

# Financial Results for the 2<sup>nd</sup> Quarter of Fiscal Year ending March 31, 2023 (FY2022 2Q)

November 8, 2022  
Chiyoda Corporation




## Presenters



Mr. Masakazu  
Sakakida Chairman of  
the Board, President &  
CEO



Mr. Koji Tarutani  
Executive Vice President  
& CFO



**I** Financial Results

**II** Growth Strategy

**III** Major Ongoing Projects

1

This presentation outlines Chiyoda Corporation’s (Chiyoda) financial results for the second quarter of the fiscal year ending March 31, 2023, released on November 8, 2022.



# I Financial Results

2

First section is the Financial Results.

# 1 Highlights

1.

## Financial Results

- Revenue and profit increased YoY.
- Expecting to achieve full year forecast, accelerating large scale project progress in the second half of the fiscal year.

2.

## Countermeasures Against Global Inflation

Minimizing existing and new project impacts through cooperation and discussion with clients and partners

3.

## Growth Strategy

Global business developing with international hydrogen supply chain in Singapore

## 1. Financial Results

- Revenue and profit increased YoY in the second quarter.
- Accelerating project progress in the second half of the fiscal year and we expect to achieve the full year forecast.

## 2. Countermeasures Against Global Inflation

Minimizing project impacts through cooperation and discussion with clients and partners.

## 3. Growth Strategy

Global business development with an international hydrogen supply chain in Singapore.

## 2 Income Statement

Billions of JPY

	FY2021 2Q	FY2022 2Q	Difference	Full Year Forecast	Progress
Revenue	147.4	184.3	36.9	500.0	37%
Gross Profit	11.9	12.1	0.2	35.0	34%
Gross Profit Margin	8.1%	6.6%	(1.5)pt	7.0%	-
SG&A Expenses	(5.6)	(5.9)	(0.3)	(15.0)	-
Operating Income	6.3	6.1	(0.2)	20.0	31%
Ordinary Income	6.0	6.6	0.6	18.0	37%
Profit*	(15.3) <small>Note 1</small>	5.3	20.7	11.5	46%
Exchange Rate JPY/ USD	112	145		138 <small>Note 2</small>	

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

Note 2) Revised from JPY120 at the beginning of the fiscal year

\* Profit attributable to owners of the parent

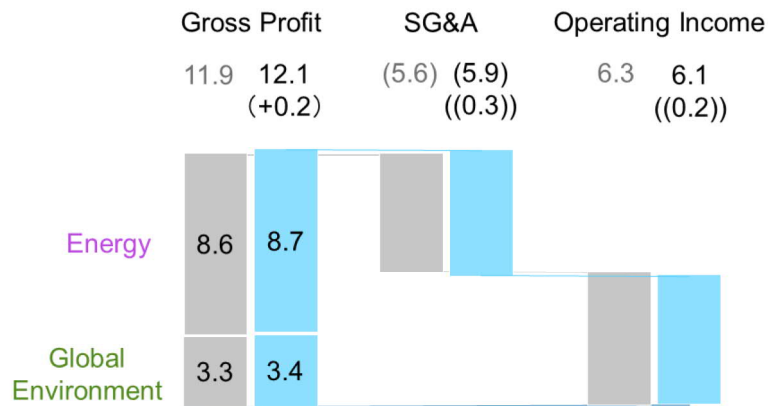


4

- Revenue and profit increased YoY.
- Revenue was 184.3 billion JPY, an increased of 36.9 billion JPY YoY.
- Gross profit was 12.1 billion JPY, an increased of 0.2 billion JPY YoY. Gross profit margin was 6.6%.
- SG&A expenses were 5.9 billion JPY, an increased of 0.3 billion JPY YoY.
- Operating income was 6.1 billion JPY, a decrease of 0.2 billion JPY YoY. Ordinary income was 6.6 billion JPY, an increased of 0.6 billion JPY YoY.
- Net profit was 5.3 billion JPY, increased from the same period last year.
- In the second half of the fiscal year, large scale project progress accelerates, accumulating revenue and profit to achieve the full year forecast.

### 3 Profit Analysis

Billions of JPY



( ) : Compared to FY2021 2Q results



5

- The blue bar shows the result of FY2022 2Q, and the gray the previous year 2Q.
- Gross profit, SG&A expenses and operating income are almost the same YoY.
- Gross profit increase by 0.2 billion JPY YoY. Gross profit was 8.7 billion yen and 3.4 billion JPY in the energy and global environment business fields, an increase of 0.1 billion JPY respectively.

## 4 Balance Sheet

Billions of JPY							
	FY2021 4Q	FY2022 2Q	Difference		FY2021 4Q	FY2022 2Q	Difference
Current Assets	372.7	387.9	15.2	Current Liabilities	350.7	366.1	15.4
Cash and Deposits	68.8	67.4	(1.4)	Notes Payable, Accounts Payable for Construction Contracts	96.1	112.6	16.5
Operating Assets**	59.0	61.0	2.0	Contract Liabilities	143.4	176.9	33.4
Accounts Receivable - Other	83.2	33.0	(50.3)	Provision for Loss on Construction Contracts	34.8	35.1	0.3
Jointly Controlled Assets of JV **	141.4	181.6	40.2	Accounts Payable - Other	44.0	16.5	(27.5)
Other	21.7	46.5	24.8	Non-Current Liabilities	29.0	27.5	(1.5)
Non-Current Assets	22.7	24.0	1.2	Net Assets	15.8	18.2	2.5
Total Assets	395.4	411.8	16.4	Liabilities and Net Assets	395.4	411.8	16.4
				Shareholders' Equity	15.7	18.1	2.4
				Shareholders' Equity Ratio	4.0%	4.4%	+0.4pt

\*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 increased by 16.4 billion JPY from the end of last fiscal year.
  - Jointly controlled assets of JV in total assets and notes payable, accounts payable for construction contracts and contract liabilities in liabilities increased as ongoing project progressed.
  - Accounts receivable - other in total assets and accounts payable - other in liabilities decreased, due to an out of court settlement with a subcontractor on Ichthys LNG in Australia (construction complete in April 2022). The decreased amount of account receivable - other is relatively large as the received amount is recorded as short-term fund operation in other current assets.
- Shareholders equity was 18.1 billion JPY, an increased of 2.4 billion yen.

## 5 New Orders / Backlog

Billions of JPY

	New Orders FY2022 2Q	Backlog FY2022 2Q
Energy	30.5	976.2
Global Environment	15.6	383.6
<b>Total</b>	<b>46.1</b>	<b>1,359.8</b>

Major Backlog Projects	More than JPY100 billion	More than JPY10 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>Tanggung 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 received was 46.1 billion JPY and the order backlog was 1,359.8 billion JPY.
- Major projects in the order backlog 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 and a plant for manufacturing biopharmaceuticals substance manufacturing plant and energy storage system facility in the global environment sector.



## Att. Revenue and Backlog Breakdown

Billions of JPY

### FY2022 2Q Revenue

【Business】

ENERGY	129.4	70%
■ LNG Plant, Gas Related Work	112.5	61%
■ Refinery, Petrochemical	16.9	9%
ENVIRONMENT	54.9	30%
■ Pharmaceutical, Biochemistry, Chemical	14.2	8%
■ Environment, New Energy, Infrastructure, Others	40.7	22%
TOTAL	184.3	100%

【Region】

OVERSEAS	148.0	80%
■ Middle East & Africa	63.6	35%
■ Americas	33.1	18%
■ Asia & Oceania	51.4	28%
■ Others	0.0	0%
■ DOMESTIC	36.3	20%
TOTAL	184.3	100%

### FY2022 2Q Backlog

【Business】

ENERGY	976.2	72%
■ LNG Plant, Gas Related Work	952.0	70%
■ Refinery, Petrochemical	24.2	2%
ENVIRONMENT	383.6	28%
■ Pharmaceutical, Biochemistry, Chemical	42.4	3%
■ Environment, New Energy, Infrastructure, Others	341.1	25%
TOTAL	1,359.8	100%

【Region】

OVERSEAS	1,268.0	93%
■ Middle East & Africa	816.7	60%
■ Americas	116.1	9%
■ Asia & Oceania	335.1	25%
■ Others	0.0	0%
■ DOMESTIC	91.8	7%
TOTAL	1,359.8	100%



8

This is a summary of Revenue and Backlog Breakdown for reference.

## II Growth Strategy

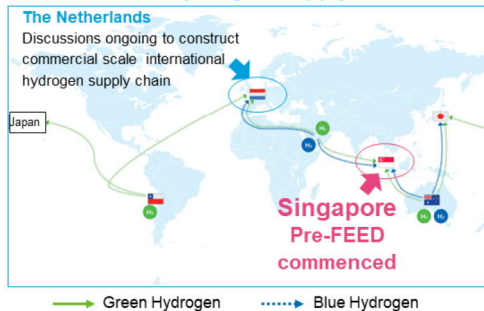
Next section is the Growth Strategy.

# 1 Hydrogen Business ~SPERA Hydrogen™~

## Hydrogen Supply Chain Business in Singapore

- Commenced Pre-Front End Engineering Design (Pre-FEED) for a clean hydrogen supply chain in Singapore with Sembcorp Industries\*1 and Mitsubishi Corporation. Commercial operation commencing in 2026.
- Aiming for the largest clean hydrogen supply business in Asia with a capacity of approximately 60 kilotonnes per year\*2

### SPERA Hydrogen Connecting Global Hydrogen Supply Chains



Ambassador to Singapore Mr. Hiroshi Ishikawa (third from left)  
Singapore Manpower Minister Tan See Leng (fourth from left)

\*1 A leading integrated utilities and government-affiliated conglomerate in Singapore

\*2 Equivalent to generating approximately one million megawatt-hours of renewable energy, doubling the current renewable energy output in Singapore



- Chiyoda commenced Pre-Front End Engineering Design for a clean hydrogen supply chain in Singapore with Sembcorp Industries, a leading integrated utilities and government-affiliated conglomerate in Singapore, and Mitsubishi Corporation.
- Commercial operation will commence in 2026.
- The production capacity is approximately 60 kilotonnes per year, doubling the current renewable energy output in Singapore.
- We aim to establish the largest clean hydrogen supply business in Asia.
- Detailed discussions are ongoing to construct a commercial scale international hydrogen supply chain in The

Netherlands as a gateway to import hydrogen into Europe using our competitive 'in-house' SPERA Hydrogen™ technology.

# 1 Hydrogen Business ~SPERA Hydrogen™~

## Economy, Trade and Industry Minister Nishimura Visits the Dehydrogenation Plant

- During his visit to the TOA OIL CO., LTD. Keihin Refinery dehydrogenation plant in October 2022, Minister Yasutoshi Nishimura received a lecture on the global hydrogen supply chain demonstration, successfully completed by AHEAD\*1 in 2020, and hydrogen storage and transportation using MCH\*2.



Minister Nishimura (third from left)

### AHEAD Global Hydrogen Supply Chain Demonstration

OUTLINE	
Capacity	Max. 210 tonnes/year (Filling approx. 40,000 FCV)
Period	2020
Hydrogen Supply	Brunei Darussalam
Hydrogen Demand	Gas fired power plant turbine fuel in Kawasaki
Transportation	ISO tank container (Container vessel / trailer)
Scheme	AHEAD conducted demonstration project with a NEDO subsidy

\*1 Advanced Hydrogen Energy chain Association for technology Development  
AHEAD is composed of Chiyoda, Mitsubishi Corporation, Mitsui & Co., and NYK Line

\*2 Methylcyclohexane



- Economy, Trade and Industry Minister Nishimura visited the dehydrogenation plant in Kawasaki in October 2022.
- Chiyoda explained our global hydrogen supply chain demonstration, successfully completed by the Advanced Hydrogen Energy chain Association for technology Development in 2020 and subsidized by the New Energy and Industrial Technology Development Organization, storing and transporting hydrogen at ambient temperature and pressure using methylcyclohexane (MCH).
- Mr. Nishimura showed a keen interest in hydrogen, asking many insightful questions about SPERA Hydrogen™ and the demonstration. Immediately following the visit, Mr. Nishimura tweeted his high expectations for MCH technology in his SNS account 'NISHIMURA Yasutoshi'.

- Chiyoda is accelerating early construction of a global hydrogen supply chain using its competitive 'in-house' SPERA Hydrogen™ technology.

## 2 Low Carbon and Carbon Recycling

### Joint Feasibility Study (FS) on Large Scale CCS\*<sup>1</sup> with PT Pertamina in Indonesia

- Business alliance based on the agreement with Pertamina regarding cooperation in the decarbonization field in Indonesia.
- Conducting a joint FS for the construction and operation of facilities to large-scale capture, transport and store CO<sub>2</sub> produced as a by-product from a chemical manufacturing plant in Indonesia
- Supported by METI\*<sup>2</sup> in Japan as a bilateral cooperation agreement strengthening the relationship between Japan and Indonesia



MOU signing ceremony at the  
2<sup>nd</sup> Asia Growth Partnership  
Ministerial Meeting in  
September 2022

\*<sup>1</sup> Carbon dioxide Capture and Storage  
\*<sup>2</sup> Ministry of Economy, Trade and Industry



12

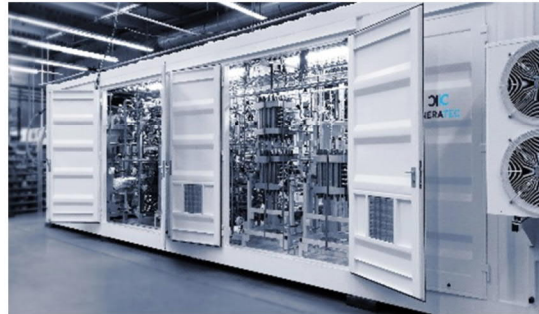
- In January 2022, Business alliance made between Chiyoda and the Indonesian national energy company PT Pertamina (Persero) , to collaborate on decarbonization in support of the net-zero emissions drive.
- In September, Chiyoda and Pertamina commenced a joint feasibility study for the deployment of large scale carbon dioxide capture and storage technology in Indonesia.
- The study include the construction and operation of facilities to capture, transport and store 1 million tons per year of CO<sub>2</sub> over 20 years produced as a by-product from a newly constructed dimethyl ether production plant in Indonesia.
- Supported by the Ministry of Economy, Trade and Industry Japan as the bilateral cooperation agreement, strengthening the relationship between Japan and Indonesia.



## 2 Low Carbon and Carbon Recycling

### e-fuel\*<sup>1</sup> Business

- Commenced strategical collaboration with German Clean Tech company INERATEC GmbH (INERATEC) on an e-fuel project to accelerate decarbonization
- Realizing e-fuel manufacturing projects, including SAF\*<sup>2</sup> in Japan and the Asia-Pacific, combining INERATEC's leading PtX\*<sup>3</sup> technology with Chiyoda's engineering expertise



INERATEC's industrial-scale container size plant module

\*<sup>1</sup> Manufactured using captured carbon dioxide and hydrogen obtained from sustainable electricity

\*<sup>2</sup> Sustainable Aviation Fuel

\*<sup>3</sup> Power-to-X is a collective term for electricity conversion, energy storage, and reconversion pathways



- Chiyoda commenced strategical collaboration with German Clean Tech company INERATEC GmbH (INERATEC) on an e-fuel project to accelerate decarbonization in September 2022.
- We aim to realize joint e-fuel manufacturing projects, including Sustainable Aviation Fuel in Japan and the Asia-Pacific, combining INERATEC's innovative and space-saving Power-to-X technology with Chiyoda's engineering expertise and project execution expertise.



### 3 Energy Management Business

#### JBIC\*1 Managing Director Maeda Visits Energy Storage System Facility

- Mr. Tadashi Maeda visited the world's largest Energy Storage System Facility site for North Hokkaido Wind Energy Transmission Corporation in August 2022.
- Chiyoda is currently carrying out EPC and study work and will provide a 20 year maintenance work for the plant, further contributing to regional revitalization while developing local utility businesses through combined renewable energy and energy storage projects.



Mr. Maeda (fourth from left)



Computer Graphic by Chiyoda Corporation

\*1 Japan Bank for International Cooperation  
\*2 Engineering, procurement and construction



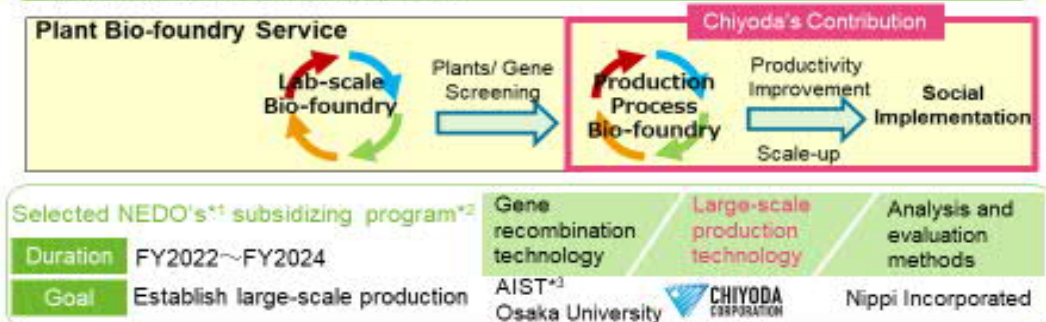
14

- Japan Bank for International Cooperation Managing Director Mr. Tadashi Maeda visited the world's largest Energy Storage System Facility construction site in August 2022.
- Chiyoda is executing the facility's engineering, construction, study work and 20 year maintenance, contributing to regional revitalization while developing regional utility businesses through combined wind power renewable energy and energy storage projects.
- Mr. Maeda was appointed Special Advisor to the Cabinet on September 1, 2022, and is responsible for overseas business investment support. Chiyoda regards it as an honor to assist government measures to support Japanese companies' overseas deployment of renewable energy and energy storage system.

## 4 Life Science Business

### Applying Chiyoda's Energy Expertize in the Bio-Foundry Field

- Developing large-scale production technology and plant functional protein systems through industry-academia collaboration, compatible for human application assuming application in the quasi-drug area
- Applying our expertise in the energy business field to horizontally develop the bio-foundry field



<sup>\*1</sup> New Energy and Industrial Technology Development Organization

<sup>\*2</sup> 'Development of Bio-based Production Technology to Accelerate Carbon Recycling'

<sup>\*3</sup> National Institute of Advanced Industrial Science and Technology



- A system to improve bio-based productivity and reduce production cost.
- Subsidized by NEDO, Chiyoda develops large-scale production technology and plant functional protein systems through industry-academia collaboration, compatible for human application assuming application in the quasi-drug area.
- Chiyoda aims to horizontally develop the bio-foundry field, leveraging production processes, demonstrated by the development of large-scale production technology utilizing technical integration in the energy field and scale-up expertise.

## 5 Digital Transformation (DX)

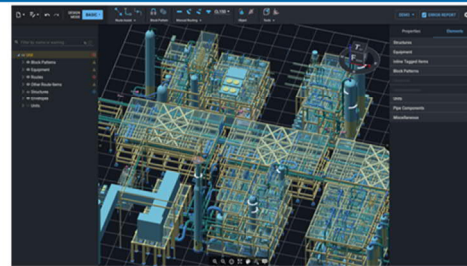
~ PlantStream™ ~

### A Revolutionary Space Design System

- PlantStream™ automatically designs pipes and cables in basic engineering using CAD\*, accelerating 3D model creation by up to five times and reducing the process by approximately 80%.
- Licensed to over 10 domestic and international companies since its launch 18 months ago, with a further 20 considering introduction
- PlantStream™ is implemented 'in-house', adding competitiveness



Awarded first-place in the 'good digital award' start-up category by The Digital Agency in September 2022



PlantStream™ design image

\* Computer Aided Design



16

- PlantStream™ automatically designs pipes and cables in basic engineering using Computer Aided Design, accelerating 3D model creation by up to five times and reducing the process by approximately 80%.
- Converts the expertise of skilled plant and space design engineers into algorithms across the entire engineering process.
- PlantStream™ has been licensed to over 10 domestic and international petrochemical and engineering companies since its launch 18 months ago, with a further 20 considering introduction.
- The 'in-house' implementation of PlantStream™ adds to Chiyoda's competitiveness.

- PlantStream™ was awarded first-place in the 'good digital award' start-up category by The Digital Agency in September 2022.

## Major Ongoing Projects

17

Last section is the latest update of Major Ongoing Projects.

# 1 Major Ongoing Projects (Energy)

Project	Tangguh LNG Expansion, Indonesia	Golden Pass LNG, USA	NFE LNG, Qatar
Client	BP Berau Ltd.	Golden Pass LNG (QatarEnergy and ExxonMobil JV)	QatarEnergy
JV Partner	Saipem, Tripatra	Zachry, McDermott	Technip Energies
Scheduled Completion	Start up in 2023	2024 – 2025 (3 trains)	2025 – 2027 (4 trains)
Status	Construction is in the final stage and is approaching completion	Construction ongoing	Engineering and procurement ongoing and construction commenced



- Projects are steadily progressing.
- The NFE LNG project in Qatar has commenced construction.



## 2 Major Ongoing Projects (Environment)

Project	Copper Smelting Plant, Indonesia	Vaccine Constituent Production Facility	Energy Storage System Facility
Field	Non-Ferrous Metal	Life Science	Energy Management
Client	P.T. Freeport Indonesia	SHIONOGI & CO., Ltd.	North Hokkaido Wind Energy Transmission Corp.
Scheduled Completion	2024	2023	2023
Status	Engineering, procurement and construction ongoing	Commissioning ongoing	Commissioning ongoing



- Construction of the copper smelting project in Indonesia is progressing.

*Energy and Environment in Harmony*



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

Forward-Looking Statements: Any projections included in these materials are based solely on information available at the time this presentation was prepared. It is possible that actual results may vary significantly from the projections due to a number of risk factors such as economic conditions. The results projected here should not be construed in any way as being guaranteed by the Company. Investor are recommended not to depend solely on these projections for making investment decisions.

© Chiyoda Corporation 2022, All Rights Reserved.

20

Please address inquiries to:  
IR, PR & Sustainability Advanced Section, Corporate Services Department:  
Tel. +81-45-225-7734