



First Half Financial Results for Fiscal 2022

Business Overview

Enhancing planetary health

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Total Engineering First Half Results

Plant market recovery has set the scene for favorable progress

Value of Consolidated Orders :

Approx. **463** Billion Yen

Overseas

Domestic

Orders Target
for Fiscal 2022

670 Billion Yen

170 Billion Yen

First Half Results

Approx. **416** Billion Yen

Approx. **47** Billion Yen

Main Orders
Received

- Middle East GOSP
- Thailand Chemicals
- Indonesia Gas processing
- Southeast Asia Metal refining related
- North America LNG (FEED)
- Malaysia Medical mfg. plant
- Vietnam Solar power, etc.

- Pharmaceutical mfg. plants
- Hospitals
- Maintenance services , etc.

Total Engineering Market Environment Outlook

Overseas

- Clients are fully resuming their investments, encouraged by increased energy demand from a return to economic activity, and by general diversification of energy suppliers driven by the need for energy security. Steady progress in our plans is also expected in the second half.
- Steady progress is expected in several low-carbon/decarbonization projects, mainly involving FS and FEED.
- As we monitor global economic developments, we will be expecting steady of progress in capital investment plans in FY2023, as well as FY2022.
- We will focus on securing orders for projects likely to proceed.

Domestic

- In the second half, progress is expected in pharmaceutical manufacturing projects, as well as in decarbonization projects such as SAF and blue hydrogen production.
- In FY2023, we anticipate continued progress, particularly in pharmaceutical manufacturing, as well as in electronic materials related and decarbonization projects – circular economy (such as SAF), hydrogen, and others.

Total Engineering Second Half Orders Sought

Main Second-Half Orders Sought

Overseas

- North America LNG
- Southeast Asia LNG
- Oceania LNG (FEED)
- North America Gas chemicals
- Middle East Gas chemicals
- Asia, etc. Low and decarbonization-related (FS、Pre-FEED)
- Asia Solar Power
- Asia Solar power and power storage system
- Asia Biodegradable plastics production demonstration, etc.

Domestic

- Pharmaceutical mfg. plants
- Hospitals
- Blue hydrogen production demonstration
- SAF production demonstration
- Nuclear related
- Maintenance services , etc.

Second Half Policy

Multiple LNG and gas chemical projects, as well as steady progress in securing orders such as FS and pre-FEED for decarbonization projects

In addition to pharmaceutical plants and several hospitals, steady progress in securing orders for production of blue hydrogen and SAF, among other decarbonization projects

Progress in Major Projects: LNG Canada

**Major modules have arrived at the site and are well underway.
JV scope is over 70% completed.**



Functional Materials Manufacturing

First Half Results and Market Environment

		First Half Results	Fiscal 2022 Target (Revised)
		Approx.	
First Half Results	Net sales	23.4 Billion Yen	47 Billion Yen
	Segment profit	38 Billion Yen	6.5 Billion Yen

Market Environment/ Second Half Policy

Catalysts / Fine Chemicals

Overall, client demand has remained firm, and we will continue to monitor this. We will also focus on engaging clients in price negotiations to deal with increases in fuel and raw materials prices. In catalysts, overseas market expansion is planned, along with promotion of new development for clean energy and circular economy applications.

In fine chemicals, we are accelerating expansion of multiple applications.

Fine Ceramics

Client demand remains robust, especially for parts used in semiconductor manufacturing equipment. Demand is also strong for high thermal conductivity silicon nitride substrates for EV power semiconductors. We will enhance the personnel structure and promote overall quality improvement and capacity-building.

Initiatives toward Expanding Manufacturing Business for High-Performance Functional Materials

Facility investment to increase production of semiconductor ceramics

- In June this year, facility investment was made to increase in precision of ceramics for semiconductor manufacturing equipment and production of silicon nitride substrates for power semiconductors.
- In July, a new plant site was acquired in Tomiya, Miyagi. Total investment of approx. 10 billion yen is intended to increase production of ceramics for both applications mentioned above.



Location announcement ceremony for new site



Tomiya Factory, producing semiconductor manufacturing equipment parts and silicon nitride substrates

Start of operations at JFC Materials

- Ceramics business acquisition from Showa Denko Materials is now complete, and operations at the new company, JFC Materials Co. Ltd., began in July this year.
- This has doubled our production capacity for structural ceramics, such as those used in semiconductor manufacturing equipment. We intend to expand product lines for semiconductor manufacturing equipment and power semiconductor applications.

Reinforcing the Project Execution Framework

Established a New Operations Centre in India

Background and purpose of establishment

- Development of a project execution framework anticipating overseas plant market expansion
- A facet of strengthening competitiveness and profitability in large overseas projects, in line with a key strategy of the medium-term business plan, transforming EPC operations

Background of Selection of India

- Politically stable and secure, relatively low level of labor costs
- Home to many engineering companies and engineering universities serving the same industries; many talented engineers with high English proficiency



Progress in Sustainability-Oriented Sector (1)

Domestic

Steady progress is being made domestically in specific EPC projects, such as plants for SAF production and blue hydrogen production, also green ammonia demonstration. We will be targeting orders totaling approx. 30–40 billion yen between the second half of FY2022 and FY2023.

Overseas

Overseas, there has been a steady increase and progress in sustainability projects such as SAF production, mainly for FS and pre-FEED for hydrogen/fuel ammonia projects.



Established “Sustainable Solutions”

Established on Sept. 1 at JGC Corporation as a new organization focused on low/decarbonization sector in overseas EPC business

Target areas

Hydrogen/fuel ammonia, SAF, green chemicals, and SMRs, etc.

Purpose

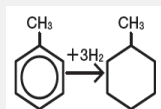
- To consolidate functions from business development to securing orders and executing FS, FEED, and EPC
- To steadily secure and execute sustainability projects that have moved into the implementation phase

Progress in Sustainability-Oriented Sector (2)

2022 2023 2024 2025 2030 2040

Hydrogen

MCH*



Business
Milestones

FS

1st Pre-FEED
/ FEED

1st
EPC

Operation &
Further EPC Projects

Ammonia



Business
Milestones

FS

Pre-FEED

1st
FEED

1st
EPC

Operation &
Further EPC Projects

A
Project

FS

Pre-FEED

1st FEED

1st EPC

● ● ● ●

B
Project

FS

CCS Pilot

FEED

● ● ● ●

C
Project

Pre-FEED

● ● ● ●

SMR Small Module Reactor



Business
Milestones

Finance & Application

1st EPC

Operation &
Further EPC Projects

* MCH: Methyl Cyclohexane

Note on Future Outlook

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