

# **CHIYODA REPORT 2020**

Energy and Environment in Harmony

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## Corporate Philosophy

Enhance our business in aiming for harmony between energy and the environment and contribute to the sustainable development of society as an integrated engineering company through the use of our collective wisdom and painstakingly developed technology.

Every Chiyoda Group employee engages in our corporate activities with this philosophy in mind as we strive for corporate group management that earns the trust and empathy of all of our stakeholders, including shareholders, customers, business partners, employees, and local communities.

## Business Vision

### A Grand Opportunity for the Future

The Chiyoda Group is committed to being an 'Innovative' Engineering Company, shaping the future of energy and the global environment with passion and cutting-edge technology.



#### Editorial Policy

CHIYODA REPORT 2020 is intended as a communication tool to comprehensively inform all stakeholders, including shareholders, investors, business partners, customers, directors, employees and society, of the Chiyoda Group's management policies, business strategies, financial status, corporate values, growth potential, and activities toward realizing a sustainable global society.

We will strive to improve the quality of information contained in the report to strengthen the awareness of the Chiyoda Group among all stakeholders and the wider community.

#### Disclaimer Regarding Forward-Looking Statements

Statements in CHIYODA REPORT 2020 are forward-looking, based on information available at the time of issuance. Readers should be aware that actual results may differ materially from such statements due to a number of factors.

Please refer to the following website for information on the Chiyoda Group.

 <https://www.chiyodacorp.com/en/>

# Realizing Sustainable Growth

In this section, we describe Chiyoda Corporation's vision for a sustainable society and our value creation story in pursuit of "Energy and Environment in Harmony." Messages from the Chairman & CEO, President & COO, and CFO describe their views on our vision and strategies for revitalization and the future based on our Medium-Term Management Plan.

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## Message from the CEO

# Realizing a sustainable society through our commitment to company revitalization and the future

## Energy and Environment in Harmony



### Laying the Foundation for Sustained Revitalization

Fiscal 2019 was highlighted by the launch of our new Medium-Term Management Plan, “Chiyoda’s Revitalization Plan—Initiatives for Revitalization and the Future,” which details a strengthened governance structure and balance sheet improvements with a finance package that includes the issuance of preferred shares through third-party allotment to Mitsubishi Corporation. Our revitalization initiatives include the three pillars of 1. improved risk management, 2. enhanced EPC\* execution and management capabilities, and 3. reinforced human resource management, while successfully completing existing projects. We are committed to implementing the measures required for successful revitalization.

\* Engineering, Procurement, and Construction

### Renewing Our Corporate Culture

Chiyoda is renewing its corporate culture and revisiting the following five basic principles that act as guidelines for all employees when conducting business: 1. Accept responsibility and be proactive, 2. Improve awareness of the “chain of responsibilities,” 3. Respect economic and social values when conducting business, 4. Systematically manage risks to protect corporate value, and 5. Enhance the value of human resources. Senior management, including myself, regularly engage with employees to ensure we are all familiar with these basic principles and, as a result, we are making steady progress toward successful revitalization.

### A Shifting Business Environment

The effects of COVID-19 have exceeded all expectations and have had a substantial impact on our lifestyles and business environment alike. The changes in Chiyoda’s business environment have been extraordinary and the future remains uncertain, with the prices of crude oil, gas and other energy sources plummeting due to a stagnant global economy.

We conduct business with many of the world’s major oil companies and national oil companies, which are pursuing new business portfolios in response to possible long-term fluctuations in the energy supply—demand balance. Chiyoda will continue to monitor the impact of these fluctuations related to our customers’ investment decisions.

The significant changes in our business environment, such as the paradigm shift toward a carbon recycling society and the advancement of digital technology and artificial intelligence (AI) also represent opportunities for growth. To seize these opportunities, we are expanding our business horizons in line with the trend toward a carbon recycling society and reforming our business processes, including digital transformation. The implementation of this integrated strategy will result in sustainable business growth.

### Promoting Health and Productivity Management

The 2019 “Work Style Reform Bill” raised public interest in health and productivity management. Chiyoda recognizes that the health and welfare of its employees are key to fully leveraging all of its abilities and realizing the Group’s corporate philosophy. Chiyoda therefore published its “Declaration of Health and Productivity Management” in April 2020, with myself as Chief Wellness Officer (CWO), to promote health and productivity management throughout the Chiyoda Group. We will undertake strategic investment to ensure the health of every employee as well as increase vitality and improve productivity.

### Contributing to the Future of the Global Environment and the Development of a Sustainable Society

Driven by a corporate philosophy of “Energy and Environment in Harmony,” the Chiyoda Group has operated as a fully integrated engineering company for over 70 years. Through the EPC of LNG, gas, petroleum, chemical, industrial, pharmaceutical and renewable energy facilities in Japan and overseas, the Chiyoda Group contributes to society through the supply of optimized technologies and infrastructure tailored to the requirements of each generation.

International environmental challenges are becoming more complex. With the growing awareness of the urgency to combat climate change, Chiyoda constructs LNG plants (low carbon intensity), provides advanced technological solutions (including the supply of hydrogen and the provision of transportation worldwide to realize a hydrogen-based society), and promotes renewable energy. We will continue to expand our business, based on our mission to continue contributing to the future of the global environment and to developing a sustainable society through our expertise cultivated as a foremost global integrated engineering company.

Through the dedication and hard work of all directors and employees, the Chiyoda Group will continue to revitalize, and we wish to express our sincere gratitude to all stakeholders for their understanding and continuing support as we advance.

Kazushi Okawa  
Representative Director,  
Chairman of the Board, CEO & CWO

# Message from the COO

Shaping the future of energy and the global environment through our revitalization plan and by redefining the value of engineering



## Strengthening Project Risk Management

Effective risk management is essential to successfully completing projects as planned.

The Strategy & Risk Integration Division commenced activities in July 2019 and is responsible for managing Company-wide operational risks. The Division implemented a newly established integrated risk management system to strengthen the project support structure and enhance human resource management at every stage of a project, from securing orders to completion and handover. For the Energy Business and the Global Environment & Green Energy Business (which

underpin Chiyoda's earnings), we have implemented a framework that integrates sales and project management.

Based on this framework and by prioritizing the steady execution of existing projects, we completed the Freeport LNG and Cameron LNG projects in May and July 2020, respectively. Chiyoda demonstrated its technical expertise in both of these large-scale LNG plants, overcoming challenges to provide a stable natural gas supply across the globe. We will continue to improve our risk management capabilities in future projects using our accumulated project execution experience.

## Executing Chiyoda's Revitalization Plan in Response to Changes in the Business Environment

Our business environment is changing rapidly, including plunging crude oil prices as a result of COVID-19, the acceleration of digital transformation, the shift to environmentally friendly energy to address the impacts of climate change, and the drive toward a carbon-recycling society. The enhancement of technologies in the life science field can also be regarded as a major transformation. Our Medium-Term Management Plan, "Chiyoda's Revitalization Plan—Initiatives for Revitalization and the Future," views these changes as opportunities for sustainable growth, and to this end, we established a "Digital Transformation Division" and a "Frontier Business Division" in July and October 2019, respectively.

Our digital transformation initiatives include reforming Companywide work processes utilizing AI and digital technologies, and developing digital products to support our EPC execution capabilities and maximize client asset value. We are also expanding our frontier business through "SPERA

Hydrogen," our patented hydrogen supply chain technology, developing a decentralized utility business in response to the new data era, and establishing pharmaceutical and life science business as strategic fields for non-EPC business. Chiyoda also implements a systematic approach to human resource management to accelerate these initiatives.

Our business is anchored by the construction of LNG plants, and we will strengthen our earnings foundation by selecting the most competitive projects with achievable goals and by engaging in activities to ensure securing orders and profitability.

We will pursue balanced growth between existing and new businesses and aim to have EPC and non-EPC businesses contributing equally to profits by 2030, while targeting the same contribution balance between the "Energy Business" and the "Global Environment Business." As a result, we will transform our business portfolio and revenue structure to realize a stable earnings foundation.

## Redefining Engineering Value

Since its founding in 1948 as a company that contributes to society through engineering, the Chiyoda Group has facilitated the growth of society through the EPC of petroleum, gas, and industrial facilities. The essential value of engineering is its contribution to social development by delivering innovative solutions. The general perception, however, is that large-scale projects, which continue to increase in complexity due to intensifying competition and the maturation of the plant market, are executed by engineering companies on an EPC lump-sum contract\* basis involving substantial risk. To change this perception, Chiyoda aims to redefine the value of engineering and create a new business model based on its original value, delivered through its frontier businesses and digital

transformation. Chiyoda meets the needs of society by applying its wide-ranging engineering expertise and integrating pioneering technology in response to industry and customer requirements.

We will continue to advance our revitalization initiatives and implement our growth strategies while accelerating our endeavors to redefine engineering value, to shape the future of energy and realize a sustainable global environment through our engineering capabilities.

We sincerely appreciate the continuing invaluable support of all of our stakeholders.

\* A contracting agreement in which the duties stipulated in the contract are fulfilled for a fixed monetary amount

Masaji Santo  
Representative Director,  
President, COO & CSO

# Chiyoda's History

As Japan recovered from World War II, the Chiyoda Group emerged as an engineering industry pioneer, contributing to develop energy and chemical industries in over 60 countries worldwide. Since its founding, the Chiyoda Group has responded to the needs of each generation by pursuing "Energy and Environment in Harmony." The Chiyoda Group will continue to shape the future through engineering to realize the sustainable development of society and the global environment.

- Social trends
- The Chiyoda Group's initiatives

## The Dawn of Chiyoda 1948–1970

- Growing demand for oil
- Period of high economic growth
- Founded in 1948 under the mission "Serving Society through Technology"
- Contributing to industrial reconstruction through engineering



**1960**  
Mitsubishi Oil Co., Ltd.  
Secured an order for Mizushima grass-roots refinery

## Period of Growth 1971–1990

- Market changes resulting from the two oil crises
- Accelerating overseas production as a result of the Plaza Accord (period of strong Japanese yen)
- Promoting "Companywide internationalization"
- Executing large-scale petroleum/petrifaction projects
- Commenced full-scale environmental conservation



**1977**  
Secured the Kaduna Refinery order for NNPC (Nigeria)

## Period of Resurgence 1991–2000

- Collapse of bubble economy and surging price of oil
- Asian financial crisis
- Full-scale participation in LNG projects
- Expanding into fields of general industrial facilities and non-ferrous metals



**1994**  
Crown Prince and Princess visit LNG plant construction site in Ras Laffan Industrial City, Qatar

## Period of Rapid Growth 2001–2010

- Growth in LNG demand worldwide
- Increasing need to address climate change and environmental conservation issues
- Executing large-scale LNG projects (Qatar, Oman, Russia, and Papua New Guinea)
- Expanding flue gas desulfurization technology licensing overseas



**2004**  
Secured orders for LNG plants for Qatargas Operating Company Limited (Plants 3 & 4)

## Period of Transition 2011–2020

- Adoption of Paris Agreement
- Rapid development of shale oil and gas in the U.S.
- Entered the renewable energy field, including solar power generation
- Establishing technology for mass storage and long distance of hydrogen at normal temperature and pressure
- Executed large-scale LNG project in the U.S.



**2011**  
Secured order for Nagasaki Solar Energy Co., Ltd.



**2013**  
Conducted SPERA Hydrogen demonstration

## Chiyoda's Vision for the Future

Engineering that shapes the future of energy and the global environment



# Value Creation Story

The Chiyoda Group will leverage its innovative engineering expertise and cutting-edge technologies to continue creating value for society.

Driven by our corporate philosophy of “Energy and Environment in Harmony,” we promote our business based on our CSR values (shared values).

While drawing on our cultivated strengths to advance our Medium-Term Management Plan, “Chiyoda’s Revitalization Plan—Initiatives for Revitalization and the Future,” released in May 2019, we will harness our engineering capabilities to continue contributing to the development of a sustainable society.

- Optimization and digitalization of business assets
- The contrast between population growth and increased demand for energy vs. resource limitations and climate change (decarbonization)
- Strengthening disaster-response capabilities

- ISO 26000
- United Nations Global Compact
- SDGs\*
- Paris Agreement
- United Nations Convention on Biological Diversity

Social and Customer Issues Facing the Chiyoda Group

Global Standards

**Medium-Term Management Plan**  
(Chiyoda’s Revitalization Plan)  
—Initiatives for Revitalization and the Future—

### Cultivated Strengths

- **EPC Execution Capability**  
Optimize design and deliver superior quality
- **Integration & Optimization**  
Provide optimal solutions for complex issues and challenges
- **Commercialization of New Technologies**  
Integrate research capabilities with EPC expertise

1. A reliable company
2. Environmental initiatives
3. Social contributions
4. Respect for human rights
5. Commitment to fairness

The Chiyoda Group’s CSR Values (Shared Values)

## Chiyoda’s Vision for the Future

—Shaping the Future of Energy and the Global Environment—

### “Project Life Cycle Partner”

Maximizing customer asset value

### “Integration Partner” of Wide-Ranging Technologies

Providing optimal compound systems for complex energy constraints

### “Incubation Partner” for the Development of Future Technologies

Resolving challenges in energy and the global environment

Realizing Our Vision for the Future (P.12–13)

## Realize Our Corporate Philosophy

—Our Mission to Accomplish—

Enhance our business in aiming for harmony between energy and the environment and contribute to the sustainable development of society as an integrated engineering company through the use of our collective wisdom and painstakingly developed technology

SUSTAINABLE DEVELOPMENT GOALS  
17 GOALS TO TRANSFORM OUR WORLD



\* Sustainable Development Goals: A set of international goals and targets adopted at the United Nations Sustainable Development Summit in September 2015 to be realized by 2030

# Realizing Our Vision for the Future

The Chiyoda Group will realize its vision for the future by advancing growth strategies that seize on the opportunities presented by the changing business environment and by transforming its business portfolio under the Medium-Term Management Plan, “Chiyoda’s Revitalization Plan—Initiatives for Revitalization and the Future.”

## Business Environment

### Changes in the Business Environment

- Global economic recession from the spread of COVID-19
- Plunging oil and gas prices
- Potential long-term fluctuations in energy supply-demand balance
- Shift from growth stage to maturity stage of LNG market

### Growth Opportunities

- Paradigm shift to carbon-recycling society
- Digital revolution and transformation
- Growing health consciousness and enhancement of life science technology

## Medium-Term Management Plan (Chiyoda’s Revitalization Plan) Initiatives for Revitalization and the Future

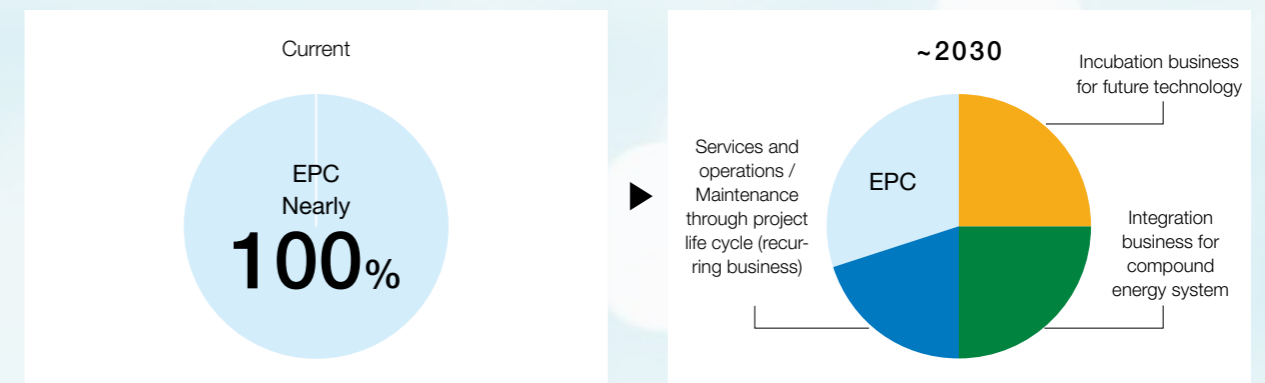
Growth Foundation	Growth Strategies
<b>Strengthening Risk Management Structure</b> → Risk Management (P.20–21)	<b>Strengthening the EPC Business</b> → Energy Business (P.28–29) → Global Environment & Green Energy Business (P.32–33)
<b>Enhancing EPC Execution and Management Capabilities</b> → (P.22)	<b>Digital Transformation</b> → (P.34–35)
<b>Reinforcing Human Resources</b> → (P.23)	<b>Redefining Engineering Value</b> → Frontier Business (P.36–37)

## Future Business Portfolio (~ 2030)

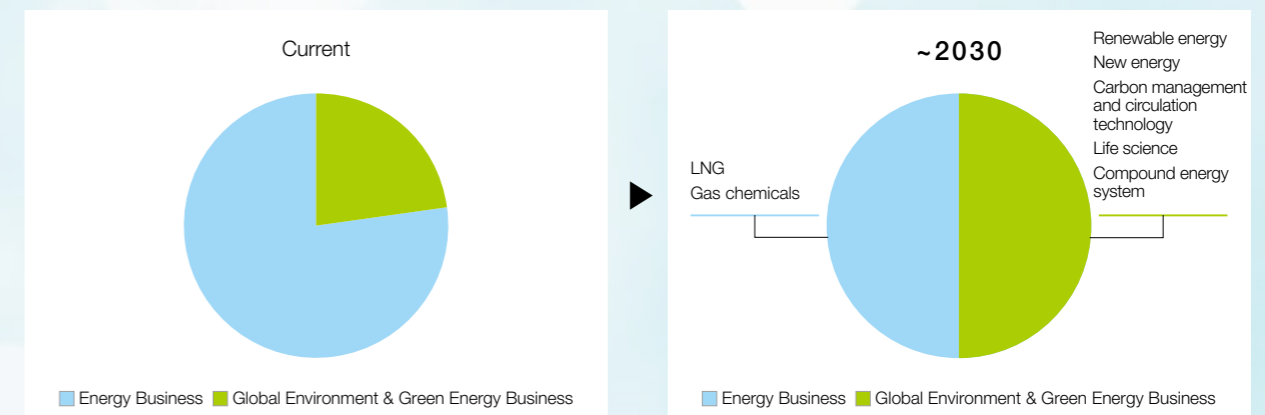
By transforming the business portfolio, we will pursue 50% contributions from each of our EPC and non-EPC businesses (business model) and from our Energy Business and Global Environment & Green Energy Business (business segment)\* by 2030.

\* Based on revenues in each business segment

### Business Model



### Business Segment





# Message from the CFO

Adapting to the changing business environment by strengthening our financial foundation and restructuring our organization to accelerate revitalization



## Current Business Environment and Role of the CFO

The spread of COVID-19 has drastically changed Chiyoda's business environment, evidenced by a stagnant global economy and the drop in crude oil and gas prices. As CFO, it is my responsibility to adapt to this changing business environment and promptly orchestrate stable financial strategies under our

Medium-Term Management Plan, "Chiyoda's Revitalization Plan—Initiatives for Revitalization and the Future," in our efforts to transform our corporate culture and enable Chiyoda to grow.

## Strengthening Our Financial Health

Chiyoda's financial strengthening plan in 2019 included a third-party allotment of shares valued at ¥70.0 billion to Mitsubishi Corporation and subordinated loans of ¥20.0 billion from Mitsubishi UFJ Bank Ltd. to restore our financial health. Through a resolution of the Ordinary General Meeting

of Shareholders in June 2020, we conducted a capital reduction in August to eliminate the cumulative loss for retained earnings. As we move ahead, we will gradually accumulate profits, thereby improving shareholders' equity and our financial position.

## Adapting to the Changing Business Environment

While our business environment continues to undergo significant changes and the future remains uncertain, we are improving project finance estimation and cash flow management to secure revitalization and to promptly implement growth strategies. We are also enhancing dialogue with stakeholders and diversifying procurement of cash flow.

Through such measures, we will secure adequate levels of cash flow to meet liquidity criteria. We are also strengthening financial due diligence, increasing commercial support for projects, and implementing other solutions geared toward maintaining project revenue and preventing the impairment of our corporate value.

## Enhancing Awareness of Economic Value Added

We have adopted the principle of "pursuing economic value-added business activities" toward Chiyoda's revitalization and are working to improve the financial literacy of officers and employees through a corporate culture that promotes greater

fiscal awareness. As such, we have implemented a management accounting system that visualizes the revenue structure of business departments and operates in step with the progress of projects.

## Capital Allocation and Efficiency

Our capital allocation centers on investments to reinforce our main business and promote growth strategies. We are investing to reform EPC work processes, bolstering our execution capabilities through digital transformation, and increasing the allocation of capital in pursuit of our corporate philosophy, "Energy and Environment in Harmony," such as in our global environmental business, which includes the fields of new energy, pharmaceuticals and life sciences, carbon recycling, and hydrogen.

As our industry continues to face the challenge of unstable and fluctuating revenue, we will focus on enhancing our project portfolio and developing our global environmental business as a stable source of revenue, while expanding our revenue base as a way to respond to changes in the external environment.

Although we have yet to announce our ROE and other target figures due to the increase in shareholders' equity, we are aiming for an 8%–10% gross profit margin from each project to enhance capital efficiency.

## Returns to Shareholders

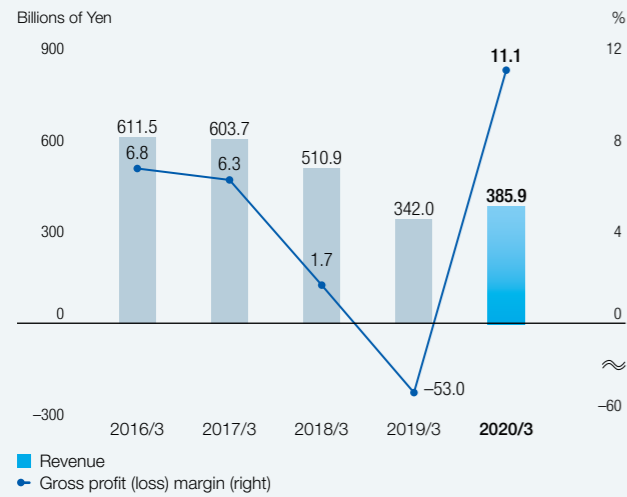
As a listed company, we are striving to restore our dividend as soon as possible in our commitment to fulfilling shareholder expectations, by reorganizing business and revenue structures and increasing profits to secure the required funds. We will continue to dedicate our efforts to providing our shareholders with stable dividends at the earliest opportunity. As we proceed, I look forward to the continued understanding and support of all of our stakeholders.

Koji Tarutani  
Representative Director,  
Executive Vice President & CFO

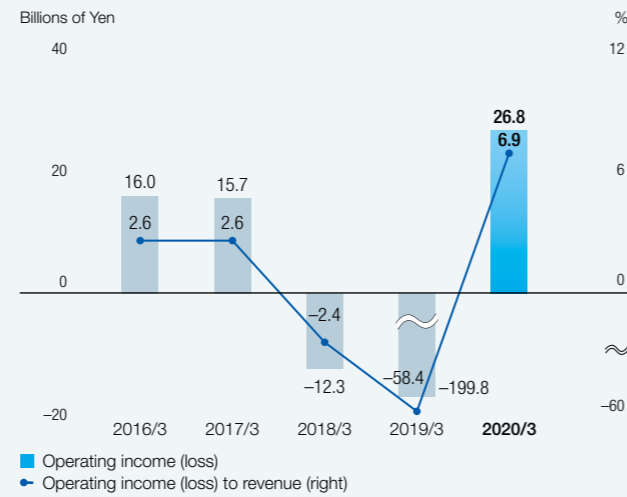
# Financial and Non-Financial Highlights

## Financial Highlights

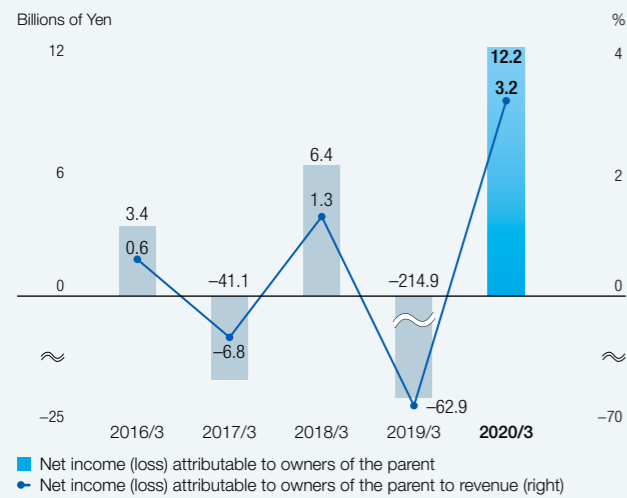
Revenue and Gross Profit (Loss) Margin



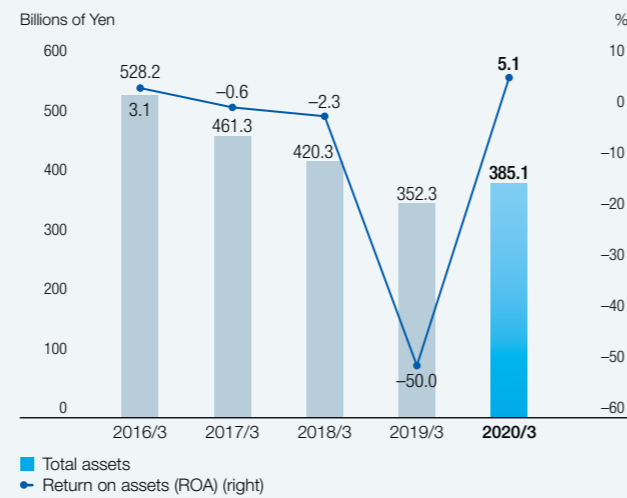
Operating Income (Loss) and Operating Income (Loss) to Revenue



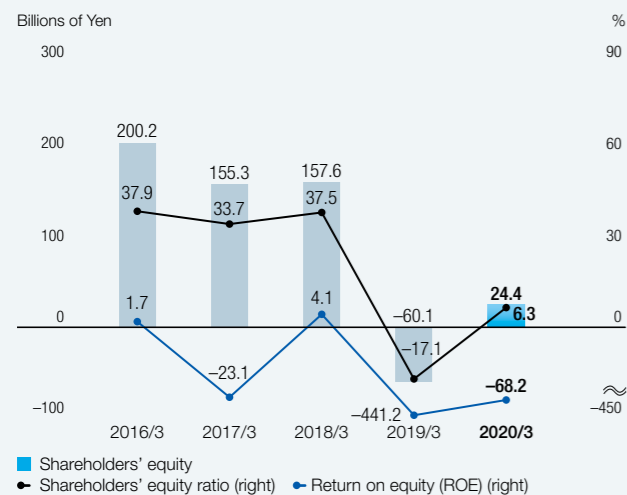
Net Income (Loss) Attributable to Owners of the Parent and Net Income (Loss) Attributable to Owners of the Parent to Revenue



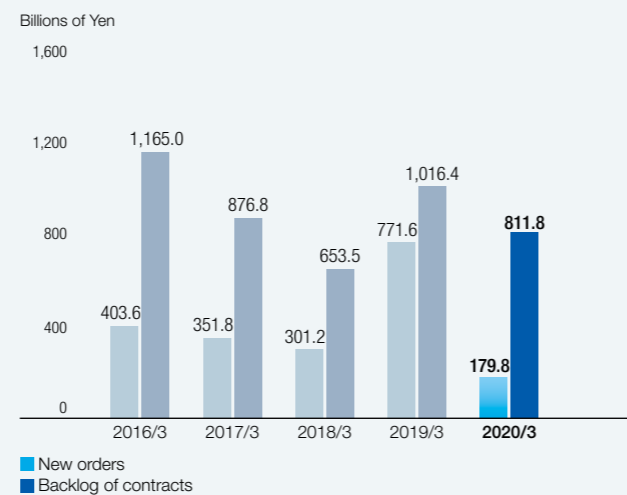
Total Assets and Return on Assets (ROA)



Shareholders' Equity, Shareholders' Equity Ratio, and Return on Equity (ROE)

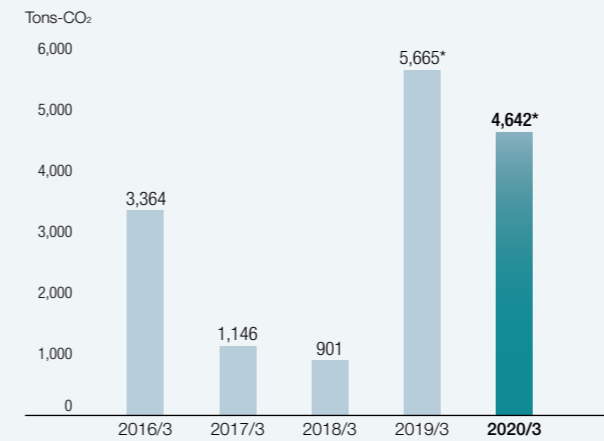


New Orders and Backlog of Contracts



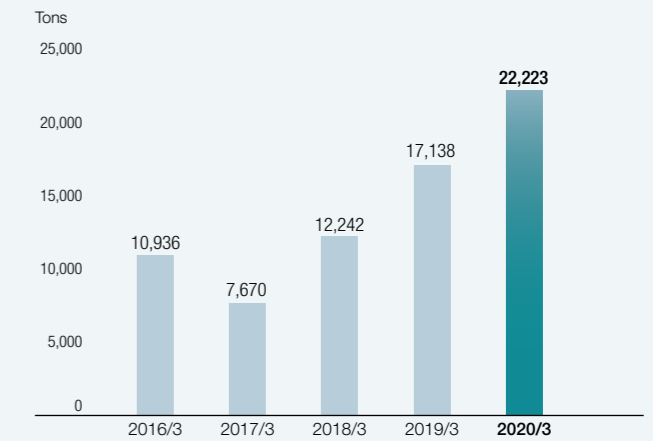
## Non-Financial Highlights

CO<sub>2</sub> Emissions Generated at Domestic Construction Sites



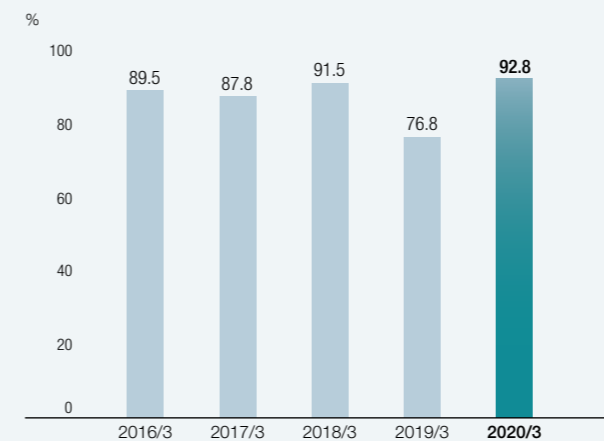
\* CO<sub>2</sub> emissions increased in 2019/3 and 2020/3 due to a rise in domestic construction.

Industrial Waste Disposal Quantity\*



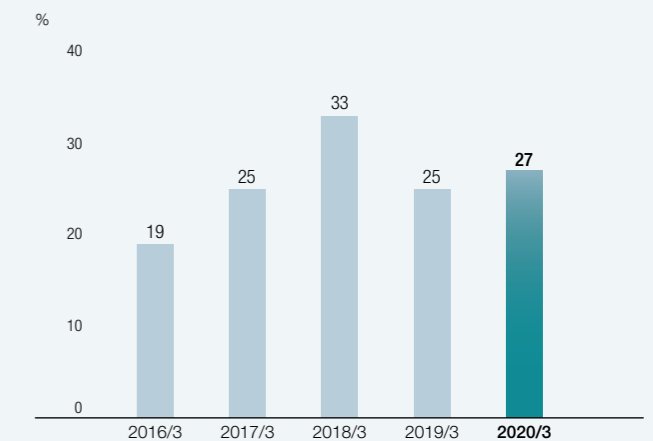
\* At domestic construction sites, excluding sludge

Industrial Waste Recycling Rate\*



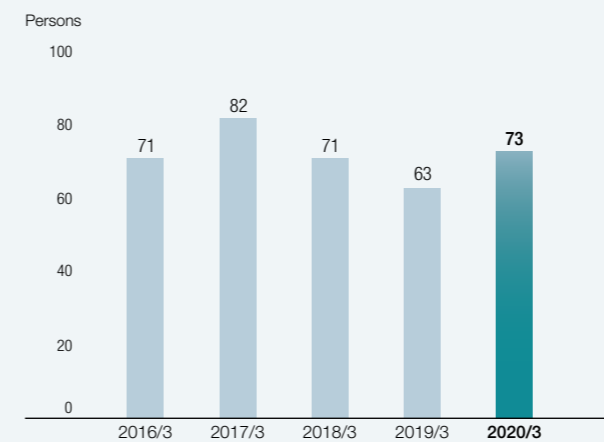
\* At domestic construction sites, excluding sludge

Ratio of Female Employees among New Recruits\*



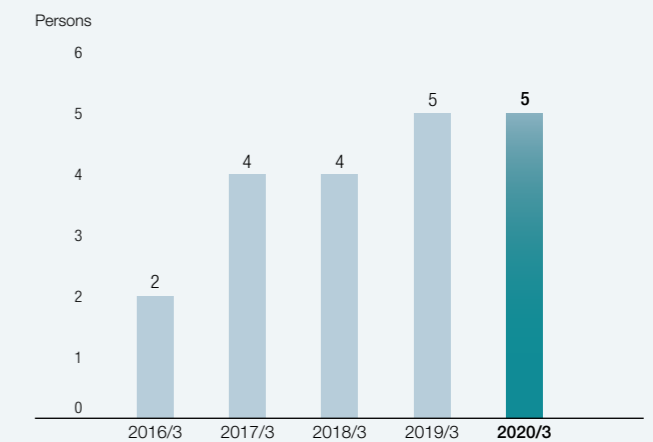
\* Chiyoda Corporation, non-consolidated basis

Number of Non-Japanese Employees\*



\* Chiyoda Corporation, non-consolidated basis

Number of Outside Directors\*



\* Chiyoda Corporation, non-consolidated basis

# A Business Foundation Underpinning Sustainable Growth

In this section, we describe how Chiyoda is strengthening its business foundation to facilitate sustainable growth based on the Medium-Term Management Plan.

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Photo provided by QatarGas  
Operating Company Limited

# Risk Management



**Fuminori Hasegawa**  
Senior Vice President,  
Director of Strategy & Risk Integration  
(SRI) Division,  
Chief Risk Management Officer (CRO)

## Ensuring the Future: Enhanced Risk Management

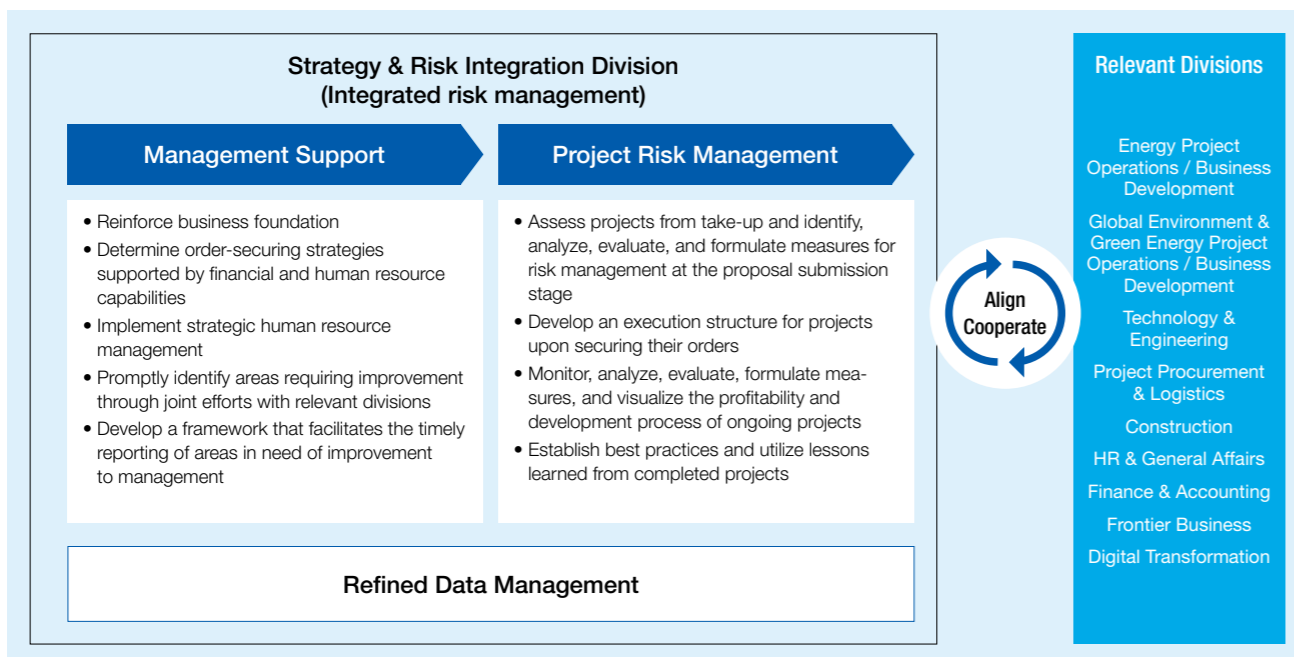
In fiscal 2019, the Chiyoda Group established its Strategy & Risk Integration (SRI) Division to strengthen risk management and support revitalization. We will further consolidate our risk management capabilities this fiscal year, enhancing employee risk awareness while adapting to the changing business environment and turning challenges into opportunities for growth to preserve corporate value and secure the future of the Chiyoda Group.

## Risk Management Structure

Effective risk management is essential to executing and completing projects according to plan. Improving the management of project risks as a foundation to achieving the Medium-Term Management Plan (Chiyoda's Revitalization Plan), Chiyoda fortified the Project Management, Project Legal, and Corporate Planning departments, among others,

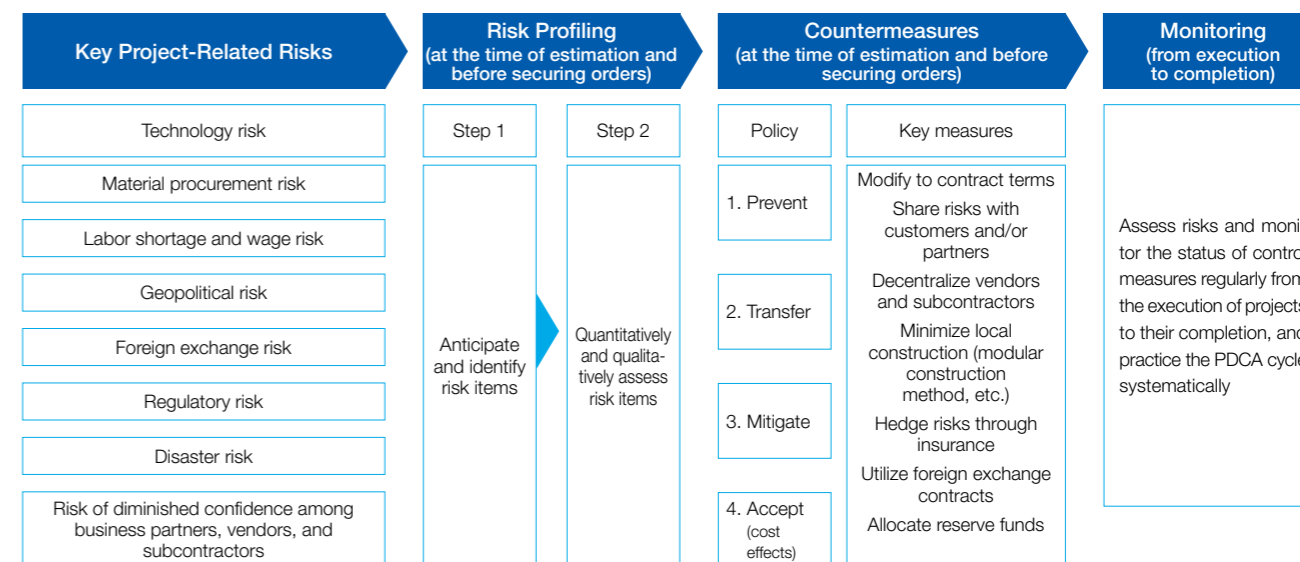
with the development of the SRI Division. The Division supports management by controlling risk strategy and provides a framework for seamlessly integrating managed risks throughout a project's life cycle, from securing orders to execution and handover.

### Project Risk Management Structure



## Project Risk Management Flow

Enforcing stringent risk management by actively addressing risks throughout every stage of a project's life cycle.



## Initiatives to Further Enhance Risk Management

Chiyoda is progressing with the measures required to continue enhancing its project execution and risk management capabilities.

Main Goals	Measures
Improve project management through the use of AI and digital technologies	Utilizing AI and digital technologies, we will expand the use of platforms to ensure the rigorous management of costs, schedules, and quality throughout engineering, procurement, and construction, enhancing project management to improve profitability.
Strengthen contract management capabilities	We will establish a specialized department that underpins profits and improves our risk awareness from commercial and contractual perspectives to reinforce our contract management capabilities during all project stages.
Introduce management accounting	We will introduce a management accounting system that fosters a high level of risk awareness among all employees and promotes more efficient responses to project issues by each department.

# Enhancing EPC Execution and Management Capabilities

Chiyoda is implementing the following initiatives to enhance its EPC execution and management capabilities, crucial to successfully completing increasingly large and complex projects.

## Strengthening Construction Capabilities

To strengthen its construction capabilities, which significantly impact the Company's profitability through the EPC of projects, Chiyoda established the Construction Work Execution Reinforcement Committee in July 2019 and appointed a Chief

Construction Management Officer (CCMO) in August of the same year. The Construction Division was established in April 2020 by integrating construction-related organizations.

## Key Strategies

Chiyoda is embracing AI and digital technologies, reforming its business processes utilizing sophisticated data management, and strengthening its human resources.

Key Strategies	Initiatives
Chiyoda's AWP	<ul style="list-style-type: none"> <li>Implement Chiyoda's Advanced Work Packaging (AWP), advocated by the Construction Industry Institute in the United States, which incorporates Chiyoda's expertise and effectively applies disciplined and focused planning to support project execution</li> <li>AWP is a project management tool using digital technology whereby construction work is "packaged" through integrated management to optimize the EPC process from engineering and procurement to commissioning, completion and handover</li> </ul>
Internet of Things (IoT): workplace safety and work management system	<ul style="list-style-type: none"> <li>Efficiently manage materials through radio frequency identification (RFID)</li> <li>Use beacons to enhance labor and safety management</li> </ul>
Strengthen project data management	<ul style="list-style-type: none"> <li>Collect and visualize ongoing project data in real time</li> <li>Utilize real-time data to manage budgets, results, and forecasts</li> <li>Project partners, major subcontractors, home offices, and construction sites utilizing the same data platform to execute projects</li> <li>More efficient project planning by utilizing data accumulated in previous projects</li> </ul>
Strengthen engineering competitiveness	<ul style="list-style-type: none"> <li>Partially automate engineering activities by utilizing AI and digital technologies</li> </ul>
Strengthen procurement capabilities	<ul style="list-style-type: none"> <li>Enhance major vendor capability assessments</li> <li>More robust implementation of quality procedures for materials, welding and manufacturing, and improved forecasting of quality issues</li> <li>Remote operation, inspection, and communication through AI and digital technologies</li> </ul>
Strengthen preventive legal functions	<ul style="list-style-type: none"> <li>Establish systems and procedures that involve legal departments from a project's planning stage to reduce risks</li> </ul>
Enhance subcontract management structure	<ul style="list-style-type: none"> <li>Improve subcontract management systems</li> <li>Ensure "Plan, Do, Check, Act" (PDCA) cycle within subcontract procedures</li> </ul>
Develop and strengthen construction dedicated personnel	<ul style="list-style-type: none"> <li>Identify and assign appropriate construction personnel</li> <li>Implement human resource development guidelines, including employee rotation</li> </ul>

# Reinforcing Human Resources (Talent Management)

The most valuable asset in any company is its employees. The Chiyoda Group expands and advances its human resources by promoting diversity of age, gender, nationality, etc., to support revitalization and the future as detailed in the Medium-Term Management Plan (Chiyoda's Revitalization Plan).

## Human Resource Development

### ① Human Resource Development Goals

Chiyoda's human resource development goals are to enhance business execution capabilities and to develop organizational management capabilities to sustainably grow the Company over the medium to long term.

#### ◆ Business Execution Capabilities

- Execution capabilities + Specific knowledge and experience + Unique strengths and competitive advantage
- Leverage expertise to continue generating profit

#### ◆ Organizational Management Capabilities

- Innovation + Leadership + Broad perspective + Commitment
- Strengthen the organization by cultivating human resources to achieve organizational goals

### ② Human Resource Development Initiatives

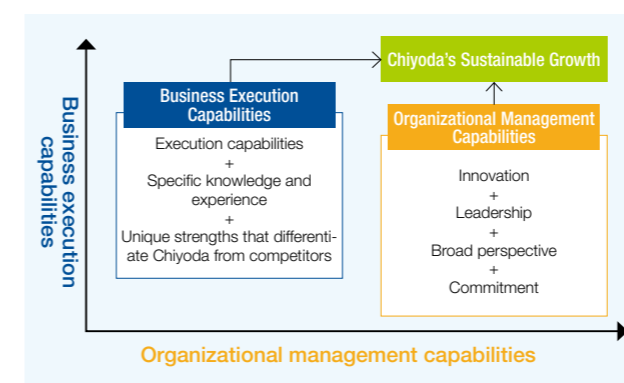
By implementing human resource development initiatives, we will pursue an optimal balance between our business execution capabilities and organizational management competence while strengthening our human resource foundations.

◆ **Personnel Changes:** Chiyoda develops its employees to provide value by keeping Chiyoda one step ahead as an engineering company. We give employees diverse experience through systematic, varied and challenging personnel assignments, providing a multifaceted view of the business so that they can gain a comprehensive understanding of the Company's earnings structure and accumulate the broad experience required for organizational management.

◆ **Human Resource Development:** Chiyoda's human resource development is divided into the following four disciplines to strengthen business execution capabilities. A Human Resources Officer is assigned to each discipline, and we implement the required initiatives and systems to optimize human resource development standards.

#### Four Disciplines

- ① Engineering
- ② Project Management
- ③ Business Incubation
- ④ Other Corporate Professionals



## Transforming Our Human Resources Portfolio

To advance the growth strategies detailed in the Medium-Term Management Plan, the Chiyoda Group is transforming its business portfolio, promoting its Global Environment & Green Energy Business Operations, embracing digital transformation, and redefining Chiyoda's engineering value. We are also appraising our range of human resources and evaluating

our deployment strategies to ensure an optimal balance between the execution and development of existing and new businesses, respectively. Successful identification of key staff for strategic roles and establishing effective career development plans are essential to systematically developing suitable personnel to fulfill appropriate positions.

Please refer to the following website for details regarding Chiyoda's career development initiatives (Japanese only).

➔ <https://www.chiyodacorp.com/jp/recruit/graduate/career/>

# Business Strategies

In this section, we provide an overview of Chiyoda Group's business and outline the strategies and business model of each business segment.

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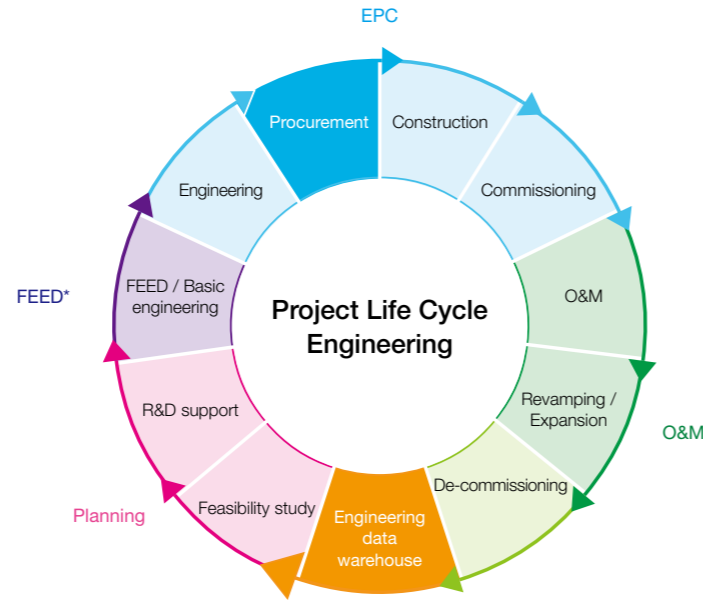
INPEX—Operated Ichthys LNG onshore processing facilities, Darwin, Australia  
Courtesy of INPEX Operations Australia Pty Ltd.

# Overview of the Chiyoda Group's Business

## Project Life Cycle Engineering

Since its establishment in 1948, the Chiyoda Group has completed EPC projects in over 60 countries in global environment engineering, the energy value chain, and many other fields.

We will continue contributing to society by meeting customer requirements throughout the entire project life cycle, supporting clients from the planning stage, through Front End Engineering Design (FEED) and EPC (including commissioning), to handover and operation and maintenance (O&M).



\* FEED: Basic plant engineering including planning and feasibility studies

## Business Fields

### Energy Business

Gas Value Chain	Petroleum Refining	Petrochemicals & Chemicals
<ul style="list-style-type: none"> <li>Gas processing</li> <li>LNG</li> <li>-Liquefaction</li> <li>-Regasification</li> </ul>	<ul style="list-style-type: none"> <li>Clean fuel</li> <li>Refinery / Chemical refinery integration</li> <li>Heavy oil upgrading</li> </ul>	<ul style="list-style-type: none"> <li>Olefins</li> <li>Aromatics</li> <li>Synthetic gas / Fertilizers</li> <li>Methanol</li> <li>Specialty chemicals</li> </ul>

### Global Environment & Green Energy Business

Renewable Energy	Environment	Pharmaceuticals	Metals and Non-Ferrous Metals	General Industries
<ul style="list-style-type: none"> <li>Solar power</li> <li>Wind power</li> <li>Biomass energy</li> <li>Storage / power management systems (EMS)</li> <li>Hydrogen value chain</li> </ul>	<ul style="list-style-type: none"> <li>Flue gas desulfurization facilities</li> <li>Acid gas / CO<sub>2</sub> capture and storage</li> <li>Industrial water</li> <li>-Wastewater treatment</li> </ul>	<ul style="list-style-type: none"> <li>Pharmaceuticals / Formulation</li> <li>Tissue engineering / Regenerative medicine (iPS cells)</li> <li>Laboratories</li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical refining and smelting</li> </ul>	<ul style="list-style-type: none"> <li>Electronic materials</li> <li>Food manufacturing</li> <li>Vegetable factories</li> </ul>

## Track Record

~40% of the world's LNG project capacity	Over 800 refinery units constructed	Over 600 petrochemical and chemical plants constructed	76 LNG receiving terminal projects constructed	Over 1,800 plants constructed in the Global Environment & Green Energy Business fields
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## New Businesses

### Digital Transformation

Our new Digital Transformation Business will establish non-EPC business by combining AI and digital technologies with our engineering expertise accumulated over many years. We will deliver innovative solutions to improve plant efficiency and maximize customer asset value, such as the optimization and autonomy of plant operation and maintenance.

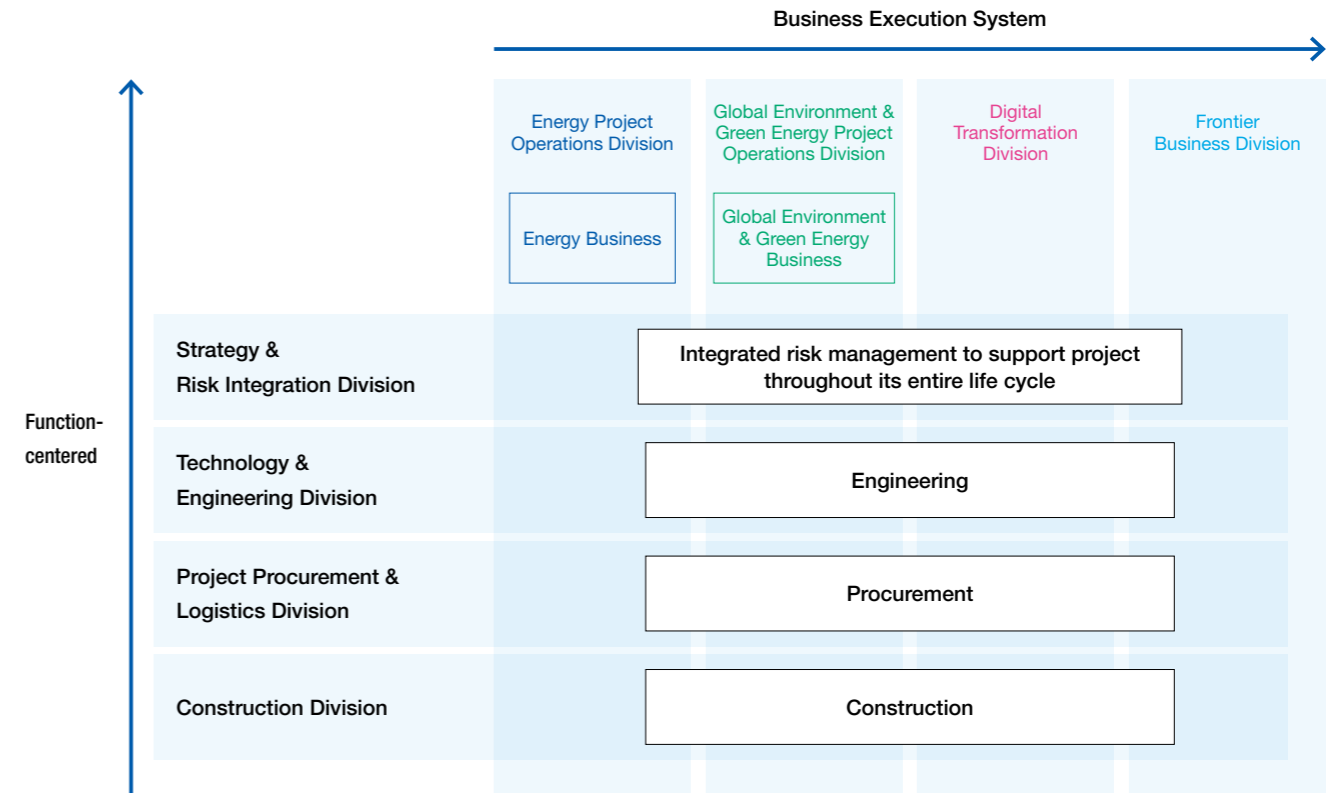
We will also promote Companywide digitalization, health and productivity management, and workstyle reforms.

### Frontier Business

Our new Frontier Business will develop, connect, and commercialize a wide range of potential technologies to resolve issues in the areas of environment and energy, society, business succession and life science to meet society's needs and customer requirements.

Our goal is to redefine Chiyoda's engineering value and establish our non-EPC businesses.

## Business Execution System



# Energy Business



**Hiroyuki Shimizu**  
Senior Vice President, Energy Business Operations  
Operations Director, Energy Project Operations Division

## Underpinning Group Earnings Foundation and Contributing to the Stable Supply of Energy by Enhancing Our EPC Capabilities

Chiyoda Corporation's operating environment has undergone significant changes in recent years, requiring flexible strategies that can adapt to new challenges.

To underpin the earnings foundation set out in our Medium-Term Management Plan (Revitalization Plan), we will implement measures to minimize risks, effectively utilize AI and digital technologies and improve the standard of our services in response to the changes in our operating environment.

### Strategy

• Market Trends

Our operating environment is currently dominated by COVID-19 and is characterized by a subdued global economy and a prolonged period of inactivity in energy demand resulting from shifts in the industrial structure and the diversification of energy resources. Energy demand is expected to grow, however, centered on the use of electricity for LNG and other resources that generate environmentally friendly energy.

Promotion of Energy Business

Key Initiatives	Measures
Ensure steady progress of projects	<ul style="list-style-type: none"> <li>Secure profits by advancing large-scale projects in accordance with client requirements, including the Tangguh LNG Project in Indonesia and the Ethylene Project and Golden Pass LNG Project in the United States</li> <li>Collaborate with customers, joint venture partners, suppliers, and subcontractors in the pursuit of solutions that benefit all stakeholders</li> </ul>
LNG and other gases as core businesses	<ul style="list-style-type: none"> <li>Continue with LNG and other gases as core businesses in Energy Business Operations in line with market trends</li> <li>Utilize the expertise accumulated from the successful completion of LNG plants around the world to secure orders for future large-scale LNG EPC projects</li> <li>Continue to meet LNG supplier expectations as a leading global LNG integrated engineering contractor</li> </ul>
Strengthen risk, schedule, and cost management	<ul style="list-style-type: none"> <li>Further improve risk, schedule, and cost management on ongoing and new projects</li> </ul>
Strengthen our EPC capabilities through AI and digital technologies and diversify our service portfolio	<ul style="list-style-type: none"> <li>Enhance EPC efficiency and strengthen competitiveness by leveraging our innovative engineering expertise, utilizing cutting-edge AI and digital technologies, embracing challenges and innovation, and diversifying our project-related service portfolio</li> </ul>

## Major Ongoing Projects

### Construction of Freeport LNG Plant in the U.S.



Courtesy of Freeport LNG Development, LP

The Freeport LNG Plant comprises three liquefaction trains, producing approximately 15 mtpa of LNG using the most advanced electric motor cooling system in the world. The determination of all project participants overcame every challenge during the EPC phase, including torrential rain, Hurricane Harvey, and a severe shortage of skilled labor, to commence commercial operation of all trains in May 2020.

The completion of this large-scale LNG plant will increase the energy export capacity of North America and diversify Japan's energy suppliers.

Client	Train 1 and Train 2: FLNG Liquefaction, LLC and FLNG Liquefaction 2, LLC Train 3: FLNG Liquefaction 3, LLC
Production Capacity	4.64 mtpa x 3 trains
Location	Texas, USA
Scope of Business	EPC

### Construction of a Large-Scale Ethane Cracking Complex



Overview of ongoing module fabrication

This project is notably unique in that the plant facilities are modularized to minimize on-site construction work. A consortium between Chiyoda International Corporation, Chiyoda's subsidiary in the U.S., and Kiewit Energy Group Inc., a construction contractor with extensive experience in the U.S., has provided Front End Engineering Design (FEED) work since the project commenced in July 2017.

As a global leader in EPC execution, Chiyoda is working closely with Kiewit to leverage the two companies' worldwide experience in petrochemical and downstream plant construction and successfully complete the project.

Client	Gulf Coast Growth Ventures LLC (ExxonMobil / Saudi Arabia Basic Industries Corporation (SABIC) JV)
Production Capacity	1.8 mtpa
Location	Texas, USA
Scope of Business	EPC



Special Feature

# The Cameron LNG Project

— Undertaking the Challenge of a Large-Scale LNG Project in the U.S. —

## Overview of Cameron LNG

Client	Cameron LNG, LLC
Annual Production Capacity	4.5 million tons x 3 trains
Location	Louisiana, USA
Scope of Business	EPC
Project Status	Commenced commercial operations

The Cameron LNG Project involved the engineering and construction of a new natural gas liquefaction plant with a total annual capacity of 13.5 million tons. As a leading global integrated engineering contractor, Chiyoda won the EPC contract for the project.

Liquefied natural gas from Cameron LNG has been exported to Japan and emerging markets in Asia for 20 years. While Japan currently imports a significant volume of its LNG from the Middle East, Southeast Asia and Australia, the U.S. has now been added to this list of suppliers. Chiyoda will continue to leverage its engineering capabilities to ensure a stable supply of energy in Japan.

## The North American Shale Gas Revolution as a Turning Point

The Shale Gas Revolution in North America transformed the global energy industry in the 21st century through technological advancements that enabled natural gas, known to be trapped in shale formations, to be extracted and commercialized.

Innovations introduced in the U.S., such as hydraulic fracturing, have facilitated the extraction of petroleum and natural gas from shale formations widely distributed throughout North America. Such technological advancements have resulted in the excavation of shale oil and gas across the continent. Construction of petrochemical and liquefaction plants to export LNG from the U.S. has expanded in the region surrounding the Gulf of Mexico, in particular.

Leveraging its global experience in LNG liquefaction plant engineering and construction, Chiyoda formed a joint venture with McDermott International, Ltd. in 2014 (formerly known as Chicago Bridge & Iron Company N.V. (CB&I)), to execute the Cameron LNG EPC Project in Louisiana on the Gulf of Mexico.

Cameron LNG is a large-scale project comprising the engineering and construction of three LNG trains with an annual production capacity of 4.5 million tons each. The project owner, Cameron LNG, LLC, partners with leading energy companies in the U.S., France and Japan, in operating natural gas liquefaction facilities.



Courtesy of Cameron LNG, LLC

## Confronting a Series of Challenges

Immediately upon commencement, Chiyoda relocated key personnel to McDermott's office in Houston, Texas. The development of shale gas gained momentum following the gradual recovery of crude oil prices from rock bottom in 2016.

Also in 2016, two years after project commencement, unprecedented adverse weather conditions across Texas and Louisiana delayed construction. Further, in August 2017, a state of emergency was declared across Louisiana

following Hurricane Harvey. By 2018 a shortage of skilled labor, coupled with a rise in labor costs and reduced productivity of local workers, exceeded all expectations.

As a result, construction costs increased immeasurably and construction schedules were delayed considerably, the consequences of which greatly affected both JV partners in meeting their contractual obligations.



President Trump observing the construction site

## Overcoming a Multitude of Obstacles

Chiyoda's contractual and moral obligations to valued clients remained a priority under such extraordinary challenges, and mitigation efforts, including increasing the number of employees assigned to the U.S., were undertaken, leading to the successful production of LNG by the first train in May 2019. President Donald Trump visited the project on the first day of LNG production and congratulated all those involved in the project for achieving this milestone.

Production of LNG from the second and third trains commenced in December 2019 and May 2020, respectively, with final completion in July 2020.

Although the project involved many overwhelming and unforeseeable challenges, Chiyoda's unwavering commitment to its clients resulted in our completing the largest such project ever undertaken in Louisiana. The project provided valuable lessons learned and equipped us with the essential skills required to successfully overcome the challenges we will face going forward while contributing to the stable supply of energy worldwide.

# Global Environment & Green Energy Business



**Terunobu Iio**  
 Director of Global Environment & Green Energy Business Operations and Global Environment & Green Energy Project Operations Division  
 Senior Vice President

## Realizing a Sustainable Global Environment as a Leading Integrated Engineering Company

Developing the engineering industry and contributing to the global environment have been Chiyoda missions since its founding. Concerns for the global environment continue to grow, exemplified by international efforts to promote carbon recycling. In fiscal 2020, Chiyoda will advance ongoing projects while shifting its efforts to new EPC projects in the global environmental field, seizing upon the expansion of renewable and other forms of clean energy and the growing trend toward the pharmaceutical and life science field.

### Strategy

#### Expansion of the Global Environment & Green Energy Business

Key Strategies	Measures
Business expansion	Expand the EPC business into new energy; pharmaceuticals and life sciences; carbon recycling; domestic petroleum, gas, and chemicals; and metals and resources
Strengthen our ability to meet customer requirements and resolve social issues	Strengthen our ability to provide solutions that meet customer requirements and resolve social issues by utilizing our engineering expertise and experience, leveraging digital innovative technology, using external expertise, and promoting collaboration between our Frontier Business and Digital Transformation Divisions
Improve profitability by optimizing Group management	Improve project profitability by optimizing the management of resources throughout the Group via more stringent alignment between our three major domestic subsidiaries* while reinforcing EPC execution capabilities
Improve work quality	Eliminate workplace accidents and enhance work quality by strengthening governance and ensuring safety awareness throughout the Group, including our three major domestic subsidiaries

\* Chiyoda Kosho Co., Ltd., Chiyoda TechnoAce Co., Ltd., and Chiyoda System Technologies Corporation

Strategic Fields	Specific Measures
New energy	<ul style="list-style-type: none"> <li>Expand renewable energy projects (solar, biomass, and wind power generation)</li> <li>Expand battery storage system projects</li> <li>Demonstrate technologies for energy management systems</li> <li>Realize a business plan for the supply of utilities to industrial complexes and urban developments</li> </ul>
Pharmaceuticals and life sciences	<ul style="list-style-type: none"> <li>Execute middle and high molecule drug projects</li> <li>Engage in regenerative medicine projects</li> <li>Construct large-scale plant facilities incorporating AI and digital technologies</li> <li>Reduce costs, minimize lead times, increase quality, and enhance production efficiency</li> </ul>
Carbon recycling	<ul style="list-style-type: none"> <li>Commence EPC activities in CCS*1 and CCUS*2</li> <li>Engage in various master plans</li> </ul>
Domestic petroleum, gas, and chemicals	<ul style="list-style-type: none"> <li>Maintain existing facilities</li> <li>Shift to renewable energy plants</li> <li>Restore aging plants</li> </ul>
Metals and resources	<ul style="list-style-type: none"> <li>Secure orders for, and steadily execute, EPC projects in Japan and overseas</li> </ul>

\*1 Carbon dioxide capture and storage

\*2 Carbon dioxide capture, utilization, and storage

## Completion of One of the World's Largest Facilities for Manufacturing Non-Standard Peptide Therapeutics

In July 2019, PeptiStar Inc., in which Chiyoda is an investor, completed construction of one of the largest facilities for the manufacture of non-standard peptide therapeutics in the world. The facility focuses primarily on the production of non-standard peptide therapeutics, a middle molecule drug consisting of exceptional features found in low molecule and antibody drugs mostly used today.

With an annual production capacity of over 100 kilograms of non-standard peptide therapeutics, the manufacturing plant, engineered by Chiyoda, is the largest in Japan and one of the leading drug manufacturing facilities in the world.

Chiyoda utilized the technologies of Japanese business partners on the project, which is critical to the growth of our life sciences business and has generated interest throughout the industry for its large-scale, significant potential and revolutionary impact.



PeptiStar's manufacturing facility for non-standard peptide therapeutics

Please refer to the following websites for details on our pharmaceutical engineering.

- <https://www.chiyodacorp.com/en/service/medicine/>
- [https://www.chiyodacorp.com/media/Pharmaceutical\\_201706.pdf](https://www.chiyodacorp.com/media/Pharmaceutical_201706.pdf)

## Construction of CCS Demonstration Plant

Chiyoda has constructed a large-scale demonstration plant that captures and stores CO<sub>2</sub> from flue gas emitted from coal-fired thermal power plants.

The plant captures and stores over 500 tons of CO<sub>2</sub> per day (approximately 50% of CO<sub>2</sub> emitted by the Mikawa Power Plant of SIGMA POWER Ariake Corporation [Omuta City, Fukuoka Prefecture; output of 50,000 kW], a subsidiary of Toshiba Energy Systems & Solutions Corporation [Toshiba ESS]).

Based on the technical requirements of Toshiba ESS, Chiyoda is performing the EPC and test operation. The project, led by Toshiba ESS, was authorized as a "Demonstration of Sustainable CCS Technology Projects," sponsored by the Ministry of the Environment in fiscal 2016 and will commence operations in 2020. The "Demonstration of Sustainable CCS Technology Projects" reflects the vision of the Japanese government to implement CCS by 2030 and reduce CO<sub>2</sub> emissions from thermal power plants.

Chiyoda will continue to draw on our major project execution expertise, cultivated in Japan and overseas, and utilize our state-of-the-art gas processing technologies for the projects successful launch.



Construction of CCS demonstration plant

# Digital Transformation

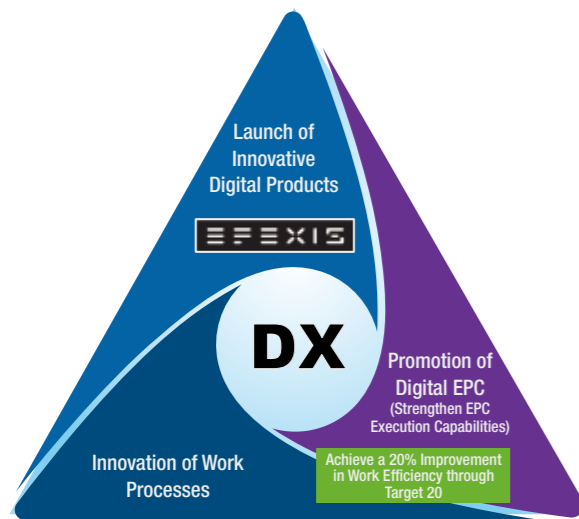


**Toshiya Momose**  
Chief Digital Officer (CDO)  
Director of Digital Transformation Division  
Senior Vice President

## Implementing Chiyoda's Revitalization Plan Centered on AI and Digital Technologies and Promoting Digital Transformation

As our business and social environments continue to undergo significant changes, accelerating digital transformation is imperative to realizing "initiatives for revitalization and the future," as detailed in our Medium-Term Management Plan (Chiyoda's Revitalization Plan). Our aim for digital transformation is improved work efficiency, extended global reach, and increased use of AI and digital technologies, which have dramatically evolved in recent years, to expand our new businesses in order to provide optimal solutions that maximize customer asset value (industrial facilities). We will also advance our new workflow from the concept stage to the implementation stage, creating new value and improving results, by cultivating a culture and mindset unbound by conventional beliefs.

### Strategy



### Chiyoda's Digital Transformation

- Launch of Innovative Digital Products**  
 We will deliver innovative solutions that maximize customer asset value by combining AI and digital technologies with engineering and project execution expertise cultivated over many years.
  - Promotion of Digital EPC**  
 We will incorporate the latest digital technologies into our core EPC business to improve our competitiveness.
  - Innovation of Work Processes**  
 We will digitalize our work processes to advance workstyle reforms and health and productivity management.
- The three initiatives outlined above are our digital transformation goals. We will be aggressive in our approach to simultaneously promote and integrate these initiatives toward realizing our Medium-Term Management Plan (Chiyoda's Revitalization Plan).

### Initiatives to Fast-Track Digital Transformation

Strategies	Specific Measures
Launch Innovative Digital Products	<ul style="list-style-type: none"> <li>Develop products that facilitate the optimization and autonomy of plant operation and maintenance</li> <li>Tap into new markets and customers with the EFEXIS™ brand</li> <li>Expedite the profitability of proven products</li> </ul>
Promote Digital EPC (Strengthen EPC execution capabilities)	<ul style="list-style-type: none"> <li>Upgrade construction execution capabilities through Chiyoda AWP*1</li> <li>Realize a 20% improvement in work efficiency through the digitalization of engineering, procurement, and construction and by implementing RPA*2</li> <li>Automate selected engineering activities</li> <li>Optimize work processes on construction sites through the use of drones and beacons</li> <li>Improve safety and work quality</li> </ul>
Innovate Work Processes	<ul style="list-style-type: none"> <li>Reinforce IT infrastructure through a new joint venture company (established in October 2020) with IT giant TIS Inc.</li> <li>Implement Companywide digitalization and RPA*2 to achieve a 20% improvement in work efficiency</li> <li>Promote workstyle reforms</li> </ul>

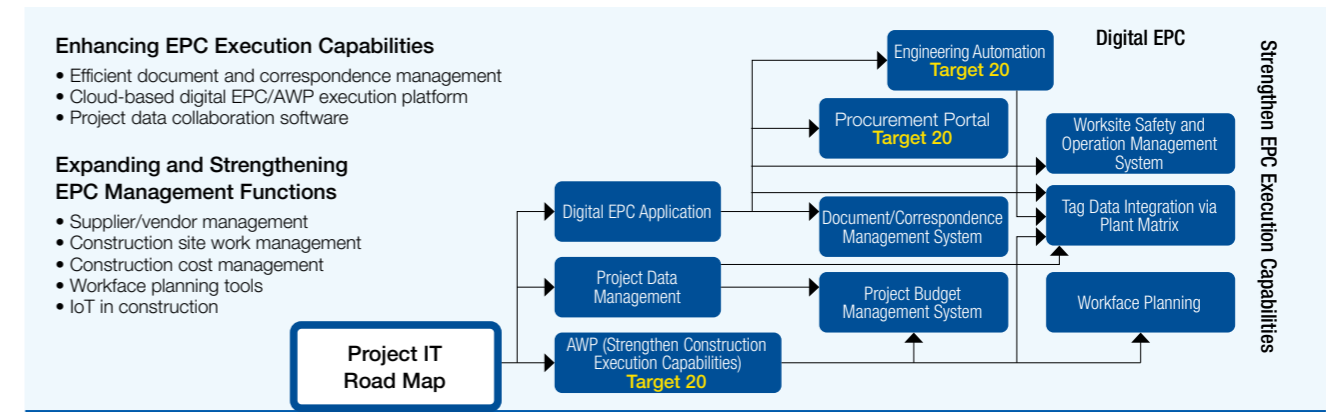
\*1 Advanced Work Packaging: A project management tool using digital technology whereby construction work is "packaged" through integrated management to optimize the EPC process from engineering and procurement to commissioning, completion, and handover

\*2 Robotic Process Automation

## Digital EPC Road Map

We will enhance EPC competitiveness through Chiyoda AWP and boost our EPC execution capabilities while improving work efficiency.

### Digital EPC Road Map



## Launching Innovative Digital Products with the EFEXIS™ Brand

Engineering × Digital = EFEXIS™  
Creating a new standard to unleash untapped potential

"EFEXIS™" is an abbreviation for EFFICIENCY and EXPERTISE. Chiyoda launches digital products that optimize the operation and maintenance of industrial facilities utilizing EFEXIS™. By streamlining the operation and maintenance of industrial

facilities through EFEXIS™, we will provide optimal labor saving, automation, remote operation, and safety solutions that enhance customer asset value.

### EFEXIS™ Product Portfolio

Improve Performance	Improve Availability	Enhance Operation & Maintenance
<ul style="list-style-type: none"> <li>LNG Plant AI Optimizer™</li> <li>Refinery Process Unit Optimizer</li> <li>Distillation Column Operation Optimizer</li> <li>Fired Heater Optimizer</li> </ul>	<ul style="list-style-type: none"> <li>Anomaly Prediction</li> <li>Failure Prediction</li> <li>Intelligent Furnace</li> <li>Furnace Coking Prediction</li> </ul>	<ul style="list-style-type: none"> <li>Tank Corrosion Monitoring</li> <li>Gas Leak Detection</li> <li>SDM Control Tool</li> <li>Inspection Work Support and Automation Tool</li> </ul>
Improve yield, efficiency, and output by optimizing the performance of plants and facilities, thereby increasing revenue	Improve availability through the prediction of plant failure and damage, enabling rapid intervention, and ultimately increasing revenue and margins	Enhance operation and maintenance by improving the efficiency of daily maintenance and shutdown maintenance, and reducing operational risk and waste

### Expediting the Profitability of Proven Products

LNG Plant AI Optimizer™, part of our EFEXIS™ product portfolio, was adopted at an LNG plant in Indonesia and led to improved production efficiency and increased LNG output, demonstrating how Chiyoda products are improving customer industrial facilities worldwide.

Please refer to the website below for details on our digital transformation and EFEXIS™.

<https://www.efexis.com/en>

# Frontier Business



## Redefining Engineering Value

Our world is facing challenges from social and business sustainability risks, such as the paradigm shift to a circular economy (including carbon recycling), incurable diseases, a changing business environment, and technological know-how shifting toward younger generations. We will ambitiously pursue new systems and solutions to address these issues by redefining our engineering value.

**Tomonori Hirata**  
Division Director,  
Frontier Business Division

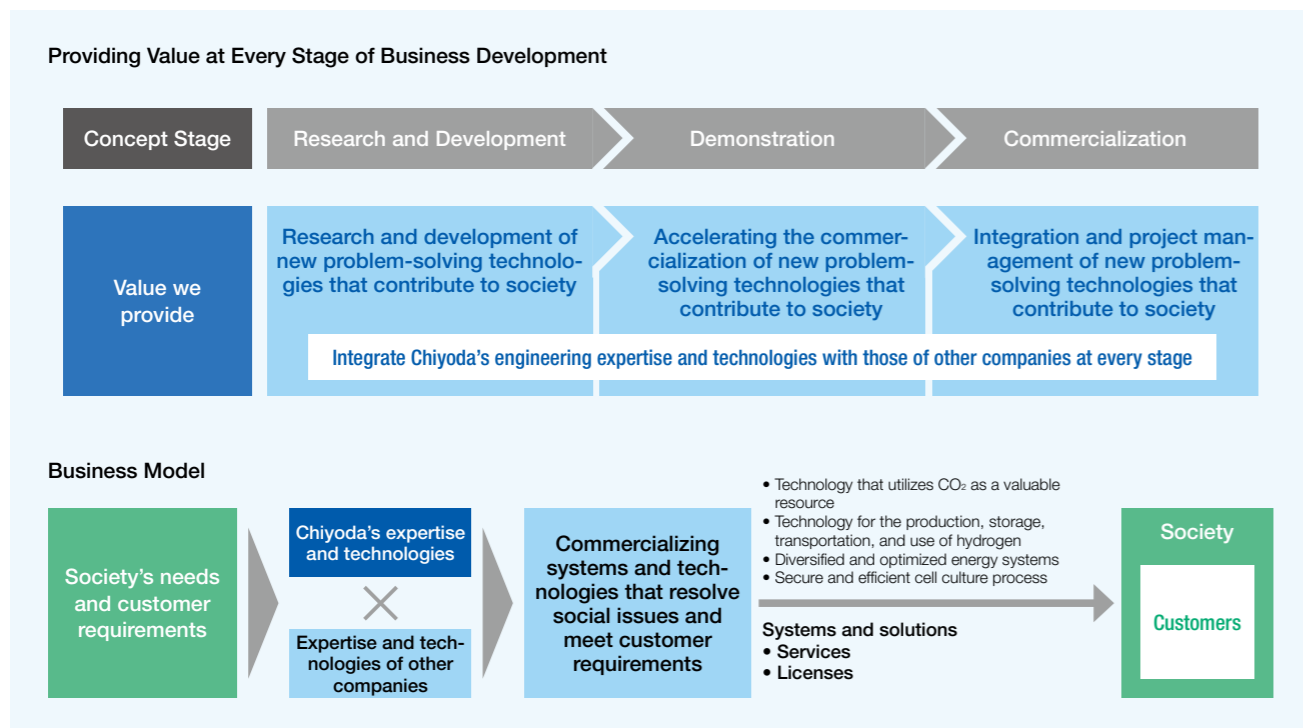
## Strategy

Our strategic fields are hydrogen and carbon recycling, the diversified compound utility business, which is aimed at meeting the demands of the new data-driven era, and pharmaceuticals and life science. Specifically, we will strive to develop

CO<sub>2</sub> as a valuable resource, establish an international hydrogen supply chain, integrate engineering expertise with AI and digital technologies to optimize energy efficiency, and commercialize cell culture technology toward regenerative medicine.

## Business Model

We will contribute to society by integrating technologies to deliver innovative solutions that meet society's needs and customer requirements.



## Value We Aim to Provide

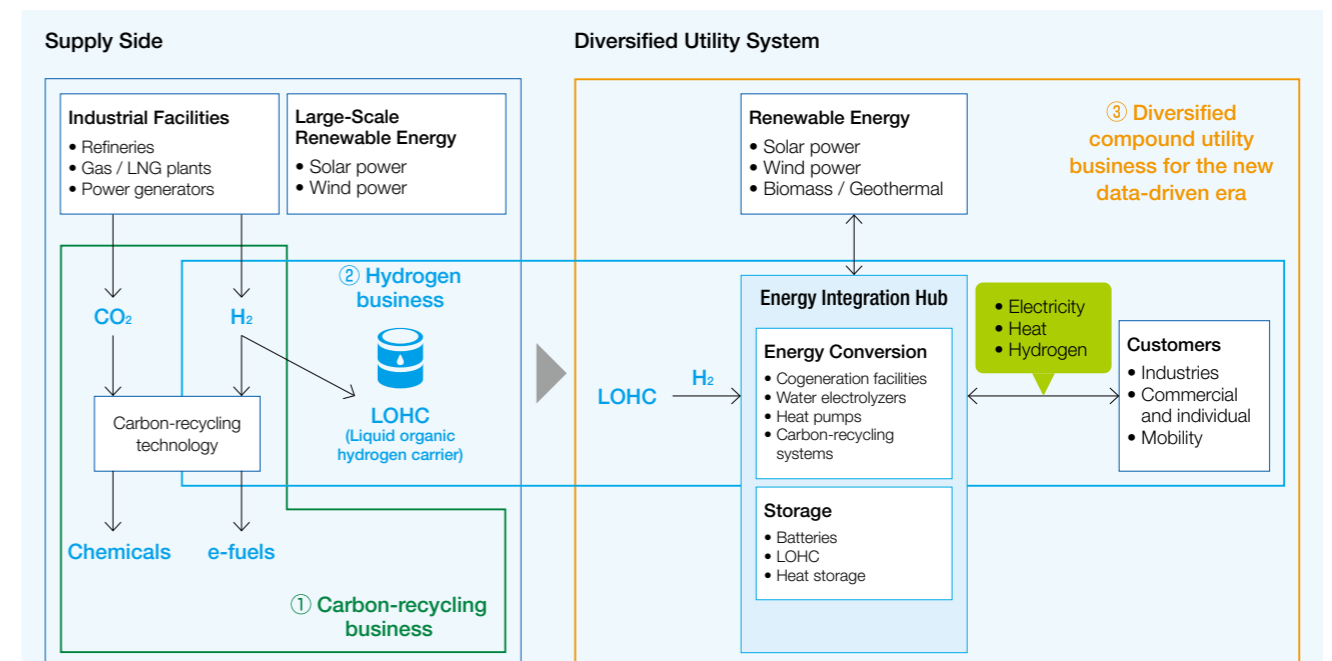
Chiyoda will leverage its engineering expertise to resolve issues related to the environment and energy, the sustainability of business and society, and life science.



## Contributing to a Sustainable Society

Our initiatives in the strategic fields of hydrogen and carbon recycling and the diversified compound utility business, which is aimed at meeting the demands of the new data-driven era, are organically linked, centered on Chiyoda's hydrogen technology.

By combining our expertise, networks and technology with partners, we will develop a business that provides stable company profits and supports a sustainable society.



# ESG Initiatives

In this section, we describe the Chiyoda Group's management structure for facilitating sustainable growth and the key issues and specific initiatives to realizing a sustainable society.

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# Message from the CSO

## Realizing a Sustainable Society

Founded in 1948 with the ideology of “serving society through technology,” the Chiyoda Group contributes to resolving global issues based on a corporate philosophy of “Energy and Environment in Harmony.”

Innovative solutions are required to meet the significant changes taking place in our social environment and resolve the issues highlighted by the United Nations SDGs\*1 in 2015, among which climate change is the highest priority. Chiyoda announced its support for the TCFD\*2 recommendations in 2019 and launched a scenario analysis according to the TCFD framework. While society undergoes a paradigm shift to low-carbon energy, the scenario analysis confirmed the impact of our contributions to resolving social issues through technology and creating new businesses while growing our Environmental Business and Energy Business.

Of the 17 SDGs, Chiyoda designated “affordable and clean energy,” “industry, innovation and infrastructure,” and “climate action” as goals closely related to our business and as priority issues to enhance our corporate value.

Seizing upon the drastic changes taking place in its social and business environments, Chiyoda will redefine engineering value and apply digital innovation technology in its mission to realize a sustainable society that balances social and economic value.

## Striving for Fair Corporate Management and Becoming a Reliable Company

Ensuring transparent corporate management based on fair terms and conditions is essential as we advance our business. Chiyoda became a signatory to the UN Global Compact\*3 in 2012, and develops its business in accordance with principles related to human rights, labor, the environment, and anti-corruption. Compliance is our top priority and we have appointed a new Chief Compliance Officer (CCO), to ensure we adhere to fair business practices in our operations and that business partners and suppliers similarly comply with laws and regulations.

Through our EPC execution expertise, commercialization of new technology, with a broad-minded approach, the Chiyoda Group will continue to earn the trust of stakeholders and society as an integrated engineering company that shapes the future of energy and the global environment.



**Masaji Santo**  
Representative Director,  
President, COO & CSO

\*1 SDGs (Sustainable Development Goals): A set of international goals adopted at the UN Summit in September 2015 to be realized by 2030

\*2 TCFD (The Task Force on Climate-related Financial Disclosures): An international organization created by the Financial Stability Board (FSB) in 2016 to improve and increase reporting of climate-related financial information

\*3 UN Global Compact: An initiative proposed by Kofi Annan, then UN Secretary-General, at the 1999 World Economic Forum, requesting company adherence to 10 principles related to human rights, labor, the environment, and anti-corruption

# CSR Values

The Chiyoda Group strives to be invaluable to society and trusted by its customers and other stakeholders. Our CSR serves as a set of shared values to promote harmony between the global environment and economic and social activities.

The Company’s day-to-day business activities, including Environmental, Social and Corporate Governance (ESG), are conducted transparently through open dialogue for the benefit of all stakeholders.

### CSR Values: Our Shared Values

	ESG	Society's Needs and Customer Requirements	Initiatives
<b>1. A Reliable Company</b> We strive to be a reliable company for our customers and stakeholders by providing world-class technologies and expertise.	E S G	—	—
<b>2. Environmental Initiatives</b> We strive to remain invaluable to society by utilizing technologies that promote harmony between the global environment and economic and social activities.	E	Climate change Biodiversity Pollution and resources Supply chain / Green procurement	<b>Environmental Initiatives</b> • TCFD initiatives <b>P.54</b> • Projects for harmonizing with the environment <b>P.55</b> • Initiatives toward realizing a hydrogen-based society <b>P.56–57</b>
<b>3. Social Contributions</b> Through our engineering expertise, we contribute to local communities and address global issues, including human resource development, technology transfer, and environmental protection.	S	Responsibility to customers Safety and quality Trust Contributing to local communities	<b>Social Initiatives</b> • Safety management <b>P.58–59</b> • Social contribution activities <b>P.61</b>
<b>4. Respect for Human Rights</b> We are dedicated to respecting human rights through a corporate culture that respects employee diversity, individuality and character, where people are motivated to do their best and of which employees and their families are proud.	S	Health Human rights Labor standards	<b>Social Initiatives</b> • Employee health and productivity management <b>P.60</b> • Global human resource development <b>P.62–63</b>
<b>5. Commitment to Fairness</b> We are dedicated to achieving even greater transparency and stability by conducting our operations in accordance with the highest ethical standards.	G	Compliance Corporate governance Risk management	<b>Governance Initiatives</b> • Corporate governance <b>P.44–51</b> • Compliance <b>P.52–53</b>

Please refer to the website below for details on CSR Values 1–5.

➔ <https://www.chiyodacorp.com/en/csr/csr/value/value1/>

# Initiatives for Sustainability

## Vision

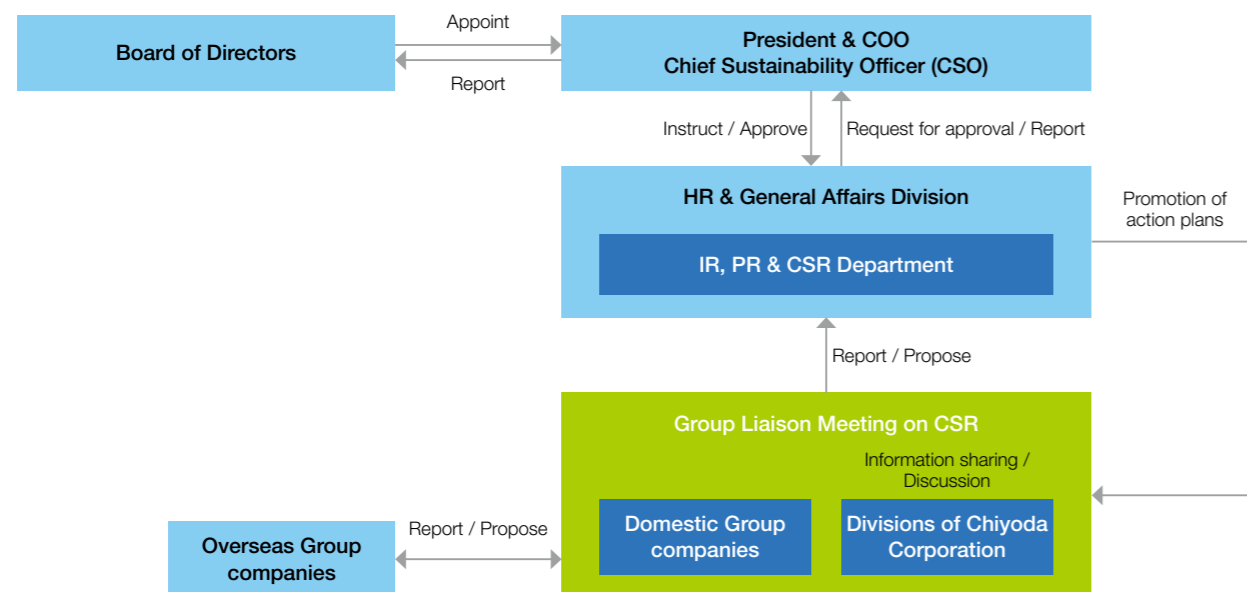
To realize medium- to long-term growth, a company's business must be sustainable. As the circumstances surrounding global society increase in complexity, we must quickly identify the changes in our business environment and adapt appropriately. The Chiyoda Group will draw on its engineering capabilities to contribute to resolving the global issues identified by the Paris Agreement, the Sustainable Development Goals (SDGs), and the Task Force on Climate-related Financial Disclosures (TCFD) and provide social and economic value in the pursuit of a sustainable society.

## Promotion Structure

Through a resolution of the July 2019 Board of Directors' meeting, the Company appointed the President & COO as Chief Sustainability Officer (CSO). The IR, PR & CSR Department of the Company is responsible for all CSR-related activities. We have established a Group Liaison Meeting on CSR,\* which includes the participation of the Division Director of the Corporate Management Division and those responsible for sustainability in each division and Group company, to

promote sustainability throughout the Group. The Group Liaison Meeting on CSR discusses sustainability and CSR issues. Through such efforts, we are promoting Groupwide CSR activities. CSR policies and other significant matters are proposed to the CSO, who reports to the Board of Directors.

\* A meeting held to exchange internal and external information on CSR activities at the Company and domestic Group companies and to discuss CSR-related themes. The IR, PR & CSR Department serves as the secretariat of the liaison meeting.



## Priority Issues (Materiality) and Selected SDGs

The Company has identified "affordable and clean energy," "industry, innovation and infrastructure," and "climate action" as its three issues of priority (materiality) and selected SDGs from the 17 adopted by the United Nations in 2015 as a set of

universally shared global targets. These priorities are closely tied to our business and are therefore determined material to enhancing corporate value and contributing to a sustainable society.



## Identifying Priority Issues

### STEP 1 Selecting business fields and issues

We identified the SDGs that are achievable by the Company through HSE\*/CSR target sheets, questionnaires, and workshops at Group companies.

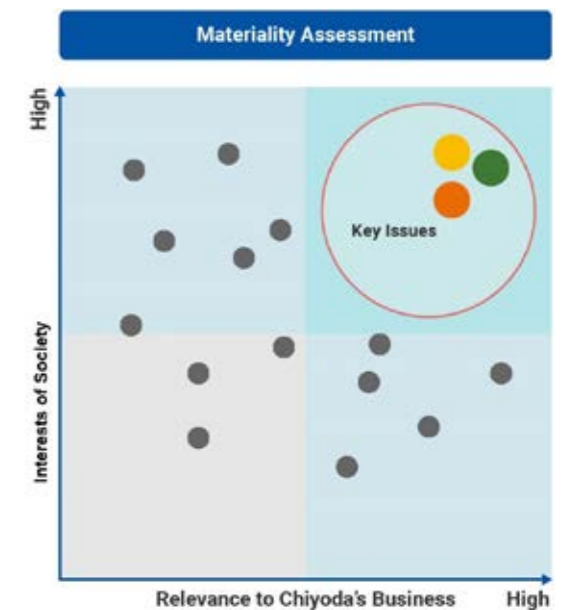
### STEP 2 Narrowing down key performance indicators (KPIs) and materiality

We compiled an extensive list of issues identified in STEP 1 and mirrored them with our Medium-Term Management Plan. Upon assessing their degree of impact on society and our business, we identified the issues of highest priority.

### STEP 3 Determining priority issues for sustainability

The priority issues identified in STEP 2 were discussed and assessed by the Group Liaison Meeting on CSR, and the results were approved by the CSO.

\* Health, Safety, Environment



# Corporate Governance



## Basic Principles

Chiyoda envisions a management that maintains the trust and empathy of all its stakeholders, including shareholders, customers, business partners, creditors, employees and local communities. This philosophy is the basis of our corporate activities and we are working to continue strengthening Chiyoda's business foundations, ensuring sound and

transparent operations with the objective of realizing sustainable growth over the medium to long term. We uphold the continued strengthening of corporate governance and the development and reinforcement of an internal control system as material issues and strive to put these into practice.

### Governance Structure (As of June 25, 2020)

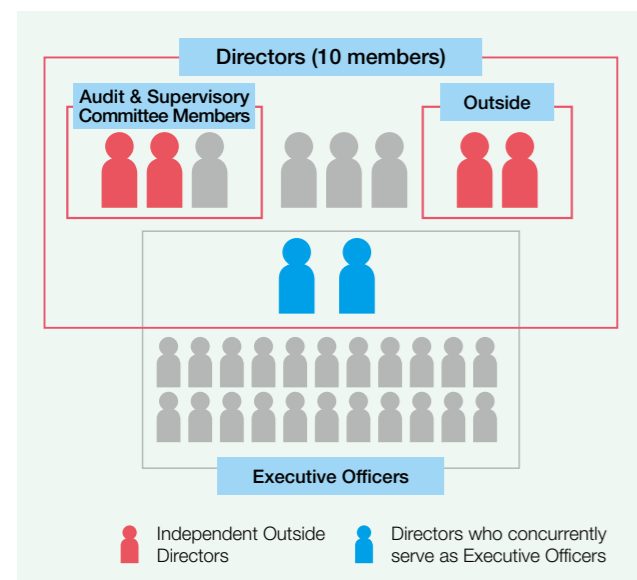
Organizational Structure	Company with Audit & Supervisory Committee
Executive Officer System	Yes
Number of Directors Of Whom, Outside Directors (Independent Directors)	10 4 (4 Independent Directors)
Term of Office (Excluding Members of the Audit & Supervisory Committee)	One year
Number of Audit & Supervisory Committee Members Of Whom, Outside Directors	3 2
Number of Board of Directors' Meetings Held (Fiscal 2019)	17
Number of Audit & Supervisory Committee Meetings Held (Fiscal 2019)	14
Remuneration System for Directors and Audit & Supervisory Committee Members	<ul style="list-style-type: none"> <li>Directors (excluding those who are Audit &amp; Supervisory Committee Members): Base remuneration (according to roles and responsibilities), performance-linked remuneration (reflecting the Company's business performance in each term), and remuneration for the purpose of purchasing treasury stock (linked to improvements in the Company's business performance over the long term)</li> <li>Directors who are Audit &amp; Supervisory Committee Members: Base remuneration (according to roles and responsibilities)</li> </ul>

Note: Remuneration for outside directors is only base remuneration.

## Strengthening Corporate Governance

Chiyoda will continue to strengthen its corporate governance.

External monitoring functions	Forty percent of Independent Outside Directors are responsible for monitoring the Company's operations from an external perspective.
Separation of management supervision and business execution	Restriction of Directors who concurrently serve as Executive Officers to the President and CFO to further ensure separation of management supervision and business execution



## Overview of Corporate Governance Structure

During the Ordinary General Meeting of Shareholders held on June 23, 2016, the Company transferred its corporate governance structure from the previous Company with an Audit & Supervisory Board to a Company with an Audit & Supervisory Committee composed of a majority of Outside Directors. Based on this change, Chiyoda now operates a system under

which the Directors who are Audit & Supervisory Committee Members have voting rights to be exercised at the Board of Directors' meetings and are involved in the nomination of Representative Directors and decision-making on overall business execution (excluding decision-making responsibilities delegated to the Directors).

- Chiyoda has appointed four Outside Directors to ensure that its management monitoring function is conducted from an objective and neutral standpoint.
- Chiyoda has enhanced objectivity and transparency and ensured the appropriateness of its processes for appointing and determining the remuneration of Directors through the participation of Independent Outside Directors and Full-Time Audit & Supervisory Committee Members in their decision-making, fulfilling a similar role to that of a voluntary nomination and remuneration committee.

Committee	Composition and Roles/Responsibilities
Board of Directors	<ul style="list-style-type: none"> <li>• 10 Directors, including those who are Audit &amp; Supervisory Committee Members. The Board meeting is held on a monthly basis.</li> <li>• Important management matters are determined and business execution is monitored. Appropriate decision-making and management supervision is ensured based on the objective and neutral perspectives of the Outside Directors.</li> <li>• Matters to be decided include management plans, important matters regarding the organization's human resources, and major investments and loans.</li> </ul>
Executive Advisory Committee	<ul style="list-style-type: none"> <li>• Through a resolution of the Board of Directors, the Company has established the Executive Advisory Committee, composed of Representative Directors who concurrently serve as Executive Officers, the Senior Vice President, and other members of management at a higher level. The Company stipulates the participation of the majority of those members as an advisory body to the President &amp; COO, responsible for business execution of the Company, to enable prompt decision-making on matters related to business execution.</li> <li>• The Committee conducts decision-making on matters concerning business execution adopted by a resolution of the Board of Directors and prior deliberation of matters to be decided by the Board of Directors and reports to the President &amp; COO, responsible for the Company's business execution.</li> </ul>
Audit & Supervisory Committee	<ul style="list-style-type: none"> <li>• Three members (one full time) consisting of two independent officers and one member who has extensive insight into finance and accounting.</li> <li>• The Committee conducts audits on the overall business execution of Directors.</li> <li>• To strengthen its auditing activities, a dedicated staff member has been assigned to assist the Audit &amp; Supervisory Committee with its duties.</li> </ul>

## Development and Management of the Internal Control System

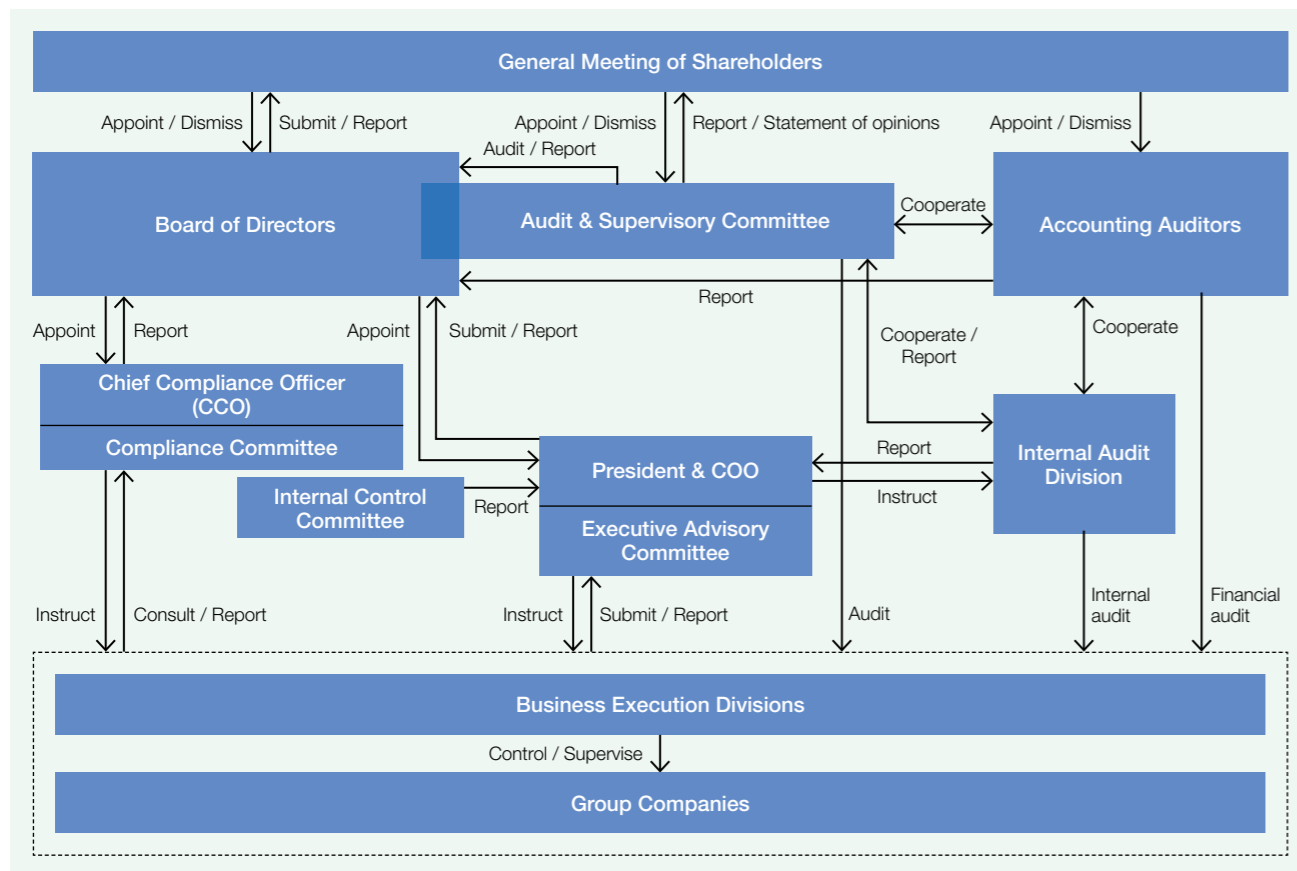
In accordance with laws and regulations, Chiyoda has developed and manages an internal control system to ensure appropriate execution of operations.

- Chiyoda has established an Internal Control Committee that coordinates and summarizes the opinions and proposals of its members.
- At the end of the term or whenever necessary, the Internal Control Committee proposes improvements to internal controls to the President & COO.
- The President & COO, through the Executive Advisory Committee, reviews proposals from the Internal Control Committee, and the Board of Directors makes the necessary decisions on the internal control system.
- To enhance the framework of compliance with laws and regulations, the Company has established the position of Chief Compliance Officer (CCO) and the Compliance Committee.



# Corporate Governance

## Corporate Governance and Internal Control System



## Evaluation of the Effectiveness of the Board of Directors

Chiyoda analyzes and evaluates the effectiveness of the Board of Directors every year. Progress on improvements is confirmed and issues identified are discussed at meetings of the Board of Directors toward further enhancing its effectiveness.

### Initiatives in Fiscal 2019 toward Enhancing the Effectiveness of the Board

Process	<ul style="list-style-type: none"> <li>A questionnaire on the effectiveness of the Board of Directors was provided to all Directors (including those who are Audit &amp; Supervisory Committee Members).</li> <li>Progress on improvements in the issues identified in the previous evaluation was confirmed.</li> <li>Opinions on the current year's evaluation and on further improvements to the Board's effectiveness were exchanged.</li> <li>Results and issues going forward were confirmed by the Board of Directors.</li> </ul>
Questionnaires	<p>Main Items</p> <ol style="list-style-type: none"> <li>1. Composition of the Board of Directors</li> <li>2. Frequency and length of meetings of the Board of Directors</li> <li>3. Matters for resolution by the Board of Directors and relevant materials</li> <li>4. Agenda and management of meetings</li> </ol>
Evaluation of the effectiveness and initiatives going forward	<p><b>Fiscal 2019 Evaluation of the Board of Directors</b></p> <p>A new corporate governance system was introduced, through which the ratio of Outside Directors increased and the selection criteria for proposals to be discussed at meetings of the Board of Directors were revised. As a result, declines in profitability on projects will be controlled at an earlier stage and the risks involved with potential new projects will be managed in a timely and more effective manner.</p> <p><b>Issues to be Addressed in Fiscal 2020</b></p> <p>The business environment is undergoing significant changes, characterized by the stagnant global economy due to the spread of COVID-19 and the drop in gas and crude oil prices as a result of the reduced demand for energy. To address these changes, sufficient information will be provided in a timely manner with the aim of raising the level of information provision to Directors and enabling smooth and prompt decision-making. In these ways, the Company seeks to enhance the discussions at Board meetings from a variety of perspectives.</p>

## Board of Directors

### Principles on Diversity of the Board of Directors

- As of fiscal 2020, Chiyoda's Board of Directors is composed of seven Directors and three Directors who are Audit & Supervisory Committee Members. Through the combination of Outside Directors with experience in their respective fields of expertise and Directors with specialized skills and knowledge in the areas of corporate planning, human resources and corporate affairs, finance & accounting, sales, technology & engineering, legal affairs and project operations, the Board of Directors ensures diversity and balance of knowledge, experience, and ability.
- One of the three Directors who are Audit & Supervisory Committee Members possesses knowledge in finance & accounting.

## Compliance with the Corporate Governance Code

In compliance with the Corporate Governance Code of the Tokyo Stock Exchange, Chiyoda has formulated a Corporate Governance Policy that details its basic views and guidelines on corporate governance and is steadily promoting initiatives to strengthen its corporate governance.

Please refer to the following for details on our corporate governance practices.

Corporate Governance Policy

➔ [https://www.chiyodacorp.com/about/181227\\_GCPE.pdf](https://www.chiyodacorp.com/about/181227_GCPE.pdf)

Corporate Governance Report

➔ [https://www.chiyodacorp.com/about/20190801\\_CGR\\_E.pdf](https://www.chiyodacorp.com/about/20190801_CGR_E.pdf)

Basic Policy on Internal Control System (Japanese only)

➔ [https://www.chiyodacorp.com/about/20200401\\_internal\\_control.pdf](https://www.chiyodacorp.com/about/20200401_internal_control.pdf)

## Corporate Governance

### Status of Audits

#### Audits by Audit & Supervisory Committee

- In addition to the monthly Audit & Supervisory Committee meetings, Audit & Supervisory Committee Members attend other important meetings including meetings of the Board of Directors, Executive Advisory Committee, Internal Control Committee, and Compliance Committee. Members provide opinions on their assessment of any unlawful behavior by Directors regarding the execution of their duties, legal violations, articles of incorporation, or any breaches of due diligence in making decisions.
- Audit & Supervisory Committee Members of the Company's three main domestic subsidiaries coordinate with Audit & Supervisory Committee Members of Group companies through biannual meetings.

#### Internal Audit

An Internal Audit Division has been established to conduct Group company internal audits.

#### Alignment between Internal Audits, Audits by the Audit & Supervisory Committee and Accounting Audits, and Relationship with the Internal Control Division

- To ensure Audit & Supervisory Committee effectiveness, members interview each internal division regarding operations. Meetings are held on a regular basis with the Internal Audit Division and accounting auditors to share information and ensure mutual alignment. Meetings are also held on a regular basis between the Audit & Supervisory Committee, the Internal Audit Division, and accounting auditors.
- Members of the Audit & Supervisory Committee align with accounting auditors and meet regularly for debriefing by accounting auditors, including the annual audit plan debriefing, the quarterly review debriefing, and the year-end audit debriefing.

#### Alignment between the Supervision and Audits by Outside Directors and Outside Audit & Supervisory Committee Members, Internal Audits, Audits by the Audit & Supervisory Committee and Accounting Audits, and Relationship with the Internal Control Division

- Outside Directors (excluding those who are Audit & Supervisory Committee Members)

Outside Directors attended all 17 meetings of the Board of Directors in fiscal 2019. Drawing on their experience and insight in their respective fields of expertise, Outside Directors provided their opinions and recommendations when required, received reports on the status of business execution, including the results of audits by the Audit & Supervisory Committee and accounting audits, and supervised Company operations.

- Outside Audit & Supervisory Committee Members

Through attendance at Audit & Supervisory Committee and Board of Directors' meetings and reports from accounting auditors, Outside Audit & Supervisory Committee Members contribute to the audit reports of the Audit & Supervisory Committee, both directly and indirectly, by receiving reports on accounting audits and internal audits. They provide opinions and recommendations when required, thereby enhancing the effectiveness of audits. Outside Audit & Supervisory Committee Members also ensure appropriate business execution by providing opinions and recommendations on reports by the Internal Control Divisions at meetings of the Board of Directors.

### Directors and Audit & Supervisory Committee Members



**Kazushi Okawa**

Representative Director, Chairman of the Board, CEO & CWO\*1

1980: Joined Mitsubishi Corporation  
 2007: Assistant Manager to Plant and Industrial Machinery Division of Mitsubishi Corporation  
 2008: Assistant to Corporate Plan Implementation Office of the Company  
 2010: Senior Vice President, Division COO of Infrastructure Project Division of Mitsubishi Corporation  
 2012: Senior Vice President, Division COO of Plant Engineering Division of Mitsubishi Corporation  
 2014: Executive Vice President, Group COO of Machinery Group of Mitsubishi Corporation  
 2016: Executive Vice President, Group CEO of Machinery Group of Mitsubishi Corporation  
 2019: Corporate Advisor of Mitsubishi Corporation Representative Director, Chairman of the Board & CEO of the Company  
 2020: Representative Director, Chairman of the Board, CEO & CWO of the Company (current position)



**Masaji Santo**

Representative Director, President, COO\*2 & CSO\*3

1981: Joined Mitsubishi Corporation  
 2009: President of Mitsubishi Chile Ltda. (Santiago)  
 2012: Senior Vice President, Division COO of Environment & Infrastructure Business Division of Mitsubishi Corporation  
 2013: Director of the Company (retired in June 2016)  
 Senior Vice President, Division COO of Infrastructure Business Division and Division COO of Environmental Business Division of Mitsubishi Corporation  
 2015: Senior Vice President, Division COO of Infrastructure Business Division of Mitsubishi Corporation  
 2016: Senior Vice President, Regional CEO for Latin America & the Caribbean of Mitsubishi Corporation  
 2017: Senior Executive Vice President of the Company Representative Director, President & CEO of the Company  
 2019: Representative Director, President, COO & CSO of the Company (current position)



**Koji Tarutani**

Representative Director, Executive Vice President & CFO,\*4 Division Director, Finance & Accounting Division

1986: Joined The Mitsubishi Bank, Ltd.  
 2012: General Manager of Corporate Business Risk Management Division and General Manager (Special Assignment) of Global Compliance Division of The Bank of Tokyo-Mitsubishi UFJ, Ltd.  
 2014: General Manager of Credit Examination Office of Internal Audit Division of The Bank of Tokyo-Mitsubishi UFJ, Ltd.  
 2016: General Manager (Special Assignment) of Internal Audit Division of Mitsubishi UFJ Financial Group and General Manager of Credit Examination Office of Internal Audit Division of The Bank of Tokyo-Mitsubishi UFJ, Ltd.  
 General Manager of Legal Division of Mitsubishi UFJ Financial Group and General Manager of Legal Division of The Bank of Tokyo-Mitsubishi UFJ, Ltd.  
 2019: Senior Advisor of the Company Representative Director, Executive Vice President, CFO and Division Director of Finance & Accounting Division of the Company (current position)



**Tsunenori Kazama**

Director

1976: Joined the Company  
 2005: Project Manager for RGX6 Team of the Company  
 2014: Project Sponsor for Jangkrik FPU Project of the Company  
 2016: Project Sponsor for Yamal LNG Project of the Company  
 2018: Project Director for Tangguh LNG Project of the Company  
 2019: Strategic Project Development Department, Energy Project Operations Division of the Company  
 Director of the Company (current position)



**Aiichiro Matsunaga**

Director

1986: Joined Mitsubishi Corporation  
 2013: General Manager of Power Systems International Dept., New Energy & Power Generation Division of Mitsubishi Corporation  
 2014: President of Mitsubishi Corporation do Brasil S.A., Sao Paulo (concurrently), Deputy Regional CEO of Latin America and the Caribbean of Mitsubishi Corporation  
 2017: Senior Vice President of Mitsubishi Corporation, Regional CEO of Latin America and the Caribbean, Sao Paulo (concurrently), President of Mitsubishi Corporation do Brasil S.A.  
 2018: Senior Vice President, Regional CEO of Latin America and the Caribbean of Mitsubishi Corporation (concurrently), President of Mitsubishi Corporation do Brasil S.A.  
 2019: Executive Vice President, Group CEO of Industrial Infrastructure Group of Mitsubishi Corporation (current position)  
 Director of the Company (current position)



**Nobuo Tanaka**

Outside Director\*5

1973: Joined Ministry of International Trade and Industry (currently Ministry of Economy, Trade and Industry)  
 1991: Director of Directorate for Science, Technology and Engineering of Organisation for Economic Cooperation and Development (OECD)  
 1995: Director, Industrial Finance Division of Industrial Policy Bureau of Ministry of International Trade and Industry  
 1998: Minister of Embassy of Japan in the United States of America, Ministry of Foreign Affairs of Japan  
 2000: Vice President of Research Institute of Economy, Trade and Industry  
 2002: Director-General, Multilateral Trade System Department of Trade Policy Bureau of Ministry of Economy, Trade and Industry  
 2004: Director of Directorate for Science, Technology and Industry of OECD  
 2007: Executive Director of International Energy Agency  
 2012: Outside Audit & Supervisory Board Member of TEIJIN LIMITED (current position)  
 2013: Outside Audit & Supervisory Board Member of INNOTECH CORPORATION (current position)  
 2015: President of The Sasakawa Peace Foundation Director of the Company (current position)  
 2016: Chairman of The Sasakawa Peace Foundation (current position)



**Hiroshi Yamaguchi**

Outside Director\*5

1975: Joined Tokyo Electric Power Company  
 2005: Executive Officer, General Manager of Engineering Department, Electric Power Distribution Division of Tokyo Electric Power Company  
 2006: Executive Officer, Deputy General Manager of Electric Power Distribution Division of Tokyo Electric Power Company  
 2007: Managing Director, Deputy General Manager of Electric Power Distribution Division of Tokyo Electric Power Company  
 2012: Director, Representative Executive Vice President and General Manager of Electric Power Distribution Division of Tokyo Electric Power Company  
 2013: Director, Representative Executive Vice President of Tokyo Electric Power Company  
 2014: Representative Executive Vice President and Chief Engineer of Tokyo Electric Power Company  
 2016: Representative Executive Vice President and Chief Engineer, Safety Management of Tokyo Electric Power Company Holdings, Inc.  
 2017: Chairman of Kanto Electrical Safety Services Foundation (current position)  
 2018: Director, Audit & Supervisory Committee Member of the Company  
 2019: Director of the Company (current position)



**Takahiro Kitamoto**

Full-Time Audit & Supervisory Committee Member

1982: Joined Mitsubishi Corporation  
 2000: Risk Management Dept. of Mitsubishi Corporation  
 2008: CFO of Mitsubishi Corporation China Co., Ltd. and CFO of Mitsubishi Corporation (Shanghai) Ltd.  
 2011: General Manager of Administration Dept., Industrial Finance, Logistics & Development Group of Mitsubishi Corporation  
 2013: Planning Manager of Business Development and Promotion Division of JAPAN POST Co., Ltd.  
 2014: Assistant Manager of Corporate Staff Section of Mitsubishi Corporation  
 2015: Deputy General Manager of Mitsubishi Corporation (Taiwan) Ltd.  
 2018: Senior Advisor of the Company Director of the Company (Full-Time Audit & Supervisory Committee Member) (current position)

## Corporate Governance



**Mika Narahashi**  
Outside Audit & Supervisory Committee Member\*5

2000: Registered as a lawyer (Tokyo Bar Association)  
2003: Joined Anderson Mori & Tomotsune  
2007: Joined Investment Banking Division of Deutsche Securities Inc.  
2009: Joined American Life Insurance Company (currently MetLife, Inc.)  
Senior Manager of Legal Affairs Department of American Life Insurance Company  
2015: Joined AIG American Home Assurance Company, Ltd.  
Head of Legal Affairs Office of AIG American Home Assurance Company, Ltd.  
2017: Senior Partner of TH Law Office (current position)  
2018: Director of the Company (Audit & Supervisory Committee Member) (current position)



**Hisashi Ito**  
Outside Audit & Supervisory Committee Member\*5

1983: Joined The Mitsubishi Trust and Banking Corporation  
2005: General Manager, Money Market Activities Division, Mitsubishi Trust and Banking Corporation  
2010: General Manager, London Branch, Mitsubishi UFJ Trust and Banking Corporation  
Executive Officer, General Manager, London Branch, Mitsubishi UFJ Trust and Banking Corporation  
2012: Managing Executive Officer, Mitsubishi UFJ Trust and Banking Corporation  
2013: Managing Director, Mitsubishi UFJ Trust and Banking Corporation  
2015: Senior Managing Director and CIO, Mitsubishi UFJ Trust and Banking Corporation  
2016: Director, Senior Managing Executive Officer and CIO  
2017: Representative Director, President, The Master Trust Bank of Japan, Ltd.  
2019: Representative Director and Chairman, Mitsubishi UFJ Trust Systems Co., Ltd. (current position)

- \*1 Chief Wellness Officer
- \*2 Chief Operating Officer
- \*3 Chief Sustainability Officer
- \*4 Chief Financial Officer
- \*5 Outside Director as stipulated in Article 2, Item 15 of the Companies Act

## Executive Officers

**Masaji Santo**

President (COO & CSO)

**Koji Tarutani**

Executive Vice President (CFO)

**Fuminori Hasegawa**

Executive Vice President (CRO\*)

**Masao Ishikawa**

Executive Vice President

**Yasumitsu Abe**

Senior Vice President (CCMO\*)

**Shuichi Wada**

Senior Vice President (CCO\*3 & CHRO\*4)

**Masao Fujiwara**

Senior Vice President

**Setsuo Iuchi**

Senior Vice President

**Terunobu Iio**

Senior Vice President

**Hiroyuki Shimizu**

Senior Vice President

**Hideo Matsui**

Senior Vice President

**Toshiya Momose**

Senior Vice President (CDO\*5)

**Nobuyuki Uchida**

Vice President

**Toshiaki Furugori**

Vice President

**Masaki Kadono**

Vice President

**Masakazu Fujiwara**

Vice President

**Munetaka Horiguchi**

Vice President

**Yasuyuki Maeda**

Vice President

**Junichi Kunihiro**

Vice President

**Kenichi Ishiguro**

Vice President

**Norimasa Matsuoka**

Vice President

- \*1 Chief Risk Management Officer
- \*2 Chief Construction Management Officer
- \*3 Chief Compliance Officer
- \*4 Chief Human Resources Officer
- \*5 Chief Digital Officer

**Reason for Appointing Outside Director**

Name	Reason for Appointment	Reason for Designation as Independent Officer
Nobuo Tanaka	Mr. Tanaka is expected to perform his duties appropriately as an Outside Director by drawing on his extensive experience and knowledge gained from his service at the International Energy Agency and other international organizations.	They are not involved in matters that are likely to result in a conflict of interest with general shareholders and are deemed Outside Directors with no conflict of interest with general shareholders.
Hiroshi Yamaguchi	Mr. Yamaguchi is expected to perform his duties appropriately as an Outside Director by leveraging his extensive knowledge of the energy industry and experience as a Director, Representative Executive Vice President, and General Manager of the Electric Power Distribution Division of Tokyo Electric Power Company.	
Mika Narahashi	Ms. Narahashi is expected to contribute to ensuring effective management by conducting audits from a specialized and objective standpoint as a lawyer and an expert in corporate law.	
Hisashi Ito	Mr. Ito is expected to utilize his experience as Director and Senior Managing Executive Officer of Mitsubishi UFJ Trust and Banking Corporation, President and Representative Director of The Master Trust Bank of Japan, Ltd., and Representative Director and Chairman of Mitsubishi UFJ Trust System Co., Ltd. in the auditing of management.	

## Director Remuneration System

<b>Basic policy and approval at the General Meeting of Shareholders</b>	The Company's Director remuneration system aims to strengthen the link with the Company's business performance, share value with shareholders, and enhance motivation and morale toward improving business results. The system was approved by resolution at fiscal 2015 Ordinary General Meeting of Shareholders held on June 23, 2016.
<b>Composition of remuneration system</b>	Director remuneration consists of the following three types: <ul style="list-style-type: none"> <li>• Base remuneration (according to roles and responsibilities)</li> <li>• Performance-linked remuneration (reflecting the Company's business performance in each term) The Company has adopted short-term performance indicators, such as net income attributable to owners of the parent and dividends, to strengthen incentives for enhancing the Company's business performance in the short term.</li> <li>• Remuneration for the purpose of purchasing treasury stock (linked to improvements in long-term corporate value) The Company has adopted remuneration linked to improvements in the Company's share price to strengthen incentives for enhancing the Company's business performance over the long term.</li> </ul>
<b>Process</b>	<ul style="list-style-type: none"> <li>• Remuneration for individual Directors is decided by the Board of Directors based on remuneration criteria resolved at meetings of the Board of Directors each year within the framework of total remuneration determined at the General Meeting of Shareholders and following discussion among Representative Directors regarding management content and economic conditions as well as each individual's annual evaluation.</li> <li>• To enhance the objectivity and transparency and ensure the appropriateness of decision-making processes, the opinions of Independent Outside Directors and Full-Time Audit &amp; Supervisory Committee Members are heard through their participation in discussions. In addition, the structure of the remuneration system is reviewed as necessary by the Board of Directors.</li> </ul>

	Classification	Remuneration principles	Overview of remuneration system
Directors (excluding those who are Audit & Supervisory Committee Members)	Base remuneration	According to roles and responsibilities	No more than ¥300 million per annum
	Performance-linked remuneration	Reflecting the Company's business performance in each term	An amount equivalent to no more than 1% of net income attributable to owners of the parent and up to ¥200 million per annum, taking into account qualitative factors such as levels of net income attributable to owners of the parent and dividends and progress toward the achievement of management objectives.
	Remuneration for the purpose of purchasing treasury stock	Linked to improvements in the Company's business performance over the long term	An amount equivalent to no more than ¥90 million per annum is paid to Directors who are not Audit & Supervisory Committee Members (excluding Outside Directors) who can acquire the Company's treasury stock through the Directors' shareholding association.
Directors who are Audit & Supervisory Committee Members	Base remuneration	According to roles and responsibilities	Up to ¥84 million per annum

**Total Amount of Remuneration by Director Classification, Total Amount of Remuneration by Type, and Number of Directors Eligible**

	No. of persons	Base remuneration (millions of yen)	Performance-linked remuneration (millions of yen)	Remuneration for the purpose of purchasing treasury stock (millions of yen)
Directors (excluding those who are Audit & Supervisory Committee Members)	12	115	13	28
Directors who are Audit & Supervisory Committee Members	4	56	(not applicable)	(not applicable)

- Notes: 1. Total remuneration for Directors who are not Audit & Supervisory Committee Members is ¥156 million and for Directors who are Audit & Supervisory Committee Members is ¥56 million. Total remuneration for Outside Directors and Outside Audit & Supervisory Committee Members (two Outside Directors, three Outside Audit & Supervisory Committee Members) is ¥51 million.  
2. The above numbers of persons represent the number of Directors and Audit & Supervisory Committee Members to whom remuneration was paid during the fiscal year under review, including seven Directors (including Directors who are Audit & Supervisory Committee Members) who retired as of the conclusion of the 91st Ordinary General Meeting of Shareholders held on June 25, 2019.  
3. One of the Directors is receiving remuneration, etc., from a subsidiary.

# Compliance



Based on our conviction that a company's business activities are underpinned by the trust of society and its customers, the Chiyoda Group has positioned compliance as a core value. We are proactively enhancing our compliance education and training programs to prevent unlawful and fraudulent acts, while continuing to reinforce our compliance systems to ensure early detection and facilitate a swift response. We are working to further strengthen compliance initiatives throughout the Group.

## The Group's Compliance System

### • Organizational Structure

The Chief Compliance Officer (CCO), appointed by the Board of Directors, is responsible for overseeing compliance in all divisions. Division Directors serve as Compliance Officers and are responsible for policies and implementing measures related to compliance in their respective division. A Group company representative serves as the Group Company Compliance Officer and is responsible for policies and implementing measures related to compliance throughout the Group.

### • Code of Conduct

We have formulated the Chiyoda Group Code of Conduct and Conduct Guidelines to ensure that our business activities conform to social standards. We have also established a written declaration pledging our commitment that all officers and employees will adhere to the code and will comply with national and international laws and regulations and our own internal rules.

## Enhancing Compliance Awareness and Knowledge

We implement initiatives to prevent unlawful and fraudulent acts and work to enhance executive and employee compliance knowledge and awareness.

### Main Initiatives

Details of initiatives	Number of times held
E-learning	One time (fiscal 2019)
Issuance of email newsletter	Once every month (news, topics, trivia, etc., related to compliance)
Seminar	Seven times (fiscal 2019, theme: Bribery prevention and harassment)
Distribution of "Chiyoda Compliance Handbook"	Distributed to executives and employees, including to those at domestic Group companies

## Internal Whistleblowing System

We have implemented a whistleblowing system within the Group and have established external hotlines in Group companies (to lawyers, external specialists) to serve as a point of contact to report unlawful and fraudulent acts, enabling early resolution and preventing recurrence. We have also

distributed "internal whistleblowing cards," in English and Japanese, to raise awareness of the internal whistleblowing system and indicate the points of contact inside and outside the Group for executives and employees.

### Consultations Provided and Whistleblowing Reports Received in Fiscal 2019

#### By points of contact for consultations and whistleblowing

Points of contact	Number of consultations provided and whistleblowing reports received in fiscal 2019
Points of contact for consultations and whistleblowing common to Headquarters and Group companies (external points of contact: including lawyers)	77
Group companies' points of contact for consultations and whistleblowing	8
External points of contact (external specialists) in Group companies	13
<b>Total</b>	<b>98</b>

#### By content (number of whistleblowing reports received by the Group's points of contact)

Category	Number of consultations provided and whistleblowing reports received in fiscal 2019
Legal violations and bribery (including cartel and concerns)	0
Violation of internal rules	5
Power harassment (including consultations, canceled items, and concerns)	5
Sexual harassment and pregnancy discrimination	15
Workplace environment	33
Other consultations	40
<b>Total</b>	<b>98</b>

Please refer to the following for details on Group compliance.

<https://www.chiyodacorp.com/en/csr/risk-management/compliance/initiatives.html>



Discussion held in a harassment-prevention seminar

# Environmental Initiatives



In keeping with our corporate philosophy of “Energy and Environment in Harmony,” the Chiyoda Group actively pursues climate change solutions. As an integrated engineering company, we deliver innovative technology and proactively engage in initiatives to reduce CO<sub>2</sub> emissions. In this section, we provide an overview of our environmental activities.

## TCFD Initiatives

In 2019, the Company declared its support for the Task Force on Climate-related Financial Disclosures (TCFD) recommendations. We participated in the Ministry of the Environment’s “Project to Analyze Scenarios of Climate Risks and Opportunities in Accordance with TCFD” and conducted scenario analysis on climate change. As we proceed, we will enhance our analysis for use in our management strategies while disclosing information in line with TCFD recommendations.

Please refer to the following for our scenario analysis.

“Practical Guide for Scenario Analysis in Line with the TCFD Recommendations Ver. 2.0” (3-29-3-36) (Japanese only)

→ <http://www.env.go.jp/policy/tcf.html>

### Assumptions under Scenario Analysis

Analytical assumptions	Target
Target year	2040
Scenario	2°C scenario: Promote countermeasures against climate change (example: introduction of carbon tax) 4°C scenario: Without countermeasures (example: no carbon tax)
Reference data	WEO*1 2019 data (unless it does not cover the necessary data)
Sectors	LNG / Green Energy EPC / Non-EPC, such as hydrogen, CCU,*2 and distributed composite utilities
Financial data	Extension of data to 2040, based on business plan disclosed in Medium-Term Management Plan (Revitalization Plan) up to 2023

\*1 World Energy Outlook (WEO), announced by the International Energy Agency (IEA) each fall

\*2 CO<sub>2</sub>: Capture and Utilization (CCU)

### Chiyoda’s Worldview

Scenario	Worldview in 2040
4°C scenario	No promotion of carbon taxes or carbon cycles, and continued dependence on fossil fuels
2°C scenario	Promotion of low carbon and carbon cycles, greater demand for green energy facilities, and accelerated implementation of hydrogen and CCU

### Impact Calculations

A countermeasure policy, based on impact calculations implemented in our business strategies (global environment, digital transformation, redefining Chiyoda’s engineering value)

Items (Impact on the Company)	2°C	4°C	Policy for countermeasures
LNG	→	→	Provision of services that address changes in business structure
Petroleum/fossil fuel plant	→	→	Optimization of customer assets through the use of AI and digital technologies
Hydrogen	→	—	Early entry into markets and securing of market share due to increasing demand for low carbon and carbon cycles
CCU	→	—	
Green energy plant	→	→	Promotion of utility business based on future trends

## Projects for Harmonizing with the Environment

### Construction of the Largest Mega Solar Power Plant in Tokai Region

#### • Contributing to Reductions in CO<sub>2</sub> Emissions

We completed construction of Pacifico Energy’s Toyota Mega Solar Power Plant in Toyota City, Aichi Prefecture, in March 2020, nearly two and a half years after breaking ground in October 2017. With an annual projected power output of 74 million kWh and the ability to generate electricity for approximately 21,000 households, this mega solar power plant is the largest of its kind in the Tokai region spanning Gifu, Aichi, and Mie prefectures. Through the use of cleaner energy in the form of solar power, we will contribute to reducing CO<sub>2</sub> emissions by approximately 40,000 tons\* per year.



Pacifico Energy’s Toyota Mega Solar Power Plant

#### • Preserving the Landscape of Local Communities

In constructing the Toyota Mega Solar Power Plant by the Yahagi River, we worked with local companies to preserve the pristine landscape of the river’s watershed while ensuring the safety of the local community by installing a resilient disaster-prevention facility. As the land consisted of slopes of 20° or greater, we utilized 3D design to ensure that there were no shadows or gaps when installing the solar panels. The project came to fruition through our technological expertise combined with the united efforts of customers, local affiliates, and government agencies.

The Company will continue to work with customers on renewable energy projects in the future to support the goal of a decarbonized society.

\* Source: Pacifico Energy’s news release

→ For related content, please refer to “Global Environment & Green Energy Business” on P.32-33.

### Establishment of the World’s Largest and Most Advanced Storage Batteries

#### • Stable Supply of Renewable Energy

The use of renewable energy generated through solar and wind power is increasing in line with the growing drive toward a decarbonized society. Storage batteries, connected to power systems controlling power generation, energy transmission and distribution, store excess energy for discharge when required and resolve the issue of unfavorable weather conditions and the natural environment adversely affecting the stability of energy supply.

Continuing with this initiative, we are constructing the North Toyotomi Transformer Station Storage Battery System in Toyotomi, Teshio District, Hokkaido, the largest and most advanced energy storage battery system in the world, supplying energy through wind power.



Construction of North Hokkaido Wind Energy Transmission Corporation’s storage battery system

#### • Providing Safety and Security to Local Communities

For this project, we actively participated in festivals and events and worked together with local communities to ensure the safety and security of the area. For example, following the Hokkaido Eastern Iburi earthquake in September 2018, which resulted in the entire region of Hokkaido Prefecture losing power for several days, the site manager acknowledged an urgent request from local dairy farmers and used the generator from the project to provide power, which enabled them to continue working without sustaining too much damage.

As we proceed, we will continue to devote our attention to safety and the environment to support the realization of a sustainable society, while striving to meet customer and community requirements.

→ For related content, please refer to “Global Environment & Green Energy Business” on P.32-33.

Special Feature

# Initiatives toward Realizing a Hydrogen-Based Society



— Achieving a Zero-Emission Society with SPERA Hydrogen® —



Please scan the QR code on the left to watch our short movie on SPERA Hydrogen® technology.

Chiyoda has successfully overcome the challenges of safely storing and transporting large quantities of hydrogen over long distances through the development of a high-performance dehydrogenation catalyst that acquires hydrogen from methylcyclohexane (MCH)\*1 and has registered the technology as “SPERA\*2 Hydrogen®.”

To meet the Paris Agreement target of zero greenhouse gas emissions within the latter half of the 21st century, we have joined forces with business partners from around the world to effectively commercialize technologies producing green hydrogen from renewable energy through our hydrogen supply chain, SPERA Hydrogen®.

## Launch of the World's First Global Hydrogen Supply Chain



Hydrogenation plant in Brunei Darussalam



Dehydrogenation plant in the coastal area of Kawasaki City

Participating in a demonstration project\*3 funded by the New Energy and Industrial Technology Development Organization (NEDO), Chiyoda, as a member of the Advanced Hydrogen Energy Chain Association for Technology Development (AHEAD), commenced transporting hydrogen from Brunei to a dehydrogenation plant at TOA Oil Co., Ltd.'s Keihin Refinery in Kawasaki, Kanagawa Prefecture, to be used at the Mizue Thermal Power Plant. This is the first time that hydrogen has been transported from overseas to Japan for the purpose of generating power and represents a significant step toward achieving a hydrogen-based society.

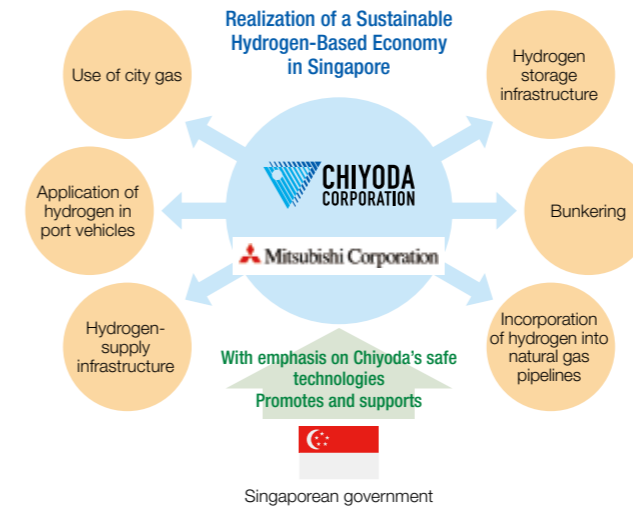
We have incorporated hydrogen, as a power generation fuel, into a global supply chain by transporting MCH from Brunei and separating the hydrogen for energy use in Japan. This may generate large-scale future demand. A hydrogen global supply chain brings us one step closer to commercializing hydrogen energy.

\*1 Produced from toluene and hydrogen and transportable in a liquid state at ambient temperature and pressure

\*2 Latin for “hope”

\*3 NEDO-funded project: Development of Technologies for Realizing a Hydrogen Society/Development of Large-Scale Hydrogen-Energy Utilization Technology

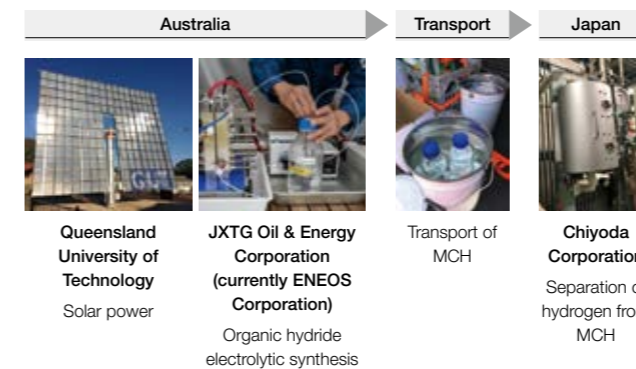
## Joint Efforts toward Realizing a Sustainable Hydrogen-Based Economy in Singapore



Chiyoda, Mitsubishi Corporation, and five privately owned Singaporean enterprises signed a Memorandum of Understanding (MoU) in March 2020 to realize a sustainable hydrogen-based economy in Singapore. The Singaporean government is aiming for zero CO<sub>2</sub> emissions by the latter half of the 21st century and is actively promoting hydrogen technology and other forms of carbon-reduction technology, with the aim of transitioning to a more environmentally friendly clean energy system. Chiyoda's SPERA Hydrogen® storage and transportation technology will play a major role in implementing this initiative.

Chiyoda will work collectively with the other companies to assess technologies and business practices toward realizing this aim.

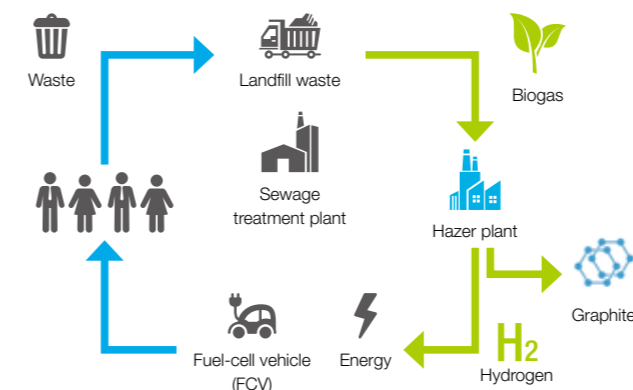
## The World's First Technical Verification for the Low-Cost Production of CO<sub>2</sub>-Free Hydrogen



In March 2019, Chiyoda, JXTG Oil & Energy Corporation (currently ENEOS Corporation), the University of Tokyo, and Queensland University of Technology succeeded in the world's first technical verification for the low-cost production of MCH in Australia, based on the electrochemical synthesis method and the separation of gaseous hydrogen in Japan. The verification featured a simplified MCH production process to lower the cost of hydrogen, essential to expanding its use. In the future, we will be able to achieve substantial reductions in facility costs for MCH production.

We also utilized solar power for MCH production to generate CO<sub>2</sub>-free hydrogen, which does not emit CO<sub>2</sub> during the production process.

## Commercial Development of HAZER® Process for High-Efficiency Production of Hydrogen and Graphite from Methane



In December 2019, Chiyoda entered into an MoU with Hazer Group Limited in Australia to commercialize the HAZER® Process. Developed by the Hazer Group, the HAZER® Process utilizes methane to efficiently produce hydrogen and graphite. Chiyoda and Hazer collaborate on the development of hydrogen and graphite using the HAZER® Process, based on unused biomass and other methane resources, and establish a hydrogen supply chain of local production for a local consumption business model.

# Safety Management



## Safety Is Our Core Value

With the adoption of our Safety, Quality, and Environmental (SQE) policy and Information Security (IS) policy, the Chiyoda Group is committed to becoming the most reliable engineering company in the world through its SQEI activities.

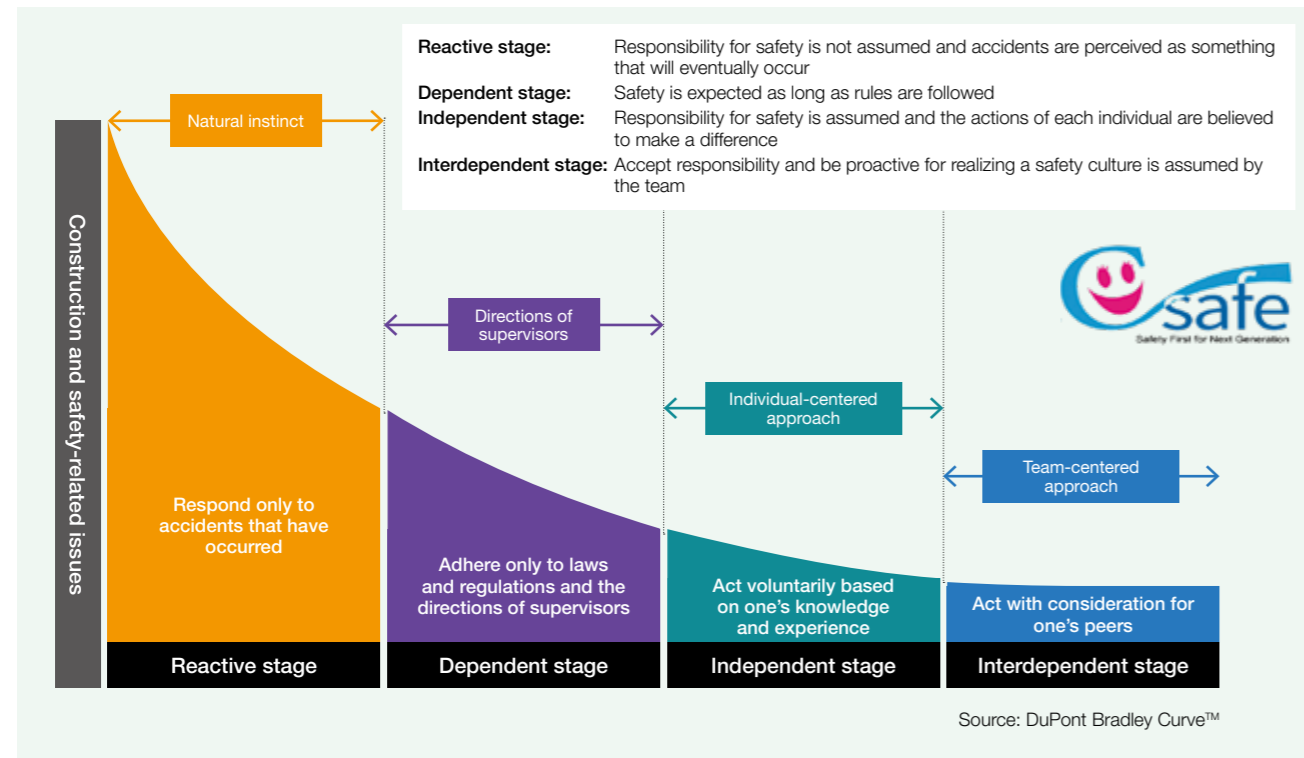
- For its SQEI activities, an SQEI Management Review Committee is held by the Management Advisory Committee and a PDCA cycle is implemented annually.
- To promote the activities of our occupational safety and health management and environmental management, we have established various committees under the leadership of our management team as well as committees below these committees tailored to each business site and its activities. We voluntarily promote activities at our various offices as well as in research and development and EPC business.
- These activities have helped foster a safety culture throughout Chiyoda by instilling in each officer and employee the awareness that safety represents the core value of the Company and is of the utmost priority in all aspects of their daily work.

## C-SAFE Program

In an effort to comprehensively realize safety, quality, and productivity, we at Chiyoda promote our original C-SAFE Program, embrace the “Building Responsibly” and “Human Performance” principles advocated by the engineering industry, and remain dedicated to the traditional Japanese mindset of striving for the highest quality possible.

Our C-SAFE Program is designed to evolve safety initiatives from an “independent” stage, where each employee

takes responsibility and actions, to an “interdependent” stage, where the team takes responsibility and is proactive for safety. From the perspective of the Bradley Curve™ created by DuPont, a leading provider of safety culture, Chiyoda’s efforts are diagrammed in the shift from Stage 3 to Stage 4 of safety culture maturity. Further, we believe that DuPont’s vision of “zero injuries is an attainable goal” and Chiyoda’s SQE policy, “every incident is preventable,” derive from the same root.



Please refer to the following website for details on our C-SAFE Program.

<https://www.chiyodacorp.com/en/csr/safety/c-safe.html>

## Companywide Educational Activity “SQEI Convention”

The strengthening of technological capabilities, enhancement of quality and productivity, and improvement of safety are all essential to our business. We at Chiyoda hold a Companywide SQEI Convention each year to educate all officers and employees on the significance of these measures in our business activities.

The SQEI Convention held in February 2020 was themed on “Safety, Quality, and Productivity (SQP): Safety is the priority, quality is the standard, and productivity is the prime mover.”

For a global business like Chiyoda, diversity is the key to embedding and continuously upgrading this SQP philosophy. We will create a supportive, respectful, and cooperative environment in which each officer and employee understands and respects the views of one another and perceives differences as a form of value, and embraces our SQP philosophy in our business activities to continue to build customer confidence.



## Our Commitment to Improvement

With an eye to advancing our SQEI activities even further, we established our new Project SQEI Section in July 2019. The Project SQEI Section dispatches a dedicated support unit to project sites around the world to improve the safety performance of each project. These efforts have resulted in such achievements as 81 million consecutive work hours without

an accident at our overseas sites, our longest-ever period without an accident.

The face-to-face interaction between the dedicated support unit and our global project sites has fueled the creation of opportunities to constantly improve our safety initiatives and the continuous evolution of our C-SAFE Program.

### Consecutive Work Hours without Accidents and Disasters

Year	Project	Consecutive accident- and disaster-free work hours (thousand hours)
2020	GYO-MFY*1	1,300
2020	Tangguh Expansion*1	6,200
2020	Cameron LNG*1	8,100
2017	Ichthys Onshore LNG	2,900
2016	Yamal LNG-MFY	1,300
2015	Laffan Refinery Phase 2	2,000
2014	PNG LNG	6,600
2014	Tokuyama Malaysia Polycrystalline Silicon Phase 2	2,100
2014	Tokuyama Malaysia Polycrystalline Silicon Phase 1	2,000
2013	Jubail Export Refinery, Package 4	2,900
2013	Taganito HPAL	2,000
2009	QatarGas 3 & 4 LNG	2,900
2008	RasGas Onshore Expansion Phase 2*2	2,900
2007	QatarGas 2 LNG Development	2,400
2007	Sakhalin LNG Train 1 & 2	2,000

\*1 Ongoing project

\*2 Includes AKG-2

■ LNG plant construction site  
■ Other than LNG plant construction site

# Health and Productivity Management



As a part of its proactive initiative to improve the health of employees, Chiyoda Corporation formulated a Declaration of Health and Productivity Management in April 2020, with the Chairman of the Board and CEO serving as Chief Wellness Officer (CWO).

## Declaration of Health and Productivity Management

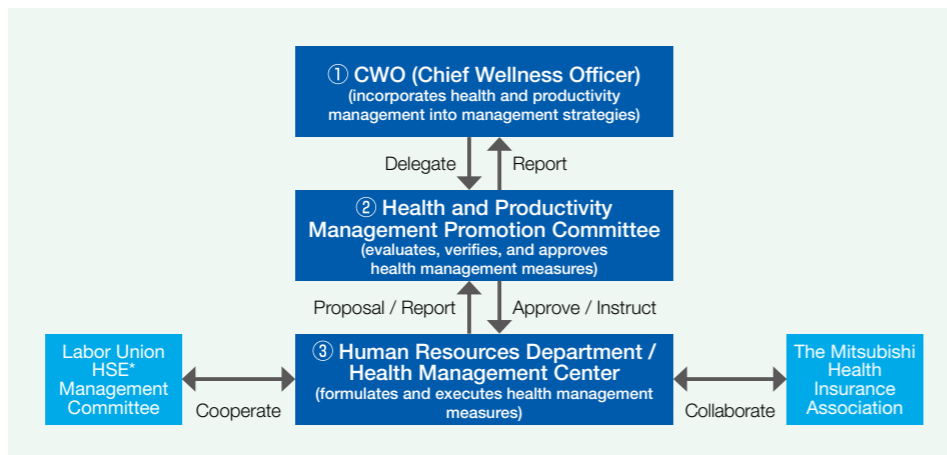
Chiyoda Corporation believes that maintaining employees' physical and mental health and maximizing their abilities is essential to achieving the Group's management philosophy and improving competitiveness. To achieve this, we will work to support the health and productivity management of employees.

The Company, labor associations, health insurance association, employees and their families will work together to promote good health so that employees can enjoy a healthy and fulfilling life at and outside work.

We will contribute to society through our business by linking the health and welfare of our employees to the vitality of the workplace.

## Promotion Structure

Chiyoda has established the Health and Productivity Management Promotion Committee, with a Human Resources officer as Chairman who is responsible to the CWO to evaluate, verify, and approve health management measures. The Human Resources Department and the Health Management Center also cooperate with health insurance associations, labor unions, and the HSE\* Management Committee to formulate and execute health management measures.



\* Health, Safety, Environment

## Key Measures

Measure	Main points
Health checkups	100% health checkup rate, strengthening specific health guidance and promoting cancer screening
Mental health	Promoting stress check and fatigue assessments and mental health training
Reduction of presenteeism*	Measures to improve eating and sleeping habits and implementing a health-keeper system
Women's health	Incorporating gynecological screening into examinations for lifestyle-related diseases and providing special paid leave for the female workforce
Smoking cessation	Limiting the use of smoking areas on Company premises and implementing smoking cessation support programs
Health promotion	Providing exercise opportunities for employees and subsidizing in-house sports club activity costs

\* An index to measure the outcome of investments in employee health. Presenteeism refers to a state in which work productivity is declining due to physical and mental health problems. Presenteeism can lead to approximately 70% of costs associated with work loss in Japanese companies and is a priority issue.

Please refer to the following website for details on other measures related to health and productivity management.

<https://www.chiyodacorp.com/en/csr/csr/value/value4/approach.html>

# Social Contribution Activities



## Initiatives in Fiscal 2019

### Support for People with Special Needs

#### Japan's Philharmonic Orchestra of Beethoven's Ninth Symphony (Chiyoda Global Headquarters)

Chiyoda has supported Japan's Philharmonic Orchestra of Beethoven's Ninth Symphony since 2011 and provides 25 pairs of tickets annually to visually impaired people in Yokohama.



#### "Heart Made Sale" (Chiyoda Group in Japan)

Chiyoda held 20 in-house sales events for products made by disabled people in Yokohama.



### Contribution to Health and Welfare

#### TABLE FOR TWO\* (Chiyoda Group in Japan)

Chiyoda provided 1,557 school lunches to children in developing countries.

\* For every order made through the TFT menu in Chiyoda's company cafeteria, ¥20 is donated to school lunches in developing countries, enough to provide one meal.



© TABLE FOR TWO

#### Eco Cap Program\* (Chiyoda Group in Japan)

Chiyoda collected 239,381 plastic bottle caps in-house, contributing to vaccine doses for 278 children in developing countries.

\* Approximately 860 plastic bottle caps are required to provide vaccine doses for one child.



#### Blood Drive (Chiyoda Philippines Corporation)

110 Chiyoda employees donated blood in the Philippines.



### Educational Support and Human Resource Development

#### Company Visits and Visiting Lectures (Chiyoda Global Headquarters)

Chiyoda held a company visit and a visiting lecture to facilitate high school student career development.



#### Acceptance of Internship Students (Chiyoda Group Headquarters, Chiyoda Philippines Corporation, and Chiyoda Almana Engineering LLC)

Chiyoda accepts university students to work as interns alongside employees.



#### "School Supply Drive" (Chiyoda Philippines Corporation)

Chiyoda donated school supplies to 700 elementary school students and 43 teachers in the Philippines.



### Support for Disaster-Stricken Areas

#### Volunteer Activities by Company Employees in Support of the Great East Japan Earthquake (Chiyoda Group in Japan)

Nine Chiyoda employees volunteered to engage in activities in Otsuchi in Kamaishi City, Iwate Prefecture.



#### Fundraising for Taal Volcano in the Philippines (Chiyoda Philippines Corporation)

Chiyoda donated 65,000 Philippine pesos, ¥170,400 and 1,000 sets of N95 masks to the Shell Foundation.



#### "Yubeshi no Kai" (Chiyoda Group in Japan)

Chiyoda held nine in-house events for the sale of products from disaster-stricken areas.

### Environmental Conservation

#### Community Cleanup Activities (Chiyoda Group in Japan)

120 Chiyoda employees participated in community cleanup activities in the Minatomirai and Koyasu districts of Yokohama.



#### Tree-Planting Activities (Chiyoda Philippines Corporation)

96 Chiyoda employees helped plant 230 trees in the Philippines.





# Global Human Resource Development



## Leveraging Chiyoda's Engineering Expertise to Develop Human Resources and Train Overseas Customers

Chiyoda Corporation is committed to developing global human resources and conducted training sessions for 81 overseas company employees in four countries in fiscal 2019. Overseas customers either travel to Japan for training or instructors are dispatched to their home offices. Communication is imperative to identify customer requirements and to ensure training programs meet their expectations by matching their technical and cultural needs with Chiyoda-driven solutions.

Our engineering training contributes to developing human resources and establishing sustainable industrial infrastructure in countries where Chiyoda operates.



Engineering training at Chiyoda Global Headquarters

### Number of Overseas Company Employees in Fiscal 2019

Participating Country	Number of Participants	Method
Russia	16	Instructor dispatched from Japan
	11	Training held in Japan
Qatar	28	Training held in Japan
Mozambique	17	Instructor dispatched from Japan
Saudi Arabia	9	Training held in Japan

## Establishing Industrial Infrastructure through the Transfer of Technical Expertise

Chiyoda Almana Engineering LLC and Chiyoda Corporation have combined to develop human resources to support Qatar's National Vision 2030 of "evolving Qatar into an advanced society capable of achieving sustainable development by the year 2030."

Chiyoda has supported the development of young engineers through the transfer of technical expertise for seven years and in fiscal 2019 conducted technical training programs for 21 engineers from Qatargas Operating Company Limited

and Qatar Petroleum. The program covered a wide range of fields, from engineering-related knowledge essential to operate LNG plants to innovative technologies such as AI and big data relating to energy plant operation. By providing human resource development programs for technical employees, project managers, and project leaders, Chiyoda will continue to grow while contributing to the development of industrial and technologically innovative infrastructure in the countries where it operates.



With Qatargas Operating Company Limited and Qatar Petroleum participating engineers

## Project Management Courses at Yokohama National University and Kyushu University, and Global Human Resource Training Courses at Sophia University

Commissioned by the Engineering Advancement Association of Japan, Chiyoda conducts project management courses at Yokohama National University and Kyushu University every spring to enhance student awareness of the engineering industry and promote human resource development through industry-academia collaboration. The courses, led by instructors dispatched from Chiyoda, continued in fiscal 2019.

Chiyoda has also conducted human resource training courses at Sophia University since 2018 and has supported students through to final presentation ceremonies at Keidanren Kaikan.

The courses have been praised by the universities as "informative learning opportunities provided by current professionals based on personal experience and a wealth of knowledge," thus contributing to greater recognition of the Chiyoda brand and increased awareness of our business activities.

Chiyoda conducts engineering-related courses to nurture its diverse human resources and develops interest in the unlimited potential of engineering in contributing to resolving new challenges in the support of a sustainable society.



Norimitsu Yanagimachi, a Company employee and instructor global human resource training course being held at Sophia University



Kyushu University students who took part in the course



Project management course being held at Yokohama National University



**Norimitsu Yanagimachi**  
Energy Project Business Division

### Message from the Instructor

Following training course participation, students who have never encountered the term "engineering" commonly develop an interest in the energy industry and pursue a career with Chiyoda or with other engineering companies. We will continue these initiatives to increase awareness of the engineering industry and cultivate human resources.

# Data Section

In this section, we provide key data on the Chiyoda Group, financial results over the past 11 years, and ESG initiatives.

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## Eleven-Year Summary

Chiyoda Corporation and Consolidated Subsidiaries

	Millions of yen (excluding key ratios)										
	2010/3	2011/3	2012/3	2013/3	2014/3	2015/3	2016/3	2017/3	2018/3	2019/3	2020/3
<b>Results for the Year</b>											
Revenue	312,985	247,082	254,675	398,918	446,147	480,979	611,548	603,745	510,873	341,952	<b>385,925</b>
Gross Profit (Loss)	14,219	31,519	38,891	42,515	41,462	45,651	41,520	38,223	8,618	(181,148)	<b>42,823</b>
SG&A Expenses	12,517	13,974	14,693	17,402	20,383	24,185	25,505	22,543	20,948	18,647	<b>16,033</b>
Operating Income (Loss)	1,702	17,544	24,197	25,113	21,079	21,466	16,015	15,680	(12,330)	(199,795)	<b>26,789</b>
Ordinary Income (Loss)	4,837	15,732	23,793	25,518	22,837	22,271	16,205	(3,080)	(10,100)	(192,998)	<b>18,644</b>
Net Income (Loss) Attributable to Owners of the Parent	2,953	7,979	14,364	16,077	13,447	11,029	3,375	(41,116)	6,445	(214,948)	<b>12,177</b>
<b>Financial Position at Year-End</b>											
Current Assets	290,719	316,196	320,478	383,206	409,096	444,578	455,030	425,244	374,470	326,929	<b>360,387</b>
Current Liabilities	165,960	181,887	193,687	230,431	261,679	294,339	311,106	301,182	247,847	392,505	<b>319,878</b>
Total Assets	328,174	353,392	365,795	435,379	475,288	515,839	528,219	461,331	420,337	352,341	<b>385,051</b>
Interest-Bearing Debt	10,004	10,208	10,198	10,220	11,305	11,010	10,348	10,211	10,000	15,989	<b>35,871</b>
Net Assets	149,253	155,758	168,737	189,356	198,031	208,405	202,128	157,125	159,418	(59,154)	<b>24,943</b>
Shareholders' Equity	148,683	155,242	168,120	188,386	196,411	206,395	200,166	155,339	157,557	(60,114)	<b>24,423</b>
<b>Cash Flows</b>											
Cash Flows from Operating Activities	8,613	(5,229)	55,615	14,147	(17,177)	(24,145)	55,526	(4,375)	(34,115)	(37,941)	<b>(32,217)</b>
Cash Flows from Investing Activities	(2,722)	(2,577)	(9,140)	(5,257)	(16,796)	(5,444)	(26,750)	10,433	(1,428)	778	<b>(7,828)</b>
Cash Flows from Financing Activities	(2,079)	(805)	(2,899)	(4,432)	(5,249)	(4,569)	(3,942)	(2,693)	(1,468)	4,020	<b>89,200</b>
Cash and Cash Equivalents, at End of Year	139,790	130,618	173,769	180,229	145,303	113,246	136,919	138,889	101,767	68,306	<b>115,932</b>
<b>Key Ratios</b>											
Gross Profit (Loss) Margin (%)	4.5	12.8	15.3	10.7	9.3	9.5	6.8	6.3	1.7	(53.0)	<b>11.1</b>
Return on Assets (ROA) (%)	1.4	4.6	6.6	6.4	5.0	4.5	3.1	(0.6)	(2.3)	(50.0)	<b>5.1</b>
Return on Equity (ROE) (%)	2.0	5.3	8.9	9.0	7.0	5.5	1.7	(23.1)	4.1	(441.2)	<b>(68.2)</b>
Shareholders' Equity Ratio (%)	45.3	43.9	46.0	43.3	41.3	40.0	37.9	33.7	37.5	(17.1)	<b>6.3</b>
Current Ratio (%)	175.2	173.8	165.5	166.3	156.3	151.0	146.3	141.2	153.0	83.3	<b>112.7</b>
Debt Equity Ratio (DER) (Times)	0.07	0.07	0.06	0.05	0.06	0.05	0.05	0.07	0.06	(0.27)	<b>1.47</b>
Earnings Per Share (EPS) (Yen)	11.39	30.79	55.44	62.06	51.91	42.58	13.03	(158.76)	24.89	(830.02)	<b>40.94</b>
Book-value Per Share (BPS) (Yen)	573.61	599.15	648.95	727.24	758.31	796.89	772.89	599.83	608.41	(232.13)	<b>(182.07)</b>
Dividend Per Share (Yen)	3.5	11	17	19	16	13	10	6	7.5	-	-
Dividend Payout Ratio (%)	30.8	35.7	30.7	30.6	30.8	30.5	76.7	38.7	30.1	-	-
Price Earning Ratio (PER) (%)	81.5	24.7	19.0	16.9	25.6	24.1	63.3	(4.5)	40.3	(0.31)	<b>5.2</b>

## Key ESG Data



## Environmental Initiatives

The Chiyoda Group strives to realize its corporate philosophy of “Energy and Environment in Harmony” and further contribute to the sustainable development of society through its business activities.

KPI	Unit	2016/3	2017/3	2018/3	2019/3	2020/3
<b>Environmental Data of Domestic Construction Sites</b>						
Industrial waste disposal quantity (excluding sludge)	Tons	10,936	7,670	12,242	17,138	<b>22,223</b>
Final landfill disposal quantity (excluding sludge and incinerated ash)	Tons	1,065	783	614	1,059	<b>1,464</b>
CO <sub>2</sub> emissions	Tons-CO <sub>2</sub>	3,364	1,146	901	5,665	<b>4,642</b>
Industrial waste recycling rate (excluding sludge)	%	89.5	87.8	91.5	76.8	<b>92.8</b>
Electronic manifest penetration rate	%	93.5	95.8	93.2	94.6	<b>90.8</b>
Adoption of environmental proposals	Cases	206	222	197	347	<b>236</b>
<b>Environmental Data of Overseas Construction Sites (Released from March 2020)</b>						
Industrial waste disposal quantity	Tons	–	–	–	–	<b>6,868</b>
Final landfill disposal quantity (excluding recyclable resources and incinerated ash)	Tons	–	–	–	–	<b>4,624</b>
CO <sub>2</sub> emissions	Tons-CO <sub>2</sub>	–	–	–	–	<b>56,970</b>
Industrial waste recycling rate	%	–	–	–	–	<b>17.0</b>
Adoption of environmental proposals	Cases	–	–	–	–	<b>111</b>
<b>Environmental Data of Chiyoda Group Company Offices</b>						
Power consumption	1,000 kWh	11,635	12,526	11,129	10,331	<b>9,313</b>
Energy consumption	kl	3,624	3,826	3,430	3,295	<b>3,018</b>
CO <sub>2</sub> emissions	Tons-CO <sub>2</sub>	6,886	7,287	6,367	6,083	<b>5,685</b>
Chilled water consumption	1,000 m <sup>3</sup>	13.7	17.5	15.5	17.5	<b>15.2</b>
Steam consumption	GJ	5,840	5,914	5,168	4,541	<b>4,633</b>
Cold water consumption	GJ	12,453	11,776	11,306	14,201	<b>13,785</b>
Waste disposal volume	Tons	264	262	233	241	<b>281</b>
Waste recycling rate	%	94.6	92.3	93.8	95.4	<b>96.5</b>
Printing paper consumed	Tons	106	88	66	80	<b>70</b>



## Governance Initiatives

The Chiyoda Group is dedicated to achieving high levels of transparency and stability by conducting its operations fairly and in accordance with the highest ethical standards.

KPI	Unit	2016/3	2017/3	2018/3	2019/3	2020/3
<b>Actions for Compliance</b>						
Number of employees receiving compliance training (new recruits, mid-career hires, and executives and associate executives)	Persons	156	166	150	112	<b>114</b>
Number of employees receiving compliance training (overseas assignment, site managers at field offices, export control, and bribery prevention)	Persons	512	523	314	168	<b>248</b>
Number of employees attending compliance seminars held by external instructors	Persons	389	717	662	172	<b>711</b>
Number of employees receiving compliance training via e-learning	Persons	2,849	2,841	5,213	4,669	<b>5,704</b>
Number of reports submitted under the Compliance Consultation and Whistleblowing System	Cases	15	24	25	36	<b>98</b>
<b>Initiatives for Business Continuity</b>						
Business continuity plan (BCP) training	Times	1	2	2	2	<b>0</b>
<b>Actions for Information Security</b>						
Number of serious information security-related incidents	Cases	0	0	0	0	<b>0</b>
<b>Governance-Related Data</b>						
Number of outside directors	Persons	2	4	4	5	<b>5</b>



## Social Initiatives

The Chiyoda Group contributes to local communities in a number of ways through its business, such as in the form of human resource development, human rights and labor initiatives, and social contributions. We will also cultivate a corporate culture that embraces diversity and individuality, as well as the uniqueness of each director and employee, and strive to boost employee morale through our respect for each individual and their families.

KPI	Unit	2016/3	2017/3	2018/3	2019/3	2020/3
<b>Employee Status</b>						
Average years of service	Years	12.9	12.9	13.2	12.3	<b>12.7</b>
Average age of employees	Years	40.8	40.9	41.6	41.0	<b>41.3</b>
Turnover rate excluding retirement	%	1.9	2.4	4.5	2.5	<b>4.7</b>
<b>Employee Diversity</b>						
Ratio of female employees among new recruits	%	19	25	33	25	<b>27</b>
Number of female employees among new recruits	Persons	13	18	19	12	<b>14</b>
Ratio of women among all employees	%	13	14	19	16	<b>16</b>
Average years of service of female employees	Years	7.5	8.0	7.6	8.1	<b>9.0</b>
Number of women in management positions	Persons	23	23	24	25	<b>28</b>
Ratio of women in management positions	%	2.6	2.6	3.2	3.5	<b>3.8</b>
Ratio of employment of persons with disabilities	%	1.7	1.5	1.5	1.6	<b>1.7</b>
Number of non-Japanese employees	Persons	71	82	71	63	<b>73</b>
<b>Employee Support</b>						
Number of employees taking childcare leave	Persons	15	22	27	26	<b>28</b>
Number of employees taking sick/injured childcare leave	Persons	2	1	7	11	<b>23</b>
Number of employees taking nursing care leave	Persons	8	4	9	9	<b>10</b>
Number of employees taking temporary retirement for nursing care	Persons	0	0	0	0	<b>1</b>
Number of employees working reduced hours for childcare	Persons	14	19	14	12	<b>27</b>
Number of employees dispatched for on-site training/on-site instruction	Persons	64	70	54	42	<b>47</b>
<b>Volunteer Activities</b>						
Number of employees participating in reconstruction assistance	Persons	62	70	54	53	<b>9</b>
Number of employees participating in cleanup activities (around Chiyoda Global Headquarters and Koyasu Office)	Persons	95	127	157	110	<b>120</b>
Donation of vaccines through the collection of plastic bottle caps under ECOCAP Program	Vaccines	267	228	231	292	<b>278</b>
Donation of school lunches through TABLE FOR TWO	Lunches	1,782	1,860	1,581	1,561	<b>1,557</b>

# Corporate Information

(As of March 31, 2020)

## Company Profile

Company Name	Chiyoda Corporation
Established	January 20, 1948
Paid-In Capital	¥15,014 million (as of August 7, 2020)
Number of Employees	5,649 (consolidated and equity-method affiliates)
Business Activities	Integrated engineering business
Main Offices	Chiyoda Global Headquarters Koyasu Office & Research Park
Project Experience	In over 60 countries

## Stock Information

Fiscal Year	April 1 to March 31 of the following year	
Ordinary General Meeting of Shareholders	June	
Number of Authorized Shares	Common Stock	1,000,000,000
	Type A Preferred Shares	175,000,000
Number of Issued and Outstanding Shares	Common Stock	260,324,529 (1 unit = 100 shares)
	Type A Preferred Shares:	175,000,000 (1 unit = 1 share)
Number of Shareholders	Common Stock	34,744
	Type A Preferred Shares	1
Listing of Shares	Tokyo Stock Exchange, Second Section	
Stock Transaction Unit	100 shares	

## Major Shareholders

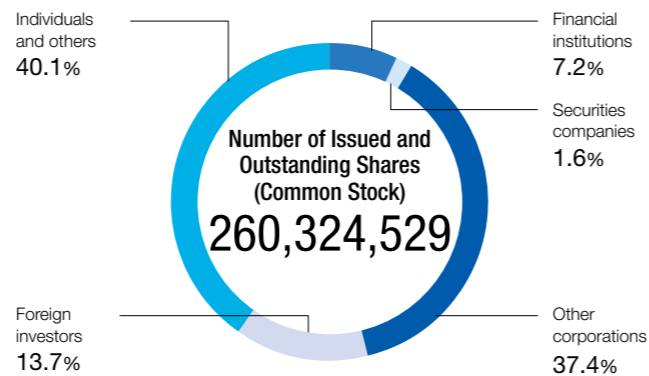
### 1. Common Stock (10 Largest Shareholders)

Shareholder	Number of Shares Owned (Thousands of Shares)	Ratio of Shares Owned (%)
Mitsubishi Corporation	86,931	33.57
MUFG Bank, Ltd.	9,033	3.49
NORTHERN TRUST CO. (AVFC) RE SILCHESTER INTERNATIONAL INVESTORS INTERNATIONAL ALUE EQUITY TRUST	7,326	2.83
The Mitsubishi UFJ Trust & Banking Corporation	4,274	1.65
NORTHERN TRUST CO. (AVFC) RE U.S. TAX EXEMPTED PENSION FUNDS	3,906	1.51
Chiyoda Employee Shareholding Association	3,217	1.24
NORTHERN TRUST CO. (AVFC) SUB A/C NON TREATY	2,579	1.00
STATE STREET BANK AND TRUST COMPANY 505001	2,275	0.88
Meiji Yasuda Life Insurance Company	2,265	0.87
JP MORGAN CHASE BANK 385151	2,071	0.80

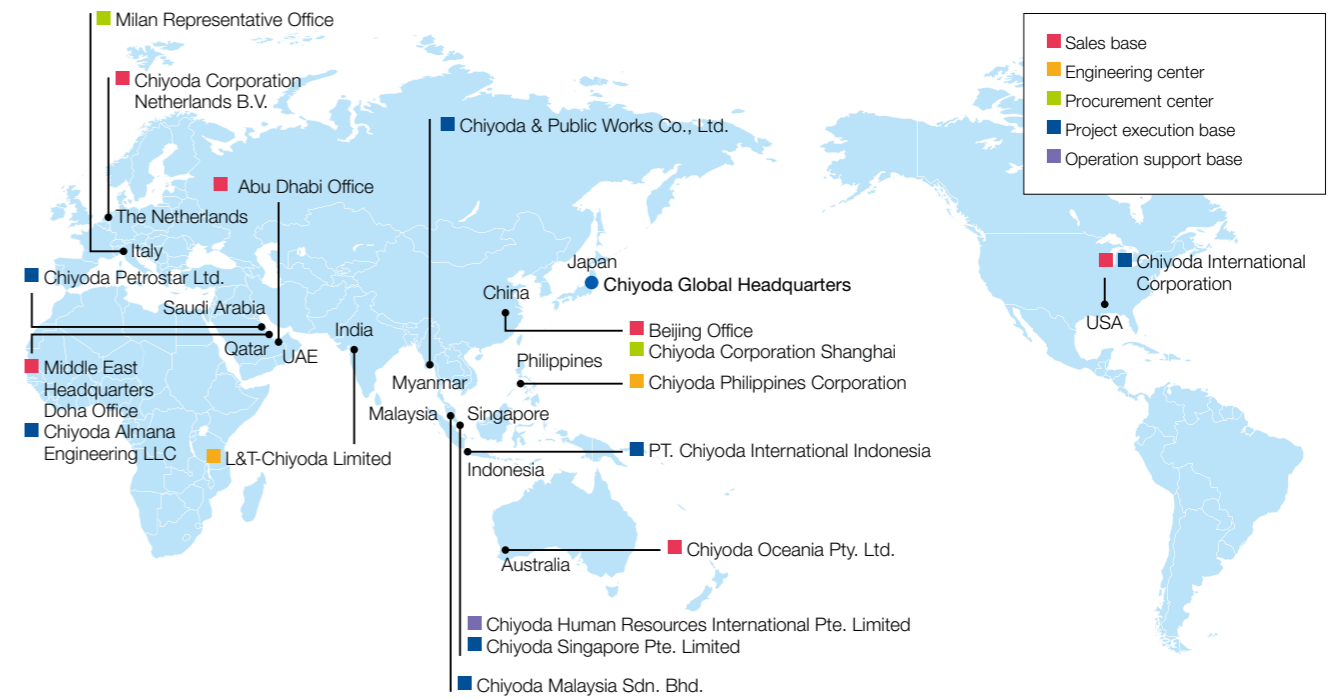
### 2. Type A Preferred Shares

Shareholder	Number of Shares Owned (Thousands of Shares)	Ratio of Shares Owned (%)
Mitsubishi Corporation	175,000	100

## Breakdown of Shareholders



## Chiyoda's Global Network (Major Overseas Subsidiaries and Offices)



### Engineering

#### Chiyoda Kosho Co., Ltd.

Design, construction, and maintenance of industrial facilities  
<https://www.cks-ykh.co.jp/> (Japanese only)

#### Chiyoda TechnoAce Co., Ltd.

Design and construction of pharmaceutical facilities  
[http://www.cta.chiyoda.co.jp/en\\_corporate/](http://www.cta.chiyoda.co.jp/en_corporate/)

#### Chiyoda System Technologies Corporation

Engineering, procurement, construction, and maintenance of electrical and instrumentation facilities and social infrastructure. Consulting, development, and operation of integrated IT systems. Supply of spare parts and materials  
<http://www.cst.chiyoda.co.jp/english/index.html>

### Business Support

#### Arrow Business Consulting Corporation

Finance and accounting consulting

#### Chiyoda U-Tech Co., Ltd.

Technical consultation on energy and the environment, engineer staffing service, and outsourcing services  
<https://www.utc-yokohama.com/english>



Chiyoda Corporation joined the UN Global Compact in 2012, declaring its commitment to 10 universal principles in the following four areas: human rights, labor, the environment, and anti-corruption. Guided also by the spirit of CSR Value, we are promoting initiatives in each of these four areas.

### Inquiries

#### Chiyoda Corporation

#### IR, PR & CSR Department

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 4-6-2, Minatomirai, Nishi-ku, Yokohama 220-8765, Japan

Inquiries

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Yokohama 220-8765, Japan  
<https://www.chiyodacorp.com/en/>



# **Consolidated Financial Statements FY 2019**

For the year ended March 31, 2020

Energy and Environment in Harmony

## **CORPORATE PHILOSOPHY**

Enhance our business in aiming for harmony between energy and the environment and contribute to the sustainable development of a society as an integrated engineering company through the use of our collective wisdom and painstakingly developed technology.

Every Chiyoda Group employee engages in our corporate activities with this philosophy in mind as we strive for corporate group management that earns the trust and empathy of all of our stakeholders, including shareholders, customers, business partners, employees, and local communities.

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# Consolidated Balance Sheet

March 31, 2020

ASSETS	Millions of Yen		Thousands of U.S. Dollars (Note 1)	LIABILITIES AND EQUITY (CAPITAL DEFICIENCY)	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2020	2019	2020		2020	2019	2020
<b>CURRENT ASSETS:</b>				<b>CURRENT LIABILITIES:</b>			
Cash and cash equivalents (Note 15)	¥ 115,932	¥ 68,306	\$ 1,063,604	Current portion of long-term debt (Notes 8, 9 and 15)	¥ 542	¥ 121	\$ 4,976
Short-term investments (Note 15)	8,471	1,150	77,718	Notes and accounts payable—trade (Note 15)	137,546	175,277	1,261,892
Notes and accounts receivable—trade (Note 15)	30,671	44,449	281,393	Advance receipts on construction contracts	119,911	122,252	1,100,106
Costs and estimated earnings on long-term construction contracts (Notes 4 and 15)	30,510	24,162	279,914	Income taxes payable (Note 15)	1,212	708	11,120
Costs of construction contracts in process	5,261	7,494	48,267	Deposits received	6,865	1,329	62,985
Accounts receivable—other (Note 15)	68,712	65,945	630,391	Allowance for warranty costs for completed works	860	372	7,890
Jointly controlled assets of joint venture (Note 15)	96,028	110,967	880,995	Allowance for losses on construction contracts	34,871	67,637	319,923
Prepaid expenses and other	6,041	5,707	55,427	Provision for business structure improvement (Note 18)	401	1,825	3,681
Allowance for doubtful accounts	(1,243)	(1,254)	(11,405)	Accrued expenses and other	17,667	22,979	162,085
<b>Total current assets</b>	<b>360,387</b>	<b>326,929</b>	<b>3,306,306</b>	<b>Total current liabilities</b>	<b>319,878</b>	<b>392,505</b>	<b>2,934,663</b>
<b>PROPERTY, PLANT AND EQUIPMENT:</b>				<b>LONG-TERM LIABILITIES:</b>			
Land (Note 8)	5,085	4,952	46,658	Long-term debt (Notes 8, 9 and 15)	36,458	15,889	334,477
Buildings and structures (Note 8)	15,035	13,524	137,938	Liability for retirement benefits (Note 10)	1,986	1,546	18,226
Machinery and equipment	748	512	6,869	Provision for treatment of PCB waste	239	267	2,193
Tools, furniture and fixtures (Note 8)	6,073	6,404	55,719	Asset retirement obligations	1,502	1,022	13,788
Construction in progress	137	272	1,265	Other	42	264	392
<b>Total</b>	<b>27,081</b>	<b>25,666</b>	<b>248,451</b>	<b>Total long-term liabilities</b>	<b>40,229</b>	<b>18,989</b>	<b>369,078</b>
Accumulated depreciation	(14,627)	(13,952)	(134,193)	<b>COMMITMENTS AND CONTINGENT LIABILITIES</b> (Notes 14, 16 and 17)			
<b>Net property, plant and equipment</b>	<b>12,454</b>	<b>11,714</b>	<b>114,257</b>	<b>EQUITY (CAPITAL DEFICIENCY) (Note 11):</b>			
<b>INVESTMENTS AND OTHER ASSETS:</b>				Common stock—authorized, 570,000 thousand shares; issued, 260,324 thousand shares in 2020 and 2019	43,396	43,396	398,132
Investment securities (Notes 5 and 15)	1,540	1,603	14,131	Preferred stock—authorized, 175,000 thousand shares; issued, 175,000 thousand shares in 2020	35,000		321,100
Investments in and advances to unconsolidated subsidiaries and associated companies (Note 7)	4,058	4,789	37,230	Capital surplus	72,128	37,112	661,730
Goodwill	319	427	2,930	Accumulated deficit	(127,778)	(139,956)	(1,172,282)
Software	4,539	4,816	41,647	Treasury stock—at cost, 1,357 thousand shares in 2020 and 2019	(1,435)	(1,435)	(13,167)
Asset for retirement benefits (Note 10)		5		Accumulated other comprehensive income (loss):			
Deferred tax assets (Note 12)	599	701	5,503	Unrealized gain (loss) on available-for-sale securities	58	(5)	541
Other assets	1,325	1,528	12,156	Deferred gain (loss) on derivatives under hedge accounting	6	(50)	57
Allowance for doubtful accounts	(172)	(174)	(1,584)	Foreign currency translation adjustments	3,033	(102)	27,834
<b>Total investments and other assets</b>	<b>12,209</b>	<b>13,697</b>	<b>112,016</b>	Defined retirement benefit plans	13	926	125
				<b>Total</b>	<b>24,423</b>	<b>(60,114)</b>	<b>224,071</b>
				Noncontrolling interests	519	960	4,767
				<b>Total equity (capital deficiency)</b>	<b>24,943</b>	<b>(59,154)</b>	<b>228,838</b>
<b>TOTAL</b>	<b>¥ 385,051</b>	<b>¥ 352,341</b>	<b>\$ 3,532,580</b>	<b>TOTAL</b>	<b>¥ 385,051</b>	<b>¥ 352,341</b>	<b>\$ 3,532,580</b>

See notes to consolidated financial statements.

# Consolidated Statement of Operations

Year Ended March 31, 2020

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2020	2019	2020
REVENUE	¥ 385,925	¥ 341,952	\$ 3,540,596
COST OF REVENUE	<u>343,101</u>	<u>523,101</u>	<u>3,147,721</u>
Gross profit (loss)	42,823	(181,148)	392,874
SELLING, GENERAL, AND ADMINISTRATIVE EXPENSES (Note 13)	<u>16,033</u>	<u>18,647</u>	<u>147,096</u>
Operating income (loss)	<u>26,789</u>	<u>(199,795)</u>	<u>245,777</u>
OTHER INCOME (EXPENSES):			
Interest and dividend income	2,851	3,303	26,159
Equity in earnings of associated companies	361	194	3,316
Reversal of provision for business structure improvement (Note 18)	232		2,129
Gain on sales of shares of subsidiaries and associated companies	363	979	3,337
Interest expense	(727)	(238)	(6,675)
Foreign exchange (loss) gain	(10,192)	3,638	(93,507)
Provision for business structure improvement (Note 18)		(1,825)	
Impairment loss (Note 6)	(67)		(619)
Loss on valuation of investment securities (Note 5)	(122)		(1,126)
Loss on disposal of fixed assets		(335)	
Other—net	<u>(437)</u>	<u>(100)</u>	<u>(4,016)</u>
Other (expenses) income—net	<u>(7,739)</u>	<u>5,614</u>	<u>(71,002)</u>
INCOME (LOSS) BEFORE INCOME TAXES	<u>19,050</u>	<u>(194,181)</u>	<u>174,775</u>
INCOME TAXES (Note 12):			
Current	7,120	11,090	65,329
Deferred	<u>(105)</u>	<u>10,580</u>	<u>(963)</u>
Total income taxes	<u>7,015</u>	<u>21,670</u>	<u>64,366</u>
NET INCOME (LOSS)	12,034	(215,852)	110,409
NET LOSS ATTRIBUTABLE TO NONCONTROLLING INTERESTS	<u>(142)</u>	<u>(903)</u>	<u>(1,310)</u>
NET INCOME (LOSS) ATTRIBUTABLE TO OWNERS OF THE PARENT	<u>¥ 12,177</u>	<u>¥ (214,948)</u>	<u>\$ 111,719</u>

	Yen		U.S. Dollars
	2020	2019	2020
PER SHARE OF COMMON STOCK (Notes 2.aa and 20):			
Basic net income (loss)	¥40.94	¥ (830.02)	\$0.38
Diluted net income	15.51		\$0.14
Cash dividends applicable to the year			

See notes to consolidated financial statements.

# Consolidated Statement of Comprehensive Income

Year Ended March 31, 2020

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2020	2019	2020
NET INCOME (LOSS)	<u>¥ 12,034</u>	<u>¥ (215,852)</u>	<u>\$ 110,409</u>
OTHER COMPREHENSIVE INCOME (LOSS) (Note 19):			
Unrealized gain (loss) on available-for-sale securities	64	(69)	592
Deferred gain on derivatives under hedge accounting	56	1,719	516
Foreign currency translation adjustments	3,197	(1,348)	29,337
Defined retirement benefit plans	(912)	(87)	(8,371)
Share of other comprehensive loss of associates	<u>(66)</u>	<u>(850)</u>	<u>(611)</u>
Total other comprehensive income (loss)	<u>2,339</u>	<u>(636)</u>	<u>21,463</u>
COMPREHENSIVE INCOME (LOSS)	<u>¥ 14,374</u>	<u>¥ (216,488)</u>	<u>\$ 131,872</u>
TOTAL COMPREHENSIVE INCOME (LOSS)			
ATTRIBUTABLE TO:			
Owners of the parent	¥ 14,522	¥ (215,638)	\$ 133,231
Noncontrolling interests	(148)	(849)	(1,359)

See notes to consolidated financial statements.

# Consolidated Statement of Changes in Equity (Capital Deficiency)

Year Ended March 31, 2020

	Thousands					Millions of Yen								
	Outstanding Number of Shares of Common Stock	Outstanding Number of Shares of Preferred Stock	Common Stock	Preferred Stock	Capital Surplus	(Accumulated Deficit) Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)					Noncontrolling Interests	Total Equity (Capital Deficiency)
								Unrealized Gain (Loss) on Available- for-Sale Securities	Deferred Gain (Loss) on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans	Total		
BALANCE, APRIL 1, 2018	258,967		¥43,396		¥37,112	¥77,024	¥(1,434)	¥64	¥(1,778)	¥2,159	¥1,013	¥157,557	¥1,861	¥159,418
Cumulative effects of changes in accounting policies						(90)						(90)		(90)
Restated balance	258,967		43,396		37,112	76,934	(1,434)	64	(1,778)	2,159	1,013	157,466	1,861	159,328
Net loss attributable to owners of the parent						(214,948)						(214,948)		(214,948)
Cash dividends, ¥7.50 per share						(1,942)						(1,942)		(1,942)
Purchase of treasury stock														
Net change in the year								(69)	1,728	(2,261)	(87)	(690)	(901)	(1,591)
BALANCE, MARCH 31, 2019	258,967		43,396		37,112	(139,956)	(1,435)	(5)	(50)	(102)	926	(60,114)	960	(59,154)
Net income attributable to owners of the parent						12,177						12,177		12,177
Issuance of new shares (Note 11)		175,000		¥35,000	35,000							70,000		70,000
Purchase of treasury stock														
Purchase of shares of consolidated subsidiaries					15							15		15
Net change in the year								64	56	3,136	(912)	2,344	(440)	1,904
BALANCE, MARCH 31, 2020	<u>258,967</u>	<u>175,000</u>	<u>¥43,396</u>	<u>¥35,000</u>	<u>¥72,128</u>	<u>¥(127,778)</u>	<u>¥(1,435)</u>	<u>¥58</u>	<u>¥6</u>	<u>¥3,033</u>	<u>¥13</u>	<u>¥24,423</u>	<u>¥519</u>	<u>¥24,943</u>

	Thousands of U.S. Dollars (Note 1)					Millions of Yen							
	Common Stock	Preferred Stock	Capital Surplus	Accumulated Deficit	Treasury Stock	Accumulated Other Comprehensive Income (Loss)					Noncontrolling Interests	Total Equity (Capital Deficiency)	
						Unrealized Gain (Loss) on Available- for-Sale Securities	Deferred Gain (Loss) on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans	Total			
BALANCE, MARCH 31, 2019	\$398,132		\$340,482	\$(1,284,002)	\$(13,166)	\$(51)	\$(458)	\$(940)	\$8,496	\$(551,508)	\$8,810	\$(542,697)	
Net income attributable to owners of the parent				111,719						111,719		111,719	
Issuance of new shares (Note 11)		\$321,000	321,100							642,201		642,201	
Purchase of treasury stock													
Purchase of shares of consolidated subsidiaries			146							146		146	
Net change in the year						592	516	28,774	(8,371)	21,512	(4,042)	17,469	
BALANCE, MARCH 31, 2020	<u>\$398,132</u>	<u>\$321,000</u>	<u>\$661,730</u>	<u>\$(1,172,282)</u>	<u>\$(13,167)</u>	<u>\$541</u>	<u>\$57</u>	<u>\$27,834</u>	<u>\$125</u>	<u>\$224,071</u>	<u>\$4,767</u>	<u>\$228,838</u>	

See notes to consolidated financial statements.

# Consolidated Statement of Cash Flows

Year Ended March 31, 2020

	Millions of Yen		Thousands of U.S. Dollars (Note 1)		Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2020	2019	2020		2020	2019	2020
<b>OPERATING ACTIVITIES:</b>							
Income (loss) before income taxes	¥ 19,050	¥ (194,181)	\$ 174,775	Net cash used in operating activities—(Forward)	¥ (32,217)	¥ (37,941)	\$ (295,571)
Adjustments for:				<b>INVESTING ACTIVITIES:</b>			
Income taxes paid	(3,841)	6,230	(35,247)	Net (increase) decrease in time deposits	(7,358)	1,150	(67,506)
Depreciation	3,174	2,816	29,122	Purchases of property, plant and equipment	(560)	(642)	(5,141)
Impairment loss	67		619	Proceeds from sales of property, plant and equipment	91	3	838
Amortization of goodwill	40	41	372	Purchases of intangible assets	(1,702)	(1,611)	(15,623)
(Decrease) increase in allowance for doubtful accounts	(10)	1	(99)	Payments for purchases of investment securities	(9)	(109)	(85)
Increase (decrease) in allowance for warranty costs for completed works	491	(52)	4,508	Proceeds from sales and redemption of investment securities		1,791	
(Decrease) increase in allowance for losses on construction contracts	(31,906)	64,409	(292,722)	Proceeds from sales of shares of subsidiaries and associated companies	1,116		10,240
(Decrease) increase in liability for retirement benefits	(146)	63	(1,344)	Proceeds from liquidation of subsidiaries and associated companies		138	
Foreign exchange gain—net	(59)	(980)	(542)	Payments of loans receivable	(7)	(2)	(69)
(Decrease) increase in provision for business structure improvement	(1,290)	1,825	(11,835)	Proceeds from collections of loans	604	59	5,545
Gain on sales of shares of subsidiaries and associated companies	(363)	(979)	(3,337)	Other—net	(2)		(18)
Equity in earnings of associated companies	(361)	(194)	(3,316)	Net cash (used in) provided by investing activities	(7,828)	778	(71,822)
Loss on valuation of investment securities	122		1,126	<b>FINANCING ACTIVITIES:</b>			
Loss on disposal of fixed assets		335		Proceeds from long-term debt	20,000	6,220	183,486
Changes in operating assets and liabilities:				Repayments of long-term debt	(118)	(231)	(1,088)
Decrease in trade notes and accounts receivable, and costs and estimated earnings on long-term construction contracts	7,291	7,908	66,893	Proceeds from issuance of preferred stock	70,000		642,201
Decrease in costs of construction contracts in process	2,194	8,149	20,133	Payments of cash dividends		(1,939)	
(Decrease) increase in trade notes and accounts payable	(34,702)	28,180	(318,370)	Other—net	(680)	(29)	(6,240)
(Decrease) increase in advance receipts on construction contracts	(1,285)	46,210	(11,789)	Net cash provided by financing activities	89,200	4,020	818,350
Increase in accounts receivable—other	(3,960)	(23,097)	(36,335)	<b>FOREIGN CURRENCY TRANSLATION ADJUSTMENTS ON CASH AND CASH EQUIVALENTS</b>	(1,528)	(317)	(14,020)
Decrease in jointly controlled assets of joint venture	14,830	20,055	136,058	<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	47,626	(33,461)	436,936
Increase in interest and dividends receivable	(1,412)	(2,144)	(12,957)	<b>CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR</b>	68,306	101,767	626,667
Other—net	(139)	(2,541)	(1,284)	<b>CASH AND CASH EQUIVALENTS, END OF YEAR</b>	¥ 115,932	¥ 68,306	\$ 1,063,604
Total adjustments	(51,267)	156,239	(470,346)				
Net cash used in operating activities—(Forward)	¥ (32,217)	¥ (37,941)	\$ (295,571)				

See notes to consolidated financial statements.

# Notes to Consolidated Financial Statements

Year Ended March 31, 2020

## 1. BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS

The accompanying consolidated financial statements have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act and its related accounting regulations and in accordance with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards ("IFRS").

In preparing these consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. In addition, certain reclassifications have been made in the 2019 consolidated financial statements to conform to the classifications used in 2020.

The consolidated financial statements are stated in Japanese yen, the currency of the country in which Chiyoda Corporation (the "Company") is incorporated and principally operates. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥109 to \$1, the approximate rate of exchange at March 31, 2020. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate.

Japanese yen figures less than a million yen are rounded down to the nearest million, except for per share data.

U.S. dollar figures less than a thousand U.S. dollars are rounded down to the nearest thousand, except for per share data.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**a. Consolidation**—The consolidated financial statements as of March 31, 2020, include the accounts of the Company and its 20 (20 in 2019) significant subsidiaries (together, the "Group").

Under the control and influence concepts, those companies in which the Company, directly or indirectly, is able to exercise control over operations are fully consolidated, and those companies over which the Group has the ability to exercise significant influence are accounted for by the equity method.

Investments in three (three in 2019) associated companies are accounted for by the equity method.

MPDC GABON Co., Ltd. ceased to be an associated company in the current consolidated fiscal year due to sale of its stock and excluded from application of the equity method.

Investments in the remaining unconsolidated subsidiaries and associated companies are stated at cost. If the equity method of accounting had been applied to the investments in these companies, the effect on the accompanying consolidated financial statements would not be material.

Most of the foreign consolidated subsidiaries have a December 31 year-end, which is different from that of the Company. As a result, adjustments have been made for any significant transactions which took place during the period between the year-end of these subsidiaries and the year-end of the Company.

The excess of the cost of acquisition over the fair value of the net assets of an acquired subsidiary at the date of acquisition is amortized over a period of 20 years.

All significant intercompany balances and transactions have been eliminated on consolidation. All material unrealized profit included in assets resulting from transactions within the Group is also eliminated.

**b. Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements**—Under Accounting Standards Board of Japan ("ASBJ") Practical Issues Task Force ("PITF") No. 18, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements," the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should in principle be unified for the preparation of the consolidated financial statements. However, financial statements prepared by foreign subsidiaries in accordance with either IFRS or generally accepted accounting principles in the United States of America (Financial Accounting Standards Board Accounting Standards Codification) tentatively may be used for the consolidation process, except for the following items that should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; and (d) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting.

**c. Unification of Accounting Policies Applied to Foreign Associated Companies for the Equity Method**—ASBJ Statement No. 16, "Accounting Standard for Equity Method of Accounting for Investments," requires adjustments to be made to conform the associate's accounting policies for similar transactions and events under similar circumstances to those of the parent company when the associate's financial statements are used in applying the equity method unless it is impracticable to determine such adjustments. In addition, financial statements prepared by foreign associated companies in accordance with either IFRS or generally accepted accounting principles in the United States of America tentatively may be used in applying the equity method if the following items are adjusted so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; and (d) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting.

**d. Construction Contracts**—Under Japanese GAAP, construction revenue and construction costs are recognized by the percentage-of-completion method if the outcome of a construction contract can be estimated reliably. When total construction revenue, total construction costs and the stage of completion of the contract at the balance sheet date can be reliably measured, the outcome of a construction contract is deemed to be estimated reliably. If the outcome of a construction contract cannot be reliably estimated, the completed-contract method should be applied. When it is probable that the total construction costs will exceed total construction revenue, an estimated loss on the contract should be immediately recognized by providing for a loss on such construction contracts.

Concerning the construction contracts, the Group applies the following accounting methods:

Unbilled costs on contracts, which are accounted for by the completed-contract method, are stated as costs of construction contracts in process.

Payments received in excess of costs and estimated earnings on contracts, which are accounted for by the percentage-of-completion method, and payments received on the other contracts, are presented as current liabilities.

Costs of preparation work for unsuccessful proposals and other projects that are not realized are charged to income, as incurred, and are included in cost of revenue.

- e. Cash Equivalents**—Cash equivalents are short-term investments that are readily convertible into cash and exposed to insignificant risk of changes in value. Cash equivalents include time deposits, certificates of deposit, and commercial paper, all of which mature or become due within three months of the date of acquisition.
- f. Short-Term Investments**—Short-term investments are time deposits which will mature three months after the date of acquisition. Short-term investments are exposed to insignificant risk of changes in value.
- g. Investment Securities**—All marketable securities are classified as available-for-sale securities and are reported at fair value, with unrealized gains and losses, net of applicable taxes, reported in a separate component of equity. The cost of securities sold is determined based on the moving-average method.
- Nonmarketable available-for-sale securities are stated at cost determined by the moving-average method or at amortized cost. For other-than-temporary declines in fair value, investment securities are reduced to net realizable value by a charge to income.
- h. Jointly Controlled Assets of Joint Venture**—The jointly controlled assets of the joint venture consist of jointly controlled cash pertaining to the contract work recognized based on the Company's share of the venture.
- i. Allowance for Doubtful Accounts**—The allowance for doubtful accounts is stated in amounts considered to be appropriate based on the Group's past credit loss experience and an evaluation of potential losses in the receivables outstanding.
- j. Property, Plant and Equipment**—Property, plant and equipment are stated at cost. Depreciation is computed by the declining-balance method, except for buildings owned by the Company and structures acquired on or after April 1, 2016, that are depreciated using the straight-line method, at rates based on the estimated useful lives of the assets. The range of useful lives is from 8 to 57 years for buildings and structures, from 4 to 17 years for machinery and equipment, and from 4 to 15 years for tools, furniture, and fixtures.
- k. Long-Lived Assets**—The Group reviews its long-lived assets for impairment whenever events or changes in circumstance indicate the carrying amount of an asset or asset group may not be recoverable. An impairment loss is recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group. The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset or the net selling price at disposition.
- l. Software**—Software for internal use is amortized on a straight-line basis over its estimated useful life (five years at the maximum).
- m. Other Assets**—Intangible assets and goodwill are carried at cost less accumulated amortization, which is calculated by the straight-line method over their estimated useful lives.
- n. Share Issuance Costs**—Deferred assets—share issuance costs are accounted for as the full amount at the time of the expenditure.
- o. Allowance for Warranty Costs for Completed Work**—The allowance for warranty costs for completed work is provided based on past rate experience.
- p. Allowance for Losses on Construction Contracts**—The allowance for losses on construction contracts is provided for an estimated amount of probable losses to be incurred in future years in respect of construction projects in progress. When there are losses on completed-contract method applied contracts, the allowance for losses on construction contracts is offset against the costs of construction contracts in process in the balance sheet.

- q. Provision for Business Structure Improvement**—To improve business structure, the provision for business structure improvement is provided based on anticipated loss reasonably estimated in and after next consolidated fiscal year.
- r. Provision for Treatment of PCB Waste**—Provision for treatment of PCB (Poly Chlorinated Biphenyl) waste is provided based on estimated costs of the treatment for PCB products and equipment as well as their collection and transportation fees.

- s. Retirement and Pension Plans**—The Company and consolidated subsidiaries have funded or unfunded defined benefit pension plans and defined contribution pension plans for employees. Certain consolidated subsidiaries have defined benefit corporate pension plans or severance lump-sum payment plans, and calculate retirement benefit expenses by using the simplified method.

The Company and its domestic consolidated subsidiaries account for the liability for retirement benefits based on the projected benefit obligations and plan assets at the balance sheet date. The projected benefit obligations are attributed to periods on a benefit formula basis. Actuarial gains and losses are amortized on a straight-line basis over 10 years within the average remaining service period.

Actuarial gains and losses that are yet to be recognized in profit or loss are recognized within equity (accumulated other comprehensive income), after adjusting for tax effects, are recognized in profit or loss over a certain period no longer than the expected average remaining service period of the employees.

- t. Asset Retirement Obligations**—Under Japanese GAAP, an asset retirement obligation is defined as a legal obligation imposed either by law or contract that results from the acquisition, construction, development and normal operation of a tangible fixed asset and is associated with the retirement of such tangible fixed asset. The asset retirement obligation is recognized as the sum of the discounted cash flows required for the future asset retirement and is recorded in the period in which the obligation is incurred if a reasonable estimate can be made. If a reasonable estimate of the asset retirement obligation cannot be made in the period the asset retirement obligation is incurred, the liability should be recognized when a reasonable estimate of the asset retirement obligation can be made. Upon initial recognition of a liability for an asset retirement obligation, an asset retirement cost is capitalized by increasing the carrying amount of the related fixed asset by the amount of the liability. The asset retirement cost is subsequently allocated to expense through depreciation over the remaining useful life of the asset. Over time, the liability is accreted to its present value each period. Any subsequent revisions to the timing or the amount of the original estimate of undiscounted cash flows are reflected as an adjustment to the carrying amount of the liability and the capitalized amount of the related asset retirement cost.
- u. Research and Development Costs**—Research and development costs are charged to income as incurred.
- v. Leases**—Japanese GAAP require that all finance lease transactions be capitalized by recognizing lease assets and lease obligations in the balance sheet.

All other leases are accounted for as operating leases.

- w. Income Taxes**—The provision for income taxes is computed based on the pretax income included in the consolidated statement of income. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred taxes are measured by applying currently enacted income tax rates to the temporary differences.

The Company and its wholly owned domestic subsidiaries file tax returns under the consolidated corporate-tax system, which allows companies to base tax payments on the combined profits or losses of the parent company and its wholly owned domestic subsidiaries.

Concerning items which transitioned to the group tax sharing system and those for which the nonconsolidated tax payment system was reviewed in line with the transition to the group tax sharing system, which has been established under the "Act for Partial Amendment of the Income Tax Act, etc." (Act No. 8 of 2020), the Company and its domestic consolidated subsidiaries will not apply the provisions of Paragraph 44 of "Implementation Guidance on Tax Effect Accounting" (ASBJ Guidance No. 28 of February 16, 2018), in accordance with Paragraph 3 of "Treatment of Tax Effect Accounting for the Transition from the Consolidated Declaration System to the Group Tax Sharing System" (PITF No. 39 of March 31, 2020). As a result, the amounts of deferred tax assets and deferred tax liabilities are reported based on the provisions of the tax act before the amendment.

- x. Foreign Currency Transactions**—All short-term and long-term monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the exchange rates at the balance sheet date. Foreign exchange gains and losses from translation are recognized in the consolidated statement of income to the extent that they are not hedged by foreign currency forward contracts.
- y. Foreign Currency Financial Statements**—Balance sheet accounts of consolidated foreign subsidiaries are translated into Japanese yen at the current exchange rate as of the balance sheet date except for equity, which is translated at the historical rate. Differences arising from such translation are shown as "Foreign currency translation adjustments" under accumulated other comprehensive income in a separate component of equity. Revenue and expense accounts of consolidated foreign subsidiaries are translated into Japanese yen at the current exchange rate as of the balance sheet date.
- z. Derivatives and Hedging Activities**—The Group uses derivative financial instruments, including foreign currency forward contracts, as a means of hedging exposure to foreign currency risks. The Group does not enter into derivatives for trading or speculative purposes.

Derivative financial instruments are classified and accounted for as follows:

- (1) All derivatives are recognized as either assets or liabilities and measured at fair value, with gains or losses recognized in the consolidated statement of income.
- (2) For derivatives used for hedging purposes, if such derivatives qualify for hedge accounting because of high correlation and effectiveness between the hedging instruments and the hedged items, gains or losses on derivatives are deferred until maturity of the hedged transactions.

Foreign currency forward contracts are utilized to hedge foreign exchange risks. Certain assets and liabilities on construction contracts denominated in foreign currencies are translated at the contracted rates if the forward contracts qualify for hedge accounting.

Foreign currency deposits are held to hedge foreign exchange risks derived from forecasted purchases of fixed assets denominated in foreign currency.

- aa. Per Share Information**—Basic net income per share is computed by dividing net income available to common shareholders by the weighted-average number of common shares outstanding for the period, retroactively adjusted for stock splits.

Diluted net income per share reflects the potential dilution that could occur if preferred stocks were exercised. Diluted net income per share of common stock assumes full exercise of preferred stocks.

Cash dividends per share presented in the accompanying consolidated statement of income are dividends applicable to the respective fiscal years, including dividends to be paid after the end of the year.

#### **ab. Accounting Changes**

##### Adaption of IFRS 16 Leases

Effective from the current fiscal year, the overseas consolidated subsidiaries excluding the ones in the U.S., applied "Leases" (IFRS 16). The effect of these changes on consolidated financial statements was immaterial.

##### Adaption of ASU No. 2014-09 Revenue from Contracts with Customers

Effective from the current fiscal year, certain overseas consolidated subsidiaries that apply generally accepted accounting principles in the United States of America (U.S. GAAP) applied Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (revised on May 28, 2014). The effect of these changes on consolidated financial statements was immaterial.

#### **ac. New Accounting Pronouncements**

On March 30, 2018, the ASBJ issued ASBJ Statement No. 29, "Accounting Standard for Revenue Recognition," and ASBJ Guidance No. 30, "Implementation Guidance on Accounting Standard for Revenue Recognition," and ASBJ Guidance No. 19, "Implementation Guidance on Disclosures about Fair Value of Financial Instruments." The core principle of the standard and guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity should recognize revenue in accordance with that core principle by applying the following steps:

- Step 1: Identify the contract(s) with a customer
- Step 2: Identify the performance obligations in the contract
- Step 3: Determine the transaction price
- Step 4: Allocate the transaction price to the performance obligations in the contract
- Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

The accounting standard and guidance are effective for annual periods beginning on or after April 1, 2021. Earlier application is permitted for annual periods beginning on or after April 1, 2018.

The Company expects to apply the accounting standard and guidance for annual periods beginning on or after April 1, 2021, and is in the process of measuring the effects of applying the accounting standard and guidance in future applicable periods.

### **3. BUSINESS DIVESTITURE**

The Board of Directors met on January 28, 2020, and conditionally resolved to spin off the IT business from Chiyoda System Technologies (the "CST"), succeeding it with a newly combined company of CST IT business and TIS Inc. and to transfer part of the new company shares to TIS Inc. On February 28, 2020, the condition was fulfilled and the share transfer agreements were executed with TIS Inc.

#### **a. Overview of the Business Divestiture**

- (1) *Name of the counterparty of the business divestiture and the share transfer*

- (a) Name of the counterparty of the business divestiture

TIS Chiyoda Systems Corporation

- (b) Name of the counterparty of the share transfer

TIS Inc.



## (2) Name and description of the business subject to the business divestiture

## (a) Name of the business

IT business operated by CST

## (b) Contents of the business

Providing IT system consulting, development, integration and operational support, etc.

## (3) Purpose of the business divestiture

CST provides clients with IT solutions covering project management, project control and operational control of industrial plants to resolve challenges. In order to promote value creation through internal and external digitalization, the Group believes that it is necessary to further strengthen the management infrastructures and to develop the abilities of the human resources working in the IT business who play a core role in the delivery of IT services. The Company is pursuing improved performance as an IT solution provider via enhancement of CST's IT capability in collaboration with TIS Inc., a first class integrated IT enterprise in Japan.

## (4) Date of the business divestiture

October 1, 2020 (planned)

## (5) Summary of other transactions including legal forms

## (a) Business divestiture

Incorporation-type split of CST with succession of CST's IT business by the new company

## (b) Share transfer

Transfer of stocks, with cash, etc. as the only compensatory assets

**b. Reportable Segment in Which the Divested Business Is Included**

Engineering

**4. CONSTRUCTION CONTRACTS**

Costs and estimated earnings recognized with respect to construction contracts which are accounted for by the percentage-of-completion method at March 31, 2020 and 2019, were as follows:

	Millions of Yen		Thousands of
	2020	2019	U.S. Dollars
			2020
Costs and estimated earnings	¥ 332,157	¥ 311,707	\$ 3,047,320
Amounts billed	(301,647)	(287,545)	(2,767,406)
Net	¥ 30,510	¥ 24,162	\$ 279,914

**5. INVESTMENT SECURITIES**

Investment securities at March 31, 2020 and 2019, consisted of the following:

	Millions of Yen		Thousands of
	2020	2019	U.S. Dollars
			2020
Non-current—Equity securities	¥1,540	¥1,603	\$ 14,131

The costs and aggregate fair values of investment securities at March 31, 2020 and 2019, were as follows:

March 31, 2020

	Millions of Yen			Fair Value
	Cost	Unrealized Gains	Unrealized Losses	
Securities classified as—				
Available-for-sale—equity securities	¥297	¥112	¥19	¥390

March 31, 2019

	Millions of Yen			Fair Value
	Cost	Unrealized Gains	Unrealized Losses	
Securities classified as—				
Available-for-sale—equity securities	¥411	¥164	¥121	¥453

March 31, 2020

	Thousands of U.S. Dollars			Fair Value
	Cost	Unrealized Gains	Unrealized Losses	
Securities classified as—				
Available-for-sale—equity securities	\$2,731	\$1,030	\$175	\$3,587

Information on the available-for-sale securities sold during the years ended March 31, 2020 and 2019, was as follows:

March 31, 2020

None

March 31, 2019

	Millions of Yen		
	Proceeds	Realized Gains	Realized Losses
Securities classified as—			
Available-for-sale—equity securities	¥7	¥1	

The impairment loss on available-for-sale securities for the year ended March 31, 2020, was ¥122 million (\$1,126 thousand).

#### 6. IMPAIRMENT LOSS OF LONG-LIVED ASSETS

Impairment loss on long-lived assets for the fiscal year ended March 31, 2020, was as follows:

March 31, 2020

Location	Used Status	Category of Assets	Impairment Loss	
			Millions of Yen	Thousands of U.S. Dollars
Japan	—	Goodwill	¥67	\$ 619

Regarding the goodwill recorded on the acquisition of the shares of subsidiary in Japan, the Group concluded that it was required impairment, as its recoverable amount at the time of transfer from the Company to the new company whose stock is to be owned by the non-Group company was lower than its book value. The recoverable amount for goodwill is measured at its net realizable values at the transfer date.

#### 7. INVESTMENTS IN AND ADVANCES TO UNCONSOLIDATED SUBSIDIARIES AND ASSOCIATED COMPANIES

Investments in and advances to unconsolidated subsidiaries and associated companies at March 31, 2020 and 2019, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Investments	¥4,058	¥4,789	\$ 37,230
Total	¥4,058	¥4,789	\$ 37,230

#### 8. ASSETS AND LIABILITIES ACCOUNTED FOR AS FINANCIAL TRANSACTIONS

Assets and liabilities accounted for as financial transactions at March 31, 2020 and 2019, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Land	¥381	¥381	\$ 3,496
Buildings and structures	341	373	3,136
Tools, furniture and fixtures			1
Current portion of long-term debt	122	118	1,124
Long-term debt	747	870	6,862

#### 9. LONG-TERM DEBT

Long-term debt at March 31, 2020 and 2019, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Long-term loans from banks, with interest rates at 2.5% (2020)—Unsecured	¥20,000		\$ 183,486
Long-term loans from banks, with interest rates at 1.9% (2020) and 1.9% (2019)—Unsecured	10,000	¥10,000	91,743
Long-term loans from banks, with interest rate at 0.8% (2020) and 0.8% (2019)—Unsecured	4,000	4,000	36,697
Long-term loans from banks, with interest rate at 0.7% (2020) and 0.7% (2019)—Unsecured	1,000	1,000	9,174
Long-term loans accounted as financial transactions, with interest rate at 3.4% (2020) and 3.4% (2019)—Collateralized	870	989	7,986
Obligations under finance leases	1,129	22	10,366
Total	37,000	16,011	339,454
Less current portion	(542)	(121)	(4,976)
Long-term debt, less current portion	¥36,458	¥15,889	\$ 334,477

Annual maturities of long-term debt, excluding finance leases, at March 31, 2020, were as follows:

Year Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2020	¥ 122	\$ 1,124
2021	747	6,862
2022	10,000	91,743
2023	5,000	45,871
2024	20,000	183,486
Total	¥35,870	\$ 329,087

#### 10. RETIREMENT AND PENSION PLANS

The Company and consolidated subsidiaries have funded or unfunded defined benefit pension plans and defined contribution pension plans for employees.

Under defined benefit corporate pension plans, all of which are funded, employees are entitled to certain lump-sum payments or pension payments based on cumulated points which are granted in accordance with years of continuous employment, occupational classification and performance evaluation. Under severance lump-sum payment plans, employees are entitled to certain lump-sum payments based on salary and service period.

Certain consolidated subsidiaries have defined benefit corporate pension plans or severance lump-sum payment plans, and calculate retirement benefit expenses by using the simplified method.

- (1) The changes in defined benefit obligation for the years ended March 31, 2020 and 2019, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Balance at beginning of year	¥20,896	¥21,174	\$ 191,708
Current service cost	1,087	1,092	9,977
Interest cost	151	179	1,391
Actuarial gains	(212)	(27)	(1,952)
Benefits paid	(2,116)	(1,506)	(19,414)
Others	3	(16)	27
Balance at end of year	¥19,809	¥20,896	\$ 181,737

- (2) The changes in plan assets for the years ended March 31, 2020 and 2019, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Balance at beginning of year	¥19,669	¥20,532	\$ 180,449
Expected return on plan assets	354	378	3,250
Actuarial gains	(868)	(443)	(7,967)
Contributions from the employer	712	689	6,534
Benefits paid	(1,669)	(1,454)	(15,313)
Others	6	(33)	56
Balance at end of year	¥18,204	¥19,669	\$ 167,011

- (3) The changes in the liability recorded in the consolidated balance sheet by using the simplified method for the years ended March 31, 2020 and 2019, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Balance at beginning of year	¥313	¥330	\$2,880
Benefit costs	206	183	1,891
Benefits paid	(66)	(124)	(612)
Contribution to the plans	(68)	(78)	(632)
Others	(2)	3	(27)
Balance at end of year	¥381	¥313	\$3,500

- (4) Reconciliation between the liability recorded in the consolidated balance sheet and the balances of defined benefit obligations and plan assets:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Funded defined benefit obligations	¥20,948	¥21,684	\$ 192,187
Plan assets	(19,293)	(20,778)	(177,008)
Total	1,654	906	15,179
Unfunded defined benefit obligations	332	634	3,047
Net liability arising from defined benefit obligations	¥ 1,986	¥ 1,541	\$ 18,226

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Liability for retirement benefits	¥1,986	¥1,546	\$ 18,226
Asset for retirement benefits		(5)	
Net liability arising from defined benefit obligations	¥1,986	¥1,541	\$ 18,226

- (5) The components of net periodic benefit costs for the years ended March 31, 2020 and 2019, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Service cost	¥1,087	¥1,092	\$9,977
Interest cost	151	179	1,391
Expected return on plan assets	(354)	(378)	(3,250)
Recognized actuarial gains	(338)	(77)	(3,103)
Benefit costs in simplified method	206	183	1,891
Net periodic benefit costs	¥ 752	¥ 999	\$6,906

- (6) Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the years ended March 31, 2020 and 2019, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Actuarial losses	¥914	¥495	\$8,388
Total	¥914	¥495	\$8,388

- (7) Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2020 and 2019, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Unrecognized actuarial gains	¥(2)	¥(917)	\$(25)
Total	¥(2)	¥(917)	\$(25)

- (8) Plan assets

a. Components of plan assets

Plan assets as of March 31, 2020 and 2019, consisted of the following:

	2020	2019
Debt investments	36%	30%
Equity investments	23	31
General accounts	26	25
Others	15	14
Total	100%	100%

**b. Method of determining the expected rate of return on plan assets**

The expected rate of return on plan assets is determined considering the long-term rates of return which are expected currently and in the future from the various components of the plan assets.

(9) Assumptions used for the years ended March 31, 2020 and 2019, were set forth as follows:

	<u>2020</u>	<u>2019</u>
Discount rate	Mainly 0.7%	Mainly 0.7%
Expected rate of return on plan assets	Mainly 1.8%	Mainly 1.8%

(10) Payables to defined contribution plans of the Company and consolidated subsidiaries for the years ended March 31, 2020 and 2019, were ¥400 million (\$3,673 thousand) and ¥408 million, respectively.

**11. EQUITY**

Japanese companies are subject to the Companies Act of Japan (the "Companies Act"). The significant provisions in the Companies Act that affect financial and accounting matters are summarized below:

**a. Dividends**

Under the Companies Act, companies can pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. Additionally, for companies that meet certain criteria, an Audit & Supervisory Board may declare dividends (except for dividends-in-kind) at any time during the fiscal year if the company has prescribed so in its articles of incorporation. The Board of Directors of a company with an audit and supervisory committee (as implemented under the Companies Act effective May 1, 2015) may also declare dividends at any time because such company, by its nature, meets the criteria under the Companies Act. The Company became organized as a company with an audit and supervisory committee effective June 23, 2016. However, the Company does not meet all the above criteria.

The Companies Act permits companies to distribute dividends in kind (noncash assets) to shareholders subject to a certain limitation and additional requirements.

Semiannual interim dividends may also be paid once a year upon resolution by the Board of Directors if the articles of incorporation of the company so stipulate. The Companies Act provides certain limitations on the amounts available for dividends or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the shareholders, but the amount of net assets after dividends must be maintained at no less than ¥3 million.

The preferred dividend annual rate for the Class A Preferred Shares is set at 3%. If there is a shortfall in dividend on the shareholders of Class A Preferred Shares during a fiscal year, such shortfall will be carried over into the following fiscal year or into subsequent fiscal years. The shareholders of Class A Preferred Shares may not receive dividends from surplus in excess of the amount of such preferred dividends. The order of preference on payment of dividends from surplus between the Class A Preferred Shares and common shares is as follows: the amount equal to the unpaid dividends carried over on the Class A Preferred Shares is paid first; preferred dividends on the Class A Preferred Shares are paid next; and dividends on common shares are paid last.

**b. Increases/Decreases and Transfer of Common Stock, Reserve, and Surplus**

The Companies Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (a component of retained earnings) or as additional paid-in capital (a component of capital surplus), depending on the equity account charged upon the payment of such dividends, until the aggregate amount of legal reserve and additional paid-in capital equals 25% of the common stock. Under the Companies Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. The Companies Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus, and retained earnings can be transferred among the accounts within equity under certain conditions upon resolution of the shareholders.

The Company issued new shares through a third-party allotment to Mitsubishi Corporation and payment process was completed on July 1, 2019.

Outline of the third-party allotment was as follows:

**(1) Number of newly issued shares**

Class A Preferred Shares 175,000,000

**(2) Issue price**

¥400 per share

**(3) Total issue price of stocks**

¥70,000 million (\$642,201 thousand)

**(4) Method of subscription or allotment (planned allottee)**

Allotment to Mitsubishi Corporation by third-party allotment

**(5) Amount of increase in capital**

¥35,000 million (\$321,100 thousand)

**(6) Amount of increase in capital surplus**

¥35,000 million (\$321,100 thousand)

**(7) Other notable matters**

The shareholders who own the "Preferred Shares" do not hold voting rights, but have the right to request compensation for converting shares to common stock.

Hence, there is a possibility that the existing common shares will be diluted.

Regarding this expected situation, the Company will carry out the following plan.

First, the Company will establish the right to request voting rights for compensation by cash payment. Second, the Company will enable dual usage of these two rights for the shareholder.

These steps aim to limit possible requests for voting rights for compensation by converting shares to common stock, and to enable the Company to acquire the Preferred Shares while limiting the impact of potential common stock dilution as much as possible.

**c. Treasury Stock and Treasury Stock Acquisition Rights**

The Companies Act also provides for companies to purchase treasury stock and dispose of such treasury stock by resolution of the Board of Directors. The amount of treasury stock purchased cannot exceed the amount available for distribution to the shareholders, which is determined by a specific formula.

Under the Companies Act, stock acquisition rights are presented as a separate component of equity.

The Companies Act also provides that companies can purchase both treasury stock acquisition rights and treasury stock. Such treasury stock acquisition rights are presented as a separate component of equity or deducted directly from stock acquisition rights.

**12. INCOME TAXES**

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes which, in the aggregate, resulted in a normal effective statutory tax rate of approximately 31% for each of the years ended March 31, 2020 and 2019.

The tax effects of significant temporary differences and tax loss carryforwards which resulted in deferred tax assets and liabilities at March 31, 2020 and 2019, were as follows:

	Millions of Yen		Thousands of
	2020	2019	U.S. Dollars
	2020	2019	2020
Deferred tax assets:			
Tax loss carryforwards* <sup>3</sup>	¥49,172	¥45,519	\$ 451,125
Adjustment of percentage of completion for foreign construction	5,218	8,762	47,873
Loss on valuation of investment securities	4,809	4,895	44,120
Cost of revenue	3,815	4,747	35,005
Allowance for losses on construction contracts	3,579	8,499	32,841
Advances receipts on construction contracts	2,471	28	22,676
Long-term accounts receivable	1,824	1,824	16,735
Long-term loans receivable	1,643	1,643	15,075
Allowance for employees' bonuses	1,247	908	11,447
Accounts receivable from completed construction contracts	895	2,182	8,211
Costs of construction contracts in process	822	1,051	7,550
Liability for retirement benefits	581	584	5,331
Foreign tax credit carryforwards		551	
Other	3,896	3,298	35,743
Subtotal of deferred tax assets	79,977	84,498	733,738
Valuation allowance for tax loss carryforwards* <sup>3</sup>	(49,138)	(45,463)	(450,814)
Valuation allowance for temporary differences	(29,725)	(37,943)	(272,714)
Subtotal valuation allowance* <sup>2</sup>	(78,864)	(83,406)	(723,528)
Total	1,112	1,091	10,209
Deferred tax liabilities:			
Fixed assets as asset retirement obligations	291	153	2,676
Profit/loss in joint venture	161	138	1,482
Other	65	305	599
Total	518	597	4,758
Net deferred tax assets* <sup>1</sup>	¥ 594	¥ 493	\$ 5,450

\*<sup>1</sup> Net deferred tax assets as of March 31, 2020 and 2019, were recorded in the accompanying consolidated balance sheet as follows:

	Millions of Yen		Thousands of
	2020	2019	U.S. Dollars
	2020	2019	2020
Investments and other assets—Deferred tax assets	¥599	¥701	\$5,503
Long-term liabilities—Other	(5)	(207)	(53)

\*<sup>2</sup> The main reason for the fluctuation of the valuation allowance is the decrease of the valuation allowance for the allowance for losses on construction contracts.

\*<sup>3</sup> Amounts of tax loss carryforwards and related deferred tax assets by tax loss carryforwards for the year ended March 31, 2020 and 2019, were as follows:

	Millions of Yen						
	1 Year or Less	After 1 Year through 2 Years	After 2 Years through 3 Years	After 3 Years through 4 Years	After 4 Years through 5 Years	After 5 Years	Total
March 31, 2020							
Tax loss carryforwards*	¥653	¥291	¥161	¥3,482	¥65	¥44,518	¥49,172
Valuation allowance for tax loss carryforwards	(653)	(291)	(161)	(3,448)	(65)	(44,518)	(49,138)
Deferred tax assets				33			33
March 31, 2019							
Tax loss carryforwards*	¥656	¥115	¥236	¥47	¥3,995	¥40,468	¥45,519
Valuation allowance for tax loss carryforwards	(656)	(115)	(236)	(47)	(3,938)	(40,468)	(45,463)
Deferred tax assets					56		56
	Thousands of U.S. Dollars						
	1 Year or Less	After 1 Year through 2 Years	After 2 Years through 3 Years	After 3 Years through 4 Years	After 4 Years through 5 Years	After 5 Years	Total
March 31, 2020							
Tax loss carryforwards*	\$5,993	\$2,671	\$1,483	\$31,948	\$604	\$408,423	\$451,125
Valuation allowance for tax loss carryforwards	(5,993)	(2,671)	(1,483)	(31,637)	(604)	(408,423)	(450,814)
Deferred tax assets				310			310

\* Figures for tax loss carryforwards were the amounts multiplied by the effective statutory tax rate.

A reconciliation between the normal effective statutory tax rates and the actual effective tax rates reflected in the accompanying consolidated statement of income for the years ended March 31, 2020 and 2019, is as follows:

	<u>2020</u>	<u>2019</u>
Normal effective statutory tax rate	31%	*
Expenses not deductible for income tax purposes	1	
Nontaxable dividend income	(2)	
Profit/loss in joint venture	14	
Tax rate differences with overseas subsidiaries	<u>(7)</u>	—
Actual effective tax rate	<u>37%</u>	=

\* As loss before income taxes is provided, the amount is omitted.

### 13. RESEARCH AND DEVELOPMENT COSTS

Research and development costs charged to income were ¥1,620 million (\$14,871 thousand) and ¥1,917 million for the years ended March 31, 2020 and 2019, respectively.

### 14. LEASES

The Group leases certain machinery, computer equipment, and other assets.

Future minimum payments under non-cancelable operating leases were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	<u>2020</u>	<u>2019</u>	<u>2020</u>
Due within one year	¥(139)	¥ 540	\$ (1,278)
Due after one year	<u>(116)</u>	<u>844</u>	<u>(1,070)</u>
Total	<u>¥(256)</u>	<u>¥1,385</u>	<u>\$ (2,349)</u>

Effective from the current fiscal year, the overseas consolidated subsidiaries excluding the ones in the U.S., applied "Leases" (IFRS 16). The effect of these changes on consolidated financial statements was immaterial. The operating leases related to these companies is included only in the year ended March 31, 2019.

### 15. FINANCIAL INSTRUMENTS AND RELATED DISCLOSURES

#### (1) Group Policy for Financial Instruments

The Group uses financial instruments for cash surpluses, if any, invested in low-risk financial assets, such as short-term commercial paper. For operating capital, the Group uses bank loans. Derivatives are used, not for speculative purposes, but to manage exposure to the market risk of fluctuation in foreign currency exchange rates and interest rates.

#### (2) Nature and Extent of Risks Arising from Financial Instruments

Receivables, such as trade notes and trade accounts, are exposed to customer credit risk. Although receivables in foreign currencies are exposed to the market risk of fluctuation in foreign currency exchange rates, the position, net of payables in foreign currencies, is hedged by using foreign currency forward contracts.

Investment securities are equity securities related to the business which the Group operates. Marketable securities are exposed to the risk of fluctuations in stock prices.

Payment terms of payables, such as trade notes and trade accounts, are generally less than one year. Although payables in foreign currencies are exposed to the market risk of fluctuation in foreign currency exchange rates, the position, net of receivables in foreign currencies, is hedged by using foreign currency forward contracts.

Derivatives are foreign currency forward contracts, which are used to manage exposure to market risks from changes in foreign currency exchange rates of receivables and payables. Please see Notes 2.z and 16 for more details about derivatives.

#### (3) Risk Management for Financial Instruments

##### Credit risk management

The Group manages its credit risk from receivables on the basis of internal guidelines, which include monitoring of payment terms and balances of major customers to identify the default risk of customers at an early stage.

Commercial paper is exposed to insignificant default risk because transactions are limited to companies with high credit ratings.

With respect to foreign currency forward contracts, the Group limits the counterparties to those derivatives to major financial institutions that can bear losses arising from credit risk.

##### Market risk management (risk of foreign exchange and interest rates)

Foreign currency trade receivables and payables are exposed to market risk resulting from fluctuations in foreign currency exchange rates. Such foreign exchange risk grasped by currency and month is hedged principally with foreign currency forward contracts.

Foreign currency forward contracts are controlled under internal guidelines. The position related to particular construction contracts is identified and is reviewed monthly. For setting and cancelling foreign currency contracts, reconciliation of the transaction and balances with customers' confirmation replies is made, and the transactions related to foreign currency forward contracts are executed and accounted for under internal guidelines.

Marketable and investment securities are managed by monitoring the market values and financial position of issuers on a regular basis. The Group assesses the stock price risk quantitatively so as to account for significant declines in market value as impairment losses.

##### Liquidity risk management

Liquidity risk comprises the risk that the Group cannot meet its contractual obligations in full on their maturity dates. The Group manages its liquidity risk by holding adequate volumes of liquid assets along with timely, adequate financial planning.

#### (4) Fair Values of Financial Instruments

Fair values of financial instruments are based on quoted prices in active markets. If a quoted price is not available, another rational valuation technique is used instead. Also, please see Note 16 for fair values for derivatives.

## (a) Fair values of financial instruments

March 31, 2020

	Millions of Yen		
	Carrying Amount	Fair Value	Unrealized Gain (Loss)
Cash and cash equivalents	¥ 115,932	¥ 115,932	
Short-term investments	8,471	8,471	
Notes and accounts receivable—trade	30,671	30,671	
Allowance for doubtful accounts*	(1,222)	(1,222)	
Costs and estimated earnings on long-term construction contracts	30,510	30,510	
Accounts receivable—other	68,712	68,712	
Allowance for doubtful accounts*	(20)	(20)	
Jointly controlled assets of joint venture	96,028	96,028	
Investment securities	390	390	
<b>Total</b>	<b>¥ 349,475</b>	<b>¥ 349,475</b>	<b>—</b>
Current portion of long-term debt	¥ 122	¥ 122	
Notes and accounts payable—trade	137,546	137,546	
Income taxes payable	1,212	1,212	
Long-term debt	35,747	35,692	¥(55)
<b>Total</b>	<b>¥ 174,629</b>	<b>¥ 174,573</b>	<b>¥(55)</b>

March 31, 2019

	Millions of Yen		
	Carrying Amount	Fair Value	Unrealized Gain (Loss)
Cash and cash equivalents	¥ 68,306	¥ 68,306	
Short-term investments	1,150	1,150	
Notes and accounts receivable—trade	44,449	44,449	
Allowance for doubtful accounts*	(1,230)	(1,230)	
Costs and estimated earnings on long-term construction contracts	24,162	24,162	
Accounts receivable—other	65,945	65,945	
Allowance for doubtful accounts*	(21)	(21)	
Jointly controlled assets of joint venture	110,967	110,967	
Investment securities	453	453	
<b>Total</b>	<b>¥ 314,182</b>	<b>¥ 314,182</b>	<b>—</b>
Current portion of long-term debt	¥ 118	¥ 118	
Notes and accounts payable—trade	175,277	175,277	
Income taxes payable	708	708	
Long-term debt	15,870	14,857	¥(1,013)
<b>Total</b>	<b>¥ 191,975</b>	<b>¥ 190,962</b>	<b>¥(1,013)</b>

March 31, 2020

	Thousands of U.S. Dollars		
	Carrying Amount	Fair Value	Unrealized Gain (Loss)
Cash and cash equivalents	\$ 1,063,604	\$ 1,063,604	
Short-term investments	77,718	77,718	
Notes and accounts receivable—trade	281,393	281,393	
Allowance for doubtful accounts*	(11,214)	(11,214)	
Costs and estimated earnings on long-term construction contracts	279,914	279,914	
Accounts receivable—other	630,391	630,391	
Allowance for doubtful accounts*	(191)	(191)	
Jointly controlled assets of joint venture	880,995	880,995	
Investment securities	3,587	3,587	
<b>Total</b>	<b>\$ 3,206,199</b>	<b>\$ 3,206,199</b>	<b>—</b>
Current portion of long-term debt	\$ 1,124	\$ 1,124	
Notes and accounts payable—trade	1,261,892	1,261,892	
Income taxes payable	11,120	11,120	
Long-term debt	327,963	327,453	\$ (509)
<b>Total</b>	<b>\$ 1,602,101</b>	<b>\$ 1,601,591</b>	<b>\$ (509)</b>

\* Allowance for doubtful accounts corresponding to trade receivable is deducted.

Cash and Cash Equivalents, Short-Term Investments, Notes and Accounts Receivable—Trade, Costs and Estimated Earnings on Long-Term Construction Contracts, and Accounts Receivable—Other

The carrying values of the accounts mentioned above approximate fair value because of their short maturities.

Jointly Controlled Assets of Joint Venture

The jointly controlled assets of the joint venture consists of cash recognized based on the Company's share of the venture. The carrying values of jointly controlled assets of the joint venture approximate fair value because of their short maturities.

Investment Securities

The fair values of investment securities are measured at the quoted market price of the stock exchange for the equity instruments. Fair value information for investment securities by classification is included in Note 5.

The above schedules do not include investment securities with fair values that cannot be reliably determined.

Notes and Accounts Payable—Trade and Income Taxes Payable

The carrying values of the accounts mentioned above approximate fair value because of their short maturities.

Current Portion of Long-Term Debt (Bank Loans) and Long-Term Debt (Bank Loans)

The fair value of long-term debt is calculated by discounting total principal and interest payments to present value using a discount rate equal to the rate that would be charged if the loan was newly borrowed.

Derivatives

Fair value information for derivatives is included in Note 16.

(b) *Carrying amount of financial instruments with fair values that cannot be reliably determined*

	Millions of Yen		Thousands of
	2020	2019	U.S. Dollars
			2020
Investment securities that do not have a quoted market price in an active market	¥1,146	¥1,147	\$ 10,519
Investments in equity instruments that do not have a quoted market price in an active market	2	2	24
Investments in unconsolidated subsidiaries and associated companies that do not have a quoted market price in an active market	4,058	4,789	37,230

**(5) Maturity Analysis for Financial Assets and Securities with Contractual Maturities**

March 31, 2020

	Millions of Yen		
	Due in 1 Year or Less	Due after 1 Year through 5 Years	Due after 5 Years through 10 Years
Cash and cash equivalents	¥ 115,904		
Short-term investments	8,471		
Notes and accounts receivable, and costs and estimated earnings on long-term construction contracts*	56,309	¥3,650	
Accounts receivable—other*	68,691		
Jointly controlled assets of joint venture	96,028		
<b>Total</b>	<b>¥ 345,405</b>	<b>¥3,650</b>	

March 31, 2019

	Millions of Yen		
	Due in 1 Year or Less	Due after 1 Year through 5 Years	Due after 5 Years through 10 Years
Cash and cash equivalents	¥ 68,232		
Short-term investments	1,150		
Notes and accounts receivable, and costs and estimated earnings on long-term construction contracts*	61,522	¥5,858	
Accounts receivable—other*	65,923		
Jointly controlled assets of joint venture	110,967		
<b>Total</b>	<b>¥ 307,796</b>	<b>¥5,858</b>	

March 31, 2020

	Thousands of U.S. Dollars		
	Due in 1 Year or Less	Due after 1 Year through 5 Years	Due after 5 Years through 10 Years
Cash and cash equivalents	\$ 1,063,341		
Short-term investments	77,718		
Notes and accounts receivable, and costs and estimated earnings on long-term construction contracts*	516,604	\$ 33,489	
Accounts receivable—other*	630,200		
Jointly controlled assets of joint venture	880,995		
<b>Total</b>	<b>\$ 3,168,860</b>	<b>\$ 33,489</b>	

\* Allowance for doubtful accounts is deducted.

Please see Note 9 for annual maturities of long-term debt.

**16. DERIVATIVES*****Derivative Transactions to Which Hedge Accounting Is Not Applied***

March 31, 2020

	Millions of Yen			
	Contract Amount	Contract Due after One Year	Fair Value	Unrealized Gain (Loss)
Foreign currency forward contracts:				
Selling USD/buying JPY	¥32,165		¥ (28)	¥ (28)
Selling EUR/buying JPY	5,685		(13)	(13)
Selling AUD/buying JPY	43,251		(341)	(341)
<b>Total</b>	<b>¥81,102</b>		<b>¥(383)</b>	<b>¥(383)</b>



March 31, 2019

	Millions of Yen			
	Contract Amount	Contract Amount Due after One Year	Fair Value	Unrealized Gain (Loss)
Foreign currency forward contracts:				
Selling USD/buying JPY	¥ 12,949		¥ (556)	¥ (556)
Buying USD/selling JPY	503	¥ 503	(3)	(3)
Buying EUR/selling JPY	15			
<b>Total</b>	<b>¥ 13,467</b>	<b>¥ 503</b>	<b>¥ (560)</b>	<b>¥ (560)</b>

March 31, 2020

	Thousands of U.S. Dollars			
	Contract Amount	Contract Amount Due after One Year	Fair Value	Unrealized Gain (Loss)
Foreign currency forward contracts:				
Selling USD/buying JPY	\$ 295,100		\$ (261)	\$ (261)
Selling EUR/buying JPY	52,157		(119)	(119)
Selling AUD/buying JPY	396,802		(3,136)	(3,136)
<b>Total</b>	<b>\$ 744,060</b>		<b>\$ (3,517)</b>	<b>\$ (3,517)</b>

**Derivative Transactions to Which Hedge Accounting Is Applied**

March 31, 2020

	Hedged Item	Millions of Yen		
		Contract Amount	Contract Amount Due after One Year	Fair Value (Loss)*1
Foreign currency forward contracts—Accounted for under deferred hedge accounting method:				
Selling USD/buying JPY	Foreign currency	¥ 138	¥ 17	¥ (6)
Buying USD/selling JPY	forecasted transaction	1,076	489	20
<b>Total</b>		<b>¥ 1,215</b>	<b>¥ 506</b>	<b>¥ 13</b>
Other*2:				
Selling USD/buying JPY	Payables	¥ 141		
Buying USD/selling JPY		376		
<b>Total</b>		<b>¥ 518</b>		

March 31, 2019

	Hedged Item	Millions of Yen		
		Contract Amount	Contract Amount Due after One Year	Fair Value (Loss)*1
Foreign currency forward contracts—Accounted for under deferred hedge accounting method:				
Selling USD/buying JPY	Foreign currency	¥ 3,859	¥ 1,444	¥ (54)
Buying USD/selling JPY	forecasted	3,680	1,634	32
Buying EUR/selling JPY	transaction	1,293		(36)
Buying SGD/selling JPY		18		
<b>Total</b>		<b>¥ 8,852</b>	<b>¥ 3,078</b>	<b>¥ (58)</b>
Other*2:				
Buying EUR/selling JPY	Payables	¥ 1,636	¥ 84	
Buying SGD/selling JPY				
<b>Total</b>		<b>¥ 1,637</b>	<b>¥ 84</b>	

March 31, 2020

	Hedged Item	Thousands of U.S. Dollars		
		Contract Amount	Contract Amount Due after One Year	Fair Value (Loss)*1
Foreign currency forward contracts—Accounted for under deferred hedge accounting method:				
Selling USD/buying JPY	Foreign currency	\$ 1,272	\$ 160	\$ (56)
Buying USD/selling JPY	forecasted transaction	9,877	4,488	183
<b>Total</b>		<b>\$ 11,150</b>	<b>\$ 4,649</b>	<b>\$ 127</b>
Other*2:				
Selling USD/buying JPY	Payables	\$ 1,300		
Buying USD/selling JPY		3,452		
<b>Total</b>		<b>\$ 4,753</b>		

\*1 Fair value is based on prices obtained from financial institutions.

\*2 Fair value of the foreign currency forward contract assigned for payables is included in the fair value of payables disclosed in Note 15.

**17. CONTINGENT LIABILITIES**

At March 31, 2020, the Group had the following contingent liabilities:

	Millions of Yen	Thousands of U.S. Dollars
Guarantees on employees' housing loans and others		\$3

**18. PROVISION FOR BUSINESS STRUCTURE IMPROVEMENT**

The Company recognized "provision for business structure improvement" in the year ended March 31, 2019. As part of the Company's medium-term management plan, it has been striving to implement structural reform including restructuring of the group companies.

Along with the cost being spent, the Company recognized ¥232 million (\$2,129 thousand) as "reversal of provision for business structure improvement" in the year ended March 31, 2020.

**19. OTHER COMPREHENSIVE INCOME (LOSS)**

The components of other comprehensive income (loss) for the years ended March 31, 2020 and 2019, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Unrealized gain (loss) on available-for-sale securities:			
Losses arising during the year	¥ (66)	¥ (67)	\$ (605)
Reclassification adjustments to profit or loss	115		1,063
Amount before income tax effect	49	(67)	457
Income tax effect	14	(2)	135
<b>Total</b>	<b>¥ 64</b>	<b>¥ (69)</b>	<b>\$ 592</b>
Deferred gain on derivatives under hedge accounting:			
Gains arising during the year	¥ 43	¥ 2,554	\$ 400
Reclassification adjustments to profit or loss	13	(34)	127
Adjustment to acquisition cost of assets	1	(21)	15
Amount before income tax effect	59	2,498	542
Income tax effect	(2)	(779)	(26)
<b>Total</b>	<b>¥ 56</b>	<b>¥ 1,719</b>	<b>\$ 516</b>
Foreign currency translation adjustments—			
Adjustments arising during the year	¥3,197	¥(1,348)	\$29,337
<b>Total</b>	<b>¥3,197</b>	<b>¥(1,348)</b>	<b>\$29,337</b>
Defined retirement benefit plans:			
Adjustments arising during the year	¥ (576)	¥ (418)	\$ (5,284)
Reclassification adjustments to profit or loss	(338)	(77)	(3,103)
Amount before income tax effect	(914)	(495)	(8,388)
Income tax effect	1	408	17
<b>Total</b>	<b>¥ (912)</b>	<b>¥ (87)</b>	<b>\$ (8,371)</b>
Share of other comprehensive loss of associates:			
Loss arising during the year	¥ (66)	¥ (99)	\$ (611)
Reclassification adjustments to profit or loss		(750)	
<b>Total</b>	<b>¥ (66)</b>	<b>¥ (850)</b>	<b>\$ (611)</b>
<b>Total other comprehensive income (loss)</b>	<b>¥2,339</b>	<b>¥ (636)</b>	<b>\$21,463</b>

**20. NET INCOME (LOSS) PER SHARE**

A reconciliation of the differences between basic and diluted net income (loss) per share ("EPS") for the years ended March 31, 2020 and 2019, was as follows:

	Year Ended March 31, 2020		Yen	U.S. Dollars
	Millions of Yen	Thousands of Shares		
	Net Income Attributable to Owners of the Parent	Weighted-Average Shares	EPS	
Basic EPS—Net income available to common shareholders	¥10,602	258,967	¥40.94	\$0.38
Effect of dilutive securities—Preferred stock	1,575	525,956		
Diluted EPS—Net income for computation	¥12,177	783,923	¥15.51	\$0.14
	Year Ended March 31, 2019		Yen	U.S. Dollars
	Millions of Yen	Thousands of Shares	EPS	
Basic EPS—Net loss available to common shareholders	¥(214,948)	258,967	¥(830.02)	

There is no dilutive effect for the year ended March 31, 2019.

**21. SUBSEQUENT EVENTS**

(Reduction of Capital and Capital Reserve and Appropriation of Surplus)

The Board of Directors met on May 8, 2020, and resolved to reduce capital and capital reserves and appropriate these funds as compensation for deficit, which is to be proposed at the ordinary general meeting of shareholders of the Company on June 25, 2020.

**a. Purpose of Reduction of Capital and Capital Reserve and Appropriation of Surplus**

This is carried out to offset the loss in retained surplus carried forward and improve its financial condition. Capital and capital reserves are transferred to other capital surplus, and other capital surplus is transferred to retained earnings carried forward.

**b. Outline of Capital Reduction****(1) Amount of capital to be reduced**

The capital amount of ¥78,396 million as of March 31, 2020, is to be reduced by ¥63,381 million to ¥15,014 million.

**(2) Method of capital reduction**

In accordance with Article 447, Paragraph 1 of the Companies Act, the Company will reduce its capital without compensation and transfer the total amount of reduced capital to other capital surplus. This reduction will not affect the number of shares held by shareholders.

**c. Outline of Capital Reserve Reduction****(1) Amount of capital reserve to be reduced**

The capital reserve amount of ¥72,112 million as of March 31, 2020, is to be reduced by ¥72,112 million to ¥0.

**(2) Method of capital reduction**

In accordance with Article 448, Paragraph 1 of the Companies Act, the Company will reduce its capital reserve and transfer the total amount of the reduced capital reserve to other capital surplus.

**d. Outline of Appropriation of Surplus**

Based on Article 452 of the Companies Act, on the condition that the reduction of the amount of capital and capital reserve outlined in b and c above takes effect, the Company will make up for deficits by transferring to retained earnings a carried forward a total of ¥135,494 million, which is equivalent to the increase of other capital surplus due to the aforementioned capital reduction. As a result, the amount of retained earnings carried forward after the transfer will be ¥0.

**(1) Items and amount of reduced surplus**

Other capital surplus ¥135,494 million

**(2) Items and amount of increased surplus**

Retained earnings carried forward of ¥135,494 million

**e. Timeline**

Decision by Board of Directors:	May 8, 2020
Approved by general meeting of shareholders:	June 25, 2020
Notice of objection of creditors:	June 26, 2020
Deadline for objections of creditors:	July 27, 2020
Effective date:	August 7, 2020

**22. SEGMENT INFORMATION**

Under Japanese accounting standards, an entity is required to report financial and descriptive information about its reportable segments. Reportable segments are operating segments or aggregations of operating segments that meet specified criteria. Operating segments are components of an entity about which separate financial information is available and for which such information is evaluated regularly by the chief operating decision-maker in deciding how to allocate resources and in assessing performance. Generally, segment information is required to be reported on the same basis as is used internally for evaluating operating segment performance and deciding how to allocate resources to operating segments.

**(1) Description of Reportable Segments**

The Group's reportable segments are those for which separate financial information is available and regular evaluation by the Company's management is performed in order to decide how resources are allocated within the Group. The Group provides "Engineering" services globally, including planning, engineering, construction, procurement, commissioning, and maintenance, adapting the most appropriate functions of each related company.

**(2) Methods of Measurement for the Amounts of Sales, Profit (Loss), Assets, Liabilities, and Other Items for Each Reportable Segment**

The accounting policies of each reportable segment are consistent with those disclosed in Note 2, "Summary of Significant Accounting Policies."

The profit in reporting segments is based on the operating income. Intersegment income and transfers are measured at the quoted market price.

**(3) Information about Sales, Profit, Assets, Liabilities, and Other Items**Year Ended March 31, 2020

The reportable segment of the Group consists of only the "Engineering" segment. Since the travel services of Arrowhead International Corporation were transferred to another company in this fiscal year, the "Other" segment has become immaterial. Accordingly, the Group has omitted reporting of segment information.

Year Ended March 31, 2019

	Millions of Yen				
	Reportable Segment Engineering	Other*1	Total	Reconcili- ations*2	Consoli- dated*3
Sales:					
Sales to external customers	¥ 338,592	¥3,360	¥ 341,952		¥ 341,952
Intersegment sales or transfers	18	6,208	6,226	¥(6,226)	
Total	¥ 338,611	¥9,568	¥ 348,179	¥(6,226)	¥ 341,952
Segment profit (loss)	¥ (200,090)	¥ 278	¥ (199,812)	¥ 16	¥ (199,795)
Segment assets	347,715	4,900	352,615	(274)	352,341
Segment liabilities	396,836	1,418	398,254	13,240	411,495
Other:					
Depreciation	2,781	34	2,816		2,816
Amortization of goodwill	11	29	41		41
Investment in associated companies	2,837		2,837		2,837
Increase in property, plant and equipment and intangible assets	2,463	17	2,480		2,480

Notes for the year ended March 31, 2019:

\*1 "Other" represents industry segments which are not included in the reportable segment, consisting of temporary staffing services and travel services.

\*2 Details of the reconciliations are as follows:

- (1) The reconciliation in segment profit of ¥16 million is the elimination of intersegment trades.
- (2) The reconciliation in segment assets of ¥(274) million is the result of the elimination of intersegment trades of ¥(2,748) million and the Group's assets of ¥(2,474) million, which are not included in the reportable segment.
- (3) The reconciliation in segment liabilities of ¥13,240 million is the result of the elimination of intersegment trades of ¥(2,748) million and the Group's liabilities of ¥15,989 million, which are not included in the reportable segment.

\*3 The calculation of segment profit (loss) is based on the operating income in the consolidated statement of operations.

**Related Information****(1) Information about Products and Services**

The engineering business represents more than 90% of the total sales of the Group. Accordingly, the presentation of the information about each service is not required under Japanese GAAP.

**(2) Information about Geographical Areas****(a) Revenue**Year Ended March 31, 2020

	Millions of Yen	Thousands of U.S. Dollars
U.S.A.	¥ 192,057	\$ 1,761,997
Japan	133,080	1,220,919
Others	<u>60,787</u>	<u>557,679</u>
Total	<u>¥ 385,925</u>	<u>\$ 3,540,596</u>

Year Ended March 31, 2019

	Millions of Yen
Japan	¥ 120,400
Russia	116,961
U.S.A.	35,465
Others	<u>69,125</u>
Total	<u>¥ 341,952</u>

Note: Revenue is classified by country or region based on the location of construction sites.

**(b) Property, plant and equipment**Year Ended March 31, 2020

	Millions of Yen	Thousands of U.S. Dollars
Japan	¥ 10,160	\$ 93,212
Asia	1,974	18,117
Others	<u>319</u>	<u>2,927</u>
Total	<u>¥ 12,454</u>	<u>\$ 114,257</u>

Year Ended March 31, 2019

	Millions of Yen
Japan	¥ 10,311
Asia	1,290
Others	<u>112</u>
Total	<u>¥ 11,714</u>

**(3) Information about Major Customers**Year Ended March 31, 2020

Name	Related Segment	Millions of Yen Revenue	Thousands of U.S. Dollars Revenue
Cameron LNG LLC	Engineering	¥79,612	\$ 730,385
Gulf Coast Growth Ventures, LLC	Engineering	57,378	526,403

Year Ended March 31, 2019

Name	Related Segment	Millions of Yen Revenue
OJSC Yamal LNG	Engineering	¥ 116,918

**(4) Information about Goodwill by Reportable Segment**

The ending balance of goodwill as of March 31, 2020 and 2019, was as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2020	2019	2020
Engineering	*2	¥ 112	
Other*1	—	314	—
Total	=	<u>¥ 427</u>	=

\*1 "Other" includes temporary staffing services.

\*2 The reportable segment of the Group consists of only the "Engineering" segment, and the "Other" segment is immaterial. Accordingly, the Group has omitted reporting of segment information. Regarding the goodwill, which is not included in the reportable segment, its amortization in the year was ¥29 million (\$275 thousand) and its unamortized balance was ¥284 million (\$2,614 thousand).

**23. RELATED PARTY DISCLOSURES**

The material transactions of the Group with the parent company and major shareholders for the year ended March 31, 2020, were as follows:

	Millions of Yen	Thousands of U.S. Dollars
Subscribe for shares*1	¥ 70,000	\$ 642,201
Loan of funds*2	35,000	321,100
Borrowings*3	30,000	275,229

\*1 Mitsubishi Corporation subscribed to a third-party allotment.

\*2 This was due to the transaction Mitsubishi Corporation Financial & Management Services (Japan) Ltd. Regarding the loan of funds, applicable interest rates are rationally determined upon taking into account the market rate of interest.

\*3 This was due to the transaction Mitsubishi Corporation Financial & Management Services (Japan) Ltd. Regarding the borrowings, applicable interest rates are rationally determined upon taking into account the market rate of interest.

There are no material balances with these unconsolidated subsidiaries and associated companies as of March 31, 2020.

There are no material transactions of the Group with unconsolidated subsidiaries and associated companies for the year ended March 31, 2019.

There are no material balances with unconsolidated subsidiaries and associated companies as of March 31, 2019.

\* \* \* \* \*

**Deloitte.**

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## INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Chiyoda Corporation:

### Opinion

We have audited the consolidated financial statements of Chiyoda Corporation and its consolidated subsidiaries (the "Group"), which comprise the consolidated balance sheet as of March 31, 2020, and the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, all expressed in Japanese yen.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of March 31, 2020, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

### Convenience Translation

Our audit also comprehended the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made in accordance with the basis stated in Note 1 to the consolidated financial statements. Such U.S. dollar amounts are presented solely for the convenience of readers outside Japan.

### Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the provisions of the Code of Professional Ethics in Japan, and we have fulfilled our other ethical responsibilities as auditors. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Responsibilities of Management and the Audit and Supervisory Committee for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern in accordance with accounting principles generally accepted in Japan and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Audit and Supervisory Committee is responsible for overseeing the Directors' execution of duties relating to the design and operating effectiveness of the controls over the Group's financial reporting process.

### Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in Japan will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks. The procedures selected depend on the auditor's judgment. In addition, we obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain, when performing risk assessment procedures, an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate whether the overall presentation and disclosures of the consolidated financial statements are in accordance with accounting principles generally accepted in Japan, as well as the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit and Supervisory Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit and Supervisory Committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with it all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

### Interest Required to Be Disclosed by the Certified Public Accountants Act of Japan

Our firm and its designated engagement partners do not have any interest in the Group which is required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.



June 25, 2020



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