

# Financial Results for the 3<sup>rd</sup> Quarter of Fiscal Year ending March 31, 2023 (FY2022 3Q)

February 2, 2023  
Chiyoda Corporation

## Presenters



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*Enriching society through engineering value*

**CHIYODA CORPORATION**

SPERA Hydrogen  
Shaping the Future of Energy

**I** Financial Results

**II** Topics

**III** Major Ongoing Projects

Our SDGs Materiality

- 7 AFFORDABLE AND CLEAN ENERGY
- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
- 13 CLIMATE ACTION

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This presentation outlines Chiyoda Corporation's (Chiyoda) financial results for the third quarter of the fiscal year ending March 31, 2023, released on February 2, 2023.

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# I Financial Results

# 1 Highlights

## 1. Full Year Forecast Revised

Increased profit from steadily progressing ongoing projects, accumulated profits in new business fields and risk sharing with clients

## 2. Countermeasures Against Global Inflation

Stable revenue and strict risk control, minimizing impacts on existing and new projects in cooperation with clients and partners

## 3. Domestic Business Reinforcement

An integrated engineering company 'CHIYODA X-ONE Engineering Corporation' will be established in April 2023, merging three group companies to offer a one-stop service from EPC\* to operation and maintenance engineering.

\* Engineering, procurement and construction



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## 1. Full Year Forecast Revised

The full year financial forecast was revised upward due to:

- Steady progress on ongoing projects
- Accumulated profits in new business fields such as life science
- Improved project profitability from risk sharing with clients

## 2. Countermeasures Against Global Inflation

Chiyoda stabilizes income and reinforces risk control by minimizing the influence of inflation on ongoing and prospective projects through cooperation with clients and partners.

## 3. Domestic Business Reinforcement

'CHIYODA X-ONE Engineering Corporation' will be established in April 2023 by merging three group companies, offering a one-stop service from EPC to operation and maintenance engineering.

## 2 Income Statement

Billions of JPY

	FY2021 3Q	FY2022 3Q	Difference	Full Year Forecast*2	Progress
Revenue	217.1	308.5	91.4	450.0	69%
Gross Profit	16.9	23.5	6.7	35.0	67%
Gross Profit Margin	7.8%	7.6%	(0.1) pt	7.8%	-
SG&A Expenses	(8.6)	(9.9)	(1.3)	(15.0)	66%
Operating Income	8.3	13.6	5.3	20.0	68%
Ordinary Income	8.8	15.6	6.9	20.0	78%
Profit*1	(13.7) <small>Note</small>	12.5	26.2	15.0	84%
Exchange Rate JPY/ USD	115	133		133	

Note) FY2021 1Q: Extraordinary losses of JPY20.4 billion was recorded related to the completed Ichthys LNG project.

\*1 Profit attributable to owners of parent

\*2 Revised on January 31, 2023 (Profit was previously forecasted JPY 11.5 billion.)



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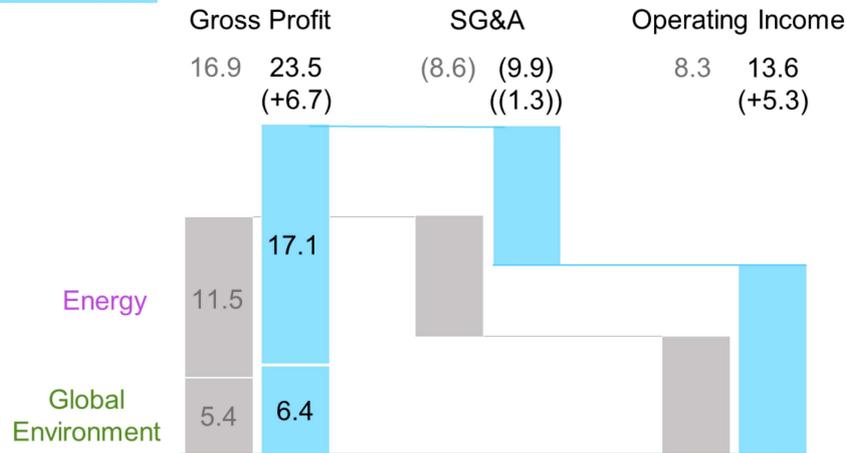
- Revenue and Profit increased YoY.
- Revenue was 308.5 billion JPY, an increase of 91.4 billion JPY YoY.
- Gross Profit was 23.5 billion JPY, an increase of 6.7 billion JPY YoY. Gross Profit Margin was 7.6%.
- Operating Income was 13.6 billion JPY and ordinary income was 15.6 billion JPY, significant YoY increases, although SG&A expenses increased YoY.
- Net Profit was 12.5 billion JPY, achieving the full year forecast of 11.5 billion JPY at the beginning of the term. The figures in the table show the full year forecast revised on January 31, 2023.
- Progress ratios up to Operating Income are less than 70%. However in 4Q, income is expected to accumulate due to construction progress on large overseas projects and steady progress on domestic projects.
- Ordinary Income and Profit achieved 78% and 84% progress respectively.

### 3 Profit Analysis

Billions of JPY

FY2021 3Q

FY2022 3Q



( ) : Compared to FY2021 3Q results



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- The **blue** bar shows the result of FY2022 3Q, compared to the same period last year shown in **gray**.
- Gross Profit increased by 6.7 billion JPY YoY. Operating Income increased by 5.3 billion JPY YoY, offsetting the increase of SG&A expenses.
- Energy and Global Environment Gross Profit are 17.1 billion JPY and 6.4 billion JPY respectively, both increasing YoY.

## 4 Balance Sheet

Billions of JPY

	FY2021 4Q	FY2022 3Q	Difference		FY2021 4Q	FY2022 3Q	Difference
Current Assets	372.7	352.4	(20.3)	Current Liabilities	350.7	337.2	(13.5)
Cash and Deposits	68.8	61.1	(7.7)	Notes Payable, Accounts Payable for Construction Contracts	96.1	121.4	25.3
Operating Assets**	59.0	66.9	7.9	Contract Liabilities	143.4	139.1	(4.4)
Accounts Receivable - Other	83.2	37.9	(45.3)	Provision for Loss on Construction Contracts	34.8	34.1	(0.7)
Jointly Controlled Assets of JV *2	141.4	140.6	(0.9)	Accounts Payable - Other	44.0	15.8	(28.2)
Other	21.7	47.6	25.8	Non-Current Liabilities	29.0	24.6	(4.4)
Non-Current Assets	22.7	24.3	1.6	Net Assets	15.8	14.9	(0.8)
Total Assets	395.4	376.7	(18.7)	Liabilities and Net Assets	395.4	376.7	(18.7)
				Shareholders' Equity	15.7	14.8	(0.8)
				Shareholders' Equity Ratio	4.0%	3.9%	(0.0)pt

\*1 Operating Assets: Notes receivable, accounts receivable from completed construction contracts, and contract assets + Costs on construction contracts in progress  
 \*2 Jointly controlled assets of JV: Cash and deposits of joint venture proportional to Chiyoda's interest

- Total assets was 376.7 billion JPY, a decrease of 18.7 billion JPY from the end of the last fiscal year.
  - Operating Assets in the assets section and Notes Payable, Accounts Payable for Construction Contracts in the liabilities section increased as ongoing projects progressed.
  - Accounts Receivable - Other in the assets section and Accounts Payable - Other in the liabilities section decreased, due to an 'out of court' settlement with a subcontractor on Ichthys LNG. The decrease in Accounts Receivable - Other is relatively large as the received amount is recorded as short-term fund operation in other current assets.
- Shareholders equity was 14.8 billion JPY, a decrease YoY as the valuation account fluctuated with currency exchange rates. Current shareholders equity is more than 20.0 billion JPY with currency exchange fluctuations and accumulated profits.

## 5 New Orders / Backlog

Billions of JPY

	New Orders FY2022 3Q	Backlog FY2022 3Q
Energy	85.6	916.2
Global Environment	35.0	363.3
<b>Total</b>	<b>120.5</b>	<b>1,279.5</b>

Major Backlog Projects	More than JPY100 billion	More than JPY5 billion
Energy	<ul style="list-style-type: none"> <li>NFE LNG, Qatar</li> <li>Golden Pass LNG, USA</li> </ul>	<ul style="list-style-type: none"> <li>Tangguh LNG Expansion, Indonesia</li> </ul>
Global Environment	<ul style="list-style-type: none"> <li>Copper Smelting Plant, Indonesia</li> </ul>	<ul style="list-style-type: none"> <li>Biopharmaceutical Manufacturing Plant, Japan</li> <li>Energy Storage System Facility, Japan</li> </ul>

- New Orders was 120.5 billion JPY and the Backlog was 1,279.5 billion JPY.
- Major projects include NFE LNG in Qatar, Golden Pass LNG in the USA and the Tangguh LNG Expansion project in Indonesia in the energy sector and a copper smelting project in Indonesia, a biopharmaceuticals manufacturing plant and an energy storage system facility in the global environment sector.

## Att. Revenue and Backlog Breakdown

Billions of JPY

### FY2022 3Q Revenue

【Business】		
ENERGY	207.2	67%
■ LNG Plant, Gas Related Work	183.9	60%
■ Refinery, Petrochemical	23.3	8%
ENVIRONMENT	101.3	33%
■ Pharmaceutical, Biochemistry, Chemical	23.0	7%
■ Environment, New Energy, Infrastructure, Others	78.3	25%
TOTAL	308.5	100%

【Region】		
OVERSEAS	250.3	81%
■ Middle East & Africa	110.7	36%
■ Americas	45.2	15%
■ Asia & Oceania	94.4	31%
■ Others	0.0	0%
■ DOMESTIC	58.2	19%
TOTAL	308.5	100%

### FY2022 3Q Backlog

【Business】		
ENERGY	916.2	72%
■ LNG Plant, Gas Related Work	884.7	69%
■ Refinery, Petrochemical	31.5	2%
ENVIRONMENT	363.3	28%
■ Pharmaceutical, Biochemistry, Chemical	42.1	2%
■ Environment, New Energy, Infrastructure, Others	321.3	25%
TOTAL	1,279.5	100%

【Region】		
OVERSEAS	1,180.0	92%
■ Middle East & Africa	722.3	57%
■ Americas	126.4	10%
■ Asia & Oceania	331.2	26%
■ Others	0.0	0%
■ DOMESTIC	99.5	8%
TOTAL	1,279.5	100%



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This is a summary of Revenue and Backlog for reference.

## II Topics

# 1 Domestic Business Reinforcement

## CHIYODA X-ONE Engineering Corporation

- An integrated engineering company 'CHIYODA X-ONE Engineering Corporation' will be established in April 2023 from the merger of three group companies.
- The Group reinforces our domestic business, offering a one-stop service from EPC to operation and maintenance engineering.

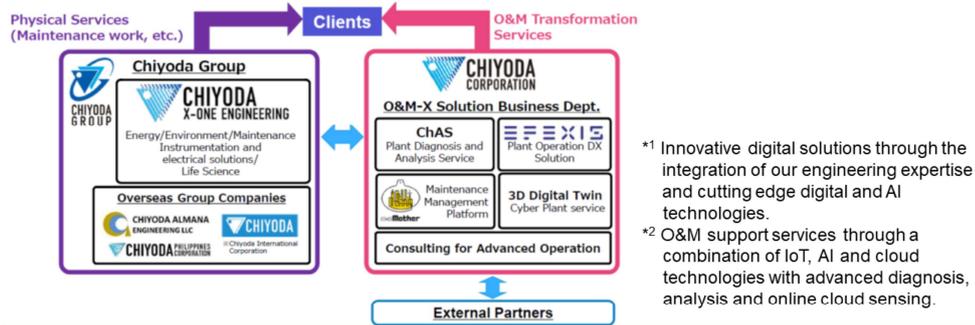


- 'CHIYODA X-ONE Engineering Corporation' will be established in April 2023 by merging three domestic group companies.
- The name includes 'X-ONE' in reference to the combination of Transformation (X) and our project execution driver, 'One Team' (ONE), representing 'proceeding as 'One Team' and transformation through Chiyoda's technology'.
- CHIYODA X-ONE Engineering Corporation will be an integrated engineering contractor, combining the three group businesses of 'energy, environment and maintenance', 'electrical and instrumentation solutions' and 'life science'. The Group reinforces our domestic business and offers a one-stop service from EPC to operation and maintenance engineering.

## 2 O&M Transformation Solution Business

### Transformation (X) of Client Operation and Maintenance (O&M)

- A new department has been established, combining O&M support services including advanced diagnosis/analysis and digital solutions such as EFEXIST<sup>TM</sup>\*1 and O&M Mother<sup>TM</sup>\*2.
- Collaborating with CHIYODA X-ONE Engineering Corporation and other Group companies, Chiyoda will accelerate the provision of competitive solutions, supporting the transformation of client O&M activities from both a cyber and physical perspective.



- Chiyoda launched a new O&M Transformation Solution Business Department, combining the following two solutions:
  - i. Plant operation and maintenance, such as advanced diagnosis technology, analysis technology and maintenance support
  - ii. Digital operation optimization
- Collaborating with CHIYODA X-ONE Engineering Corporation and other Group companies, Chiyoda will accelerate the provision of competitive solutions, supporting the transformation of client O&M activities from both a cyber and physical perspective.

### 3 Digital Transformation (DX)

#### Company-wide DX Acceleration

##### ■ DX Business Operator

- Certified as a DX business operator by the Ministry of Economy, Trade and Industry in December, 2022
- The Group works as 'One Team' to accelerate DX

##### ■ Digital transformation business

- EFEXIS™ FCC AI Optimizer™ introduced to Taiyo Oil Company, Ltd. achieved planned production and improving yields by optimizing catalyst reaction of RFCC\* unit at Shikoku operations
- Supporting smart factory initiatives and contributing to technology transfer from senior operators



AI system in use



RFCC unit

\* Residue Fluid Catalytic Cracking



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- Chiyoda was certified as a DX business operator by the Ministry of Economy, Trade and Industry on December 1, 2022. We will continue accelerating company-wide DX.
- In the 'DX business', digital solutions to optimize plant operation are deployed under the EFEXIS™ brand. For example, FCC AI Optimizer™, has been introduced into Taiyo Oil Shikoku operations, optimizing their RFCC unit catalyst reaction and contributing to production management in line with production schedules, supporting smart factory initiatives and contributing to technology transfer from senior to junior operators.

## 4 Life Science Business

### Vaccine Constituent Production Facility Completed

- Production facility of a Vaccine Drug Substance for SHIONOGI & CO., Ltd. was handed over in January 2023.



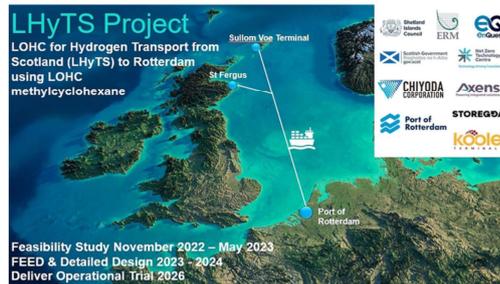
Vaccine Constituent Production Facility

- A vaccine constituent production facility was handed over to SHIONOGI & CO. Ltd. in January 2023.
- The facility commercially produces a recombinant protein-based vaccine.
- Chiyoda is also executing the EPC phase of a biopharmaceutical manufacturing plant, aiming to enter the bio-industry and next generation pharmaceutical products field such as regenerative medicine.

## 5 Hydrogen Business ~SPERA Hydrogen™~

### Participating in a Scotland to Rotterdam LOHC-MCH Hydrogen Highway Project

- Feasibility study is underway for a pilot project to export hydrogen on a large scale as LOHC\*<sup>1</sup>-MCH\*<sup>2</sup>, the highest-rated hydrogen carrier.
- Diverse international consortium of 10 companies and governments, including the Scottish Government, the Rotterdam Port Authority and the Net Zero Technology Center as project coordinator.
- Scotland is aiming for a production output of 25 GW of low-carbon hydrogen by 2045 and the Port of Rotterdam aims to become the hub for importing hydrogen into Europe.



\*<sup>1</sup> Liquid Organic Hydrogen Carrier

\*<sup>2</sup> Methylcyclohexane, a liquid at ambient temperature and pressure produced from toluene and hydrogen, widely used as a pharmaceutical agent, a solvent for correction liquid etc.



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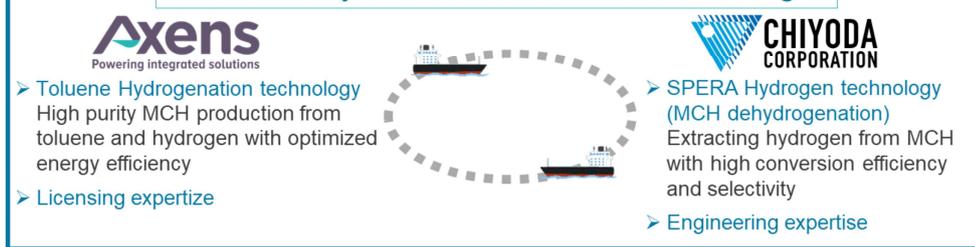
- Chiyoda is participating in a feasibility study for a pilot project as a forerunner to developing an industrial-scale hydrogen supply chain from Scotland to Rotterdam in the Netherlands, whose goal is to become Europe's premier hydrogen hub.
- In Europe, Chiyoda is conducting studies with the Port of Rotterdam Authority and Mitsubishi Corporation to construct an international hydrogen supply chain to import hydrogen on a commercial scale.

## 6 Hydrogen Business ~SPERA Hydrogen™~

### Strategical Commercial Cooperation with Axens in France

- An LOHC-MCH hydrogen supply chain commercial cooperation agreement
- Combination of SPERA Hydrogen technology (MCH dehydrogenation) and Axens' Toluene Hydrogenation technology, enabling fast track project implementation and reducing the customer burden of coordinating two licensors
- Developing hydrogen markets in Europe, Japan, North America, Asia, Oceania etc. to accelerate the expansion of our hydrogen supply chain business.

#### Axens – Chiyoda License Commercial Package



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- Axens' Toluene Hydrogenation technology combined with Chiyoda's 'in-house' SPERA Hydrogen technology (MCH dehydrogenation) enables fast track project implementation and accelerates hydrogen supply chain construction.

## 7 Low Carbon Emissions and Carbon Recycling

### Decarbonization Technology - Joint Study MOU\*1 in Thailand

- A Feasibility Study with BCPL Power Limited and Mitsubishi Corporation applying CCUS\*2 technology for the Flue Gas of a BLCP coal-fired Power Plant
- Chiyoda provides technical support by utilizing its expertise of in-house CO<sub>2</sub> Reforming Technology\*3
- Contributing to implementing CCUS in Thailand, an important country in the AZEC(Asia Zero Emissions Community) advocated by the Japanese government and the horizontal development of thermal power plants



MOU signing ceremony at Japan-Thailand Energy Policy Dialogue on January 12, 2023

\*1 Memorandum of Understanding

\*2 Carbon dioxide Capture, Utilization and Storage

\*3 Technology utilizing CO<sub>2</sub> to efficiently produce synthetic gases from natural gas and reduces CO<sub>2</sub> emissions

- Chiyoda signed an MOU with BLPC Power Limited and Mitsubishi Corporation to jointly study the development and application of decarbonization technology.
- Chiyoda is providing technical support by utilizing its expertise of an 'in-house' and environmental-friendly CO<sub>2</sub> Reforming Technology in a feasibility study, applying CCUS technology for the Flue Gas of a BLCP coal-fired Power Plant.
- The joint study aims to horizontally develop other thermal power plants in Thailand, an important country in the Asia Zero Emissions Community advocated by the Japanese government.

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## **III** Major Ongoing Projects

# 1 NFE LNG, Qatar (Energy)

## Project Features

- 8 MMTPA\* x 4 trains mega size project
- More than 25% CO<sub>2</sub> emissions reduction compared to existing LNG plants

Client	QatarEnergy
JV Partner	Technip Energies
Scheduled Completion	2025 – 2027
Status	Engineering and procurement ongoing and construction commenced

NFE Plant (3D model screenshot)



Courtesy of QatarEnergy

\* Million Metric Tonne per Annum

## 2 Copper Smelting Plant, Indonesia (Environment)

### Project Features

- Copper demand increases in a decarbonized society
- The world's largest single line manufacturing capacity
- Complies with the environmental performance standards of the IFC\*

Client	P.T. Freeport Indonesia
Scheduled Completion	2024
Status	Engineering, procurement and construction ongoing



\* International Finance Corporation

### 3 Other Major Ongoing Projects

Project	Tangguh LNG Expansion, Indonesia	Golden Pass LNG, USA
Client	BP Berau Ltd.	Golden Pass LNG (QatarEnergy and ExxonMobil JV)
JV Partner	Saipem, Tripatra	Zachry, McDermott
Scheduled Completion	2023 Ready for Start-up	2024 – 2025 (3 trains)
Status	Construction is in the final stage and approaching completion	Construction ongoing



## *Energy and Environment in Harmony*



Chiyoda Corporation Corporate Services Department IR, PR & Sustainability Advanced Section, <https://www.chiyodacorp.com/en/>

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