Management Messages

Message from the Chairman and CEO

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. Representative Director and Chairman as of June 2014 and CEO as of June 2017.

Collaborating on Global Issues

A world where the hands of time have been turned back

The past few years have seen an accelerated trend toward decarbonization, as moves to build a sustainable society drive a transition from fossil to renewable energy sources. Fiscal 2021 did remind people that fossil fuel still plays an important role in meeting immediate energy needs, and that liquified natural gas (LNG) and natural gas remain significant as transitional energy sources in the shift to decarbonization. The reminder was spurred by returning energy demand, as the global economy began to recover under less pressure from the COVID-19 pandemic, and by a shortfall of wind power in the UK. Conditions in Ukraine since the end of February 2022 then presented the West with a new challenge in ensuring energy security. Accordingly, the matter of how to meet growing energy demand in one's country, and the revival of fossil fuel in this context, has emerged as a pressing issue. When we consider the environment surrounding the world's energy supply, it is as if the clock has been turned back to an era centered on fossil energy.

A corporate group providing realistic solutions

What's truly required now, under these conditions, is to reconcile the two conflicting issues of accelerating decarbonization for sustainability and meeting energy demand that is increasing. It is not a matter of finding solutions to only one of these conflicting issues. We must meet immediate and growing energy demand by quickly providing transitional energy sources such as LNG and natural gas as a bridge to decarbonization while keeping our medium- to long-term focus on accelerating the transition.

In the long-term management vision (2040 Vision) formulated by the JGC Group last year, we redefined our purpose as "Enhancing planetary health" and identified three social issues to be addressed: balancing energy stability with decarbonization, reducing the environmental impact of resource consumption, and building and maintaining vital infrastructure and services. We also adopted a stance of expanding from oil and gas into the five business areas of energy transition, healthcare & life sciences, high-performance functional materials, circular economy, and industrial & urban infrastructure.
(Overview of 2040 Vision, the Group's Long-Term Management Vision, p. 29)

CEO Message

Message from the Chairman and CEO

“As a collaborator taking on global issues, we will enhance our corporate value by demonstrating our presence more than ever before.”

Two social issues addressed under the 2040 Vision—balancing energy stability with decarbonization and reducing the environmental impact of resource consumption—are indeed pressing issues for the world today, and the five businesses slated for expansion are the very areas that will be essential socially and industrially on the path to sustainability and when this goal is achieved.

In the core area of energy transition, we are focusing in particular on our existing oil and gas segment and on the shift to low carbon / decarbonization. The JGC Group has built many plants worldwide for this segment, which is also closely associated with the key transitional energy resources of LNG and natural gas which have again been globally recognized for their importance.

Besides focusing on business as usual here, we are also putting efforts into low carbon / decarbonized technologies such as carbon capture and storage (CCS). Moreover, we are taking an active stance on expansion in the area of clean energy—hydrogen / fuel ammonia, wind power, small modular reactors (SMRs), and other business.

We know with conviction that by building on our technical expertise, the JGC Group is positioned to contribute to solutions for the global issues of decarbonizing and meeting growing energy demand. We also know we must be the rare equal partner who can provide realistic solutions, whether to countries, clients, or a range of other stakeholders who face these pressing issues—a collaborator in taking on global issues. To fulfill our calling, I am determined as CEO to move forward firmly and unwaveringly toward the 2040 Vision.

Honing four competitive strengths

This year’s integrated report takes a fresh look at the four strengths of vision, technical expertise, management capabilities, and risk management, which play an important role in value creation (p. 19) as well as working toward sustained growth, in line with the 2040 Vision and as an ally in addressing global issues. The report also discusses how we are further honing these strengths to steadily transform engineering procurement, and construction (EPC) operations, expand high-performance functional materials manufacturing, and establish future engines of growth. These are key strategies in the medium-term business plan “Building a Sustainable Planetary Infrastructure 2025 (BSP 2025),” the first phase (fiscal 2021–2025) of the 2040 Vision.

As the source of competitiveness enabling sustained Group growth, the strengths have been cultivated for over more than 90 years since our founding in 1928 as we have anticipated changes and constantly taken on transformation. They are the core of what makes us as the JGC Group. Even in a rapidly changing market environment, the four strengths make us competitive today and tomorrow, and further reinforcement will support sustained growth.

Developing and strengthening sustainability governance

As the world pursues sustainability, attaining higher corporate value will mean improving and striking the right balance of the economic, social, and environmental value that we provide. Among these, we sought to enhance social and environmental value in fiscal 2021 by developing and strengthening sustainability governance, as a management resource for continuous growth (p. 49). A basic policy on sustainability was established as a higher-level concept reflecting materiality, our long-term management vision, and medium-term business plan. We also established the Sustainability Committee, which I chair, and subcommittees that guide Group efforts supporting net-zero emissions, human rights, diversity and inclusion, and a variety of other measures. We will continue to develop and strengthen the management resources for sustainability governance for further growth while actively contributing to enhanced social and environmental value.

Looking ahead

I will continue to exercise firm leadership as CEO, and our corporate value will be further enhanced as the JGC Group gains prominence as a collaborator in taking on global issues to meet the expectations of shareholders and investors, whose ongoing support we deeply appreciate.

Message from the President and COO

Resolving Challenges and Managing Risk as Needed for Continuous Growth

Fiscal 2021: Firmer footing for future growth

In fiscal 2021, crude oil and gas prices soared on the back of higher energy demand as markets looked ahead to a post-pandemic future, giving the impression that after several years of sluggishness in EPC business, this market environment had turned the corner toward recovery. The timing of some orders slipped into the next fiscal year, which kept this year's total at ¥315.9 billion and short of our original ¥500 billion target. However, this was due to the time required to negotiate the contracts of promising projects in order to account for higher materials, equipment, and transport costs due to conditions in Ukraine.

As for performance, although we regrettably recorded a net loss attributable to owners of the parent due to an extraordinary loss in the Ichthys LNG project in Australia, we significantly improved our gross profit ratio, which represents the earnings capacity of an engineering company, from an initial forecast of 8.1% to 10.6%. A weaker yen was not the only reason for this, nor was moving on from unprofitable projects. Improved profitability came from the robust management of current projects, as well as increased revenue from functional materials manufacturing, partly from expansion of the semiconductor market.

In general, as the market environment began to recover for our EPC and functional materials manufacturing segments, our orders and business performance in fiscal 2021 were solid enough to provide a firmer footing for the future.

Executing key strategies with a sense of speed

Fiscal 2021 also marked the start of BSP 2025, the medium-term business plan. To summarize our progress this first year, we saw steady results in the three key strategies of transforming EPC operations, expanding high-performance functional materials manufacturing, and establishing future engines of growth. There was speed, but we did not miss potential opportunities.

Several measures were taken in transforming our EPC business. Mr. Farhan Mujib, a veteran in the EPC industry outside of Japan with a broad personal network of clients and other professional acquaintances, was appointed president of JGC Corporation, our EPC operating company. To improve competitiveness in securing orders through account-focused sales in Southeast Asia and reinforce project execution capabilities there, JGC Asia Pacific Pte. Ltd. was established in January 2022 as a headquarters in Singapore, which has strengthened our framework for regional management. Domestically, pharmaceuticals remain a growth segment, and in anticipation of expansion in the new modalities market, we increased our project execution capacity for the pharmaceutical manufacturing sector by acquiring the pharmaceutical plant EPC business of a company in this industry. These measures were also successful, and record pharmaceutical orders were received in fiscal 2021. Looking ahead, our digitalization of EPC (EPC DX) undertaken for greater competitiveness and profitability in large-scale projects will reach a milestone in digital project delivery from April 2023. EPC DX has already been implemented in a refinery upgrading project in Iraq where construction is underway.

Measures to expand high-performance functional materials manufacturing in fiscal 2021 included stepping up production and sales of silica sol for hard disk polishing, expanding catalyst sales overseas, developing catalysts that support decarbonization, and starting full-scale production at a high thermal conductivity silicon nitride substrate plant. With applications such as EV / HEV power semiconductors expected to drive growth of this substrate market, we are taking a proactive stance toward facility investment that will further increase production capacity.

In measures to establish future engines of growth in fiscal 2021, we were particularly active in the areas of hydrogen / fuel ammonia and circular economy. In hydrogen / fuel ammonia, we have already received orders overseas for feasibility studies and front-end engineering and design (FEED), which are among the signs of future market expansion. Significantly greater demand in Japan and elsewhere is expected from 2030 to 2050. This has set the stage for initiatives such as forming an alliance with Toyo Engineering Corporation for fuel ammonia EPC business and concluding a license agreement with U.S.-based KBR Inc. for an ammonia production process. In support of a circular economy, the JGC Group along with airline companies and other participants established a voluntary organization called "Act For Sky" to promote widespread adoption of sustainable aviation fuel (SAF) and to enlighten the public. A collaborative agreement was concluded to supply used cooking oil as a raw material from sources such as restaurants at three airports operated by Kansai Airports, to an SAF plant slated for construction at the Sakai Refinery of Cosmo Oil Co., Ltd. Additionally, on September 1, 2022, JGC Corporation established a new organization combining sales, project execution, and business development functions for sustainability-related

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, and Senior Executive Vice President and CPO in February 2017, and President and COO in June of that year.

COO Message

business. Resources previously dispersed within the Group will be consolidated as our work to establish future engines of growth gains momentum.

Fiscal 2022 order target and earnings forecast

We are targeting ¥840 billion in orders for fiscal 2022, about 2.5 times the level of orders received for fiscal 2021. This figure reflects both the clear recovery in our EPC market environment and, from the standpoint of energy security, a likely increase in demand for LNG and natural gas. Of this amount, we are seeking ¥670 billion in orders from overseas EPC business, which includes energy solutions and facility infrastructure solutions. The energy solutions business is already off to a good start, with orders including a construction project for a large oil and gas separation plant in Saudi Arabia and a chemical plant expansion project in Thailand. Active sales activities are planned that will help secure orders for gas chemical projects in the U.S. and Middle East, as well as LNG projects in the U.S. and Southeast Asia and other opportunities.

JGC Corporation's Facility Infrastructure Solutions will continue to pursue account-focused sales for clients mainly in Southeast Asia, leveraging our technical expertise as an engineering company to make proposals. Among other projects, we will be working to secure orders for solar power plants with energy storage systems, as well as tenant factories in industrial parks. In the domestic EPC area, the market environment is expected to be as robust as in fiscal 2021. We are targeting orders of ¥170 billion, primarily by actively engaging in the pharmaceutical sector, where substantial investment is anticipated in applications such as biopharmaceuticals and vaccine production, and in areas where corporate decarbonization and circular economy initiatives are taking shape, such as demonstrations of blue hydrogen and production of the biofuel SAF.

In functional materials manufacturing, besides working to secure new chemical catalyst projects, we will be developing materials for clean energy applications and moving into new fields, and in fine chemicals we will steadily expand applications for existing products, as in semiconductor and life science applications. In fine ceramics, although business in the active semiconductor market is likely to temporarily slow, we will be preparing for future growth by focusing on further increasing production of ceramics used in semiconductor production, as well as high thermal conductivity silicon nitride substrates. Acquisition of a new site in Sendai for this purpose is planned, calling for investing a total of ¥10 billion including land costs. In fine ceramics, production capacity will be further increased by the start of operations at JFC Materials Co. Ltd. on July 1, 2022, following acquisition of the business from Showa Denko Materials Co. Ltd.

As announced in the first quarter results, forecasts for fiscal 2022 were revised upward as follows: net sales of ¥620 billion, gross profit of ¥57 billion (gross profit ratio of 9.2%), operating profit of ¥28 billion, ordinary profit of ¥36 billion, and net profit attributable to owners of the parent of ¥24 billion. We expect significantly higher net sales compared to fiscal 2021, backed by steady progress in large-scale EPC projects and market conditions that remain robust for our functional materials manufacturing. Profit is expected to be up from fiscal 2021 as we maintain solid EPC project management.

Continuing to grow by resolving challenges and managing risk

With EPC market growth expected, the JGC Group may well be within range of achieving the financial targets of BSP 2025—net sales of ¥800 billion, operating profit of ¥60 billion, and net profit attributable to owners of the parent of ¥45 billion. We will therefore do our utmost in meeting challenges and management of risk to meet our order target and earnings forecast for this fiscal year as the first step toward this goal.

While meeting our order target for fiscal 2022, we recognize that expanding our project execution capacity is essential as we expect to provide EPC services to a growing market in fiscal 2023 and beyond. We plan to steadily respond and maintain market expansion through measures such as increasing personnel at certain sites (at overseas EPC operating company JGC Corporation and the Asian regional headquarters JGC Asia Pacific) and establishing a new center for operations in India that will be fully

“It will be essential from an early stage to foresee and identify these challenges and risks as well as implement solutions with a sense of certainty and speed.”

operational by the end of fiscal 2023. With more projects expected to appear in the future, we will be renewing our ultimate commitment to generating anticipated revenue by reliably managing the risk for each project, as we concentrate even more on selecting projects which we are optimistic about winning.

Meanwhile, the JGC Group remains keenly aware that maintaining stable earnings calls not only for the greater project execution capacity already mentioned but also responsive risk management when executing projects under current conditions. In fiscal 2021, amid global economic recovery, we saw a worldwide trend toward inflation intensify, especially after events in Ukraine from February 2022, and there is a sense that this trend has further accelerated. We recognize that unless we remain responsive to higher materials and equipment costs, these costs pose a serious risk to profitability whether projects are at the bidding stage or are underway. This risk was accounted for in contract negotiations for a large oil and gas separation plant in Saudi Arabia that was received at the beginning of fiscal 2022, and it was assessed for pending orders in all current domestic and overseas projects in the fourth quarter of fiscal 2021 and applied to the cost of sales in the fiscal 2022 earnings forecast. We will continue to monitor changes in market conditions regarding this risk, and besides responding appropriately in current projects, we will pursue risk-sharing with clients and vendors to minimize any risk of this kind that emerges, to maintain our desired gross profit margin.

Wrapping up

It will be essential from an early stage to foresee and identify these challenges and risk—impediments to higher, market-driven sales and profit, to ensure the JGC Group is within range of the BSP 2025 targets—and to implement solutions steadily and with a sense of speed. This applies not only to our main EPC business and functional materials manufacturing, but also to business supporting sustainability which we view as a future growth engine.

Although the global economy may now be headed toward recovery as the impact of the pandemic fades, there are some concerns about recession amid higher prices and subsequent quantitative easing or tightening. Conditions remain unpredictable. To keep the JGC Group on track toward sustained growth, as COO I am committed to meeting shareholder and investor expectations by implementing measures with a sense of speed while monitoring these global economic and market environment developments. Thank you for your continued support.

Message from the Chief Financial Officer

Assertive and Defensive Financial Strategies Responding to Market Expansion

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.

Summary of fiscal 2021 results

For fiscal 2021, the JGC Group reported net sales of ¥428.4 billion, gross profit of ¥45.3 billion, operating profit of ¥20.6 billion, and a net loss attributable to owners of the parent of ¥35.5 billion. The minimum dividend of ¥15 per share announced at the beginning of the fiscal year was approved at the General Meeting of Shareholders held in June.

The net loss attributable to owners of the parent was due to an extraordinary loss of ¥57.5 billion from reaching a settlement in the protracted matter of the Ichthys LNG project in Australia, which was the culmination of making a comprehensive assessment of the remaining risks of continued arbitration and economic rationality in consideration of future cash flow. Although a large final loss was recorded, resolving this protracted issue has eliminated future management uncertainty and created an environment for focusing on the goals of the long-term management vision and medium-term business plan. As of March 31, 2022, equity capital stood at ¥387.1 billion, with an equity ratio of 55.8%. As an engineering company mainly involved in EPC, we have ensured client trust and maintained a solid financial position for the business expansion ahead.

Toward the fiscal 2022 earnings forecast and greater capital efficiency

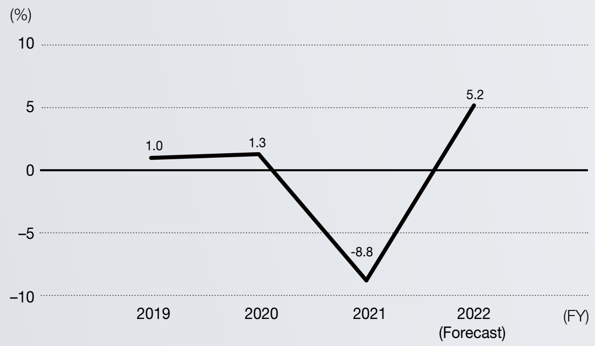
For fiscal 2022, we are targeting orders of ¥840 billion, about 2.5 times the fiscal 2021 level. This target was set in consideration of plant market growth, driven by factors such as recovery of energy demand and the higher global demand expected for the transitional energy sources of LNG and natural gas, with an eye on ensuring energy security. Moreover, we have revised our forecasts upward, as announced in first quarter results: net sales of ¥620 billion, gross profit of ¥57 billion, operating profit of ¥29 billion, and net profit attributable to owners of the parent of ¥24 billion. As for gross profit ratio, which is projected at 9.2%, the drop of 1.4% year on year is due to applying higher material and equipment cost risk to the cost of sales. Nevertheless, we do expect significantly higher sales and profit than in fiscal 2021, and the dividend per share was raised to ¥29 in line with the revised earnings forecast.

We anticipate a significant improvement in return on equity (ROE). After lower foreign tax credits increased the tax burden in fiscal 2019 and 2020 while profitability deteriorated in several overseas projects, a final loss in fiscal 2021 from the extraordinary loss in the abovementioned Ichthys LNG project led to a decline in ROE from 1.0% to 1.3% to -8.8% in these years. However, for fiscal 2022, ROE is expected to be 5.2%.

Unprofitable projects were eliminated in fiscal 2021, and as we look forward to stable profit from reliable project management, an increase in orders as the market expands would put us in a good position for improved ROE after fiscal 2022.

The medium-term business plan (BSP 2025) targets net sales of ¥800 billion, operating profit of ¥60 billion, net profit attributable to owners of the parent of ¥45 billion, and ROE at 10%, with 80% of net sales expected to be generated by EPC business. We believe that for an engineering company maintaining sound finances is essential for earning client trust from the standpoint of ensuring risk resilience. Accordingly, we firmly believe that further improvement of ROE in fiscal 2022 onward will depend on increasing net profit attributable to owners of the parent while maintaining equity capital commensurate with expanded orders and backlog.

Return on equity (ROE)



Assertive and defensive financial strategies

As CFO, I will continue to pursue both defensive and assertive financial strategies. For the former, I will work to maintain sound finances with an equity ratio of 50% or more, secure working capital for the EPC operations required for increased sales, and respond promptly through financial means to risks that may affect our profitability, such as risk associated with higher material and equipment costs, as mentioned. At the same time, assertive strategies we will proactively implement include allocating funds to strategic investments indispensable for the three key BSP 2025 strategies of transforming EPC operations, expanding high-performance functional materials manufacturing, and establishing future engines of growth. In particular, we will move rapidly, but without missing opportunities, in strategic investments for the pressing matter of expanding project execution capacity to meet increased orders.

On this point, strategic investment in fiscal 2021 remained somewhat limited at about ¥16 billion, with this as the first year of BSP 2025. However, this investment funded enterprises among the BSP 2025 strategies likely to contribute to future earnings, such as EPC DX system development, establishment of our Southeast Asia headquarters, SMR business investment, pharmaceutical plant EPC capacity expansion, and high thermal conductivity silicon nitride substrate facility investment. The Group will also be ensuring effective investment governance before these strategic investments are made, with a system in place calling for deliberation by the Group Investment and Loan Committee deliberating on risk and return for the type of investment, as well as deliberation by the Board of Directors on the amounts to be invested.

Higher shareholder return over the medium to long term

During the period of the medium-term business plan, we are seeking a payout ratio of about 30% of net profit attributable to owners of the parent, with a minimum annual dividend of ¥15 per share. Share buyback will be studied as appropriate, in consideration of earnings forecast and free cash flow conditions.

Looking ahead, we intend to meet shareholder expectations by steadily attaining our BSP 2025 targets while making consistent progress in increasing the dividend per share and improving shareholder value over the medium to long term. We appreciate your continued understanding and support.

CFO Message