage diverse project resources with an original project management system to complete plants and facilities on time, on budget, and at the level of quality required by clients.



Background

- **Establishment of integrated project management:** When Idemitsu Kosan awarded JGC a lump-sum EPC contract for their Tokuyama Refinery in 1956, Japan's first large-scale "grassroots" refinery project was completed in just 10 months. Attained the status of a general contractor, managing entire projects from design to procurement and construction.
- **Advanced project management system:** An original project management system was deployed in full scale in the Kuwait refinery upgrading project in the 1980s for rationally and scientifically controlling project resources. The system is at the heart of the JGC Group's management capabilities.



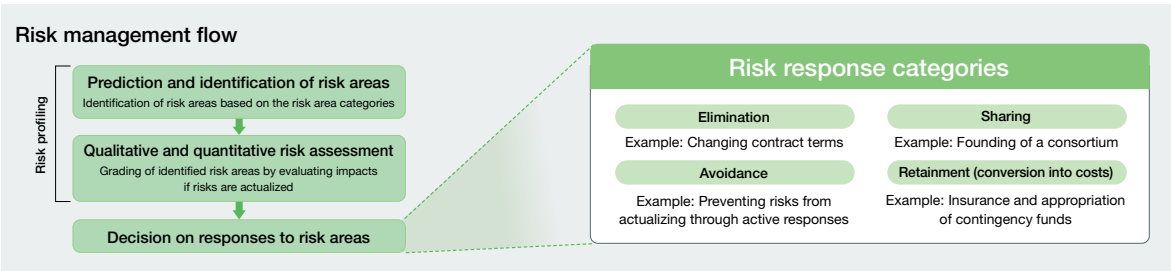
Group strengths



- Anticipating risks, planning suitable countermeasures, and reliably implementing them
- Minimizing and overcoming unexpected risks that arise



With recent large-scale projects, changes in individual project profitability may greatly affect overall corporate profit or loss. We recognize that suitably addressing risks is essential in managing projects, and accordingly, all team members follow a risk management flow applying our original project management system and methods to respond to a variety of project risks for each role fulfilled and in each phase.



Background

- **From petroleum refining to engineering business:** Refinery construction plan put on hold in the 1930s due to the Great Depression and local opposition. Subsequently became Japan's first engineering company by applying process technologies acquired through licensed businesses.
- **Established risk response capabilities for overseas projects:** Following expansion overseas in the 1960s, established a thorough risk management system covering all aspects to ensure steady revenue from overseas projects with much greater uncertainty.

# JGC Group Materiality

In line with its "Basic Policy for Sustainability," the JGC Group identifies issues that are important to stakeholders we are involved with and issues that are important for our management as materiality. All our corporate activities are oriented toward resolving materiality, and we are also aiming to enhance the Corporate Governance Structure and Sustainability Management as part of efforts toward resolving materiality.

## Purpose



















### Enhancing planetary health

#### Basic Policy for Sustainability

The JGC Group will endeavor centered on its "Enhancing planetary health" as its Purpose, to sustainably increase its corporate value through creation of social values.

To realize the above, it will actively pursue sustainability in the areas of environment, society, governance, quality, safety, and health.

## Materiality (Priority Issues)

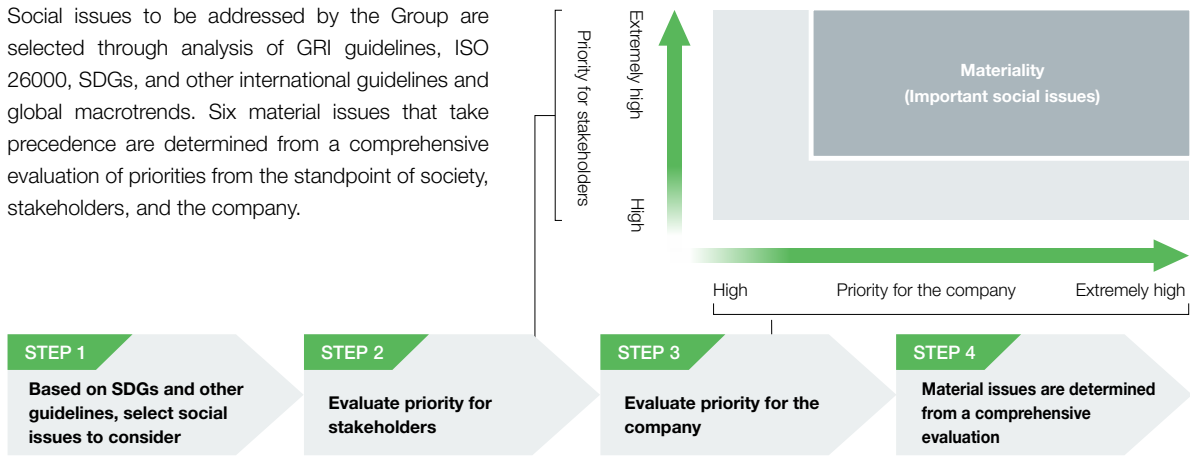
	Materiality		Related SDGs
<b>E</b>	Societies in harmony with environment		   
<b>S</b>	Materiality to address through business activities	Working with local communities around the world	   
		Human rights, employee motivation	  
	Materiality to achieve as a result of business activities	Energy access	 
		Quality of life	  
<b>G</b>	Corporate governance, risks management		 

**Materiality positioning and identification process**

Issues positioned as materiality are viewed as key elements, fundamental in establishing management policies and conducting business. Through sound business activities, the JGC Group aims to help solve social issues and create economic, social, and environmental value.

**Materiality identification process**

Social issues to be addressed by the Group are selected through analysis of GRI guidelines, ISO 26000, SDGs, and other international guidelines and global macro trends. Six material issues that take precedence are determined from a comprehensive evaluation of priorities from the standpoint of society, stakeholders, and the company.

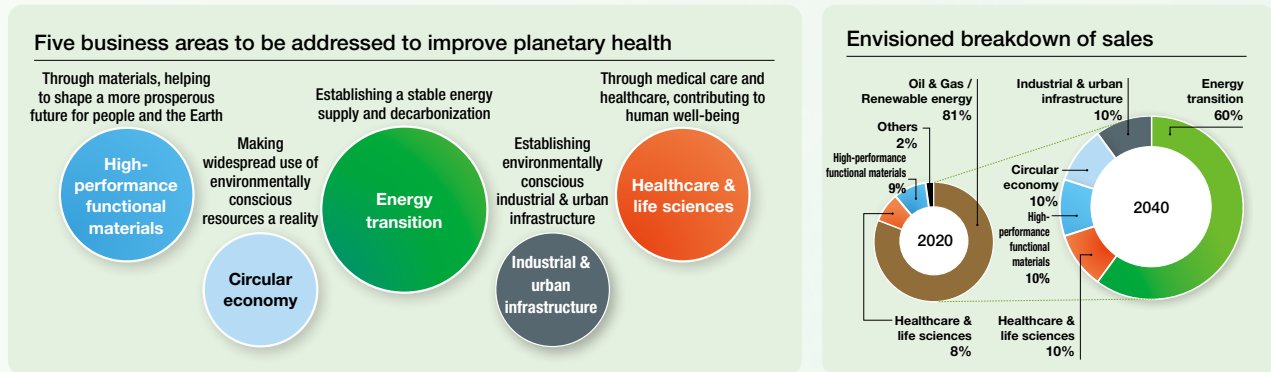


Recognized Social Issues	Materiality Icon
<ul style="list-style-type: none"> <li>Reducing the environmental impact of fossil energy</li> <li>Promoting use of a greater share of renewable energy</li> <li>Protecting ecosystems, maintaining biodiversity</li> <li>Promoting development or products and technologies that help curb global warming</li> </ul>	
<ul style="list-style-type: none"> <li>Contributing to economic and industrial development in emerging markets</li> <li>Creating employment in emerging markets</li> <li>Supporting technology transfer and human resource development in emerging markets</li> </ul>	
<ul style="list-style-type: none"> <li>Promoting workplace diversity</li> <li>Promoting female hiring and strengthening skill-building</li> <li>Respecting human rights in all business activities</li> </ul>	
<ul style="list-style-type: none"> <li>Meeting greater global energy demand</li> <li>Promoting wider use of renewable energy that contributes to sustainable growth</li> <li>Enhancing productivity through greater global energy efficiency</li> </ul>	
<ul style="list-style-type: none"> <li>Responding to aging social and industrial infrastructure</li> <li>Promoting development of social and industrial infrastructure in emerging markets</li> <li>Improving global medical standards</li> <li>Making life more convenient and comfortable</li> </ul>	
<ul style="list-style-type: none"> <li>Strengthening and improving corporate governance</li> <li>Ensuring regulatory compliance in business activities</li> <li>Responding appropriately to corporate and business risks</li> </ul>	

# Long-Term Management Vision "2040 Vision"

## Long-Term Management Vision "2040 Vision"

### 01 Business area transformation



### 02 Business model transformation

#### Transformation of EPC business model

In the EPC business, we will be applying EPC DX in particular for the transformation of the EPC business model. We will seek business model expansion upstream and downstream in the value chain, building on our accumulated experience, and establishing new business models applying digital technologies.

#### Diversifying into non-EPC business models

In the area of non-EPC business models, while reinforcing our existing Functional Materials Manufacturing Business, we will undertake transformation that leverages JGC Group strengths such as licensing, PMC and other consulting, maintenance and digital O&M, digital platform business, as well as participation in new business.

### 03 Organizational transformation

#### Stronger framework for regional management

Complementing existing project management from the head office in Japan, we are strengthening our regional management framework, aimed at promptly proposing and executing solutions in an attentive, locally produced and consumed arrangement for local clients in growth markets.

#### More vibrant culture of innovation

In new and existing operations, a corporate culture will be fostered for continuous innovation in technical commercialization and business model development, as needed for transformation in business areas and models. We will seek an "ambidextrous" organization with diverse work styles.

#### Five years of challenge

(2021-2025)

#### Five years of harvest

(2026-2030)

#### Overview of Medium-Term Management Plan "BSP 2025"

Last fiscal year began the first five-year stage (fiscal 2021–2025) on the path to the 2040 Vision, positioned as five years of challenge. Our medium-term business plan for this initial period is "Building a Sustainable Planetary Infrastructure 2025 (BSP 2025)." Three key strategies established in BSP 2025 form the basis for an array of ongoing business and investment strategies.

#### Three key strategies

##### Key Strategy 1 Transformation of EPC operations

Increase competitiveness and profitability in mega-sized EPC projects

Take on EPC growth markets and segments

##### Key Strategy 2 Expansion of manufacturing business for high-performance functional materials

Offer more product lineups in existing business for increased revenue

Expand sales of strategic products

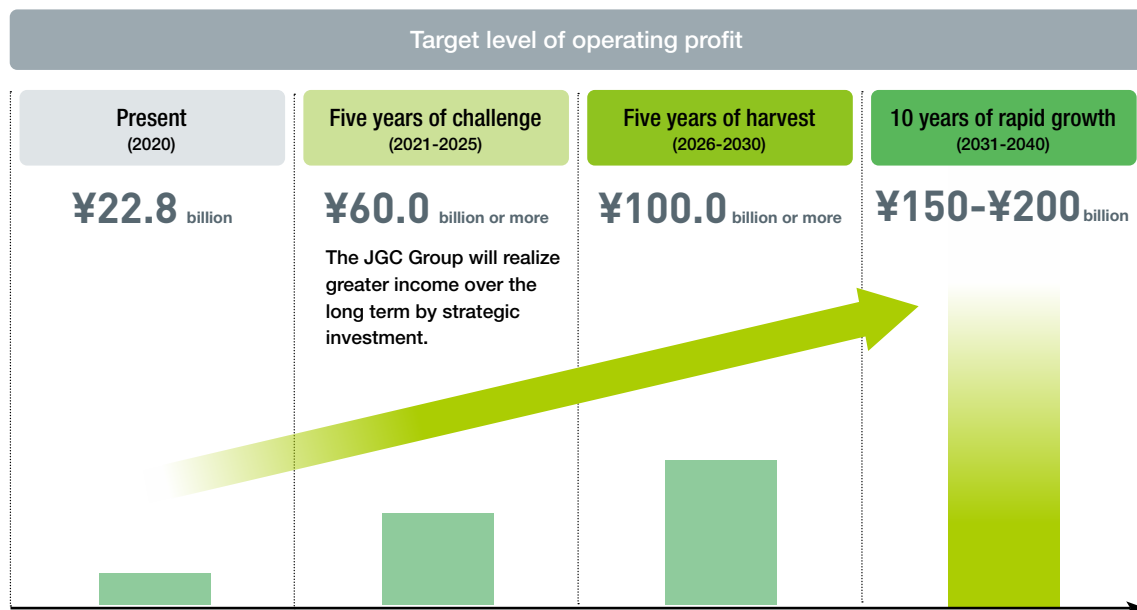
Explore and develop next-generation business

##### Key Strategy 3 Establishment of future engines of growth

# and Medium-Term Business Plan "BSP 2025"

## Target level of operating income\*

The 2040 Vision will occur over the three phases of "Five years of challenge," "Five years of harvest" and "10 years of rapid growth," and we will make proactive strategic investments via these three facets of transformation to reach ¥150–200 billion of operating profit in 2040.



\* Adjusted operating income: Operating income plus interest and dividend income and share of profit of entities accounted for using equity method earned in each business area

### 10 years of rapid growth (2031-2040)

#### ► Financial targets

Through steady progress in implementing the three key strategies, we are targeting net sales of ¥800 billion in fiscal 2025, with operating income of ¥60 billion, net profit attributable to owners of the parent of ¥45 billion, and ROE of 10%.

FY2025 (Targets)	
Net sales	¥800 billion
Operating profit	¥60 billion
Net profit attributable to owners of the parent	¥45 billion
ROE	10%

#### ► Strategic investments

A total of ¥200 billion in investment is planned during BSP 2025, including "DX," "Business development," "M&As," "Commercial demonstrations," "Production facilities," and "R&D."

Transformation of EPC operations  
**¥70.0 billion**

Expansion of manufacturing business for high-performance functional materials  
**¥50.0 billion**

Establishment of future engines of growth  
**¥80.0 billion**

# 2040 Vision and Materiality

The JGC Group has set forth the materiality (priority issues) to be resolved as a corporate group in line with the Basic Policy for Sustainability (P.25 JGC Group Materiality). The long-term management vision "2040 Vision" forecasts our future stance in the year 2040, and guided by materiality, outlines three social issues to be resolved by the JGC Group by 2040, with the aim of expanding five business areas to resolve these issues. This section describes the materiality to be resolved by expanding into the five business areas—and illustrates the relationship between the five business areas and materiality that the JGC Group is seeking to achieve in its 2040 Vision.

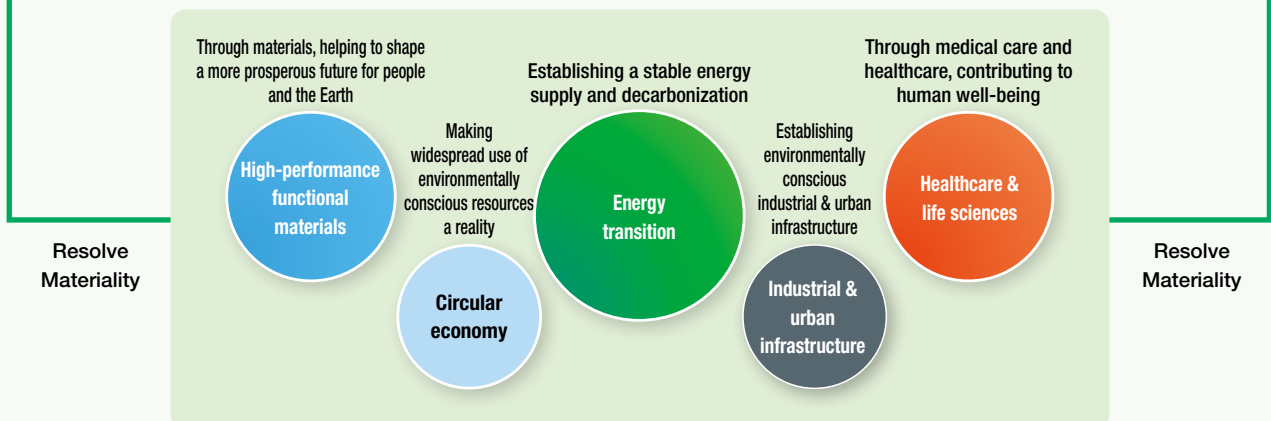
## JGC Group materiality

E		S			G
<b>Societies in harmony with environment</b>	<b>Working with local communities around the world</b>	<b>Human rights, employee motivation</b>	<b>Energy access</b>	<b>Quality of life</b>	<b>Corporate governance, risks management</b>

## Social issues to be addressed as identified in the 2040 Vision

<b>Establishing a stable energy supply and decarbonization</b>	<b>Reducing environmental impact of resource consumption</b>	<b>Building and maintaining vital infrastructure and services</b>
<ul style="list-style-type: none"> <li>Under stated policy scenario, global primary energy demand is set to expand with demographic and economic growth from 14.4 billion toe (ton of oil equivalent) in 2019 to 17.1 billion toe in 2040.</li> <li>Global average temperature is expected to rise 1.5°C between 2030 and 2050, at the current rate of warming.</li> <li>In renewable energy, the current supply of 900 million toe is expected to increase to 3.3 billion toe by 2040.</li> </ul>	<ul style="list-style-type: none"> <li>In waste generated, the 2016 level of 2 billion tons is expected to reach 3.4 billion tons by 2050.</li> <li>12% of this total will be plastic waste that is not biodegradable.</li> </ul>	<ul style="list-style-type: none"> <li>Cities are expected to swell from 50% of the total population in 2018 to 66% in 2050 as economic growth drives urbanization.</li> <li>Development of medical infrastructure will be in demand, as well as needs will increase for higher standards of treatment and specialized medicine in emerging countries.</li> </ul>

## Five business areas to be addressed to resolve the above issues



► Five business areas aiming to resolve materiality and social issues

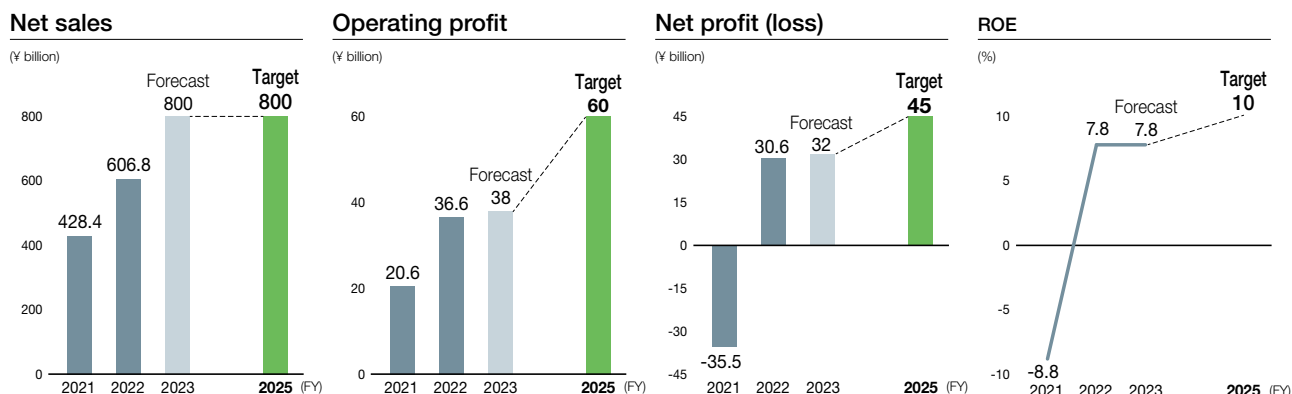
Business Area	Resolved Materiality	Resolved Social Issues
 <p>Energy transition</p>		<ul style="list-style-type: none"> <li>Reducing the environmental impact of fossil energy</li> <li>Promoting use of a greater share of renewable energy</li> <li>Protecting ecosystems, maintaining biodiversity</li> <li>Promoting development or products and technologies that help curb global warming</li> </ul>
		<ul style="list-style-type: none"> <li>Contributing to economic and industrial development in emerging markets</li> <li>Creating employment in emerging markets</li> <li>Supporting technology transfer and human resource development in emerging markets</li> </ul>
		<ul style="list-style-type: none"> <li>Meeting greater global energy demand</li> <li>Promoting wider use of renewable energy that contributes to sustainable growth</li> <li>Enhancing productivity through greater global energy efficiency</li> </ul>
 <p>Healthcare &amp; life sciences</p>		<ul style="list-style-type: none"> <li>Contributing to economic and industrial development in emerging markets</li> <li>Creating employment in emerging markets</li> <li>Supporting technology transfer and human resource development in emerging markets</li> </ul>
		<ul style="list-style-type: none"> <li>Improving global medical standards</li> </ul>
 <p>High-performance functional materials</p>		<ul style="list-style-type: none"> <li>Promoting development or products and technologies that help curb global warming</li> </ul>
		<ul style="list-style-type: none"> <li>Improving global medical standards</li> </ul>
 <p>Circular economy</p>		<ul style="list-style-type: none"> <li>Reducing the environmental impact of fossil energy</li> <li>Protecting ecosystems, maintaining biodiversity</li> </ul>
		<ul style="list-style-type: none"> <li>Enhancing productivity through greater global energy efficiency</li> </ul>
		<ul style="list-style-type: none"> <li>Making life more convenient and comfortable</li> </ul>
 <p>Industrial &amp; urban infrastructure</p>		<ul style="list-style-type: none"> <li>Reducing the environmental impact of fossil energy</li> </ul>
		<ul style="list-style-type: none"> <li>Contributing to economic and industrial development in emerging markets</li> <li>Creating employment in emerging markets</li> <li>Supporting technology transfer and human resource development in emerging markets</li> </ul>
		<ul style="list-style-type: none"> <li>Responding to aging social and industrial infrastructure</li> <li>Promoting development of social and industrial infrastructure in emerging markets</li> <li>Making life more convenient and comfortable</li> </ul>
<b>Governance</b>		
 <p>Sustainable management foundation</p>		<ul style="list-style-type: none"> <li>Promoting workplace diversity</li> <li>Promoting female hiring and strengthening skill-building</li> <li>Respecting human rights in all business activities</li> </ul>
		<ul style="list-style-type: none"> <li>Strengthening and improving corporate governance</li> <li>Ensuring regulatory compliance in business activities</li> </ul>

## Path for Fulfilling Our Strategy

# Review of the first half of BSP 2025

Fiscal 2023 marks the third year of the medium-term business plan "BSP 2025" that commenced in fiscal 2021. Driven by significant changes in the environment related to the plant market over the past two years, coupled with steady progress with key BSP 2025 strategies, we are well on the way to achieving the financial targets of BSP 2025. We will continue making steady progress with the key strategies toward accomplishing these targets.

## Progress of financial targets



## Changes in market environment

In addition to recovery in energy demand as markets look ahead to a post-pandemic future, there is an increased focus placed on transitional energy beyond the initial scenarios envisaged in BSP 2025. Furthermore, the plant market has expanded significantly on the back of the soaring demand for LNG as a substitute for Russian gas from the standpoint of energy security, and the unprecedented pace of growth in the sustainability sector, such as hydrogen/fuel ammonia, sustainable aviation fuel (SAF) and plastic waste.

### Background to plant market expansion

Recovery in energy demand as markets look ahead to a post-pandemic future

Sudden increase in LNG demand from an energy security standpoint

Sustainability sector progressing at a faster pace than expected

Sudden growth in plant market

## Steady progress with key strategies

Over the past two years, steady progress has been made with various measures in line with the three key BSP 2025 strategies of transforming EPC operations, expanding manufacturing business for high-performance functional materials, and establishing future engines of growth.

### Key Strategy 1

#### Transformation of EPC operations

- Establish new engineering company in India
- Implement EPC DX (Construction Management System) to projects underway
- Acquisition of pharmaceutical plant EPC business from IHI Plant Services Corporation, etc.

### Key Strategy 2

#### Expansion of manufacturing business for high-performance functional materials

- Appoint Chief Manufacturing Officer (CMO) and accelerate expansion of the manufacturing business
- Acquire ceramics business from Showa Denko Materials Co., Ltd. (now Resonac Corporation)
- Capital investment for increasing production of high thermal conductivity silicon nitride substrates for power semiconductors, etc.

### Key Strategy 3

#### Establishment of future engines of growth

- Establish the new "Sustainable Solutions" organization serving the overseas operating company (JGC Corporation)
- Secure numerous hydrogen/fuel ammonia-related contracts for EPC projects
- Establish "SAFFAIRE SKY ENERGY LLC" for achieving the first large-scale SAF production in Japan, etc.



# Future policies for achieving BSP 2025

We are well on the way to achieving the goals of BSP 2025, however to ensure we definitely reach our financial targets, we recognize that it will first be essential to achieve our order target and earnings forecasts for fiscal 2023. Going forward, we will continue to move ahead with carefully selected contracts and ensure proper management of projects already underway, while actively promoting the three key strategies of BSP 2025 with the view to accomplishing the financial targets.

## Key Strategy 1 "Transformation of EPC operations"

Focus on increasing project execution capacity in response to the sudden growth in the plant market and developing a system capable of increasing net sales, while advancing project execution capabilities in order to improve competitiveness in securing orders.

### Awareness of business environment

- Positive environment for the plant market to continue based on the increasing trend in global demand for LNG

### Future policy

- Focus all efforts on achieving our order target and earnings forecasts for fiscal 2023, in order to achieve the financial targets of BSP 2025
- Focus on increasing project execution capacity in response to the increase in projects following growth in the plant market

#### TOPICS

### New engineering company established in Chennai, India

Implemented as one approach to increasing project execution capacity. Company established in Chennai in India, staffed with many highly skilled engineers, with plans in place to expand up to 1,000 engineers in the future.



- Use modular construction method and implement EPC DX to advance project execution capabilities

#### TOPICS

### JGC Integrated Module and EPC DX were adopted for the LNG Canada Project

- JGC's modular construction method, J-I-Module™, was adopted for the LNG Canada Project, integrating pipe rack, electrical room and instrument room, thereby achieving reduced on-site work.
- Despite the impact of COVID-19, modules were delivered to the site on schedule, at the highest quality and praised by numerous clients.
- EPC DX (Construction Management System) was fully adopted for standardization of the flow and quality of information required for decision-making processes in the project execution phase.



- In the overseas infrastructure sector, enhance the industrial infrastructure sector (semiconductor-related facilities, data centers, etc.)
- In the domestic sector, continue focusing on the booming life sciences sector, such as pharmaceuticals

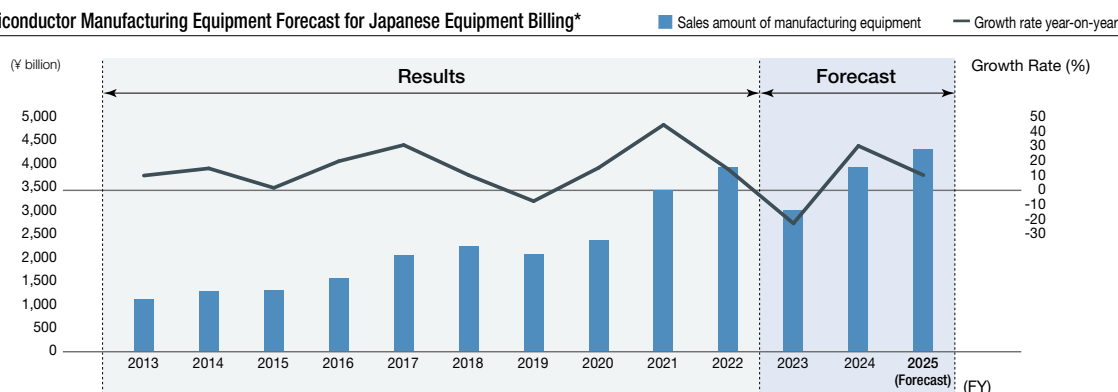
**Key Strategy 2 "Expansion of manufacturing business for high-performance functional materials"**

Diversify sources of income for the Functional Materials Manufacturing Business by discovering new customers and expanding product applications. Make capital investments as planned for ceramics products for semiconductors to respond to growing demand in the future, to lay the foundations for achieving fiscal 2025 plans with the view to increasing net sales and profits in the Functional Materials Manufacturing Business.

**Awareness of business environment**

- Market conditions in our main segment of semiconductors and the semiconductor manufacturing equipment sector are expected to remain flat through fiscal 2023, but is anticipated to recover from fiscal 2024 and beyond
- The EV-related market is expected to grow at a rapid pace with a focus on China and Europe

**Semiconductor Manufacturing Equipment Forecast for Japanese Equipment Billing\***



\* "Japanese Equipment Billing" refers to domestic and overseas billing of Japanese manufacturers (including overseas plants).  
Source: Semiconductor Equipment Association of Japan, "Market Forecast Report Semiconductor and FPD Manufacturing Equipment (Fiscal years 2023-2025)"

**Future policy**

**[Catalysts and Fine Chemicals Sector]**

- Production facilities will be increased to meet the anticipated increase in demand for catalyst elements and various polishing materials. Production of existing products will also be increased.
- Petroleum refining and chemical catalysts that have a high market share in Japan will be marketed overseas. Efforts will also be made for uncovering new sectors for fine chemicals.
- Plan a total of ¥20 billion in capital investments, including land already purchased for businesses, from fiscal 2025 to fiscal 2030 to respond to growing demand for catalysts for carbon-neutral fuel (synthetic fuel), and catalysts and adsorbents for chemical recycling, as well as new fine chemical products such as materials for high-speed communications and functional abrasive particles for semiconductors.

**[Fine Ceramics Sector]**

- Move ahead with capital investment plans for high thermal conductivity silicon nitride substrates for EV power semiconductors expected to grow in demand. Verify investments by fiscal 2025, with the aim of setting up production
- Coordinate efforts with JFC Materials Co., Ltd. and the Sendai Plant to improve operational efficiency and profits in the engineering ceramics sector

**TOPICS**

**Capital investment for increasing production of ceramics for semiconductors – increase profits of existing businesses and expand sales of strategic products**

**<High thermal conductivity silicon nitride substrates for EV power semiconductors>**

- Make capital investments for increasing production. Operations planned to begin from fiscal 2023
- Purchase new land to respond to growing markets (total investment of ¥10 billion)

**<Ceramics for semiconductor manufacturing equipment>**

- Make capital investments for high-precision manufacturing. Operations planned to begin from fiscal 2023
- Begin capital investment plans for increasing production capacity



Tomiya Factory, which produces high thermal conductivity silicon nitride substrates and semiconductor production components

## Key Strategy 3 "Establishment of future engines of growth"

As a sector positioned as the future engine of growth, this market is growing at an unprecedented pace, and we recognize that we need to respond with a sense of urgency. Resources will be allocated as required in parallel with responding to existing sectors, such as the soaring LNG, in order to continue generating positive results.

### Awareness of business environment

- FEED projects for the hydrogen/fuel ammonia, SAF and plastic waste recycling sectors moved forward in fiscal 2023, and this is expected to shift to EPC projects from fiscal 2024 and beyond
- Government plans for the offshore wind power generation sector seem to be suffering from delays

### Future policy

#### 1) General

- Secured FEED contracts for the hydrogen/fuel ammonia, SAF and plastic waste recycling sectors in fiscal 2023, and lead this to securing EPC projects planned from fiscal 2024 and beyond
- Aim for expected net sales exceeding ¥50 billion for future engines of growth in BSP 2025

### TOPICS

#### Awarded contracts for SAF and hydrogen plant in Japan and oversea

##### Awarded contract for the first large-scale domestic SAF production demonstration facility in Japan

- Secure contract for large-scale domestic SAF production demonstration facility on the site of the Cosmo Oil Co., Ltd. Sakai Refinery
- Construction to be completed and operations expected to begin within fiscal 2024, with plans to begin supplying 30,000 kL of SAF annually in 2025 when World Expo 2025 will be held in Osaka, Kansai
- More complex and larger plants are expected in the future to achieve the 2030 target of 1.71 million kL set by the government. This will leverage our extensive track record with design and construction of large-scale petroleum refining, petrochemical and chemical plants in Japan and overseas
- In addition to construction of SAF production plants, efforts are being made to develop a domestic SAF supply chain as a business operator



Site for the Construction of Domestic SAF Manufacturing Equipment (Sakai Refinery, Cosmo Oil Co., Ltd.)

##### Awarded contract for hydrogen production plant in Australia

- Joint project between Sumitomo Corporation and Rio Tinto Ltd. in fiscal 2023. Construct a hydrogen production plant capable of 250 tons annually on the site of the alumina refinery plant owned and operated by Rio Tinto Ltd.



Planned construction site of alumina refinery plant ©Rio Tinto 2023

##### Demonstrate the development of green ammonia production technology derived from renewable energy

- Development and demonstration of "Integrated Control System" achieved by optimizing operation of green chemical (ammonia) production plant
- Plant location agreement signing ceremony held in Fukushima Prefecture. Operations planned to begin from fiscal 2024



**Key Strategy 3 "Establishment of future engines of growth"**

**Future policy**

**2) Secure required resources**

- Secure the resources required as a steady and consistent engine of growth for the future

**TOPICS**

**License agreement with Toyo Engineering Corporation for SAF production plants**

- Concluded alliance agreement for FEED and EPC contracts for domestic SAF production plants in fiscal 2023
- In response to increasing demand for SAF in the future, and the increase in projects of diverse materials such as bioethanol
- In addition to the extensive track record of construction of large-scale petroleum refining, petrochemical and chemical plants owned by both companies in Japan and overseas, our range of know-how as a SAF operator will be integrated with Toyo Engineering Corporation's know-how and technical expertise related to synthetic gas-derived SAF production using materials, such as ethanol and woody biomass, to cover all aspects from the conceptual stage through to EPC projects



Alliance agreement signing ceremony

**3) Revise key areas and sow seeds for business over the long-term perspective**

- Government plans for the offshore wind power generation sector seem to be suffering from delays, so approach from a long-term perspective
- Expand into food technology-related sectors such as biomanufacturing, land-based aquaculture and cultured meat as new engines of growth

**TOPICS**

**Promotion of the "Integrated Biofoundry®" business**

- In addition to the medical and healthcare sectors, biomanufacturing is expected to expand into the materials, energy, food and other sectors in the future, with the market scale anticipated to be around ¥200 trillion by 2030
- Utilize scale-up technology honed with process development in the energy sector, and technology on the optimal design of fermenters developed in the pharmaceuticals production sector

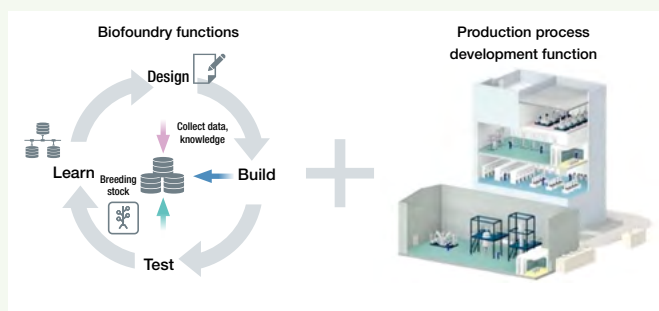


Image of Integrated Biofoundry

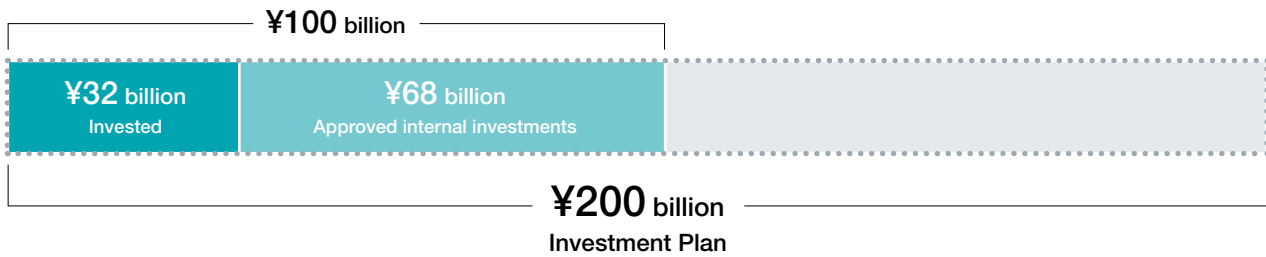
- Construct pilot plant of small modular reactors (SMRs) in Idaho, U.S. using NuScale Power, LLC modules with operations planned to begin from 2029. Dispatch JGC Group engineers and acquire know-how from the construction project of small modular reactors

**4) Diversify into non-EPC business models**

- Join various sectors as a business operator, such as SAF, hydrogen/ammonia, plastic waste recycling, cultured meat, and land-based aquaculture

# Growth Strategy Investments

A total of ¥200 billion in growth strategy investment is planned with the aim of accelerating the three key strategies during the five years of BSP 2025. Up to ¥32 billion was invested over the two years to fiscal 2022, primarily in EPC DX-related investment, product development investment and capital investments in the high-performance functional materials business. Investments have already been approved internally, with around ¥100 billion planned including projects invested from fiscal 2023 and beyond. Suitable investment opportunities will continue being identified to make investments in order to achieve growth strategies through to 2040.

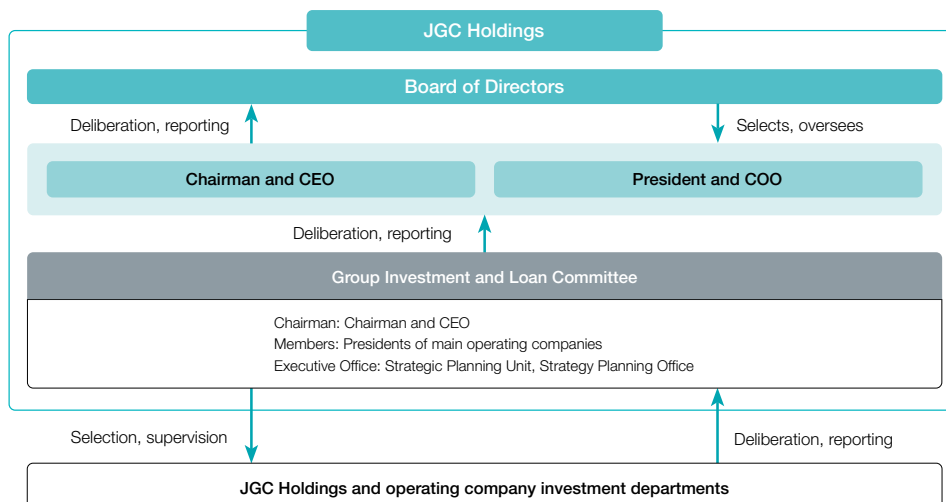


	Fiscal 2022 Results	Plan for Fiscal 2023 and Beyond
Transformation of EPC operations	<ul style="list-style-type: none"> <li>EPC DX, execution technology-related technology</li> <li>Establishment, operation, etc., of Operation Center in India</li> </ul>	
Expansion of manufacturing business for high-performance functional materials	<ul style="list-style-type: none"> <li>Capital investment related to high thermal conductivity silicon nitride substrates</li> <li>Investment to increase production facilities</li> <li>Capital investment into new products/technologies</li> <li>Acquire ceramics business from Showa Denko Materials Co., Ltd. (now Resonac Corporation), etc.</li> </ul>	
Establishment of future engines of growth	<ul style="list-style-type: none"> <li>DDR commercialization</li> <li>INTEGNANCE® VR</li> </ul>	<ul style="list-style-type: none"> <li>Biomanufacturing</li> <li>SAF business, etc.</li> </ul>
	<ul style="list-style-type: none"> <li>Ammonia-related</li> <li>Food technology-related (land-based aquaculture, cultured-meat)</li> <li>Healthcare-related investments, etc.</li> </ul>	

Cash will continue being used effectively, including M&A, for ongoing growth strategic investments

## Strategic investment framework

The Group Investment and Loan Committee established under the holding company JGC Holdings Corporation conducts quantitative analyses that factor in capital costs when making investment decisions, and also carefully and cautiously deliberates R&D projects based on their potential to lead to future business expansion. It also monitors progress after investments are made, as part of a system that can properly study whether to withdraw from certain businesses.



# Reinforcing Management Resources for Continuous Growth

Continuous gains in corporate value depend not only on steady results from management strategies but also on reinforcing management resources that support sustainable growth. Here, we describe JGC Group roles for society and the environment, including climate change and human rights initiatives. This chapter also introduces human and intellectual capital initiatives, our corporate governance system, stakeholder engagement, and others.

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## Sustainability Management

### Basic stance

Sustainability initiatives consistent with the JGC Group's "Basic Policy for Sustainability" are pursued which also support continuous growth of corporate value.

#### Basic Policy for Sustainability

The JGC Group will endeavor centered on its "Enhancing planetary health" as its Purpose, to sustainably increase its corporate value through creation of social values.

To realize the above, it will actively pursue sustainability in the areas of environment, society, governance, quality, safety, and health.

The JGC Group released its "Approach and Initiatives for Sustainability" in the securities report for the fiscal 2022. The report positions the following sustainability items as key factors to consider based on the Basic Policy for Sustainability, and includes details outlining each initiative.

Key Sustainability Item	Details of Main Initiatives	Relevant Page
Addressing climate change	Take climate action through business activities/Promote disclosure in accordance with TCFD, etc.	P.41 Climate Change Initiatives
Human capital initiatives	Create a human resources portfolio, and increase employee engagement and promote inclusion and diversity toward achieving the portfolio, etc.	P.45 Human Capital Initiatives
Human rights compliance	Develop a human rights due diligence process, etc.	P.61 Respect for Human Rights in Supply Chains
Quality management initiatives	Promote a quality management system at each group company, etc.	P.64 Quality Management System
Occupational health and safety	Promote an occupational health and safety management system at each group company, etc.	P.63 Occupational Health and Society
Information security initiatives	Develop an information security system promotion structure, etc.	P.75 Risk Management
Compliance initiatives	Promote a group compliance system/Establish and implement an internal whistleblowing system, etc.	P.77 Compliance

### ▶ Expanded disclosure on sustainability issues

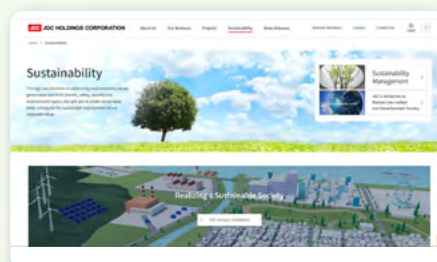
The JGC Group emphasizes dialogue not only with investors, shareholders, clients, and employees but also local communities and other stakeholders. Broad access to information on our sustainability efforts is provided through expanded disclosure on the sustainability section of our corporate website. By recognizing stakeholder expectations and concerns for the Group, we can incorporate measures to address these issues in our business activities and pursue activities supporting sustainability, and we will be considering further steps to improve information disclosure in the future.

#### Sustainability section of the corporate website



Further details on sustainability initiatives are available on the JGC Group website.

<https://www.jgc.com/en/esg-hsse/>

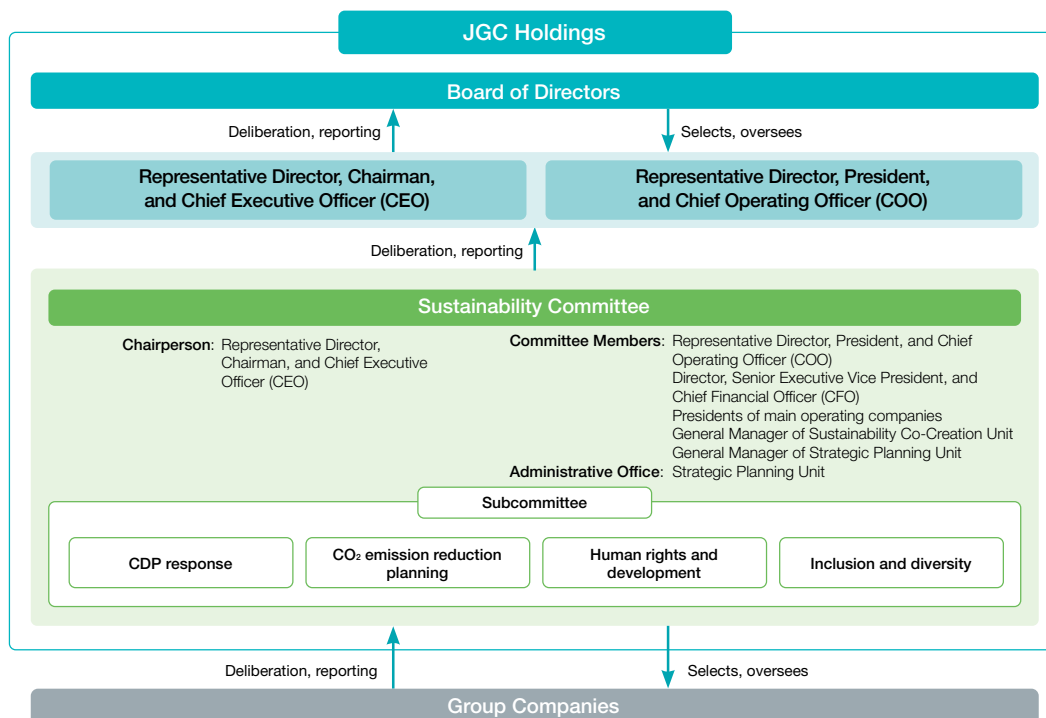




## ▶ Sustainability promotion system

The Sustainability Committee formulates policies and action plans relevant to sustainability and manages and reports on progress in activities in which the Group operating companies collaborate. With increasing demand related to sustainability in recent years, from fiscal 2023 the committee changed the number of meetings held from once a year to three times and now comprises the COO and CFO as members, to ensure more sustainability-related business activities and even greater disclosure of information.

The results of the Sustainability Committee's activities conducted throughout the year are also reported to the Board of Directors once a year.



### Details of main Sustainability Committee activities

<b>FY2021</b>	1st meeting: Three subcommittees formed: CDP response system development, CO <sub>2</sub> emission reduction planning, and human rights and development
<b>FY2022</b>	2nd meeting: Basic policy for human rights and development approved, Inclusion & Diversity Subcommittee formed 3rd meeting: CO <sub>2</sub> emission reduction plan and CDP response reported 4th meeting: Details on Basic Policy for Inclusion & Diversity 5th meeting: Deliberation related to forming Basic Policy for Inclusion & Diversity → Adopted as company regulations after being approved by the Board of Directors P.53 Human Capital Initiatives: Promotion of inclusion and diversity
<b>FY2023</b>	6th meeting: CDP response reported, details about formulating action plan proposals for reducing total CO <sub>2</sub> emissions

In addition to the topics shown above, the Sustainability Committee discusses the latest trends related to sustainability, JGC Group's response and other information reported each time by the Strategic Planning Unit that operates as the Executive Office, in order to respond as quickly as possible to the needs of society.

### Message from the Sustainability Committee Administrative Office



**Aiko Horikawa**  
Sustainability Management Group Manager  
Planning Office  
Strategic Planning Unit, Strategy  
JGC Holdings

I have been part of the Sustainability Committee since it was established in December 2021, and am in charge of operations as the administrative office. There are currently four subcommittees in action, starting from our response to climate change and now has been expanded to cover topics, such as our response to human rights and inclusion and diversity. There are vibrant discussions in the committee by being shared activities report of each subcommittee and topics related to the latest in sustainability. I think some of our key accomplishments during fiscal 2022 include efforts toward creating a system for addressing CO<sub>2</sub> emissions and reduction plans as a group, as well as formulating the Basic Policy for Human Rights & Development and the Basic Policy for Inclusion & Diversity as the Group's basic policies.

Going forward, the way corporations approach sustainability will need to include initiatives covering an even broader scope, with even more detailed and accurate disclosures. We will continue responding to higher priority items while monitoring global trends, with the view to helping to achieve sustainability for the JGC Group and society as a whole.

# Climate Change Initiatives

## Basic stance

As we work toward a sustainable society, addressing climate change has become a global challenge. The JGC Group has identified "societies in harmony with environment" as a materiality. Besides taking climate action through environmentally conscious business activities, the JGC Group studies and formulates business strategies accounting for scenario analysis in recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

### Climate change related disclosure

In participating in international frameworks for climate change disclosure, the JGC Group has responded to CDP surveys since 2021 (when the Group received a B rating in fiscal 2022) and has followed TCFD disclosure guidelines as a supporter, including securities reports.

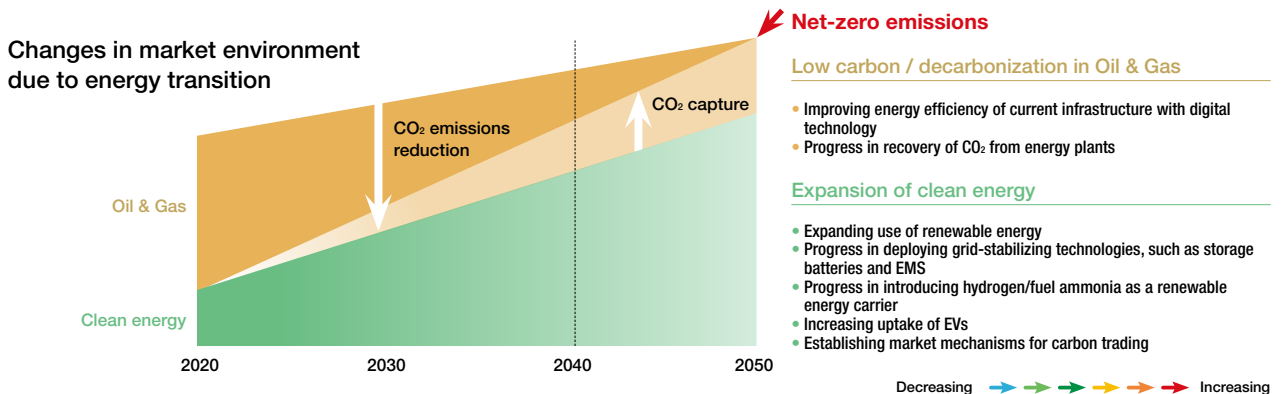


### Governance

The JGC Group responds to climate change issues under the leadership of the representative director and CEO, who is responsible for ensuring that environmental issues are addressed in Group business strategies and targets. One facet of this is assessing and managing climate-related risks and opportunities. Accordingly, the long-term management vision and medium-term business plan announced in May 2021 were established through Board discussions based in part on results of climate change scenario analysis and an assessment of these risks and opportunities. Monitoring of climate change issues is conducted by the Sustainability Committee, which formulates policies and action plans related to sustainability, including the Group response to climate change, and deliberates to evaluate and promote relevant action.

### Strategy

The JGC Group recognizes risks and opportunities related to climate change, which are reflected in strategies.



### Scenario Analysis

Scenario Item	Definition
Target	2040
Analysis reference data	Based on data from the International Energy Agency (IEA)'s <i>World Energy Outlook 2020</i>
Scenarios	Based on the following outlook scenarios <ul style="list-style-type: none"> <li>Stated Policies Scenario (STEPS)</li> <li>Sustainable Development Scenario (SDS)</li> </ul>
Target of analysis	Analysis of energy transition, circular economy, and high-performance functional materials areas that are highly relevant to climate change

Business Area	Segment	Business Growth Potential (Scale of 1-6)	
		STEPS Stated Policies Scenario (STEPS)	SDS Sustainable Development Scenario (SDS)
Energy transition	Refinery	→	↘
	LNG	→	↘
	Power generation, nuclear power, new energy	↗	↗
	Hydrogen/fuel ammonia	—	↗
Circular economy	Plastic waste chemical recycling	—	↗
High-performance functional materials	Catalysts	↗	↘
	Fine ceramics	↗	↗
Other	Consulting	↗	↗

Decreasing → → → → → Increasing

● Recognition of climate-related risks and opportunities

Main risks




<b>New regulatory risks</b>	Introduction of global carbon pricing may lead to higher equipment and fuel costs, which may affect business costs in the future. We also recognize that introduction of carbon taxes and stricter emission targets in various countries poses a risk of fewer contract opportunities, from a decline in oil & gas projects.
<b>Technology risks</b>	Lower gasoline demand from the spread of electric and fuel cell vehicles poses a risk of fewer contract opportunities for plants in the oil & gas industry. A similar risk is posed by the spread of decarbonized materials and a shift to renewable energy driven by the spread of high-performance storage batteries.
<b>Regulatory risks</b>	Firms bidding on plant construction projects are likely to face stricter information disclosure requirements regarding their climate change measures. This poses a risk of lost opportunities or unsuccessful bids, which may affect the corporate reputation.
<b>Market risks</b>	Lower plant demand in the oil & gas industry may result in fewer contract opportunities. An aversion in financial and capital markets to business related to fossil fuels also poses a risk that projects may not be approved.
<b>Reputation risks</b>	Failure to maintain or build on our reputation as an enterprise with the technical expertise to contribute to climate change solutions such as carbon reduction, renewable energy, and hydrogen applications may adversely affect the JGC Group in various ways, such as contract opportunities, financing, or securing human resources.
<b>Acute physical risks</b>	More frequent extreme weather events such as heavy rain, storms, typhoons, and flooding attributed to climate change may physically damage materials, equipment, and JGC Group facilities, adversely affect employees, and delay procurement.
<b>Chronic physical risks</b>	Higher average temperatures may make longer construction periods more common, due to lower labor productivity at construction sites in temperate and tropical regions. Another concern is increased costs for countermeasures and accident compensation, due to higher occupational safety risks. There is also a risk of higher shipping costs from a lack of ports if sea levels rise in coastal areas.

Main opportunities

<b>Products and services</b>	The JGC Group has an extensive record in renewable energy plants such as solar and biomass power plants, which, as the international community shifts toward decarbonization, may increase contract opportunities. The JGC Group has also taken steps to expand orders by establishing an organization dedicated to the promising segment of offshore wind power generation.
	Oil & gas sector applications of CCS, for which the JGC Group has completed multiple projects in Japan and overseas, and CCUS, for which joint development is underway, are expected to expand contract opportunities.
	The JGC Group is engaged in technological development and other initiatives in hydrogen, ammonia, and SMRs applications aimed at a decarbonized society. More contract opportunities here can be expected in the future.
	Greater worldwide demand for a circular economy can be expected to drive demand for technologies under development by JGC Group, which include chemical recycling of plastic waste, recycling of fiber waste, and SAF.

● Business areas contributing to achieving societies in harmony with environment (2040 Vision)

Based on analysis of the above scenarios and the risks and opportunities, Energy Transition, Circular Economy and High-Performance Functional Materials are positioned as business areas for building the JGC Group's purpose. Additionally, the introduction of policies in the SDS on matters such as expanded renewable energy use and carbon pricing that supports reduced greenhouse gas (GHG) emissions are viewed by the JGC Group as an opportunity to expand into related business areas by leveraging Group core competencies.

		Key Areas	JGC Group Strengths
 <b>Energy transition</b>	<b>Low-carbon / decarbonized oil &amp; gas</b>	<ul style="list-style-type: none"> <li>• Blue hydrogen/fuel ammonia</li> <li>• CCS</li> <li>• Energy conservation technology</li> <li>• Carbon credit</li> </ul>	<ul style="list-style-type: none"> <li>• Large-scale oil and gas project knowledge and track record</li> <li>• CCS facility design and construction track record</li> <li>• Maintenance track record</li> </ul>
	<b>Clean energy</b>	<ul style="list-style-type: none"> <li>• Green hydrogen/fuel ammonia</li> <li>• Small modular reactors (SMRs)</li> <li>• Offshore wind power generation</li> </ul>	<ul style="list-style-type: none"> <li>• Process engineering</li> <li>• Renewable energy and nuclear power knowledge</li> <li>• Design and installation know-how of offshore structures</li> </ul>
 <b>Circular economy</b>		<ul style="list-style-type: none"> <li>• Sustainable aviation fuel (SAF)</li> <li>• Chemical recycling (plastic and fiber waste)</li> </ul>	<ul style="list-style-type: none"> <li>• Process engineering</li> <li>• Network with customers and partners</li> </ul>
 <b>High-performance functional materials</b>		<ul style="list-style-type: none"> <li>• Carbon and chemical recycling catalysts</li> <li>• Energy storage and new energy materials</li> <li>• High thermal conductivity silicon nitride substrates for EV power semiconductors</li> </ul>	<ul style="list-style-type: none"> <li>• Catalyst development and business foundation</li> <li>• Nanoparticle preparation and control technology</li> <li>• Fine ceramics development and manufacturing</li> </ul>

➔ Initiatives related to business areas indicated with icons are shown on the next page.

## Climate Change Initiatives

### ● Key initiatives and results to date



### Hydrogen/Fuel Ammonia Sector

Energy Transition Segment

In addition to providing support for customers planning to shift from fossil fuels, as an EPC contractor we are facilitating the deployment of hydrogen/fuel ammonia through technical development together with our partners.

#### <Key initiatives>

- Launched a green chemical production plant demonstration project for green ammonia etc. with Asahi Kasei Corporation in Fukushima Prefecture (selected as NEDO project)
- Concluded an alliance agreement with Toyo Engineering Corporation for EPC projects for fuel ammonia plants
- Secured contract for construction work of a ground facility for blue hydrogen and ammonia production pilot project facility in Niigata Prefecture
- Facilitated research and development for ammonia isolation and hydrogen production technology with KUBOTA Corporation and TAIYO NIPPON SANSO CORPORATION (selected as NEDO project)
- Awarded contract for hydrogen production plants in Australia, etc.



Ammonia synthesis pilot project facility (Fukushima)



### Sustainable Aviation Fuel (SAF) Sector

Circular Economy Segment

From our expertise as both a business operator and an EPC contractor, we are contributing to decarbonization of the airline industry through our SAF deployment projects.

#### <Key initiatives>

- Established merger company SAFFAIRE SKY ENERGY LLC with Cosmo Oil Co. Ltd. and REVO International Inc. for development and demonstration of SAF production technology based on used cooking oil, and development of supply chains
- Concluded an alliance agreement with Toyo Engineering Corporation for domestic SAF production plants



### Chemical Recycling Sector

Circular Economy Segment

As a business operator, we are pushing forward with plastic and fiber waste recycling with our partners with the view to build a recycling-oriented society.

#### <Key initiatives>

- Partnered with Iwatani Corporation and Toyota Tsusho Corporation for a hydrogen production model using a waste plastic gasification facility
- Established RePEAT Co., Ltd. with Teijin Limited and ITOCHU Corporation for the chemical recycling of polyester products



### High-Performance Functional Materials Sector

High-Performance Functional Materials Segment

We are increasing production capacity to meet the growing needs of customers toward achieving carbonneutrality.

#### <Key initiatives>

- Japan Fine Ceramics Co., Ltd. led capital investments for increasing production, etc. for high thermal conductivity silicon nitride substrates for EV power semiconductors
- JGC Catalysts and Chemicals Ltd. led capital investments, etc. to meet the growing demand for catalysts for carbon-neutral fuel, and catalysts and adsorbents, etc. for chemical recycling

## ▶ Risk Management

The JGC Group strives to mitigate and prevent various specific expected risks including climate change by coordinating efforts with the Sustainability Committee, in line with the framework of the Risk Management Committee and other bodies.

## ▶ Metrics and Targets

### Commitment to Carbon Neutrality by 2050

While the core domain of the JGC Group has long been Oil & Gas, we announced our "Commitment to Carbon Neutrality by 2050" in 2020 as a sign of our dedication to enhancing corporate value in a sustainable manner through transformation toward achieving planetary health.

#### Target

##### Scope 1+2

2050: Net-zero CO<sub>2</sub> emissions  
2030: 30% reduction in CO<sub>2</sub> emissions intensity per base unit of net sales

##### Scope 3

Reduction as determined in consultation with stakeholders

#### Net-zero Initiatives

For Scope 1+2 reductions, adopt low-carbon / decarbonized practices, such as **energy conservation in our business activities, or using renewable energy**

**Leverage technologies cultivated by the JGC Group to provide energy transition solutions to stakeholders**

From fiscal 2020, we have been calculating and disclosing Scope 1+2 and Scope 3 for our six main group companies\*. While net sales for fiscal 2022 increased significantly over the base year, the amount of Scope 1+2 emissions was kept at only a slight increase, resulting in a 28% reduction in emissions intensity per base unit of net sales (compared to fiscal 2020).

\* Six main group companies: JGC Holdings Corporation, JGC Corporation, JGC Japan Corporation, JGC Catalysts and Chemicals Ltd., Japan Fine Ceramics Co., Ltd., and Japan NUS Co., Ltd.  
(Note) Refer to our CDP Climate Change Questionnaire 2023 for the breakdown in Scope 1+2 and Scope 3 and reasons for reductions.

CO <sub>2</sub> Equivalent Emissions Data	FY2020 (Base Year)	FY2021	FY2022
Scope 1+2 (t-CO <sub>2</sub> )	132,546	133,537	134,004
Scope 1	84,325	87,856	82,943
Scope 2	48,221	45,717	51,061
Consolidated net sales (¥ billion)	433.9	428.4	606.8
Emissions intensity per base unit of net sales (t-CO <sub>2</sub> /¥0.1 billion)	30.55	31.18	22.08
Comparison with base year	-	2%	-28%
Scope 3 (t-CO <sub>2</sub> )	Not disclosed	702,873	975,775

[https://www.jgc.com/en/esg-hsse/environment/climate-change/pdf/climate\\_change2023\\_e.pdf](https://www.jgc.com/en/esg-hsse/environment/climate-change/pdf/climate_change2023_e.pdf)



### ● Key initiatives for reducing CO<sub>2</sub> emissions

The JGC Group is coordinating efforts between relevant departments under the framework of sustainability promotion to study ways to reduce our CO<sub>2</sub> emissions including the use of carbon credits, etc., and enhancing information disclosure.

#### Promotion of studies for reducing CO<sub>2</sub> emissions toward achieving carbon neutrality by 2050

In fiscal 2022, we studied measures for reducing the JGC Group's CO<sub>2</sub> emissions with the view to achieving net-zero CO<sub>2</sub> emissions by 2050. During fiscal 2023, we are planning to first identify specific action plans aimed at reducing Scope 1+2 emissions, formulate a roadmap toward implementation, and gradually put them into action.

#### Active participation in climate change-related initiatives

In addition to compliant disclosures as a company endorsing TCFD, the JGC Group joined the TCFD consortium from January 2023 and has been taking part in various events, such as roundtable discussions with investors. We are working on enhancing our response to climate change and disclosure of information by facilitating the exchange of information with other companies and investors.

Since May 2023, the JGC Group has also been participating in the "GX League" led by the Ministry of Economy, Trade and Industry. The Company plays an active role in discussions as part of working groups within the GX League on the state of the carbon credit market and frameworks to suitable assess contributions made by Japanese companies to address climate change.



## Human Capital Initiatives

Message from the CHRO



# Promoting human resource strategy tied with management strategy

**Takuya Hanada**

Chief Human Resource Officer (CHRO)  
JGC Holdings

The JGC Group formulated the long-term management vision "2040 Vision" in fiscal 2021, defining our purpose as "Enhancing planetary health" by expanding the five business areas and diversifying business models in order to achieve sustainable growth. As an engineering company, human capital, that is, human resources, is our most vital asset—engineering companies can even be viewed as companies that cultivate the personnel who actually construct plants. We created "Human Resources Grand Design 2030" as the new overall human resource strategy with the view to achieving the 2040 Vision.

In addition to the ongoing training of human resources for project execution underpinning EPC operations in the oil and gas sector, the new human resource strategy aims to develop a new portfolio comprising four types of human resources deemed essential for achieving the 2040 Vision: human resources for specialist roles (experts), business and management, and innovative roles. The objective is to become an organization where human resources are able to continue bringing about their own transformation, as well as the organization able to continue bringing about its own transformation.

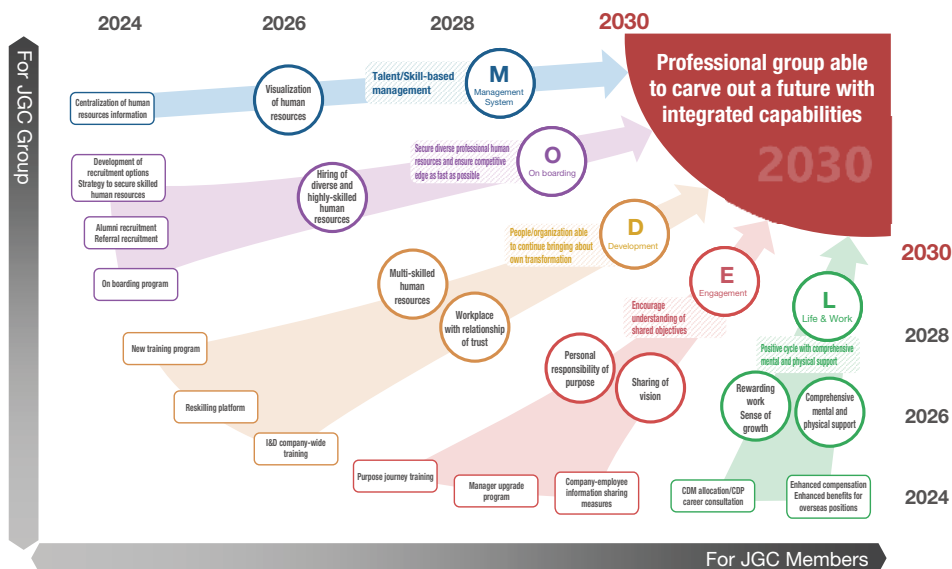
The plan for the new human resource strategy is to first visualize the quantitative deficiencies between the current human resources portfolio and that required for the future, and develop a talent management system with the aim of harnessing human resources in an efficient manner by

utilizing digital technology, hiring of the four human resources portfolios in a strategic manner, and training for advancing and diversifying their skills.

Maintaining a high level of motivation is vital for ensuring our Group's human resources are able to apply themselves to the best of their abilities, and we are making an active effort to implement measures so employees gain a sense that a "fulfilling work leads directly to a fulfilling life, and makes their own lifestyles more affluent."

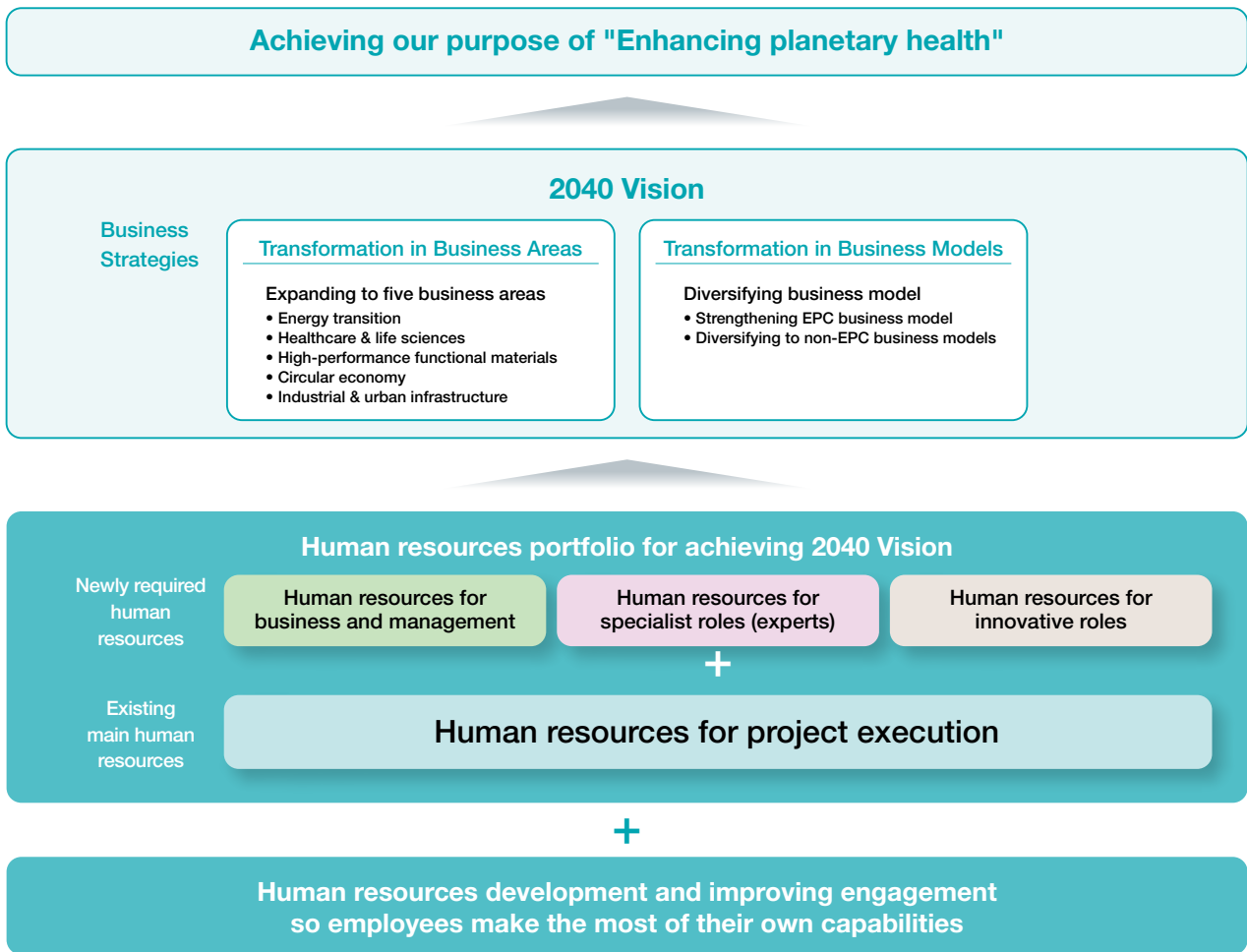
In fiscal 2022, we embarked on a new personnel system built on the policy of "Pay for VALUE", which shifts away from the seniority-based aspects of the past and instead focuses on the roles and accomplishments as well as the value of work and responsibilities. From fiscal 2023, we made significant improvements to compensation that applies to the holding company and two operating companies in Japan. We are also concentrating efforts toward measures aimed at increasing engagement with employees so they can apply company management policies to their own work duties, and enhancing inclusion and diversity such that diverse human resources can actively apply themselves. A broad range of measures are also being put in place to create a more comfortable and rewarding workplace environment.

Going forward, we will continue to play an active role implementing human resource strategy that is tied with management strategy.



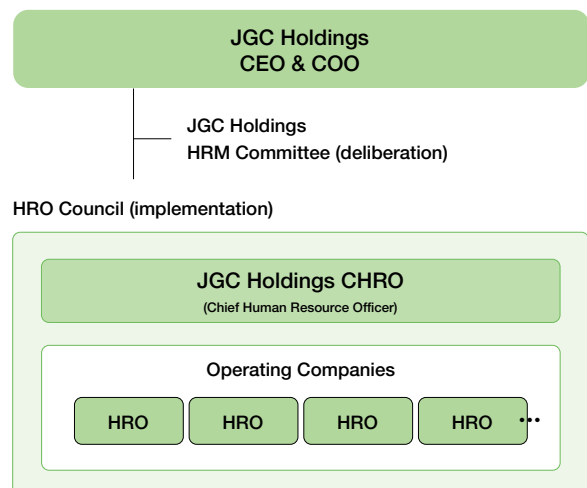
## Personnel strategy basic stance

Human resources are the JGC Group's greatest asset throughout all businesses, such as the Total Engineering Business and Functional Materials Manufacturing Business, and are the most important foundation for management. We are pressing ahead with completing a new human resource strategy by 2030, with the aim of developing the diverse human resources portfolio deemed essential for executing the business strategies of expanding business areas and diversifying business models set forth in 2040 Vision.



### ▶ Human resource strategy execution system

In 2022, we appointed a Chief Human Resource Officer (CHRO) to head the HRO Council as the implementing body under the HRM Committee (deliberative body for human resources matters), with the aim of properly establishing human resource strategy tied with management strategy. This system ensures the CHRO coordinates efforts with the JGC Holdings Corporation CEO and COO for proposing human resource strategy tied with management strategy, and in line with these, HROs of each company move ahead with their own human resource strategy tied with their company's business strategies, which are then discussed by the HRO Council.



## Human Capital Initiatives

### Overall human resource strategy

Our human resource strategy aims to develop the human resources portfolio required for achieving the 2040 Vision based on three core elements—monitoring and reviewing human resources portfolio; strategically recruiting and training those human resources; and engagement.



### Monitoring and reviews of human resources portfolio

#### 1. Visualization and clarification of required human resources

Developing the human resources portfolio required in the future involves visualizing and clarifying the quantitative deficiencies in the current human resources portfolio—mainly comprised of human resources for project execution—and the three human resources portfolios required in the future, and strategically hiring and training human resources in an efficient manner to cover areas that are lacking in each portfolio.



#### 2. Creation of optimal human resources allocation system (talent management)

We are considering the introduction of a system that allows monitoring and reviewing of deficiencies relative to the envisioned portfolio, by harnessing the leading digital technology used throughout HR to visualize and clarify human resources, and creating a framework that facilitates optimal personnel allocation planning for diverse business areas and business models.



## ▶ Human resources recruiting and training

The JGC Group considers recruiting and training of human resources extremely important, not only for transforming existing operations, but also for expanding business into new areas. In hiring and training human resources, efforts are being made to secure advanced and diverse human resources in line with the four core strategies: strategic recruiting; training for advancing and diversifying skills; training for human resources succession; and promoting retention.

### ● 1. Recruiting

A tactical approach is taken for diverse recruiting that includes new graduate recruitment, mid-career recruitment and alumni recruitment, to secure the human resources deemed essential for achieving the 2040 Vision.

#### New graduate recruitment

In addition to traditional methods of recruitment, a new recruiting segment for "TR (transformation)" has been formed as a proactive way of securing human resources with diverse areas of expertise (biotechnology, medical engineering, nuclear energy, etc.) or capable of creating new businesses. A DX segment has also been created to secure human resources capable of bringing about digital transformation, with the view to assigning capable personnel to departments related to DX and IT.

Students amongst the pool of new graduates are better educated about their careers earlier on every year, and the number of students brought on board for internships during school holidays are also increasing. We are fine-tuning ideas like creating new courses accepting students involved in the DX and TR outlined above, as we actively hire new graduates as human resources who will be taking the reins of the JGC Group in the future.

#### Mid-career recruitment

In addition to greater recruitment of human resources aimed at increasing project execution capacity, we proactively engage in mid-career recruitment of human resources who are experts in new business areas that underpinned by as-of-yet unknown technical competence and knowledge or the DX and IT sector that is expected to be more important in the future.

We have raised the target number of mid-career recruits by 30% or more over the previous fiscal year at the three companies of JGC Holdings Corporation, JGC Corporation and JGC Japan Corporation's Total Engineering Business. We are increasing these numbers by adopting new methods of recruitment, such as referrals (human resources introduced by existing employees) and direct recruiting, and these efforts have produced positive results.

#### Alumni recruitment (leveraging networks)

We actively rehire those who at one point left or retired from our group company. In fiscal 2022 these efforts were honored by the third consecutive Encouragement Award from the Japan Alumni Award, which promotes renewed ties between organizations and their former employees and recognizes outstanding efforts to this end. In fiscal 2023, we received the Excellence Award in the Design of Will Category.

The Alumni Community is run by volunteers, and there are currently more than 150 alumni registered. Alumni also held Echo-Day for the past five years in a row on October 25, the anniversary of the company's founding.

We also opened a human resources registration system named "JGC members," catering to people outside the JGC Group who are seeking information about the company. This initiative regularly disseminates information and organizes activities for people outside the company who share the same attitude toward the JGC Group's purpose.



Echo-Day held on October 25, 2023

#### Alumni recruitments in last four years

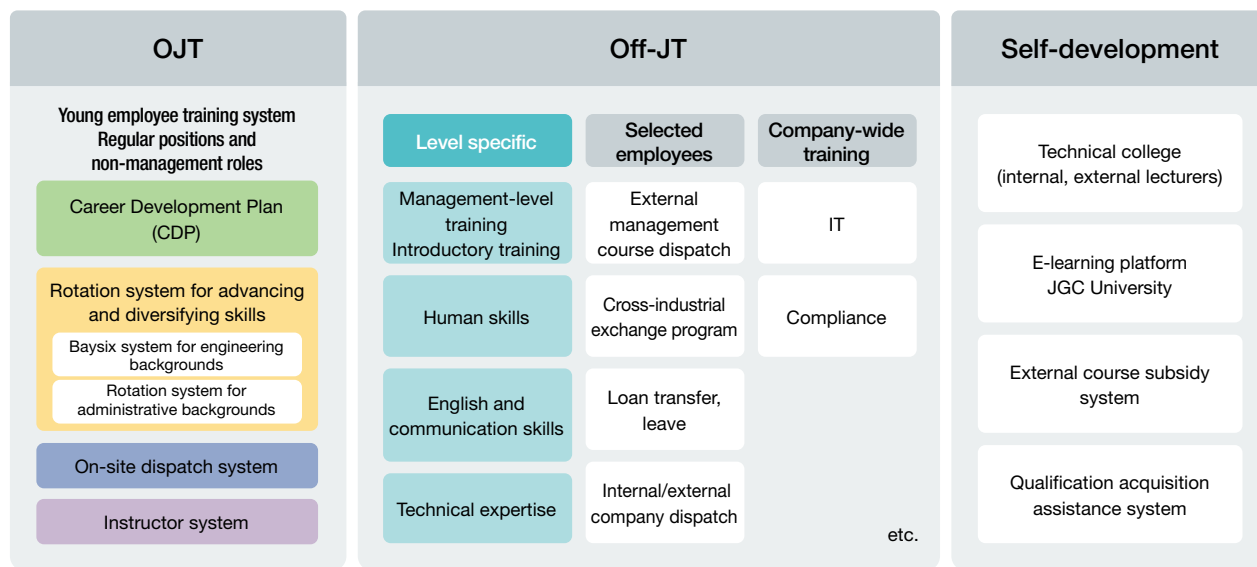
Fiscal 2022	8
Fiscal 2021	0
Fiscal 2020	3
Fiscal 2019	1

## Human Capital Initiatives

### 2. Training for advancing and diversifying skills

The JGC Group provides strategic training to give human resources a competitive edge as soon as possible after they are recruited. In order to build up a diverse human resources portfolio capable of achieving the 2040 Vision, the JGC Group provides young employees with a strategic OJT program and various Off-JT training like level-based training, and programs that foster self-development. We are focusing in particular on OJT programs for young employees that facilitate development while engaged in work duties.

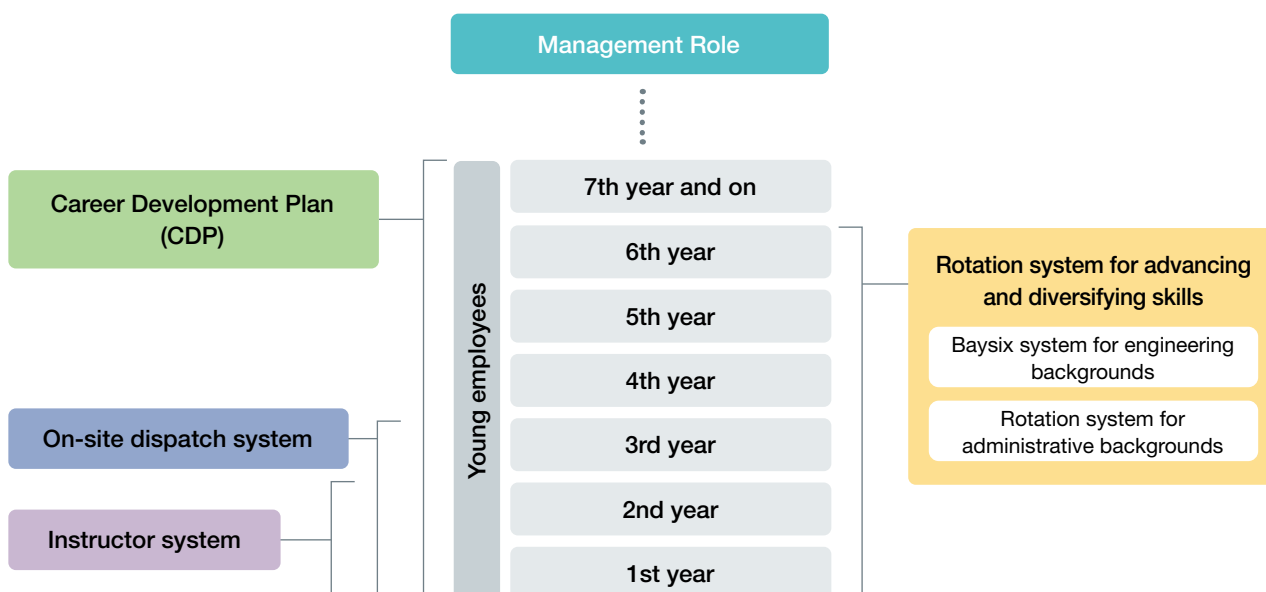
#### Overall image of training for advancing and diversifying skills



Total annual training (FY2022): 50,871 hours  
Training per person (FY2022): 17 hours

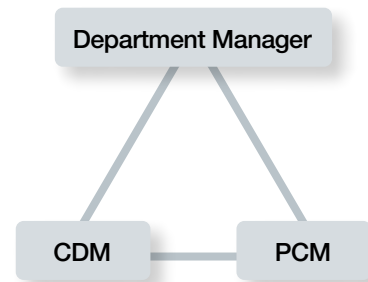
#### OJT (young employee training system)

In addition to creating career development plans aimed at giving young employees in regular positions and non-management roles a competitive edge as fast as possible, we are working on building the foundation for the diverse human resources portfolio that will be required in the future by providing strategic training for young employees through OJT at work, including training programs for both humanities and engineering backgrounds, or the on-site dispatch system.



### Three-party department organization (OJT)

The JGC Group provides a workplace environment where department managers can focus on creating transformation and vision for their departments, and leading their strategies. This is bolstered by Project Coordination Managers (PCM) who lead members assigned to each project, and Career Development Managers (CDM) who are responsible for human resources development. In particular, CDMs organize various types of meetings with whom applies to the Baysix system, CDP, on-site dispatch system and other programs.



### Career Development Plan (CDP)

**[Purpose & Overview]** Employees describe their current situation and the image they are aiming to achieve, and outline their deficiencies in skills, experience, mindset, and other factors required for performing work, to encourage self-awareness and individual career development. Fostering communications with 1-on-1 career discussions between superiors (development coach) and subordinates while creating a CDP provides growth opportunities in line with what the subordinates are seeking, and cultivates their awareness.

### Rotation system for advancing and diversifying skills

**[Purpose & Overview]** To develop a diverse human resources portfolio, this consistent program of recruitment, allocation and training linked to CDP allows young employees to build up their career in an independent manner. This system provides the foundation for developing the skills for understanding diverse perspectives, same level of knowledge and experience as outside experts, and a broad outlook and profound insight.

**[Procedure]** Rotation in line with courses after three to four years corresponding to factors, such as evaluations during recruitment selection, individual preferences, and state of company allocation. Purpose Journey training is provided before and after rotation, with the aim of defining My Tagline for a management role.

### On-site dispatch system

**[Purpose & Overview]** All new graduate recruit are stationed up to half a year at project sites overseas or in Japan, or at operating companies within three years of entering the company, to build up extensive experience.

### Instructor system

**[Purpose & Overview]** Gives young employees a competitive edge for those two years after entering the company as new graduates.

## Human Capital Initiatives

### 3. Promoting retention

Key items are defined and implemented with the aim of boosting the retention rate of skilled human resources over a long-term span.

#### Key items

- Align with Company philosophy and strategies
- Improve training system and sense of growth
- Improve satisfaction with work details
- Improve compensation and treatment

	Turnover rate
October 2021 to September 2022	4.8%
October 2022 to September 2023	3.8%

\* Based on a denominator of approximately 3,000 employees at the four companies: JGC Holdings Corporation, JGC Corporate Solutions, JGC Corporation, and JGC Japan Corporation  
 \* Only employees under 65 years old retiring for personal reasons

### Networking program

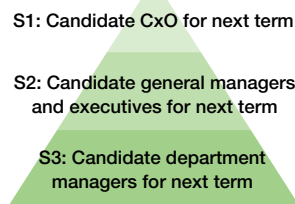
A system suited to mid-career recruits within their third year, or new graduate recruits within their sixth year of entering the company, this new networking program introduced from fiscal 2023 allows them to perform their duties while creating their own vertical, horizontal and diagonal connections.

Panel discussions and other types of dialogue enable participants to learn more about the culture of the JGC Group, while regularly holding various sessions and social gatherings to encourage retention of human resources by not only facilitating vertical connections between superiors and subordinates, and horizontal connections between colleagues or contemporaries who entered the company at the same time, but also building relationships with diagonal connections.

### 4. Training for human resources succession

A candidate selection and training program is provided to identify three levels of succession of human resources, and creating evaluation axes and methods.

Level	Applicable to	Management/Coordinating Body
S1	Presidents of operating companies	JGC Holdings Nominating Committee
S2	General manager class	Group-wide operation and management
S3	Department manager class	Operating company operation and management



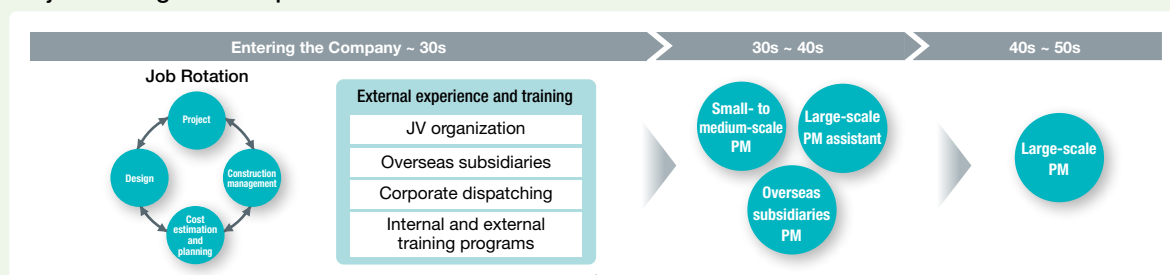
For details on S1, see P. 69 Corporate Governance: Succession plan

#### TOPICS

### Training of human resources for project execution

We recognize the importance of providing training for human resources for project execution for EPC projects in the Total Engineering Business, particularly project managers (PM) who serve as project supervisors, and others who head various functions. Continuous training of applicable candidates is monitored to provide extensive professional experience over the medium to long term.

#### Project manager career path



Creation and implementation of a human resources training plan based on a human resources vision looking toward the future



## ► Enhancing human resources engagement

To enable human resources of the JGC Group to make the most of their own capabilities toward achieving the 2040 Vision, a broad range of measures are implemented for increasing motivation by making purpose personally relevant, developing rewarding systems, promoting inclusion and diversity, and creating a comfortable workplace environment.

Making purpose personally relevant

Developing rewarding systems

Promoting inclusion and diversity

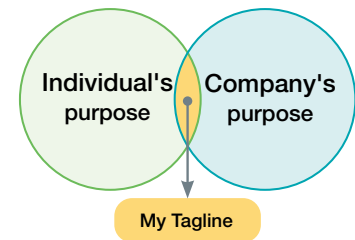
Creating a comfortable workplace environment

### 1. Making purpose personally relevant

In addition to instilling the JGC Group's purpose, "Enhancing planetary health," we provide "Purpose Journey training" with the aim of having employees renew their own sense of purpose and pointing out items in common with the company and each individual.

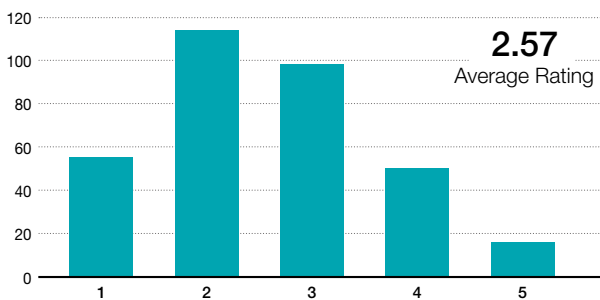
Initiatives include a program for exploring the employee's own sense of perspectives, an aptitude test for analyzing oneself from objective and quantitative metrics, and a program for identifying personal qualities and strengths from individual lifeline charts. Participants discuss with each other about the background of the company's purpose, and find areas in common between the company's purpose and their own individual purpose, to create their My Tagline in around 15 words.

A survey conducted after training indicated that the level of satisfaction regarding our Group's purpose grew from 2.57 points before training to 4.13 afterwards—ample evidence of positive results.

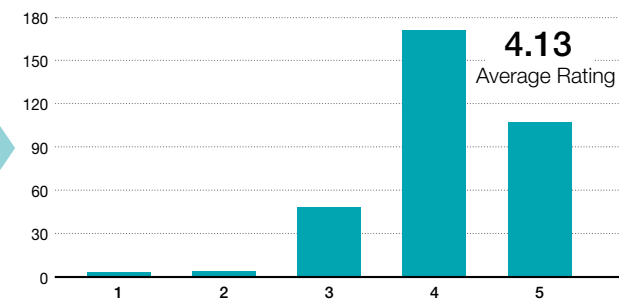


#### JGC Group's level of satisfaction with Purpose

Before training  
(People)



After training  
(People)



### 2. Developing rewarding systems

#### 1 Introducing a new personnel system

We believe that this unwavering dynamism and an ambitious corporate culture cannot be attained unless each of our members take on and persist in challenges. In fiscal 2022, we updated the personnel system that eliminates the seniority-based aspects and instead emphasizes the significance of duties, such as job responsibility. Based on the core concept of Pay for VALUE, the value or results brought about by each individual is reflected in bonuses and salary. We also provide allowances corresponding to the value of performed duties.

#### 2 Promoting initiatives for external assignments (cross-border)

We have developed a corporate dispatching and seconding system to locations in Japan and overseas to create a more rewarding working experience, and more than 130 employees are playing active roles in companies within and outside of the Group at this point.

## Human Capital Initiatives

### ③ JGC Family Day

We have held the JGC Family Day since fiscal 2009 for employees and their children (elementary school students in Grades 4 through 6) with the aim of fostering understanding of work. In fiscal 2023, a total of 41 children took part in the program, including those from overseas.



### ● 3. Promoting inclusion and diversity

#### Basic Policy for Inclusion & Diversity

Recognizing that diversity and fairness are essential for everyone to thrive and work together effectively, the JGC Group has established the Basic Policy for Inclusion and Diversity comprising the following principles, and it is committed to promoting this policy throughout all its entities and activities worldwide:

- Treat one another with respect and value their opinions and experiences including their differences in nationality, race, age, disability, gender, religion.
- Provide fair opportunities for career development and skill development to all employees around the world.
- Cultivate a positive work environment with systems that empower all employees to maximize their potential and vitality.
- Promote the JGC culture of open communication, innovation, collaboration and teamwork by fostering an atmosphere of continuous personal and professional development, where diverse perspectives and experiences are shared with each other.

### ① Promotion of women's careers

#### A. Actively promoting highly skilled women

The JGC Group is seeking to double the number (30) of women in management positions compared to 2020 levels by 2025, and the entire group is actively pursuing the promotion of highly skilled women in management roles.

 P.85 ESG Data Highlights


#### Number and ratio of women in managerial positions\*

	Fiscal 2020	Fiscal 2021	Fiscal 2022
Number of total managers	1,221	1,256	1,267
Number of female managers	30	35	39
Ratio of female managers (%)	2.5	2.8	3.1

\* Applies to employees of JGC Holdings, JGC, and JGC Japan

## B. Family Care

The family care system in place helps members balance work with family affairs, childcare, and nursing care via sick/injured child-care leave, support for those raising children that includes up to two days off per month for childcare leave, and leave or shorter working hours for childcare. The number of men taking parental leave has also been increasing year by year. For men and women alike, the system supports career development mindful of life events.

 P.85 ESG Data Highlights



Available reduction in working hours until children reach the age of three: 1-3 hours  
Available reduction when children are between three years old and sixth-grade age: 1-2 hours

### "Kurumin" certification

The JGC Group companies received "Kurumin" certification as a "company that supports childrearing."



## C. Participation in the "Rikochalle program" to cultivate potential female employees

We are also involved in nurturing future female Group leaders through participation in the "Riko Challenge (Rikochalle)", an initiative of the Gender Equality Bureau of the Cabinet Office, to support female students interested in science or engineering careers.

### 2 Promoting recruitment of people with disabilities

To advance and stabilize recruitment of people with disabilities, Group company JGC Parallel Technologies Corporation was established in January 2021. Focusing on IT operational support, JGC Parallel Technologies has a personnel system in place for the convenience of those with disabilities. With 23 employees (of which 22 are persons with disabilities) as of June 1, 2023, the Group-wide rate of employment of people with disabilities is 2.46%, which is at a level that exceeds the statutory employment rate (2.3%).



**Parallel × Technologies**

### 3 Senior engagement and retention

The EPC business relies on proven engineering expertise, and we have long recognized the valuable experience of older engineers who have been actively recruited. JGC took the initiative to raise the retirement age to 65 in 2015, enabling senior employees to pass on expertise while bearing project responsibility and continuing to be compensated accordingly.

## Human Capital Initiatives

### 4. Creation of a comfortable workplace environment

#### 1 Initiatives for those posted overseas

A comprehensive range of initiatives are available for employees posted overseas, with the view of boosting the appeal and compensation of business trips and positions stationed overseas in the Total Engineering Business.

##### Purpose

- 1 Provide more extensive experience, including positions overseas, to facilitate employee career formation
- 2 Improve the working environment and compensation for overseas positions, giving employees a more rewarding experience and sense of pride
- 3 Provide comprehensive lifestyle support for family members to suit each employee's life stage

##### Specific Initiatives

###### Shorter cycles for overseas postings

Postings overseas exceeding 2 years are determined based on the employee's intentions to suit their life stages, such as marriage, childbirth, childcare or nursing.

###### Enhanced home leave

The length of home leave available for single employees or those posted alone to construction sites overseas has been changed from 12 weeks overseas and 2 weeks home, to 10 weeks overseas and 2 weeks home. After 2024, we plan to further reduce the vacation cycle, aiming to achieve a well-balanced and flexible leave system that harmonizes with different life stages.

Home Leave Cycle	Fiscal 2020 and On	July 2023 and On	Planned for July 2024 and On
Weeks on duty	12	10	8
Weeks on leaves	2	2	2

###### Care for family members at home

We have partnered with full-service housekeeping companies providing house cleaning, babysitting, nursing and other services to assist family members in Japan with their childcare or nursing needs, or to reduce the burden on those posted overseas.

#### 2 Extensive paid leave and other leave systems

##### A. Welcome Back system

Welcome Back system is available for employees who retired due to their spouse's relocation to new jobs or positions overseas (regardless of whether or not they are our company employees), on the assumption that they will return to work within 3 years. In the past, such employees had to retire and rejoin the company, but the system has been changed from fiscal 2022 where employees can select a new form of "leave." The system has been amended to provide additional flexibility where it has become the norm for both partners to be working.

##### Feedback on the Welcome Back system




Eriko Ishii  
Project Controls Department  
JGC Corporation

My spouse was assigned to a position in Vietnam and we made the decision to move the five members of our family together. My supervisor recommended making use of this system, so I submitted an application and left Japan. The fact that I had kept in touch with my supervisor and colleagues while I was living in Vietnam, and that the system gave me the opportunity to rejoin the same division as before helped to alleviate the psychological stress associated with gaps in my employment after leaving the company. After returning to the company, I was assigned as a member of a project controls department for a project in Malaysia. I feel that being given the opportunity to utilize this system and experience living overseas with my family has helped to broaden my perspective toward work at this company that has a high rate of people stationed overseas.



### B. Childcare leave for male employees

With a growing number of people taking childcare leave and more households where both partners are working, we are creating a workplace environment and supportive systems that allow male employees take childcare leave.

 P.85 ESG Data Highlights

	Rate of Utilization	Participants	Taken
Childcare leave (men)	69%	93	64

\* As of the end of fiscal 2022

### C. Encouraging employees to take paid leave

In addition to regular days off every month, measures are in place to encourage employees to take an extra day off for a three-day weekend, to cater to more flexible work styles. In a standard month (based on 30 days) made up of four weeks, employees would work for 22 days and have eight days off. This system encouraging employees to take paid leave is called "921", as taking an extra day of leave results in nine days off and 21 days of work. We are taking steps to make sure employees are aware of this system, particularly in June and December when there are no public holidays available.



Internal poster for 921 system

## 3 Facilitating work styles and workplace environments

### A. Telecommuting system

To maintain high productivity while respecting the work-life balance of each member, flexible work styles have been adopted with relaxed restrictions on where and when work is done. Our basic approach is a hybrid style combining commuting and telecommuting for greater convenience.

### B. Shared offices

Shared offices at the Yokohama Head Office offer a variety of areas for different purposes, including private booths, open spaces for discussions, and smart cubicles for online meetings. This has inspired more flexible ways of working and stimulated internal interaction, leading to new ideas and value.



Shared office (Yokohama Head Office)

### C. Promoting employees health

In addition to workplace vaccinations and other preventive measures during the pandemic, the JGC Group maintains several health programs, including regular stress assessment and the JGC exercise program, to facilitate the maintenance and improvement of employees' physical and mental health.



JGC exercise program

Human Capital Initiatives

# Human Resources Embodying Group Personnel Strategy



## Naohiro Yasuda

Mechanical engineering major  
 Joined JGC in 2008

Assigned to a department focused on overseas business after joining the company, has since been involved in estimating, FEED and EPC as a project engineer on oil and gas projects. Worked on-site in Saudi Arabia and the U.S., and is currently the engineering manager of a construction project for the world's largest scale ethylene production plant based in the U.S.

Q1

**Tell us about your feelings about project management.**

A1

I feel that project management actually involves the management of "people" rather than "things" or "money." At the end of the day, it is "people" who manage the "things" and "money." EPC projects cannot be accomplished by one person alone—in many cases, they are achieved by hundreds or thousands of people. The key to success is ensuring that each and every person involved in the project is able to exert their maximum capabilities and achieve their given task in line with a common goal. Project management is about creating the environment that enables this to happen. And naturally, unexpected events accompany any type of project. When faced with such situations, it is the role of project management to quickly identify the present conditions and indicate the direction the project should take in order to prevent or minimize damage, and make decisions balancing the three factors of quality, schedule and cost in a timely manner.

Q2

**Tell us about some of your experiences that led to your own personal growth?**

A2

When I was working on a construction project for an ethylene production plant in North America in 2017, Hurricane Harvey struck the site and also caused severe damage around the southern regions of the U.S. This disaster hit right before construction was due to be completed, and while all our group employees considered for a while returning home, we were all committed to seeing the project through to completion and decided to stay at the site. Instead, we worked with our clients and joint venture partners to restore the damage, which ensured the plant was completed as quickly as possible. Despite such an unprecedented situation where no one knew the best approach to take, we identified what needed to be done and the steps required, and coordinated our efforts with the authorities and partners. This was a valuable learning experience for me, and it made me realize the need of finding the optimum solution to any challenge I face.

Q3

**What is the ideal character for a project manager?**

A3

A project manager capable of continually showing the way to everyone involved in their project. As I mentioned earlier, projects are only successful when a diverse range of personnel are able to work to the best of their potential and capabilities. Yet there is always more than one way of approaching things. The important thing that leaders should keep in mind to ensure that their project is a success is to stick to a common goal, but not limit themselves to a single way of doing things. Keeping options open to suit the characteristics of each individual allows each person to come up with creative ideas and a more rewarding approach while guiding them toward a common goal—this is the type of leader that I am also striving to become.

Q4

**What goals lie ahead?**

A4

First up is completing the projects I am currently in charge of as planned, and creating an atmosphere where all the clients, subsidiaries and members working on the project—myself included—can look back and feel happy that there were involved in the project. I feel that project management skills refer to the ability to leverage those skills no matter the scale or field of the project. I want to further hone the project management skills I have developed to get closer to the ideal image of a leader and making any type of project I am working a successful one, even beyond those in the oil and gas industry. I also want to think about the best way to pass on my own experiences to help train the next generation of personnel as dependable project engineers.



## Motokata Kai

Mechanical sciences and engineering major  
Joined JGC in 2005

Assigned to the Heating Department after joining the company. Engaged in projects in Japan and overseas. Stationed at JGC Philippines, Inc. and Qatar natural gas processing facilities before being transferred to the Technical Development Department. Involved in ammonia technical development and demonstration projects. Subsequently moved to the Sustainability Co-Creation Department in 2020 to supervise the hydrogen/fuel ammonia business.

### Q1 What type of work are you currently involved in?

**A1** I am currently working on the "Large-scale Alkaline Water Electrolysis System Development and Green Chemical Plant Demonstration" and "Research and development of large-scale external thermal ammonia decomposition hydrogen production technology" projects funded by the New Energy and Industrial Technology Development Organization (NEDO). I am also involved in studying investments in venture capital funds that invest in hydrogen-related venture businesses with the aim of unearthing technologies and businesses. In addition to this, I am a member of Sustainable Solutions established under the overseas operating company JGC Corporation where I assist with securing orders for EPC projects in the hydrogen/fuel ammonia sector, and I am also involved in establishing business development organizations with the view to entering the hydrogen/fuel ammonia business.

### Q2 Those roles differ to the traditional fields and business models that the JGC Group has been engaged in—what aspects do you find challenging?

**A2** The JGC Group is currently aiming to secure EPC contracts in the hydrogen/fuel ammonia sector, while also taking part in projects geared toward orders as a business operator contributing capital. I am engaged in discussions about how to deliver new value from the perspective of a business operator and EPC contractor. Blue ammonia projects are currently mainstream in the hydrogen/fuel ammonia sector, but this is expected to transition to green ammonia in the future. The Group is involved in a green ammonia demonstration project in Namie Town in Fukushima Prefecture. I think we will be able to provide a broad range of value regarding green ammonia, including our know-how as a business operator, systems under development and EPC, so I want to focus on building up the know-how and knowledge for commercializing green ammonia with the view to expanding the sector.

### Q3 What type of human resources do you expect to expand into new fields and models in the future?

**A3** An extension of the work I am currently involved in is business operations in the hydrogen/fuel ammonia sector and the licensing business marketing our technology. We have internal departments covering the business operations and finance aspects, so I think it would be ideal with more human resources well-versed in business development and financing.

We also have a dedicated team for the licensing business, but members actually engaged in executing projects also work on EPC businesses. The required background is the same for both these fields, but they have a different business position. The licensing business is particularly sensitive to the latest technologies, and calls for the generation of patents and improvements. In addition to the execution skills developed with EPC projects, I am training human resources who have the qualities of leaders, backed with the drive to take on new challenges, such as developing and commercializing new technologies through this work.

### Q4 What goals lie ahead?

**A4** My ultimate objective is to take the projects I am working on through to commercialization and establish a firm foothold. One of the reasons I transferred to the Technical Development Department was because I was keen on taking up the challenge of creating businesses with a sense of differentiation based on technology. As an engineering company, I feel that the licensing business marketing our technology will be the key to building on our current business operations and generating value. I hope to train human resources capable of leading this sector through the combination of technical development and business development.

## IP / Intangible Asset Initiatives

### Basic stance

Intellectual property and intangible assets are emphasized by the JGC Group as a management resource for sustainable growth, and we are actively engaged in creating, protecting, and applying these assets and in associated risk management.

A broad range of these assets built up through internal "creation of knowledge" and collaborative "fusion of knowledge" are used to expand existing business, develop technology licensing, enter non-EPC areas, and transform business through digital technology while ensuring compliance, respecting others' rights, and minimizing our own risks.



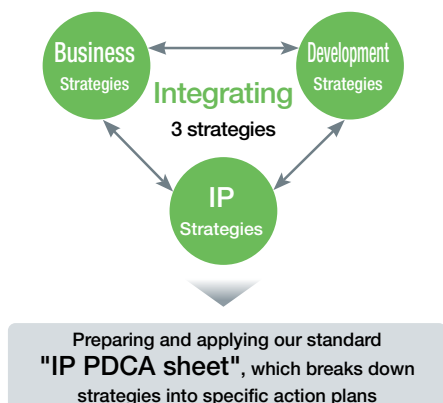
### Example of forms of usage of intellectual property and intangible assets



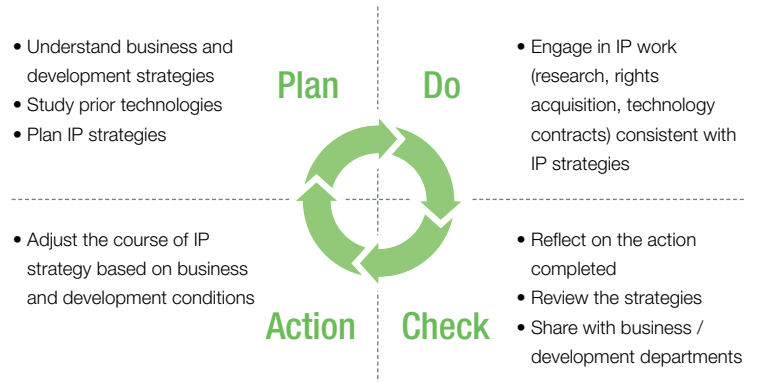
### ▶ Implementing IP strategies linked to business and development strategies

Growth of current business and creation of new business is promoted by formulating IP strategies linked to our business and development strategies. The Group then repeats PDCA cycles for IP that integrate all three strategies.

#### Planning IP strategies



#### Implementing a PDCA cycle for IP

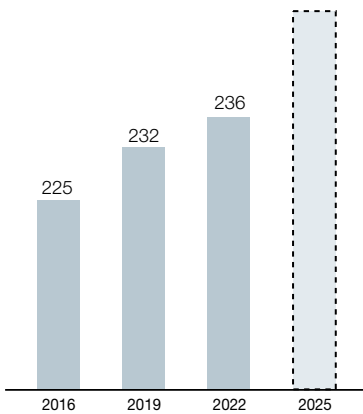


## ▶ IP activities and sustainability

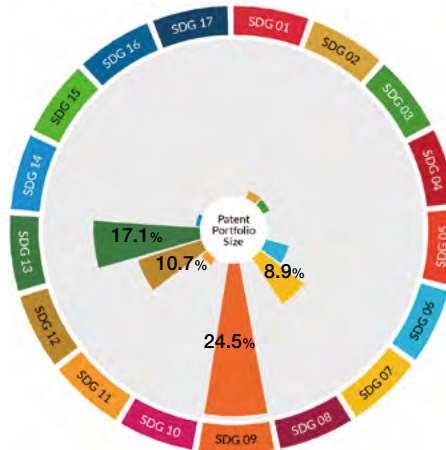
The JGC Group is engaged in business activities and research and development activities aimed at achieving our purpose of "Enhancing planetary health." The ratio of intellectual property created through these activities that have led to patents related to SDGs is increasing by the year.

### Changes in active patents related to addressing JGC Group materiality and SDGs

Number of patents



### Ratio of patents related to SDGs of active patents owned by JGC Group



- Industry, Innovation and Infrastructure
- Climate action
- Responsible consumption and production
- Affordable and clean energy

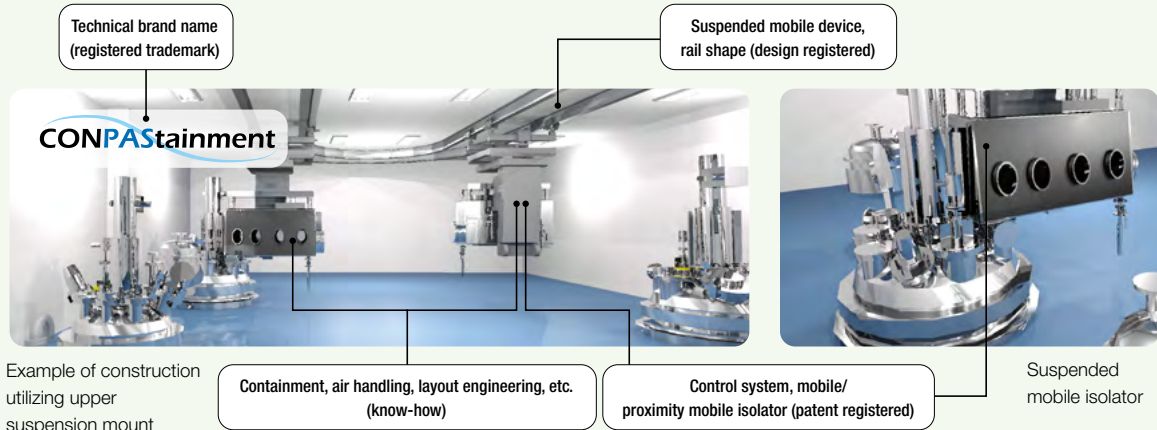
\* Created with LexisNexis®PatentSight®

## TOPICS

### Protection of IP (IP mixture)

One of the JGC Group's IP strategies is the "IP mixture" that protects our technologies and services in numerous ways through rights and know-how such as patents, designs, and trademarks. Protection via IP rights and management of technical information, such as knowledge and know-how helps establish our brand of technical expertise and create differentiated technologies, which leads to securing project orders.

#### Example of value creation for pharmaceutical production in the Life Sciences sector



#### Social needs

Handling of highly potent substances, such as anticancer drugs is increasing in the pharmaceutical production sector, and there is a growing need for "containment technology" that helps to manage quality and keep workers safe

#### JGC Japan Solution

Isolation system capable of unprecedented level of containment  
**Development of "CONPASTainment"**

#### IP strategy

Multifaceted protection of technology to establish a technical brand, based on the intellectual property mixture strategy

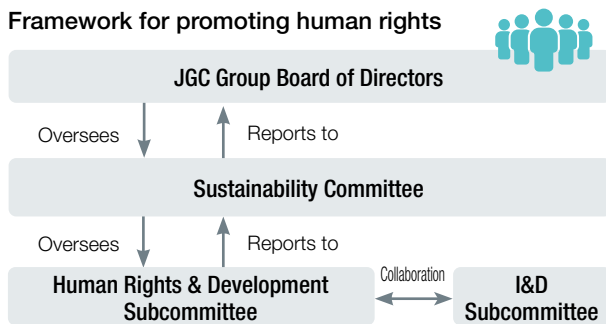
#### Value creation

- Safe and reliable operation of pharmaceutical manufacturing facilities
- Prevents leaks of highly potent substances, and contributes to worker safety and environmental conservation
- Expand and create business opportunities in the Life Sciences sector

## Respect for Human Rights in Supply Chains

### Basic stance

Recognizing that a respect for the human rights of all people affected by our business is a fundamental principle of our business, the JGC Group abides by internationally recognized human rights principles, such as the International Bill of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work of the International Labor Organization (ILO). In addition to the Group executives and employees, we ask all stakeholders throughout our supply chains to respect human rights, in line with the "JGC Group Code of Business Conduct" and our "Basic Policy for Human Rights & Development."



Under the Sustainability Committee chaired by the chairman and CEO of JGC Holdings, the JGC Group has established the Human Rights & Development Subcommittee as part of our human rights framework.

To promote a unified, group-wide approach to human rights, the subcommittee consists of senior executives of main Group companies and works with the I&D\* Subcommittee led by a human resources department. This ensures that respect for human rights is part of our corporate culture.

\* I&D: Inclusion & Diversity

"Basic Policy for Human Rights & Development" on the JGC Group website  
<https://www.jgc.com/en/about/policies.html>



### ▶ Human rights due diligence

#### ● Create human rights risk map and identify issues (create based on the UN Guiding Principles Reporting Framework)

In fiscal 2022, we conducted desktop studies for EPC Business in Japan and abroad to shed light on all stakeholders throughout the supply chain, so as to identify human rights issues that present risks to the JGC Group's businesses. Each detected issue was categorized on the basis of severity and likelihood of occurrence, to create a human rights risk map. Response policies and plans are developed in accordance with the "Guidelines on Respect for Human Rights in Responsible Supply Chains" released by the

Japanese government, with initiatives slated to be rolled out from fiscal 2024 to address the detected issues in order of severity and likelihood of occurrence.

Ahead of implementing the above plan, we have started screening by sending questionnaires to suppliers of our overseas businesses that use certain construction materials deemed to have extremely high human rights risks, in order to verify their attitudes toward human rights and their supply chains.

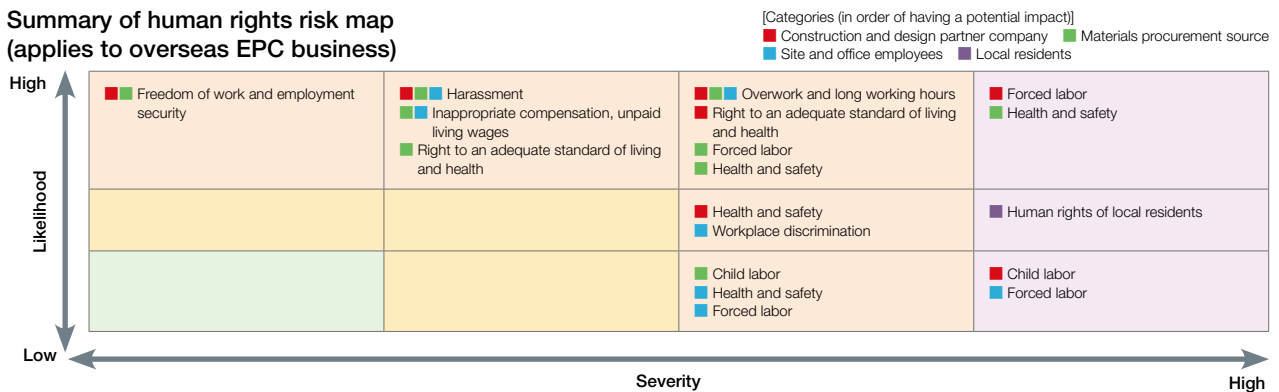
	~ Fiscal 2022	Fiscal 2023	Fiscal 2024 ~
Assess human rights risks	████████████████████		
Study risk reduction measures		████████████████████	
Implement risk reduction measures		████████████████████	████████████████████
Verify effectiveness			████████████████████
Disclose information, communicate externally			████████████████████

#### ● Future issues to be addressed and direction

Specific initiatives for risk reduction measures will be implemented going forward, based on the created human rights due diligence process and proposed measures. Furthermore,

the human rights due diligence process currently being implemented for the EPC Business will be applied to functional materials manufacturing companies from fiscal 2024.

**Summary of human rights risk map (applies to overseas EPC business)**



**Raising awareness of human rights through internal training**

We held "business and human rights training" for executives and employees in fiscal 2022 with the aim of increasing understanding of the social responsibility required of companies to ensure that each and every employee respects human rights. While we also recognized the importance of management expressing their own attitudes toward human rights during discussions between external human rights experts and management during training. This higher level of awareness toward human rights within the company increases the effectiveness of human rights due diligence to be conducted in the future.



**Comment from Lawyer Akiko Sato, who participated in business and human rights training**



**Lawyer Akiko Sato**  
United Nations Development Programme  
Liaison Officer  
(Business and Human Rights project)

Establishing the Human Rights & Development Subcommittee within the JGC Group Sustainability Committee, creating policies on human rights, holding associated training and running human rights due diligence to identify and respond to specific human rights risks is in line with the United Nation's guiding principles. From the stance of business and human rights, existing internal initiatives need to be revised from the perspective of human rights, and the impact that business has on the human rights of the company as well as all stakeholders throughout the value chain, including overseas, needs to be identified based on a human rights policy that reflects the level of commitment of the management team. To achieve this, an internal culture needs to be nurtured based on the common language of human rights, with medium- to long-term action plans developed and revised regularly, and above all else, engaging in dialogue with those affected. I hope to see enhancements made to the current initiatives, while also addressing global issues such as social structural problems like minorities, climate change, biodiversity, and conflicts from the perspective of human rights, and make further improvements to the system by incorporating corrective actions and remedial measures.

**▶ Building Responsibly (BR) initiatives**

Worker Welfare is drawing increased attention in the oil and gas industry that involves hazardous work. JGC Corporation joined Building Responsibly (BR), an organization committed to protecting construction workers' rights and respecting

their welfare, and promotes respect of human rights for workers in the industry by establishing international standards and guidelines as a board member.

**TOPICS**

**Presenting the importance of addressing human rights at construction sites, at an APEC conference**

A member of the JGC Corporation Construction Department participated in APEC's Human Resource Development Working Group held in the U.S. in May 2023, and gave a presentation about IIF activities\* in place at our current LNG Canada Project, and took part in the discussion session. The presentation covered on-site IIF activities, and was praised highly by BR. IIF activities at construction sites are a way of creating a working culture of ensuring care for construction workers, and help to improve Worker Welfare.



\* IIF activities: Incident & Injury Free. This is a method of creating a culture of safety on worksites, developed by safety consultant JMJ to ensure that everyone is able to return home without any injuries.

## Occupational Health and Society

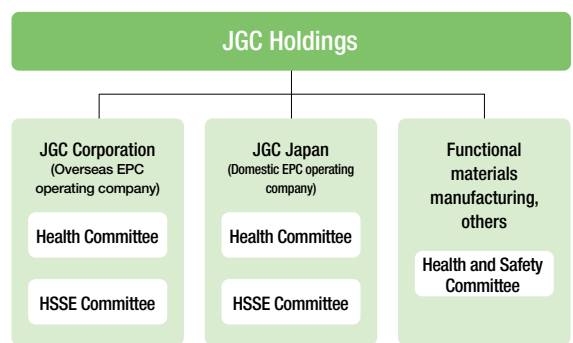
### Basic stance

The JGC Group positions Health, Safety, Security and the Environment (HSSE) performance as a corporate value that is to be continuously pursued. To this end, we created our fundamental principle "to create safe, secure and healthy workplaces in which all staff can carry out their functions with confidence" that not only applies to the JGC Group but also to all workers at offices or construction sites in Japan and overseas, including partner companies, as we work to implement HSSE initiatives throughout the Group.

#### ▶ HSSE management framework

EPC operating companies and functional materials manufacturing companies have developed their own health and safety policies based on the above fundamental principle, and established a Health and Safety Committee or HSSE Committee to develop a health and safety management system, which deliberates on and addresses key topics related to HSSE. The Health and Safety Committee or HSSE Committee of each group company conducts activities aimed at reducing risks related to health and safety. In the event of a major disaster, the Occupational Health and Safety Management Department of each group company address the incident quickly and urgently contacts our relevant departments—we have a system in place that provides support if necessary.

#### Framework for managing occupational health and safety



#### ▶ Increasing performance of occupational health and safety

The JGC Group increases the performance of occupational health and safety from two angles—raising awareness of health and safety, and enhancing knowledge and expertise on health and safety. Raising awareness of health and safety involves boosting awareness at all offices and construction sites in Japan and overseas by holding various events, such as the HSSE Competition organized by the President of JGC Holdings Corporation. Enhancing knowledge and expertise on health and safety involves providing education on health and safety environments to new recruits and employees assigned to sites for the first time, as well as HSSE audits at construction sites in Japan and overseas.



HSSE Conference in 2022

#### ▶ High worksite safety performance

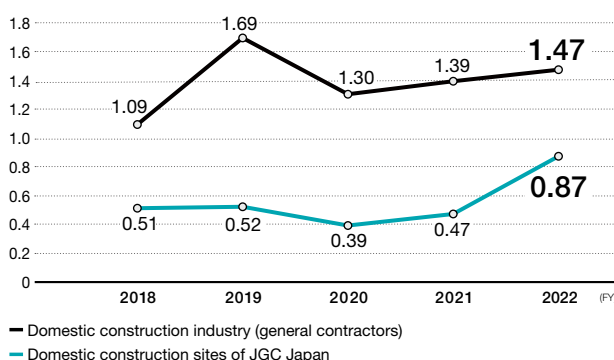
The Group's high safety record at construction sites in Japan and overseas attests to our constant commitment to safety as a core value shared by all members. Sites in Japan maintain a lost-time incident rate\*<sup>1</sup> below the industry average for general construction, and overseas sites have outperformed the annual lost time injury rate LTIR\*<sup>2</sup> of construction companies outside Japan as reported by the International Association of Oil and Gas Producers (IOGP)\*<sup>3</sup>.

\*<sup>1</sup> LTIR: indicating the frequency of lost time injuries, is a safety benchmark in Japan representing the number of injuries due to workplace accidents per million actual working hours.

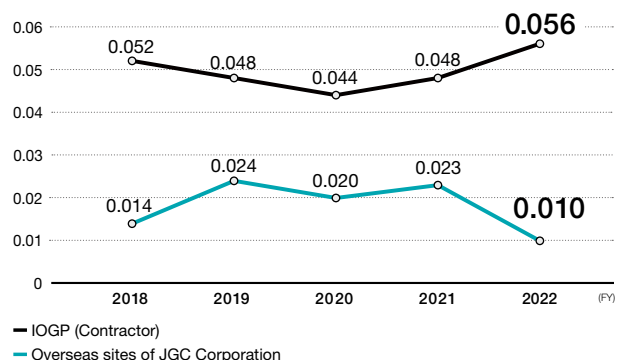
\*<sup>2</sup> LTIR: Lost Time Injury Rate is an Occupational Safety and Health Administration (OSHA) of the U.S. metric for calculating the number of injuries that result in time away from work, and indicates the frequency of lost time injuries per 200,000 hours.

\*<sup>3</sup> IOGP: The International Association of Oil & Gas Producers compiles safety records of construction companies in the oil and gas industry

#### Injury frequency at construction sites of JGC Japan compared to the domestic construction industry



#### LTIR of overseas sites of JGC Corporation compared to IOGP (Contractor)





Reinforcing Management Resources for Continuous Growth

# Quality Management System

## Basic stance

Quality management is essential for safe operation and stable production at plants and other facilities. Under the ISO 9001-certified quality management system in place at the JGC Group, quality policies established by each company form the basis for quality targets set at various organizational levels. After organizational issues are identified, quality targets and action plans are formulated, implemented, evaluated, and improved in PDCA cycles for continuous improvement of organizational performance. Each company of the JGC Group ensures quality through systems and human resources that bring together valuable knowledge and skills built up over many years.

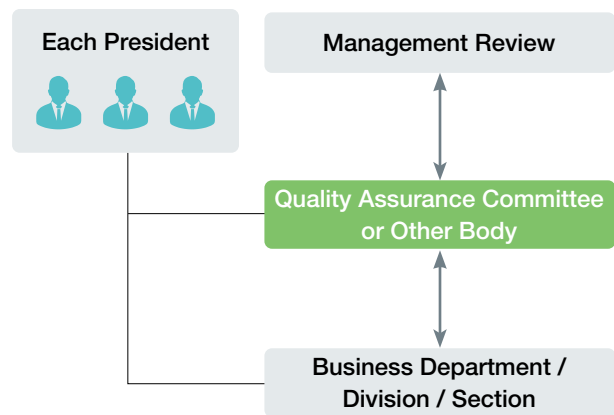
### ▶ Framework for quality management at Group companies

Quality assurance committees or similar bodies are established at each Group company, and meet regularly.

The committees implement continuous improvements to ensure that quality of the products and services provided remains satisfactory, which includes investigating the root causes of any quality issues and preventing recurrence. The committees also evaluate these measures, as ongoing improvements are made.

In maintaining this framework for quality assurance, quality management activities are reviewed annually by the president of each company.

### Quality management framework at each company



### Lessons Learned—Leveraging valuable knowledge built up over the years

The JGC Group continually adopts ideas and initiatives for leveraging the knowledge and experience gained from past successes or failures (LL: Lessons Learned) to new projects.

The overseas EPC operating company JGC Corporation has developed the Corporate Lessons Learned (CLL) framework based on the lessons garnered from past projects, and provides it company-wide as a means of preventing severe quality problems. All employees are given the opportunity to learn more using CLL, and the CLL courses in particular have been taken by a total of more than 11,000 employees including overseas group companies—all employees are united in our commitment to raising awareness of prevent quality problems from occurring. TQI

(Think Quality Initiative) activities that forge a culture where everyone works to increase quality, are part of initiatives aimed at increasing quality performance, and include an annual Quality Day where employees have the opportunity to get together to openly discuss ideas that can help improve quality beyond existing frameworks.

The domestic EPC operating company JGC Japan Corporation holds a general operational meeting attended by executive level personnel, which includes a session called LL Discussion that covers past examples and ways to prevent problems with defects in the future. LL Communication shares details of defects to all employees across the organization, as part of ongoing efforts to raise awareness of quality.



Panel discussions at Quality Day

# Corporate Governance

## Basic stance

The JGC Group remains aware that, sound governance is the foundation of management for sustained growth. We are therefore strengthening our corporate governance, which we view as a material issue.

Our central mechanism for corporate governance is the Board of Directors. Its governance structures, functions, and roles are continuously reviewed, with Board effectiveness analyzed and assessed each year as we seek progress through steady improvement.

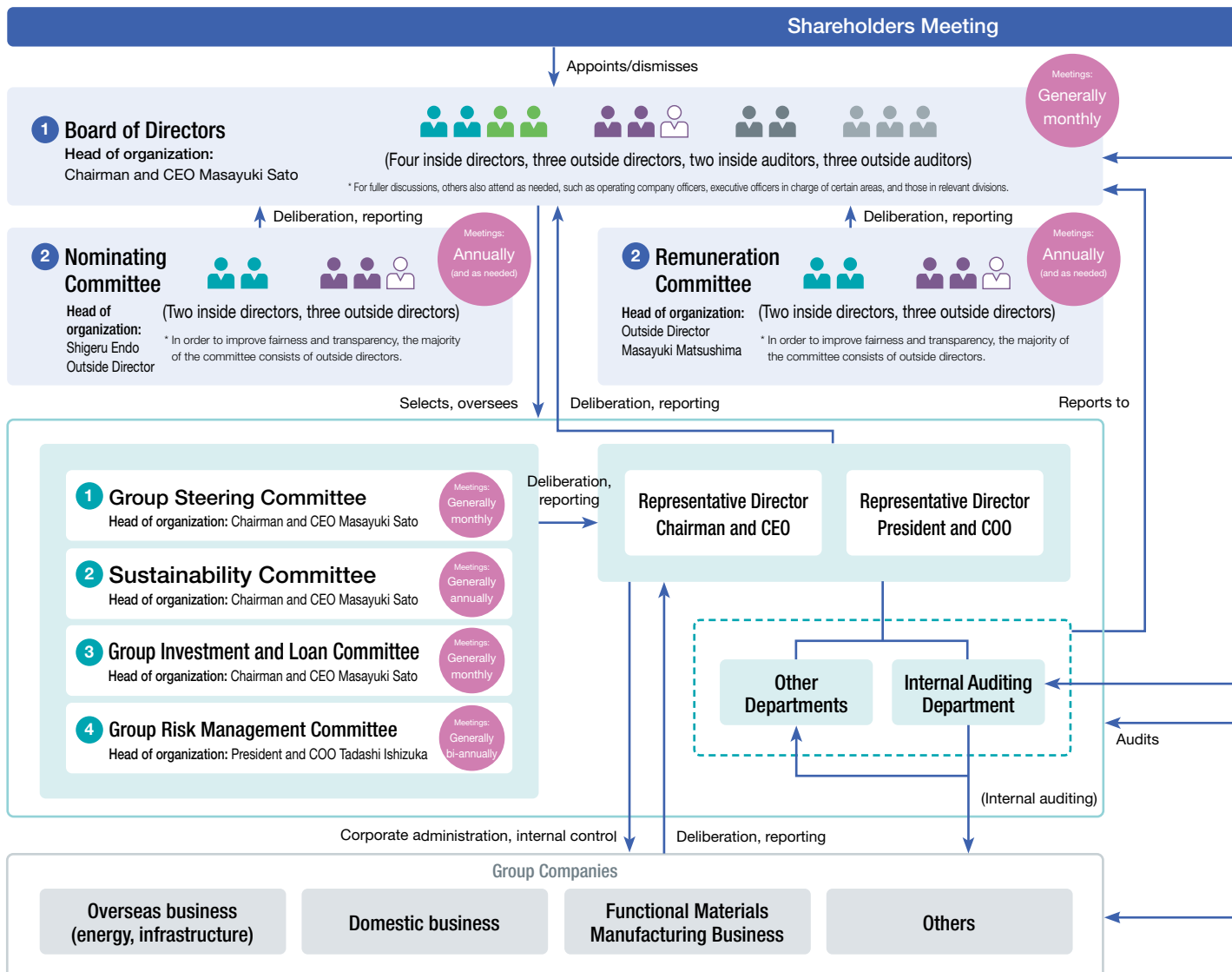
In regulatory compliance and other matters essential to appropriate corporate governance as well, our purpose and values call on each employee and officer to maintain high ethical standards in everything they do, so that the Group as a whole works to enhance medium- to long-term corporate value and achieve sustainable growth.

### ▶ Outline of the corporate governance system

JGC Holdings maintains a board of directors and an audit and supervisory board. The JGC Group has adopted a holding company structure under which operating companies pursue the Group's core business.

Separating management from execution provides greater clarity on roles and responsibilities of the holding company and operating companies. The holding company's role is to formulate management policies and oversee the operating companies from a medium- to long-term Group perspective. Operating companies apply the Group management policies and strategies to respond

#### Corporate governance system



flexibly and rapidly to market characteristics and seek further business expansion. This is intended to maximize corporate value and ensure optimal allocation of management resources for the Group as a whole while enhancing transparency of corporate management and strengthening overall Group governance. Committees have been established to deliberate key Group matters, and an executive officer system has been introduced to ensure efficient managerial decision-making and execution.

## ▶ Improvement Status of Internal Control System

JGC Holdings' Board of Directors determines the basic principles of the internal control system and revises them as necessary.

### Improvement status

1. The Internal Auditing Department monitors, evaluates, and improves the effectiveness of the internal control systems of JGC Holdings and the JGC Group and conducts separate audits as necessary
2. Rules of Management Authority regulate the duties and authority of each role, and clarify the system of responsibilities in corporate management and business execution
3. Management rules for Group companies have been formulated and implemented to ensure efficient and appropriate operations across the Group

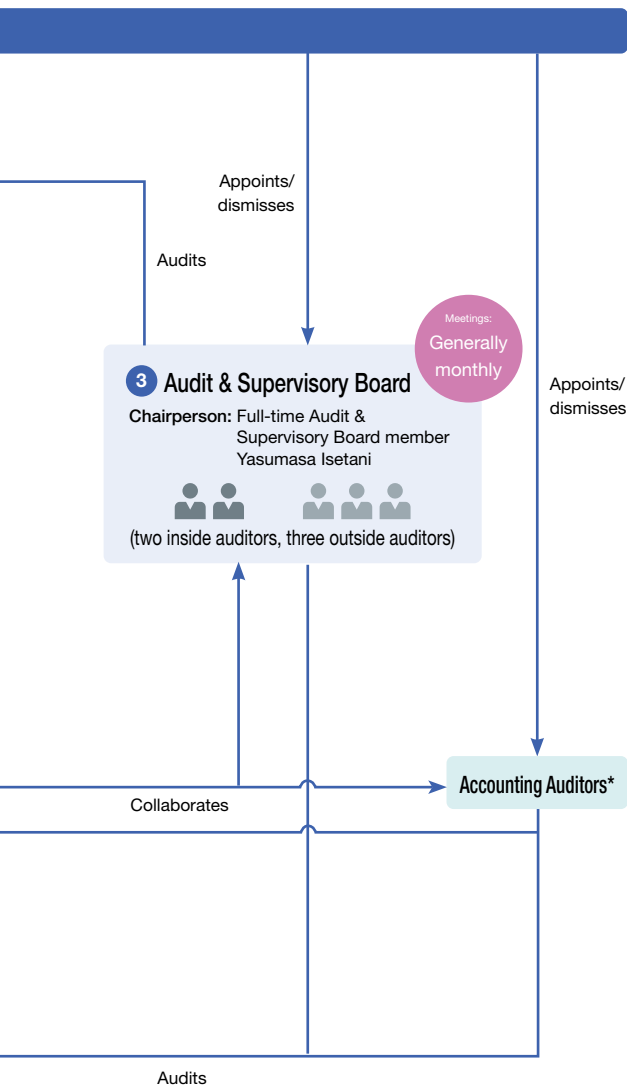
## ▶ Response to the Corporate Governance Code

We implement all principles laid out in the Corporate Governance Code and provide disclosure according to all 14 general principles, and supplementary principles required by the Tokyo Stock Exchange as stipulated in the revised Corporate Governance Code of June 11, 2021, and are making steady efforts to further solidify our corporate governance.



A Corporate governance report is available on the JGC Group website. (Only in Japanese)

<https://www.jgc.com/jp/ir/ir-library/corporate-governance.html>



Body	Purpose
<b>1 Board of Directors</b>	<ul style="list-style-type: none"> <li>• Resolves key matters of business execution</li> <li>• Oversees directors' executive actions</li> <li>• Deliberates on medium- to long-term strategies and issues</li> </ul>
<b>2 Nominating and Remuneration Committees</b>	<ul style="list-style-type: none"> <li>• Deliberates on appointment and dismissal of officers, remuneration, etc.</li> </ul>
<b>3 Audit &amp; Supervisory Board</b>	<ul style="list-style-type: none"> <li>• Discusses or resolves issues based on reports of key auditing matters</li> <li>• Presents opinions based on the results above to directors or the Board of Directors as necessary</li> </ul>

Body	Purpose	Members
<b>1 Group Steering Committee</b>	Reports on and discusses the direction that the Group should take as well as steering matters such as management / business strategies for the Group as a whole and each operating company	Chairman and CEO Masayuki Sato President and COO Tadashi Ishizuka Auditors (rotating)
<b>2 Sustainability Committee</b>	Formulates Group policies and action plans related to sustainability; deliberation to evaluate and promote action supporting sustainability	Chairman and CEO Masayuki Sato
<b>3 Group Investment and Loan Committee</b>	Deliberates on holding company and Group investment and lending projects	Standing members: Seven directors, executive officers, and auditors of the holding company and the Group companies Non-standing members: Three executive officers of the holding company may attend, depending on the agenda
<b>4 Group Risk Management Committee</b>	Understands and organizes risks posed to the Group as a whole, develops and maintains a group-wide risk management system, and proposes and deliberates on improvements	President and COO Tadashi Ishizuka

\* CPAs Takemitsu Nemoto, Atsushi Nagata, and Takashi Inoue of KPMG AZSA LLC audit JGC accounts. Auditing support is provided by nine other CPAs and 16 assistants

Representative Director	Director	Outside Director (Male/Female)
Auditor	Outside Auditor	

## Corporate Governance

## ▶ Board of Directors

## ● Board functions

The Board of Directors is responsible for decision-making on medium- to long-term Group strategies and issues, and it provides oversight regarding business execution of the Group companies. Board composition is intended to enable effective and efficient execution of these functions.

## ● Basic policy on Board composition and diversity

From the standpoint of further enhancing discussions on medium- to long-term Group strategies and issues and of strengthening oversight regarding business execution of the Group companies, the Board consists of the following members.

- ① Consists mainly of directors with broad experience in business markets and directors with a high level of knowledge and expertise in EPC operations, which is the primary Group business
- ② Independent outside directors are appointed in order to incorporate outside perspectives in management, with the expectation that these directors will provide objective advice to the Board and fulfill oversight functions from an independent viewpoint

As a matter of policy respecting the importance of diverse perspectives, members are appointed not solely based on professional experience and expertise but also on competence, regardless of nationality, race, or sex.

## Skills Matrix of Directors (Four inside, three outside)

Name and position at JGC	Term as director (in years)	Outside director attendance at Board meetings in fiscal 2022	Field					
			Corporate management	Technology, project management, and IT	Global business	HR, human resource development, and labor relations	Finance and accounting	Legal and risk management
<b>Masayuki Sato</b> Representative Director, Chairman, and Chief Executive Officer (CEO)	13	-	●		●		●	
<b>Tadashi Ishizuka</b> Representative Director, President, and Chief Operating Officer (COO)	6	-	●	●	●			
<b>Kiyotaka Terajima</b> Director, Senior Executive Vice President, and Chief Financial Officer (CFO)	7	-	●				●	●
<b>Shoji Yamada</b> Director	2	-	●	●	●			
<b>Shigeru Endo</b> Outside director	10	16/16 (100%)			●	●		●
<b>Masayuki Matsushima</b> Outside director	7	15/16 (94%)	●		●		●	
<b>Noriko Yao</b> Outside director	2	16/16 (100%)			●	●		●

## Skills Matrix of Auditors (Two inside, three outside)

Name and position at JGC	Term as auditor (in years)	Outside auditor attendance at Board meetings in fiscal 2022	Field					
			Corporate management	Technology, project management, and IT	Global business	HR, human resource development, and labor relations	Finance and accounting	Legal and risk management
<b>Yasumasa Isetani</b> Auditors	5	-		●	●		●	
<b>Kazuyoshi Muto</b> Auditors	2	-		●	●		●	
<b>Koichi Ohno</b> Outside Audit & Supervisory Board Member	9	15/16 (94%)				●	●	●
<b>Norio Takamatsu</b> Outside Audit & Supervisory Board Member	7	15/16 (94%)	●	●			●	
<b>Kazuya Oki</b> Outside Audit & Supervisory Board Member	0	-			●		●	●

Note: Selection rationale for each skills matrix is shown on P. 68. The above list is not exhaustive or prescriptive, which indicates disciplines where directors and auditors can further demonstrate their expertise, not all disciplines in which each director and auditor excels.

## ▶ Directors



**Masayuki Sato**  
Chairman and Representative Director  
Chief Executive Officer (CEO)



**Tadashi Ishizuka**  
Representative Director, President  
Chief Operating Officer (COO)



**Kiyotaka Terajima**  
Director



**Shoji Yamada**  
Director



**Shigeru Endo**  
Outside Director



**Masayuki Matsushima**  
Outside Director



**Noriko Yao**  
Outside Director

## ▶ Audit & Supervisory Board Members

**Yasumasa Isetani**  
Audit & Supervisory Board Member

**Kazuyoshi Muto**  
Audit & Supervisory Board Member

**Koichi Ohno**  
Outside Audit & Supervisory  
Board Member

**Norio Takamatsu**  
Outside Audit & Supervisory Board  
Member

**Kazuya Oki**  
Outside Audit & Supervisory  
Board Member

## ▶ Executive Officers

**Kiyotaka Terajima**  
Senior Executive Vice President  
Chief Financial Officer (CFO)

**Takuya Hanada**  
Executive Vice President  
Chief Human Resource Officer  
(CHRO)

**Masahiro Aika**  
Senior Executive Officer  
Technology Commercialization  
Officer (TCO)

**Masaki Ishikawa**  
Senior Executive Officer

**Takeshi Kawasaki**  
Executive Officer

**Toshiyuki Karasawa**  
Executive Officer

**Yoshihiro Mizuguchi**  
Executive Officer  
Chief Technology Officer (CTO)

**Akihito Sawaki**  
Executive Officer  
Chief Information Officer (CIO)

**Keiji Tanigawa**  
Executive Officer  
Chief Digital Officer (CDO)

**Satoshi Kurata**  
Executive Officer  
General Counsel

**Hiroyuki Morishima**  
Executive Officer  
Chief Manufacturing Officer (CMO)

**Shinya Miyake**  
Executive Officer

## Selection Rationale for Each Skills Matrix

Skill	Selection Rationale
<b>Corporate management</b>	To achieve the goals of BSP 2025 and 2040 Vision in line with the Group purpose of "Enhancing planetary health," the Group requires directors experienced in establishing clear strategies for sustainable growth and higher corporate value even in a turbulent business environment.
<b>Technology, project management, and IT</b>	The Group requires directors with a high level of knowledge and expertise in our main businesses in order to pursue, manage, and oversee growth strategies for sustainable growth and greater corporate value. Directors must also be highly knowledgeable and experienced in the five business areas of Energy transition, High-performance functional materials, Circular economy, Healthcare & life science, and Industrial & urban infrastructure that will be essential in social issues we must begin to address to fulfill our purpose of "Enhancing planetary health."
<b>Global business</b>	Implementing growth strategies and managing and supervising progress toward sustainable Group growth and higher corporate value calls for directors with experience in overseas business management and extensive knowledge of and familiarity with everyday life, culture, business environments, and so on outside of Japan.
<b>HR, human resource development, and labor relations</b>	JGC Group employees are required to possess advanced technical capabilities and expertise, an appreciation of different cultures and diversity in order to work with others of many nationalities, and a mental attitude that helps us make the most of our organizational strengths. To this end, personnel management must be established that ensures peak employee performance, and the Group requires directors with solid knowledge and experience in human resources management or development, including promotion of diversity.
<b>Finance and accounting</b>	Beyond ensuring accurate financial reporting, the directors required by the Group must have reliable knowledge and experience in finance and accounting, as needed to build a strong financial foundation and to formulate financial strategies both for growth investments (including M&As) aimed at sustainable gains in corporate value and for higher shareholder return.
<b>Legal and risk management</b>	A suitable governance system is fundamental to sustainable growth in corporate value. Moreover, to continue enhancing Board oversight effectiveness, the Group requires directors with solid knowledge and experience in corporate governance, risk management, and compliance.

Corporate Governance

► Policies and procedures for senior management appointment and dismissal

<b>Appointment process</b>	<p><b>Appointment of senior management and nomination of candidates for directors</b></p> <p>① <b>Deliberations of the Nominating Committee, which consists of a majority of outside directors and is chaired by an outside director, are focused on the following items.</b></p> <p>(1) Qualities such as character and views                  (2) Senior management and inside directors: Qualities such as experience, performance, and management capabilities, as defined in succession planning                  (3) Outside directors: Qualities such as independence and expertise</p> <p>② <b>After comprehensive deliberation by the Nominating Committee, a decision is made by the Board.</b></p> <p>Appointment of senior management and nomination of director candidates follows this process and involves ample discussion before decisions are made, with the understanding that these individuals may one day be candidates to succeed the CEO.</p>
<b>Dismissal process</b>	<p><b>Dismissal of senior management</b></p> <p>In the event of any of the following, the Board decides on dismissal after deliberation by the Nominating Committee.</p> <p>(1) Wrongdoing, impropriety, or breach of faith                  (2) Violation of laws or articles of incorporation                  (3) Loss of the qualities and capabilities initially required for appointment</p>

► Succession plan

The following succession plan in place informed by discussions of the Nominating Committee and Board is beginning to be initiated, reflecting the Group’s recognition of the importance of succession planning in sustainable growth of corporate value.

● Purpose

- Toward attainment of BSP 2025 and the 2040 Vision, and for lasting enhancement of corporate value beyond this, we recognize the necessity of appointing optimal directors and executive officers for the current business environment and management strategies.
- Based on the business environment and management strategies, the plan clarifies the knowledge, experience, abilities, and personal qualities sought in top management, guiding development and selection of the Group’s next leaders and enabling continuous appointment of these leaders whenever needed.

● Stance on leadership criteria

- In fiscal 2019, leadership criteria were determined through talks with current top management facilitated by a third-party organization, and future needs in leaders are defined from a medium- to long-term management vision.
- These criteria are classified on minimum essential attributes and ideal attributes (three-level scale), and candidates are assigned to groups with specific level requirements.
- The requirements of leaders were redefined in fiscal 2022 to suit changes in the business environment, and human resources criteria was revised.

● Stance on succession planning

- The basic stance taken on succession planning involves defining leadership criteria, selecting several individuals for near- and far-term candidate groups, providing opportunities to develop required attributes and gain experience, and monitoring progress each year as candidates are groomed over the medium to long term.
- In line with the above approach, educational programs for near- and far-term candidate groups are enhanced and built upon by sending candidates to external educational and training programs or inviting external lecturers as part of ongoing lectures.

Message from Outside Director

# Assembling a potent management structure to sustainably enhance corporate value

**Shigeru Endo**  
Outside Director



**[Reason for appointment]**

Mr. Shigeru Endo does not have direct experience in corporate management, but he has served as the ambassador extraordinary and plenipotentiary to Saudi Arabia and Tunisia and possesses extensive experience and knowledge of the Group's principal business market. Appointment as outside director reflects the Group's determination that this experience and knowledge will be applied in appropriately performing the duties of providing accurate advice and opinions on management and business and fulfilling a supervisory role from an independent standpoint, which will contribute to sustainable enhancement of corporate value.



Please refer to the JGC Group website for brief biography.

<https://www.jgc.com/en/about/directors.html>



In April 2022, the former Appointment and Remuneration Advisory Committee was split into two separate committees—the Nominating Committee and the Remuneration Committee—with each chaired by an independent outside director, of which I was appointed to chair the Nominating Committee. The committee currently comprises two inside and three outside directors as members. In order to prevail through these uncertain times where major changes are constantly afoot, determining how to assemble a potent management structure capable of sustainably increasing corporate value will be the key to the future of the Company—the Nominating Committee is also taking this to heart through its activities.

The primary responsibility of the Nominating Committee is to ensure objectivity, fairness and transparency when selecting members that make up the management structure. We are requested by the Board of Directors to deliberate on the selection and dismissal of senior management such as directors and other executive officers, before providing our reply. Over the past year and a half, we have been holding serious discussions on the personal qualities required of directors, executive officers and other members of top management,

as well as deliberating succession development planning and other matters.

We consider the fundamental essence of diversity as ensuring that each and every individual, from regular employees to the management team, is able to perform to the maximum extent of their capabilities, but we also see the significant potential of women in the workplace. Nurturing human resources is by no means an easy task. Yet it is impossible to foster true leaders without putting in the required effort. More than simply possessing knowledge of the manufacturing industry or the unique engineering aspects underpinning the JGC Group's operations, people suitable for top management positions need to be of a character fusing the perfect blend of decision-making capacity and drive, the ability to bring change and the power of imagination, and integrity and grit. The ideal image of a leader will no doubt change along with the circumstances of the day. The top management also needs to be supported by capable human resources. The office in charge of human resources plays a crucial role in formulating, implementing and assessing succession development planning with a long-term perspective, but I hope to see the Nominating Committee also becoming involved in this process.

## Cross-shareholdings

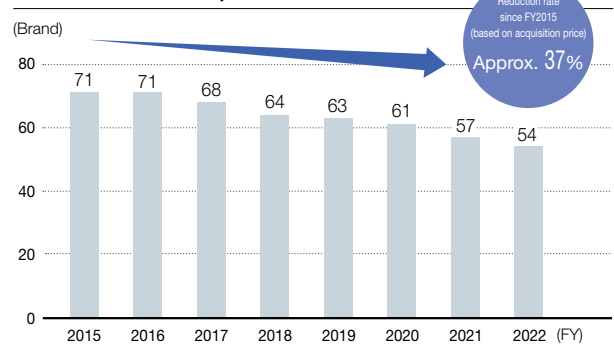
### 1. Purpose

The Group refrains from cross-shareholdings except in cases where maintaining and strengthening relationships with clients and business partners will contribute to higher medium- to long-term corporate value for the Group. Each year, the Board of Directors reviews the significance of maintaining each cross-shareholding, and both qualitative and quantitative aspects are reviewed. Quantitatively, TSR (total shareholder return) and ROE are checked for each company, as well as whether business advantages are commensurate with the cost of equity. Sale of shares deemed to have lost their significance is investigated accounting for the market environment and changes in stock prices.

### 2. Basis for exercising voting rights

In exercising voting rights for cross-shareholdings, advantages and disadvantages are weighed based on whether the decision will contribute to sustainable growth of the company involved, and thus, higher Group corporate value over the medium to long term.

History of sales and reductions in cross-shareholdings since the introduction of the Corporate Governance Code



Details on the review process of each holding objective are available on the JGC Group website.

<https://www.jgc.com/en/esg-hsse/governance/corporate-governance/>



## Corporate Governance

### ▶ Director compensation

Policy on determining director compensation amounts or calculation methods

#### ● Basic policy, general shareholders' meeting resolutions

- Under a basic policy to secure the management personnel needed for greater global competitiveness and higher medium- to long-term corporate value, a resolution made at the 113th general shareholders' meeting on June 26, 2009, set maximum annual director compensation at ¥690 million, with maximum auditor compensation at ¥88 million.
- As for the policy on determining the amount, calculation, and breakdown of compensation for individual directors, compensation shall not exceed the range resolved at the general shareholders' meeting, and details are discussed in advance by the Remuneration Committee (which consists of a majority of outside directors and is chaired by an outside director), whose report is considered by the Board to reach a decision.

#### ● Process for determining compensation

- To ensure fairness, transparency, and consistency with this decision policy, decisions by the chairman and CEO reflect the results of comprehensive deliberation by the Remuneration Committee on evaluation of individual directors and the amount of remuneration.
- The compensation for individual directors within the range set at the general shareholders' meeting is at the discretion of the chairman of the Board, who as the Company's CEO is most familiar with the duties and responsibilities of each director, their performance, and the extent to which this performance contributes to higher corporate value.
- The Board has determined that final decisions have been consistent with this policy, and in making this determination, the Board has been informed of a summary and results of Remuneration Committee deliberations, as well as final decisions by the chairman and CEO.

#### ● Compensation mix and details

- Inside directors, excluding outside directors, receive compensation comprising monetary compensation and stock compensation, where monetary compensation comprises fixed compensation and bonuses, and stock compensation comprises restricted stock and performance share units.
- The compensation mix is designed to provide a higher proportion of variable compensation (bonus and stock compensation) for higher performance and rank.

(Note) The introduction of performance share units was approved and passed at the shareholders' meeting held on June 29, 2023, so the above includes details of the discussed matter.

#### ■ Stock compensation

- Introduced the following two types of stock compensation so that directors share the benefits and risks of stock price fluctuations with shareholders and conduct business accordingly, and to further incentivize a higher stock price and greater medium- to long-term corporate value.
- A malus and clawback clause has been introduced, where in the event that a corporate scandal such as violation of laws is identified, the Company can seize some or all the stock compensation or request the return after the stock restriction is removed, based on deliberation by the Remuneration Committee and approval by the Board of Directors.

##### Performance Share Unit (PSU)

- Compensation linked to results was introduced at the 127th ordinary general shareholders' meeting held on June 29, 2023.
- According to the degree of performance achievement for the fiscal 2023, common stock with a restricted period is planned to be allocated in August of the same year.
- **Outline of PSU**  
**Scope:** Directors and executive officers of the holding company and directors of Group companies  
**Performance evaluation period:** 1 year (from April 1 to March 31 of the following year)  
**Performance evaluation period:** Operating profit and profit attributable to owners of parent  
**Maximum monetary compensation:** ¥650 million per year  
**Total shares of PSU (maximum):** 959,000 shares per year (approximately 0.40% of total issued shares)  
**Restricted stock period:** Set to 3 years up to 30 years

##### Restricted Stock (RS)

- As compensation for responsibilities, restricted stock compensation is allocated in August, and on August 9, 2022, some 8,333 shares corresponding to 10% of base compensation (equivalent to ¥13 million) were allocated to three directors in fiscal 2022.
- **Outline of RS**  
**Scope:** Directors and executive officers of the holding company and directors of Group companies  
**Maximum monetary compensation:** ¥190 million per year  
**Total shares of RS (maximum):** 149,300 shares per year (approximately 0.06% of total issued shares)  
**Restricted stock period:** Set to 3 years up to 30 years

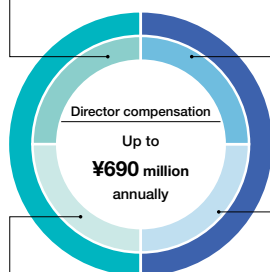
#### ■ Monetary compensation

##### Fixed compensation

- Determined according to each director's position and the value of their duties, accounting for the capabilities required and the weight and impact of those duties.
- Consists of base compensation and an allotment for directors or representative directors, both paid monthly.
- Outside director compensation is limited to fixed compensation, to enable management oversight from a position independent of business execution.

##### Bonus

- Designed as a key incentive to meet performance figures each fiscal year and steadily improve corporate value over the medium and long term.
- Individual bonuses are determined by the Remuneration Committee from a base amount (calculated for each position and indexed to operating income and net income attributable to owners of the parent, which are targets in the medium term business plan) and individual evaluation (accounting for responsibilities to fulfill in order to attain the long-term management vision and medium-term business plan).
- As a performance indicator, net income attributable to owners of the parent is weighted, in view of the responsibility to shareholders for results. It is weighted higher for those in higher positions.
- Bonuses do not apply when there is a net loss attributable to owners of the parent.





## Breakdown of executive compensation

Category	Total value of compensation, etc.	Breakdown of compensation, etc.					
		Fixed compensation		Performance-based compensation		Restricted stock compensation	
		Number of eligible executives	Total amount provided	Number of eligible executives	Total amount provided	Number of eligible executives	Total amount provided
Five directors (excluding outside directors)	¥278 million	5	¥172 million	3	¥92 million	3	¥13 million
Two Audit & Supervisory Board members (excluding outside Audit & Supervisory Board members)	¥36 million	2	¥36 million	-	-	-	-
Seven outside executives (four outside directors and three outside Audit & Supervisory Board members)	¥69 million	7	¥69 million	-	-	-	-

Note 1: As of the end of fiscal 2022, there were eight directors (including four outside directors) and five auditors (including three outside auditors).

Note 2: The performance-based compensation above is the amount recorded as expenses as allowances for the fiscal year ending March 31, 2022.

## Breakdown of executive compensation

Name	Total value of compensation	Category	Breakdown of compensation, etc.		
			Fixed compensation	Performance-based compensation	Restricted stock compensation
Masayuki Sato	¥105 million	Directors	¥61 million	¥38 million	¥5 million

Note 1: Only those whose total amount of consolidated remuneration, etc. is ¥100 million or more are listed.

Note 2: The performance based compensation above includes the amount recognized as an allocation to reserves during the consolidated fiscal year for the provision.

## Message from Outside Director

## Securing human resources to lead the future is the top priority

### Masayuki Matsushima

Outside director



#### [Reason for appointment]

Mr. Masayuki Matsushima has extensive experience and knowledge in finance and corporate management, having served as executive director of the Bank of Japan and in other significant positions. Appointment as outside director reflects the Group's determination that this experience and knowledge will be applied in appropriately performing the duties of providing accurate advice and opinions on management and business and fulfilling a supervisory role from an independent standpoint, which will contribute to sustainable enhancement of corporate value.



Please refer to the JGC Group website for brief biography.

<https://www.jgc.com/en/about/directors.html>



Securing human resources capable of leading the future is the top priority to ensure sustainable growth in corporate value for the JGC Group. To achieve this, I feel that transparency of the compensation system for employees and executives as well as incentive-based compensation focusing on performance will be essential. To ensure that this is achieved in an objective manner, the process for determining the calculation method for compensation and the policy defining the compensation mix first involves deliberation by the Remuneration Committee that comprises a majority of outside executives (and chaired by an outside executive), and then approval by the Board of Directors.

I would like to take this opportunity to expand on two points in particular regarding the overall compensation system of the JGC Group I have seen during fiscal

2023. The first is that the JGC Group has enhanced company-wide well-being with efforts, such as raising the average salary to counter the 5% increase in prices. The second is that stock compensation linked to company performance has been introduced for director compensation (to begin from fiscal 2024). The introduction of this type of director compensation with a medium- to long-term view forms an incentive for attaining continuous growth in corporate value, which in turn leads to benefits for all employees of the JGC Group in what creates a positive cycle.

Going forward, we will continue creating a rewarding workplace environment with compensation to match each individual's capabilities and achievements, while maintaining an eye on DEI (Diversity, Equity and Inclusion).

Corporate Governance

▶ **Board effectiveness evaluation**

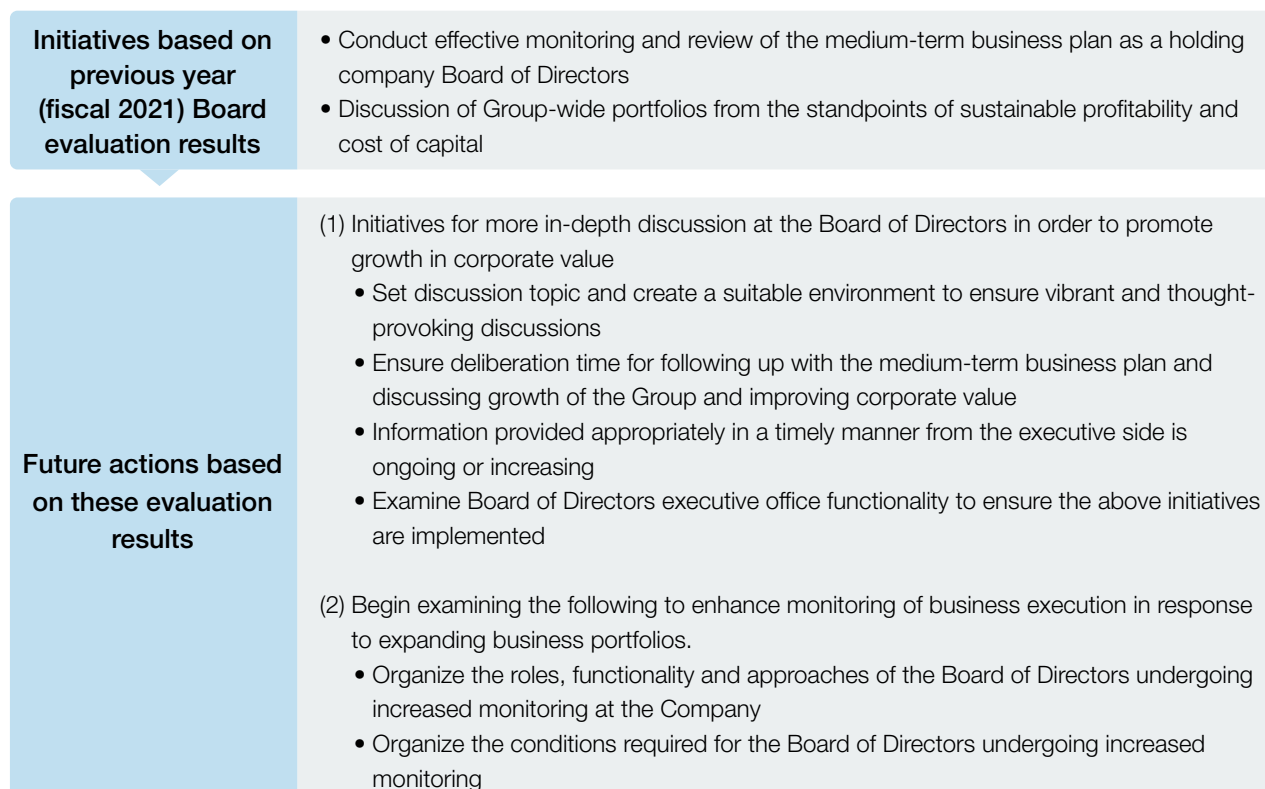
Board effectiveness is analyzed and evaluated annually, efforts toward improvement are reviewed, and issues linked to further gains in effectiveness are discussed by the Board in pursuit of continuous improvement. Presented below is a summary of the process for evaluating Board effectiveness in fiscal 2022, the state of initiatives based on the Board evaluation results of the previous year (fiscal 2021), and future response policy based on these evaluation results.

● **Evaluation process**



● **Evaluation results**

Survey and interview analysis and evaluation have indicated that the Board is functioning appropriately and effectively in its current state. Details of the evaluation results are as follows.



● Main efforts to date for improving Board effectiveness

	FY2020	FY2021	FY2022
<b>Main Board and committee efforts</b>	<ul style="list-style-type: none"> <li>Revised Board rules and internal decision-making rules to make agenda item criteria more fitting for the holding company structure</li> <li>Held multiple Board meetings to discuss the establishment of the 2040 Vision and BSP 2025</li> </ul>	<ul style="list-style-type: none"> <li>Basic policy on sustainability enacted, Sustainability Committee established, and committee rules formulated by the Board</li> <li>Improved the framework for monitoring and review of measures in the medium term business plan</li> <li>Revised Board rules and internal approval procedures in accordance with clarification of investment and loan categories and revision and improvement of review and approval procedures</li> </ul>	<ul style="list-style-type: none"> <li>Creation of Basic Policy for Human Rights &amp; Development and Basic Policy for Inclusion &amp; Diversity, and reporting on Sustainability Committee activities, such as GHG reduction solutions at the Board of Directors</li> <li>Discussions on sustainable growth and increasing long-term corporate value, including diversification of business portfolios, based on quantitative and qualitative monitoring of level of achievement of numerical targets defined in BSP 2025 and estimated capital cost value of each business</li> </ul>
<b>Director training*</b>	<ul style="list-style-type: none"> <li>External seminars (workshops on "ambidextrous" management led by a business school professor)</li> </ul>	<ul style="list-style-type: none"> <li>Internal workshops on EPC risk and financial risk management</li> </ul>	<ul style="list-style-type: none"> <li>Internal workshops on new initiatives toward a recycling-oriented society such as SAF production business and biomanufacturing, estimation process for the EPC business, and budgeting and cost review processes when executing projects</li> </ul>

\* Policy on director training: JGC Holdings bears cost for provides opportunities and information for directors and auditors to acquire the knowledge and competence to fulfill their roles and responsibilities.

Message from Outside Director

## Improving effectiveness of Board of Directors

### Noriko Yao

Outside director



**[Reason for appointment]**

Ms. Noriko Yao does not have direct experience in corporate management, but she possesses professional knowledge and keen insight as an attorney at law with extensive international experience. Appointment as outside director reflects the Group's determination that this experience and knowledge will be applied in appropriately performing the duties of providing accurate advice and opinions on management and business and fulfilling a supervisory role from an independent standpoint, which will contribute to sustainable enhancement of corporate value.



Please refer to the JGC Group website for brief biography.

<https://www.jgc.com/en/about/directors.html>



A proper understanding and sharing of the facts and background information must be considered the prerequisites for extensive deliberation at the Board of Directors. In addition to preliminary briefings for outside directors, the JGC Holdings also holds workshops covering topics put forward by outside directors. These provide the opportunity for outside directors and executives to hold lively Q&A sessions, exchange views and acquire essential information, which helps to increase the level of understanding of the underlying facts.

Outside directors also regularly coordinate information and exchange views with members of the Audit & Supervisory Board, and they also provide recommendations to the management team on how to run the Board of Directors to ensure an even higher level of effectiveness, leading to a host of initiatives geared to make improvements.

Board of Directors meetings held with these factors in mind involve recommendations and discussions from a diverse range of perspectives, based on the special expertise and experience of each individual executive officer. I hope to see the Board of Directors implement a range of suggested improvements and ideas related

to the running of the meeting and discussions, to infuse even more energy into deliberations held by the Board of Directors.

Fiscal 2023 marks the mid-point of the medium-term business plan "Building a Sustainable Planetary Infrastructure 2025" (BSP 2025). The Board of Directors also held constructive discussions on the awareness of the current business environments based on external environmental factors, progress of key strategies, and studied issues and priority actions, and conducted monitoring and review of BSP 2025 that was raised as a key issue in the fiscal 2021 Board of Directors' effectiveness evaluation. Enhancing monitoring was identified as a key issue in the Board of Directors' effectiveness evaluation for fiscal 2022. Studying in detail the most effective format and method of governance for the execution of operations is essential for the JGC Group to create an even better system, with an eye to the current situation and the future of the JGC Group.

As an outside director, I remain committed to ensuring the Board of Directors functions more effectively on behalf of shareholders, with the view to increasing long-term corporate value and sustainable growth of the JGC Group.

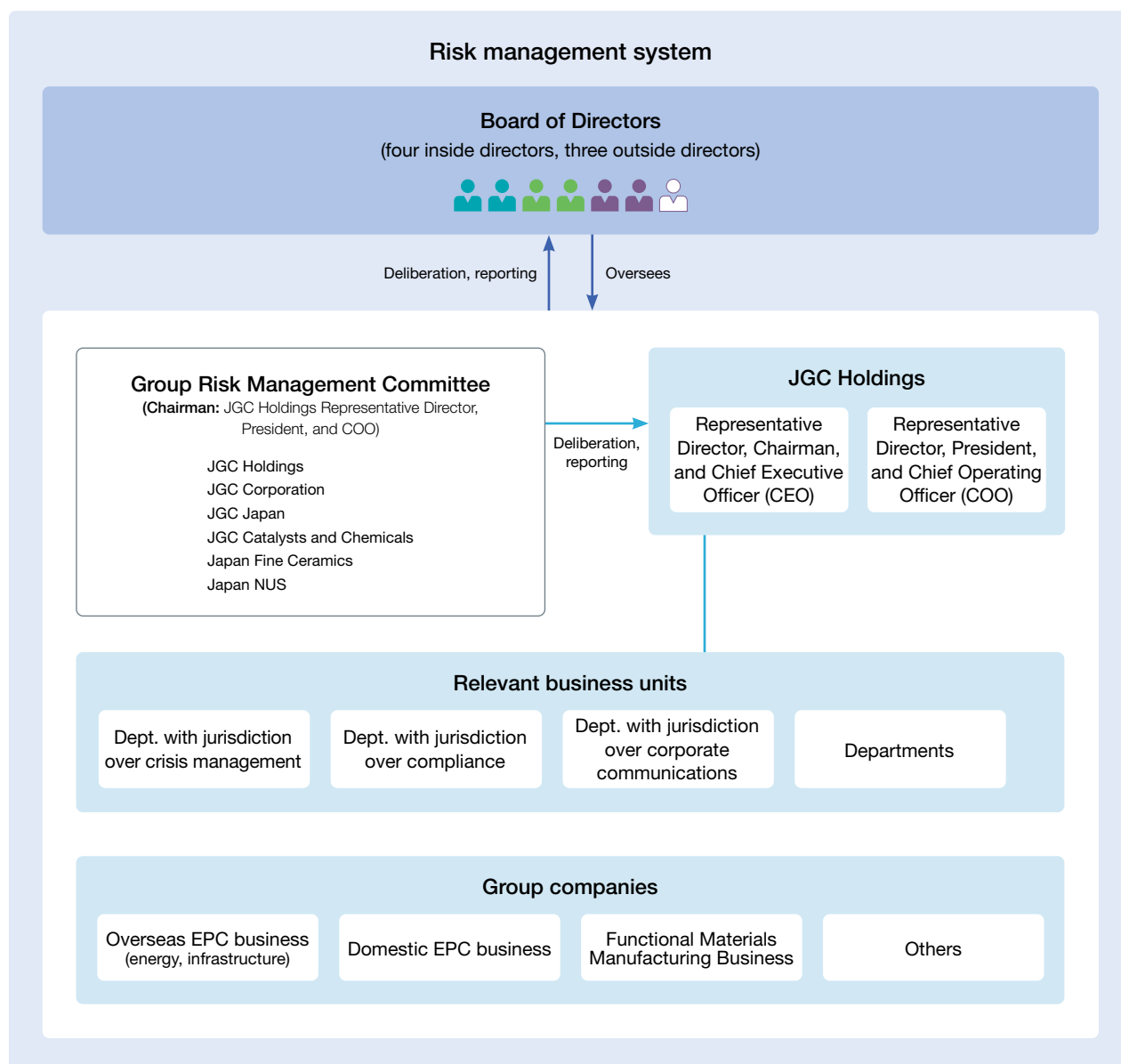
## Risk Management

### Basic stance

Recognizing that appropriate risk management reduces losses and contributes to profits for the Group, we strive to reduce and prevent risks routinely by understanding and organizing risks posed to the Group as a whole and by building, maintaining, and refining our risk management system. If risks do materialize, we respond rapidly and appropriately to minimize the impact and associated loss.

### ▶ Risk management system

Based on the Group Risk Management Committee rules, the JGC Group has established and uses a comprehensive risk management system for a systematic understanding of the risks posed to the Group as a whole. We are committed to further reducing these risks. Management of business risks of the Group is mainly carried out by each operating company, with significant individual risks reported to the holding company Board and discussed as necessary.



## Primary Group risks and responses

Primary Risk Area	Nature of Typical Risks	Countermeasures
<b>Risk associated with receiving and executing projects</b>	<ul style="list-style-type: none"> <li>Change of plans, cancellation, suspension, or postponement of projects in the Total Engineering Business after orders are received</li> <li>Worsening financial conditions, insufficient project execution capabilities, and defaulting in the portion of operations covered by joint venture consortium partners as comprehensive engineering projects are executed</li> </ul>	<ul style="list-style-type: none"> <li>Specific risk analysis by the holding company and operating companies, monitoring of project progress and profitability</li> <li>Deliberation of the above risks at the Board of Directors as necessary</li> </ul>
<b>Country risk</b>	<ul style="list-style-type: none"> <li>Impact on business activities from political instability, war, revolution, domestic conflict, terrorism, sudden changes in economic policies or conditions, or economic sanctions</li> </ul>	<ul style="list-style-type: none"> <li>Use of trade insurance</li> <li>Gathering information on country risk</li> <li>Setting reasonable contract conditions with clients, addressing force majeure clauses and regulatory changes</li> <li>Strengthening crisis management functions by the Crisis Management Dept.</li> </ul>
<b>Risk associated with natural disasters, epidemics, etc.</b>	<ul style="list-style-type: none"> <li>Impact on business activities from natural disasters of unforeseen magnitude such as earthquakes, torrential rain, or typhoons, or from global pandemics such as new strains of influenza</li> </ul>	<ul style="list-style-type: none"> <li>Establishing disaster response procedures, introducing systems to confirm safety, and implementing disaster training</li> <li>Gathering information on risk</li> <li>Taking necessary measures in response to official requests, confirming safety in accordance with national conditions and regulations</li> <li>Setting reasonable contract conditions with clients, addressing force majeure clauses and regulatory changes</li> <li>Requesting and discussing with clients any necessary rescheduling or rebudgeting</li> </ul>
<b>Foreign exchange volatility risk</b>	<ul style="list-style-type: none"> <li>Impact on sales and profit / loss from sharp fluctuations in foreign exchange rates</li> </ul>	<ul style="list-style-type: none"> <li>Using project contracts denominated in multiple currencies, using overseas procurement</li> <li>Issuing orders denominated in foreign currencies, using forward foreign exchange agreements</li> </ul>
<b>Risk of construction worker shortages, substantial wage increases</b>	<ul style="list-style-type: none"> <li>Impact on business activities in the Total Engineering Business from shortages of construction workers or substantial increases in wages</li> </ul>	<ul style="list-style-type: none"> <li>Monitoring and forecasting trends in the construction industry labor force for primary plant markets</li> <li>Adopting modular construction techniques to minimize on-site construction</li> <li>Working with companies that have extensive track records in local construction</li> </ul>
<b>Risk of substantial increases in fuel, material and equipment costs</b>	<ul style="list-style-type: none"> <li>Increased procurement and transport costs for material and equipment in the Total Engineering Business</li> <li>Substantial rises in prices of raw materials or fuel in the Functional Materials Manufacturing Business</li> </ul>	<ul style="list-style-type: none"> <li>Monitoring and forecasting price trends, ongoing efforts to improve forecast accuracy</li> <li>Placing orders for materials and equipment early on</li> <li>Diversifying suppliers</li> <li>Transfers to product prices</li> <li>Addressing this risk in contracts</li> </ul>
<b>Investment risk</b>	<ul style="list-style-type: none"> <li>Loss from unforeseen circumstances in the investment environment</li> <li>Inability to withdraw from investments at the preferred time or in the preferred manner, due to low liquidity or similar factors</li> </ul>	<ul style="list-style-type: none"> <li>Clarifying the significance and purpose of new investment, and making decisions after deliberation by the Board or committees</li> <li>Careful selection of new investments</li> </ul>
<b>Legal and regulatory risk</b>	<ul style="list-style-type: none"> <li>Restrictions under business laws and regulations such as tax or construction laws, various domestic and international environmental laws, import/export trade regulations including those for security purposes, various laws and regulations to prevent corruption such as graft, laws and principles on human rights protection, or business or investment licenses</li> </ul>	<ul style="list-style-type: none"> <li>Developing, implementing, monitoring, and improving compliance programs and Group policies and rules</li> </ul>
<b>Information security risk</b>	<ul style="list-style-type: none"> <li>Leaks and loss of information from power outages, disasters, failure, loss, or theft of host computers, servers, or network equipment, external attacks, or virus infections</li> </ul>	<ul style="list-style-type: none"> <li>Security measures such as preventing intrusion by establishing information security policies, adopting antivirus measures, and using encryption</li> <li>Information security education, training and practice for executive officers and employees</li> </ul>
<b>Risk associated with quality</b>	<ul style="list-style-type: none"> <li>Poor quality of supplies or items procured, recall of delivered products due to defects, liability for damages</li> </ul>	<ul style="list-style-type: none"> <li>Promoting quality management system activities by establishing organizations with jurisdiction over quality assurance</li> <li>Using product liability insurance</li> </ul>
<b>Risk associated with changes in the macroeconomic environment and social and international affairs</b>	<ul style="list-style-type: none"> <li>Impact on business activities from fluctuating energy prices linked to global recessions</li> </ul>	<ul style="list-style-type: none"> <li>Diversifying our business portfolio by shifting to a Group management structure</li> <li>Developing technologies to reduce environmental impact</li> <li>Building value chains in collaboration with other companies that possess advanced technologies</li> </ul>
<b>Risk associated with climate change</b>	<ul style="list-style-type: none"> <li>Natural disasters at construction and manufacturing sites</li> <li>Impact on business activities from lower fossil fuel related investment by clients, or from similar changes to client business itself</li> <li>Changes in the business environment such as changes throughout society and industry as the backdrop to climate change issues</li> </ul>	<ul style="list-style-type: none"> <li>Receiving and executing non-fossil fuel, circular economy, and renewable energy projects</li> <li>Transforming business areas, business models, and the Group's internal organization in line with the 2040 Vision, our long-term management vision</li> </ul>

# Compliance

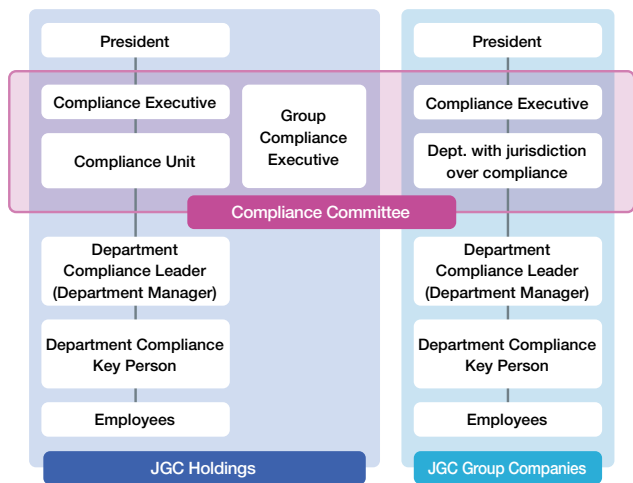
## Basic stance

Guided by our sense of purpose and values representing our corporate philosophy, we view compliance as the cornerstone of management, based on two keywords in a list of shared values—respect and integrity. As a member of the international community, the JGC Group believes that compliance with the laws of Japan and overseas, as well as fair and equitable business practices in accordance with corporate ethics, are essential to the pursuit of sustainable business development. Based on this belief, the Group has developed the JGC Group Code of Business Conduct. The code, which must be followed by all employees, contains key points to ensure that the JGC Group’s corporate philosophy is implemented in practice.

### ▶ Group compliance system

The JGC Group has established a Group compliance system to ensure each company carries out its business based on high ethical standards. Compliance executives assigned to each main Group company work with compliance officers under their supervision to evaluate risks faced by the company and implement suitable measures. The JGC Group has also established the Compliance Committee as a forum to share information and collaborate among Group companies. We are aiming to achieve a sense of unity to the entire Group through the Committee. The Compliance Unit at JGC Holdings Corporation is in charge of comprehensive measures, coordination, and other functions.

JGC Group Compliance System Organization

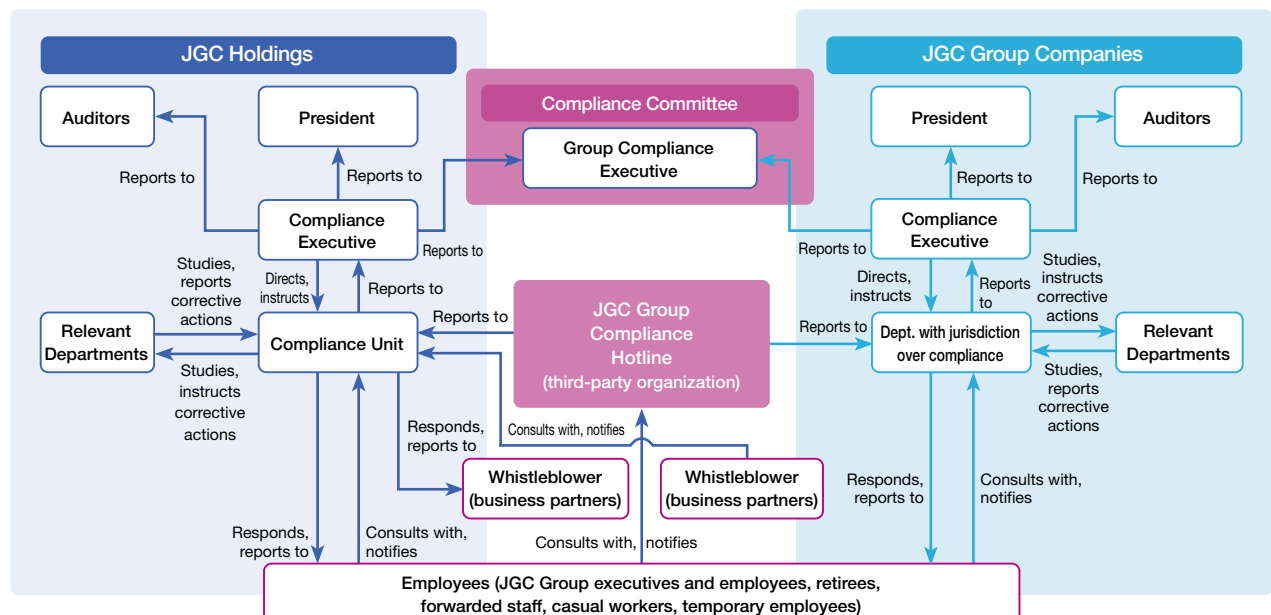


### ▶ Compliance hotline

For prompt identification and prevention of compliance risks, the JGC Group has made available several ways to seek advice and report suspicions, mainly based on the "JGC Group Compliance Hotline" external contact point to facilitate anonymous consultation and reporting. In addition to accepting reports from employees, we have created a convenient system that also responds to consultations and accepts reports of violations. A system has also been developed that allows suppliers to submit reports via our homepage.

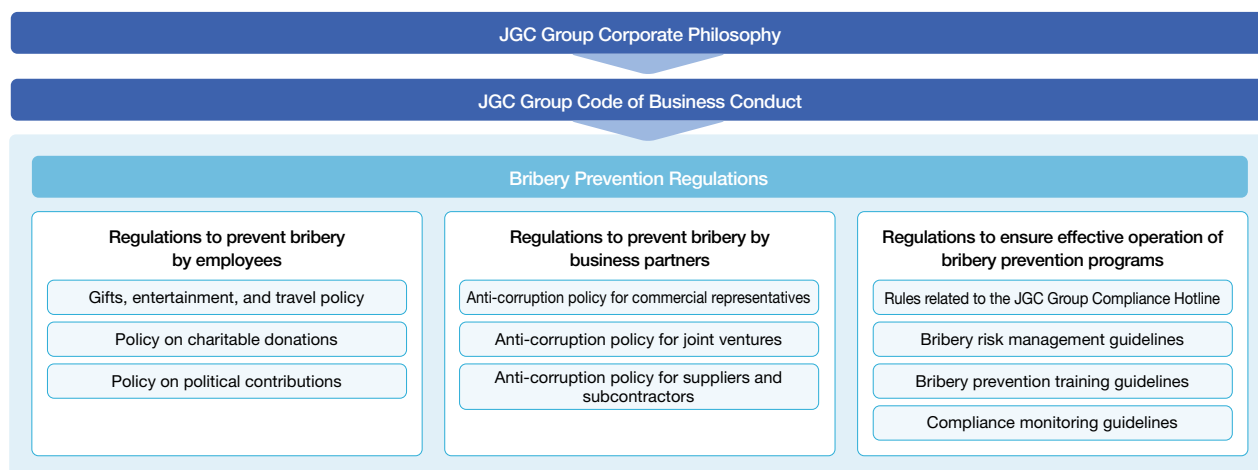
P.85 ESG Data Highlights

### JGC Group Consulting and Reporting Hotline Organization



## ▶ Measures to prevent bribery

The JGC Group follows a basic policy of complying with all anti-bribery rules and regulations, such as provisions in Japan's Unfair Competition Prevention Law prohibiting the bribing of foreign public officials, the US Foreign Corrupt Practices Act (FCPA), and the UK Bribery Act 2010. Group rules on preventing bribery, based on our corporate philosophy and Code of Business Conduct, are summarized in the following table.



Under these anti-corruption programs, business partners intending to do business with the JGC Group are screened to ensure compliance, and the results enable us to implement any necessary risk-based measures, such as stipulating strict anti-corruption clauses in contracts with business partners. Any gifts, entertainment, donations, or contributions must be approved in advance, so that we are aware of transactions that may be linked to corruption.

Compliance is also monitored to ensure implementation of anti-bribery programs at Group companies. Each year, members of the Compliance Unit of JGC Holdings visit several Group companies. Executives and employees are interviewed and records audited to identify issues and make improvements.

## ▶ Compliance training

Awareness of compliance is enhanced through thematic and level-specific compliance training programs. Four types of level-based courses including beginner training to suit employees' positions are available for employees at group companies in Japan. Beyond compliance basics, the training features case studies and encourages each employee to view matters of compliance as personally relevant.

Some domestic and overseas Group companies also conduct their own training programs for anticipated risks, or covering a range of individual topics.

### Courses and participation

	Fiscal 2022
Number of courses	42
Number of participants	5,053

P.85 ESG Data Highlights

### Training courses in fiscal 2022

Type of training	Course	Participants
Level-specific	New employee training	New employees of domestic Group companies
	Compliance Training A	Newly appointed assistant managers of domestic Group companies
	Compliance Training B	Section managers of domestic Group companies
	Compliance Training C	General managers and managers of domestic Group companies
	Compliance training for general managers	General managers at JGC Holdings, JGC Corporation, and JGC Japan
Thematic	Project compliance training	Members involved in projects
	Anti-harassment training	JGC Japan employees at domestic sites or regional offices
	Risk-specific compliance training (anti-corruption, subcontracting and anti-monopoly laws, and other risks)	Group employees in Japan (applies only to specific departments and positions)
	JGC Group Code of Business Conduct e-Learning	Executive officers and employees at JGC Holdings, JGC Corporation, and JGC Japan

## Stakeholder Engagement

### Basic stance

Attentive communication reflects our belief that engagement with our diverse stakeholders is essential to sustainable growth and higher corporate value. By providing regular feedback from shareholders and investors to management and relevant departments, applying this knowledge in management strategies, and diligently disclosing both financial and non-financial information, we create a forum for an understanding of our management policies.

## Shareholders & Investors

Disseminating management information and providing feedback to management

### ▶ Enhancements to the JGC Report (Integrated Report)

More informative each year, the JGC Report serves a key role in disclosure for long-term investment decisions. The content of the 2022 JGC Report reflects the broad range of preliminary feedback received from shareholders and investors. There is a growing level of interest from the stock market on how the 2040 Vision and BSP 2025 will be achieved, so the report outlines how the JGC Group's strengths have been honed and leveraged as strategies for the Group's expansion and growth since its founding. This expanded coverage of non-financial information, including our response to climate change and human rights in the supply chain, was recognized by domestic equity investment managers of the Government Pension Investment Fund (GPIF) with a Most-Improved Integrated Report award in 2022.



### ▶ Positive IR activities

#### IR activities schedule



#### Main IR activities

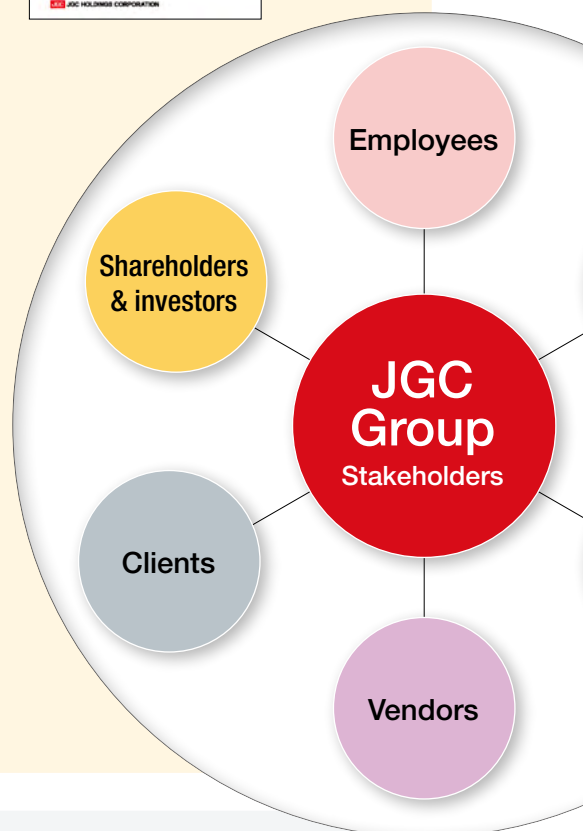
Activity	No. of events	No. of companies
Responses to requests for information, phone calls from institutional investors in Japan / overseas	216	114
Results briefing conference calls	2	68
Results briefing by top managements	2	70
ESG-related meetings	11	11
Overseas IR roadshows by top managements*	0	0
Business activities briefing conference	-	-

\* Suspended during fiscal 2022 due to the pandemic.

#### Ordinary General Shareholders' Meetings

	FY2021	FY2022	FY2023
Date held	June 29 (Tue)	June 29 (Wed)	June 29 (Thu)
Shareholders attending	19*	32*	48
Ratio of voting rights exercised	84.21%	87.11%	84.65%

\* Fiscal 2021 and 2022, we asked shareholders to avoid attending the meeting at the venue as much as possible, as part of measures to prevent the spread of COVID-19.



## Clients | Sharing know-how and training human resources

### ▶ HR training programs in resource-rich countries

Over the past few decades, the JGC Group has held training programs for engineers and students of chemical engineering and similar disciplines in efforts to strengthen ties with resource-rich countries. Many past participants have later contributed to domestic resource development and industrial growth, and also expanded the JGC Group's business in resource-rich countries.



## Employees | Instilling the vision and management policy, frank dialogue

### ▶ Dialogue with top management, quarterly newsletter, and more

The JGC Group holds executive-employee roundtable discussions so that people speak freely and share in our vision. This is recorded and broadcasting on demand encourages a vibrant corporate culture. Efforts are made to share knowledge of management policies and issues with employees across the Company through a variety of media such as newsletters and Company-wide bulletin boards, part of communication that fosters a sense of belonging among employees.

## Next-generation of human resources |

### Fostering interest in sciences and global issues

#### ▶ Company visits from public high schools in Yokohama City

The JGC Group hosts company visits by students from public high schools in Yokohama city. Here, talks with employees and students, and VR experiences etc., encourage communication. In fiscal 2022, the program also raised awareness of our efforts toward sustainability, as students learned about JGC sustainable aviation fuel (SAF) initiatives.

#### ▶ Chemistry workshops for elementary students

Each year at its Kitakyushu office, JGC C&C has held workshops with chemistry experiments for local elementary students. This represents a meaningful way to interact with and contribute to the community. JGC C&C will continue to kindle an interest in chemistry through these opportunities, which also encourage people to know about their business activities. We will continue to build positive engagement with the local community.



An experiment at a chemistry workshop

## Local communities |

### Long-term commitment consistent with the needs of countries constructing plants

#### ▶ Initiatives for Basra elementary students

Academic decline in postwar Iraq has been significant, and educational investment is insufficient, particularly in Basra Province. Unemployment also remains high among young people, with jobs scarce even for university graduates. The JGC Group launched JGC Code Education in March 2022, to teach computational thinking at local elementary schools in Basra with the aim of long-term contributions, such as providing educational experiences for children and creating youth employment opportunities. Nearly 20,000 students will have opportunities to learn programming concepts over the next two years. Additionally, science shows held on June 2022 targeted some 2,600 students at about 20 public elementary schools in Basra Province.



JGC Code Education classroom

## Vendors |

### Sharing project know-how, collecting local information and enhancing safety and quality standards

#### ▶ Supporting vendors with technical assistance

The JGC Group actively promotes domestic procurement where plants are built, and when sophisticated equipment is ordered, our engineers may go on-site to provide technical assistance tailored to local vendors' expertise and facilities. Viewing these close ties as an asset, we take the initiative in providing technical assistance to vendors.



Training for welders

Next-generation of human resources

Local communities

# Results of Value Creation

The JGC Group's value-creation mechanism creates economic, social, and environmental value while supporting our sustainable growth, with outcomes gauged and evaluated through financial and non-financial metrics. Here, we present business results for fiscal 2022 and chronicle this value creation.

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## Results of Value Creation

# Financial Highlights

JGC Holdings Corporation and its consolidated subsidiaries\*1

Years ended March 31	2014	2015	2016	2017
<b>Performance Highlights</b>				
Net Sales	675,821	799,076	879,954	693,152
Operating Profit (Loss)	68,253	29,740	49,661	(21,496)
Profit (Loss) Attributable to Owners of the Parent*2	47,178	20,628	42,793	(22,057)
New Contracts*3	818,161	769,680	320,626	506,293
Outstanding Contracts	1,767,814	1,772,036	1,192,625	1,045,684
<b>Financial Position at Year-End</b>				
Total Current Assets	575,886	533,538	522,747	480,865
Total Current Liabilities	333,353	286,533	225,203	226,457
Working Capital	242,533	247,005	297,544	254,408
Net Property, Plant and Equipment	70,290	78,560	76,255	69,877
Total Assets	746,102	719,754	689,782	646,291
Long-Term Loans Payable	13,001	22,715	20,991	12,631
Net Assets	379,882	388,496	419,673	383,260
Shareholders' Equity	374,654	387,480	418,695	382,215
<b>Cash Flows</b>				
Cash Flows from Operating Activities	120,576	(71,416)	(49,764)	(28,884)
Cash Flows from Investing Activities	(18,728)	(23,411)	8,696	(12,979)
Cash Flows from Financing Activities	(10,687)	3,836	(4,374)	(19,674)
Cash and Cash Equivalents at End of Year	385,252	297,707	247,947	185,603
<b>Financial Highlights*4</b>				
Return on Assets (ROA) (%)	12.2	6.1	7.4	(2.3)
Return on Equity (ROE) (%)	13.3	5.4	10.6	(5.5)
Net Income (Loss) per Share (yen)	186.90	81.73	169.60	(87.42)
Cash Dividends per Share (yen)	46.5	21.0	42.5	30.0
Gross Profit Ratio (%)	13.1	6.6	8.3	0.2
Operating Income Ratio (%)	10.1	3.7	5.6	(3.1)
Equity Ratio (%)	50.2	53.8	60.7	59.1
Current Ratio (%)	172.8	186.2	232.1	212.3
Payout Ratio (%)	24.9	25.7	25.1	—
Number of Employees	7,005	7,332	7,489	7,554

\*1 As of March 31, 2023, there were 25 consolidated subsidiaries.

\*2 As a consequence of applying "Accounting Standard for Business Combinations" (ASBJ Statement No. 21, September 13, 2013), "Net income (loss)" is referred to as "Net income (loss) attributable to owners of the parent" from fiscal 2015 onward.

\*3 The method of aggregating orders received has been changed to include orders in Functional Materials Manufacturing Business since fiscal 2022.

\*4 The "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29, March 31, 2020) has been applied from the beginning of fiscal 2021.

(Millions of yen)

	2018	2019	2020	2021	2022	2023
	722,987	619,241	480,809	433,970	428,401	<b>606,890</b>
	21,495	23,249	20,234	22,880	20,688	<b>36,699</b>
	16,589	24,005	4,117	5,141	(35,551)	<b>30,665</b>
	547,826	935,451	189,643	683,068	315,956	<b>878,789</b>
	846,157	1,208,365	941,618	1,241,204	1,215,911	<b>1,571,093</b>
	521,320	541,747	537,955	548,359	533,343	<b>539,493</b>
	215,773	223,559	228,386	197,055	253,836	<b>272,206</b>
	317,200	318,188	309,569	351,304	279,507	<b>267,287</b>
	55,222	55,440	49,794	66,654	69,534	<b>72,234</b>
	684,921	708,855	671,273	702,529	694,274	<b>713,127</b>
	4,294	3,949	347	16,783	11,496	<b>13,891</b>
	395,779	410,350	390,979	417,616	387,662	<b>397,981</b>
	394,701	409,254	390,516	417,120	387,145	<b>397,343</b>
	5,539	(55,259)	92,442	12,467	19,311	<b>110,769</b>
	11,736	(4,662)	19,364	(13,520)	(7,695)	<b>(11,471)</b>
	33,781	(13,878)	(7,699)	196	(148)	<b>(61,288)</b>
	235,394	160,841	261,898	268,281	288,009	<b>332,755</b>
	3.8	4.6	3.2	3.7	4.3	<b>7.2</b>
	4.3	6.0	1.0	1.3	(8.8)	<b>7.8</b>
	65.75	95.14	16.32	20.37	(140.77)	<b>122.28</b>
	25.0	28.5	12.0	12.0	15.0	<b>38.0</b>
	6.2	7.3	9.0	10.1	10.6	<b>11.0</b>
	3.0	3.7	4.2	5.3	4.8	<b>6.0</b>
	57.6	57.7	58.2	59.4	55.8	<b>55.7</b>
	241.6	242.3	235.5	278.2	210.1	<b>198.2</b>
	38.0	30.0	73.5	58.9	—	<b>31.1</b>
	7,610	7,841	7,607	7,371	7,275	<b>7,876</b>

# ESG Data Highlights

		JGC's Main KPIs	Units	Fiscal 2018	Fiscal 2019	Fiscal 2020*1	Fiscal 2021*1	Fiscal 2022*1
<b>E Report on Environmental Initiatives</b>								
<b>Environment-related Initiatives</b>	Scope 1 and 2 GHG emissions*2		t	—	—	132,546	133,573	<b>134,004</b>
• Contribution to environmental protection	Scope 3 GHG emissions*2		t	—	—	—	702,873	<b>975,775</b>
• Environmental improvement activities in line with our business	Industrial waste recycling rate (Domestic construction sites)		%	96.1	85.2	88.3	98.4	<b>99.0</b>
• Promotion of the zero emissions initiative	Number of incidents of leaks of hazardous substances, etc. (Domestic and overseas construction sites)		Incidents	0	0	0	0	<b>0</b>
	Energy-related CO <sub>2</sub> emissions (Domestic construction sites)		kg CO <sub>2</sub> /hour	2.39	0.61	0.40	1.91	<b>1.35</b>
	Rate of diffusion of electronic manifests		%	79.5	69.5	85.9	93.9	<b>99.6</b>
	Energy consumption (Yokohama Head Office)*3		Crude oil equivalent (kl)	2,224	2,139	2,091	2,022	<b>2,035</b>
	Yokohama Head Office power consumption		1,000 kWh	5,497	5,221	4,756	4,658	<b>4,819</b>
	Consumption of chilled water by Yokohama Head Office		1,000 MJ	15,353	15,503	14,349	13,327	<b>14,970</b>
	Consumption of steam by Yokohama Head Office		1,000 MJ	7,724	7,170	10,377	9,963	<b>7,708</b>
	Volume of waste disposed by Yokohama Head Office		1,000 kg	206	191	109	129	<b>149</b>
	Rate of recycling of waste by Yokohama Head Office		%	61.4	59.5	65.5	68.6	<b>61.4</b>
<b>S Report on Social Initiatives</b>								
<b>Initiatives related to human rights and labor practices</b>	Number of women in management positions		Persons	21	26	30	35	<b>39</b>
• Promotion of diversity	Ratio of women in managerial positions		%	—	2.2	2.5	2.8	<b>3.1</b>
• Support for realization of work-life balance	Rate of employment of people with disabilities*4		%	1.87	1.97	2.27	1.72	<b>2.58</b>
• Support for employee career formation	Number of re-employed employees*5		Persons	109	55	55	13	<b>8</b>
	Number of non-Japanese employees*5		Persons	89	86	95	93	<b>90</b>
	Rate of employees taking childcare leave (Male)		%	10	14	48	32	<b>69</b>
	Number of female employees taking childcare leave (Rate of reinstatement of female employees taking childcare leave)		Persons (%)	24 (100)	19 (100)	27 (100)	27 (100)	<b>33 (100)</b>
	Number of employees taking spousal childbirth leave		Persons	64	80	91	87	<b>61</b>
	Number of employees taking sick or injured childcare leave		Persons	185	187	217	167	<b>189</b>
	Number of employees taking nursing care leave		Persons	22	11	42	33	<b>38</b>
	Number of employees taking temporary retirement for nursing care		Persons	0	0	1	0	<b>3</b>
	Number of employees working reduced hours for childcare		Persons	51	47	47	44	<b>68</b>
	Number of employees working reduced hours for nursing care		Persons	0	0	0	0	<b>0</b>
	Rate of utilization of annual leave		%	53	59	60.75	60.95	<b>70.25</b>
	Number of employees dispatched for on-site training / on-site instruction		Persons	86	45	55	88	<b>102</b>
	Total annual training		Hours	—	—	—	57,877	<b>50,871</b>
	Training per person		Hours	—	—	—	18	<b>17</b>
	Number of employees dispatched to overseas companies, etc.		Persons	2	4	4	1	<b>1</b>
<b>Initiatives related to health and safety*6</b>	Total project working hours		1,000 hours	90,993	56,478	40,861	49,334	<b>46,401</b>
• Fostering of culture of health and safety	Number of fatal accidents		Incidents	0	0	1	0	<b>0</b>
• HSSE leadership by top management	Number of accidents accompanied by lost work time		Incidents	8	7	7	8	<b>8</b>
• Enhancement of HSSE management system for investment projects	Number of restrictions on work		Incidents	11	18	15	11	<b>13</b>
• Ongoing implementation of traffic safety measures	Number of conditions requiring specialized treatment		Incidents	31	46	46	31	<b>32</b>
• Further development of in-house health and safety education	Rate of frequency of accidents accompanied by lost work time*7			0.018	0.025	0.034	0.032	<b>0.034</b>
• Enhancement of Head Office construction HSSE functions	Rate of frequency of recordable accidents*8			0.11	0.25	0.34	0.20	<b>0.23</b>
<b>G Report on Governance</b>								
<b>Initiatives related to fair business practices</b>	Number of times compliance training implemented / Number of employees receiving compliance training*9		Times (People)	6 (199)	21 (559)	19 (1,856)	27 (846)	<b>42 (5,053)</b>
• Realization of increased compliance awareness	Number of reports received by hotlines		Incidents	28	47	44	49	<b>48</b>
<b>Initiatives related to the promotion of information security</b>	Number of serious information security-related incidents		Incidents	0	1*10	0	0	<b>0</b>
• Information management awareness verification surveys and voluntary inspections								
• Drills against targeted threats								
<b>Reinforcement of governance system</b>	Number of outside directors		Persons	2	3	4	4	<b>3</b>

\*1 Applies to JGC Holdings, JGC, and JGC Japan combined.

\*2 Based on CDP reporting. Also includes JGC C&C, Japan Fine Ceramics, and Japan NUS.

\*3 Energy consumption (Yokohama Head Office): Reduction target set so that an average annual reduction of 1% over the past five years can be achieved.

\*4 From fiscal 2022, scope includes special subsidiary JGC Parallel Technologies Corporation.

\*5 Number of re-employed employees and number of non-Japanese employees = (Number of employees in April + Number of employees in March) ÷ 2

\*6 This data is the total based on the period from January to December.

\*7 Rate of frequency of accidents accompanied by lost work time = (Number of accidents accompanied by lost work time) × 200,000 ÷ Total project working hours

\*8 Rate of frequency of recordable accidents = (Number of fatal accidents + Number of accidents accompanied by lost work time + Number of restrictions on work + Number of conditions requiring specialized treatment) × 200,000 ÷ Total project working hours

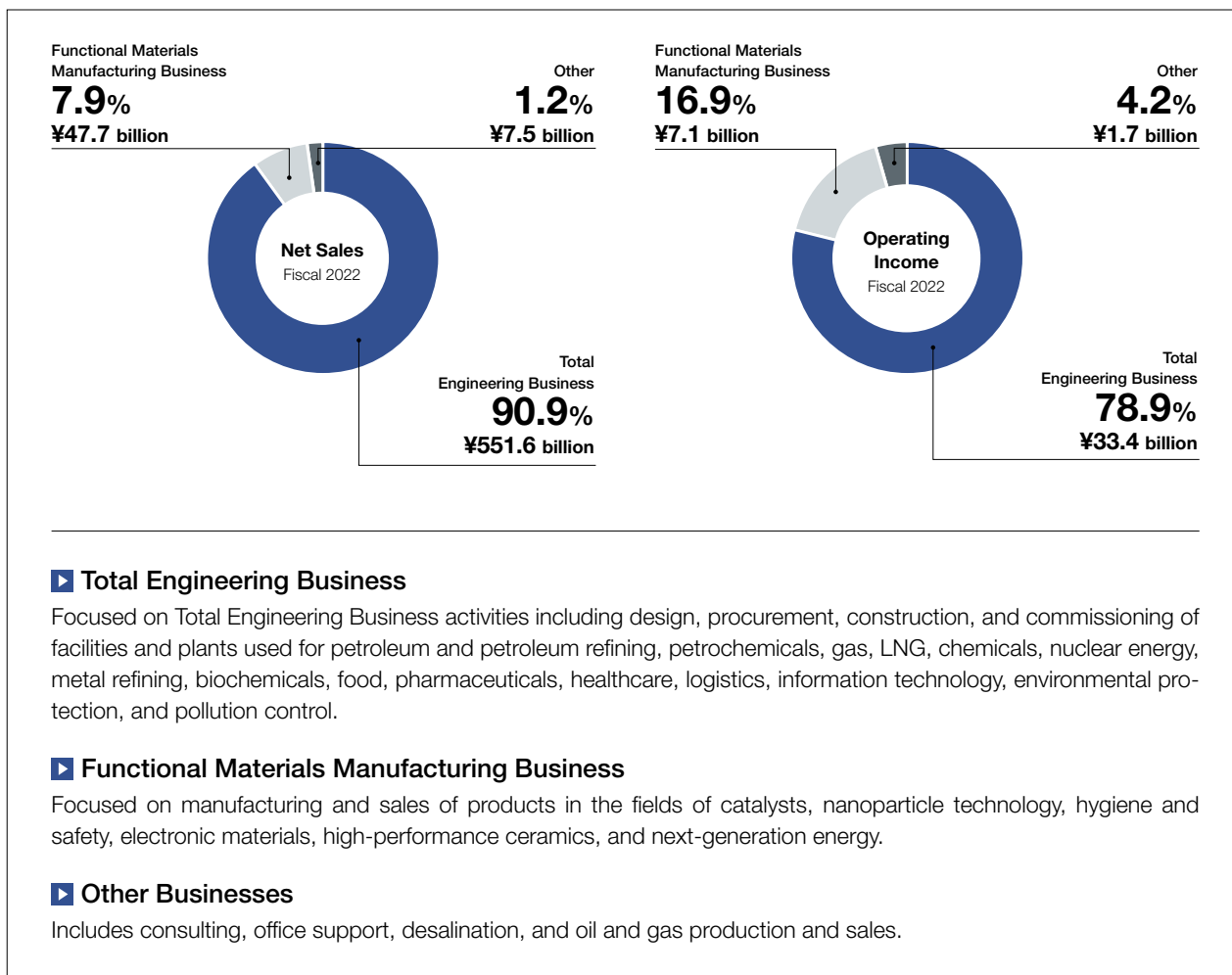
\*9 From fiscal 2022, includes e-Learning.

\*10 Number of serious information security-related incidents: 1 (Emails sent to external parties due to unauthorized access)

Corrective measures for the above incident: introduction of measures to prevent unauthorized access through two-factor authentication

Results of Value Creation

Consolidated Segment Information



Completed Construction by Region

Millions of yen

Japan	Southeast Asia	Middle East	Africa	North America	Other	Total
173,106	53,791	148,463	32,009	184,986	14,532	606,890

(Note) Based on client location and classified by country or region.



Total Engineering Business



**Farhan Mujib**  
Representative Director,  
President  
JGC Corporation

# Overseas Sector

New Contracts in Fiscal 2022 **Approx. ¥696 billion**

New Contracts Targeted for Fiscal 2023 **¥620 billion**

## Energy Solutions

**Business Areas** Engineering, procurement and construction of plants in sectors such as liquefied natural gas (LNG), Carbon Capture and Storage (CCS), petroleum refining, petrochemicals, chemicals, gas processing, etc.



FLNG plant (Africa)

### Operational Review

Economic activity resumed around the world during fiscal 2022 as the impact of COVID-19 gradually slowed down. There was also an increase demand for natural gas including LNG as a transition energy, given both concerns over energy security caused by conditions in Ukraine and moves toward low-carbon and decarbonization. With the number of projects increasing as clients resume their capital investments, we received orders for Zuluf AH Oil Increment Central Processing Facilities in Saudi Arabia, a near-shore FLNG plant in Malaysia, and a Vinyl Chloride Monomer (VCM), Polyvinyl Chloride (PVC) and OSBL expansion project in

Thailand.

During fiscal 2023, clients are slated to continue moving forward with their capital investment plants with a focus on natural gas and LNG, the importance of which has been reconfirmed as a transitional energy—a stable energy source in the shift to a low-carbon and decarbonization. We will continue to evaluate the risks and concentrate on selecting projects that are definitely forecast to deliver profits. At the same time, we will also be focusing on increasing future capacity, including the operation center that we established in India.

## Sustainable Solutions

**Business Areas** Engineering, procurement and construction of plants in sectors such as hydrogen/fuel ammonia, SAF, and nuclear energy, etc.



Ammonia synthesis pilot project facility (Fukushima)

### Operational Review

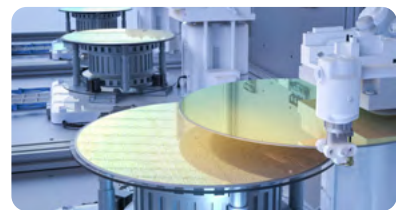
We established the "Sustainable Solutions" organization in September 2022 to serve the sustainability sector outside of Japan toward achieving a low-carbon and decarbonized society. The organization covers sustainability-oriented projects overseas in areas such as hydrogen/fuel ammonia, SAF, green chemicals, and SMRs while securing and executing projects for related facilities from FS to FEED, and EPC.

With the global trend toward low-carbon and decarbonization, capital investment plans are anticipated to move ahead during fiscal 2023, particularly in sectors, such as hydrogen/fuel ammonia and SAF. The Company will take part in FS and FEED, identify the most feasible projects that can create a sense of differentiation, and develop them into EPC orders, all while factoring in partnering and conditions like countries and regions with a proven track record.



# Facility Solutions

**Business Areas** Engineering, procurement and construction of infrastructure facilities in the semiconductor and battery-related industries, data centers, LNG receiving terminals, transportation infrastructure, etc.



Semiconductor manufacturing facilities (image)

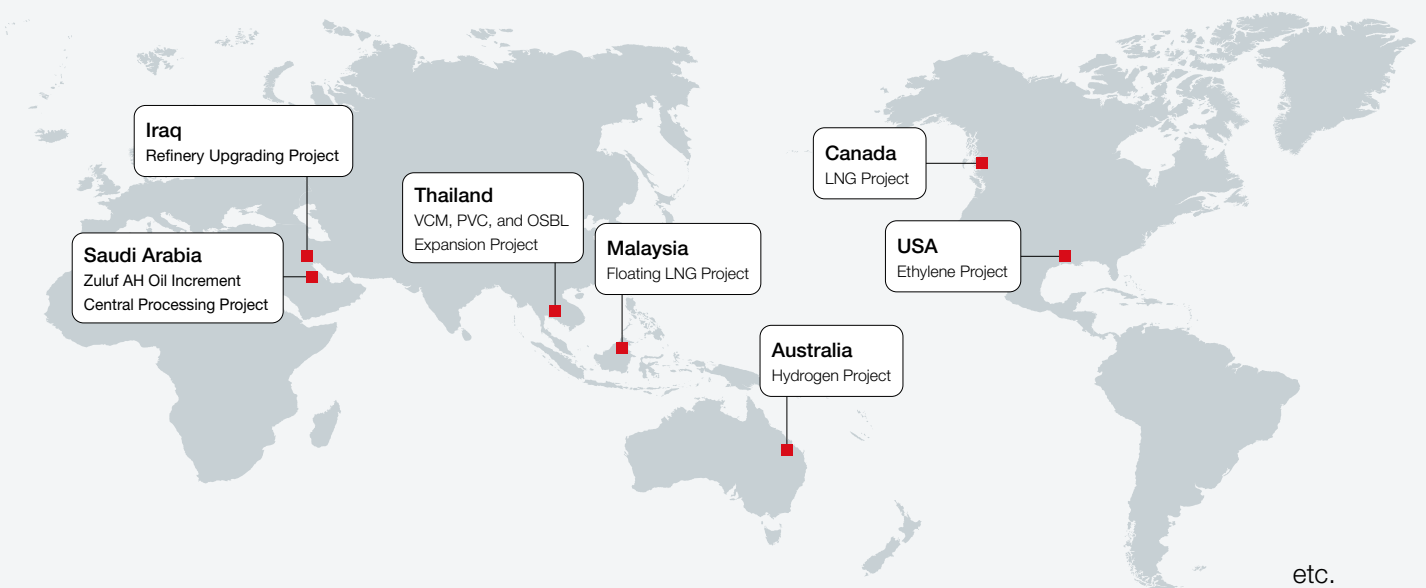
## Operational Review

Orders received in fiscal 2021 progressed at a steady pace during fiscal 2022, as we also conducted sales activities in earnest with the goal of developing clients and coordinating and secure projects through a solutions-driven approach starting with conceptual design.

With the expansion of digital industries, we will be aiming to receive EPC projects in industrial infrastructure sectors such as the high-demand semiconductor and battery-related

industries, data centers. We will continue working with client's decision-making processes to develop clients through a solutions-driven approach starting with conceptual design and coordinate and receive projects. Plans for low-carbon and decarbonization-related projects are taking shape throughout Southeast Asia, so we will be coordinating efforts with companies including JGC Asia Pacific to develop them into EPC orders.

## Current Major EPC Projects





## Total Engineering Business

# Domestic Sector

**Shoji Yamada**  
Representative Director,  
President  
JGC Japan Corporation



New Contracts in Fiscal 2022 **Approx. ¥128 billion**  
New Contracts Targeted for Fiscal 2023 **¥180 billion**

### Business Areas

Engineering, procurement, and construction of plants and facilities in sectors such as pharmaceuticals, healthcare, SAF, hydrogen/fuel ammonia, chemical recycling, petroleum refining, petrochemicals, chemical, nuclear energy, etc.



Pharmaceutical production plant (Shizuoka)

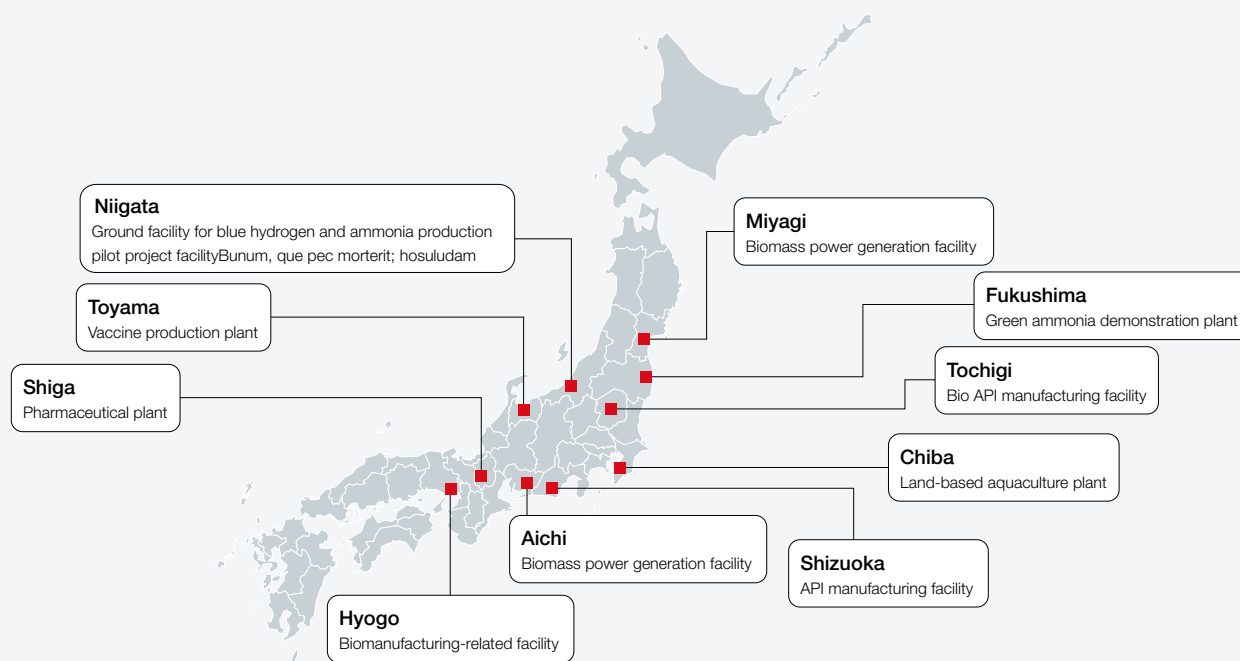
### Operational Review

Fiscal 2022 saw activity in renovation and maintenance for existing oil refineries as well as ongoing capital investment in life sciences, healthcare and chemicals facilities. In this kind of environment, in addition to maintenance of existing refineries and chemical plants, the domestic business secured construction contracts for pharmaceutical manufacturing facilities and hospitals, a SAF production facility construction project in Osaka, construction work for a ground facility for blue hydrogen and ammonia production pilot project facility in Niigata Prefecture, and facilities associated with the resumption of nuclear power plants. We also made progress with low-carbon and decarbonization-related projects in

Japan, such as participating in the technology development and demonstration project for CO<sub>2</sub> separation and capture with unused LNG cold energy as put forward by companies, such as Toho Gas Co., Ltd.

There has been ongoing investments in facilities centered on maintenance of existing refineries, life sciences and healthcare and chemicals, as well as anticipated growth in clients capital investments in the low-carbon and decarbonization-related sector, such as hydrogen/fuel ammonia and SAF, CCS and battery facilities toward achieving Green Transformation (GX) set forth by the Japanese government, and the circular economy sector.

## Current Major EPC Projects





## Functional Materials Manufacturing Business

# Catalysts and Fine Chemicals Sector

**Toshiharu Hirai**  
Representative Director,  
President  
JGC Catalysis and Chemicals Ltd.



### Business Areas

Development and production of catalysts used in petroleum refining, chemical, and environmental conservation and of fine chemical products used as materials in semiconductor, IT / electronics, optics, cosmetics, and other applications



Oil refining catalysts

### Operational Review

In catalysts in fiscal 2022, domestic and overseas demand for catalysts remained steady, primarily with FCC catalysts as fuel demand gradually returned. In the Fine Chemicals sector, despite a worsening business environment in the semiconductor and electronics market leading to a decrease in demand for silica sols used in hard disk and semiconductor polishing and for silica sols used as anti-reflective material in flat panel displays and tablets, demand for cosmetics materials remained steady.

Turning to the Functional Materials Manufacturing Business in fiscal 2023, in catalysts, we will again seek a larger domestic market share for FCC catalysts and continue developing overseas operations, maintain our partnerships

and improve profitability for hydrotreating catalysts, work to secure new chemical catalyst contracts, develop new chemical catalyst products for the growing carbon recycling and chemical recycling sectors, and develop materials for environmental conservation catalysts for renewable energy power generation. In fine chemicals, despite concerns over a worsening business environment in our core electronics and semiconductor markets, we are focusing on launching new silica sol polishing materials, expanding functional coating material sales and applications, developing cosmetic microbead alternatives, and expanding optical material sales and applications.

# Fine Ceramics Sector

**Hiroshi Tanaka**  
Representative Director,  
President,  
Japan Fine Ceramics Co., Ltd



### Business Areas

Development and production of ceramic materials for semiconductor, automotive, telecommunications, industrial, medical, and aerospace applications



Announcing the location of the new plant

### Operational Review

The semiconductor-related market began to suffer in the second half of fiscal 2022 due to slowing demand for products used in semiconductor manufacturing, as device manufacturers adjusted production activities and curtailed new capital investments. Meanwhile, demand for high thermal conductivity silicon nitride substrates for electric vehicle and hybrid vehicle power semiconductors continued to remain strong, and so the decision was made in June and July 2022 to acquire land and for capital investment to increase production of high thermal conductivity silicon

nitride substrates and other materials. To expand business in the Fine Ceramics sector, operations commenced at JFC Materials Co. Ltd., on July 1, 2022 following acquisition of the ceramics business from Showa Denko Materials Co., Ltd.

Despite ongoing concerns over a worsening business environment in the semiconductor manufacturing equipment market in fiscal 2023, we will continue working to acquire new clients and enter new areas, and seek more orders for high thermal conductivity silicon nitride substrates.

## Analysis of Performance and Financial Position

### Overview of the business environment

Despite a trend toward global economic recovery as the impact of COVID-19 eases, increasing prices over the longer term due to factors, such as the prices of resources caused by conditions in Ukraine, as well as countries' central banks continuing to tighten monetary control in order to curb these increases. This is leading to signs of recession throughout the global economy, and there is growing uncertainty about the future.

With these circumstances affecting the overseas markets served by the JGC Group's Total Engineering Business, the Energy Solutions sector (including oil refining, petrochemicals and chemicals, gas processing, liquefied natural gas (LNG)) saw recovery in demand for energy following the resumption of economic activities around the world. Moreover, from the standpoint of both energy security and the shift to a low-carbon society, the importance of relatively low-impact natural gas (including LNG) is growing, which has led to steady growth in numerous capital investment projects in oil- and gas-producing countries. In the Facility Infrastructure Solutions sector (including power generation, receiving terminals, pharmaceuticals, medical care, water treatment, and railways), there was progress in renewable power generation and investment related to industrial infrastructure mainly throughout Asia in light of the global trend toward low-carbon and decarbonization. In the Sustainable Solutions sector (including hydrogen/fuel ammonia, small modular reactors (SMRs), specialty chemicals, chemical recycling, and green chemicals), there was steady development mainly with low-carbon and decarbonization-related projects such as hydrogen/fuel ammonia, following similar global trends toward low-carbon and decarbonization.

The domestic market for this business saw activity in refinery renovation and maintenance, and there has been ongoing capital investment in infrastructure focused on life sciences, healthcare, and chemicals, as well as progress with low-carbon and decarbonization-related projects such as hydrogen/fuel ammonia and SAF (sustainable aviation fuel) toward achieving Green Transformation (GX) set forth by the Japanese government.

In the Functional Materials Manufacturing Business, the Catalysts and Fine Chemicals sector suffered from a worsening business environment for fine chemicals in the semiconductor and electronics market, due to excess supply and a slowdown in consumer spending following rising global inflation, despite solid demand for customer products centered mainly on catalysts in line with the resumption of economic activities worldwide with the easing of COVID-19. In the Fine Ceramics sector, there was a greater economic slowdown in the previously strong semiconductor-related market, but demand for power semiconductor-related products for electric vehicles and hybrid vehicles continued to remain positive.

The JGC Group continued to monitor the ever-changing business environment, gathering information and taking steps against risk as needed, as we sought to prevent the spread of COVID-19 infection and remain cognizant of the safety of employees and other stakeholders as we conducted business.

### Results of operations

In the current consolidated fiscal year, the JGC Group reported net sales of ¥606,890 million (up 41.7% year on year), operating income of ¥36,699 million (up 77.4% year on year), ordinary profit of ¥50,560 million (up 68.4% year on year), and net profit attributable to owners of the parent of ¥30,665 million (net loss attributable to owners of the parent of ¥35,551 million last fiscal year).

#### ▶ Assets

Total current assets at the end of the current consolidated fiscal year were ¥539,493 million, an increase of ¥6,149 million compared to the end of the previous fiscal year. This was mainly due to a decrease of ¥38,712 million in accounts receivable, and an increase of ¥44,792 million in cash and deposits. Fixed assets totaled ¥173,633 million, an increase of ¥12,702 million from the end of the previous fiscal year. This was mainly due to an increase of ¥2,700 million in property, plant and equipment, an increase of ¥1,349 million in intangible assets, and an increase of ¥8,653 million in investments and other assets.

As a result, total assets amounted to ¥713,127 million, an increase of ¥18,852 million compared to the end of the previous fiscal year.

#### ▶ Liabilities

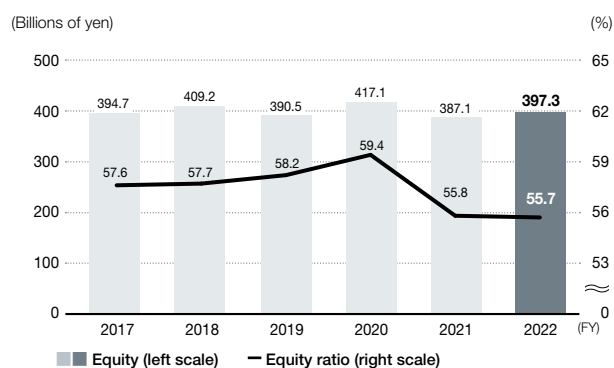
Total current liabilities at the end of the current consolidated fiscal year were ¥272,206 million, an increase of ¥18,369 million compared to the end of the previous fiscal year. This was mainly due to a decrease of ¥20,000 million in current portion of bonds payable, but an increase of ¥26,747 million in notes and accounts payable and an increase of ¥9,794 million in current liabilities and others. Total long-term liabilities amounted to ¥42,939 million, a decrease of ¥9,836 million compared to the end of the previous fiscal year. This was mainly due to a decrease of ¥10,000 million in bonds payable.

As a result, total liabilities amounted to ¥315,145 million, an increase of ¥8,533 million from the end of the previous fiscal year.

#### ▶ Net assets

Total net assets at the end of the current consolidated fiscal year were ¥397,981 million, an increase of ¥10,318 million compared to the end of the previous fiscal year. This was mainly due to the recording of ¥30,665 million in net profit attributable to owners of the parent, despite a decrease of ¥20,000 million due to the purchase of treasury shares.

### Equity and equity ratio



As a result, the equity ratio was 55.7% compared with 55.8% at the end of the previous fiscal year.

## Segment information

### ▶ Total Engineering Business

In fiscal 2022, the JGC Group sought total orders of ¥840 billion in the Energy Solutions Business, Facility Infrastructure Solutions Business and Sustainable Solutions Business, made up of ¥670 billion in the overseas business and ¥170 billion in the domestic business. With the number of projects increasing as clients resume their capital investments, we worked toward securing the number of target orders, while concentrating on selecting projects that are definitely forecast to deliver profits, and as a result of these efforts, we achieved new consolidated contracts of ¥824 billion, close to the numerical target and our second-highest level ever recorded.

In the Energy Solutions Business in the current consolidated fiscal year, the orders we received included a construction project for a large gas and oil separation plant for Saudi Aramco, a construction project for a near-shore floating LNG (FLNG) plant for Petrolim Nasional Berhad (PETRONAS) in Malaysia, and a VCM (vinyl chloride monomer) and PVC (polyvinyl chloride) production capacity expansion project in Thailand. Other orders included Front End Engineering Design (FEED) for expansion project of the Cameron LNG plant in the U.S., an FLNG plant in Nigeria and LNG plant in Papua New Guinea. Furthermore, JGC Corporation took part in a joint carbon capture and storage (CSS) study in Malaysia run by Petronas PETRONAS and Japan Petroleum Exploration Co., Ltd., and also played an active role toward low-carbon and decarbonization of fossil fuels, such as taking part in a joint study run by PETRONAS and JX Nippon Oil & Gas Exploration Corporation for developing the specifics of a CSS supply chain covering CO<sub>2</sub> emitted by various industrial facilities within Malaysia as well as the separation and capture, transportation, compression and storage of CO<sub>2</sub> from Japan and other countries outside of Malaysia. Furthermore, being the first Japanese company taking part in the "Aiming for Zero Methane Emissions Initiative," run by an international organization leading the oil and natural gas industry's response to climate change with the aim of reducing methane emissions from the oil and natural gas sector.

Orders received in the previous consolidated fiscal year progressed at a steady pace in the Facility Infrastructure Solutions sector, as we also conducted sales activities in earnest with the goal of developing clients and coordinating and securing projects through a solutions-driven approach starting with conceptual design.

In the Sustainable Solutions Business that was established by JGC Corporation in September 2022 as an organization serving low-carbon and decarbonization projects overseas, we secured orders for pre-FEED services for the circular economy, and conducted sales activities in earnest toward

FEED and EPC (Engineering, Procurement, Construction) services for numerous hydrogen-related projects that were expected to move ahead.

Overseas subsidiaries secured orders, including a large-scale solar power generation installation project by the Vietnam subsidiary, gas processing plant construction project by the Indonesian subsidiary, numerous chemical plant construction projects by the Singaporean subsidiary, and large-scale ethylene production plant construction project by the U.S. subsidiary.

With the overseas plant market slated to expand over the medium to long term in line with increasing demand for energy, we established a new operation center in Chennai City in India, which began operating in November 2022 in order to expand the execution capacity of our Group's overseas plant construction projects. Efforts are already being made to quickly develop a framework comprising 250 engineers, with plans in place to expand up to 1,000 engineers in the future.

In addition to maintenance of existing refineries and chemical plants, the domestic business secured construction contracts for numerous pharmaceutical manufacturing facilities and several hospitals, a SAF production facility construction project in Osaka, and construction work for a ground facility for blue hydrogen and ammonia production pilot project facility in Niigata Prefecture. We also made significant progress in low-carbon and decarbonization-related projects in Japan, such as participating in the technology development and demonstration project\*1 for CO<sub>2</sub> separation and capture with unused LNG cold energy as put forward by Toho Gas Co., Ltd, etc.

Our new company "Brownreverse Inc." released the 3D viewer "INTEGNANCE® VR" for advanced support of maintenance for existing facilities using digital twins, while JGC Corporation began offering the "CoreSafety®" risk management software to assist with optimizing smart maintenance. The JGC Group has also focused efforts on diversifying its business models, including beginning the "Development of Polymer Synthesis Technology by Microorganisms using CO<sub>2</sub> as Direct Raw Material\*2" together with Kaneka Corporation, Bacchus Bio Innovation Co., Ltd. and Shimadzu Corporation, and as part of this initiative, developing and demonstrating the "Integrated Biofoundry®" with Bacchus Bio Innovation Co., Ltd. as a one-stop service for breeding microbes that produce a variety of useful substances from CO<sub>2</sub>, scaling up this technology, and developing production processes.

In addition to the "Perovskite solar cell" next-generation solar cell developed through the corporate venture capital fund "JGC MIRAI Innovation Fund" established in the previous consolidated fiscal year, investments were also made into pharmaceutical and medical-related start-ups, AI-powered wearable devices, and various start-ups for the production of plant-derived plastic substitute materials.

As part initiatives toward the "establishment of future engines of growth" put forward as a key strategy of

### Current consolidated accounting year

	Total Engineering Business (Millions of yen)	Year-on-year Change (%)	Functional Materials Manufacturing Business (Millions of yen)	Year-on-year Change (%)	Other Businesses (Millions of yen)	Year-on-year Change (%)
Net sales	551,607	45.9	47,773	8.0	7,509	21.4
Operating profit	33,429	95.5	7,169	(1.7)	1,786	72.2

## Analysis of Performance and Financial Position

our current medium-term business plan "Building a Sustainable Planetary Infrastructure 2025 (BSP 2025)," we forged an alliance with Toyo Engineering Corporation for contracting and executing FS (feasibility study), FEED and EPC projects for fuel ammonia production plants and ammonia receiving terminals. We also concluded a license agreement with U.S.-based KBR Inc. for an ammonia production process, with the JGC Group, Toyo Engineering Corporation and KBR Inc. coordinating sales activities toward securing potential contracts in North America, the Middle East, North Africa and other regions.

We also concluded a license agreement with Toyo Engineering Corporation in March this year for contracting and executing FEED and EPC projects for SAF production plants in Japan, and will coordinate joint sales activities and execution of projects for SAF production plant construction projects that are expected to increase in Japan going forward, with the view to securing more projects.

We also partnered with Cosmo Oil Co., Ltd. and Revo International Inc. to establish the merger company SAFFAIRE SKY ENERGY LLC for a domestic SAF production and supply project\*<sup>3</sup> based on used cooking oil, with the aim of commencing operation from between the second half of fiscal 2024 to the start of fiscal 2025. For the production and technological demonstration project\*<sup>4</sup> for green ammonia derived from renewable energy, we concluded a basic cooperation agreement with Namie Town in Fukushima Prefecture for the site of a demonstration plant anticipated to commence operation in fiscal 2024. Furthermore, we partnered with Iwatani Corporation and Toyota Tsusho Corporation to begin a study on developing a low-carbon hydrogen production model using a waste plastic gasification facility in the suburbs around the Port of Nagoya in Aichi Prefecture, and we also worked with Teijin Limited and ITOCHU Corporation to establish the joint venture company RePEaT Co., Ltd. to license technology for the chemical recycling of polyester products, as part of efforts to advance recycling business operations of polyester products by concluding the first license agreement with Chinese corporations.

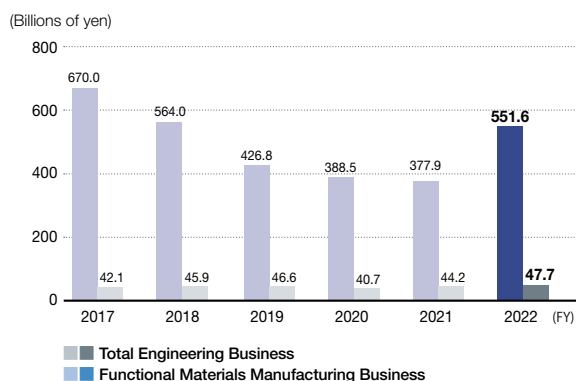
\*1 Subcontracting initiatives for the NEDO Green Innovation Fund project: Technology development and demonstration project for CO<sub>2</sub> separation and capture

\*2 Selected as NEDO Green Innovation Fund project: Promotion of Carbon Recycling Using CO<sub>2</sub> from Biomanufacturing Technology as a Direct Raw Material

\*3 Selected as a NEDO Development of Production Technologies for Biojet Fuels project: Development of supply chain model through demonstration

\*4 Selected as a NEDO Green Innovation Fund project: Hydrogen production through water electrolysis using power from renewables

### Net sales by reportable segment



## Functional Materials Manufacturing Business

In catalysts, domestic and overseas demand for catalysts remained steady, primarily with FCC catalysts as fuel demand gradually returned.

In the Fine Chemicals sector, despite a worsening business environment in the semiconductor and electronics market leading to a decrease in demand for silica sols used in hard disk and semiconductor polishing and for silica sols used as anti-reflective material in flat panel displays and tablets, demand for cosmetics materials remained steady.

In the Fine Ceramics sector, the previously strong semiconductor-related market began to suffer from slowing demand for products used in semiconductor manufacturing, as device manufacturers adjusted production activities and curtailed new capital investments. Meanwhile, demand for high thermal conductivity silicon nitride substrates for electric vehicles and hybrid vehicles continued to remain strong, and so the decision was made in June and July, 2022 for capital investment and acquisition of land to increase production of high thermal conductivity silicon nitride substrates and other materials. To expand business in the Fine Ceramics sector, operations commenced at JFC Materials Co., Ltd. on July 1, 2022 following acquisition of the ceramics business from Showa Denko Materials Co., Ltd. As a subsidiary of Japan Fine Ceramics Co., Ltd., our Group company in the Functional Materials Manufacturing Business, JFC Materials Co. Ltd. will help increase production capacity and business performance of the JFC Group.

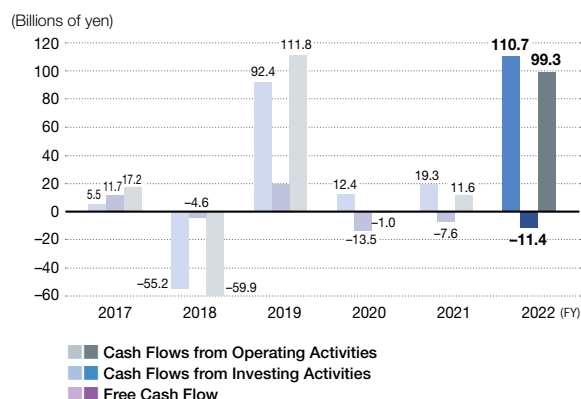
## Cash Flows

Current cash and cash equivalents (hereafter, "net cash") on a consolidated basis as of the end of the consolidated fiscal year stood at ¥332,755 million, a year-on-year increase of ¥44,746 million. The cash flow conditions and causes in the current consolidated fiscal year are as follows.

With regard to cash flows from operating activities, in addition to income before taxes on income of ¥48,811 million, a decrease in accounts receivable was the major contributor to give a total of ¥110,769 million for the current fiscal year, an increase of ¥19,311 million compared to the previous fiscal year.

Cash flows from investing activities amounted to ¥11,471 million used in these activities, mainly due to payments for purchases of property, plant and equipment, compared to

### Cash flows



¥7,695 million used in these activities in the previous fiscal year.

Cash flows used in financing activities amounted ¥61,288 million, mainly due to redemption of corporate bonds, compared to cash flows provided by financing activities of ¥148 million in the previous fiscal year.

## Analysis of new contracts

In the current consolidated fiscal year, orders received totaled ¥878,789 million.

The method used to calculate new contracts was changed from the current consolidated fiscal year, and includes new contracts of the Functional Materials Manufacturing Business. The tables below provide a breakdown of new contracts by sector and region.

### New Contracts by Business Sector

(Billions of yen)

	2022	2023	2023 (Percentage of new contracts)
Total Engineering Business			
Energy Transition	220.3	780.5	–
Oil and gas	92.8	349.7	39.8%
LNG	48.0	147.1	16.7%
Chemical	48.3	212.1	24.1%
Clean energy	28.6	61.8	7.0%
Others	2.5	9.6	1.1%
Healthcare & Life sciences	83.2	38.3	4.4%
Industrial & Urban infrastructure	5.6	4.1	0.5%
Others	0.2	0.9	0.1%
Functional Materials Manufacturing Business	–	47.7	5.4%
Other Businesses	–	7.0	0.8%

### New Contracts by Region

(Billions of yen)

	2022	2023	2023 (Percentage of new contracts)
Japan	166.4	127.6	15.5%
Asia	67.8	251.0	30.5%
Middle East	62.7	310.1	37.6%
Africa	2.0	10.1	1.2%
North America & Other	10.3	125.0	15.2%

## Future outlook

### Total Engineering Business

In the Energy Solutions Business and Sustainable Solutions Business, there are concerns about ongoing future uncertainties in the business environment due to long-term inflation and tightening monetary control causing a slowdown in the global economy. Meanwhile, with energy shortages as much of the world decouples from Russia and makes efforts to diversify suppliers, clients seeking to secure stable energy supplies over the medium to long term are slated to continue moving forward with their capital investment plans with a focus on natural gas and LNG, the importance of which has been reconfirmed as a transitional energy—a stable energy source in the shift to a low-carbon or decarbonized society. Furthermore, with the global trend toward low-carbon and decarbonization, capital investment plans are anticipated in low-carbon and carbon-free sectors like hydrogen/fuel ammonia and SAF, as well as the circular economy sector.

In the Facility Infrastructure Solutions Business as well, we anticipate steady growth in customer capital investment plans toward industrial infrastructure and advanced industries, driven by population and economic growth in emerging economies and elsewhere, with the need for decarbonization as a background factor.

The domestic sector, there has been ongoing capital investment in industrial infrastructure focused on refinery maintenance, healthcare & life sciences, and chemicals, as well as anticipated growth in customer capital investments in the low-carbon and decarbonization-related sector such as hydrogen/fuel ammonia and SAF toward achieving Green Transformation (GX) set forth by the Japanese government, and the circular economy sector.

### Functional Materials Manufacturing Business

Turning to the Functional Materials Manufacturing Business, in catalysts, we will seek a larger domestic market share for FCC catalysts and continue developing overseas operations, maintain our partnerships and improve profitability for hydrotreating catalysts, work to secure new chemical catalyst contracts, develop new chemical catalyst products for the growing carbon recycling and chemical recycling sectors, and develop materials for environmental conservation catalysts for renewable energy power generation. In fine chemicals, despite concerns over a worsening business environment in our core electronics and semiconductor markets, we will focus on launching new silica sol polishing materials, expanding functional coating material sales and applications, developing cosmetic microbead alternatives, and expanding optical material sales and applications.

In fine ceramics, despite ongoing concerns over a worsening business environment in the semiconductor manufacturing equipment market, we will continue working to acquire new clients and enter new areas, and seek increased orders for high thermal conductivity silicon nitride substrates.

## Results of Value Creation

# Consolidated Balance Sheets

Years ended March 31, 2023 and 2022

The translation of the Japanese yen amounts into U.S. dollars, using the prevailing exchange rate at March 31, 2023 of ¥133.53 to U.S.\$1, is included solely for the convenience of readers outside Japan.

		Millions of yen	Millions of U.S. dollars
	2022	2023	2023
<b>ASSETS</b>			
<b>CURRENT ASSETS</b>			
Cash and deposits	288,159	332,951	2,493
Notes receivable, trade receivables, contract assets and other	141,222	141,846	1,062
Costs on construction contracts in progress	23,804	16,981	127
Merchandise and finished goods	6,659	7,760	58
Work in process	2,970	3,236	24
Raw materials and supplies	3,596	4,520	34
Accounts receivable-others	64,423	25,710	193
Other	6,069	6,802	51
Allowance for doubtful accounts	(3,562)	(315)	(2)
<b>TOTAL CURRENT ASSETS</b>	<b>533,343</b>	<b>539,493</b>	<b>4,040</b>
<b>NON-CURRENT ASSETS</b>			
<b>PROPERTY, PLANT AND EQUIPMENT</b>			
Buildings and structures	74,181	75,001	562
Machinery, vehicles, tools, furniture and fixtures	71,133	72,569	543
Land	18,617	18,639	140
Leased assets	1,079	2,690	20
Construction in progress	803	2,928	22
Other	4,795	—	—
Accumulated depreciation	(101,075)	(99,595)	(746)
<b>TOTAL PROPERTY, PLANT AND EQUIPMENT</b>	<b>69,534</b>	<b>72,234</b>	<b>541</b>
<b>INTANGIBLE ASSETS</b>			
Software	7,228	10,650	80
Other	2,447	374	3
<b>TOTAL INTANGIBLE ASSETS</b>	<b>9,676</b>	<b>11,025</b>	<b>83</b>
<b>INVESTMENTS AND OTHER ASSETS</b>			
Investment securities	55,837	59,224	444
Long-term loans receivable	8,640	11,074	83
Retirement benefit asset	1,506	1,277	10
Deferred tax assets	13,557	15,483	116
Other	16,002	25,333	190
Allowance for doubtful accounts	(13,824)	(22,018)	(165)
<b>TOTAL INVESTMENTS AND OTHER ASSETS</b>	<b>81,720</b>	<b>90,373</b>	<b>677</b>
<b>TOTAL NON-CURRENT ASSETS</b>	<b>160,930</b>	<b>173,633</b>	<b>1,300</b>
<b>TOTAL ASSETS</b>	<b>694,274</b>	<b>713,127</b>	<b>5,341</b>



		Millions of yen	Millions of U.S. dollars
	2022	2023	2023
<b>LIABILITIES</b>			
<b>CURRENT LIABILITIES</b>			
Notes payable, accounts payable for construction contracts and other	63,258	90,005	674
Short-term borrowings	2,167	2,336	17
Current portion of bonds payable	30,000	10,000	75
Current portion of long-term borrowings	8,660	544	4
Income taxes payable	5,244	4,794	36
Contract liabilities	109,756	113,989	854
Provision for bonuses	6,880	12,509	94
Provision for bonuses for directors (and other officers)	274	299	2
Provision for losses on construction contracts	384	838	6
Provision for warranties for completed construction	1,074	958	7
Other	26,135	35,929	269
<b>TOTAL CURRENT LIABILITIES</b>	<b>253,836</b>	<b>272,206</b>	<b>2,039</b>
<b>NON-CURRENT LIABILITIES</b>			
Bonds payable	20,000	10,000	75
Long-term borrowings	11,496	13,891	104
Retirement benefit liability	15,884	12,803	96
Provision for retirement benefits for directors (and other officers)	210	233	2
Deferred tax liabilities	1,089	1,438	11
Deferred tax liabilities for land revaluation	1,014	1,014	8
Other	3,080	3,557	27
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>52,775</b>	<b>42,939</b>	<b>322</b>
<b>TOTAL LIABILITIES</b>	<b>306,612</b>	<b>315,145</b>	<b>2,360</b>
<b>NET ASSETS</b>			
<b>SHAREHOLDERS' EQUITY</b>			
Share capital	23,672	23,733	178
Capital surplus	25,770	25,831	193
Retained earnings	342,198	369,066	2,764
Treasury stock	(6,740)	(26,741)	(200)
<b>TOTAL SHAREHOLDERS' EQUITY</b>	<b>384,901</b>	<b>391,889</b>	<b>2,935</b>
<b>ACCUMULATED OTHER COMPREHENSIVE INCOME</b>			
Valuation difference on available-for-sale securities	6,311	7,219	54
Deferred gains or losses on hedges	3,786	2,359	18
Revaluation reserve for land	(10,891)	(10,891)	(82)
Foreign currency translation adjustments	3,462	6,089	46
Remeasurements of defined benefit plans	(424)	677	5
<b>TOTAL ACCUMULATED OTHER COMPREHENSIVE INCOME</b>	<b>2,244</b>	<b>5,454</b>	<b>41</b>
<b>NON-CONTROLLING INTERESTS</b>	<b>517</b>	<b>637</b>	<b>5</b>
<b>TOTAL NET ASSETS</b>	<b>387,662</b>	<b>397,981</b>	<b>2,980</b>
<b>TOTAL LIABILITIES AND NET ASSETS</b>	<b>694,274</b>	<b>713,127</b>	<b>5,341</b>

## Results of Value Creation

# Consolidated Statements of Operations

Years ended March 31, 2023 and 2022

		Millions of yen	Millions of U.S. dollars
	2022	2023	2023
<b>NET SALES</b>	428,401	606,890	4,545
<b>COST OF SALES</b>	383,029	540,164	4,045
<b>GROSS PROFIT</b>	45,372	66,725	500
<b>SELLING, GENERAL AND ADMINISTRATIVE EXPENSES</b>	24,683	30,026	225
<b>OPERATING PROFIT</b>	20,688	36,699	275
<b>NON-OPERATING INCOME</b>			
Interest income	1,060	7,364	55
Dividend income	2,103	2,119	16
Share of profit of entities accounted for using equity method	3,014	2,714	20
Foreign exchange gains	2,528	2,833	21
Other	1,124	226	2
<b>TOTAL NON-OPERATING INCOME</b>	9,831	15,259	114
<b>OTHER EXPENSES</b>			
Interest expense	419	1,162	9
Other	72	235	2
<b>TOTAL OTHER EXPENSES</b>	491	1,397	10
<b>ORDINARY PROFIT</b>	30,028	50,560	379
<b>EXTRAORDINARY INCOME</b>			
Gain on change in equity	—	1,318	10
Gain on sales of investment securities	799	399	3
Gain on liquidation of subsidiaries and associates	179	—	—
Gain on sales of receivables	—	2,079	16
Other	8	5	0
<b>Total extraordinary income</b>	987	3,802	28
<b>EXTRAORDINARY LOSSES</b>			
Impairment losses	—	2,525	19
Loss on valuation of investment securities	397	992	7
Loss on valuation of investments in capital of subsidiaries and associates	—	1,727	13
Loss on Ichthys LNG Project	57,576	—	—
Other	301	307	2
<b>Total extraordinary losses</b>	58,275	5,552	42
<b>Profit (loss) before income taxes</b>	(27,260)	48,811	366
<b>Income taxes - current</b>	7,773	19,302	145
<b>Income taxes - deferred</b>	463	(538)	(4)
<b>Total income taxes</b>	8,236	18,763	141
<b>PROFIT (LOSS)</b>	(35,496)	30,047	225
<b>PROFIT (LOSS) ATTRIBUTABLE TO NON-CONTROLLING INTERESTS</b>	54	(618)	(5)
<b>PROFIT (LOSS) ATTRIBUTABLE TO OWNERS OF PARENT</b>	(35,551)	30,665	230

**Results of Value Creation****Consolidated Statements of Comprehensive Income**

Years ended March 31, 2023 and 2022

		Millions of yen	Millions of U.S. dollars
	2022	2023	2023
PROFIT (LOSS)	(35,496)	30,047	225
OTHER COMPREHENSIVE INCOME			
Valuation difference on a available-for-sale securities	653	(177)	(1)
Deferred gains or losses on hedges	2,855	(2,979)	(22)
Foreign currency translation adjustments	3,220	1,387	10
Remeasurements of defined benefit plans	(4)	1,215	9
Share of other comprehensive income of entities accounted for using equity method	1,410	3,933	29
TOTAL OTHER COMPREHENSIVE INCOME	8,135	3,378	25
COMPREHENSIVE INCOME	(27,360)	33,425	250
COMPREHENSIVE INCOME ATTRIBUTABLE TO			
COMPREHENSIVE INCOME ATTRIBUTABLE TO OWNERS OF PARENT	(27,415)	33,875	254
COMPREHENSIVE INCOME ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	54	(449)	(3)

## Results of Value Creation

# Consolidated Statements of Changes in Net Assets

Years ended March 31, 2023 and 2022

Year ended March 31, 2022	Shareholders' equity				
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity
<b>Balance at beginning of period</b>	23,611	25,709	380,402	(6,739)	422,983
Cumulative effects of changes in accounting policies			312		312
<b>Restated balance</b>	23,611	25,709	380,714	(6,739)	423,295
<b>Changes during period</b>					
Issuance of new shares	61	61			122
Dividends of surplus			(3,029)		(3,029)
Loss attributable to owners of parent			(35,551)		(35,551)
Purchase of treasury shares				(0)	(0)
Change in scope of consolidation			64		64
Net changes in items other than shareholders' equity					—
<b>Total changes during period</b>	61	61	(38,515)	(0)	(38,394)
<b>Balance at end of period</b>	23,672	25,770	342,198	(6,740)	384,901

Year ended March 31, 2023	Shareholders' equity				
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity
<b>Balance at beginning of period</b>	23,672	25,770	342,198	(6,740)	384,901
<b>Changes during period</b>					
Issuance of new shares	60	60			120
Dividends of surplus			(3,788)		(3,788)
Profit attributable to owners of parent			30,665		30,665
Purchase of treasury shares				(20,000)	(20,000)
Change in scope of consolidation			(8)		(8)
Net changes in items other than shareholders' equity					—
<b>Total changes during period</b>	60	60	26,868	(20,000)	6,988
<b>Balance at end of period</b>	23,733	25,831	369,066	(26,741)	391,889

Year ended March 31, 2023	Shareholders' equity				
	Share capital	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity
<b>Balance at beginning of period</b>	177	193	2,563	(50)	2,883
<b>Changes during period</b>					
Issuance of new shares	0	0			1
Dividends of surplus			(28)		(28)
Profit attributable to owners of parent			230		230
Purchase of treasury shares				(150)	(150)
Change in scope of consolidation			(0)		(0)
Net changes in items other than shareholders' equity					—
<b>Total changes during period</b>	0	0	201	(150)	52
<b>Balance at end of period</b>	178	193	2,764	(200)	2,935

Millions of yen

Accumulated other comprehensive income						Non-controlling interests	Total net assets
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		
5,571	248	(10,891)	(358)	(432)	(5,862)	495	417,616
							312
5,571	248	(10,891)	(358)	(432)	(5,862)	495	417,928
							122
							(3,029)
							(35,551)
							(0)
			(28)		(28)		36
740	3,537	—	3,849	8	8,135	21	8,157
740	3,537	—	3,820	8	8,107	21	(30,265)
6,311	3,786	(10,891)	3,462	(424)	2,244	517	387,662

Millions of yen

Accumulated other comprehensive income						Non-controlling interests	Total net assets
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		
6,311	3,786	(10,891)	3,462	(424)	2,244	517	387,662
							120
							(3,788)
							30,665
							(20,000)
							(8)
907	(1,426)	—	2,627	1,101	3,210	120	3,330
907	(1,426)	—	2,627	1,101	3,210	120	10,318
7,219	2,359	(10,891)	6,089	677	5,454	637	397,981

Millions of U.S. dollars

Accumulated other comprehensive income						Non-controlling interests	Total net assets
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		
47	28	(82)	26	(3)	17	4	2,903
							1
							(28)
							230
							(150)
							(0)
7	(11)	—	20	8	24	1	25
7	(11)	—	20	8	24	1	77
54	18	(82)	46	5	41	5	2,980

## Results of Value Creation

# Consolidated Statements of Cash Flows

Years ended March 31, 2023 and 2022

		Millions of yen	Millions of U.S. dollars
	2022	2023	2023
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Profit (loss) before income taxes	(27,260)	48,811	366
Depreciation	7,202	7,839	59
Impairment losses	—	2,525	19
Increase (decrease) in allowance for doubtful accounts	3,712	4,489	34
Interest and dividend income	(3,164)	(9,484)	(71)
Interest expense	419	1,162	9
Foreign exchange losses (gains)	(4,419)	(11,761)	(88)
Share of loss (profit) of entities accounted for using equity method	(3,014)	(2,714)	(20)
Decrease (increase) in notes receivable, trade receivables, contract assets and other	3,326	898	7
Decrease (increase) in inventories	(3,742)	5,310	40
Increase (decrease) in notes and accounts payable - trade	19,072	26,594	199
Loss (gain) on sale of investment securities	(799)	(398)	(3)
Increase (decrease) in retirement benefit liabilities	353	(3,324)	(25)
Increase (decrease) in provision for loss on construction contracts	(3,251)	429	3
Loss (gain) on valuation of investment securities	397	992	7
Loss on valuation of investments in capital of subsidiaries and associates	—	1,727	13
Loss (gain) on change in equity	—	(1,318)	(10)
Increase (decrease) in contract liabilities	8,739	3,753	28
Decrease (increase) in accounts receivable - other	33,328	36,579	274
Increase (decrease) in accounts payable - other	(13,437)	7,177	54
Gain on sale of receivables	—	(2,079)	(16)
Other, net	(895)	6,820	51
Subtotal	16,567	124,029	929
Interest and dividends received	5,341	9,985	75
Interest paid	(419)	(932)	(7)
Proceeds from sale of receivables	—	2,079	16
Income taxes paid	(2,177)	(24,392)	(183)
Cash flows from operating activities	19,311	110,769	830
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Purchase of property, plant and equipment	(5,467)	(6,565)	(49)
Proceeds from sale of property, plant and equipment	9	150	1
Purchase of investment securities	(2,435)	(2,629)	(20)
Proceeds from sale of investment securities	2,835	939	7
Purchase of intangible assets	(4,339)	(5,573)	(42)
Proceeds from sale of intangible assets	—	1,796	13
Proceeds from capital reduction of investments	1,064	733	5
Other, net	637	(322)	(2)
CASH FLOWS FROM INVESTING ACTIVITIES:	(7,695)	(11,471)	(86)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Proceeds from long-term borrowings	1,617	2,324	17
Repayments of long-term borrowings	(370)	(9,197)	(69)
Redemption of bonds	—	(30,000)	(225)
Dividends paid	(3,031)	(3,789)	(28)
Dividends paid to non-controlling interests	(33)	(44)	(0)
Net increase (decrease) in short-term borrowings	1,819	56	0
Purchase of treasury stock	(0)	(20,000)	(150)
Other, net	(148)	(637)	(5)
CASH FLOWS FROM FINANCING ACTIVITIES:	(148)	(61,288)	(459)
<b>EFFECT OF EXCHANGE RATE CHANGE ON CASH AND CASH EQUIVALENTS</b>			
	7,968	6,592	49
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	19,436	44,602	334
<b>CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD</b>	268,281	288,009	2,157
<b>INCREASE IN CASH AND CASH EQUIVALENTS FROM INCLUSION OF SUBSIDIARIES IN CONSOLIDATION</b>	291	144	1
<b>CASH AND CASH EQUIVALENTS AT END OF PERIOD</b>	288,009	332,755	2,492

## Results of Value Creation

## Group Companies

(As of March 31, 2023)

● Consolidated subsidiaries

● Affiliated companies accounted for by the equity method

● Affiliated companies not accounted for by the equity method

## Total Engineering Business

Industry	Name	Country	Capital	Percentage of voting rights owned*
EPC	● JGC CORPORATION	Japan	¥1.0 billion	100%
	● JGC JAPAN CORPORATION	Japan	¥1.0 billion	100%
	● JGC ASIA PACIFIC PTE. LTD.	Singapore	S\$2,100,000	100%
	● JGC PHILIPPINES, INC.	The Philippines	PHP1,300,000,000	100%
	● PT. JGC INDONESIA	Indonesia	IDR1,357,050,000	49% (14%)
	● JGC Gulf International Co. Ltd.	Saudi Arabia	SAR262,500,000	100% (5%)
	● JGC OCEANIA PTY LTD	Australia	A\$913,800,000	100%
	● JGC America, Inc.	U.S.A.	US\$41,051,000	100%
	● JGC Gulf Engineering Co. Ltd.	Saudi Arabia	SAR500,000	75% (75%)
	● JGC Construction International Pte. Ltd.	Singapore	US\$1,043,000	100% (100%)
	● JGC ASIA PACIFIC (M) SDN. BHD.	Malaysia	MYR750,000	100% (100%)
	● JGC INDIA EPC PRIVATE LIMITED	India	INR280,000,000	100% (100%)
	● JGC Vietnam Co., Ltd.	Vietnam	VND519,831,000,000	100% (62%)
	● Japan NuScale Innovation, LLC	U.S.A.	US\$173,008,000	29% (29%)
Inspection / Maintenance	● JGC PLANTECH AOMORI Co., Ltd.	Japan	¥50 million	100% (100%)
Process Licensing	● Nikki-Universal Co., Ltd.	Japan	¥1.0 billion	50%

## Functional Material Manufacturing Business

Name	Country	Capital	Percentage of voting rights owned*
● JGC Catalysts and Chemicals Ltd.	Japan	¥1.8 billion	100%
● Japan Fine Ceramics Co., Ltd.	Japan	¥0.3 billion	100%
● Nikki-Universal Co., Ltd.	Japan	¥1.0 billion	50%

## Other Businesses

Industry	Name	Country	Capital	Percentage of voting rights owned*
Equipment Procurement	● JGC Trading & Services Co., Ltd.	Japan	¥40 million	24%
Consulting	● Japan NUS CO., LTD.	Japan	¥50 million	88%
Office Support Services	● NIKKI BUSINESS SERVICES CO., LTD.	Japan	¥1,455 million	100%
Water Treatment	● Swing Corporation	Japan	¥5.5 billion	33%
	● Swing AM Corporation	Japan	¥0.1 billion	[100%]
	● Swing Engineering Corporation	Japan	¥0.3 billion	[100%]
Oil and Gas Production Sales	● JGC (GULF COAST), LLC	U.S.A.	US\$51,050,000	100% (100%)
	● JGC Exploration Eagle Ford LLC	U.S.A.	US\$46,700,000	100% (100%)
	● JGC EXPLORATION CANADA LTD.	Canada	C\$160,885,000	100%
Water Desalination	● Al Asilah Desalination Company S. A. O. C.	Oman	OMR7,500,000	75%
	● A. R. C. H WLL	Bahrain	US\$758,000	30%
	● ASH SHARQIYAH OPERATION AND MAINTENANCE COMPANY LLC	Saudi Arabia	SAR1,000,000	29%
FPSO (Floating Production, Storage and Offloading system)	● Japan Sankofa Offshore Production Pte. Ltd.	Singapore	US\$29,824,000	26%

\* Figures in parentheses ( ) in percentage of voting rights owned ratio are indirect ownership ratios, and figures in parentheses [ ] are ownership ratios held by persons closely related to or in agreement with the company, and are outside figures.

## Results of Value Creation

# Stock Information

(As of March 31, 2023)

### Authorized Shares

600,000,000

### Issued and Outstanding Shares

259,409,926

### Number of Shareholders

36,924

### Administrator of the Shareholders' Register

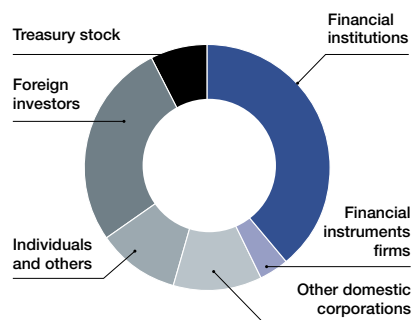
Mitsubishi UFJ Trust and Banking Corp.1-4-5, Marunouchi, Chiyoda-ku, Tokyo 100-8212, Japan

### Major Shareholders

	Number of shares (thousands)	Percentage of total (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	46,210	19.20
Custody Bank of Japan, Ltd. (Trust Account)	36,529	15.18
JGC Trading & Services Co., Ltd.	12,112	5.03
JGC-S SCHOLARSHIP FOUNDATION	8,433	3.50
SSBTC CLIENT OMNIBUS ACCOUNT	7,014	2.91
Sumitomo Mitsui Banking Corporation	5,500	2.28
BNYM AS AGT/CLTS NON TREATY JASDEC	3,724	1.54
Mizuho Bank, Ltd.	2,899	1.20
JP MORGAN CHASE BANK 385781	2,866	1.19
JPMorgan Securities Japan Co., Ltd.	2,675	1.11

(Notes) 1. Number of shares is rounded down to the nearest thousand. Percentage of total is rounded down to the second decimal place.  
2. The Company holds 18,820 thousand shares (7.26%, 3rd) of treasury stock, but this is excluded from the above table.  
3. Percentage of total is calculated excluding treasury stock.

### Distribution of Shareholders

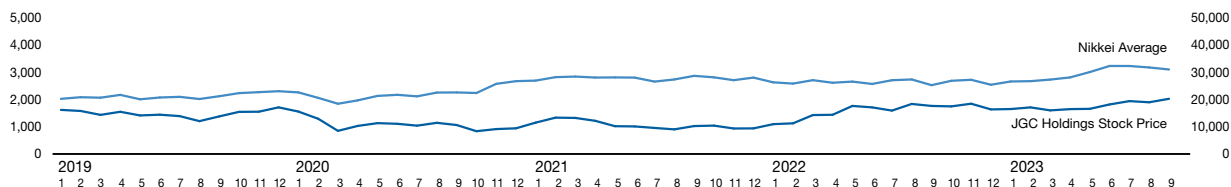


	(%)
Financial institutions	39.02
Financial instruments firms	3.85
Other domestic corporations	11.59
Individuals and others	10.93
Foreign investors	27.35
Treasury stock	7.26

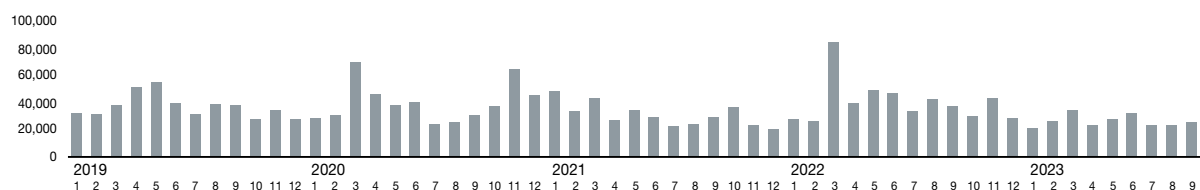
Figures have been rounded down to the second decimal places.

### Stock Price

#### JGC Holdings Stock Price (Yen)



#### Volume (Thousands of shares)





Results of Value Creation

# Outline of JGC

(As of March 31, 2023)

## Company Name

JGC HOLDINGS CORPORATION

## Head Office

2-3-1, Minato Mirai, Nishi-ku, Yokohama-shi, Kanagawa 220-6001, Japan

## Established

October 25, 1928

## Capital stock

¥23,733,170,000

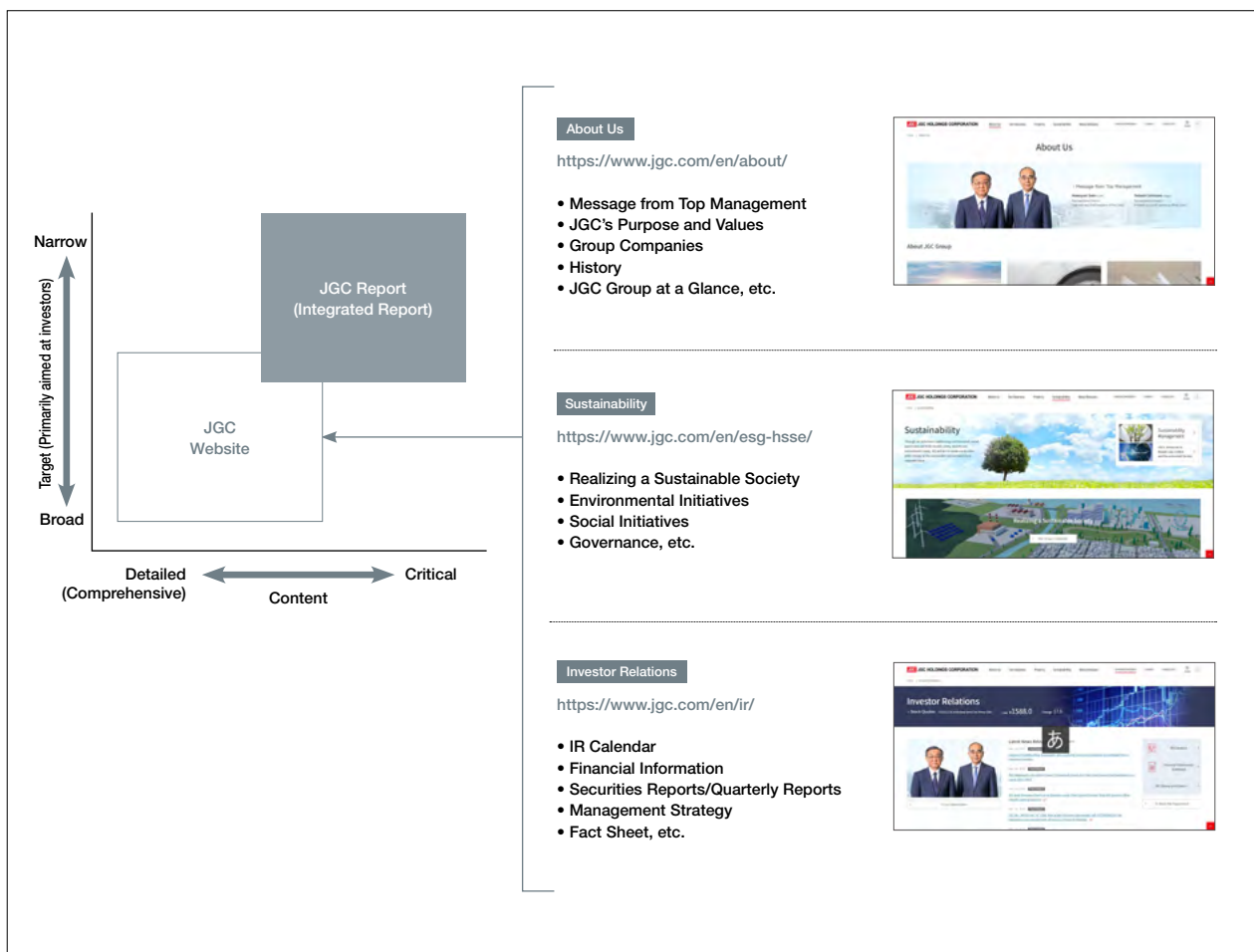
## Employees

313 (Consolidated: 7,876)

## Independent Auditor

KPMG AZSA LLC

## Information Provided



**JGC** JGC HOLDINGS CORPORATION

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