# A Grand Opportunity for the Future



**ANNUAL REPORT FY2017** 

For the year ended March 31, 2018

# **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 our stakeholders, including shareholders, customers, business partners, employees, and local communities.

# 70 Years of Chiyoda

On January 17, 2018, Chiyoda Corporation celebrated the 70th anniversary of its founding.

1968~

**Contributes to** 

development of the

oil and gas industry

beyond the oil shock

# 1948~

Supports rebuilding of the postwar oil industry in Japan



The Company's founding



25.000 barrels per dav at Crude Distillation Unit in Kawasaki, Japan



1958~

**Establishes its** 

position as a reliable

engineering company

Grass-roots refinery in Mizushima, Japan



Jeddah Refinerv in Saudi Arabia



Completion of LNG plant faction in UAF





for Abu Dhabi Gas Lique-

#### Accelerates its execution of overseas projects in mainly the Middle East and Southeast Asia



1978~

Completion of Petromin . Mobil Yanbu Refinery in Saudi Arabia



Food processing plant for Nada-Kobe Consumers' Co-operative Society in Kobe, Japan

# **Mirai Engineering**

### The Chiyoda Group aims to be a global top-tier "Integrated Engineering and Service Provider" in the energy and environment fields.

- World-leading contractor of liquefied natural gas (LNG) plant construction
- Steady progress in the life science and new energy fields pharmaceuticals, photovoltaic, and hydrogen
- Strategic move into advanced medical and cutting-edge digital technologies
- Corporate operations with greater awareness of society, health, safety, and environment (HSE) and diversity

# 1988~

#### **Expands its business** field beyond the oil and gas industry

# 1998~

projects worldwide

Order awarded for

Sakhalin Energy in Russia,

the first LNG plant in Russia

timed to take advantage

of the natural gas boom

Order awarded for Qatargas LNG Project in Qatar





Order awarded for PT. Smelting Copper Smelter Project in Indonesia



Order awarded for Qatar-gas II LNG Project in Qatar. the largest LNG plant in the world





# 2008~

Establishes its position as the No. 1 LNG contractor and expands into the U.S. market



Order awarded for Cameron LNG Project in the United States



Order awarded for Yamal LNG Project in Russia

# 2018~

Accelerates its **Medium-Term** Management Plan, "Mirai Engineering"



Scheduled to complete Japan's first demonstration plant for renewable jet and diesel fuels for euglena Co., Ltd.



Chiyoda's Al Solution: New technology development for the next generation with Big Data / IoT / AI / robotics



SPERA Hydrogen®: Chivoda's Hydrogen Supply Business-Largescale storage and transport of hydrogen utilizing the organic chemical hydride (OCH) method



# PROFILE

Chiyoda Corporation is a leading integrated engineering company with a significant presence in the global oil and gas market, and customers in more than 60 countries. Especially in the field of LNG plant engineering and construction, Chiyoda is a global leader, with a track record of undertaking projects that account for around 40% of the world's total LNG plant capacity.

Established in 1948, Chiyoda started with domestic projects in petroleum refining, petrochemicals, and gas processing. Since the 1970s, Chiyoda has developed a powerful global footprint, taking advantage of the many opportunities in the engineering, procurement, and construction (EPC) of energy-related plants, while building a first-class reputation for technological capability, safety, and reliability.

During its 70-year history, the Chiyoda Group has been growing steadily under the corporate philosophy of enhancing business by aiming for "Energy and the Environment in Harmony," while contributing to the sustainable development of society. In addition, Chiyoda has expanded its business into the new energy and renewable energy markets.

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#### Forward-Looking Statements

Statements made in this annual report with respect to plans, strategies, and future performance that are not historical facts are forward-looking statements involving risks and uncertainties. Chiyoda cautions that a number of factors could cause actual results to differ materially from such statements including, but not limited to, general economic conditions in Chiyoda's markets; demand for, and competitive pricing pressure on, Chiyoda's products in the marketplace; Chiyoda's ability to continue to win acceptance for its products in these highly competitive markets; and movements of currency exchange rates.

Note: FY2017 and the year under review represent the one-year period ended March 31, 2018, and FY2018 represents the one-year period ending March 31, 2019.

# Who We Are At a Glance

Chiyoda Corporation is a world-leading, integrated engineering company. The Chiyoda Group has developed its cutting-edge technologies in this highly challenging industry and accumulated a wealth of experience over the last seven decades.

The Group provides excellent services backed by ample experience and technical know-how, while also striving to realize vital business with "Energy and the Environment in Harmony." Existing major projects and key data are reflected on this page.





Chiyoda Corporation Annual Report 2017

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#### **Oil Refineries**

**Chemicals & Petrochemicals** 

Gas Processing & LNG (Liquefaction / Export Terminal & Import / Regasification Terminal)

**Metal Smelter** 

**Environmental Protection Projects** lue Gas Desulfurization / Water Treatment Facilitie

Fine Chemicals / Pharmaceuticals

**Industrial Facilities** actory Automation / Food Proce sing Plant, etc.)

**Renewable Energy** oltaic / Wind / E

**Infrastructure Projects** 

# Who We Are **Business Trends**

### **Financial Highlights**

**Revenue and Gross Margin** 



Ordinary Income (Loss) and Ordinary Income (Loss) to Revenue



- Ordinary Income (Loss) to Revenue (right)

#### Shareholders' Equity, ROE, and Shareholders' Equity Ratio



← ROE (right) ← Shareholders' Equity Ratio (right)

**Operating Income (Loss) and** 

**Operating Income (Loss) to Revenue** 



- Operating Income (Loss) to Revenue (right)

%

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



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

#### New Orders / Backlog of Contracts



**Non-Financial Highlights** 

Industrial Waste Disposal Quantity



#### Industrial Waste Recycling Rate



#### Number of Non-Japanese Employees





#### CO<sub>2</sub> Emissions









# **Major Project List**

The Chiyoda Group has successfully completed various types of facilities all across the world over the past 70 years.

The following list shows our major projects under execution and recently completed projects.

Energy Business						
	Client	Project	Location	Capacity	Scope of Work	Project Status
LNG Plants & Other Gas-Related Wor	rk					
LNG Plants (EPC)	INPEX Operations Australia Pty Ltd.	Ichthys Onshore LNG Facilities Project	Darwin, Australia	4.45 x 2 MMTY	E.P.C.	Ongoing
	FLNG Liquefaction, LLC	Freeport LNG Export Project	Freeport, Texas, U.S.	4.64 x 2 MMTY	E.P.C.	Ongoing
	FLNG Liquefaction 3, LLC	Freeport LNG Export Project Train 3	Freeport, Texas, U.S.	4.64 x 1 MMTY	E.P.C.	Ongoing
	Cameron LNG, LLC	Cameron LNG Project	Hackberry, Louisiana, U.S.	4.5 x 3 MMTY	E.P.C.	Ongoing
	JSC Yamal LNG	Yamal LNG Project	Sabetta, Yamal-Nenets, Russia	5.5 x 3 MMTY	E.P.C.	Ongoing
	BP Berau Ltd.	Tangguh LNG Project	West Papua, Indonesia	3.8 x 1 MMTY	E.P.C.	Ongoing
Floating (FPU)	ENI Muara Bakau B.V.	FPU Jangkrik Gas Field, Indonesia		150 x 3 MMSCFD	E.P.C.I.	Completed*1
Helium Recovery Unit	RasGas Company Ltd.	Helium 3	Ras Laffan, Qatar	_	E.P.C.	Ongoing
<b>Refineries / Petrochemicals / Metals</b>						
Catalytic Reforming Unit	JXTG Nippon Oil & Energy Corporation	-	Negishi, Japan	30,000 BPSD	E.P.C.	Completed*1
Hydrocracking Unit	PDVSA Petroleo, S.A.	_	Puerto La Cruz, Venezuela	100,000 BPSD	E.PS.CS.	Ongoing
Fluid Catalytic Cracking Unit	Showa Yokkaichi Sekiyu Co., Ltd.	_	Yokkaichi, Japan	61,000 BPSD (Partial Renewal)	E.P.C.	Completed*1
	PRPC Refinery and Cracker Sdn. Bhd.	_	Johor, Malaysia	70,000 x 2 BPSD (for Residue Oil)	E.P.C.C.	Ongoing
Residuum Hydrodesulfurization Unit	Nghi Son Refinery Petrochemical Ltd.	– Nghi Son, Vietnam		105,000 BPSD	E.P.C.	Completed*1
Refrigerated Gaseous Tank Facility for Ethylene and Propylene	Dialog Plant Services Sdn. Bhd.	_	Pengerang, Johor State, Malaysia	_	E.P.C.C.	Ongoing
Non-Ferrous Metals Plants	Toho Titanium Co., Ltd. and Advanced Metal Industries Cluster Company Ltd.	Titanium Sponge Plant	Yanbu, Saudi Arabia	15,600 ton/year	E.P.C.	Completed*1

Anmantal Blisinass	

<b>Environmental Business</b>						
	Client	Project	Location	Capacity	Scope of Work	Project Status
Pharmaceuticals / Biochemistry / Ge	eneral Chemistry					
Pharmaceuticals	Nichi-Iko Pharmaceutical Co., Ltd.	Finishing, Commercial	Toyama, Japan	-	E.P.C.V. *2	Ongoing
	CMIC CMO Co., Ltd.	Finishing, Commercial	Tochigi, Japan	-	E.P.C.V.	Ongoing
	Nippon Shokubai Co., Ltd.	API Commercial	Osaka, Japan	_	E.P.C.V. *2	Ongoing
	Tosoh Corporation	Offices	Yamaguchi, Japan	_	E.P.C.	Ongoing
PeptiStar, Inc. Man		Manufacturing Plant No.1 and No.2	Osaka, Japan	-	E.P.C.	Ongoing
Environment / New Energy / Infrastr	ucture					
CCS (Carbon Capture & Storage)         Toshiba Energy Systems & Solutions Corporation		Large-Scale Carbon Capture Facility	Fukuoka, Japan	500 t/d	E.P.C.	Ongoing
Photovoltaic Power Plants	Sanco Real Estate Co., Ltd.	CIS Photovoltaic Power Plant (On Ground)	Mie, Japan	14,000 kW	E.P.C.	Completed*1
	Sanco Real Estate Co., Ltd.	CIS Photovoltaic Power Plant (On Ground)	Mie, Japan	12,800 kW	E.P.C.	Completed*1
	Solar Frontier K.K.	CIS Photovoltaic Power Plant (On Ground)	lwate, Japan	13,000 kW	E.P.C.	Completed*1
	SDT Solar Power K.K.	CIS Photovoltaic Power Plant (On Ground)	Yamaguchi, Japan	17,300 kW	E.P.C.	Completed*1
	Pacifico Energy Toyota LLC	Photovoltaic Power Plant (On Ground)	Aichi, Japan	62,000 kW	E.P.C.	Ongoing
Transportation Projects	Civil Aviation Authority of Mongolia	Airport	Ulaanbaatar, Mongolia	_	P.C.	Completed*1
	Department of Transportation and Communication, the Government of the Republic of the Philippines	Airport	Panglao Island, Bohol Province, the Republic of the Philippines	_	P.C.	Ongoing
Environment, Energy Conservation, and Industrial Facilities	Undisclosable	Precious Metal Recycling Plant	Chiba, Japan	_	E.P.C.	Ongoing

\*1 Completed in 2017 \*2 Main Contractor: Chiyoda Techno Ace Co., Ltd.

For a complete list of major projects, please refer to the Major Project booklet on our corporate website: • www.chiyodacorp.com/projects/MajorProjects\_201803\_e\_1.pdf

E: Engineering P: Procurement C: Construction CS: Construction Supervision CC: Construction and Commissioning I: Installation V: Validation BPSD: Barrel Per Stream Day SCFD: Standard Cubic Feet Per Day

#### Management View

# Message from the CEO



In creating shared values, it is important that we approach sustainability not as a tactic or a single objective, but as a way of doing business.

## Looking Back at Fiscal 2017

Fiscal 2017 was my first year as President & CEO of Chiyoda and the start of the new Medium-Term Management Plan (MTMP), "Mirai Engineering—A Grand Opportunity for the Future."

Our business environment is experiencing major challenges which offer opportunities for the Company to adapt and grow, such as changes in the structure of energy supply and demand, increasing environmental awareness, and revolutions in digital technologies and biotechnologies.

Consequently, we are organizing our future growth strategies in line with these opportunities while introducing structural reforms to the way we do business.

Looking back at our business performance in fiscal 2017, we were able to record net income attributable to owners of the parent of ¥6.4 billion (compared with net loss of ¥41.1 billion in the previous fiscal year, and 129% of the forecast), a positive sign for stakeholders. Meanwhile, we also faced internal challenges as consolidated revenue fell 15.4%, to ¥510.9 billion, and we recorded operating loss of ¥12.3 billion (compared with operating income of ¥15.7 billion in the previous fiscal year), mainly because of incremental cost increases at ongoing U.S. projects.

As for new orders, we saw a growth in the environmental business field, where we put focus on the MTMP. New orders in this field grew 26%, to ¥122.7 billion, and accounted for roughly 41% of total new orders, while the total amount of new orders itself decreased 14.4%, to ¥301.2 billion, as no final investment decision (FID) for new LNG projects was made in fiscal 2017.

# **Structural Reforms for Minimizing Volatility**

The new MTMP simultaneously promotes structural reforms in the management of the Company and a transformation of its business model to focus on growth for the next 10 years. Management reforms include strengthening risk management capabilities, increasing core earnings strength and resilience, and expanding our human resource base. Major changes are being introduced in fiscal 2018 and 2019, and the Company has already made a solid start.

Of the three reforms undertaken, we are putting special emphasis on our earnings strength and resilience. Engineering, our core business, is vulnerable to market volatility— hence our focus on minimizing volatility by reducing costs. In addition, we see opportunities in small- and medium-sized projects which present less risk than the larger-scale projects in which we historically compete and excel. In the highly competitive overseas refinery and petrochemical fields, a change to a more centralized bidding process will allow us to engage our core expertise and work on cost reduction more effectively.

### Growth Strategy for Expanding Business Activities and Innovation in Our Business Model

Our new growth strategy introduces three major objectives in addition to our pursuit of major LNG plant contracts, which is the cornerstone of our business. These objectives are to: (1) build an energy value chain business; (2) expand our engagement in and the global environmental engineering sector; and (3) develop a business model for the digital society.

Underlying our enthusiasm for our new growth strategy is the belief that demand for LNG will continue to increase, that new large-scale projects will move forward, and that additional opportunities will arise in projects already under way. Our expertise in front-end engineering and design (FEED) will lead to new orders while our development work for a carbon-free society in Japan and around the world is presenting opportunities in renewable energy, including solar energy and biomass power generation. While renewable energy projects may not be large scale at the moment, the experience and knowledge they provide will be of great value in the future.

### Efforts toward the Establishment of Hydrogen Energy

We expect hydrogen to be a pillar of long-term growth. Technical challenges today include storage and transportation in large quantities, and Chiyoda is developing technologies that address those problems, in part by using the existing infrastructure that supports the oil industry. While a small business today, the potential for hydrogen as a major source of energy makes this a very exciting prospect.





### **Enhancing Corporate Governance and Working** toward Sustainability

Enhancing corporate governance to improve the decision-making process can be a major contributor toward achieving sustainable growth and increasing shareholder value. Recently, Chivoda has increased the size of the Audit & Supervisory Committee and brought in more outside directors to foster a culture that is more open to thoughtful discussion and diverse points of view. However, we continue to look for further improvement, recognizing the need to consistently meet stakeholder expectations. For example, we will increase the size of the team auditing business operations, installing a Chief Compliance Officer (CCO) and appointing a Chief Sustainability Officer (CSO) to help with the Company's

pursuit of a carbon-free society.

### **Efforts toward Training Human Resources**

Human resources are our most important asset. Attracting, cultivating, and retaining high-level talent is key to creating long-term value at Chiyoda, and we have appointed a new Chief Human Resources Officer (CHRO) and a Chief Talent Management Officer (CTMO) to further those aims. Under these two executives, we will utilize our human resources more effectively, improve the development of those assets, proactively place skilled personnel in optimum positions, and promote mobility within the entire Group.

In closing, I must express my gratitude for the praise we receive from customers around the world for our technological and project execution capabilities. Our core value of promoting "Energy and the Environment in Harmony" remains as true today as at our founding. As we pursue new goals of technological innovation and the sustainability of corporate value, our original values remain the same. We kindly ask our stakeholders for their continued guidance and encouragement as we pursue these goals going forward.

July 2018

Masaji Santo President & CEO

#### Management View

# Message from the CFO

# Working toward Sustainable Growth in the Medium to Long Term

Hirotsugu Hayashi CFO and CCO



Since my appointment as CFO in 2017, the energy sector continues to face challenges that have impacted Chiyoda in many ways. While the level of oil and gas prices and demand may be fluctuating, there are signs that the overall environment for Chiyoda and its partners in the energy construction industry is improving. Chiyoda has worked hard to increase financial efficiency and introduce the structural reforms announced last year.

#### **Business Performance for fiscal 2017**

The Chiyoda Group recorded ¥510.9 billion in consolidated revenue for completed construction work in the fiscal year under review, a decline of 15.4% from the previous fiscal year. Total cost of sales, at ¥502.3 billion, also declined, 11.2%, and due to significant cost increases in costs for LNG projects in the United States, gross profit declined 77.5%, to ¥8.6 billion. At the operating level, Chiyoda recorded a loss of ¥12.3 billion compared with income of

#### **Stabilization of Core Earnings**

A key initiative of our new MTMP, "Mirai Engineering—A Grand Opportunity for the Future," launched in August 2017, is to strengthen core earnings via structural reforms that balance those core earnings with costs in the medium to long term. ¥15.7 billion in the previous fiscal year. Net income attributable to owners of the parent increased ¥47.6 billion over the previous fiscal year, to ¥6.4 billion. The Company recorded an extraordinary profit of ¥15.0 billion in the fiscal year under review compared with an extraordinary loss of ¥23.4 billion in the previous fiscal year, due to a reversal of provision for loss on business of subsidiaries and associated companies.

While developing the Company's core energy sector business, we will focus on increasing our activities in the global environmental engineering sector. Over the next decade, we plan to increase our global environment business from the current level of 15% of total sales to 25-45%. In addition, we will increase the breadth of our activities by taking our established EPC work and diversifying into operations and maintenance, consulting, and technical services. We will further balance our portfolio by relying

#### **Maximizing Our Financial Resources**

An essential part of our structural reforms is addressing fixed costs toward increasing our profitability. In the fiscal year under review, SG&A expenses fell 7.1%, to ¥20.9 billion, and we plan to reduce this even further, to ¥18.5 billion, in fiscal 2018 by reviewing our overseas businesses. We believe that reducing our fixed costs in tandem with diversifying our sources of revenue throughout our

#### **Dividend Policy**

Under the latest MTMP, we continue to set the consolidated payout ratio at a minimum of 30% of net income attributable to owners of the parent but set a new minimum for full-year dividends of ¥6 per share.

#### **Dividends per Share and Payout Ratio**







Financing Activities

Financing Activities

less on highly volatile LNG-centered EPC profits and expanding into industries and services that offer a more stable earnings stream.

domestic and global operations will allow us to maximize growth in the medium to long term.

Meanwhile, we need to focus on achieving high liquidity in order to provide flexible support for EPC execution, our core business. We will utilize cash on hand toward the smooth development of our business.

Based on this policy we will increase the annual dividend for fiscal 2017 by ¥1.5 per share, to a total of ¥7.5 per share. Thus, the payout ratio is 30.1%, and we will continue to seek stable returns for our shareholders in the future.



#### **EBITDA and EV / EBITDA**

EV / EBITDA (right)

# **Introducing New Chief Officers**

Chiyoda Corporation introduced the Chief Officer System in April 2018, which serves to streamline processes and create new growth opportunities. In accordance with the MTMP released in August 2017, the new organization focuses on the three elements of Energy, Environment, and Digital Technologies. In that regard, we are pleased to announce the appointment of six new chief officers:

CCO (Chief Compliance Officer) Responsible for ensuring employees focus on matters of compliance

CSO (Chief Sustainability Officer) Responsible for working toward a sustainable society and decarbonization CTMO (Chief Talent Management Officer) Responsible for optimizing human resources CHRO (Chief Human Resources Officer) Responsible for promoting human resources development CDO (Chief Digital Officer) Responsible for exploring new business fields with cutting-edge digital technologies

Co-CDO (Co-Chief Digital Officer) Responsible for developing engineering tools by utilizing digital technologies

#### Their immediate response is to work in line with the needs and goals of the CEO, adapting to changes in energy demand and supply with increased awareness of the global environment and changes in industry structure. Chiyoda continues digitizing engineering tools and is ready to meet the challenges of an ever changing world.

Hirotsugu Hayashi CFO and CCO



- Establishes a compliance and ethics program within the Chiyoda Group to address ever changing compliance issues
- Promotes compliance communication within the Group via continued education and knowledge sharing
- Manages compliance issues as a Group based on smooth and comprehensive reporting and cooperation
- Maintains ongoing study of applicable laws, regulations, and industry best practices to provide a basis for compliance promotion within the Group

#### Comment

Aside from my duties as CFO, I am also responsible for overseeing the Chiyoda Group's compliance program. This involves promoting compliance communication both within and outside the Group, which is integral to engaging with stakeholders and gaining their confidence and trust.

**Ryosuke Shimizu** CSO



- Manages environmental, social, and governance (ESG) risks and opportunities
- Formulates the Chiyoda Group's sustainable development goals
- Undertakes strategic planning to ensure a low-carbon / zero-carbon society
- · Promotes the Group's ESG activities; Chiyoda is a leading EPC contractor, long engaged in efforts to place sustainability at the core of corporate strategy
- Supports the United Nations Sustainable Development Goals (SDGs); our management decisionmaking process includes efforts to address global needs and embrace the challenge of "converting" them into functional business solutions

#### Comment

I will focus on strengthening the supply chain, leading Chiyoda toward achieving the SDGs and realizing a more prosperous society for all. My hope is that my work as CSO, in combination with Chiyoda's corporate engagement, will lead us to broad improvements in our sustainability efforts. Arata Sahara CTMO

Yasumitsu Abe CHRO



- Offers opportunities to employees to enhance their careers through comprehensive development
- Creates flexibility within the workforce to encourage development in other areas of the Company
- Organizes allocation of personnel, especially project key personnel (PKP), within the Group to optimize resources relative to needs with a focus on the best allocation of project teams



- Oversees Chivoda's human capital management and HR technology systems
- Works closely with the CTMO to ensure a constant influx of top-class talent
- Addresses organizational and strategic business needs through the establishment of "Learning Zones" and "Performing Zones"
- Works as a direct link between

#### Comment

It is clear now more than ever that there is a need for highly skilled personnel for organizations to be successful. Having a skilled workforce is crucial to remaining competitive. By achieving the right balance of employees and level of talent, and integrating everyone into a successful team, a company can enjoy a harmonious workforce and experience less disruption during economic downturns.

#### Comment

I believe HR is one of the biggest differentiators of organizational performance and needs to be seen as a critical strategic function within Chiyoda. In my new position as CHRO, I will manage the HR Leadership Team by aligning the priorities and investment needs of the team with Chiyoda's business priorities. I will focus on building and maintaining the best team that will serve Chiyoda's long-term organizational goals. I will also design "Learning Zones" to continuously improve by trial and error the skills of our personnel in a low-risk environment to achieve better results in "Performing Zones." By repeating this cycle, we can smoothly execute and accomplish stronger results every time.

#### Toshiaki Furugori (left) CDO

Toshiya Momose (right) Co-CDO



- Are engaged in transformational roles responsible for the adoption of digital technologies across the entire business
- Are responsible for converting traditional EPC businesses into businesses compatible with the digital era, using Big Data and artificial intelligence (AI) applications
- Oversee operations in the rapidly developing digital sectors (AI, the Internet of Things (IoT))
- · Keep abreast of new technological advances occurring worldwide that can enhance Chiyoda's operations and benefit its clients

employees and senior management, and is responsible for addressing the feedback and concerns of both parties

### Comment

As CDO and Co-CDO, we work on the development and revisions of policies and procedures for the general operation of Chiyoda's digital strategy and related activities. Developing a digital strategy, and designing and implementing the Company's digital roadmap, is a major task in this fastchanging world. As such, two-way communication will be key.

# Yamal LNG Project

The Yamal LNG Project is an integrated facility for natural gas liquefaction owned by NOVATEK (50.1%), Total S.A. (20%), CNPC (20%), and SRF (9.9%). The project is located in Sabetta in the northeast corner of the Yamal Peninsula, Russia. Chiyoda Corporation, together with JGC and TechnipFMC, started EPC work for the Yamal LNG Project in 2014. The Yamal LNG plant will comprise three liquefaction trains with a total capacity of 16.5 million tons of LNG per year when fully operational.

The 1st LNG train started operation successfully in December 2017, as scheduled. The 2nd and 3rd LNG trains will be commissioned in 2018 and 2019, respectively.

#### Q&A with a Project Director at Chiyoda A Challenge in the Extreme Cold of the Russian Arctic

Hidetaka Fujihara Project Director

While it has certainly been difficult to accomplish projects in addition to coordinating several engineering centers and module vards, what in particular has proven to be the most difficult? We produced close to 150 modules concurrently at 10 fabrication yards spread throughout Asia. During that process, we faced some difficult decisions, including a yard that went bankrupt and descoping two locations in a timely manner. To perform fabrication at multiple locations we were forced to relocate managers and supervisors and ultimately decided to oversee all yards from the office of our joint venture (JV) based in Shanghai. Our company was in charge of the Tianjin Yard. We did not have much experience with large-scale module projects at the time, and I think the task provided me with more lessons learned (LL) than in previous projects.

Experiencing the tools and methods utilized in overseeing the construction work of a yard subcontractor and the precise manner in how they are used is a good example of such an LL. I think such methods have applications in future projects.

The Yamal LNG Project was deemed quite difficult by just about everyone. Knowing this, why do you think it was possible for the 1st LNG train to be completed on schedule?

In short, I think it was the leadership of the JV project and the level of cooperation with our clients and overall organizational structure that made this possible. The team controlling the engineering and procurement phase on the client side was centered in Paris and organized by the French staff at Total while the JV side was also led by a French company, Technip (now TechnipFMC), so communication between the parties and the ability to communicate well in Paris was a huge factor in the project running so smoothly. Furthermore, important decisionmaking was conducted promptly by the chairman of the Russian client's parent company, and the client's construction and operation organizations, which were made up of primarily Russians, consistently followed the direction of the parent company without fail. As a result, the Russian clients and the JV shared the same goal—prompt production of LNG—which allowed them to integrate their efforts and display their true power.

# With regard to Chiyoda's business, what was the most important thing you gained from the Yamal LNG Project?

I think that completing a plant's design and construction in a location where the temperatures are bitterly cold, reaching as low –50°C, and realizing the success of our first large-scale module project will be advantageous when entering into future projects in extreme cold locations.



# Hidetaka Fujihara

Mr. Fujihara has been assigned to the JV Directorate in Paris since May 2014 as Chiyoda's Project Director, and engaged in management of JV project operation.

#### In a Nutshell

- 3 LNG trains with a total of 16.5 million tons per year production capacity
- Developed in the Arctic: 290 days of ice, and extreme cold temperatures with average annual temperatures of –10°C
- World's Largest Modularized Project: A total of 142 modules constructed in 10 fabrication yards in Asia
- Remarkable Safety Record: More than 50 million man-hours achieved without LTI at yards
- A Global Footprint: 10 countries, and 52 nationalities Directorate in Paris, 7 engineering centers worldwide, and 10 module yards, etc. – involved

# 1st LNG Train Was Launched: Left from Yamal LNG Sabetta

The first of the three LNG train comprises 5.5 million tons per annum and commenced LNG production in the fourth quarter 2017 with the loading of the inaugural tanker in December 2017.

In March 2018, Yamal LNG had shipped its first million tons of LNG produced at its first train, shipped on the 14th cargo loaded and dispatched at the Sabetta seaport, supplying European and Asian markets. The LNG produced at Yamal LNG is transported by "Arc7" ice class carriers, each holding 170 thousand cubic centimeter (around 74 thousand tons).

The 1st LNG cargo is thanks to the tremendous efforts of the JV contractors and project partners who committed to deliver Yamal LNG on time and on budget. Chiyoda is proud to be a part of the JV executing EPC work at one of the world's most competitive LNG projects. This giant project is another milestone in Chiyoda's history.

#### **Unique Arctic Location**

Sabetta, the Yamal LNG Project site, is located above the Arctic Circle in the estuary of the Ob River—a wild and remote region that is frozen about eight months a year and where winter temperatures can drop to as low as -50°C. The polar night lasts from November to February. Chiyoda is proud to help build a world-class LNG project in extreme conditions to exploit vast gas resources.



#### Summer and Winter Shipping Route





LNG loading in mid-winter: LNG production and export does not stop even when the sea is totally covered with ice



Yamal LNG construction site overview: Construction work continues all through the year

### **Other Projects**

#### CASE 1

#### **Titanium Sponge Plant in Saudi Arabia**

The Titanium Sponge Plant Project is a construction project in the Yanbu Industrial Complex in the Madinah Region, the Kingdom of Saudi Arabia. Chiyoda took on the EPC work on a lump-sum contract basis for this project in 2015, with a contract value of about US\$290 million. The project was completed on schedule in 2017.

Titanium, a rare metal, is used in a range of industries, such as aircraft engines and materials for aircraft fuselages, and plumbing and heat exchangers at plants, because of its light weight, high intensity, high heat resistance, and high corrosion resistance. To satisfy the rising demand worldwide for titanium sponge for general industrial applications and aerospace, Advanced Metal Industries Cluster and Toho Titanium Metal Company Limited (ATTM), a JV between Toho Titanium Co., Ltd.

and Advanced Metal Industries Cluster Company Ltd. in Saudi Arabia, has launched this project to meet the need for the stable supply of this material.

Chiyoda has a strong track record in plant construction in the field of non-hydrocarbons in Japan as well as overseas, and has also been executing a plant construction project in Japan for Toho Titanium, one of the world's leading manufacturers of titanium sponge.

The construction of this plant will not only contribute to the stable supply of titanium sponge for Japan but will also help promote and diversify industries in Saudi Arabia. The plant has become a bridge in industrial cooperation between the two countries.



Client	Advanced Metal Industries Cluster and Toho Titanium Metal Company Limited (ATTM)
Capacity	15,600 tons/year
Location	Yanbu, Saudi Arabia
Scope of Work	E.P.C.
Year of Completion	2017

#### CASE 2

#### Pharmaceutical / Life Science

Chiyoda has been engaged in the field of engineering and construction of pharmaceutical facilities for more than 40 years, and has experience in more than 400 projects.

The domestic Japanese market for pharmaceutical facilities is recently increasing, according to current development trends, in highly potent active pharmaceutical ingredients (API). Chiyoda has extensive experience in engineering and constructing containment facilities for potent compounds and can offer appropriate facilities and equipment according to hazard class. In response to growing business opportunities, in April 2017 Chiyoda established the in-house research and development laboratories for biotechnology and regenerative medicine offering high-quality facility engineering / construction and other services, including highly advanced technologies.

For more information on related key businesses and technologies, please visit our corporate website.



GMP Vector Manufacturing Plant for tissue engineering (Courtesy of I'ROM Group Co., Ltd. / ID Pharma Co., Ltd.)



Isolator for clinical trial lab Isolator with half suit Isolator for filter drug



#### CASE 3

#### SPERA Hydrogen<sup>®</sup>: Chiyoda's Hydrogen Supply Business

Chiyoda, together with several partners, established the Advanced Hydrogen Energy Chain Association for Technology Development ("AHEAD") and launched the world's first global hydrogen supply chain demonstration project.

Project: In 2020, AHEAD will transport hydrogen from Brunei Darussalam to Japan in liquid at ambient temperature and pressure with Chiyoda's SPERA Hydrogen® technology.



#### CASE 4

#### **Regenerative Medicine: iPS Cells**

One of the keys in the endeavor of induced pluripotent stem (iPS) cells is that they have the ability to change various cells in the body, which opens new pathways in research into regenerative medicine and drug discovery.

With the increase of the average life span and the economic development of emerging economies, society's expectations of more effective and safer medical care, medical technology, and related products are ever increasing. The Chiyoda Group has been contributing to the fields of health care and life science through the engineering and constructing of advanced pharmaceutical plants for pharmaceutical companies to date.

Further, the Chiyoda Group has established the Biotechnology Development Office and Regenerative Medical Technology Development Office in its Koyasu Office Research Park to reinforce technical capabilities in these fields and to provide better services to pharmaceutical companies and society.





#### Hydrogen Production and Hydrogenation Plant (Brunei Darussalam)

In the supply country, hydrogen, chemically fixed to toluene, is converted into methylcyclohexane (MCH) by hydrogenation reaction for storage and transport.



#### Dehydrogenation Plant asaki, Japan)

In the consumer country, hydrogen gas will then be extracted from the dehydrogenation reaction and supplied as hydrogen gas to a thermal power plant.

This project is funded by New Energy and Industrial Technology Development Organization (NEDO) and the Ministry of Economy, Trade and Industry (METI).

Chiyoda provides advanced engineering services to the facility for the developing of regenerative medicine, based on the experiences of EPC services to pharmaceutical facilities and the knowledge accumulated in our laboratory through the research and development of iPS and other stem cells.



Our laboratory at the Koyasu Office Research Park

#### Review of Operations

# **Segment Overview**

Chiyoda Corporation has developed a wealth of skills and experience over the decades in this highly challenging industry. The world-class services offered by Chiyoda are supported by extensive technological expertise in pursuit of "Energy and the Environment in Harmony." The industry is highly complex, requiring a long-term commitment of capital, human resources, know-how and experience, and the ability to develop technological superiority at all levels of the business. Chiyoda meets those goals.

#### **Our Consolidated Business**

Despite geopolitical tensions in the Middle East and the Korean Peninsula and the spread of protectionism among major countries, macroeconomics in Asia, Europe, and the United States remained relatively stable during the fiscal year under review. The price of crude oil has remained in a range of approximately US\$50–60 per barrel and investment activities for new large-scale LNG projects have gradually increased based on steady LNG demand growth.

Through its LNG core business, Chiyoda continued to implement large-scale projects worldwide, and was awarded FEED work for the Qatar expansion project in the fiscal year under review. In addition, the Company is also implementing structural reforms and the growth strategy detailed in its MTMP, "Mirai Engineering—A Grand Opportunity for the Future," announced in August 2017. This includes expansion into new markets, such as renewable energy and life science, and new areas for future business models, such as leveraging Big Data and AI technology. Consequently, on a consolidated basis, new orders, for fiscal 2017 amounted to ¥301,214 million (down 14.4% year on year). Backlog of contracts amounted to ¥653,516 million (down 25.5% year on year). Revenue amounted to ¥510,873 million (down 15.4% year on year), and operating loss totaled ¥12,330 million (compared with operating income of ¥15,680 million in the previous fiscal year). Ordinary loss came to ¥10,100 million (¥3,080 million in the previous fiscal year). Net income attributable to owners of the parent amounted to ¥6,445 million (compared with net loss of ¥41,116 million in the previous fiscal year).

Operating and ordinary losses were recorded due to anticipated increases in costs on LNG projects currently under way in the United States. Net income attributable to owners of the parent increased to ¥6,445 million following recovery of subsidiary losses and federal corporation tax refunds to the U.S. subsidiary.

#### **Outlook for Fiscal 2018**

Although LNG project FIDs remain outstanding, bidding and investment activities have gradually increased. The Chiyoda Group will steadily execute construction projects on hand, including LNG projects in progress in Australia, the United States, Russia, and Indonesia.

In addition, the Group will proceed with structural reforms and the growth strategy described in the MTMP and further expand into new areas and pursue future business models. Under these operating conditions, the Company forecasts consolidated new orders of ¥800 billion, revenue of ¥400 billion, operating income of ¥11.5 billion, ordinary income of ¥12.5 billion, and net income attributable to owners of the parent of ¥6.5 billion in fiscal 2018. The exchange rate assumption is ¥105 per U.S.\$1.



# **LNG Plants & Other Gas-Related Work**

Since the construction of the first LNG plant in the Middle East in the 1970s, Chiyoda has successfully constructed numerous LNG plants all over the world. Chiyoda has consolidated its position as the world's leading contractor of LNG plants with its proven track record. The Company contributes to stable energy supply throughout the world and low-carbon emissions with its ongoing efforts to improve plant design and to develop and apply new technologies.

#### **Overseas**

Chiyoda is executing EPC work for projects in Australia, the United States, Russia, and Indonesia. In Russia, the 1st LNG train of the Yamal LNG Project was completed and started production in December 2017. In addition, Chiyoda is conducting pre-contract work on an LNG project in Mozambique as the selected EPC contractor.

#### Japan

EPC activities have commenced for the renovation and modification of existing LNG receiving terminals similarly built by Chiyoda.

#### **Outlook for Fiscal 2018**

LNG continues to be Chiyoda's most important business with a forecast for the total amount of new orders of ¥800 billion for fiscal 2018. New orders totaling ¥650 billion are expected from the energy business, including ¥400 billion from LNG / Gas based on the forecast that Chiyoda will

#### **Revenue of LNG Plants & Other Gas-Related Work**



#### **Recent Achievements**

Chiyoda is also bidding for new LNG plant projects in the United States. In Qatar, the Group has been engaged under long-term engineering, procurement, construction, and management (EPCm) contracts on a helium production facility and the renovation and modification of LNG and gas processing plants previously constructed by the Company.

#### In the Future

In Qatar, owing to successful completion of the debottlenecking study, Chiyoda was awarded FEED work for an expansion project with 7.8 million tons/year by three trains. Further, a fourth train can be added in the future as an option.

be awarded a large-scale project in either the United States or Mozambique. If two or more projects are awarded, this amount will increase significantly.

#### **Business Developments in the Energy Business**

Large-scale LNG / Gas EPC projects with a focus on: • Projects with high viability

- Clients with whom Chiyoda has ample experience
- Positive new markets

In increasing new orders for large-scale overseas projects and promoting business throughout the value chain, our areas of focus are the United States, Mozambique, Papua New Guinea, Qatar, Russia, as well as other countries.



# **Refineries / Petrochemicals / Metals**

Chiyoda started its business with domestic petroleum refineries, and has been expanding into other petrochemicals and metals areas, with a focus on continuous innovation. We provide a wide range of services in these areas, from the planning phase to EPC, operation and maintenance, expansion, and revamping. In addition, Chiyoda's service covers the introduction of process technologies which support clients' environmental requirements and more.

#### **Overseas**

FEED work for the petrochemical project in the United States was completed as planned. A Group company in Southeast Asia is executing engineering, procurement, construction, and commissioning (EPCC) activities for a residue fluid catalytic cracking (RFCC) project in Malaysia and EPC operations on a petrochemical tank terminal in Southeast Asia. In addition, Chiyoda completed the Titanium Sponge Plant Project in Saudi Arabia in May 2017.

#### **Outlook for Fiscal 2018**

- Projects where Chiyoda has technological strength
- Projects where competition is limited
- The United States, Indonesia, and other countries
- Forecast for consolidated orders received during fiscal 2018: ¥250 billion

#### Japan

Chiyoda continues to facilitate inter-refinery cooperation in the mutual accommodation of fuel through its EPC operations. The Group continues to renovate and upgrade existing facilities in accordance with the Basic Act for National Resilience and to carry out routine maintenance to improve energy efficiency in existing petrochemical production and other facilities.

 Increasing new orders for large-scale overseas projects and promoting business throughout the value chain— Structure for promoting the value chain business

# **Pharmaceuticals / Biochemistry / General Chemistry**

Chiyoda has been engaged in the field of engineering and construction of pharmaceutical facilities for more than 40 years, and has experience in more than 400 projects.

In addition to conventional low molecular-weight pharmaceutical manufacturing facilities (finishing and API), Chiyoda has expanded its knowledge of biotechnology and cell technology, and is increasing its project experience in such new fields as high molecular-weight pharmaceuticals, medium molecular-weight pharmaceuticals, and regenerative medicine.

#### Japan

Chiyoda has been involved in major societies, especially for pharmaceutical, and obtained latest domestic and international regulatory trends of GMP and a new technology. In regard to medium molecular-weight pharmaceutical manufacturing facilities, Chiyoda has been awarded an EPC contract for the development of peptide therapeutics, a medium molecular-weight drug that is expected to grow in demand globally. Chiyoda also participated as an equity participant in this project.

The market for pharmaceutical facilities employing containment technology is increasing, according to current

#### **Outlook for Fiscal 2018**

The pharmaceutical and life science fields are regarded as future growth drivers. In life science, we will increase our efforts in medium molecular-weight / polymers, regenerative medicine, and regenerative medicine production

#### **Revenue of Refineries / Petrochemicals / Metals**



#### **Business Environment**

- Improving the crude oil supply-and-demand balance through collaborations to reduce production, and increasing demand in emerging countries
- Continued investment and development in U.S. shale petroleum & petrochemical projects

#### Revenue of Pharmaceuticals / Biochemistry / General Chemistry



development trends, in highly potent API. It is Chiyoda's goal to further develop EPC projects and technology in the pharmaceutical and life science fields and to expand into advanced pharmaceutical and medical fields, adding on to its many years of experience in engineering and constructing containment facilities for potent compounds and offering appropriate facilities and equipment according to hazard class. The life science field includes high molecularweight pharmaceuticals, medium molecular-weight pharmaceuticals, regenerative medicine, biotechnology and antibody drugs, and continuous flow production technology.

facilities. We have recently invested in the development of peptide-based medicine, a type of medium molecularweight drug. Other than EPC, we wish to proceed with these projects, even if only in small measures at the start.



**Segment Overview** 





# **Environment / New Energy / Infrastructure**

The interest in global environmental preservation issues such as global warming due to greenhouse gases is increasing. Aiming to achieve "Energy and the Environment in Harmony," Chiyoda has been offering environmental preservation technologies since its foundation. In addition to offering licensed technologies, Chiyoda has been active in developing its own technologies in the fields of air pollution control and wastewater treatment, and has delivered these technologies to various clients as environmental pollution control technologies. Continuing in this spirit, Chiyoda is developing new technologies as well as improving existing technologies.

#### Environment

Chiyoda plans to expand environment-related businesses and make progress in new material technology, focusing on low environmental load and the development of energysaving technology (next-generation materials).

#### **New Energy**

In a fast-changing world with an increasing demand for clean energy, Chiyoda is responding to expanding renewable energy market needs through businesses in

#### **Outlook for Fiscal 2018**

The global environmental engineering business will increase investment in renewable energy and electricity storage, with the aim of a decarbonizing society and developing energy storage technologies. We forecast further orders in the environment business, mainly in the new energy sector, and the ¥150 billion forecast for fiscal 2018 is promising, considering that multiple projects are at an advanced stage. solar power generation, electricity storage, biomass power generation, and offshore wind power generation.

#### Infrastructure (Hydrogen Supply Chain)

Chiyoda announced the commencement of construction for a hydrogen supply chain demonstration project. In April 2018, a groundbreaking ceremony was held in Brunei for a project to demonstrate Chiyoda's SPERA Hydrogen® technology. The world's first global hydrogen supply chain to connect Brunei and Japan is scheduled to commence in 2020.

The new energy and life science fields are regarded as future growth drivers. In new energy, we are aiming for the award of large-scale electricity storage facilities, biomass electric power generation, as well as conventional mega solar projects this term. In electricity storage, our focus will be on the energy management business and EPC, and we are preparing for entry into offshore wind power projects.

#### Revenue of Environment / New Energy / Infrastructure



#### Earnings Portfolio Transition



# New Business Fields (Big Data / IoT / AI / Robotics)

In fields related to digital innovation, Chiyoda established a business alliance agreement with GRID, Inc., one of the leaders in AI technologies in Japan, and started studies for enhancing the productivity of plants by using AI technologies. The Company has started demonstration projects of AI technology application for several clients.

#### Business Development of Our Digital Technology Innovation Field and Acceleration of Digital Strategy

- Promotion of AI, Big Data, and IoT in the energy business
- Rapid evolution and expansion of options of digital technology

Chiyoda's target is to optimize plant operation and maintenance and production efficiency by providing digital technology combining its plant engineering technology and state-of-the-art AI technology. In May 2018, we introduced digital technology for ADNOC LNG.

#### Key Business and Technology

- Heat and Fluid Dynamics Simulation Technology
- Sound Environment Design and Consulting
- Structural Analysis
- Consultation on Plant Diagnoses
- Consulting Service on Operation Improvement and Business Innovation Support
- Process Dynamic Simulation / Water Hammer Analysis
- Space Utilization / Development Technology
- Acoustic Analysis Technologies and Acoustic Fatigue
- Earthquake-Resistant Technology
- Integrity Assessment and Monitoring for Aged Facilities

# Expansion of Partnering by Development and Provision of

- Plant smart IoT services
- Services that combine AI technology
- Services centered on plant digital twin

#### **Development of New Business Models**

• Integration of plant engineering technology (e.g., advanced analysis and digital innovation)

#### **Companywide Digitization**

- Accelerate digitization of Chiyoda and improve EPC performance
- Material and Corrosion Control Technologies
- Asset Risk Management Implementation and Support Services
- Integrated System Engineering
- Training Programs for Overseas Engineers

For more information on new businesses, please visit our corporate website: • www.chiyodacorp.com/en/service/chas/

# Chiyoda's Sustainability **Value Creation**

#### "Mirai Engineering": Chiyoda's Sustainable Management Pathway

Climate change and its impact on our environment has led to an increase in environmental awareness, energy efficiency, and sustainability efforts within the field of engineering services. Moreover, our fast-paced, changing world, which must grapple with further urbanization and economic uncertainties, is calling for new sustainable solutions.

Chiyoda Corporation's "Mirai Engineering" was developed under a new conceptual framework for its value creation business model. We believe that, by strengthening and integrating our expertise in energy solutions, environmental solutions, and technology and business model innovation, we will not only expand our business portfolio

but create new business fields and new value. Through the efforts of "Mirai Engineering," we can contribute to an increasingly important area of engineering operations.

In response to the needs of global markets and the greater society, the Chiyoda Group, as an integrated engineering company, will enhance its business sustainability in the pursuit of "Energy and the Environment in Harmony"-offering comprehensive engineering services in energy and environmental fields in order to create new value for society. (For more details, please see our MTMP, "Mirai Engineering—A Grand Opportunity for the Future.")

#### **Participation in International Initiatives** United Nations Global Compact

Chiyoda signed to be a participant in the United Nations Global Compact (UNGC) in November 2012. The UNGC is a voluntary corporate responsibility initiative established in the United Nations Headquarters in 2000. Chiyoda has established the Code of Conduct in line with its corporate philosophy, "Energy and the Environment in Harmony," and has been expanding its business globally. As an endorser of the UNGC 10 principles in four fields-human rights, labor, environment, and anti-corruption-Chiyoda further implements its role as a good corporate citizen and aims to contribute to the sustainable growth of international society.

#### External Evaluation – ESG Index Selection

#### FTSE4Good Index & FTSE Blossom Japan Index

Chivoda has maintained its position as one of the constituents of the FTSE4Good Index since 2005 by demonstrating strong ESG practices. In addition, Chiyoda has been chosen as one of the constituents of the FTSE Blossom Japan Index that FTSE Russell started in July 2017. The FTSE Blossom Japan Index includes Japanese companies which are promoting advanced ESG initiatives. The Chiyoda Group strives to communicate with stakeholders, and will contribute to the realization of a sustainable society aiming to help resolve global issues through engineering. FTSE Russell evaluates companies in terms of ESG requirements such as corporate governance, health and safety, anti-corruption, and climate change.



#### **SNAM Sustainability Index**

With its high ESG evaluation, Chiyoda retained its position as one of the constituents of the SNAM Sustainability Index that SOMPO JAPAN Nippon Asset Management (SOMPO JAPAN) started in August 2012. Chiyoda was first included in 2016. The SNAM Sustainability Index is intended for socially responsible investment (SRI) fund for pension funds or institutional investors to invest widely in companies with high ESG evaluation ratings. The Chiyoda Group will continue to promote communication with stakeholders, as well as contribute to the realization of a sustainable society aiming to help resolve global issues through engineering.



Chiyoda's Sustainability

# Message from the CSO

#### **Promotion of ESG Initiatives at Chiyoda**

Each year we use this section of our annual report to highlight the latest achievements of our ESG activities and accomplishments of the past year. This year's interview with our Chief Sustainability Officer (CSO) is a forward-thinking discussion about the CSO's role in leading a company on the path toward sustainable growth.

For more details on Chiyoda Corporation's sustainability policies and programs, including stakeholder engagement and health and well-being initiatives, please visit our corporate website to view our annual sustainability reports.

Mr. Shimizu, recently the role of a senior executive in charge of sustainability or corporate responsibility is becoming more and more important. What kind of expertise is necessary to become a CSO?

Many CSOs have solid backgrounds in economics or business management. As an engineer, this of course was not the career path I followed. I believe it is important to have both tangible and intangible skill sets, and a CSO must also have a real passion for leading a company toward sustainable growth. In this role, I am confident that I will be able to set objectives and develop strategies in consideration of ESG factors. While the focus is often centered on corporate social responsibility (CSR), I believe that integrating these ESG factors into our core business strategy is the best way to realize a successful transformation, which was outlined by our President & CEO, Mr. Masaji Santo, in the MTMP, "Mirai Engineering-A Grand Opportunity for the Future." Sustainability touches all departments, which means that in order to accurately assess all data across the Company, the entire Chiyoda Group must work together as one.

#### It is very inspiring to see a CSO working toward a greater good, and to do so with such creativity and collaboration. Aside from your commitment to purpose-driven goals that help Chiyoda grow as an organization while addressing pressing social issues, what is a CSO's job all about?

I would simply say, "it's all about aiming for sustainability and making that your business." If we integrate the United Nations Sustainable Development Goals (SDGs) into our strategies and operations, assess the impact of our business on society, and then report on our sustainability activities, we will certainly be encouraged by this process, which will reinforce our commitment to serving a greater purpose.

**Ryosuke Shimizu** Executive Vice President, CSO, Division Director,

Corporate Planning Division

At Chiyoda, sustainability is a daily business as we contribute energy and environmental technology to the world through engineering solutions. Striving for a cleaner world every day, we work to minimize environmental impact and address global climate change. As one example of our efforts, we developed the new technology SPERA Hydrogen®, which we believe will greatly contribute to a low-carbon society while being one of the keys to our sustainable growth. Throughout this report, you will read about our initiatives and commitment to sustainability. And while we are proud of our accomplishments, we understand there is much more that we can and have to do. So we are excited to share with you our ideas on "Mirai Engineering" and our goals for 2020, which for the first time in our history include environmental solutions as growth strategies.



#### Chivoda supports the SDGs

- Plant Construction & Providing Infrastructure
- Cultural Advancement & Support of Communities
- Sharing Technical Knowledge & Job Creation
- Working in Partnership with Local Communities • Technical Development for a Low-Carbon and
- Carbon-Free Society
- Environmental Protection & Climate Change Aversion
- Stable, Safe, and Affordable Energy Production
- Effective Use of Natural Resources

# Chiyoda's Sustainability **ESG** Initiatives

The Chiyoda Group has embraced "Energy and the Environment in Harmony" since its foundation, understanding the contribution of such collaboration to the sustainable development of society. We recognize the unique responsibilities of major corporations in the engineering sector, and the obligation to search for business strategies that benefit all members of society. In that regard, we promote open, transparent communication with all our stakeholders about the operations of the Chiyoda Group, including its ESG initiatives.



#### **Environmental Initiatives**

Our economic and social activities are intended to continuously enhance our business, while striving toward the objective of "Energy and the Environment in Harmony" and further contributing to the sustainable development of society.

					Some and	Same
KPI	Unit	2013	2014	2015	2016	2017 (F
Environmental Data of Domestic Construction Sites						
Industrial waste disposal quantity	Tons	11,354	19,209	10,936	7,670	12,242
Final landfill disposal quantity	Tons	1,010	1,435	1,065	783	614
CO <sub>2</sub> emissions	t-CO <sub>2</sub>	4,124	3,591	3,364	1,146	901
Industrial waste recycling rate	%	90.3	92.0	89.5	87.8	91.5
E-manifesto penetration rate	%	87.6	95.6	93.5	95.8	93.2
Environmental proposals	Cases	153	230	206	221	299
Environmental Data of Chiyoda Group Company Offices						
Power consumption (CGH, Koyasu, TW100, Tokyo Office)	1,000 kWh	12,627	12,609	11,635	12,526	11,129
Energy consumption (CGH, Koyasu, TW100, Tokyo Office)	kl*	4,027	4,016	3,624	3,826	3,430
CO2 emissions (CGH, Koyasu, TW100, Tokyo Office)	t-CO2	6,535	6,518	6,886	7,287	6,367
Chilled water consumption (CGH, Koyasu)	1,000 m <sup>3</sup>	13.4	14.9	13.7	17.5	15.5
Steam consumption (CGH)	GJ	7,201	6,564	5,840	5,914	5,168
Waste disposal volume (CGH, Koyasu)	Tons	238	247	264	262	233
Waste recycling rate (CGH, Koyasu)	%	94.6	95.8	94.6	92.3	93.8
Printing paper consumed (CGH, Koyasu)	Tons	150	128	106	88	66

\* Crude Oil equivalent

#### **Social Initiatives**

Through our business, we contribute to local communities in many ways including human resources development, initiatives on human rights, labor, and social contributions. Further, we will create a corporate culture where the diversity, individuality, and character of employees are respected, where people are motivated to do their best, and of which employees and their families are proud.

KPI	Unit	2013	2014	2015	2016	2017 (FY)
Situation of Employees						
Average years of service	Years	12.9	13.0	12.9	12.9	13.2
Average age of employees	Years	41.7	41.0	40.8	40.9	41.6
Turnover rate excluding retirement	%	1.8	1.6	1.9	2.4	4.5
Diversity of Employees						
Ratio of female employees among new recruits	%	18	18	19	24	33
Number of female employees among new recruits	Persons	16	16	13	18	19
Ratio of women among all employees	%	13	13	13	14	19
Average service years of female employees	Years	6.5	7.1	7.5	8.0	7.6
Number of women in management positions	Persons	22	23	23	23	24
Ratio of women in management positions	%	2.5	2.6	2.6	2.6	3.2
Ratio of employment of persons with disabilities	%	1.5	1.7	1.7	1.5	1.5
Number of non-Japanese employees	Persons	49	66	71	82	71
Assistance for Employees						
Number of employees taking childcare leave	Persons	11	7	15	22	27
Number of employees taking sick of injured childcare leave	Persons	-	0	2	1	7
Numbers of employees taking nursing care leave	Persons	-	1	8	4	9
Numbers of employees taking temporary retirement for nursing care	Persons	1	1	0	0	0
Number of employees working reduced hours for childcare	Persons	3	6	14	19	14
Number of employees dispatched for onsite training / onsite instruction	Persons	83	83	64	70	53
Volunteer Activities						
Number of employees participating in reconstruction assistance	Persons	63	35	62	70	54
Number of employees participating in cleanup activities around the office location	Persons	0	32	95	127	157
Vaccine donation by Ecocap collection	Vaccines	21	209	267	228	231
Donation of school lunches by TABLE FOR TWO	Lunches	1,693	1,817	1,782	1,860	1,581
Safety Data						
Accident frequency rate	%	0.13	0.32	0.13	0.10	0.11
Accident severity rate	%	0.004	0.018	0.010	0.001	0.119

#### **Governance Initiatives**

We are dedicated to achieving even greater transparency and stability by conducting our operations fairly in accordance with the highest ethical standards.

KPI	Unit	2013	2014	2015	2016	2017 (FY)
Actions for Compliance						
Number of employees receiving compliance training (Freshmen and mid-career hire and executive, associate executive)	Persons	139	279	156	166	150
Number of employees receiving compliance training for overseas assignment, site managers of field offices and export controls	Persons	200	551	512	523	314
Number of employees attending compliance seminars	Persons	88	264	389	717	662
Number of employees receiving compliance e-learning	Persons	-	2,611	2,849	2,841	5,213
Number of reports to the Compliance Consultation and Reporting System	Reports	7	14	15	24	25
Initiatives for Business Continuity						
Business continuity plan training	Trainings	-	-	1	2	2
Actions for Information Security						
Number of serious information security-related incidents	Incidents	0	0	0	0	0
Data Related to Governance						
Number of outside directors	Persons	1	2	2	4	4





# Chiyoda's Sustainability Risk Management

The engineering industry is a challenging business that builds facilities in some of the most difficult parts of the world, designed to deliver a product that everybody needs. Given the nature of our business, no shortcuts can ever be taken and a razor-like focus on not just what we do but how we do it is essential for all of our stakeholders—including shareholders, clients, employees, and communities.



Yasuyuki Maeda Deputy Division Director, Corporate Management Division

Risk management plays a vital role in any organization, and as deputy director of the Corporate Management Division I am responsible for the identification, management, and reporting of all the risks that we face at Chiyoda Corporation. The Board of Directors is charged with the ultimate oversight of risk within the Company and regularly reviews the effectiveness of the risk management process. This includes oversight of the corporate Code of Conduct and matters concerning investigations of non-compliance and oversight of ESG risks, including scenario planning and ESG solutions.

Given the risks inherent in our business, we believe it vital to inform and reassure our stakeholders about the risks that we face and the steps we are continually taking to manage potential problems. The following analysis will provide readers with information on how we approach risk at Chiyoda and how we can make it manageable at every level of the Company. First of all, we identify the three different types of risks that we confront, arranged under two headings: Project Risk Management, which comes with each individual project execution risk we undertake worldwide, and Corporate Risk Management, which is managed by Head Office functions such as the management of investment exposure and corporate functions that are common to all of our activities across the Company.

Each risk approach requires a different assessment. We recognize the need to follow established global standards, both for their appeal to our stakeholders and also for the depth and detail of knowledge they add to our own experiences. The unique nature of Chiyoda's businesses must always be our primary focus, but the consideration of well-researched standards achieved elsewhere in the engineering and construction industry offer opportunities for substantial benefit.

#### **Comprehensive Coverage Leading to Strong Risk Management**

Chiyoda employs various management systems that provide comprehensive coverage of the three main centers of risk—Project Execution, Investment, and Corporate—which focus on occupational safety, quality, the environment, and digital security. The use of these management systems is governed by senior management to meet internal audit and CSR standards, the legal requirements set forth in the Companies Act and J-SOX, and global CSR standards and the risk management standard ISO 31000. Through internal and external audits of the SQEI (Safety, Quality, Environment, and Information Security) Management System, Chiyoda continuously improves its business practices, contributes to the global community, and enhances its shareholder value.

Chiyoda employs internal controls for risk management. For more information on this policy, please visit our corporate website: • www.chiyodacorp.com/en/csr/management/basic-policy/

#### **Project Risk Management and Corporate Risk Management**

#### **Project Risk Management**

Successful project execution is the lifeblood of Chiyoda's business, and its projects will confront risks along the road to completion. Risk will be assessed continually throughout a project as various milestones are reached. In the early stages of a project, estimations, counterparty due diligence, and work volumes and schedules must all be studied. Further into a project, the inevitable operational changes must be managed while in the closing stages, and variations on target dates and outputs must be assessed. All of this activity needs constant monitoring and evaluation and, at times, risk mitigation assessment.

It is also worth noting that while project execution and financial risks exist for the duration of a project, many corporate risks are continually present. As a result, monitoring and auditing are a constant presence in the management of both risk and the oversight procedures in place.

#### **Chiyoda Corporation Risk Matrix**

Project Risk Management					
Category	Keywords				
Project Execution Risk	<ul> <li>Estimation</li> <li>Risk mitigation</li> <li>Counterparty due diligence</li> <li>Check / estimate</li> <li>Double-check &amp; evaluate</li> <li>Milestone monitoring</li> <li>Schedule &amp; work volume</li> <li>Management of change</li> </ul>				

Corporate Risk Management					
Category	Keywords				
Investment Risk	<ul> <li>Internal risk assessment</li> <li>Third-party assessment</li> <li>Hurdle rates &amp; exit strategies</li> <li>Monitoring &amp; auditing</li> </ul>				
Corporate Risk	<ul> <li>Risk heat map</li> <li>External environment</li> <li>Group management</li> <li>Improvement through the PDCA</li> </ul>				

#### **Corporate Risk Management**

Corporate management covers day-to-day investment and corporate risk. Investment risk refers to financial risk both within Chiyoda and with third-party relationships such as JV partners, as well as the setting of return objectives (hurdle rates) and exit strategies.

Corporate risk strategy also assesses the overall risk to the corporation, by division or by segment, taking into consideration the environment in which the Company is operating (e.g., in terms of competition, global economics, politics, etc.). It will also consider the role and effectiveness of Group management in the process and how the Plan– Do–Check–Act (PDCA) cycle, a model for change, may be able to improve the process.



Chiyoda's Governance

# **Directors & Executive Officers**

As of June 21, 2018



The President & CEO of Chiyoda Corporation, in partnership with the Board of Directors and in addition to their responsibilities managing the day-to-day affairs of the Company, must lead Chiyoda toward future success, guided by the Company's corporate philosophy and in keeping with the core values of safety and teamwork. The management will strive to enhance the sustainable corporate value of our company as "One Team." Members of the Board also represent the interests of Chiyoda's shareholders, and all directors, executive and non-executive, act in line with the Code of Conduct, following best practices of corporate governance and the highest standards of ethical business conduct. From this foundation, we can maximize long-term shareholder value.

We are pleased to take this opportunity to introduce our executive management team. These are the people who struggle with a feeling of the greatest responsibility for the success of Chiyoda and are key to our efforts to maximize business opportunities while overcoming the challenges of our industry, and to whom all stakeholders look for strategic direction and tactical guidance.

#### Katsuo Nagasaka **Representative Director,** Chairman of the Board 1

Since joining the Company, Mr. Nagasaka has long been involved in management of the International Business Divisions, and since being appointed Senior Vice President in April 2012, has overseen overall business development of the Company. He has abundant experience and knowledge regarding management of the Company and the Chiyoda Group after having served as the Representative Director, Senior Executive Vice President from February 2017 and the Representative Director, Chairman of the Board from June 2017. Leveraging his global work experience and knowledge, he is qualified to contribute to improving the corporate value of the Company.

#### Masaji Santo Representative Director, President & CEO 2

Mr. Santo is well versed in the businesses of the Company and its Group companies from having served as an outside director of the Company for three years from June 2013, after having served as President of Mitsubishi Chile Ltda. and Senior Vice President of Mitsubishi Corporation. He is gualified to contribute to improving the corporate value of the Company as a leader by leveraging his global work experience and knowledge, having been appointed Representative Director, President & CEO in June 2017.

#### Arata Sahara Representative Director, CTMO 3

Mr. Sahara, after having served as the Deputy Division Director of International Project Division 1, was appointed Director of the Company in June 2015, and Representative Director, Senior Executive Vice President in June 2017. He has provided centripetal force in leading projects in the field of downstream & non-hydrocarbon project operations, one of the Company's core operations.

#### Hirotsugu Hayashi

#### Representative Director, CFO & CCO 4

Mr. Hayashi, after serving as Branch Manager of the Chicago Branch of The Bank of Tokyo-Mitsubishi UFJ, Ltd. and Full-Time Corporate Auditor of Mitsubishi Plastics, Inc., was appointed Representative Director, Senior Executive Vice President, and CFO of the Company in June 2017.

#### MEMBERS OF THE BOARD

#### **Representative Directors**

Katsuo Nagasaka

2 Masaji Santo 3 Arata Sahara

4 Hirotsugu Hayashi

#### Directors

5 Masahiko Kojima

6 Ryosuke Shimizu

Nobuyuki Uchida

8 Nobuo Tanaka\*

Hiroshi Sakuma\*

#### **MEMBERS OF THE AUDIT &** SUPERVISORY COMMITTEE

#### Members of the Audit &

Supervisory Committee 10 Mikio Kobayashi\*

11 Takahiro Kitamoto

12 Hiroshi Yamaguchi\*

13 Tetsuya Aiba

14 Mika Narahashi\*

the Companies Act

#### Senior Vice Presidents

Deputy Operations Director,

Energy Project Operations Division

Division Director.

Chief Human Resources Officer, Division Director,

Shuichi Wada

Masao Fujiwara Division Director.

Setsuo luchi

#### Terunobu lio

Operations Director, \* Outside director as provided for in Article 2-15 of **Operations Division** 

#### **EXECUTIVE OFFICERS**

Chairman of the Board Katsuo Nagasaka

President & CEO

Masaji Santo General Manager,

#### Senior Executive Vice Presidents

Arata Sahara Chief Talent Management Officer

#### Hirotsugu Hayashi

Chief Financial Officer, Chief Compliance Officer, Deputy General Manager Structural Reform Promotion Office

#### **Executive Vice Presidents**

Masahiko Kojima Assistant to President - Growth Strategy. Deputy General Manager, Structural Reform Promotion Office

#### **Ryosuke Shimizu**

Chief Sustainability Officer

#### Mamoru Nakano

Operations Director. Energy Project Operations Division General Manager Gas & LNG Project Department

### Nobuyuki Uchida

# Masao Ishikawa

# Technology & Engineering Division

#### Yasumitsu Abe

Project Management Division

#### Division Director Corporate Management Division

Project Logistics & Construction Division

Structural Reform Promotion Office

Division Director, Corporate Planning Division

Assistant to President - Corporate Relations

Global Environment & Green Energy Project

#### **Vice Presidents**

#### Eisuke Oki

Deputy Division Director, Project Logistics & Construction Division

#### Toshiyuki Kariya

Deputy Division Director. Technology & Engineering Division

#### Hideaki Tomiku Deputy Division Director, Growth Strategy Division

Jinei Yamaguchi Deputy Division Director, Corporate Planning Division

#### Hiroyuki Shimizu Deputy Operations Director, Energy Project Operations Division

#### Toshiaki Furugori

Chief Digital Officer, Operations Director, ChAS & Digital Technology Project **Operations Division** 

#### Hideo Matsui

Division Director, Business Development Division

#### Masaki Kadono

Deputy Division Director, Project Management Division General Manager, Project Management Department

#### Masakazu Fujiwara Energy Project Operations Division Project Director, IGL Team

Munetaka Horiguchi

Deputy Division Director, Business Development Division Growth Strategy Division

#### Norimasa Matsuoka Division Director, Growth Strategy Division

Toshiya Momose Co-Chief Digital Officer, Deputy Division Director,

Corporate Planning Division

Yasuyuki Maeda Deputy Division Director, Corporate Management Division

#### Junichi Kunihiro

Deputy Operations Director, Global Environment & Green Energy Project **Operations Division** 

# Message from the Chairman

Strong, effective, and transparent corporate governance is essential for the efficient functioning of the entire Chiyoda Group. Improvement in our governance practices will further enhance corporate value and sustainability.



Katsuo Nagasaka Chairman of the Board

# Impact of Corporate Governance on Sustainability

This year, Chiyoda is celebrating the 70th anniversary of its founding in 1948. I have the great privilege and responsibility as Chairman to address topics of the highest importance with all our stakeholders while striving for long-term sustainable goals. Aside from providing great technological solutions as **an integrated engineering company**, we also need to make a positive contribution to society. Every company must have an aim, a purpose, and an ultimate vision to achieve its full potential. Along with delivering solid financial results in the short to medium term, we must also realize our mission and innovations for long-term, sustainable growth.

#### **Management and New Governance Structure**

The global landscape of corporate governance is driving our transformation. It is essential for management to **regularly engage in deep dialogue** with stakeholders to reinforce the prospects of long-term growth. To ensure such productive engagement with shareholders, we strive to discuss a diverse array of topics and identify ways to build a better framework that serves all of our stakeholders. With the creation of the new chief officer role for each area of business execution, we aim to improve the effectiveness of our existing leadership roles. These new chief officers will be combining their management oversight function with their key operational role, which will lead to greater efficiency and results with regard to their decisionmaking ability. Underpinning each area of business execution are the following principles:

- We must enhance accountability to shareholders and other stakeholders; and
- We must maintain high standards of business ethics and integrity.

# Building on Success, Supported by Strong Fundamentals

Chiyoda will continue to pursue innovative ways to meet the challenge of longevity as an "Integrated Engineering and Service Provider" in the fields of energy and the environment. We will continue to embrace globalization and will promote the importance of focusing on long-term outcomes. Guided by our philosophy of **"Energy and the Environment in Harmony,"** we are changing lives for the better through innovative engineering solutions and technology.

I would like to thank all our stakeholders for placing your trust in Chiyoda and for supporting us as we move forward with the next step in our strategy and focus on ensuring that Chiyoda evolves to the next level of its transformation. Chiyoda's Governance

# **Corporate Governance: The Sustainable Enhancement of Corporate Value**

The Company pledges to constantly strive for sustainable growth and to enhance the corporate values of the Chiyoda Group on a medium- to long-term basis. To achieve this goal, the Group established the Chiyoda Corporation Corporate Governance Policy in 2015, which developed the Company's basic views and guidelines with regard to corporate governance. The Company will continue to actively secure soundness and transparency of its corporate management through the Policy.

#### **Basic Views on Corporate Governance**

In order to further reinforce its corporate governance structure, the Company shifted to a "Company with Audit and Supervisory Committee" system. The Company established the Legal & Compliance Department, the SQEI Risk Management Department, the Crisis Management Department, and the Internal Audit Division. To reinforce internal controls, the Company established the Internal Control Committee and the Compliance Committee.

# Chiyoda's Corporate Governance System and Internal Control



To ensure speedy and accurate decision-making to deal with rapidly changing social and economic environments, the Company adopted the executive officer system. By shifting to the Company with Audit and Supervisory Committee system, with the new functions, responsibilities, and authorities that are described above, the Company will be able to improve and implement the soundness and transparency of management and prompt decision-making, and further enhance its corporate value.

#### **Corporate Governance: The Sustainable Enhancement of Corporate Value**

#### **Organizational Structure**

#### Board of Directors

Chiyoda's Board of Directors decides important matters concerning the Company's management, including management policy and business strategies, in accordance with the law, the Articles of Incorporation, and Board of Directors' regulations. The Board of Directors also receives reports from directors and others on the performance of duties, financial situation, and operating results, and oversees the performance of duties by each director.

The Board currently consists of 14 directors, four of whom are independent outside directors having no conflict of interest with general shareholders. The term of office of directors is one year, in order to make the administrative organization responsive to changes in the business environment and to establish clear administrative responsibility and roles of directors.

Board of Directors' meetings are held monthly as a rule, with special meetings convened as needed. To ensure the effectiveness of the Board of Directors, assessments and analyses are conducted annually and the follow-up to the results is done.

#### Audit & Supervisory Committee

The newly established Audit & Supervisory Committee is composed of five directors (including three outside officers) as Audit & Supervisory Committee members who closely monitor the execution of duties of directors and executive officers. The Audit & Supervisory Committee members attend meetings of the Executive Committee and express their opinion when necessary. In addition, their responsibilities include deciding the content of resolutions submitted to the General Meeting of Shareholders, such as the appointment or dismissal of accounting auditors, auditing consolidated financial documents in close cooperation with the accounting auditors, and preparing audit reports.

#### Executive Officers

We have appointed executive officers to expedite the implementation of business operations. Executive officers are responsible for carrying out operations in accordance with the policies adopted by the Board of Directors. We have 26 executive officers, with seven acting in dual capacity as directors. The term of office for executive officers is one year.

#### Executive Committee

The Management Meeting supports the decision-making of our management by providing a forum for deliberation on such vital matters as corporate strategy and capital investment, including matters to be deliberated in the Board of Directors for discussion and reports to be made to the Board. The Executive Committee consists of four directors, some of the executive officers of corporate divisions, and one standing corporate auditor. Meetings are held 24 times a year as a rule.

#### Committees

We enhance our business activities and oversight functions by establishing internal meetings (committees) to deliberate on important matters concerning the management of the Company, and the Group, from broad and diverse viewpoints. Of these committees, the Internal Control Committee, the Compliance Committee, and the Responsible Care Committee and others are attended by directors and others, as well as the standing corporate auditor, who serves as an observer.

Name of Committee	Purpose	Number of Meetings in FY2017
Internal Control Committee	Deliberate measures to build and improve a proper internal control system	2
Compliance Committee	Promote compliance-oriented business management	4

#### **Outside Directors**

Name	Purpose	Background
Nobuo Tanaka	Mr. Tanaka has appropriately carried out his duties as an outside director of the Company by drawing on his abundant knowledge and experience in the energy field, gained through his position as executive director of the International Energy Agency.	Jul. 2004: Director of Directorate for Science, Technology and Industry of OECD Sep. 2007: Executive Director of International Energy Agency Jun. 2012: Outside Audit & Supervisory Board Member of TEIJIN LIMITED (current position)
Hiroshi Sakuma	Mr. Sakuma has served extensively as a corporate director and executive officer for a number of companies and is well versed in a wide range of business fields, including infrastructure development in the petroleum / gas, electric power, and new energy sectors. During his tenure as an outside director of the Company, he has utilized his global experience and industry knowledge to ensure his effectiveness in the performance of his duties.	<ul> <li>Apr. 2011: Senior Vice President, Deputy Division COO of New Energy &amp; Power Generation Division (concurrently); General Manager of Power Generation &amp; Marketing, International Unit of Mitsubishi Corporation</li> <li>Apr. 2012: Senior Vice President, Division COO of New Energy &amp; Power Generation Division of Mitsubishi Corporation</li> <li>Apr. 2014: Executive Vice President, Group CEO of Global Environmental &amp; Infrastructure Business Group of Mitsubishi Corporation (current position)</li> </ul>
Mikio Kobayashi	Mr. Kobayashi has extensive experience as a corporate director and officer for a number of companies and has also served as an Audit & Supervisory Committee member of the Company. He has consistently offered expert opinions from a neutral and objective point of view, and the Company expects that his experience and insight will be beneficial to management oversight.	<ul> <li>Oct. 2005: Executive Officer, General Manager of Business Division I of Mitsubishi UFJ Trust and Banking Corporation</li> <li>Jun. 2007: Representative Director, President of Ryoshin Credit Service Co., Ltd.</li> <li>Jun. 2008: Representative Director, Deputy President of Japan Property Solutions Co., Ltd.</li> </ul>
Hiroshi Yamaguchi	Mr. Yamaguchi has abundant knowledge and experience in the energy industry, and the Company expects that he will leverage these assets in his role as an outside director, contributing to sound management decision-making through effective audits from a neutral and objective perspective.	<ul> <li>Apr. 2016: Representative Executive Vice President and Chief Engineer, Safety Management of Tokyo Electric Power Company Holdings, Inc.</li> <li>Jun. 2017: Chairman of the Board of KANTO ELECTRICAL SAFETY INSPECTION ASSOCIATION (current position)</li> <li>May 2018: President of The Institute of Electrical Engineers of Japan (IEEJ) (current position)</li> </ul>
Mika Narahashi	Ms. Narahashi has expert knowledge and experience as a lawyer in addition to her background in corporate law. The Company expects that she will greatly contribute to the oversight of management from the perspectives of law, compliance, and governance.	<ul> <li>Aug. 2003: Joined Anderson Mori &amp; Tomotsune</li> <li>Jan. 2015: Joined AIG American Home Assurance Company, Ltd.;</li> <li>Head of Legal Affairs Office of AIG American Home Assurance Company, Ltd.</li> <li>Apr. 2017: Senior Partner of TH Law Office (current position)</li> </ul>

#### **Remuneration for Directors and Audit & Supervisory Committee Members**

	No. of Persons	Base Remuneration (Millions of yen)	Performance-Based Remuneration (Millions of yen)	Remuneration for Purchase of Treasury Stock (Millions of yen)
Directors (Who are not Audit & Supervisory Committee members)	11	201	28	40
Directors (Who are Audit & Supervisory Committee members)	3	58	N/A	N/A

#### System of Remuneration

	Category	Concept	Outline	
Directors	Base remuneration	Corresponds to roles and responsibilities	Remuneration for directors is ¥300 million or less per year.	
	Performance-based remuneration	Corresponds to the achievements for each term	Taking into account the levels of net incom and dividend for the consolidated fiscal yea under review and qualitative elements such the degree of achievement of management objectives, the amount is kept within ¥200 million, or 1% of the amount of net income attributable to owners of the parent.	
	Remuneration for purchase of treasury stock	Linked to long-term achievement improvement	Directors (excluding outside directors) acquire treasury shares of ¥90 million or less per annum through the Directors Holding Association for continuous holding until retirement from positions.	
Audit & Supervisory Committee members	Base remuneration	Corresponds to roles and responsibilities	Remuneration for Audit & Supervisory Committee members is ¥84 million or less per year.	

For Chiyoda's complete Corporate Governance Report, please visit our corporate website: • www.chiyodacorp.com/about/Governanve\_Report\_Eng\_20180402.pdf

# **Discussion: Chairman & Outside Director**



Katsuo Nagasaka Chairman of the Board

Nobuo Tanaka Outside Director

# Chiyoda's Quest for Economic and Sustainable Development Is the Promotion of Good Governance

In partnership with Chiyoda's senior management, the Board of Directors, led by its Chairman, Mr. Katsuo Nagasaka, is responsible for overseeing the Company's operations and works closely with the President & CEO, Mr. Masaji Santo, and his management team in planning and executing Chiyoda's strategy.

The composition of the Board of Directors is key to ensuring that Chiyoda is best positioned to face the various challenges in the marketplace and benefit from its opportunities, and a key function of the Board lies in the selection of its outside directors. The knowledge that they bring from their diverse experiences greatly complements the wealth of knowledge at Chiyoda, and it is the Chairman's role to maximize the value of such assets.



The following excerpt is taken from a recent discussion between Chairman Nagasaka and Director Nobuo Tanaka, one of the Company's outside directors, and should shed some light on the workings of Chiyoda's Board of Directors and its deliberations.



TanakaMy experiences at the Ministry of Economy,<br/>Trade and Industry (METI), the Organization for<br/>Economic Co-operation and Development (OECD), and<br/>the International Energy Agency (IEA) had been recognized<br/>by Chiyoda as both relevant in terms of the global energy<br/>business and with regard to my knowledge about how<br/>businesses operate around the world. Before my appoint-<br/>ment to the Board in 2016, I met with the Company's<br/>senior management to discuss my experience and<br/>business philosophy and how they could be of service to<br/>Chiyoda's business, employees, and shareholders. I came<br/>to learn about Chiyoda's SPERA Hydrogen® project and<br/>I support it enthusiastically, because hydrogen can be

a sustainable fuel for the future. This may be one of the reasons that Chiyoda asked me to be a Board member.

Nagasaka What special skills and experience do you bring to the Board, and how would you like to make an impact in the years ahead?

Performing senior roles at some of the world's Tanaka leading institutions has given me a global perspective that, I believe, fits well with Chiyoda's in-house expertise. While there are many companies that strive for success in energy construction, the way they approach the industry's challenges can differ depending on their skills and experience. I can add valuable insight into how Chiyoda can compete in this highly technical world. My objective would be to make a lasting contribution to Chiyoda's success by introducing a truly global perspective to the conversations and decision-making that are so essential to Chivoda's future. For example, Chiyoda heavily depends on fossil fuel-related businesses-LNG, in particular. But the world is moving toward decarbonization much faster than anybody had expected.

The IEA declared in its recently published *World Energy Outlook* that solar photovoltaic generation will be the cheapest source of energy in the future. This would have significant impacts on the future of fossil fuels and nuclear power. Although a fossil fuel, LNG would be a more attractive energy source than coal or oil because it is considerably cleaner. Nevertheless, I strongly urged Chiyoda's management to appoint a Chief Sustainability Officer in order to prepare for this kind of future, and recently they did just that.

Nagasaka Please tell us about how the Board operates: the number of meetings; committee appointments; informal discussions between meetings; and the decision-making process.

Tanaka The Board meets monthly, where we spend hours deliberating over an agenda that is sent to us several days in advance. This gives us an opportunity to prepare our own responses to the matters at hand but also to research specific issues that may be related to Chiyoda's needs and challenges.

Chiyoda's Audit & Supervisory Committee now has five members that are responsible for the oversight of the Company's financial operations and are tasked with maintaining an optimal financial condition and ensuring that the Company's finances are running smoothly.



While our meetings are scheduled well in advance and we receive substantial information about the condition and operations of the Company on a regular basis, the unexpected can happen. If the need arises, we can consult by phone and arrange informal meetings to discuss any pertinent issues, ensuring that senior management have the benefit of our advice as soon as possible. In all meetings, agenda matters are discussed in detail, voted upon, and passed on for execution.

The government's recent efforts to bring the expertise, perspective, and skills of women into Japan's business community offers a rich, new opportunity both for the companies they serve and the individuals themselves. I am delighted to welcome the first female member of the Board, Ms. Mika Narahashi. Certainly her expertise, perspective, and skills offer a rich, new opportunity for Chiyoda.

NagasakaOperational performance and corporate gover-<br/>nance are two critical issues for executive and<br/>non-executive management. How do you intend to<br/>manage the competing influences of the two?

Tanaka Chiyoda's corporate philosophy of "Energy and the Environment in Harmony" constitutes a real challenge to any company operating in this difficult and ever changing market. However, our role on the Board is to ensure that the Company makes every effort to promote workplace safety, and to recognize the risks inherent in the energy business, extracting valuable energy commodities from hard-to-reach places in a multitude of environments.

Chiyoda works very hard to be a leader in energy construction but also strives to maintain a strong emphasis on corporate governance in all of its operations. We believe that operating in a way that is sensitive to all ESG matters makes Chiyoda a better, more successful company, and we will work hard to stay on that path toward sustainable success.

# OUR SHARED VALUES **Value Creation Story**

The Chiyoda Group pledges to continue as an enterprise that optimizes use of cutting-edge technology and human resources to create value for society. Our corporate philosophy proclaims "Energy and the Environment in Harmony" and we are pursuing business with our CSR values as shared values. In order to respond to the requirements of global markets and communities, we aim to be a top-tier provider of comprehensive engineering services in both energy and environmental fields by implementing our Medium-Term Management Plan (MTMP), "Mirai Engineering-A Grand Opportunity for the Future."

Energy

**Solutions** 

Build Energy

Value Chain Business

# **Realization of the Corporate Philosophy**

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## **Medium-Term Management Plan**

"Mirai Engineering" -A Grand Opportunity for the Future-

### **Global Standards**

- ISO 26000
- United Nations Global Compact
- (UNGC)
- SDGs
- Paris Climate Agreement
- United Nations Convention on Biological Diversity

#### **Chivoda Group's CSR Values**

- 1. A Reliable Company
- 2. Environmental Initiatives
- 3. Social Contributions
- 4. Respect for Human Rights 5. Commitment to Fairness

#### Social Issues

- Human Bights
- Anti-Corruption Climate Change
- Global Warming
- Economic Disparity
- Appropriate Employment
- Individual Issues in
- Local Communities
- Securing Energy Resources

#### **Environmental Solutions**

Expand Global Environmental **Engineering Business** 

# "Mirai Engineering"

-A Grand Opportunity for the Future-At the Chiyoda Group, we are aiming to become the new leading engineering company that works with technology and passion to create the future of energy and the global environm

#### **Technology and Business Model Innovation**

Develop a New Business Model for a Digital Society

#### Initiatives in 2017–2018

- Appointed Chief Sustainability Officer (CSO)
- Established the Decarbonization
- Advancement Office

#### What Are the SDGs (Sustainable Development Goals)?

These are goals that need to be realized by the year 2030 in order to achieve a sustainable development of society. They consist of 17 major goals and 169 targets that were adopted by the United Nations General Assembly in September 2015 to provide a basic framework for action in the international community of both developing and developed countries. In this report, we are reconfirming our own corporate activities and displaying icons for the relevant SDGs side by side with such activities.

# ĩ Ċ 14 BELOW WATER

- The Mission for Us to Accomplish -

Enhance our business in aiming for harmoney 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.



 Achievement of the SDGs Enhancement of Corporate Value We are responding to the ever charging business environment and contributing to the realization of a sustainable society.

The Chiyoda Group's CSR Values	Why	How	FY2017 Activities	Related SDGs
A Reliable Company We strive to be a reliable company to our customers and all our stakeholders by providing world-class technologies and knowledge.	For a corporation, the trust of its stakeholders provides the foundation for management. Through its business, the Chiyoda Group will contribute to the resolution of global issues and the sustainable development of society so as to continue earning the trust of its stakeholders.	 <ul> <li>Provide safe, reliable plants</li> <li>Execute high-quality engineering</li> <li>Provide engineering solutions for the sustainable development of society</li> <li>Share our CSR philosophy with business partners through our supply chain</li> <li>Perform facility renovations in line with the demands of the times</li> </ul>	<ul> <li>Development Project Initiatives on the Northernmost Energy Frontier</li> <li>Collaboration with suppliers to keep improving quality</li> <li>Effectively using sustainable energy by facility renovation work in line with the demands of the times.</li> <li>Developing industrial infrastructure by providing high-performance products</li> </ul>	7       offendamination       9       Person provides       11       increases         increases       increases       increases       increases       increases         12       occompany       increases       increases       increases         increases       increases       increases       increases
2 <b>Environmental Initiatives</b> We will work to remain an invaluable company to society by utilizing refined technologies to promote harmony between the global environment and economic and social activities.	Ever since the Chiyoda Group was founded, we have engaged with the contradictory theme expressed as "Energy and the Environment in Harmony." In order for the global environment and human society to be sustainable, we will aim to use engineering to realize climate change countermeasures and a carbon-free society. As we contribute to solutions for new issues as they arise, we will continue to be a leading company.	<ul> <li>Environmental preservation through project execution</li> <li>Initiatives for effective use of water</li> <li>Technological proposals to mitigate climate change</li> <li>Development and provision of environmental preservation technologies</li> <li>Effective energy utilization by improving energy efficiency</li> </ul>	<ul> <li>Reducing CO<sub>2</sub> emissions through engineering business</li> <li>Technology development to reduce environmental impact</li> <li>Demonstration project to recycle and reuse industrial wastewater in water stress areas</li> <li>Collaboration with Kawasaki City to contribute to a carbon-free society</li> </ul>	6       ILLARKUTE INDUCTION       7       ATERDATION INCLUSION       9       ADSCRIPTION ADDRESSION         11       DESCRIPTION       13       CULLER       17       REFERENCE         11       DESCRIPTION       INCLUS       INCLUS       INCLUS       INCLUS         INCLUS       INCLUS       INCLUS       INCLUS       INCLUS       INCLUS
<b>Social Contributions</b> Through our engineering business in Japan and overseas, we contribute to local communities and address global issues in ways including human resources development, technology transfer, and environmental protection.	The social responsibility of engineering firms is to address issues surrounding society and to provide solutions for those issues. Beyond providing industrial plants, we are gradually expanding the application of our engineering expertise to tackle social issues such as social infrastructure and food shortages.	<ul> <li>Establish industrial infrastructure</li> <li>Add value by integrating cutting-edge technologies</li> <li>Human resources development and technology transfer in countries where we carry out projects</li> <li>Resilient infrastructure development</li> </ul>	<ul> <li>Establishing industrial infrastructure through stable food self-sufficiency promotion</li> <li>Plant diagnosis by acoustic emission technique</li> <li>Global group operation and technology transfer</li> <li>Resilient infrastructure improvement for a sustainable society</li> </ul>	2. INFORME     3. MAGNETALINE     7. INTERNATION       3. MAGNETALINE
Respect for Human Rights We are dedicated to respecting the human rights of all people. We will create a corporate culture where the diversity, individuality, and character of employees are respected, where people are motivated to do their best, and of which employees and their families are proud.	Human resources are valuable assets for an engineering company. We realize the growing necessity to respect diversity, cultivate global human resources development, and implement workstyle reforms in order to create a corporate climate that both employees and their families can take pride in.	<ul> <li>Create a lively working environment</li> <li>Implement workstyle reforms</li> <li>Instill safety as a core value and shared mindset</li> <li>Enhance crisis management systems</li> <li>Reinforce corporate strengths by developing global human resources</li> </ul>	<ul> <li>Nurturing the next generation of human resources</li> <li>Promotion of a safety culture</li> <li>Promotion of diverse human resources</li> </ul>	3 GOOMEALTHOR       4 OULT       5 COURT         → ↓ ↓ ↓       ↓ ↓ ↓       ↓ ↓ ↓       ↓ ↓         8 COONTRE-CONTR       11 SECONTREASE       17 REFINITIONS         ● ↓ ↓ ↓       ● ↓ ↓ ↓       ● ↓ ↓ ↓       ↓ ↓
5 <b>Commitment to Fairness</b> We are dedicated to achieving even greater transparency and stability by conducting our operations fairly in accordance with the highest ethical standards.	Commitment to fairness is the foundation for the Company's continuing existence. The Chiyoda Group has pursued stronger governance and more thorough compliance, however, there is a growing demand for management transparency and fairness both domestically and overseas.	<ul> <li>Expansion of corporate management system with transparency and soundness</li> <li>Initiatives to prevent misconduct</li> <li>Conduct a thorough risk management program</li> <li>Thorough compliance and export control education</li> <li>Global development of Compliance Consultation and Reporting System (Whistleblowing System)</li> </ul>	<ul> <li>Expansion of corporate governance system</li> <li>Education and system reinforcement to raise compliance awareness and structure</li> </ul>	10 REALTS

As our corporate activities have been increasingly global in scope, we are dedicated to developing opportunities in which employees as well as other stakeholders such as customers, business partners, and local communities can participate and play an active role, regardless of gender, nationality, age, or religion in a spirit of respecting human rights, above all.

A Reliable Company

- Yamal LNG Project achieves its 1st LNG cargo shipment in 44 months
- The 18th Valve Summit
- RFCC Unit Regenerator cyclone system renovation work · Completed construction of chemicals manufacturing facility



▲ RFCC Unit Regenerator cyclone system unit renewal work



▲ 18th Valve Summit

**Environmental** Initiatives

- Mega solar plant construction effectuates CO<sub>2</sub> emissions reduction
- Technology award from the Catalyst Manufacturers Association Japan • Demonstration project of recycling industrial wastewater in Saudi Arabia Constructing a hydrogen supply network

Constructing Mega Solar Power Plants to Reduce CO<sub>2</sub> Emissions



#### Industrial Wastewater Recycling Demonstration Project







International Airport in Mongolia

4	Respect for Human Rights
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Mozambique



A Participants in the Yokohama Women's Leadership Program Source: www.city.yokohama.lg.jp/shimin/kochosodan/kocho/tea/29/270419.html (in Japanese only)

<b>5</b> Commitment to Fairness	FY2017 Whistleblo Consultation Reco (Cases reported to Chiy	wi rd oda
Making the corporate governance system stronger Appointment of Chief Compliance	Legal violations & corruption	0
Officer (CCO) / Thorough compliance	Power harassment	
education / Reinforcement of whistle-	(Abuse of power)	
DIOWING System	Sexual harassment	1
	Labor, work rules, morals	
	Other consultations	
		I

 Construction of demonstration vegetable cultivation factory in Dubai • Science and technology award conferred for development of global diagnostic technology Completion of Paku Gajah Gas Development Project Construction of New Ulaanbaatar International Airport

 Acceptance of internships / Dispatch of employees to universities as instructors for lectures • Conclusion of MOU with National Enterprise of Hydrocarbons (ENH) in the Republic of

• Education on risks and dangers through virtual reality (VR) technology Participation in Yokohama Woman's Leadership Program

Chiyoda and ENH sign a Memorandum of Understanding (MOU)





▲ Training on preventing harassment

# OUR SHARED VALUES **Social Contribution Activities**

#### Why

The Chiyoda Group is actively seeking solutions to global issues in order to help create a better society. This is not just a matter of social contributions through business. We will also continue working closely with local communities to contribute to the sustainable development of society.

#### How

Taking "CSR promotion by all members together" as our motto, and with collaboration and coexistence with local communities as our objective, we will continue our corporate existence as a contributor to the sustainable development of society. By having our employees participate in these activities, we are also heightening their motivation to contribute to society and developing human capital that will be capable of contributing not just to business performance but to society as a whole.

### **Contributions to Health & Welfare**

**TABLE FOR TWO\*** (Facilitated by the Chiyoda Group in Japan)

Offered 1,581 school lunches to children in developing countries



© TABLE FOR TWO

\* The TFT menu provided at employee dining halls includes a ¥20 donation, and each ¥20 can provide one school meal in a developing country.

#### Blood Donation (Implemented by CPh and L&TC)

L&TC believes that no celebration is complete without a noble gesture. As part of the Incorporation Day celebrations, L&TC organized a blood donation camp on November 17, 2017.



### **Assistance to Areas Hit** by **Disasters**

**Employee Volunteers Dispatched to Areas** Hit by Disasters

ented by the Chivoda Group in Japan)



Dispatched 54 members to Kamaishi City and Otsuchi Town in Iwate Prefecture over six visits.



# with Special Needs

Japan Philharmonic Performance of Beethoven's 9th Symphony Concert Invitations Provided to Those with Visual Impairments (Implemented by CGH)

Have sponsored the Japan Philharmonic Orchestra's performance of Beethoven's 9th Symphony since 2011, inviting 25 pairs of 50 visually impaired people from Yokohama City each year.



For our social contribution as a good corporate citizen, we focus on the following five areas among other things:

1. Collaboration with municipal authorities & NGOs / NPOs 2. Assistance to areas hit by disasters

3. Contributions to health & welfare 4. Educational support & human resources development 5. Environmental conservation

Through these activities, and widening the circle of exchange and collaboration with local communities, we aim to contribute to resolving such issues specific to the places we operate to help realize the sustainable development of society, being recognized as a company needed by society. Further, it is our belief that employees' participation in such activities leads them to raise awareness of the importance of such activities and behave duly considering the social values as well in conducting their business activities.

## **Educational Support & Human Resources Development**

#### Internships / University Lecturers



C&PW shared engineering knowledge with the younger generation of Engineers of Myanmar, in order to fill the knowledge gap of the fresh graduate engineers and students as well as to let them

explore the working experience that is related to their field of studies.

#### **Student Visits to the Company**



Hosted three company visits and two off-site classes for students to aid their career development.

#### Grade School Campaign Drive

Donated school supplies, etc., to local elementary schools.





#### Tree Planting (Implemented by CPW)

Planted 99 trees in collaboration with the City Environment and Waste Management Office.



#### **Donation of Unused Pamphlets** (Implemented by Alc)



Donated 12 cartons of unused pamphlets to the JATA Environmental Fund. The proceeds were used for protection and preservation of natural and cultural heritage sites.

# Financial Section Eleven-Year Financial Summary

Chiyoda Corporation and Consolidated Subsidiaries As of and for the years ended March 31

									Millions of yen (Except amounts pe		er share and key ratios)	
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Results for the Year:		-										
Revenue	¥603,559	¥446,438	¥312,985	¥247,082	¥254,675	¥398,918	¥446,147	¥480,979	¥611,548	¥603,745	¥510,873	
Cost of Revenue	583,035	427,461	298,766	215,563	215,783	356,402	404,685	435,327	570,028	565,521	502,255	
Gross Profit	20,524	18,977	14,219	31,519	38,891	42,515	41,462	45,651	41,520	38,223	8,618	
SG&A Expenses	11,684	11,749	12,517	13,974	14,693	17,402	20,383	24,185	25,505	22,543	20,948	
Operating Income (Loss)	8,839	7,227	1,702	17,544	24,197	25,113	21,079	21,466	16,015	15,680	(12,330)	
Net Income (Loss) Attributable to Owners of the Parent	9,640	6,498	2,953	7,979	14,364	16,077	13,447	11,029	3,375	(41,116)	6,445	
Capital Expenditure	1,679	2,159	1,853	2,085	3,409	9,428	4,453	4,107	2,698	2,131	2,400	
Depreciation	1,594	1,957	2,059	2,566	2,637	2,580	3,196	3,569	3,589	3,643	3,545	
Cash Flows:												
Cash Flows from Operating Activities	14,274	8,971	8,613	(5,229)	55,615	14,147	(17,177)	(24,145)	55,526	(4,375)	(34,115)	
Cash Flows from Investing Activities	(3,917)	(1,072)	(2,722)	(2,577)	(9,140)	(5,257)	(16,796)	(5,444)	(26,750)	10,433	(1,428)	
Cash Flows from Financing Activities	(17,219)	58,548	(2,079)	(805)	(2,899)	(4,432)	(5,249)	(4,569)	(3,942)	(2,693)	(1,468)	
Cash and Cash Equivalents, at End of Year	70,089	135,536	139,790	130,618	173,769	180,229	145,303	113,246	136,919	138,889	101,767	
Financial Position at Year-End:												
Total Assets	¥378,819	¥357,816	¥328,174	¥353,392	¥365,795	¥435,379	¥475,288	¥515,839	¥528,219	¥461,331	¥420,704	
Total Equity	81,637	145,917	149,253	155,758	168,737	189,356	198,031	208,405	202,128	157,125	159,418	
Long-Term Loans Payable	22	10,004	10,000	10,208	198	10,132	10,018	10,015	10,009	4	10,000	
Interest-Bearing Debt	10,061	10,022	10,004	10,208	10,198	10,220	11,305	11,010	10,348	10,211	10,000	
Shareholders' Equity	81,226	145,513	148,683	155,242	168,120	188,386	196,411	206,395	200,166	155,339	156,099	
Amounts per Share (Yen):												
Basic Net Income (Loss) per Share	¥ 50.15	¥ 25.58	¥ 11.39	¥ 30.79	¥ 55.44	¥ 62.06	¥ 51.91	¥ 42.58	¥ 13.03	¥ (158.76)	¥ 24.89	
Net Assets per Share	422.44	561.12	573.61	599.15	648.95	727.24	758.31	796.89	772.89	599.83	608.41	
Dividends per Share	10	7.5	3.5	11	17	19	16	13	10	6	7.5	
Key Ratios:												
Return on Assets (ROA) (%)	4.7	3.1	1.4	4.6	6.6	6.4	5.0	4.5	3.1	(0.6)	(2.3)	
Return on Equity (ROE) (%)	12.2	5.7	2.0	5.3	8.9	9.0	7.0	5.5	1.7	(23.1)	4.1	
Shareholders' Equity Ratio (%)	21.4	40.7	45.3	43.9	46.0	43.3	41.3	40.0	37.9	33.7	37.5	
EV / EBITDA (Times)	5.39	0.79	15.64	4.20	4.12	3.55	8.09	6.34	4.02	3.41	26.38	
Debt Equity Ratio (%)	0.12	0.07	0.07	0.07	0.06	0.05	0.06	0.05	0.05	0.07	0.06	
Current Ratio (%)	115.0	161.1	175.2	173.8	165.5	166.3	156.3	151.0	146.3	141.2	153.0	
Payout Ratio (%)	19.9	29.3	30.8	35.7	30.7	30.6	30.8	30.5	76.7	38.7	30.1	
Price Earning Ratio (PER) (%)	18.0	20.9	81.5	24.7	19.0	16.9	25.6	24.1	63.3	(4.5)	40.3	
Others:												
Number of Employees	3,067	3,376	3,670	4,104	4,530	4,915	6,062	6,097	5,866	5,367	6,176	
Share Price Range: High	2,930	1,274	946	963	1,093	1,309	1,669	1,455	1,164	933	1,110	
Low	865	348	529	546	702	901	912	903	722	611	537	

# Financial Section **Consolidated Balance Sheet**

Chiyoda Corporation and Consolidated Subsidiaries March 31, 2018 and 2017

	Million	Millions of Yen		
	2018	2017	2018	
Assets				
Current Assets:				
Cash and cash equivalents	¥101,767	¥138,889	\$ 960,075	
Short-term investments	2,240	4,483	21,140	
Notes and accounts receivable-trade	36,466	40,377	344,023	
Costs and estimated earnings on long-term construction contracts	40,418	19,487	381,302	
Costs of construction contracts in process	15,916	24,220	150,155	
Accounts receivable-other	41,967	7,761	395,920	
Jointly controlled assets of joint venture	131,374	164,283	1,239,384	
Deferred tax assets	5,948	9,586	56,113	
Prepaid expenses and other	5,563	17,696	52,482	
Allowance for doubtful accounts	(1,245)	(1,541)	(11,745)	
Total current assets	380,418	425,244	3,588,852	
Property, Plant and Equipment:				
Land	4,952	5,266	46,718	
Buildings and structures	13,504	13,892	127,396	
Machinery and equipment	522	547	4,932	
Tools, furniture and fixtures	6,142	7,236	57,943	
Construction in progress	115	22	1,091	
Total	25,236	26,965	238,082	
Accumulated depreciation	(13,165)	(13,806)	(124,201)	
Net property, plant and equipment	12,071	13,158	113,881	
Investments and Other Assets:				
Investment securities	2,067	2,748	19,507	
Investments in and advances to unconsolidated subsidiaries and				
associated companies	6,183	5,616	58,337	
Goodwill	468	2,051	4,423	
Software	5,194	5,989	49,006	
Asset for retirement benefits	203	84	1,920	
Deferred tax assets	6,328	4,967	59,698	
Other assets	7,953	1,806	75,034	
Allowance for doubtful accounts	(185)	(336)	(1,746)	
Total investments and other assets	28,215	22,928	266,180	

Total	¥420,704	¥461,331	\$3,968,913

	Millions	s of Yen	Thousands of U.S. Dollars
	2018	2017	2018
iabilities and Equity			
Current Liabilities:			
Short-term borrowings		¥ 203	
Current portion of long-term debt	¥ 2	10,023	\$ 28
Notes and accounts payable-trade	147,654	160,096	1,392,968
Advance receipts on construction contracts	76,294	85,187	719,763
Income taxes payable	894	668	8,439
Deposits received	1,224	1,087	11,550
Allowance for warranty costs for completed works	419	319	3,955
Allowance for losses on construction contracts	3,288	3,315	31,025
Provision for loss on business of subsidiaries and associated companies		22,919	
Accrued expenses and other	18,883	17,360	178,150
Total current liabilities	248,663	301,182	2,345,882
Long-Term Liabilities:			
Long-term debt	10,022	30	94,550
Liability for retirement benefits	1,176	1,522	11,096
Provision for treatment of PCB waste	344	338	3,248
Asset retirement obligations	1,008	1,010	9,516
Other	70	121	667
Total long-term liabilities	12,622	3,023	119,080
Commitments and Contingent Liabilities			
Equity:			
Common stock-authorized, 570,000 thousand shares;			
issued, 260,324 thousand shares in 2018 and 2017	43,396	43,396	409,400
Capital surplus	37,112	37,112	350,119
Retained earnings	77,024	72,132	726,650
Treasury stock—at cost, 1,356 thousand shares			
in 2018 and 1,351 thousand shares in 2017	(1,434)	(1,431)	(13,537)
Accumulated other comprehensive income (loss):			
Unrealized gain on available-for-sale securities	64	379	605
Deferred (loss) gain on derivatives under hedge accounting	(1,778)	499	(16,775)
Foreign currency translation adjustments	2,159	2,656	20,370
Defined retirement benefit plans	1,013	592	9,558
Total	157,557	155,339	1,486,391
Noncontrolling interests	1,861	1,785	17,560
Total equity	159,418	157,125	1,503,951
otal	¥420,704	¥461,331	\$3,968,913

Long-term debt	
Liability for retirement benefits	
Provision for treatment of PCB waste	
Asset retirement obligations	

Total I	ona-term	liabilities	

	Millions	s of Yen	Thousands of U.S. Dollars
	2018	2017	2018
Liabilities and Equity			
Current Liabilities:			
Short-term borrowings		¥ 203	
Current portion of long-term debt	¥ 2	10,023	\$ 28
Notes and accounts payable-trade	147,654	160,096	1,392,968
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Equity:			
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issued, 260,324 thousand shares in 2018 and 2017	43,396	43,396	409,400
Capital surplus	37,112	37,112	350,119
Retained earnings	77,024	72,132	726,650
Treasury stock—at cost, 1,356 thousand shares			
in 2018 and 1,351 thousand shares in 2017	(1,434)	(1,431)	(13,537)
Accumulated other comprehensive income (loss):			
Unrealized gain on available-for-sale securities	64	379	605
Deferred (loss) gain on derivatives under hedge accounting	(1,778)	499	(16,775)
Foreign currency translation adjustments	2,159	2,656	20,370
Defined retirement benefit plans	1,013	592	9,558
Total	157,557	155,339	1,486,391
Noncontrolling interests	1,861	1,785	17,560
Total equity	159,418	157,125	1,503,951
īotal	¥420,704	¥461,331	\$3,968,913

# Financial Section Consolidated Statement of Income

Chiyoda Corporation and Consolidated Subsidiaries Years Ended March 31, 2018 and 2017

	Millions	Millions of Yen			
	2018	2017	2018		
Revenue	¥510,873	¥603,745	\$4,819,565		
Cost of Revenue	502,255	565,521	4,738,263		
Gross Profit	8,618	38,223	81,302		
Selling, General and Administrative Expenses	20,948	22,543	197,631		
Operating (Loss) Income	(12,330)	15,680	(116,329)		
Other Income (Expenses):					
Interest and dividend income	2,585	2,487	24,393		
Equity in earnings (losses) of associated companies	680	(17,106)	6,424		
Gain on sales of investment securities	202	1,937	1,913		
Reversal of provision for loss on business of subsidiaries and					
associated companies	12,441		117,373		
Gain on sales of shares of subsidiaries and associated companies	1,732		16,348		
Interest expense	(212)	(209)	(2,005)		
Foreign exchange loss	(667)	(3,455)	(6,301)		
Commission fee	(208)	(59)	(1,964)		
Loss on valuation of investment securities		(393)			
Impairment loss		(766)			
Provision for loss on business of subsidiaries and associated companies		(22,919)			
Loss on sales of shares of subsidiaries and associated companies		(1,146)			
Other-net	643	(418)	6,068		
Other income (expenses)—net	17,198	(42,048)	162,250		
Income (Loss) before Income Taxes	4,867	(26,368)	45,921		
Income Taxes:					
Current	(5,475)	15,026	(51,660)		
Deferred	3,741	(143)	35,297		
Total income taxes	(1,734)	14,883	(16,362)		
Net Income (Loss)	6,602	(41,251)	62,283		
Net Income (Loss) Attributable to Noncontrolling Interests	156	(135)	1,472		
Net Income (Loss) Attributable to Owners of the Parent	¥ 6,445	¥ (41,116)	\$ 60,810		

	Y	U.S. Dollars		
	2018	2017	2	018
Per Share of Common Stock:				
Basic net income (loss)	¥ 24.89	¥ (158.76)	\$	0.23
Cash dividends applicable to the year	7.50	6.00		0.07

# **Consolidated Statement of Comprehensive Income**

Chiyoda Corporation and Consolidated Subsidiaries Years Ended March 31, 2018 and 2017

Years Ended March 31, 2018 and 2017	Million	s of Yen	Thousands of U.S. Dollars
	2018	2017	2018
Net Income (Loss)	¥ 6,602	¥(41,251)	\$ 62,283
Other Comprehensive Income (Loss):			
Unrealized loss on available-for-sale securities	(315)	(2,006)	(2,979)
Deferred (loss) gain on derivatives under hedge accounting	(2,276)	2,129	(21,476)
Foreign currency translation adjustments	(1,001)	(1,102)	(9,452)
Defined retirement benefit plans	420	291	3,968
Share of other comprehensive income (loss) of associates	450	(451)	4,250
Total other comprehensive loss	(2,723)	(1,139)	(25,689)
Comprehensive Income (Loss)	¥ 3,878	¥(42,391)	\$ 36,594
Total Comprehensive Income (Loss) Attributable to:			
Owners of the parent	¥ 3,775	¥(42,228)	\$ 35,616
Noncontrolling interests	103	(162)	977

# **Consolidated Statement of Changes in Equity**

Chiyoda Corporation and Consolidated Subsidiaries Years Ended March 31, 2018 and 2017

	Thousands						Millions of Yen					
						Accumula	ted Other Com	prehensive Inco	ome (Loss)	_		
	Outstanding Number of Shares of Common	Common	Capital	Retained	Treasury	Unrealized Gain on Available-for-	Deferred (Loss) Gain on Derivatives under Hedge	Foreign Currency Translation	Defined Retirement		Noncontrolling	
Polonoo April 1, 2016	250 004	V12 206	V27 110	V115 020	V(1 400)	V 2 206	V(1 619)	V / 171	V 200	10tal	V1 061	
Balarice, April 1, 2010	200,904	±43,390	#37,11Z	±110,009	ŧ(1,422)	ŧ 2,300	ŧ(1,010)	ŧ 4,171	¥ 300	ŧ200,100	ŧ1,901	#2U2,120
Net loss attributable to owners of the parent				(41,116)						(41,116)		(41,116)
Cash dividends, ¥10.00 per share				(2,589)						(2,589)		(2,589)
Purchase of treasury stock	(11)				(8)					(8)		(8)
Net changes in the year						(2,006)	2,118	(1,514)	291	(1,111)	(175)	(1,287)
Balance, March 31, 2017	258,973	43,396	37,112	72,132	(1,431)	379	499	2,656	592	155,339	1,785	157,125
Net income attributable to owners of the parent				6,445						6,445		6,445
Cash dividends, ¥6.00 per share				(1,553)						(1,553)		(1,553)
Purchase of treasury stock	(5)				(3)					(3)		(3)
Net changes in the year						(315)	(2,277)	(497)	420	(2,670)	76	(2,594)
Balance, March 31, 2018	258,967	¥43,396	¥37,112	¥ 77,024	¥(1,434)	¥ 64	¥(1,778)	¥ 2,159	¥1,013	¥157,557	¥1,861	¥159,418

	Thousands of U.S. Dollars										
		Accumulated Other Comprehensive Income (Loss)						ome (Loss)	_		
						Deferred (Loss)					
					Unrealized	Gain on	Foreign				
				-	Gain on	Derivatives	Currency	Defined			
	Common	Capital	Retained	Treasury	Available-for-	under Hedge	Iranslation	Retirement	-	Noncontrolling	
	Stock	Surplus	Earnings	Stock	Sale Securities	Accounting	Adjustments	Benefit Plans	lotal	Interests	Total Equity
Balance, March 31, 2017	\$409,400	\$350,119	\$680,498	\$(13,500)	\$ 3,584	\$ 4,712	\$25,065	\$5,590	\$1,465,470	\$16,843	\$1,482,313
Net income attributable to owners of the parent			60,810						60,810		60,810
Cash dividends, \$0.05 per share			(14,658)						(14,658)		(14,658)
Purchase of treasury stock				(36)	)				(36)		(36)
Net changes in the year					(2,979)	(21,488)	(4,695)	3,968	(25,194)	717	(24,477)
Balance, March 31, 2018	\$409,400	\$350,119	\$726,650	\$(13,537)	\$ 605	\$(16,775)	\$20,370	\$9,558	\$1,486,391	\$17,560	\$1,503,951

#### Financial Section

# **Consolidated Statement of Cash Flows**

Chiyoda Corporation and Consolidated Subsidiaries Years Ended March 31, 2018 and 2017

	Million	is of Yen	Thousands of U.S. Dollars
	2018	2017	2018
Operating Activities:	-	·	
Income (loss) before income taxes	¥ 4,867	¥ (26,368)	\$ 45,921
Adjustments for:		,	
Income taxes paid	(1,750)	(13,821)	(16,513)
Depreciation	3,545	3,643	33,450
Impairment loss		766	
Amortization of goodwill	327	547	3,092
Decrease in allowance for doubtful accounts	(218)	(701)	(2.065)
Increase (decrease) in allowance for warranty costs for completed works	102	(15)	962
(Decrease) increase in allowance for losses on construction contracts	(25)	154	(244)
Increase (decrease) in liability for retirement benefits	44	(428)	421
Foreign exchange loss (gain)—net	477	(186)	4.507
(Decrease) increase in provision for loss on business of subsidiaries		(100)	.,
and associated companies	(12,777)	22,919	(120.538)
(Gain) loss on sales of shares of subsidiaries and associated companies	(1.732)	1,146	(16.348)
Fourty in (earnings) losses of associated companies	(680)	17 106	(10,010)
Gain on sales of investment securities	(202)	(1,937)	(1,913)
Loss on valuation of investment securities	(_0_)	.393	(1,010)
Changes in operating assets and liabilities:		000	
(Increase) decrease in trade notes and accounts receivable, and			
costs and estimated earnings on long-term construction contracts	(19 550)	8 1/1	(184 442)
Decrease in costs of construction contracts in process	8 289	10,786	78 198
(Decrease) increase in trade notes and accounts payable	(10.420)	11 /01	(98,308)
Decrease in advance receipts on construction contracts	(10,420)	(48,668)	(75,611)
	(26,002)	(1,001)	(254 648)
Decrease in iginity controlled assets of joint venture	31 920	13 666	301 136
Increase in interest and dividends receivable	(631)	(1,020)	(5 955)
Other_net	(691)	(1,023)	(5,555)
Total adjustments	(38 983)	21 993	(367 768)
Net cash used in operating activities	¥ (34 115)	¥ (4.375)	\$ (321,846)
Investing Activities:	+ (0-1,110)		\$ (021,040)
Net decrease in time deposits	2 028	3 043	19 133
Purchases of property, plant and equipment	(550)	(649)	(5 189)
Proceeds from sales of property, plant and equipment	362	46	3 420
Purchases of intancible assets	(2 044)	(1.451)	(19,286)
Payments for nurchases of investment securities	(2,014)	(351)	(10,200)
Proceeds from sales of investment securities	896	15 554	8 461
Proceeds from sales of shares of subsidiaries resulting in change	000	10,004	0,401
in scope of consolidation	1 684		15 890
Payments of loans receivable	(4 229)	(12 188)	(39,900)
Proceeds from collections of loans	(4,223)	6 382	7 145
Other_net	5	19	47
Net cash (used in) provided by investing activities	(1 428)	10/33	(13 472)
Financing Activities:	(1,120)		(10,112)
Net increase (decrease) in short-term borrowings	149	(50)	1 412
Proceeds from long-term debt	10 000	(00)	94 339
Renavments of long-term debt	(10,004)	(3)	(94,379)
Payments of cash dividends	(1 552)	(2,586)	(14,650)
Other—net	(1,002)	(52)	(14,000)
Net cash used in financing activities	(1 468)	(2 603)	(13 855)
Foreign Currency Translation Adjustments on Cash and Cash Foulyalente	(1,400)	(1 305)	(10,000)
Net (Decrease) Increase in Cash and Cash Equivalents	(37 1 21)	1 060	(350 100)
Cash and Cash Equivalents Reginning of Vear	138 880	136 010	1.310.27/
Cash and Cash Equivalents, End of Year	¥101 767	¥138 889	\$ 960 075

Corporate Information

# **Corporate Data and Stock Information**

(As of March 31, 2018)

#### **Corporate Data**

Founded	1948
Paid-In Capital	¥43,396 million
Number of Employees	6,176 (Consolidated) 1,495 (Non-consolidated)
Chiyoda Global Headquarters	Minatomirai Grand Central Tower, 4-6-2, Minatomirai, Nishi-ku, Yokohama 220-8765, Japan

#### **Contact Information**

#### IR, PR & CSR Department

Minatomirai Grand Central Tower, 4-6-2, Minatomirai, Nishi-ku, Yokohama 220-8765, Japan Phone: +81-45-225-7734 Fax: +81-45-225-7748

#### Major Shareholders

Shareholder	Number of Shares Owned (Thousands of shares)	Ratio of Shares Owned (%)
Mitsubishi Corporation	86,931	33.39
The Master Trust Bank of Japan, Ltd. (Trust A/C)	16,061	6.16
Japan Trustee Services Bank, Ltd. (Trust A/C)	11,755	4.51
The Bank of Tokyo-Mitsubishi UFJ, Ltd.*	9,034	3.47
NORTHERN TRUST CO. (AVFC) RE SILCHESTER INTERNATIONAL INVESTORS INTERNATIONAL VALUE EQUITY TRUST	7,294	2.80
MSCO CUSTOMER SECURITIES	5,826	2.23
STATE STREET LONDON CARE OF STATE STREET BANK AND TRUST, BOSTON SSBTC A/C UK LONDON BRANCH CLIENTS- UNITED KINGDOM	5,676	2.18
NORTHERN TRUST CO. (AVFC) SUB A/C NON TREATY	5,162	1.98
Mitsubishi UFJ Trust and Banking Corporation	4,274	1.64
NORTHERN TRUST CO. (AVFC) RE U.S. TAX EXEMPTED PENSION FUNDS	4,195	1.61

\* The Bank of Tokyo-Mitsubishi UFJ, Ltd. changed its trade name to MUFG Bank, Ltd., effective as of April 1, 2018.

#### Monthly Stock Price (April 2014–March 2018)



Share Price (right) Volume

## **Stock Information**

Closing Date	March 31	
Ordinary General Meeting of Shareholders	June	
Common Stock	Number of authorized shares	570,000,000
	Number of issued and outstanding shares	260,324,529
	Number of shareholders	18,233
	Listing of shares	Tokyo
	Stock transaction unit	100 shares

### **Register of Shareholders**

#### Mitsubishi UFJ Trust and Banking Corporation

1-1 Nikko-cho, Fuchu-shi, Tokyo 183-0044, Japan Stock Transfer Agency Department Phone: 0120-232-711 (Toll free within Japan)

#### **Breakdown of Shareholders**





Chiyoda Global Headquarters Minatomirai Grand Central Tower, 4-6-2, Minatomirai, Nishi-ku, Yokohama 220-8765, Japan Phone: +81-45-225-7734 Fax: +81-45-225-7748



# A Grand Opportunity for the Future



**Consolidated Financial Statements FY2017** 

For the year ended March 31, 2018

CORPORATE PHILOSOPHY	<b>CO</b>
Enhance our business in aiming for harmony between energy and the environment and	<b>02</b> C
contribute to the sustainable development of a society as an integrated engineering	<b>04</b> C
company through the use of our collective wisdom and painstakingly developed technology.	<b>06</b> C
Every Chiyoda Group employee engages in our corporate activities with this philosophy in mind as we strive for corporate	<b>07</b> C
partners, employees, and local communities.	10 C
	12 N
	<b>46</b> Ir

# ONTENTS

- Consolidated Balance Sheet
- Consolidated Statement of Operations
- Consolidated Statement of Comprehensive Income
- Consolidated Statement of Changes in Equity
- **Consolidated Statement of Cash Flows**
- Notes to Consolidated Financial Statements
- Independent Auditor's Report

# Consolidated Balance Sheet March 31, 2018

ASSETS	Million 2018	s of Yen 2017	Thousands of U.S. Dollars (Note 1) 2018	LIABILITIES AND EQUITY	Millions 2018	of Yen 2017	Thousands of U.S. Dollars (Note 1) 2018
CURRENT ASSETS: Cash and cash equivalents (Note 14) Short-term investments (Note 14) Notes and accounts receivable—trade (Note 14) Costs and estimated earnings on long-term construction contracts (Notes 5 and 14) Costs of construction contracts in process Accounts receivable—other (Note 14) Jointly controlled assets of joint venture (Note 14) Deferred tax assets (Note 11)	¥ 101,767 2,240 36,466 40,418 15,916 41,967 131,374 5,948	¥ 138,889 4,483 40,377 19,487 24,220 7,761 164,283 9,586	\$ 960,075 21,140 344,023 381,302 150,155 395,920 1,239,384 56,113	CURRENT LIABILITIES: Short-term borrowings (Notes 8 and 14) Current portion of long-term debt (Notes 8 and 14) Notes and accounts payable—trade (Note 14) Advance receipts on construction contracts Income taxes payable (Note 14) Deposits received Allowance for warranty costs for completed works Allowance for losses on construction contracts Provision for loss on business of subsidiaries and associated	¥ 2 147,654 76,294 894 1,224 419 3,288	¥ 203 10,023 160,096 85,187 668 1,087 319 3,315	\$ 28 1,392,968 719,763 8,439 11,550 3,955 31,025
Prepaid expenses and other (Note 22) Allowance for doubtful accounts	5,563 (1,245)	17,696 (1,541)	52,482 (11,745)	companies (Note 7) Accrued expenses and other	18,883	22,919 17,360	178,150
Total current assets	380,418	425,244	3,588,852	Total current liabilities	248,663	301,182	2,345,882
PROPERTY, PLANT AND EQUIPMENT: Land Buildings and structures Machinery and equipment Tools, furniture and fixtures Construction in progress Total Accumulated depreciation	$\begin{array}{r} 4,952 \\ 13,504 \\ 522 \\ 6,142 \\ \underline{115} \\ 25,236 \\ (13,165) \end{array}$	5,266 13,892 547 7,236 22 26,965 (13,806)	46,718 127,396 4,932 57,943 1,091 238,082 (124,201)	LONG-TERM LIABILITIES: Long-term debt (Notes 8 and 14) Liability for retirement benefits (Note 9) Provision for treatment of PCB waste Asset retirement obligations Other Total long-term liabilities	10,022 1,176 344 1,008 70 12,622	30 1,522 338 1,010 121 3,023	94,550 11,096 3,248 9,516 <u>667</u> 119,080
Net property, plant and equipment	12,071	13,158	113,881	COMMITMENTS AND CONTINGENT LIABILITIES (Notes 8, 13, 15, 16 and 22)			
INVESTMENTS AND OTHER ASSETS: Investment securities (Notes 6 and 14) Investments in and advances to unconsolidated subsidiaries and associated companies (Note 7) Goodwill Software Asset for retirement benefits (Note 9) Deferred tax assets (Note 11) Other assets Allowance for doubtful accounts	2,067 6,183 468 5,194 203 6,328 7,953 (185)	2,748 5,616 2,051 5,989 84 4,967 1,806 (336)	19,507 58,337 4,423 49,006 1,920 59,698 75,034 (1,746)	EQUITY (Notes 10 and 20): Common stock—authorized, 570,000 thousand shares; issued, 260,324 thousand shares in 2018 and 2017 Capital surplus Retained earnings Treasury stock—at cost, 1,356 thousand shares in 2018 and 1,351 thousand shares in 2017 Accumulated other comprehensive income (loss): Unrealized gain on available-for-sale securities Deferred (loss) gain on derivatives under hedge accounting Foreign currency translation adjustments	43,396 37,112 77,024 (1,434) 64 (1,778) 2,159	43,396 37,112 72,132 (1,431) 379 499 2 656	409,400 350,119 726,650 (13,537) 605 (16,775) 20,370
Total investments and other assets	20,213	22,526	200,100	Defined retirement benefit plans Total Noncontrolling interests	1,013 157,557 1,861	592 155,339 1,785	9,558 1,486,391 17,560
				Total equity	159,418	157,125	1,503,951
TOTAL	¥ 420,704	¥ 461,331	\$ 3,968,913	TOTAL	¥ 420,704	¥ 461,331	\$ 3,968,913

See notes to consolidated financial statements.

# Consolidated Statement of Operations Year Ended March 31, 2018

	Millions	of Yen	Thousands of U.S. Dollars (Note 1)
	2018	2017	2018
REVENUE	¥510,873	¥603,745	\$4,819,565
COST OF REVENUE	502,255	565,521	4,738,263
Gross profit	8,618	38,223	81,302
SELLING, GENERAL, AND ADMINISTRATIVE EXPENSES (Note 12)	20,948	22,543	197,631
Operating (loss) income	(12,330)	15,680	(116,329)
OTHER INCOME (EXPENSES): Interest and dividend income Equity in earnings (losses) of associated companies (Note 7) Gain on sales of investment securities Reversal of provision for loss on business of subsidiaries and associated companies (Note 7) Gain on sales of shares of subsidiaries and associated companies (Note 4) Interest expense Foreign exchange loss Commission fee Loss on valuation of investment securities Impairment loss Provision for loss on business of subsidiaries and associated companies (Note 7) Loss on sales of shares of subsidiaries and associated companies Other—net	2,585 680 202 12,441 1,732 (212) (667) (208) 643	2,487 (17,106) 1,937 (209) (3,455) (59) (393) (766) (22,919) (1,146) (418)	24,393 6,424 1,913 117,373 16,348 (2,005) (6,301) (1,964) 6,068
Other income (expenses)—net	17,198	(42,048)	162,250
INCOME (LOSS) BEFORE INCOME TAXES	4,867	(26,368)	45,921
INCOME TAXES (Note 11): Current Deferred	(5,475) 3,741	15,026 (143)	(51,660) 35,297
Total income taxes	(1,734)	14,883	(16,362)
NET INCOME (LOSS)—(Forward)	¥ 6,602	¥ (41,251)	\$ 62,283

NET INCOME (LOSS)-(Forward)

#### NET INCOME (LOSS) ATTRIBUTABLE TO NONCONTROLLING INTERESTS

NET INCOME (LOSS) ATTRIBUTABLE TO OWNERS OF THE PARENT

#### PER SHARE OF COMMON STOCK (Notes 2.z and 18): Basic net income (loss) Cash dividends applicable to the year

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See notes to consolidated financial statements.

		Thousands of
Millio	ns of Yen	(Note 1)
2018	2017	2018
¥6,602	¥(41,251)	\$62,283
156	(135)	1,472
¥6,445	¥(41,116)	\$60,810
2018	Yen 2017	<u>U.S. Dollars</u> <u>2018</u>
¥24.89 7.50	¥(158.76) 6.00	\$0.23 0.07

# Consolidated Statement of Comprehensive Income Year Ended March 31, 2018

			Thousands of U.S. Dollars
	Million: 2018	s of Yen 2017	(Note 1) 2018
NET INCOME (LOSS)	¥6,602	¥(41,251)	\$62,283
OTHER COMPREHENSIVE LOSS (Note 17): Unrealized loss on available-for-sale securities Deferred (loss) gain on derivatives under hedge accounting Foreign currency translation adjustments Defined retirement benefit plans Share of other comprehensive income (loss) of associates	(315) (2,276) (1,001) 420 450	(2,006) 2,129 (1,102) 291 (451)	(2,979) (21,476) (9,452) 3,968 4,250
Total other comprehensive loss	(2,723)	(1,139)	(25,689)
COMPREHENSIVE INCOME (LOSS)	¥3,878	¥(42,391)	\$36,594
TOTAL COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO: Owners of the parent Noncontrolling interests	¥3,775 103	¥(42,228) (162)	\$35,616 977

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See notes to consolidated financial statements.

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# **Consolidated Statement of Changes in Equity** Year Ended March 31, 2018

	Thousands						Millions of Yen					
	Outstanding Number of Shares of Common Stock	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Accum Unrealized Gain on Available- for-Sale Securities	ulated Other Com Deferred (Loss) Gain on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans	Total	Noncontrolling Interests	Total Equity
BALANCE, APRIL 1, 2016	258,984	¥43,396	¥37,112	¥115,839	¥(1,422)	¥2,386	¥(1,618)	¥4,171	¥ 300	¥200,166	¥1,961	¥202,128
Net loss attributable to owners of the parent Cash dividends, ¥10.00 per share Purchase of treasury stock Net change in the year	(11)			(41,116) (2,589)	(8)	(2,006)	2,118	(1,514)	291	(41,116) (2,589) (8) (1,111)	(175)	(41,116) (2,589) (8) (1,287)
BALANCE, MARCH 31, 2017	258,973	43,396	37,112	72,132	(1,431)	379	499	2,656	592	155,339	1,785	157,125
Net income attributable to owners of the parent Cash dividends, ¥6.00 per share Purchase of treasury stock Net change in the year	(5)			6,445 (1,553)	(3)	(315)	_(2,277)	(497)	420	6,445 (1,553) (3) (2,670)	76	6,445 (1,553) (3) (2,594)
BALANCE, MARCH 31, 2018	258,967	¥43,396	¥37,112	¥ 77,024	¥(1,434)	¥ 64	¥(1,778)	¥2,159	¥1,013	¥157,557	¥1,861	¥159,418
		Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Thousan Accumu Unrealized Gain on Available- for-Sale Securities	nds of U.S. Dollars Ilated Other Comp Deferred (Loss) Gain on Derivatives under Hedge Accounting	(Note 1) rehensive Incon Foreign Currency Translation Adjustments	ne (Loss) Defined Retirement Benefit Plans	Total	Noncontrolling Interests	Total Equity
BALANCE, MARCH 31, 2017		\$409,400	\$350,119	\$680,498	\$(13,500)	\$3,584	\$ 4,712	\$25,065	\$5,590	\$1,465,470	\$16,843	\$1,482,313
Net income attributable to owners of the parent Cash dividends, \$0.05 per share Purchase of treasury stock Net change in the year				60,810 (14,658)	(36)	(2,979)	(21,488)	(4,695)	3,968	60,810 (14,658) (36) (25,194)	717	60,810 (14,658) (36) (24,477)
BALANCE, MARCH 31, 2018		\$409,400	\$350,119	\$726,650	\$(13,537)	\$ 605	\$(16,775)	\$20,370	\$9,558	\$1,486,391	\$17,560	\$1,503,951

See notes to consolidated financial statements.

# Consolidated Statement of Cash Flows Year Ended March 31, 2018

			Thousands of
			U.S. Dollars
	Millions	of Yen	(Note 1)
	2018	2017	2018
OPERATING ACTIVITIES:			
Income (loss) before income taxes	¥ 4.867	¥(26.368)	\$ 45.921
Adjustments for:		<u>- ( / /</u> /	
Income taxes naid	(1.750)	(13.821)	(16.513)
Depreciation	3.545	3.643	33,450
Impairment loss	0,010	766	00/100
Amortization of goodwill	327	547	3.092
Decrease in allowance for doubtful accounts	(218)	(701)	(2.065)
Increase (decrease) in allowance for warranty costs	(210)	(/ 01)	(2,000)
for completed works	102	(15)	962
(Decrease) increase in allowance for losses on	102	(10)	702
construction contracts	(25)	154	(244)
Increase (decrease) in liability for retirement benefits	44	(428)	421
Foreign exchange loss (gain)_net	477	(186)	4.507
(Decrease) increase in provision for loss on business of	177	(100)	1,007
subsidiaries and associated companies	(12,777)	22,919	(120.538)
(Gain) loss on sales of shares of subsidiaries and	(12,777)	22,717	(120,000)
associated companies	(1,732)	1 1 4 6	(16348)
Founty in (earnings) losses of associated companies	(680)	17 106	(6 424)
Gain on sales of investment securities	(202)	(1.937)	(1 913)
Loss on valuation of investment securities	(202)	393	(1,713)
Changes in operating assets and liabilities:		375	
(Increase) decrease in trade notes and accounts			
receivable, and costs and estimated earnings on			
long-term construction contracts	(19.550)	8 141	(184 442)
Decrease in costs of construction contracts in process	8 289	10 786	78 198
(Decrease) increase in trade notes and accounts navable	(10.420)	11 401	(98,308)
Decrease in advance receipts on construction contracts	(8 014)	(48,668)	(75,611)
Increase in accounts receivable—other	(26,014)	(1901)	(254 648)
Decrease in icipitly controlled assets of icipit venture	21,992)	13 666	201 126
Increase in interest and dividends receivable	(631)	(1.020)	(5.955)
Other pot	(691)	(1,029)	(6,524)
Other—flet	(28,082)	21.002	(0,324)
Total adjustments	(30,903)	21,995	(307,700)
Net cash used in operating activities—(Forward)	¥(34,115)	¥ (4,375)	\$(321,846)

	Millions 2018	s of Yen 2017	Thousands of U.S. Dollars (Note 1) 2018
Net cash used in operating activities-(Forward)	¥ (34,115)	¥ (4,375)	\$ (321,846)
INVESTING ACTIVITIES: Net decrease in time deposits Purchases of property, plant and equipment Proceeds from sales of property, plant and equipment Purchases of intangible assets Payments for purchases of investment securities Proceeds from sales of investment securities Proceeds from sales of shares of subsidiaries resulting in change in scope of consolidation (Note 19) Payments of loans receivable Proceeds from collections of loans Other—net	2,028 (550) 362 (2,044) (338) 896 1,684 (4,229) 757 5	3,043 (649) 46 (1,451) (351) 15,554 (12,188) 6,382 49	19,133 (5,189) 3,420 (19,286) (3,193) 8,461 15,890 (39,900) 7,145 47
Net cash (used in) provided by investing activities	(1,428)	10,433	(13,472)
FINANCING ACTIVITIES: Net increase (decrease) in short-term borrowings Proceeds from long-term debt Repayments of long-term debt Payments of cash dividends Other—net	149 10,000 (10,004) (1,552) (61)	(50) (3) (2,586) (52)	1,412 94,339 (94,379) (14,650) (577)
Net cash used in financing activities	(1,468)	(2,693)	(13,855)
FOREIGN CURRENCY TRANSLATION ADJUSTMENTS ON CASH AND CASH EQUIVALENTS	(108)	(1,395)	(1,025)
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(37,121)	1,969	(350,199)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	138,889	136,919	1,310,274
CASH AND CASH EQUIVALENTS, END OF YEAR	¥101,767	¥138,889	\$ 960,075

See notes to consolidated financial statements.

# **Notes to Consolidated Financial Statements**

Year Ended March 31, 2018

#### 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.

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 2017 consolidated financial statements to conform to the classifications used in 2018.

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 ¥106 to \$1, the approximate rate of exchange at March 31, 2018. 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, 2018, include the accounts of the Company and its 21 (30 in 2017) significant subsidiaries (together, the "Group").

Xodus Group (Holdings) Limited and its eight subsidiaries were excluded from the scope of consolidation due to the sale of its shares.

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 five (seven in 2017) associated companies are accounted for by the equity method.

Xodus Group (Holdings) Limited, which was a consolidated subsidiary in the previous consolidated fiscal year, became an associated company due to the sale of its shares and has been included in the scope of associated companies accounted for by the equity method as of this fiscal year.

In accordance with Chapter 11 of the U.S. Bankruptcy Code, EMAS CHIYODA Subsea Limited Group ("ECS") submitted its restructuring plans, and the U.S. Bankruptcy Court in the Southern District of Texas approved it.

Thus, ECS is no longer an associated company and was excluded from the scope of associated companies accounted for by the equity method.

The two associated companies of Xodus Group (Holdings) Limited were excluded from the scope of the Group's associated companies accounted for by the equity method and are no longer associated companies as of this fiscal year due to the sale of shares of Xodus Group (Holdings) Limited.

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 10 to 20 years.

All significant intercompany balances and transactions have been eliminated in 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 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 International Financial Reporting Standards 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 International Financial Reporting Standards 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.
- 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.

- considered to be appropriate based on the Group's past credit loss experience and an evaluation of potential losses in the receivables outstanding.
- Property, Plant and Equipment—Property, plant and equipment are stated at cost. and equipment, and from 4 to 15 years for tools, furniture, and fixtures.
- disposition of the asset or the net selling price at disposition.
- 1. useful life (five years at the maximum).
- which is calculated by the straight-line method over their estimated useful lives.
- n. Allowance for Warranty Costs for Completed Work-The allowance for warranty costs for completed work is provided based on past rate experience.
- o. Allowance for Losses on Construction Contracts—The allowance for losses on construction the costs of construction contracts in process in the balance sheet.
- conditions and business results, etc., of the subsidiaries and associated companies.
- equipment as well as their collection and transportation fees.
- unfunded defined benefit pension plans and defined contribution pension plans for simplified method.

*h.* Jointly Controlled Assets of Joint Venture—The jointly controlled assets of the joint venture consist of jointly controlled cash recognized based on the Company's share of the venture.

i. Allowance for Doubtful Accounts—The allowance for doubtful accounts is stated in amounts

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

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

Software—Software for internal use is amortized on a straight-line basis over its estimated

m. Other Assets—Intangible assets and goodwill are carried at cost less accumulated amortization,

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

Provision for Loss on Business of Subsidiaries and Associated Companies—The provision for loss on business of subsidiaries and associated companies is provided for an estimated amount of probable losses at the end of the fiscal year based on consideration of the financial

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

Retirement and Pension Plans-The Company and consolidated subsidiaries have funded or employees. Certain consolidated subsidiaries have defined benefit corporate pension plans or severance lump-sum payment plans, and calculate retirement benefit expenses by using the

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.

- s. 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.
- t. Research and Development Costs—Research and development costs are charged to income as incurred.
- u. 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.

v. Income Taxes—The provision for income taxes is computed based on the pretax income included in the consolidated statement of operations. 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 a tax return 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.

w. 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 operations to the extent that they are not hedged by foreign currency forward contracts.

- exchange rate as of the balance sheet date.
- v. into derivatives for trading or speculative purposes.

Derivative financial instruments are classified and accounted for as follows:

- gains or losses recognized in the consolidated statement of operations.
- 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.

Interest rate swaps which qualify for hedge accounting and meet specific matching criteria are not remeasured at market value but the differential paid or received under the swap agreements is recognized and included in interest expense.

z. Per Share Information—Basic net income per share is computed by dividing net income outstanding for the period, retroactively adjusted for stock splits.

Diluted net income per share reflects the potential dilution that could occur if securities were exercised or converted into common stock. Diluted net income per share of common stock assumes full conversion of the outstanding convertible notes and bonds at the beginning of the year (or at the time of issuance) with an applicable adjustment for related interest expense, net of tax, and full exercise of outstanding warrants.

Diluted net income per share is not disclosed because there was no potential stock having a dilutive effect for the fiscal years ended March 31, 2018 and 2017.

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

x. 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

Derivatives and Hedging Activities—The Group uses derivative financial instruments, including foreign currency forward contracts and interest swap contracts, as a means of hedging exposure to foreign currency risks and interest rate risks. The Group does not enter

(1) All derivatives are recognized as either assets or liabilities and measured at fair value, with

(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

available to common shareholders by the weighted-average number of common shares

#### aa. 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." 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. CHANGES IN PRESENTATION

(Consolidated Statement of Operations)

"Commission fee," included within "Other-net" under "Other Income (Expenses)" for the previous consolidated fiscal year, is separately stated for the fiscal year ended March 31, 2018, as it exceeded 10% of the total other (expenses) income.

(Consolidated Statement of Cash Flows)

"Proceeds from sales of property, plant and equipment," included within "Other-net" under "Investing Activities" for the previous consolidated fiscal year, is separately stated for the fiscal year ended March 31, 2018, as its materiality increased.

#### 4. BUSINESS DIVESTITURE

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

SUBSEA 7 International Holdings (UK) Limited

(b) Description of the business subject to the business divestiture

Consolidated subsidiaries: Xodus Group (Holdings) Limited and its eight subsidiaries Contents of the business: Providing services regarding investigation, examination, planning and conceptual design in an offshore and upstream field

(c) Purpose of the business divestiture

The Company pursues expansion of its business and adds more values to Xodus Group (Holdings) Limited in terms of the consulting business by making use of the experience of SUBSEA 7 International Holdings (UK) Limited ("Subsea 7"), which has a wealth of construction experience in offshore fields.

(d) Date of the business divestiture

March 16, 2018

(e) Summary of other transactions including legal forms

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

- (2) Overview of accounting treatment
  - (a) Gain on business divestiture

¥1,732 million (\$16,348 thousand)

#### Current assets Noncurrent assets

Total assets

Current liabilities Noncurrent liabilities

Total liabilities

(c) Accounting treatment

The Group reported the difference between the decrease in shares due to transfer of stocks and the selling price as extraordinary profits, which is included in "Gain on sales of shares of subsidiaries and associated companies."

(3) Reportable segment in which the divested business was included

#### Engineering

Revenue Operating loss

(b) The book value of assets and liabilities pertaining to the divested business was as follows:

Millions of Yen	Thousands of U.S. Dollars
¥2,919 1,945	\$27,545 18,357
¥4,865	\$45,903
¥2,353 25	\$22,199 239
¥2,378	\$22,438

(4) Estimated amounts of revenue and operating loss of the divested business included in the consolidated statement of operations for the year ended March 31, 2018, were as follows:

Millions of Yen	Thousands of U.S. Dollars
¥5,974	\$56,364
(606)	(5,717)

#### 5. 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, 2018 and 2017, were as follows:

Millions of Yen

2017

¥539,987

¥ 19,487

(520, 499)

2018

¥449,145

(408, 727)

¥ 40,418

Information on the available-for-sale securities sold during the years ended March 31, 2018 and 2017, was as follows:

#### March 31, 2018

Committing alogsified on
Securities classified as-
Available-for-sale—equity securities

March 31, 2017

#### 6. INVESTMENT SECURITIES

Amounts billed

Net

Costs and estimated earnings

Investment securities at March 31, 2018 and 2017, consisted of the following:

			Thousands of	Available-for-sale—equity sec
	Millions 2018	of Yen 2017	U.S. Dollars 2018	March 31, 2018
Non-current—Equity securities	¥2,067	¥2,748	\$19,507	

Thousands of

U.S. Dollars

2018

\$4,237,225

(3,855,923)

\$ 381,302

The costs and aggregate fair values of investment securities at March 31, 2018 and 2017, were as follows:

#### March 31, 2018

	Millions of Yen			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value
Securities classified as— Available-for-sale—equity securities	¥402	¥152	¥43	¥511

#### March 31, 2017

	Millions of Yen			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value
Securities classified as— Available-for-sale—equity securities	¥680	¥421		¥1,100

#### March 31, 2018

	Thousands of U.S. Dollars			
	Unrealized Unrealized			Fair
	Cost	Gains	Losses	Value
Securities classified as-	63 703	<b>61</b> 440	6.410	64.001
Available-for-sale—equity securities	\$3,793	\$1,440	\$412	\$4,821

Securities classified as— Available-for-sale—equity securities

#### Securities classified as— Available-for-sale—equity securities

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

Investments in and advances to unconsolidated subsidiaries and associated companies at March 31, 2018 and 2017, were as follows:

Investmen	ts
Long-term	receivables
· · · · ·	

#### Total

ECS, which was an associated company of the Company accounted for by the equity method, experienced financial hardship, brought about by a greater than anticipated slowdown of the subsea market, and filed for bankruptcy protection under Chapter 11 of the U.S. Bankruptcy Code in February 2017. The Company recorded its share of ECS's net loss in "equity in loss of associated companies" of ¥15,005 million during the year ended March 31, 2017. In addition, given the previous financial state of ECS and its imminent bankruptcy filing, the Company recognized a "provision for loss on business of subsidiaries and associated companies" of ¥22,919 million during the year ended March 31, 2017, related to loans and guarantee obligation.

	Millions of Yen	
	Realized	Realized
Proceeds	Gains	Losses
¥896	¥202	
	Millions of Yen	
	Realized	Realized
Proceeds	Gains	Losses
¥9,962	¥1,937	
The	manda of U.C. Do	11
1 1 1 0 1	isanus of U.S. DO	lidis

Thous	anus or U.S. L	onais
	Realized	Realized
Proceeds	Gains	Losses
		and the second se

\$8,461 \$1,913

Million	s of Yen	Thousands of U.S. Dollars
2018	2017	2018
¥5,613	¥4,959	\$52,961
569	656	5,375
¥6,183	¥5,616	\$58,337

In the fiscal year ended March 31, 2018, the U.S. Bankruptcy Court in Southern District of Texas approved the proposed reorganization plan of ECS, and ECS became a wholly owned subsidiary of Subsea 7.

Since the negotiation with Subsea 7 progressed and the amount of settlement costs was fixed. Accordingly, the Company reversed the majority of the extraordinary loss posted in the prior year and recorded <sup>12</sup>,441 million (\$117,373 thousand) as an extraordinary profit in the fiscal year ended March 31, 2018.

#### 8. SHORT-TERM BORROWINGS AND LONG-TERM DEBT

Short-term borrowings as of March 31, 2017, mainly consisted of notes to banks. The weighted-average interest rates of short-term borrowings as of March 31, 2017, were 2.0%.

Long-term debt at March 31, 2018 and 2017, consisted of the following:

	Millions 2018	s of Yen 2017	Thousands of U.S. Dollars 2018
Long-term loans principally from banks with interest rates at 1.9% (2018) and ranging from 1.3% to 2.0% (2017)—Unsecured Obligations under finance leases Total Less current portion	¥10,000 <u>25</u> 10,025 (2)	¥10,008 <u>45</u> 10,053 (10,023)	\$94,339 239 94,578 (28)
Long-term debt, less current portion	¥10,022	¥ 30	\$94,550

Annual maturities of long-term debt, excluding finance leases, at March 31, 2018, were as follows:

Year Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2023	¥10,000	\$94,339
Total	¥10,000	\$94,339

Commitment-line contracts at March 31, 2018, were as follows:

					Millions of Yen	Thousands of U.S. Dollars
Commit	tment-	line co	ontracts		¥20,000	\$188,679
Unused	comm	itment	ts		¥20,000	\$188,679

#### 9. 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.

 The changes in defined benefit obligatio as follows:

Balance at beginning of year
Current service cost
Interest cost
Actuarial losses
Benefits paid
Others

Balance at end of year

(2) The changes in plan assets for the years ended March 31, 2018 and 2017, were as follows:

Balance at beginning of year
Expected return on plan assets
Actuarial losses
Contributions from the employer
Benefits paid
Others

Balance at end of year

(1) The changes in defined benefit obligation for the years ended March 31, 2018 and 2017, were

		Thousands of
Millions	s of Yen	U.S. Dollars
2018	2017	2018
¥21,257	¥21,732	\$200,539
1,066	1,048	10,058
181	179	1,711
(18)	(46)	(178)
(1, 322)	(1,630)	(12, 477)
11	(25)	109
¥21,174	¥21,257	\$199,762

		Thousands of
Millions	s of Yen	U.S. Dollars
2018	2017	2018
¥20,128	¥20,314	\$189,892
337	336	3,179
359	126	3,388
1,010	1,007	9,537
(1, 287)	(1,614)	(12, 150)
(15)	(41)	(143)
¥20,532	¥20,128	\$193,704

(3) The changes in the liability recorded in the consolidated balance sheet by using the simplified method for the years ended March 31, 2018 and 2017, were as follows:

	Millions	s of Yen	Thousands of U.S. Dollars
	2018	2017	2018
Balance at beginning of year	¥308	¥621	\$2,913
Benefit costs	164	205	1,554
Benefits paid	(32)	(435)	(308)
Contribution to the plans	(72)	(79)	(683)
Others	(37)	(2)	(358)
Balance at end of year	¥330	¥308	\$3,118

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

	Millions 2018	of Yen 2017	Thousands of U.S. Dollars 2018
Funded defined benefit obligations Plan assets Total Unfunded defined benefit obligations	¥22,091 (21,711) 380 591	¥22,151 (21,245) 905 531	\$208,414 (204,822) 3,592 5,584
Net liability arising from defined benefit obligations	¥ 972	¥ 1,437	\$ 9,176
	Millions 2018	of Yen 2017	Thousands of U.S. Dollars 2018
Liability for retirement benefits Asset for retirement benefits	¥1,176 (203)	¥1,522 (84)	\$11,096 (1,920)
Net liability arising from defined benefit obligations	¥ 972	¥1,437	\$ 9,176

(5) The components of net periodic benefit costs for the years ended March 31, 2018 and 2017, were as follows: de of

			Thousands of
	Millions	U.S. Dollars	
	2018	2017	2018
Service cost	¥1,066	¥1,048	\$10,058
Interest cost	181	179	1,711
Expected return on plan assets	(337)	(336)	(3,179)
Recognized actuarial losses	233	243	2,200
Benefit costs in simplified method	164	205	1,554
Net periodic benefit costs	¥1,308	¥1,338	\$12,345

follows:

Actuarial	losses
, recention	1000000

Total

Unrecognized actuarial gains

#### Total

(8) Plan assets

a. Components of plan assets

Plan assets as of March 31, 2018 and 2017, consisted of the following:

Debt investments
Equity investments
General accounts
Others

Total

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.

Discount rate Expected rate of return on plan assets

(10) Payables to defined contribution plans of the Company and consolidated subsidiaries for the years ended March 31, 2018 and 2017, were ¥594 million (\$5,611 thousand) and ¥604 million, respectively.

(6) Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the years ended March 31, 2018 and 2017, were as

Million	s of Yen	Thousands of U.S. Dollars
2018	2017	2018
¥607	¥412	\$5,731
¥607	¥412	\$5,731

(7) Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2018 and 2017, were as follows:

Millions	of Yen	Thousands of U.S. Dollars
2018	2017	2018
¥(1,413)	$\underline{\Psi(805)}$	\$(13,334)
¥(1,413)	¥(805)	\$(13,334)

2018	2017
27%	29%
35	34
24	25
13	12
100%	100%

(9) Assumptions used for the years ended March 31, 2018 and 2017, were set forth as follows:

	2018	
y 0.7%	Mainly 0.7%	
	Mainly 0.7% Mainly 1.6%	

#### 10. 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.

#### 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.

#### 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.

#### 11. 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 the years ended March 31, 2018 and 2017.

The tax effects of significant temporary different deferred tax assets and liabilities at March 31, 2

Deferred tax assets: Tax loss carryforwards Loss on valuation of investment securities Cost of revenue Allowance for employees' bonuses Costs of construction contracts in process Deferred gain/loss on derivatives under hea accounting Allowance for losses on construction contracts Future deductible depreciation Provision for loss on business of subsidiaries associated companies Other Less valuation allowance

#### Total

Deferred tax liabilities: Adjustment of percentage of completion for construction Profit/loss in joint venture Deferred gain/loss on derivatives under he accounting Other

#### Total

#### Net deferred tax assets

Net deferred tax assets as of March 31, 2018 and 2017, were recorded in the accompanying consolidated balance sheet as follows:

Current assets—Deferred tax assets Investments and other assets—Deferred tax Short-term liabilities—Other Long-term liabilities—Other

nces	and	tax	loss	carry	forwa	ards	which	resulted	in
2018	and	201	17, w	ere a	as folle	ows:			

			Thousands of
	Millions	of Yen	U.S. Dollars
	2018	2017	2018
	¥15,867	¥ 6,140	\$149,689
	4,895	336	46,183
	4,029	5,834	38,013
	1,169	950	11,029
	958	767	9,041
dge			
	779		7,352
acts	600	925	5,662
	537	550	5,071
es and			
		7,008	
	3,084	8,538	29,101
	(18,973)	(15,675)	(178,990)
	12,948	15,378	122,153
or foreign			
	816		7,699
	333	254	3,146
dge			
		226	
	338	342	3,197
	1,488	824	14,043
	¥11,459	¥14,554	\$108,109

	Millions	s of Yen	Thousands of U.S. Dollars
	2018	2017	2018
	¥5,948	¥9,586	\$56,113
assets	6,328	4,967	59,698
	(816)		(7,699)
			(2)

A reconciliation between the normal effective statutory tax rates and the actual effective tax rates reflected in the accompanying consolidated statements of operations for the years ended March 31, 2018 and 2017, is as follows:

	2018	2017
Normal effective statutory tax rate	31 %	*
Expenses not deductible for income tax purposes	4	
Nontaxable dividend income	(7)	
Change in valuation allowance	(93)	
Difference in tax base between corporate income tax and enterprise tax	5	
Profit/loss in joint venture	22	
Other—net	3	-
Actual effective tax rate	(36)%	_

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

Due to the enactment of the U.S. tax legislation on December 22, 2017, the federal corporate income tax rate applied to our consolidated subsidiary in the U.S. is to be reduced from 35% to 21% from the consolidated fiscal year starting on and after January 1, 2018. According to this change in effective tax rate, "Deferred tax assets" decreased by ¥200 million, "Deferred tax liabilities" decreased by ¥347 million, and "Income Taxes—Deferred" decreased by ¥146 million.

Projected tax refunds due to the reversal of state tax loss carryforwards for our consolidated subsidiary in the U.S. are included within "Income Taxes—Current."

#### 12. RESEARCH AND DEVELOPMENT COSTS

Research and development costs charged to income were ¥1,873 million (\$17,676 thousand) and ¥2,075 million for the years ended March 31, 2018 and 2017, respectively.

#### 13. LEASES

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

Future minimum payments under noncancelable operating leases were as follows:

	Million	Millions of Yen		
	2018	2017	2018	
Due within one year Due after one year	¥ 511 1,022	¥ 763 1,730	\$ 4,827 9,648	
Total	¥1,534	¥2,493	\$14,476	

#### 14. 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 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.

Cash equivalents include commercial paper, which have short maturities and are used for cash surpluses.

Short-term investments include time deposits, which will mature three months after the date of acquisition. Both commercial paper and time deposits are exposed to the default risks of the issuing companies.

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, those risks are netted against the balance of receivables denominated in the same foreign currency, as noted above.

Bank loans are used for operating capital. Although they are exposed to market risks from changes in interest rates, the risk is hedged by using interest rate swap contracts.

Derivatives are foreign currency forward contracts and interest rate swap contracts, which are used to manage exposure to market risks from changes in foreign currency exchange rates of receivables and payables, and from changes in interest rates, respectively. Please see Notes 2.y and 15 for more details about derivatives.

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

#### Credit risk management

Credit risk is the risk of economic loss arising from a counterparty's failure to repay or service debt according to the contractual terms. 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 and time deposits are 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 is hedged principally with foreign currency forward contracts.

Interest expense associated with long-term debts is exposed to market risk resulting from changes in interest rates. Such risk is hedged by interest rate swap contracts.

#### Notes to Consolidated Financial Statements

Foreign currency forward contracts are controlled under internal guidelines. The position related to particular construction contracts is identified and is reviewed monthly. 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 15 for fair values for derivatives.

#### (a) Fair values of financial instruments

#### March 31, 2018

		Millions of Yen	
	Carrying		Unrealized
	Amount	Fair Value	Gain (Loss)
Cash and cash equivalents	¥101,767	¥101,767	
Short-term investments	2,240	2,240	
Notes and accounts receivable-trade	36,466	36,466	
Allowance for doubtful accounts*	(1,222)	(1,222)	
Costs and estimated earnings on			
long-term construction contracts	40,418	40,418	
Accounts receivable-other	41,967	41,967	
Allowance for doubtful accounts*	(20)	(20)	
Jointly controlled assets of joint venture	131,374	131,374	
Investment securities	511	511	
Total	¥353,504	¥353,504	
Notes and accounts payable—trade	¥147,654	¥147,654	
Income taxes payable	894	894	
Long-term debt	10,000	10,000	
Total	¥158,549	¥158,549	

#### March 31, 2017

Cash and cash equivalents Short-term investments Notes and accounts receivable-trade Allowance for doubtful accounts\* Costs and estimated earnings on long-term construction contracts Accounts receivable-other Allowance for doubtful accounts\* Jointly controlled assets of joint venture Investment securities

#### Total

Short-term borrowings Current portion of long-term debt Notes and accounts payable-trade Income taxes payable Long-term debt

#### Total

March 31, 2018

Cash and cash equivalents Short-term investments Notes and accounts receivable-trade Allowance for doubtful accounts\* Costs and estimated earnings on long-term construction contracts Accounts receivable-other Allowance for doubtful accounts\* Jointly controlled assets of joint ventu Investment securities

#### Total

Notes and accounts payable-trade Income taxes payable Long-term debt

Total

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

	Millions of Yen	
Carrying		Unrealized
Amount	Fair Value	Gain (Loss)
¥138 889	¥138 889	
4 483	4 483	
40.377	40.377	
(1,517)	(1,517)	
10 487	10 487	
7 761	7 761	
(21)	(21)	
164 283	164 283	
1 100	1 100	
1,100	1,100	
¥374,843	¥374,843	_
¥ 203	¥ 203	
10 004	10 028	¥24
160.096	160.096	121
668	668	
4	4	
¥170,977	¥171,002	¥24

Thousands of U.S. Dollars

	Carrying		Unrealized
	Amount	Fair Value	Gain (Loss)
	\$ 960.075	\$ 960.075	
	21,140	21,140	
	344.023	344.023	
	(11,531)	(11,531)	
	381,302	381,302	
	395,920	395,920	
	(191)	(191)	
ire	1,239,384	1,239,384	
	4,821	4,821	_
	\$3,334,944	\$3,334,944	_
	\$1,392,968	\$1,392,968	
	8,439	8,439	
	94,339	94,345	<u>\$5</u>
	\$1,495,748	\$1,495,753	\$5

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 6.

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

Short-Term Borrowings, 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 fixed rate loans 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. The fair value of floating rate loans, which are subject to a specific method for interest rate swaps, is calculated by discounting total principal and interest payments, which are handled together with interest rate swaps, 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 15.

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

	Million 2018	s of Yen 2017	Thousands of U.S. Dollars 2018
Investment securities that do not have a quoted market price in an active market	¥1,554	¥1,645	\$14,660
Investments in equity instruments that do not have a quoted market price in an active market Investments in unconsolidated subsidiaries and	2	2	24
associated companies that do not have a quoted market price in an active market	5,613	4,959	52,961

¥393 million.

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

March 31, 2018

Cash and cash equivalents Short-term investments Notes and accounts receivable, and costs a earnings on long-term construction cont Accounts receivable-other\* Jointly controlled assets of joint venture

Total

March 31, 2017

Cash and cash equivalents Short-term investments Notes and accounts receivable, and costs a earnings on long-term construction con-Accounts receivable-other\* Jointly controlled assets of joint venture

Total

March 31, 2018

Cash and cash equivalents Short-term investments Notes and accounts receivable, and costs a earnings on long-term construction con-Accounts receivable-other\* Jointly controlled assets of joint venture

Total

\* Allowance for doubtful accounts is deducted.

#### Impairment losses on investment securities for the year ended March 31, 2017, were

	1	Millions of Yen	
	Due in	Due after 1 Year	Due after 5 Years
	1 Year or Less	5 Years	through 10 Years
nd estimated	¥101,727 2,240		
nd estimated tracts*	75,079 41,947 131,374	¥583	
	¥352,369	¥583	
		Millions of Yer	1
	-	Due after	Due after
	Due in	1 Year	5 Years
	1 Year	through	through
	or Less	5 Years	10 Years
	¥138,847 4,483		
nd estimated tracts*	58,338 7,739	¥8	
	164,283	_	_
	¥373,693	¥8	_
	Thou	sands of U.S. I	Oollars
		Due after	Due after
	Due in	1 Year	5 Years
	1 Year	through	through
	or Less	5 Years	10 Years
	\$ 959,695 21,140		
nd estimated tracts*	708,293	\$5,501	
	1,239,384		
	\$3,324,242	\$5,501	

Please see Note 8 for annual maturities of long-term debt.

#### 15. DERIVATIVES

#### Derivative Transactions to Which Hedge Accounting Is Not Applied

March 31, 2018

<u>March 01, 2010</u>				
	Millions of Yen			
		Contract		
		Amount	Fair	
	Contract	Due after	Value	Unrealized
	Amount	One Year	(Loss)	Gain (Loss)
Foreign currency forward contracts:			<u> </u>	
Selling USD/buying JPY	¥46,409	¥12,923	¥354	¥354
Selling EUR/buying JPY	1,901			
Selling GBP/buying JPY	397			
Selling AUD/buying JPY	836			
Buying USD/selling JPY	126		(6)	(6)
Selling USD/buying KRW	198		(11)	(11)
Total	¥49 870	¥12 923	¥335	¥335
iotai	117,070	110,700	1000	1000

#### March 31, 2017

	Millions of Yen			
	Contract			
		Amount	Fair	
	Contract	Due after	Value	Unrealized
	Amount	One Year	(Loss)	Gain (Loss)
Foreign currency forward contracts:				
Selling USD/buying JPY	¥42,679	¥328	¥ (62)	¥ (62)
Selling EUR/buying JPY	7,071		(5)	(5)
Selling GBP/buying JPY	1,471		(1)	(1)
Selling AUD/buying JPY	6,199		6	6
Buying USD/selling JPY	30	30	(1)	(1)
Selling USD/buying EUR	166		(14)	(14)
Selling USD/buying KRW	637		(25)	(25)
Total	¥58,256	¥358	¥(103)	¥(103)

March 31, 2018

	Thousands of U.S. Dollars			
		Contract		
		Amount	Fair	
	Contract	Due after	Value	Unrealized
	Amount	One Year	(Loss)	Gain (Loss)
Foreign currency forward contracts:				
Selling USD/buying JPY	\$437,828	\$121,920	\$3,347	\$3,347
Selling EUR/buying JPY	17,935		(6)	(6)
Selling GBP/buying JPY	3,749		(3)	(3)
Selling AUD/buying JPY	7,893		(4)	(4)
Buying USD/selling JPY	1,192	2	(56)	(56)
Selling USD/buying KRW	1,876		(107)	(107)
Total	\$470,476	\$121,922	\$3,169	\$3,169

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

#### March 31, 2018

Total

Other\*1: Selling USD/buying JPY Buying USD/selling JPY Buying EUR/selling JPY

Total

March 31, 2017

Foreign currency forward contracts-Accounted for under deferred hedge accounting method: Selling USD/buying JPY Buying USD/selling JPY Buying EUR/selling JPY Buying SEK/selling JPY

Total

Other\*1: Selling USD/buying JPY Buying EUR/selling JPY

Total

Interest rate swaps\*2 (fixed rate payment, floating rate receipt)

Total

	Mi	llions of Yen	
Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value <u>(Loss)</u>
Foreign currency forecasted transaction	¥1,600 5,163 <u>99</u> ¥6,862	¥3,956 49 ¥4,005	
Receivables Payables	¥ 566 70 21 ¥ 658	¥ 2 ¥ 2	
Hedged Item	M Contract Amount	illions of Yen Contract Amount Due after One Year	Fair Value (Loss)
Foreign currency forecasted transaction	¥ 3,554 237 4 <u>30</u> ¥ 3,825	¥657 141 <u>¥799</u>	
Receivables Payables	¥ 519 11 × 531	·	
Long-term debt	¥10,000	_	
	#10,000	-	

#### March 31, 2018

		Thousands of U.S. Dollars		
	Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value (Loss)
Foreign currency forward contracts— Accounted for under deferred hedge accounting method: Selling USD/buying JPY Buying USD/selling JPY Buying SGD/selling JPY	Foreign currency forecasted transaction	\$15,095 48,709 939	\$37,324 464	\$ 636 (2,594) (20)
Total		\$64,744	\$37,788	\$(1,977)
Other*1: Selling USD/buying JPY Buying USD/selling JPY Buying EUR/selling JPY	Receivables Payables	\$ 5,342 668 204	\$    19	
Total		\$ 6,215	\$ 19	

\*1 Foreign currency forward contracts, which are applied to foreign currency translation at the contract rate of the assets and liabilities on construction contracts denominated in foreign currencies.

\*2 Interest rate swap contracts accounted for under a specific method, are treated as part of the hedged long-term debt and thus their fair values are integrally computed with those of the hedged long-term debt. See Note 14 for the fair value of long-term debt.

#### 16. CONTINGENT LIABILITIES

At March 31, 2018, the Group had the following contingent liabilities:

	Millions of Yen	Thousands of U.S. Dollars
Guarantees on employees' housing loans and others	¥ 49	\$ 466
and associated companies	798	7,530

#### 17. OTHER COMPREHENSIVE LOSS

The components of other comprehensive loss as follows:

Unrealized loss on available-for-sale securities Losses arising during the year Reclassification adjustments to profit or los Amount before income tax effect Income tax effect

#### Total

Deferred (loss) gain on derivatives under hed accounting: (Losses) gains arising during the year Reclassification adjustments to profit or los Adjustment to acquisition cost of assets Amount before income tax effect Income tax effect

#### Total

Foreign currency translation adjustments: Adjustments arising during the year Reclassification adjustments to profit or los

#### Total

Defined retirement benefit plans: Adjustments arising during the year Reclassification adjustments to profit or los Amount before income tax effect Income tax effect

#### Total

Share of other comprehensive income (loss) of associates: Income (loss) arising during the year Reclassification adjustments to profit or los

Total

Total other comprehensive loss

	Millions	of Ven	Thousands of U.S. Dollars
	2018	2017	2018
s:	N (107)	2/1 /10	e (1.015)
SS		(1,410) (1,543) (2,954) 947	(1,015) (1,913) (2,929) (49)
	¥ (315)	¥(2,006)	\$ (2,979)
lge			
SS	¥(3,003) 14 (293) (3,282) 1,006	¥ 895 351 <u>1,780</u> 3,027 (897)	\$(28,334) 133 (2,767) (30,967) 9,490
	¥(2,276)	¥ 2,129	\$(21,476)
SS	¥ 50 (1,051) ¥(1,001)	¥(1,102)  ¥(1,102)	\$ 471 (9,924) <u>\$ (9,452</u> )
ss	¥ 374 233 607 (186)		\$ 3,530 2,200 5,731 (1,763)
	¥ 420	¥ 291	\$ 3,968
			-
SS	¥ 27 423	¥(1,380) 928	\$ 256 <u>3,994</u>
	¥ 450	¥ (451)	\$ 4,250
	¥(2,723)	¥(1,139)	\$(25,689)

#### The components of other comprehensive loss for the years ended March 31, 2018 and 2017, were

#### 18. 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, 2018 and 2017, was as follows:

#### Year Ended March 31, 2018

	Millions	Thousands			
	of Yen	of Shares	Yen	U.S. Dollars	
	Net Income				
	Attributable	Weighted-			
	to Owners of	Average			
	the Parent	Shares		EPS	
Basic EPS—Net income available					
to common shareholders	¥6,445	258,968	¥24.89	\$0.23	

There is no dilutive effect for the year ended March 31, 2018.

Year Ended March 31, 2017

	Millions of Yen Net Loss	of Shares	Yen
	Attributable to Owners of the Parent	Weighted- Average Shares	EPS
Basic EPS—Net loss available to common shareholders	¥(41,116)	258,979	¥(158.76)

There is no dilutive effect for the year ended March 31, 2017.

#### 19. SUPPLEMENTAL CASH FLOW INFORMATION

Concerning the sale of shares of Xodus Group (Holdings) Limited and its eight subsidiaries, the book value of assets and liabilities of the company at the time of sale, and the selling price of the stock of and revenue from this sale (net) are presented below:

	Millions of Yen	Thousands of U.S. Dollars
Current assets	¥2,919	\$27,545
Noncurrent assets	1,945	18,357
Current liabilities	(2,353)	(22,199)
Noncurrent liabilities	(25)	(239)
Foreign currency translation adjustments	(1,051)	(9,924)
Investment accounts after the sales of shares	(994)	(9,385)
Gain on sales of shares	1,732	16,348
Selling price of the stock	2,173	20,503
Accounts receivable-other	(377)	(3,563)
Others	192	1,816
Cash and cash equivalents	(303)	(2,864)
Proceeds from sales of shares of subsidiaries resulting in change in scope of consolidation	¥1,684	\$15,890

#### 20. SUBSEQUENT EVENT

The following appropriation of retained earnings at March 31, 2018, was approved at the Company's shareholders' meeting held on June 21, 2018:

Year-end cash dividends, ¥7.50 (\$0.07) per sha

#### 21. 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.

# 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.

	Millions of Yen	Thousands of U.S. Dollars
are	¥1,942	\$18,323

(2) Methods of Measurement for the Amounts of Sales, Profit (Loss), Assets, Liabilities, and

#### (3) Information about Sales, Profit, Assets, Liabilities, and Other Items

#### Year Ended March 31, 2018

		M	fillions of Yer	1	
	Reportable Segment Engineering	Other*1	Total	Reconcili- ations*2	Consoli- dated* <sup>3</sup>
Sales: Sales to external customers Intersegment sales or transfers	¥507,573 27	¥3,300 4,433	¥510,873 4,460	¥(4,460)	¥510,873
Total	¥507,600	¥7,733	¥515,334	¥(4,460)	¥510,873
Segment profit Segment assets Segment liabilities	¥ (12,478) 415,322 251,867	¥ 143 4,685 1,326	¥ (12,334) 420,008 253,194	¥ 3 696 8,091	¥ (12,330) 420,704 261,286
Other: Depreciation Amortization of goodwill Investment in associated	3,522 297	23 29	3,545 327		3,545 327
companies Increase in property, plant and equipment and	3,561		3,561		3,561
intangible assets	2,338	62	2,400		2,400

Year Ended March 31, 2017

	Millions of Yen				
	Reportable Segment Engineering	Other*1	Total	Reconcili- ations*2	Consoli- dated* <sup>3</sup>
Sales:					
Sales to external customers Intersegment sales or transfers	¥600,244 21	¥3,501 5,380	¥603,745 5,401	¥(5,401)	¥603,745
Total	¥600,265	¥8,881	¥609,147	¥(5,401)	¥603,745
Segment profit	¥ 15,416	¥ 265	¥ 15,682	¥ (2)	¥ 15,680
Segment assets	455,596	4,893	460,489	841	461,331
Segment liabilities	294,553	1,549	296,102	8,103	304,206
Other:					
Depreciation	3,620	22	3,643		3,643
Amortization of goodwill	517	29	547		547
Investment in associated companies Increase in property, plant	2,868		2,868		2,868
intangible assets	2,109	21	2,131		2,131

#### Year Ended March 31, 2018

	Thousands of U.S. Dollars					
	Reportable Segment Engineering	Other*1	Total	Reconcili- ations*2	Consoli- dated* <sup>3</sup>	
Sales: Sales to external customers Intersegment sales or transfers	\$4,788,431 257	\$31,134 <u>41,824</u>	\$4,819,565 <u>42,081</u>	<u>\$(42,081</u> )	\$4,819,565	
Total	\$4,788,688	\$72,958	\$4,861,647	<u>\$(42,081</u> )	\$4,819,565	
Segment profit Segment assets Segment liabilities Other: Depreciation Amortization of goodwill	\$ (117,721) 3,918,136 2,376,110 33,229 2,809	\$ 1,356 44,203 12,518 221 282	\$ (116,365) 3,962,340 2,388,629 33,450 3,092	\$ 35 6,573 76,333	\$ (116,329) 3,968,913 2,464,962 33,450 3,092	
Investment in associated companies Increase in property, plant and equipment and interprible associated	33,602	500	33,602		33,602	
intangible assets	22,060	590	22,030		22,650	

Notes for the year ended March 31, 2018:

- consisting of temporary staffing services and travel services.
- \*2 Details of the reconciliations are as follows:
  - intersegment trades.
  - reportable segment.
  - which are not included in the reportable segment.
- statement of operations.

\*1 "Other" represents industry segments which are not included in the reportable segment,

(1) The reconciliation in segment profit of ¥3 million (\$35 thousand) is the elimination of

(2) The reconciliation in segment assets of ¥696 million (\$6,573 thousand) is the result of the elimination of intersegment trades of  $\frac{1}{2}$  (1,918) million ( $\frac{18,096}{100}$  thousand) and the Group's assets of  $\frac{12,615}{2}$  million ( $\frac{124,670}{100}$  thousand), which are not included in the

(3) The reconciliation in segment liabilities of ¥8,091 million (\$76,333 thousand) is the result of the elimination of intersegment trades of ¥(1,908) million (\$(18,006) thousand) and the Group's liabilities of ¥10,000 million (\$94,339 thousand),

\*3 The calculation of segment profit is based on the operating income in the consolidated

#### Notes to Consolidated Financial Statements

	No	otes for the year ended March 31, 2017:	J	Year Ended March 31, 2017
	*1	"Other" represents industry segments which are not included in the reportable segment, consisting of temporary staffing services and travel services.		
	*2	<ul> <li>Details of the reconciliations are as follows:</li> <li>(1) The reconciliation in segment profit of ¥(2) million is the elimination of intersegment trades.</li> </ul>		Japan Australia Russia U.S.A. Others
		(2) The reconciliation in segment assets of ¥841 million is the result of the elimination of intersegment trades of ¥(1,909) million and the Group's assets of ¥2,751 million, which are not included in the reportable segment.		Total Note: Revenue is classified by country
		<ul> <li>(3) The reconciliation in segment liabilities of ¥8,103 million is the result of the elimination of intersegment trades of ¥(1,896) million and the Group's liabilities of ¥10,000 million, which are not included in the reportable segment.</li> </ul>	)	sites. Property, plant and equipment
	*3	The calculation of segment profit is based on the operating income in the consolidated statement of operations.	2	Year Ended March 31, 2018
Rel	ated	d Information		
(1)	Inf Th Acc Jap	formation about Products and Services ne engineering business represents more than 90% of the total sales of the Group. cordingly, the presentation of the information about each service is not required under panese GAAP.		Japan Asia Others Total
(2)	In/	formation about Geographical Areas	1	Year Ended March 31, 2017
	(a)	Revenue		
		Year Ended March 31, 2018	J	Japan Asia

	Millions of Yen	Thousands of U.S. Dollars
Japan	¥109,795	\$1,035,803
Australia	114,854	1,083,530
U.S.A.	112,105	1,057,594
Russia	100,943	952,298
Others	73,175	690,338
Total	¥510,873	\$4,819,565

Name

Others

Total

Ichthys Lng Pty Ltd. OJSC Yamal LNG Cameron LNG LLC

(3) Information about Major Customers

Year Ended March 31, 2018

#### Millions of Yen

¥102,434
96,046
147,418
155,142
102,703
¥603,745

or region based on the location of construction

Millions of Yen	Thousands of U.S. Dollars
¥10,499	\$ 99,048
1,433	13,523
138	1,309
¥12,071	\$113,881

Millions of Yen

¥1	1	,3	38 93
_		3	26

#### ¥13,158

Related Segment	Millions of Yen Revenue	Thousands of U.S. Dollars Revenue
Engineering	¥106,371	\$1,003,509
Engineering	100,946	952,327
Engineering	87,059	821,314

#### Year Ended March 31, 2017

Name	Related Segment	Millions of Yen Revenue
OJSC Yamal LNG	Engineering	¥145,868
Cameron LNG LLC	Engineering	130,509
Ichthys Lng Pty Ltd.	Engineering	88,950

#### (4) Information about Impairment Loss on Fixed Assets by Reportable Segment

Impairment loss of goodwill as of March 31, 2018 and 2017, was as follows:

	Millions of Yen		Thousands of U.S. Dollars	
	2018	2017	2018	
Engineering		¥766		
Total		¥766		

#### (5) Information about Goodwill by Reportable Segment

The ending balance of goodwill as of March 31, 2018 and 2017, was as follows:

	Millions of Yen		Thousands of U.S. Dollars	
	2018	2017	2018	
Engineering Other*	¥123 344	¥1,676 374	\$1,168 	
Total	¥468	¥2,051	\$4,423	

\* "Other" includes temporary staffing services.

#### 22. RELATED PARTY DISCLOSURES

The material transactions of the Group with unconsolidated subsidiaries and associated companies for the year ended March 31, 2018, were as follows:

	Millions of Yen	Thousands of U.S. Dollars
Loan of funds*1,*2	¥3,990	\$37,642

. . .

\*1 In accordance with Chapter 11 of the U.S. Bankruptcy Code, ECS submitted its restructuring plans, and the U.S. Bankruptcy Court in the Southern District of Texas approved it on June 28, 2017. Thus, the value of transactions during the term when ECS was a related party is presented, since ECS is no longer a related party.

\*2 Regarding the loan of funds, applicable interest rates are rationally determined upon taking into account the market rate of interest.

There are no balances with these unconsolidated subsidiaries and associated companies as of March 31, 2018.

The material transactions of the Group with unconsolidated subsidiaries and associated companies for the year ended March 31, 2017, were as follows:

Loan of funds\*2 Guarantee obligation\*1,\*3

- guaranteed by the Company.
- into account the market rate of interest.
- \*3 ¥18,907 million of the provision for loss on businesses of subsidiaries and associated companies is provided for loans and guarantee obligations.

The material balances due to or from these unconsolidated subsidiaries and associated companies as March 31, 2017, were as follows:

Prepaid expenses and other\*

\* ¥18,907 million of the provision for loss on businesses of subsidiaries and associated companies is provided for loans and guarantee obligations.

\* \* \* \* \* \*

Millions of Yen

¥12,101 13,632

\*1 This is a guarantee for bonds, etc. related to construction work of an associated company

\*2 Regarding the loan of funds, applicable interest rates are rationally determined upon taking

Millions of Yen

¥6,396

# **Independent Auditor's Report**



consolidated subsidiaries as of March 31, 2018, and the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

#### Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these 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.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Chiyoda Corporation and its consolidated subsidiaries as of March 31, 2018, and the consolidated results of their operations and their 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.

Deloitte Touche Tohmatsu LLC

June 21, 2018

Member of Deloitte Touche Tohmatsu Limited



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