HITACHI
Inspire the Next

Hitachi Integrated Report 2022
Year ended March 31, 2022

Contents

Hitachi Integrated Report 2022 Editorial Policy

Editorial Policy
The Hitachi Integrated Report is compiled for the purposes of facilitating a deeper understanding among stakeholders of Hitachi's business model, as well as a dialogue through which we can further enhance corporate value and realize a virtuous cycle of value co-creation. In the 2022 edition, we clarify materiality within Hitachi's sustainable management and systematically explain strategies and measures. In addition to highlighting Hitachi's history of value co-creation and the Mid-term Management Plan 2024, this report will enhance the reader's understanding of Hitachi's sustainable growth potential.

In editing this report, we referred to the IFRS Foundation's International Integrated Reporting Framework and the Japanese Ministry of Economy, Trade, and Industry's Guidance for Collaborative Value Creation.

Production Structure

Board of Directors	Evaluation/Feedback
President & CEO	

Information Disclosure Working Group
Supervisor: Yoshihiko Kawamura (Executive Vice President and Executive Officer, CFO)

Information Disclosure Report Planning Production Team — Planning/Content Production
- Integrated Report, Annual Securities Report, Sustainability Report
- Investor Relations Division, Legal Division, Sustainability Promotion Division
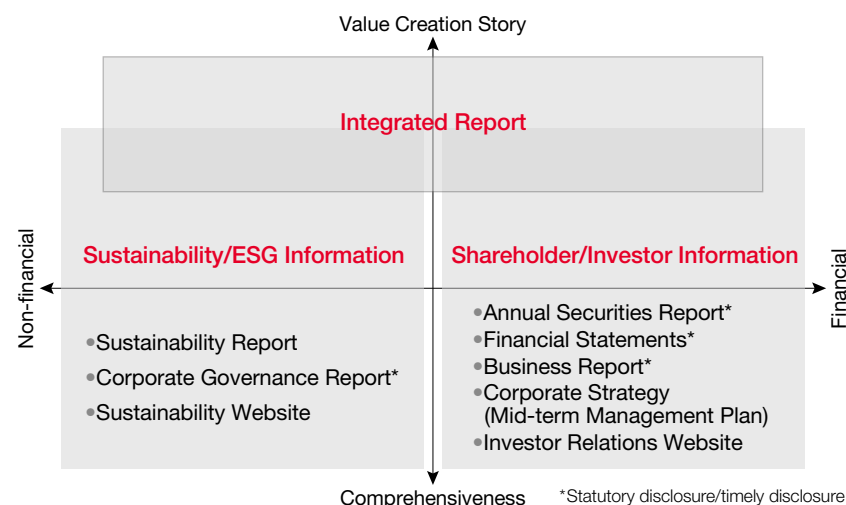
Related Divisions — Content Production/Support
- Executive Officers in Charge
- Group Corporate
- Research & Development Group
- Board of Directors Office
- Business Divisions
  - Digital Systems & Services
  - Green Energy & Mobility
  - Connective Industries
  - Hitachi Astemo

Information Disclosure Structure

Integrated Report

Sustainability/ESG Information (Non-financial)
- Sustainability Report
- Corporate Governance Report*
- Sustainability Website

Shareholder/Investor Information (Financial)
- Annual Securities Report*
- Financial Statements*
- Business Report*
- Corporate Strategy (Mid-term Management Plan)
- Investor Relations Website

Value Creation Story / Comprehensiveness

*Statutory disclosure/timely disclosure

Reporting Scope

Period: Fiscal 2021 (April 1, 2021–March 31, 2022)
Note: Includes activities and other information occurring after April 1, 2022.

Companies: Hitachi, Ltd. and its consolidated subsidiaries

Accounting Standard: Unless otherwise noted, this report is prepared in accordance with U.S. GAAP through fiscal 2013 and with the International Financial Reporting Standards (IFRS) from fiscal 2014.

Disclaimer Regarding Forward-looking Statements
Certain statements regarding the future of the company set forth in this Report may constitute "forward-looking statements," such as "plan," "forecast," "target," and "strategy." Although forward-looking statements contained in this report are based upon what the company has determined to be reasonable assumptions at the time of disclosure, actual performance and other results may differ materially from those anticipated in such statements.

🖥 Website Information

About the Hitachi Group

| Japanese | https://www.hitachi.co.jp/ |
| English | https://www.hitachi.com/ |

Investor Relations

| Japanese | https://www.hitachi.co.jp/IR/ |
| English | https://www.hitachi.com/IR-e/ |

Sustainability

| Japanese | https://www.hitachi.co.jp/sustainability/ |
| English | https://www.hitachi.com/sustainability/ |

Hitachi Integrated Report 2022 | **Introduction** | What's Hitachi | Value Creation | Business Strategies | Sustainability | Corporate Governance | Data | 3

Editorial Policy | **Message to Stakeholders**

Message to Stakeholders —— On the Release of the Intergrated Report

Creating Value through Dialogue and Co-Creation with Stakeholders, With Our Employees as the Driving Force

Since its founding in 1910, Hitachi has continued to grow and develop with society, the economy, and customers. For more than 110 years, Hitachi has faced countless difficulties. However, we have continued to transform ourselves to create value through co-creation with a diverse range of stakeholders.

In this Hitachi Integrated Report, we will showcase our sustained efforts, explain our vision and showcase the value Hitachi provides to society. We hope this report gives our stakeholders a better understanding of Hitachi's vision and creates value by encouraging further dialogue.

In the Mid-term Management Plan 2024, announced in April 2022, we declared a mode change for growth focused on supporting people's quality of life with data and technology that solves social challenges, fostering a fully sustainable society. We are committed to further promoting Hitachi's Social Innovation Business. With planning, Hitachi can determine new business opportunities that should be undertaken now and in the mid to long term to create a better, sustainable future. On a global scale, the environment is reaching the limit of its ability to accommodate

safe living for humans (planetary boundaries). Recent changes to workstyles and the diversification of personal values have made wellbeing (physical, mental, and social) a vital part of how we choose to live and work. Helping to maintain a society that does not exceed planetary boundaries while realizing wellbeing is the path forward for Hitachi. Hitachi also practices sustainable management which positions sustainability as the core of its business strategy and implements measures to strengthen the management foundation to facilitate global growth. More than 300,000 members of the Hitachi Group will combine their strengths to achieve a sustainable society and deliver value to customers and other respected stakeholders.

This report will describe Hitachi's future vision, management, and business strategies under the Mid-term Management Plan 2024. In addition, the report highlights the measures Hitachi is following to achieve a sustainable society. We have also clarified six critical issues in sustainable management in light of global initiatives and the expectations and needs of stakeholders. These issues along with the business strategies described in the Mid-term

Management Plan, will be further discussed at meetings of the Senior Executive Committee and Board of Directors.

We understand the external environment has become increasingly complex and diverse. The pandemic has made the future difficult to predict, while climate change continues to cause a surge in natural disasters, and social divisions are leading to more political instability. However, we sincerely hope this report will help you appreciate the progress Hitachi has made and value the company's strategic, long-term growth.

As CEO, I can attest to the accuracy of the information described in this report and guarantee that it has been reviewed and approved among the directors and executive officers. As you read this report, please share your honest feedback with the Hitachi management team. I hope that the Hitachi Integrated Report 2022 will help promote a deeper understanding of Hitachi's value creation story and serve as an incentive for future dialogue and creating value with all stakeholders.
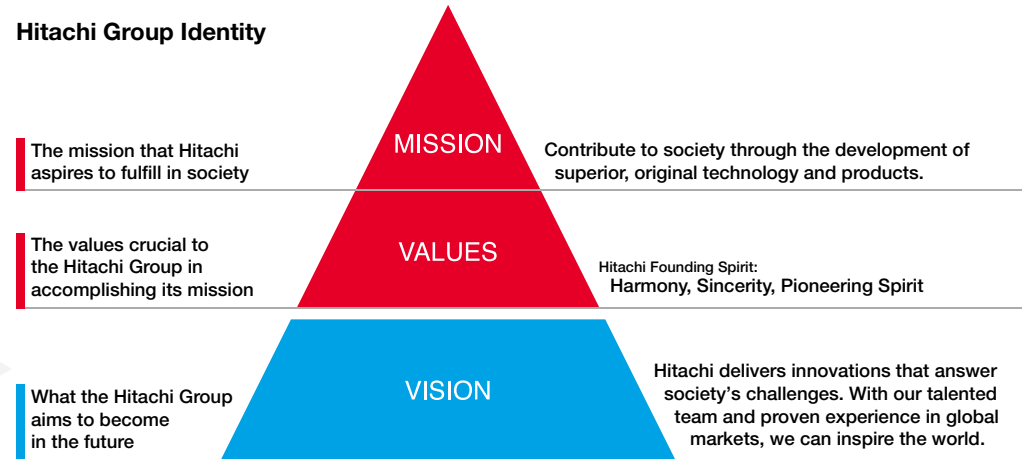
President & CEO Keiji Kojima

History of Hitachi   Looking Back on Past Mid-term Management Plans   Promoting Sustainable Management   Business of the Hitachi Group   Global Business Overview

Hitachi's History as a Corporate Citizenship with Innovation

Since its establishment, Hitachi has operated under the Mission "Contribute to society through the development of superior, original technology and products." In accordance with this Mission, we have resolved issues facing society through the development of technologies and products that support social infrastructures. The Social Innovation Business creates new value for society by offering a combination of the OT (operational technology), IT (information technology), and products cultivated over Hitachi's 110-year history. Through this business, we strive to improve people's quality of life and contribute to achieving a sustainable society.

Originally set by Hitachi founder Namihei Odaira, the Mission has been carefully passed on to generations of employees and stakeholders throughout the company's history. The Values reflect the Hitachi Founding Spirit, which was shaped by the achievements of our company predecessors as they worked hard to fulfill Hitachi's Mission. The Vision has been created based on the Mission and Values. It is an expression of what the Hitachi Group aims to become in the future as it advances to its next stage of growth. The Mission, Values, and Vision are made to be shared in a simple concept: Hitachi Group Identity.

Hitachi Group Identity

MISSION
The mission that Hitachi aspires to fulfill in society — Contribute to society through the development of superior, original technology and products.

VALUES
The values crucial to the Hitachi Group in accomplishing its mission — Hitachi Founding Spirit: Harmony, Sincerity, Pioneering Spirit

VISION
What the Hitachi Group aims to become in the future — Hitachi delivers innovations that answer society's challenges. With our talented team and proven experience in global markets, we can inspire the world.

History of Hitachi, Ltd.

1910   1920   1930   1940   1950   1960   1970   1980

Five-horsepower induction motor

Urban infrastructure development

Production of trains for the Tokaido Shinkansen

Launch of operations at the Shimane Nuclear Power Station

Development and supply of large-scale computers

Episode 1

In 1910, Namihei Odaira founded Hitachi, Ltd. with the aspiration of contributing to society through the development of machine industry in Japan by manufacturing electric machines on his own.
Hitachi has developed and provided numerous products while enhancing its technological capabilities by strengthening testing and research, and the founder's aspiration to contribute to society has been steadfastly inherited by Hitachi employees.

Hitachi Founder Namihei Odaira

Sogyo Koya (Hitachi's first factory)

Episode 2 — Contribution to reconstruction after the Great Kanto Earthquake

In 1923, the Great Kanto Earthquake wrought unprecedented damage across the Tokyo metropolitan area. Although Hitachi's Kameido Works was partially destroyed, Namihei Odaira indicated "our top priority is reconstruction of the Keihin area, the head of Japan." Every effort was made to rebuild infrastructure by increasing the production and supply of products necessary for the restoration of power supply infrastructure in the Tokyo metropolitan area. The name Hitachi became widely known throughout Japan for its technological prowess in transformer equipment and transformers.

Episode 3 — Development and supply of large-scale computers

In the late 1950s, Hitachi participated in the development of the MARS-1 seat reservation system for Japan National Railways (now JR Group). The objective was to systematize seat reservations, which at the time were done manually, enhancing convenience for users. However, development involved a variety of hardships. In 1959, we completed the computer that would become the central processor for this system, and in 1960, we succeeded in developing terminals for installation in stations. The seat reservation system for limited express trains was launched throughout Japan and has continued to evolve to the present day.

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History of Hitachi   Looking Back on Past Mid-term Management Plans   Promoting Sustainable Management   Business of the Hitachi Group   Global Business Overview

1990   *2000*   *2010*   *2020*

Development of virtual storage technology

Delivered high-speed train to the United Kingdom

Episode 4 ▷▷▷

Provision of intercity express trains to the United Kingdom, birthplace of the railroad

In 2009, Hitachi became the first Japanese manufacturer to provide rolling stocks to the United Kingdom with the delivery of 174 train cars (Class 395), which commenced commercial operations that same year. In 2017, 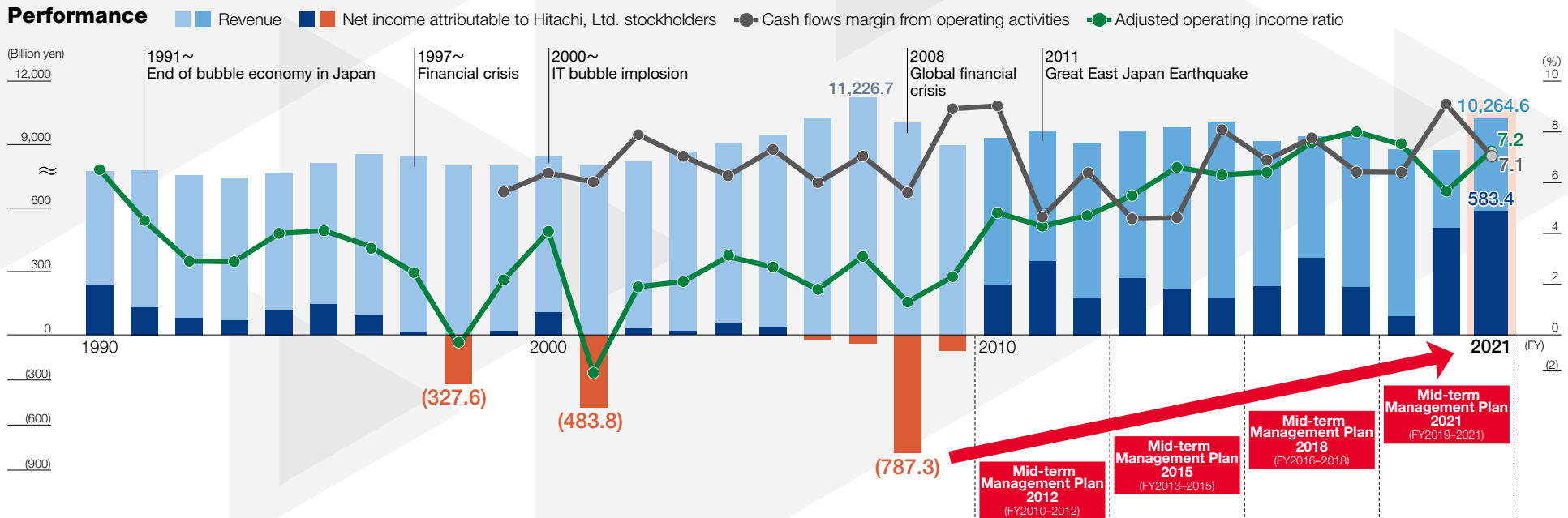866 train cars (Class 800) were delivered and commenced commercial operations on intercity express trains connecting London with destinations in northern and western UK. In 2021, Hitachi received an order for the design, build and maintenance of next-generation high-speed rail in the UK. This serves as a testament to the more than 20 years Hitachi has spent building its brand in the UK.

Social Innovation Business

Developing more advanced social infrastructures by combining expertise in OT, IT, and products

○ LUMADA

Performance

■ Revenue   ■ Net income attributable to Hitachi, Ltd. stockholders   ●─ Cash flows margin from operating activities   ●─ Adjusted operating income ratio

(Billion yen)

1991~
End of bubble economy in Japan

1997~
Financial crisis

2000~
IT bubble implosion

2008
Global financial crisis

2011
Great East Japan Earthquake

11,226.7

10,264.6

7.2
7.1

583.4

(327.6)

(483.8)

(787.3)

1990   2000   2010   **2021** (FY)

Mid-term Management Plan 2012
(FY2010–2012)

Mid-term Management Plan 2015
(FY2013–2015)

Mid-term Management Plan 2018
(FY2016–2018)

Mid-term Management Plan 2021
(FY2019–2021)

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History of Hitachi   **Looking Back on Past Mid-term Management Plans**   Promoting Sustainable Management   Business of the Hitachi Group   Global Business Overview

Looking Back on Past Mid-term Management Plans

Mid-term Management Plan 2012 (FY2010–2012)

Rebuilding Management **Recovery**

Achievements

1. **Created a product-based company system clarifying responsibilities and authority**
   - Clarified responsibility and authority through introduction of an in-house company system
   - Consolidated business into six Groups, focused on growth fields under an integrated system of operations, and accelerated management
2. **Rebuilt/Withdrew from low-profit businesses**
   - Automotive systems business: Rebuilt through structural reform
   - Flat-panel TV business: Withdrew from in-house production
   - HDD business: Divestiture
3. **Strengthened cost competitiveness**
   - Started "Hitachi Smart Transformation Project" for cost structure reform
   - Expanded centralized purchasing and global procurement
   - Optimized and consolidated manufacturing sites

Mid-term Management Plan 2015 (FY2013–2015)

Building a Foundation for Growth
The Swapping Out of Businesses

Challenges
- Realizing further improvements to business profitability
- Enhancing business with social innovations as a core
- Developing business globally

Achievements

1. **Promoted the Social Innovation Business on a global basis by strengthening frontline functions**
   - Expanded service businesses through use of digitalization
   - Strengthened digital capabilities through the acquisition of Pentaho
2. **Reviewed non-core businesses**
   - Thermal power business: Established joint-venture firm with Mitsubishi Heavy Industries
   - Air-conditioning business: Established joint-venture firm with Johnson Controls
   - Batteries business: Relisted Hitachi Maxell, drew down its stake in the company
3. **Promoted globalization**
   - Relocated the railway systems business headquarters to the United Kingdom
   - Introduced Global Performance Management aimed at enhancing the use of global human capital

Mid-term Management Plan 2018 (FY2016–2018)

Strengthened the Social Innovation Business **Leveraging Digital Technologies**

Challenges
- Speeding up management to rapidly respond to changes in market environments
- Launching a platform for digital growth
- Addressing low-profit businesses to improve profitability

Achievements

1. **Transitioned away from a product-based company system to a three-level structure comprising frontline, platform, and product tiers**
   - Accelerated decision-making with the introduction of a business unit system
2. **Strengthened the global frontline**
   - Bolstered global frontline operations through acquisitions (Ansaldo STS, Sullair)
3. **Expanded the digital solutions business with Lumada**
   - Launched Lumada
   - Established Hitachi Vantara to deliver digital solutions
   - Lumada business revenue grew to 1 trillion yen
4. **Executed ongoing business reviews**
   - Divestiture and deconsolidation of listed subsidiaries
     Divestiture of Hitachi Koki and Clarion
     Sold a part of shares in Hitachi Transport System, Hitachi Capital, and Hitachi Kokusai Electric
   - Reduced/Withdrew from low-profit businesses such as the information and telecommunications equipment business and the overseas EPC business

Mid-term Management Plan 2021 (FY2019–2021)

Realized Social Innovations with Digitalization, **Built a Platform for Global Growth**

Challenges
- Business growth through expansion of co-creation with Lumada as a core
- Completing business portfolio revisions
- Improving capital efficiency

Performance targets and results

Although targets at the start of fiscal 2019 were revised due to the COVID-19 pandemic in 2020, revenue expanded, profitability was maintained and operating cash flows were generated, and net income attributable to Hitachi, Ltd. stockholders reached an all-time high.
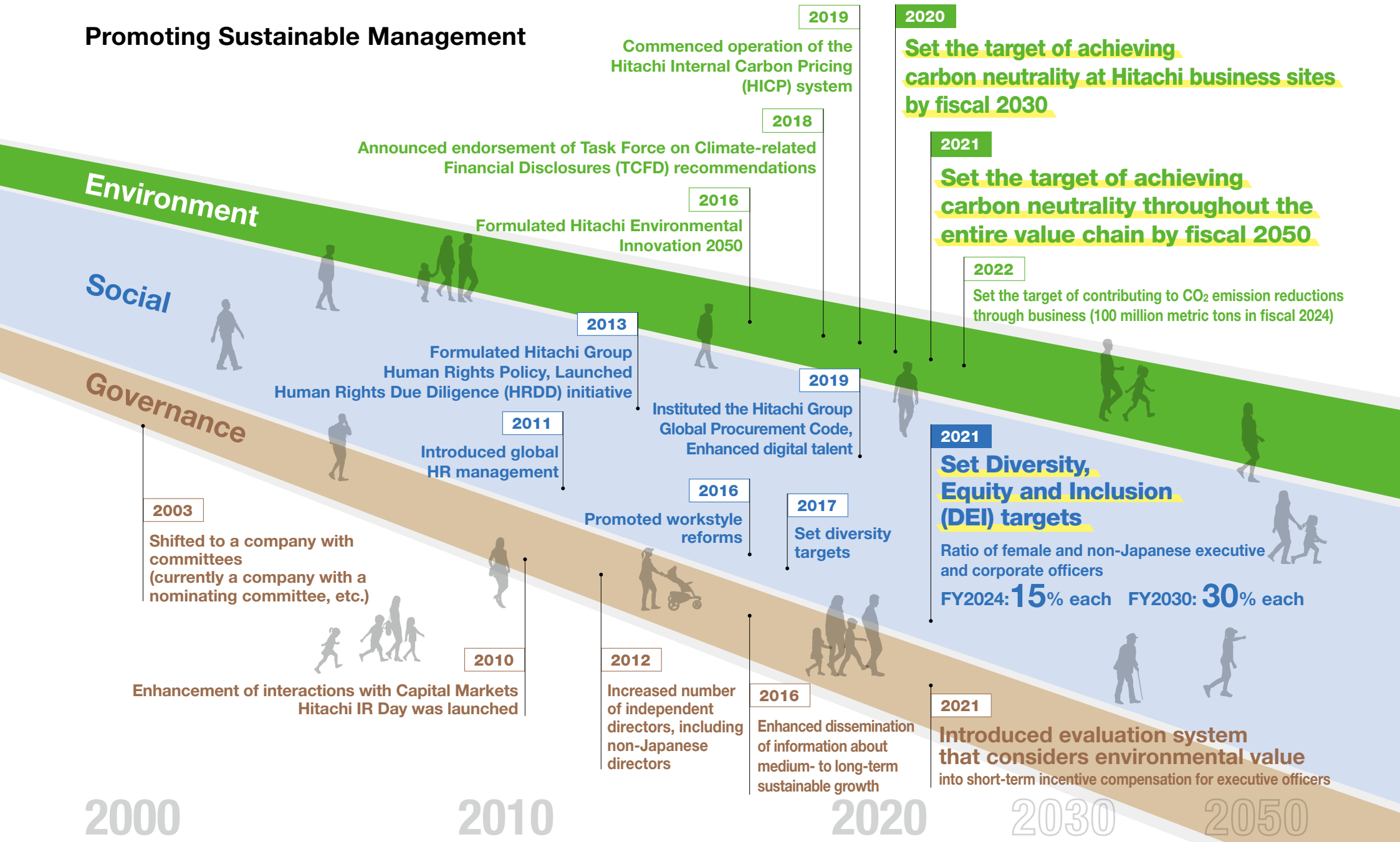
(billion yen)

	Mid-term Management Plan 2021 targets (as announced in April 2021)	Fiscal 2021 results
Revenue	9,500.0	**10,264.6**
Adjusted operating income/ratio	740.0 / 7.8%	**738.2 / 7.2%**
Net income attributable to Hitachi, Ltd. stockholders	550.0	**583.4**
Operating cash flows (FY2019–2021 cumulative total)	Over 2,100	**Approx. 2,100**
ROIC	8.3%	**7.7%**

Achievements

1. **Launched the digital business platform and achieved growth**
   - Launched the Lumada Solution Hub and Lumada Alliance Program
   - Expanded Lumada business revenue from 1.1 trillion yen to 1.6 trillion yen
2. **Enhanced efforts toward digital and environmental growth**
   - 2019: Acquired JR Automation
   - 2020: Made Hitachi High-Tech a wholly owned subsidiary Established Hitachi ABB Power Grids (now Hitachi Energy)
   - 2021: Established Hitachi Astemo Acquired GlobalLogic Transferred the diagnostic imaging–related business Participated in COP26 as a principal partner
3. **Reinforced and improved the business foundation by resolving management issues**
   - Made progress in reviewing the capital policies of listed subsidiaries
     - Divestiture of Hitachi Chemical and Hitachi Metals*
     - Sale of a part of shares in Hitachi Construction Machinery and Hitachi Transport System*
   - Responded to management issues
     - Settled with Mitsubishi Heavy Industries on South Africa projects
     - Withdrew business operations on the UK nuclear power stations construction project
   - Promoted diversity, increased digital talent, and enhanced risk management

*Scheduled for completion during fiscal 2022

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History of Hitachi | Looking Back on Past Mid-term Management Plans | Promoting Sustainable Management | Business of the Hitachi Group | Global Business Overview

Promoting Sustainable Management

Environment

Social

Governance

2019
Commenced operation of the Hitachi Internal Carbon Pricing (HICP) system

2020
Set the target of achieving carbon neutrality at Hitachi business sites by fiscal 2030

2018
Announced endorsement of Task Force on Climate-related Financial Disclosures (TCFD) recommendations

2021
Set the target of achieving carbon neutrality throughout the entire value chain by fiscal 2050

2016
Formulated Hitachi Environmental Innovation 2050

2022
Set the target of contributing to CO_2 emission reductions through business (100 million metric tons in fiscal 2024)

2013
Formulated Hitachi Group Human Rights Policy, Launched Human Rights Due Diligence (HRDD) initiative

2019
Instituted the Hitachi Group Global Procurement Code, Enhanced digital talent

2011
Introduced global HR management

2021
Set Diversity, Equity and Inclusion (DEI) targets
Ratio of female and non-Japanese executive and corporate officers
FY2024: **15**% each   FY2030: **30**% each

2016
Promoted workstyle reforms

2017
Set diversity targets

2003
Shifted to a company with committees (currently a company with a nominating committee, etc.)

2010
Enhancement of interactions with Capital Markets
Hitachi IR Day was launched

2012
Increased number of independent directors, including non-Japanese directors

2016
Enhanced dissemination of information about medium- to long-term sustainable growth

2021
Introduced evaluation system that considers environmental value into short-term incentive compensation for executive officers

2000   2010   2020   2030   2050

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History of Hitachi   Looking Back on Past Mid-term Management Plans   Promoting Sustainable Management   **Business of the Hitachi Group**   Global Business Overview

Business of the Hitachi Group

In April 2022, Hitachi formulated the Mid-term Management Plan 2024 targeting further global advances and growth in the Social Innovation Business based on three pillars of growth: digital, green and innovation. To increase management efficiency and speed, we simplified our structure, grouping together businesses with similar characteristics organized into three sectors: Digital Systems & Services (DSS), Green Energy & Mobility (GEM) and Connective Industries (CI). Together with customers, we will resolve social issues leveraging a business structure that includes the Automotive Systems Business (Hitachi Astemo).

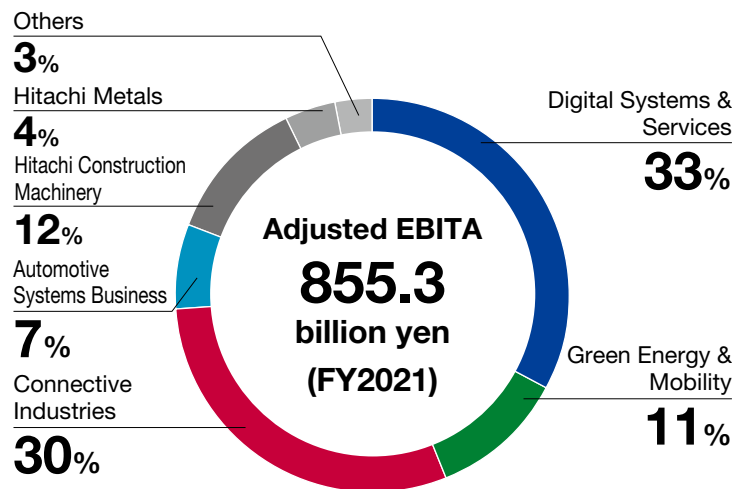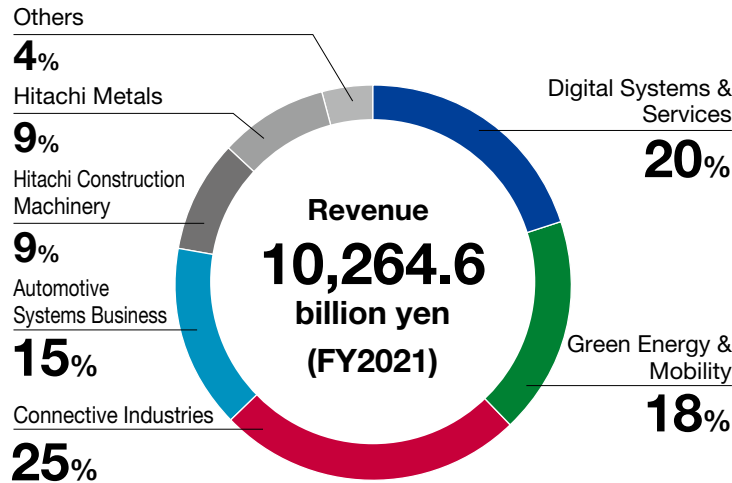## ■ Digital Systems & Services

Main products and services

◎ Front Business: IT and digital systems in mission-critical fields such as financial institutions, public offices, municipalities and social infrastructure
◎ IT Services: DX solutions and services
◎ Services & Platforms: Designs, digital engineering, data analytics, cloud services and IT products

■ Green Energy & Mobility

Main products and services

◎ Energy solutions (power grids, nuclear, renewable and distributed power sources)
◎ Railway systems (rolling stock, signals, controls, services and maintenance, smart mobility, turnkey)

Source: Aibel

■ Connective Industries

Main products and services

◎ Urban Group: Elevators, escalators and building services, home appliances, air-conditioning systems
◎ Advanced Technologies Group: Healthcare (clinical chemistry and immunochemistry analyzers, automated cell culture equipment, particle therapy system, etc.), measurement and analysis (semiconductor metrology/inspection equipment, electron microscopes, etc.)
◎ Industry Group: Industry & distribution solutions, robotics SI, water supply and sewage, utilities solutions, industrial equipment

■ Automotive Systems Business

Main products and services

◎ Powertrains, chassis, advanced driver assistance, motorcycle systems

Revenue 10,264.6 billion yen (FY2021)

- Others 4%
- Hitachi Metals 9%
- Hitachi Construction Machinery 9%
- Automotive Systems Business 15%
- Connective Industries 25%
- Digital Systems & Services 20%
- Green Energy & Mobility 18%

Adjusted EBITA 855.3 billion yen (FY2021)

- Others 3%
- Hitachi Metals 4%
- Hitachi Construction Machinery 12%
- Automotive Systems Business 7%
- Connective Industries 30%
- Digital Systems & Services 33%
- Green Energy & Mobility 11%

Notes:
1 Figures based on new segment classifications applied from fiscal 2022 onward.
2 Hitachi Construction Machinery was deconsolidated on August 23, 2022. Hitachi Metals is scheduled to be removed from the scope of consolidation in March 2023.
3 Adjusted EBITA = Adjusted operating income — acquisition-related amortization + equity in earnings (losses) of affiliates

Global Business Overview (As of March 31, 2022)

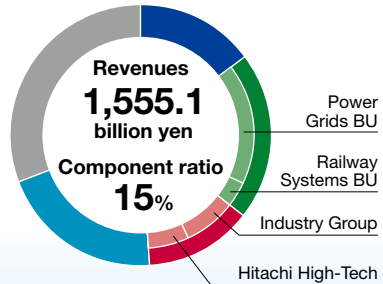Overseas revenues account for 59% of total revenues for Hitachi.
By combining Lumada with global business portfolios built up in each region and business, Hitachi will further accelerate its global rollout and expand the value created and realized through the Social Innovation Business on a global scale.

■ **Digital Systems & Services**
■ **Green Energy & Mobility**
■ **Connective Industries**
■ **Automotive Systems Business**
■ **Others (Including Hitachi Construction Machinery, Hitachi Metals)**

Japan
Number of employees
Approx. **157,000**
Number of subsidiaries
158

Revenues
4,187.0
billion yen
Component ratio
41%

Building Systems BU
Hitachi Global Life Solutions
Nuclear Energy & Energy BU
Industry Group

China
Number of employees
Approx. **51,000**
Number of subsidiaries
136

Revenues
1,331.6
billion yen
Component ratio
13%

Power Grids BU
Building Systems BU
Hitachi High-Tech

North America
Number of employees
Approx. **28,000**
Number of subsidiaries
97

Revenues
1,555.1
billion yen
Component ratio
15%

Power Grids BU
Railway Systems BU
Industry Group
Hitachi High-Tech

Europe
Number of employees
Approx. **43,000**
Number of subsidiaries
148

Revenues
1,299.4
billion yen
Component ratio
13%

Power Grids BU
Railway Systems BU
Hitachi High-Tech

ASEAN, India, and other areas
Number of employees
Approx. **70,000**
Number of subsidiaries
200

Revenues
1,183.2
billion yen
Component ratio
11%

Power Grids BU
Railway Systems BU
Hitachi High-Tech

Other areas
Number of employees
Approx. **20,000**
Number of subsidiaries
115
Revenues
708.1 billion yen
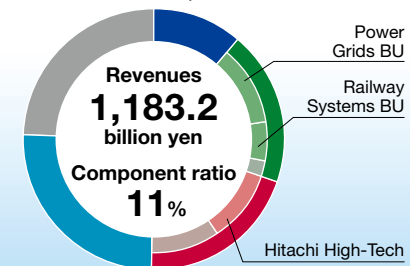
▸ **19 customer co-creation centers**

CEO Message

Hitachi is Constantly Growing Thanks to Our Employees and Technology Accelerating Transformation Through Mode Change for Growth

Hitachi is finishing up a decade-long structural reform and has begun moving towards sincere growth. I was determined when I became CEO in April 2022, during the launch of the Mid-term Management Plan 2024, to take the baton and continue Hitachi's transformation, emphasizing the history and values assembled by Hitachi since its founding.

We will continue to build a Hitachi that is always changing thanks to our employees and technology while also reconfirming our DNA of transformation that has led us to continue restructuring in accordance with social changes.

President & CEO

Keiji Kojima

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CEO Message | The Story of Collaborative Value Creation with Stakeholders | Materiality | The Value Creation Process | Mid-term Management Plan 2024 | Human Resources Strategies | Financial Strategies | CFO Message

Reconfirmation of History and Values for the Next Decade

Since its establishment in 1910, Hitachi has grown together with the development of society and the economy, operating under a foundational Mission set by founder Namihei Odaira: "Contribute to society through the development of superior, original technology and products." With this guiding principle, we have resolved issues facing society through the development of technologies and products that support social infrastructure.

As a student, I visited Hitachi's Central Research Laboratory in Tokyo for the first time. I remember being impressed that Hitachi appreciated technology above all else, which made me decide to begin my career with the company as a researcher. I was heavily involved in database research during that time and once again realized the company's unique attitude towards valued technology. Hitachi's culture of superior performance and unparalleled functionality inspires me to never compromise. Hitachi has continued to grow while championing the ideas passed down from those who came before us. We proudly continue developing new technologies and pioneering services that support social infrastructure—that is, enhancing people's lives.

Hitachi is also an organization that can cope with social changes and continuously transform without fear. Our vision of being a Social Innovation Business as promoted by previous CEOs enabled us to come out of the red following the global financial crisis. To avoid future financial issues, we shifted back to the true DNA of Hitachi and continue to seek transformation and strategize to solve future social issues. Lumada is a great symbol of this as it was launched in 2016 to offer solutions that deal with the shift towards digitalization in society that we are experiencing today.

The Lumada concept started when I was CTO in 2014, when it was predicted that the Internet of Things would be the next big social trend. We created a business model framework that offers value by collaborating with customers and leveraging Hitachi's rich IT and OT (operational technologies) expertise and technologies. We called this system, inspired by the wisdom of Silicon Valley's cutting-edge people, "Lumada." In addition to data analytics and the knowledge of AI specialists, we also incorporated cultural anthropology, experience design and a variety of other viewpoints to construct the concept of "people (customers)." Hitachi's Lumada was finally launched in 2016, not only as a system to run applications or software on platforms but also as a framework for co-creation too. In addition to expanding the Social Innovation Business, Hitachi took on the challenge of making a major transformation over the past decade and growing the Lumada business since 2016.

I believe there is a great resemblance between Hitachi and a tree that is constantly evolving. Hitachi's biggest strength is its ability to grow and transform to continuously solve social issues. In order for the tree to continue to grow without weakening, we must change our business, shedding light on Hitachi's branches and leaves, similar to the strategy we followed over the past decade. We have gone through that pruning. What kind of fruit will this tree produce? What sort of buds will become part of the new trunk? Instead of creating finite products that cannot be altered, Hitachi consistently co-creates solutions alongside society to meet current needs and improve quality of life. Hitachi's legacy is defined by the fruit—or results—of that tree. I believe it is vital for this tree to change forms along the way and for Hitachi to continue taking on new challenges.

▶ **Hitachi's Central Research Laboratory**

Established as a primary research laboratory in 1942. Through its establishment, comprehensive basic research on electron microscopes and more was strengthened from the study of prior developments and improvements directly linked to products and further progress was made in developing new products.

▶ **Lumada**
▶ **P.24**

▶ **Experience Design**

Designing around the user's experience value (experience).

Hitachi's Design Thinking

▶ https://www.hitachi.com/rd/research/design/nexperience/design/

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CEO Message   The Story of Collaborative Value Creation with Stakeholders   Materiality   The Value Creation Process   Mid-term Management Plan 2024   Human Resources Strategies   Financial Strategies   CFO Message

The Mid-term Management Plan 2021 Has Ended and the Groundwork for Growth over the Last Decade is Complete

The emergence of COVID-19 greatly affected social and economic activity worldwide during the three years between fiscal 2019 and 2021 in the Mid-term Management Plan 2021. Since the second half of 2021, there have been shortages of semiconductors and the costs of materials have skyrocketed. In 2022, the prices of resources, including crude oil and natural gas, have kept increasing due to the Russia-Ukraine situation, which exposed us to new geopolitical risks.

The major social and economic changes caused by COVID-19 also affected Hitachi's management. Nonetheless, we were able to achieve an adjusted operating income ratio of 7.2% in fiscal 2021. Under these conditions, Hitachi has set the goal of achieving a sustainable society through the Social Innovation Business in the Mid-term Plan Management 2021 and has established a comprehensive plan to build a business foundation for global growth. We built a solid management system through continued efforts and initiatives to improve profitability and believe this was a significant accomplishment for the Mid-term Management Plan 2021. We also continue to establish a strong business foundation, pushing through with profitability improvements and structural improvements to achieve growth in the Social Innovation Business. To make Hitachi an even stronger global competitor, we acquired GlobalLogic and ABB's power grid business (now Hitachi Energy) while also deciding to sell publicly listed subsidiaries including Hitachi Chemical, Hitachi Metals, and Hitachi Construction Machinery. I believe another accomplishment was establishing goals during the groundwork for growth toward the Mid-term Management Plan 2024.

Mid-term Management Plan 2024—Mode Change for Growth in the Next Decade

We positioned the three years of the Mid-term Management Plan 2024 as a mode change for growth to create paths allowing continuous growth over the next decade while also valuing prior transformations. Through the power of innovations for the future of society and the creation of value by digital and green actions, we have changed our future course to focus mainly on growth.

"Creating a sustainable society through data and technology where each person can actively participate while also protecting the earth." People and the Earth are key in our vision for the future. Based on our innovation strategy for 2050, we will implement digital and green measures from the backcast approach to determine the next steps.

Additionally, in the Mid-term Management Plan 2024, we took on the challenge of adequately explaining the Lumada framework once again. There are four monetization models in Lumada, and we recently strengthened our ability to work from any model with the acquisition of GlobalLogic. We believe that Lumada can accelerate the process of problem solving and co-creation and we hope to demonstrate Hitachi's potential for further growth through expanding the business.

▶ **GlobalLogic**
A U.S.-based company acquired by Hitachi in July 2021. GlobalLogic is a leading company in the digital engineering service market.
➤ https://www.globallogic.com/

▶ **Hitachi Energy**
Hitachi acquired the power grid business from ABB, a heavy electric company in Switzerland, and began operations in July 2020. The company name was changed to its current name in October 2021. Hitachi Energy offers systems, products, and services of a leading global standard for the transmission-transformation of electric energy, including a high-voltage direct current (HVDC) system allowing for long-distance transmission of energy on a large scale and a microgrid allowing for highly reliable energy supply.
➤ https://www.hitachienergy.com/us/en

▶ **Mid-term Management Plan 2024: Digital, Green, and Innovation**
➤ P.22

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Creating an Organization Where Our Employees and Technology Produce Innovations for Customers' Next Steps

Hitachi is committed to solving social issues of the future through both our employees and technology. We understand that the next step our customers want to take is focused on digital and green. Hitachi will solidly support these steps; Our Mid-term Management Plan 2024 will address all growth opportunities in these sectors and support in refining the customers' future decisions. It is vital to drive our business with technological advancement, insights and vision from a medium- to long-term perspective. We are already making strategic moves to refine our digital and green transformations through the acquisition of GlobalLogic and ABB's power grid business (now Hitachi Energy), and we are thinking beyond these transformations as we move forward.

While Hitachi has always valued research and development, it is essential to understand technological trends and how they differ from an innovation that changes the world. To convert technology into innovation, Hitachi believes it is imperative to foster human capital with vision, ideas and concepts and I will lead this growth by drawing from my experience in R&D. I am also confident that the strength of more than 300,000 employees in Hitachi will assist in delivering value to our customers and society. In order to respond to the various expectations and needs of society, we will create value and greater promotion of DEI (Diversity, Equity and Inclusion) and co-creation.

We have also been working to strengthen employee engagement to create a culture where each employee takes responsibility for solving social issues. We aim to be a company where employees are satisfied with their jobs and are proud to be a part. We will continue to be committed to including our employees in more significant discussions and consider what we can do together, as we are doing with PMI (Post-Merger Integration) to fully utilize the knowledge of our new colleagues at GlobalLogic and Hitachi Energy.

When I was transferred to a startup in Silicon Valley, I had the chance to see Hitachi from the outside. At that time, I was interviewing about 10 people every day to recruit human capital and I experienced firsthand how key leaders can flourish into outstanding and unique human capital and ultimately guide an organization in a unified direction.

It helped me understand the importance of harmony, where various human capital unites under one leader to work together, and the value of sincerity when facing customers and solving problems with integrity. Finally, the crucial role of having a pioneering spirit is to develop dedicated new customers.

It was a valuable opportunity for me to understand the true meaning of the Hitachi Founding Spirit of Harmony, Sincerity, and Pioneering Spirit and the role a leader should play. It was great to see Hitachi employees willing to work in different settings and fields because they have a willingness to grow. It is becoming even more important to make Hitachi a company people want to work for again.

▶ **DX**
Digital Transformation

▶ **GX**
Green Transformation

▶ **DEI (Diversity, Equity and Inclusion)**

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Dealing with Complex Global Risks

We are in an age where it is challenging to predict how the social and economic environment will change. To accelerate and grow the Social Innovation Business, Hitachi will not only collect information on potential upcoming risks, but also thoroughly prepare for and respond to them when they occur. It is often pointed out at meetings of the Board of Directors that it has become necessary not only to determine risks related to human rights, compliance, and other disasters, but also to prepare for comprehensive risk management due to the constant change in business environment that includes financial risks as well.

Since April 2022, Hitachi has established a global risk governance structure with the CFO taking on the role of CRMO in order to identify the risks that might affect us in the near future. For example, with the situation in Ukraine this year, we responded based on BCP, with the safety of our 7,000 GlobalLogic employees as our top priority. For Hitachi, having spread its business globally, it is essential to make risk management preparations to increase our resilience to various risks.

For a Stronger, Trusted Hitachi Through Dialogue with Stakeholders

As we promote our Social Innovation Business, Hitachi values the dialogue and co-creation with our diverse stakeholders, including customers, governments, municipalities, academic organizations, and research organizations, to accurately understand the various social problems in each country and region.

To accelerate and lead the initiatives towards decarbonization, a high-priority issue for society, Hitachi was inaugurated as a Principal Partner, supporting the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26) held in the U.K. in November 2021. Through discussions with our various stakeholders, including government officials and management from global companies, we have shown our role as an innovator in the field of climate change and our strong commitment to realizing a decarbonized society.

We feel that the capital markets have been very supportive in providing us counsel on management through dialogue with institutional investors. I realized that we could increase Hitachi's corporate value through co-creation with investors, just as we can realize value for customers and society through co-creation.

And from a sustainability management perspective, I believe that dialogue and engagement with a wide range of stakeholders is even more critical.

We have upheld a mode change for growth in the Mid-term Management Plan 2024 and we will be focused on generating cash during these three years as a result of implementing the plan. We will also expand our core free cash flows and enhance our shareholder returns by improving our earning power and streamlining our balance sheet. We are already planning a 200 billion yen buyback this fiscal year and we will continue to share the results of our growth with our stakeholders and make further contributions to social and environmental values.

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The Story of Collaborative Value Creation with Stakeholders

The Hitachi Group is like a continually evolving tree that gathers diverse capabilities.
By nurturing this tree together with our stakeholders, we have brought about solutions that contribute to the resolution of social issues.
Moving forward, we will continue to engage in new collaborative value creation with our stakeholders by aiming for transformations with the times and continuing to take on new challenges.

Episode 1

The Optimise Prime Project, UK
—Towards a carbon-free society

Episode 2

Development of Microservices Solutions, ASEAN
—Supporting digital transformations of financial industry and beyond

Episode 3

Hitachi Digital Solution for Retail/Logistics
—Transformations centered around the distribution industry

Episode 1

The Optimise Prime Project, UK
—Toward a carbon-free society

Episode 2

Development of Microservice Solutions, ASEAN
—Supporting digital transformations of financial industry and beyond

Social Issue	The United Kingdom has set the target of reducing CO$_2$ emissions to effectively zero by 2050. To reach this target, the decarbonization of the electric power sector has to be almost completed by 2030 and 60% of new automobiles have to be EVs in the UK. If Optimise Prime is implemented across the UK, it is estimated that a reduction of 2.7 Mt of CO$_2$ is possible by 2030, which is an effect corresponding to saving a total of 207 million pounds.
Value Provided	The Optimise Prime project, launched in January 2019, is an initiative to realize a carbon-free society by keeping down power prices while increasing the spread of EVs and making efficient use of existing power distribution networks. Hitachi is in charge of designing the solutions architecture and implementing the IoT platform at the project's core. We started gathering data on EVs in 2019 and have already implemented demonstration experiments with up to 3,000 vehicles over 12 months. We plan to submit the final report in 2023, so that the data can be used by organizations, research institutions, and government agencies that want to shift to zero emissions through EVs.
Co-creation Partners	UK Power Networks, Centrica, Royal Mail, Uber, Scottish & Southern Electricity Networks, Novuna Vehicle Solutions

➤ https://www.hitachi.com/rev/archive/2020/r2020_04/activities2/index.html

Social Issue	Application development that applies adaptable and flexible microservices, as well as DevOps that links system development and operation, thus realizing agile development that is flexible and speedy, is in great demand for the acceleration of DX. DX is proceeding rapidly in the financial industry, especially in the fast-growing ASEAN region. Hitachi will establish microservices solutions and secure a core of digital talent for its development, to realize the transformation of client systems to a more flexible architecture, for which an open banking architecture and shorter time-to-market are increasingly needed.
Value Provided	In order to expand Lumada business globally, Hitachi will make fast-growing ASEAN its starting point, and will develop common functions needed for the development of microservices by utilizing its know-how in application development for financial institutions. The development of this solution was enabled by knowing and incorporating functions required by financial institutions, which were collected through the co-creation with a major bank in ASEAN. Moreover, we engage in activities that aim to develop digital talent and guidelines that support microservices development and are now aiming to establish a managed service that includes a cloud environment and DevOps development infrastructure. Going forward, we will aim to further enhance our delivery capabilities by establishing a dedicated development team for microservices (resource pooling), and scale out these solutions globally to clients in non-financial fields, whose needs for financial functions are increasingly growing.
Co-creation Partners	A major bank in ASEAN

➤ http://www.hitachi-ebworx.com/solutions-microservices.html

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Episode 3

Hitachi Digital Solution for Retail/Logistics
—Transformations centered around the distribution industry

Social Issue

Against a background of diversifying consumer needs, manpower shortages from a shrinking working age population, food loss issues, and so forth in the logistics industry, there is a growing need for high-efficiency store management that utilizes advanced digital technologies and that can instantly respond to changes in demand. Moreover, we are seeing issues with driver shortages and long working hours in the delivery operations due to the spread of e-commerce and diversifying delivery needs.

Hitachi is using digital technologies to resolve these challenges in the distribution industry. We are contributing to more efficient, safer, and more secure operations by automating order placements based on demand prediction, automatic delivery planning, and ensuring safe driving management of drivers. Moreover, we are optimizing storage in the food industry to counter food loss as well.

Value Provided

Order placement, storage management, and delivery planning have normally required some time to perform based on the experience and know-how of expert workers. The Hitachi Digital Solution for Retail/AI Demand Forecast Auto Replenishment Service makes advanced demand predictions for individual stores and products by using AI and original algorithms, thereby making suggestions for recommended order volumes and facilitating automation of order placements. Hitachi Digital Solution for Logistics/Delivery Optimization Service realized automated suggestions for highly efficient delivery plans by generating data on all key conditions for delivery planning tasks and performing analyses that also incorporate the experience of expert workers. SSCV[1]-Safety on Hitachi Digital Solution for Logistics[2] contributes to operation management, better driver safety, and workstyle reform through AI analysis of the biometric and driving data of logistics drivers.

Hitachi is combining these solutions to provide value to all stakeholders throughout the supply chains, including suppliers, wholesalers, logistics operators, stores, and consumers, in the distribution industry.

[1] SSCV: Smart & Safety Connected Vehicle
[2] Business developed through collaborative efforts between Hitachi Transport System, Ltd., and Mitsubishi HC Capital Inc.

Co-creation Partners

Mitsui & Co., Seiyu, Workman, Asahi Shokuhin, etc.

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Materiality

Towards a Sustainable Society: Hitachi's Materiality

Hitachi practices sustainable management, which positions sustainability as the core of its business strategy, and is working toward realizing a sustainable society through the Social Innovation Business.

In the Mid-term Management Plan 2024, we declared our new aspiration of "supporting people's quality of life with data and technology that fosters a sustainable society." While some of the nine planetary boundaries have already been exceeded, Hitachi is aware of each one and works to protect the planet and maintain society. Hitachi aims to solve social challenges to realize a future that balances protection of the planet and people's individual wellbeing.

The materiality analysis process

With a comprehensive understanding of social issues, Hitachi has identified six material topics and 15 sub-material topics based on an analysis of risks and opportunities from sustainability perspectives as well as feedback from stakeholders.

Based on these material topics, Hitachi will monitor measures as well as discuss the progress of, and new initiatives for, each materiality at the Senior Executive Committee and the Board of Directors.

Further, Hitachi's materiality was developed based on backcasting from 2050 and input from stakeholder dialogue in Japan and Europe, based on the Strategic Focus Area disclosed in the Hitachi Integrated Report 2021 published last year.

STEP 1
Comprehensive understanding of social issues
- Identifying social issues from the SDGs, GRI standards, SASB standards, ESG external evaluation items, etc.

STEP 2
Ranking issues by priority from Hitachi's point of view
- Identifying innovation areas where Hitachi should contribute based on backcasting from 2050
- Analyzing risks and opportunities

STEP 3
Ranking issues by priority from stakeholders' point of view
- Evaluating material topics based on assessments and comments from investors, NGOs, and ESG evaluation organizations
- Evaluation through dialogue with investors, NGOs, and sustainability experts

STEP 4
Identifying Materiality

Materiality	Our aspirations
Environment ● Contributing to decarbonization and resource circulation	As a climate change innovator, Hitachi will contribute to the realization of a carbon neutral society with Hitachi's superior green technologies, by providing value to customers in all business segments. We will also promote resource efficiency toward the transition to a circular economy.
Resilience ● Contributing to the maintenance and rapid recovery of social infrastructure	Hitachi helps people live safely by contributing to the rapid recovery of supply chains and the maintenance of social infrastructure by providing system solutions that can respond immediately to risks, such as natural disasters, pandemics, and cyberattacks.
Safety & Security ● Contributing to safe and secure society-building	Hitachi contributes to the realization of comfortable and active lifestyles for people by providing solutions in the building, mobility, and security fields that support urban development for safe and secure living.
Quality of Life ● Contributing to physical and mental wellness and a prosperous life	Hitachi is harnessing our healthcare and digital technologies to help more people develop bonds and enjoy healthier, more prosperous lives. We will also continue to pursue the happiness and wellbeing of our employees, as we believe that their happiness and wellbeing is the ground on which Hitachi's future will flourish even more fully.
Business with Integrity ● Adhering to ethical standards as well as respect human rights	As a Group responsible for social infrastructure around the world, Hitachi will manage its business with honesty and integrity, trusted by society, respect human rights, and provide a safe workplace. We will reflect a system of ethical and responsible business conduct, including respect for human rights, in our business activities and decision-making standards, working together with our employees, collaborative partners and communities throughout the supply chain.
Diversity, Equity and Inclusion (DEI) ● Contributing to a society where everyone can shine	Hitachi has a place for everyone, welcoming differences in colleagues' background, age, gender, sexuality, family status, disability, race, nationality, ethnicity, and religion. At Hitachi, we treat everyone fairly, recognizing differences to allow everyone to perform at their full potential. We respect and value these and other differences because only through them we can understand our markets, create better ideas and drive innovation.

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15 Sub-Material Topics and Targets

Material topics	Sub-material topics		Target	Relevant SDGs
Environment ● Contributing to decarbonization and resource circulation	Decarbonization	Carbon neutrality through the value chain	• FY2030: Achieve carbon neutrality in business sites (factories and offices) • FY2050: Achieve carbon neutrality through the value chain	SDGs 6, 7, 9, 11, 12, 13, 17
		Contributing to CO_2 reduction through business	• FY2024: 100 million metric tons/year	
	Resource circulation	Transition to a circular economy	• FY2024: Full application Eco-Design for new product development • FY2030: Zero[2] waste to landfill[1] from manufacturing sites	
		Effective use of water	• Reduction rate in water use per unit (compared to FY2010) FY2024: 24%, FY2050: 50%	
	Harmonize with nature	Minimize impact on natural capital		
Resilience ● Contributing to the maintenance and rapid recovery of social infrastructure	Strengthening supply chains	Build flexible supply chains capable of responding to disasters and risks		SDGs 9, 11, 17
	Maintaining social infrastructure	Resilience and sophistication of maintenance through DX of social infrastructure	• Contribute to stable energy supply through substation management Approx. 1.9 billion people[3]	
Safety & Security ● Contributing to safe and secure society-building	Safe and secure urban environments	Safe and comfortable transportation	• A total of 15 billion people use railway services annually[3]	SDGs 3, 6, 9, 11, 17
	Ensuring cyber security	Secure cybersecurity for social infrastructure and business systems		
Quality of Life ● Contributing to physical and mental wellness and a prosperous life	Connected and prosperous society	Increase healthy life expectancy and wellbeing	• Blood tests and other physical exams: 20 billion tests/year[3]	SDGs 3, 4, 5, 8, 10, 17
		Build a trustful relationship with others	• Users of happiness service (10 thousand in FY2022 → 90 thousand in FY2024)	
	Employee happiness	More flexible working styles to increase engagement	• Employee engagement score (FY2021: 65.0% → FY2024: 68.0%)	
Business with Integrity ● Adhering to ethical standards as well as respect human rights	Business ethics and compliance	Encourage employees to apply ethical standards in day-to-day work.	• Achieve a score of at least 60 (out of 100) in FY2022, the first year of results from Ethical Culture & Perceptions Assessment, improving it every year	SDGs 3, 4, 5, 8, 10, 16, 17
	Respect for human rights	Promote human rights due diligence and strengthen monitoring of procurement partners for responsible procurement, including human rights		
	Occupational safety	Creating a safe working environment without accidents	• Zero fatal accidents	
	Safe and secure products and services	Ensure products and services safety while putting customers first		
Diversity, Equity and Inclusion (DEI) ● Contributing to a society where everyone can shine	Diverse organization that fosters innovation	Strengthen diversity in management	• Ratio of female and non-Japanese executive and corporate officers (30% in FY2030)	SDGs 4, 5, 8, 10, 17
		Acquiring and developing digital talent	• FY2021: 67,000 persons → FY2024: 98,000 persons	
	Contribution to a diverse and equitable society	Empower DEI of society through community relationship programs	• Support young generations in Asia through the Hitachi Young Leaders Initiative A total of 405 students participating (as of end of July 2022)	

*1 Wherever this is compatible with local conditions and regulations   *2 Less than 0.5%   *3 FY2021 results

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Hitachi has mapped the 15 sub-material topics in terms of importance for Hitachi and its stakeholders. The level of importance to Hitachi is defined as the gap between our goals and our current initiatives.

Business ethics and compliance (▲)

Respect for human rights (▲)

Decarbonization (■■▲)

Harmonize with nature (■)

Connected and prosperous society (■■)

Diverse organization that fosters innovation (■■■▲)

Employee happiness (■■■▲)

Resource circulation (■■■)

Safe and secure urban environment (■■)

Occupational safety (▲)

Maintaining social infrastructure (■■)

Ensuring cyber security (■■▲)

Contributing to a diverse and equitable society (▲)

Strengthening supply chains (■■)

Safe and secure products and services (■■■▲)

Higher / Importance for stakeholders / High — Importance for Hitachi — Higher

Growth driver   ■Green   ■Digital   ■Innovation   Foundation of societal trust ▲

● Environment   ● Resilience   ● Safety & Security   ● Quality of Life   ● Business with Integrity
● Diversity, Equity and Inclusion

Stakeholder dialogue about the materiality

We held a stakeholder dialogue with on the theme of materiality in Japan and Europe in fiscal 2021. We received feedback on Hitachi's proposed materiality and measures for each materiality from disclosure experts, leading sustainability companies, the European Commission, NGOs, international organizations, and institutional investors. In Europe, we divided the dialogue into a planet session and a people session, with Hitachi explaining its measures for the environment, human capital, and respecting human rights, while participants gave suggestions for new perspectives and improvements.

Principal comments from stakeholders

- Hitachi should indicate the direction society wants Hitachi to move along or the goals that Hitachi itself has.
- When it comes to diversity and inclusion, it would be better to include "equity" and make it "diversity, equity, and inclusion."
- For the circular economy, the approach shouldn't just be to reduce materials and waste but also to think about new business models.
- With human rights and decent work, Hitachi should go beyond conventional monitoring, audit, and other compliance approaches to engage with all aspects of supply chains through partnerships with external stakeholders.

Sustainability Strategy Promotion Structure

Under the leadership of Lorena Dellagiovanna, the Chief Sustainability Officer newly appointed on April 1, 2022, Hitachi is promoting its sustainability strategy including green strategy. We have created the Sustainability Promotion Meeting, which consists of the Chief Sustainability Officer, the heads of business promotion departments at business units (BUs) and major group companies, and sustainability officers at regional headquarters, to deliberate on key sustainability measures and monitor progress towards targets. Deliberations and decisions regarding important matters to achieve the Mid-term Management Plan are made by the Senior Executive Committee, which is then discussed further by the Board of Directors.

With regard to important themes like carbon neutrality, the circular economy, human rights due diligence (HRDD), and DEI, individual committees consisting of responsible staff at BUs and major group companies work to promote sustainability throughout the Hitachi Group by discussing measures and sharing information.

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The Value Creation Process

Mid-term Management Plan 2024 -Vision
Support People's Quality of Life with Data and Technology that Fosters a Sustainable Society

INPUT (FY2021)

Manufactured capital
Production/Business processes enhanced through IT
- Capital expenditure — **388.7** billion yen
- Manufacturing bases* — approx. **470**

Human capital
Diverse and global talent that can resolve social issues
- Number of employees* — **368,247**
  Overseas employee ratio — **57**%
- Investment in education per employee — **57,700** yen

Intellectual capital
Technologies/co-creation platforms to ensure global competitiveness
- R&D investments — **317.3** billion yen
- R&D staff* — **2,550**
- Customer co-creation centers* — **19**

Social and relationship capital
Partnerships for creating value through Co-creation
- Lumada Alliance Program partners — approx. **50** companies
- Investments in startups — cumulative **17** companies
- Funding for social contribution activities — **1.9** billion yen

Natural capital
Efficient use of resources
- Total energy input (crude oil equivalent) — **62** PJ (1.61 GL)
- Raw material input — **3,235** kt
- Total water input — **25.61** million m³
- Total chemical substances handled — **61** kt

Financial capital
Financial platforms and investments for creating value
- Hitachi, Ltd. stockholders' equity — **4,341.8** billion yen
- Interest-bearing debt — **3,126.7** billion yen
- Growth investment — **1,000** billion yen

Co-creation for Society

- Green
- Digital
- Innovation

Three Growth Drivers Realizing Co-creation

○ LUMADA

Leverage competitive advantages

- Green Energy & Mobility
- Digital Systems & Services
- Connective Industries
- Hitachi Astemo

IT, OT, Products

Materiality

Environment	Resilience	Security & Safety
Integrity in management	Enhancing quality of life	Diversity, equity and inclusion

■ Corporate governance   ■ Risk management

Mission | Contribute to society through the development of superior, original technology and products.

OUTCOME (FY2021)

Diversification and globalization of human capital
- Diversity, equity and inclusion
  Ratio of female managers — **9.8**%
  Ratio of non-Japanese executive and corporate officers — **17.6**%
  Ratio of female executive and corporate officers — **12.2**%
- Digital talent — Increase of **32,000** persons Total: 67,000 persons
- Engagement indicator in employee survey — **65**%

Increase competitive superiority to expand business
- Lumada business revenues — **1.6** trillion yen
  Lumada overseas revenue ratio — **47**%
- Expand the use of Lumada in-house
  Application cases for internal IT services — **305** cases
- Number of published patent applications — approx. **11,000**

Reducing environmental burden (vs. fiscal 2010)
- Reduction in CO₂ emissions from products and services — **28**%
- Reduction rate in total CO₂ emissions at business sites (factories and offices) — **37**%
- Reduction rate in water use per unit — **36**%
- Reduction rate in waste and valuables generation per unit — **18**%
- Reduction rate in chemical atmospheric emissions per unit — **35**%

Accumulate resources for growth and returns
- Core free cash flows — **290.0** billion yen
- Total dividends — **120.9** billion yen
- Total shareholder return — **+120.9**% (past five years)

Planetary Boundaries
Protect the earth while maintaining social infrastructure
Society

Wellbeing
A society where every individual is comfortable and active
People

*Number of employees, R&D staff and customer co-creation centers are as of end of fiscal 2020; manufacturing bases are as of April 2021.

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Mid-term Management Plan 2024 | Mode Change for Growth

With a corporate philosophy focused on "contributing to society through the development of superior, original technology and products," Hitachi aims to evolve even further through the provision of competitive products and services that provide customers with even higher value. Our basic management policy is to enhance shareholder value through strengthened competitiveness, achieve growth in global markets and meet the expectations of our stakeholders, including customers, shareholders and employees, by maximizing the use of various management resources within the Hitachi Group, as well as reviewing and reorganizing businesses.

Ideal Positioning in the Mid-term Management Plan 2024

With the three growth drivers of digital, green and innovation, the Mid-term Management Plan 2024 Plan aims to realize global growth. Under this plan, Hitachi will protect the global environment so as not to exceed planetary boundaries and contribute to the realization of a sustainable society where wellbeing (human happiness) is maintained so that all members of society can be comfortable and active.
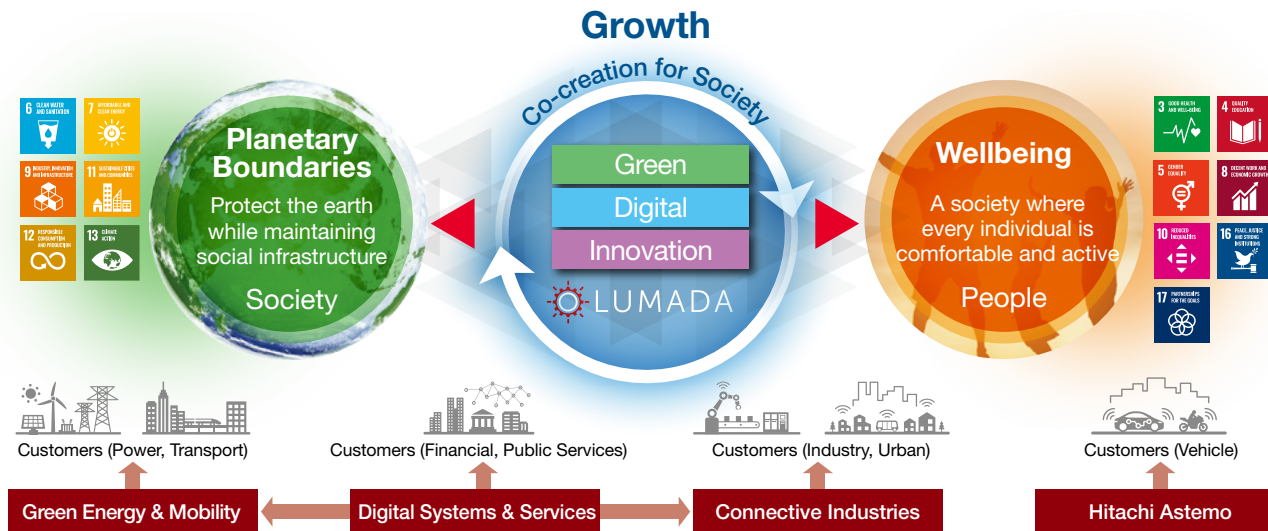
Digital

With an understanding of management issues faced by customers, Hitachi will contribute to the enhancement of customer business value through a cycle of co-creation with customers, which involves designing, implementing, managing and maintaining solutions, while working to resolve subsequent issues.

We will expand earnings and achieve global growth by leveraging digital technologies to drive the value co-creation cycle.

Green

Hitachi will lead global GX (Green Transformation) by switching to renewable energy, electrification, energy conservation and automation, and contribute to the realization of a sustainable society. We will proactively invest in the green field to contribute to an annual reduction in CO_2 emissions of approximately 100 million metric tons by fiscal 2024. Additionally, we will promote decarbonization in order to realize Hitachi Environmental Innovation 2050, which aims to achieve carbon neutrality throughout the value chain by fiscal 2050. Leveraging knowledge gained through this process and providing environmental value tailored to each business domain and region, we aim to realize both a sustainable society and growth of the Hitachi Group.

Innovation

Focusing on its vision for the world in 2050, Hitachi will identify areas where R&D is required while striving to create innovative technologies and products contributing to the resolution of social issues. At the same time, we will increase the speed of innovation by further accelerating collaborations with promising startups, government and academia.

In April 2022, Hitachi simplified its structure, grouping together businesses with similar characteristics organized into three sectors: Digital Systems & Services (DSS), Green Energy & Mobility (GEM) and Connective Industries (CI) to streamline and speed up its management function. With the addition of the Automotive Systems Business (Hitachi Astemo), we will execute these three growth strategies and provide value to customers.

Supporting people's quality of life with data and technology that foster a sustainable society

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Performance Targets

Revenue growth	Adjusted EBITA Margin*1	EPS*2 growth	Core FCF*3 (3-year cumulative)	ROIC
5%–7% FY2021–FY2024 CAGR	**12%**	**10%–14%** FY2021–FY2024 CAGR	**1.4 trillion yen** Of which about half is returned to shareholders	**10%**

*1 Adjusted EBITA = Adjusted operating income – acquisition-related amortization + equity in earnings (losses) of affiliates
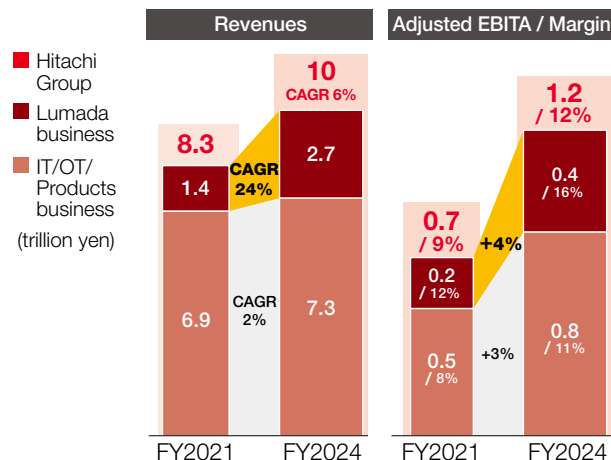*2 Includes share buybacks.   *3 Core FCF: Cash flows from operating activities – CAPEX

Under the Mid-term Management Plan 2024, in addition to top-line and bottom-line growth, we will focus on generating cash to be used for growth and shareholder returns. In terms of management indicators, we have introduced new indicators comprising adjusted EBITA, which indicates primary business profitability; EPS, which indicates growth potential; and core FCF, which indicates the ability to organically generate cash. We will increase shareholder value by allocating approximately half of the core free cash flows generated to shareholder returns.
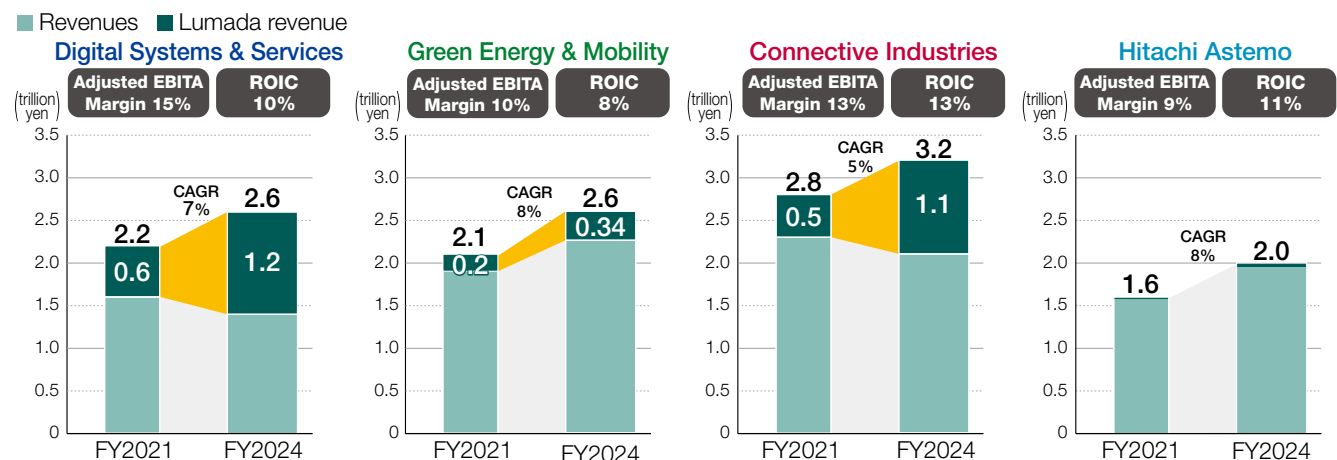
Business Portfolio Enhancements

Groupwide growth will be driven by increased revenue and profit from the Lumada business.
During the Mid-term Management Plan 2024, we will double Lumada business revenue and increase adjusted EBITA to one-third of the whole. At the same time, with regard to business other than Lumada, we will maintain stable growth in the IT, OT and product businesses while working to further enhance profitability.
To achieve growth through Lumada business expansion, we will accelerate digital transformations, expanding Lumada digital technologies to existing businesses. We will also utilize large-scale assets acquired through M&A in an effort to increase the service recurring ratio.

For example, Hitachi Energy can achieve maintenance advances and develop energy digital solutions in various fields such as control by leveraging GlobalLogic and Lumada. Similarly, in the Railway Systems Business Unit, we will further accelerate digital transformations through M&A and transform our business model by incorporating Thales' railway signal–related business, scheduled for acquisition during fiscal 2022, and expanding the MaaS business.
In addition to the transition to a highly profitable business model, we will continue to implement structural reforms aimed at achieving adjusted EBITA margins above 10% and ROIC of 10% or higher across all businesses.

Hitachi Growth driven by the Lumada Business

Mid-term Management Plan 2024 Performance Targets by Sector

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# Mid-term Management Plan 2024 | Digital Strategy

Digital transformation (DX), which uses digital technology to solve problems and transform society for the better, is drawing increased worldwide demand as various social challenges come to light. Hitachi moved swiftly to focus on the Social Innovation Business, which aims to improve quality of life (QoL) and contribute to sustainable social and economic development by leveraging know-how and ideas with data and digital technology at its core. In April 2022,

it established Hitachi Digital in Silicon Valley to further accelerate Lumada's expansion into the global DX market. Serving as a command post, Hitachi Digital will formulate and execute Hitachi's global Groupwide digital strategy and target growth by creating synergies through the cross-fertilization of OT (control and operation technology), IT, and products.

Overview of Lumada

Concept

Launched in 2016, Lumada is a coined term that combines the words "illuminate" and "data." It expresses Hitachi's desire to create value from data using digital technology to meet the needs of customers and society, as well as to help address issues and grow our businesses.
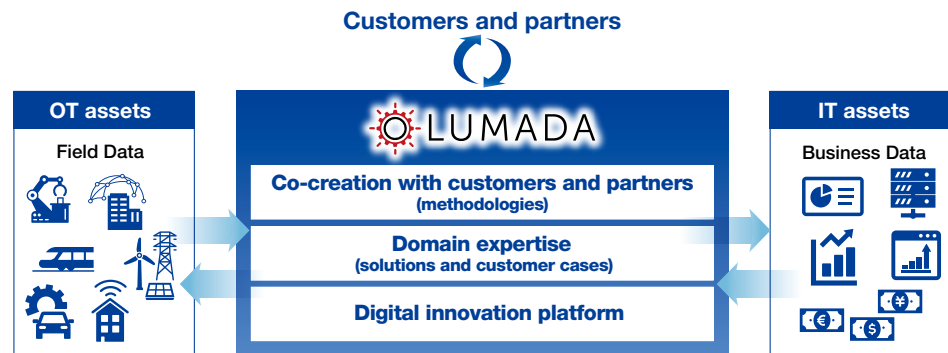
Lumada Overview

1 Digital innovation platform

Lumada's digital innovation platform brings together advanced digital technologies, such as AI and analytics. It uses AI tools and other technologies implemented on the cloud (cyberspace) to visualize and analyze data gathered from the real world, then feed back solutions to the real world in real time. The digital innovation platform creates and accelerates this cycle. It's "openness" is strong point of Lumada architecture. It connects not only Hitachi's original technologies, but also other companies' products and platforms so that it can provide combination of multiple digital technologies, products, and platforms.

2 Domain expertise (solutions and customer cases)

Hitachi has knowledge and expertise in a wide range of industries and businesses, including electric power, railways, manufacturing, and finance, as well as digital solutions that have proven their value through co-creation with customers. To enable rapid deployment and utilization of these assets, we gather universal solutions and customer cases as models and accumulate them into Lumada. The number and scope of applicable fields are growing every year, and Hitachi is using Lumada's accumulated customer cases and solutions to quickly propose and provide solutions to resolve issues faced by customers and society.
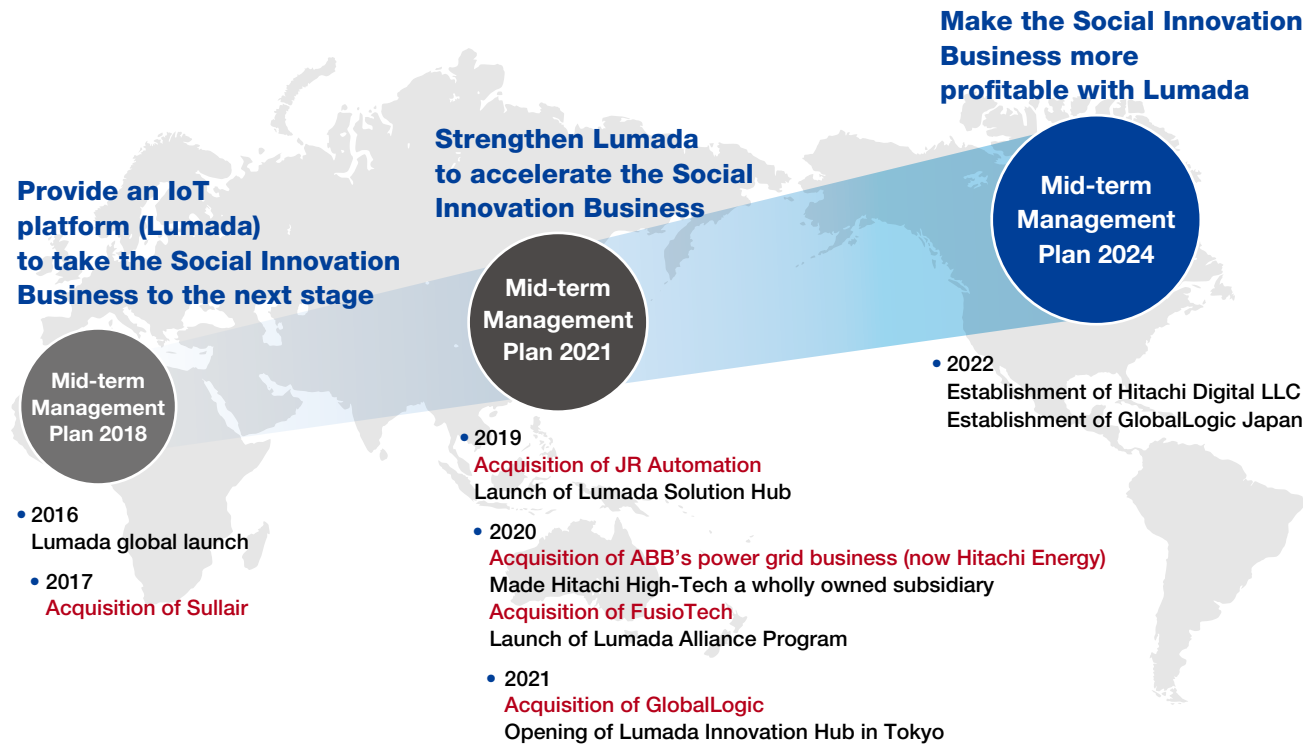
3 Co-creation with customers and partners (methodologies)

Hitachi has created value in various forms by activating co-creation with customers and partners through the following three initiatives. With GlobalLogic joining our ranks in July 2021, we have gained two new capabilities—design and digital engineering—enabling us to understand upstream issues and create solutions to them more quickly.

Ways to Accelerate Co-creation

Lumada Alliance Program	Together with partners who agree with the purpose of our Social Innovation Business, we are building an ecosystem to accelerate open innovation. This ecosystem is expanding, with approximately 50 participating partners and 50 other candidate companies in discussions to join as of March 31, 2022.
Lumada Innovation Hub	In April 2021, we opened Lumada Innovation Hub in Tokyo as a flagship base to accelerate innovation by sharing wisdom and ideas with our customers and partners. It will accelerate DX by serving as a hub to connect diverse domestic and international co-creation sites and human resources. As of March 31, 2022, over 5,100 people from more than 300 companies have used the service, making it a place for active innovation.
Lumada Solution Hub	We provide Lumada solutions that combine technologies and know-how cultivated through co-creation with our customers, as well as mechanisms to promote the reuse of applications.

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Efforts to Strengthen Lumada

Provide an IoT platform (Lumada) to take the Social Innovation Business to the next stage

Mid-term Management Plan 2018

- 2016
  Lumada global launch
- 2017
  Acquisition of Sullair

Strengthen Lumada to accelerate the Social Innovation Business

Mid-term Management Plan 2021

- 2019
  Acquisition of JR Automation
  Launch of Lumada Solution Hub
- 2020
  Acquisition of ABB's power grid business (now Hitachi Energy)
  Made Hitachi High-Tech a wholly owned subsidiary
  Acquisition of FusioTech
  Launch of Lumada Alliance Program
- 2021
  Acquisition of GlobalLogic
  Opening of Lumada Innovation Hub in Tokyo

Make the Social Innovation Business more profitable with Lumada

Mid-term Management Plan 2024

- 2022
  Establishment of Hitachi Digital LLC
  Establishment of GlobalLogic Japan
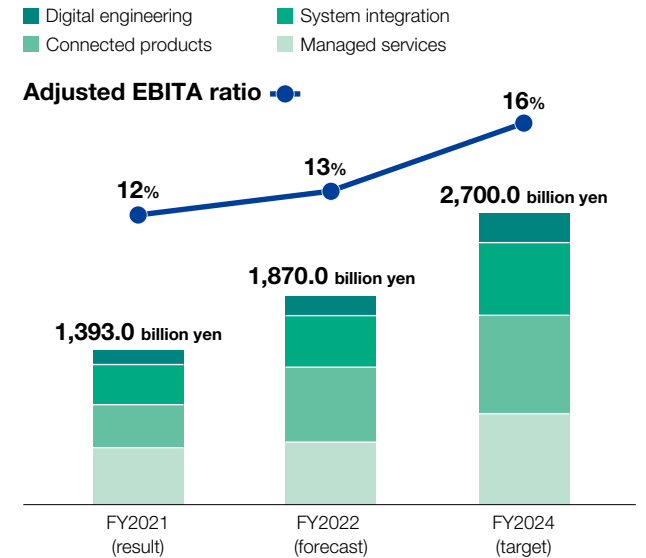
External evaluations

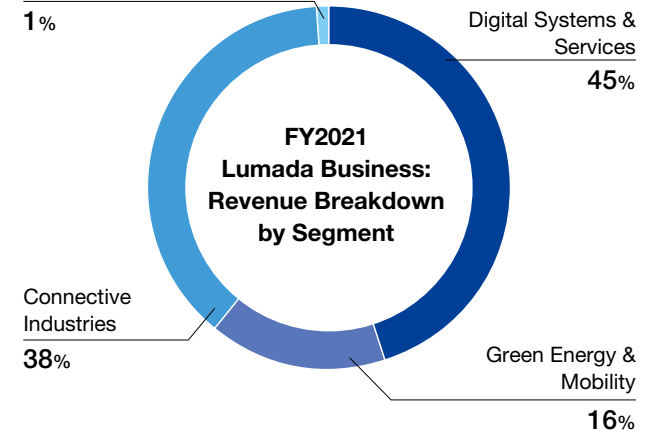| 2021 | • Received DX Grand Prix award in "Digital Transformation Brand 2021" |
| | • Named a leader in the "2021 Gartner® Magic Quadrant™ for Industrial IoT Platforms" report (second consecutive year) |
| 2022 | • Received DX Grand Prix award in "Digital Transformation Brand 2022" (second consecutive year) |

DX銘柄2022
Digital Transformation

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Lumada Performance Highlights

Lumada Business revenues *Excludes listed subsidiaries

- Digital engineering
- Connected products
- System integration
- Managed services

Adjusted EBITA ratio

12%   13%   16%

1,393.0 billion yen   1,870.0 billion yen   2,700.0 billion yen

FY2021 (result)   FY2022 (forecast)   FY2024 (target)

FY2021 Lumada Business: Revenue Breakdown by Segment

- Hitachi Astemo 1%
- Digital Systems & Services 45%
- Connective Industries 38%
- Green Energy & Mobility 16%

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Evolution of Lumada

Shift to Cyclical Business Model

As the term VUCA* implies, we are in an era of rapid change, symbolized by technological advances, diversification of customers' lifestyles and values, and market volatility, while the focus of business is shifting from the sale of goods to subscription-type solutions, and service-type businesses are emerging at an ever-increasing rate. To address such changes in customer needs and business conditions, we will evolve Lumada into a cyclical business model that continuously provides value by utilizing digital technologies, such as data analysis and AI. Specifically, as shown on the right, Lumada will continuously implement a cycle of understanding customer issues (PLAN: first quadrant), creating and implementing solutions (BUILD: second quadrant), operating (OPERATE: third quadrant), and maintaining (MAINTAIN: fourth quadrant) to enhance value for our customers. In this way, we will continue increasing value for customers.

*Acronym for "volatility," "uncertainty," "complexity," and "ambiguity" (coined term)

Leveraging GlobalLogic's Capabilities

Design thinking and digital engineering skills are extremely effective in capturing the needs and challenges of customers and society, incorporating them into agile solutions, and increasing value for customers. With this in mind, we acquired GlobalLogic, which has design thinking and digital engineering capabilities. To date, we have strengthened and developed our business by leveraging our customer base and capabilities in each of the four quadrants. With the addition of GlobalLogic, we can now connect each quadrant more seamlessly and accelerate the cycle continuously. We have also expanded our global footprint. We will leverage this cycle to capture repeat orders and grow Lumada in response to the expanding market.

Leveraging the strengths of Hitachi Energy, Hitachi Vantara, and GlobalLogic, we are already producing outcomes from OT and IT synergy projects and have initiated a cycle of digital business development, co-provisioning, demonstration, and implementation.

Secure data management and hybrid cloud support
Hitachi Vantara, Hitachi Systems, etc.

Design thinking, digital engineering capabilities
GlobalLogic, etc.

MAINTAIN — Managed services | Digital engineering — PLAN
Understand our customers' management challenges
Predictive Maintenance | Design Thinking
Operate, maintain, and assess for the next step | LUMADA · AI tools / Methodologies / Customer Cases / Solutions | Develop solutions with IT/OT/Products
Remote/Automation | Digital Twin
Implement solutions
OPERATE — Connected products | System integration — BUILD

Product, OT knowledge, customer base
Hitachi Energy, Hitachi Rail, JR Automation, etc.

Highly reliable system integration
Hitachi Vantara, Hitachi Solutions, etc.

Cycle Configuration

- Digital engineering business: Driving problem resolution through design thinking
- System integration business: Building IoT systems for data collection and analysis
- Connected products business: Improving productivity and reducing operating costs by introducing Internet-connected products and remote/automated solutions
- Managed services business: Using operation monitoring and predictive failure diagnosis to achieve advances in operation and maintenance while creating and embracing new business opportunities in such areas as ticketing and digital payment utilizing secure data management

Hitachi's Strengths

Hitachi's major strength, which other companies cannot immediately emulate, is its ability to provide continuous value to customers and society by linking the capabilities of each quadrant. In addition to GlobalLogic's design thinking and engineering capabilities, such capabilities include the system integration capabilities that our Front Business Unit, Hitachi Solutions, and Hitachi Vantara have developed over many years in Japan and overseas, as well as the customer bases and expertise of Hitachi Energy, Hitachi Rail, and JR Automation and the hybrid cloud support of Hitachi Vantara and Hitachi Systems.

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Hitachi Digital: Spearheading Development and Execution of Digital Strategies across the Hitachi Group

In April 2022, we established Hitachi Digital as a command post to accelerate the deployment of Lumada globally.

Hitachi Digital is based in North America, where the market is particularly large. Targeting the rapidly growing global DX market, it will spearhead the formulation and execution of Hitachi's Groupwide digital strategy. In North America, the speed of progress and evolution of technologies and solutions is extremely high, so Hitachi Digital will play a role in incorporating best local practices and promoting the expansion of Lumada globally. In addition to Hitachi Vantara and GlobalLogic, we will accelerate the expansion of Lumada across the Hitachi Group by driving synergy co-creation with group companies in the OT sector, including Hitachi Energy, Hitachi Rail, and JR Automation.

To this end, the Digital Systems & Services (DSS) sector plans to invest 200 billion yen in growing Lumada under Mid-term Management Plan 2024. For example, we will look to invest in creating synergies with Hitachi Energy and Hitachi Rail, as well as go-to-market initiatives, such as green transformation (GX) of social infrastructure, while leveraging Hitachi's own assets to develop solutions and attract digital talent.

Hitachi Digital will lead the development and implementation of the digital strategies across the Hitachi Group

Provide customers of all the Hitachi Group with innovative values based on OT × IT × Products

Green Energy & Mobility
Connective Industries
Hitachi Astemo

Digital Systems & Services

Hitachi Digital

Develop and implement the digital strategies across the Hitachi Group

Organize Groupwide projects with locally-led decisions to accelerate the speed of value creation and provision

Investments in growth for the global expansion of the Lumada business
Continuously invest in the resources and capabilities necessary for business expansion at each quadrant of the customer's problem-solving cycle

| Co-creation, Digital engineering | Global delivery | Cloud, Managed services |

Interview with CEO of Hitachi Digital

My mission is to expand the scale of Lumada's business in the Hitachi Group from 1.4 trillion yen to 2.7 trillion yen. The challenging part of this mission is to grow Lumada's business in fields where its presence is not high, such as the Green Energy & Mobility and Connective Industries sectors.

As a former member of Hitachi's Control System Platform Division, I have gained personal experience in OT, and I was also involved with Hitachi Global Life Solutions, which focuses on consumer electronics (products). One of my important roles is to expand new business opportunities fields that bring together OT/products and digital technologies. Using differing business timelines, business models, and KPIs, I will continue striving to connect OT/products and digital to achieve business successes.

I will chair a Board meeting attended by the CEOs of Hitachi Vantara, GlobalLogic, Hitachi Energy, Hitachi Rail, and other companies. At the meeting, we will share each company's digital strategy, determine areas of focus and investment, and make decisions on how to approach customers and develop sales and marketing activities.

Jun Taniguchi,
Vice President and Executive Officer,
CEO of Hitachi Digital LLC

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Our Approach to Lumada's Business Expansion

From the perspectives of customers' digital utilization and Hitachi's business opportunities, we will broadly divide our approach into the following two target areas.

Target Area 1

In the technology, financial services, retail, telecommunications, and media industries, where customers are increasingly using digital technology, the DSS sector will take the lead in approaching GlobalLogic's customer base. Meanwhile, Hitachi Vantara and GlobalLogic will collaborate to jointly develop powerful IT solutions and expand their business through cross-selling. In fiscal 2021, we combined GlobalLogic's design thinking and digital engineering services with Hitachi Vantara's expertise in cloud services and system operation and maintenance, enabling us to provide end-to-end solutions that meet customers' DX needs.

Target Area 2

In industries with large assets, such as energy, mobility, automobiles, manufacturing, and healthcare, we expect digital technology to be the driver of future growth. Here, we will combine OT, IT, and products to provide customers with end-to-end solutions and services, including grid automation, MaaS, Industrial Internet of things (IIoT), and digital healthcare, demonstrating the true power of "One Hitachi." For example, Hitachi Energy, Hitachi Vantara, and GlobalLogic are working together to expand digital solutions in the energy sector by upgrading asset management software and developing next-generation energy platforms.

Lumada Synergy Case Study

Asset Management Innovation

Hitachi Energy, Hitachi Vantara, and GlobalLogic have launched a project to promote next-generation green digital services by leveraging their respective strengths. Targeting the facility asset management segment of the social infrastructure, public utilities, and manufacturing industries, the three companies aim to provide end-to-end services covering everything from customer experience design to solution development, delivery, and maintenance. Among their initiatives, Hitachi Energy and Hitachi Vantara took the lead in collaborating on a project called "Lumada Asset Management" in fiscal 2020. Here, Hitachi Energy has integrated Digital Enterprise, a suite of asset and field operational management solutions provided mainly to electric power companies, into Lumada, and both companies are now offering large-scale solutions and engaging in marketing activities targeting the electric power sector in North America and other regions. GlobalLogic joined the project in July 2021, leveraging its design thinking and digital engineering expertise to provide product development and service design capabilities.

This has strengthened Lumada Asset Management, which is now expanding its business with the development of facility inspection solutions using diagnostic imaging.

Scaling: Power utilities ▶ Railways ▶ Buildings, Data centers

APM: Asset Performance Management
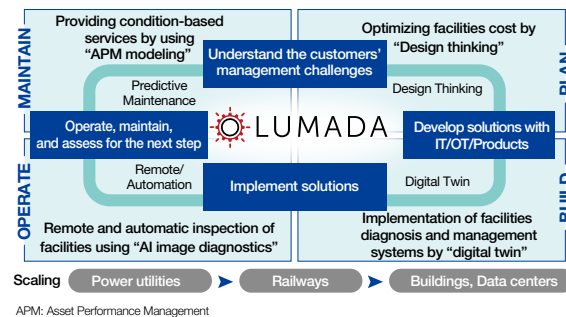
Comments from Project Leaders (Hitachi Energy and Hitachi Vantara)

The partnership with Hitachi Vantara is a collaboration in go-to-market as well as product development support. Traditionally, Hitachi Energy has focused on customers in the utility and transportation sectors, but through our collaboration with Hitachi Vantara, we have been able to strengthen our presence in sectors such as mining, as well as expand into other manufacturing industries where we had little or no presence.
Just looking back over the past year, we have been able to reach a large number of customers. Hitachi Vantara has been a strong value-delivery partner for Hitachi Energy.

Bryan Friehauf,
Senior Vice President,
Enterprise Software
Solutions, Hitachi Energy

We are working together in three areas. First, on initiatives that complement each other's Lumada software capabilities. This includes Hitachi Energy's Asset & Works Management software, and Hitachi Vantara's IoT-related capabilities that connect devices and data to gain actionable insights. These software capabilities are very complementary, and are industry leading elements of Lumada.
The second is an effort to accelerate and extend the development of both companies' capabilities. GlobalLogic is also collaborating on this.
The third is the market deployment of these capabilities. The sales forces from Hitachi Energy and Hitachi Vantara are working together on this.

Phil Gruber,
Energy Industry Leader,
Hitachi Vantara

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Mid-term Management Plan 2024 │ Green Strategy

Becoming a Climate Change Innovator

In recent years, many countries have set goals for carbon neutrality and made investments toward that end amid a growing awareness of the importance of international efforts to protect the global environment. Aiming to become a Climate Change Innovator, Hitachi is working to resolve environmental issues and achieve a higher QoL (Quality of Life) through its Social Innovation Business in collaborative creation with stakeholders.

We are working to realize a "decarbonized society," a "resource efficient society," and a "harmonized society with nature," as defined in our "Environmental Vision" and in our long-term environmental targets, "Hitachi Environmental Innovation 2050." In particular, we are accelerating our efforts to decarbonize. In addition to the targets for carbon neutrality at our business sites (factories and offices) by fiscal 2030, we set a target of achieving carbon neutrality throughout the value chain by fiscal 2050. This target covers CO_2 emissions from our procurement partners and from the use of Hitachi products and services by our customers. By collaborating with customers, partners, and governments, Hitachi will lead the way toward a better world, with the aim of realizing a decarbonized society.

To realize Hitachi Environmental Innovation 2050, Hitachi establishes three-year indicators and targets, and conducts environmental activities. BUs and major group companies also set their own targets based on the Hitachi Group's Environmental Action Plan and strive to achieve their targets.

Strengthen GX Promotion Organization

To uncover business opportunities centered on the environment and lead value creation throughout the Hitachi Group and across sectors, as well as realize sustainable growth through GX (Green Transformation), the Global Environmental Division was established in April 2022, with executive officer Lorena Dellagiovanna as Head of Global Environment Division (former Chief Environmental Officer). At the same time, she was appointed to the newly created position of Chief Sustainability Officer.

Lorena Dellagiovanna
Vice President and Executive Officer, Chief Sustainability Officer, Head of Global Environment Division, and CDIO

Environmental Vision

Hitachi will resolve environmental issues and achieve both a higher quality of life and a sustainable society through its Social Innovation Business in collaborative creation with its stakeholders.

Long-term Environmental Targets: Hitachi Environmental Innovation 2050

For a Decarbonized Society

Achieve carbon neutrality by FY2050 throughout the value chain, reduce CO_2 emissions by 50% by FY2030 (compared with FY2010)

Achieve carbon neutrality by FY2030 at business sites (factories and offices)

For a Resource-Efficient Society

Build a society that uses water and other resources efficiently with customers and society

Efficiency in use of water/resources FY2050

50% improvement
(compared with FY2010 in the Hitachi Group)

For a Harmonized Society with Nature

Impacts on natural capital
Minimized

Environmental Action Plan

To achieve its Long-term Environmental Targets, Hitachi sets indicators and targets every three years. The "Environmental Action Plan for 2024," covering the targets for FY2022 through FY2024, is in progress.

One of the decarbonization targets at Business Sites (Factories and Offices)

	Fiscal 2022	Fiscal 2023	Fiscal 2024
Reduction rate target in total CO_2 emissions (compared with fiscal 2010)	32%	35%	50%

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Hitachi GX Strategy

GX for GROWTH
Enabling our customers to reduce CO_2 emissions through enhanced product offerings

GX for CORE
Decarbonizing Hitachi activities through Scope 1 & 2 carbon neutrality commitments by FY2030 and Scope 3 by FY2050

To accelerate and promote Hitachi's long-term environmental targets as measures, Hitachi developed two business strategies, GX for GROWTH (customer and society decarbonization) and GX for CORE (Hitachi decarbonization). Under GX for GROWTH, we will support customers in reducing CO_2 emissions by expanding Hitachi's greener and more efficient product portfolio and providing customers with E2E (End-to-End) solutions across sectors. By fiscal 2024, we aim to contribute to reduce CO_2 emissions by approximately 100 million metric tons per year, equivalent to 1.1 trillion yen in monetary terms. We will accelerate the development of various solutions realizing energy transition, the electrification of mobility and the conservation of energy. GX for CORE aims to decarbonize our own operations. We aim to achieve reductions in Scope 1 and 2 by investing approximately 37 billion yen over the next three years in efforts to conserve energy and generate renewable energy, and also combining measures such as the purchase of renewable energy, the acquisition of green power certificates and the purchase of credits for neutralization.

Achievement of Hitachi GX Strategy can bring New Value

Hitachi believes a strong commitment to sustainability will be the driving force for realizing enhanced corporate value. Specifically, Hitachi believes GX for GROWTH will enable further enhancement of corporate value through the provision of increased value through the new E2E service solutions for mobility and energy as a service. In EV Value Chain as a Service, we are developing turnkey solutions and promoting the shift to EVs for bus fleets, light commercial vehicles and private vehicles. Hitachi aims to increase value by providing more environmentally friendly products and solutions as a leader in carbon-free societies. We will proactively engage with our own management resources in addition to capital alliances with outside companies. To this end, we are considering investments in startups with the aim of developing green technologies.

We also believe we can create the value through efficiency gain with less energy consumption and further utilization of renewable energy based on GX for CORE. As one example, we are considering the use of wide-area energy centers and the optimization of energy at multiple sites within facilities management. We are also avoiding costs to facilitate future high-quality credit purchases for neutralization and considering the use of green finance to reduce capital costs.

Hitachi Enterprise Value 2021 | Value-added from GX for CORE | Value-added from GX for GROWTH | Hitachi Enterprise Value 2030
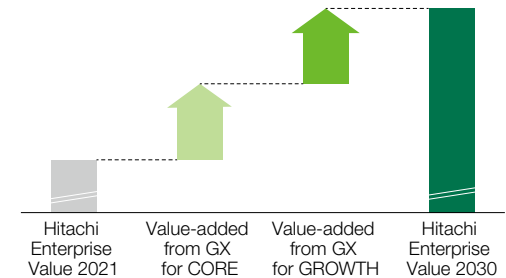
Road Map for Realizing Hitachi's Vision
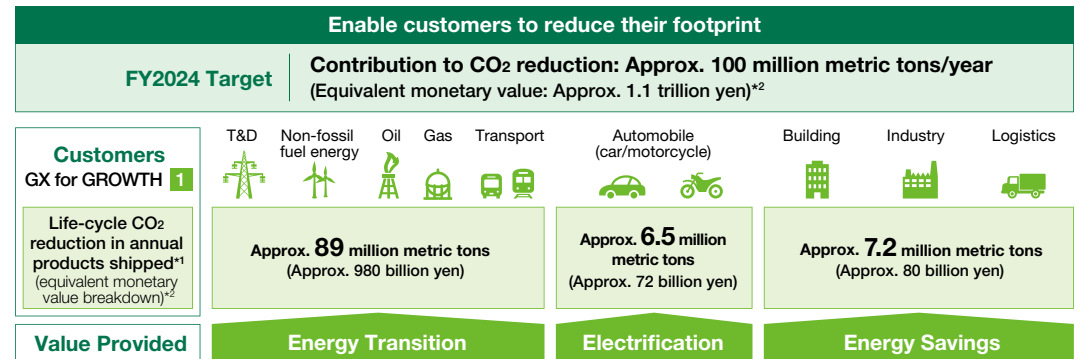
2024 | 2027 | 2030 | 2050

GX for GROWTH

1 Enable customers to reduce their footprint
- Increase sale of green products (with higher efficiency)
- Propose E2E green solutions (BTaaS*3, EVaaS*4)
- Launch carbon management platform

● **100 Mt-CO2e*2**
● Pilots completed → Roll out to new customers/geographies

2 Invest in new green technologies
- Premier Technologies development (hydrogen, CCS*5, DAC*6, energy storage)

● 100 MW HV power-electrolyser/methanation
● 100 MW BESS*7
● Artificial photosynthesis

GX for CORE

3 Build Circular Society
- Waste reduction
- Usage 3R materials

● Apply eco-design for new product development
● Battery recycling
● Renewable recycling

4 Lead Carbon Neutrality (Scope 1 & 2 + 3)*1
- Carbon Neutrality of Hitachi operations

● **CN2030** (Scope 1 & 2 + Scope 3 50%)
● **CN2050** (Scope 1 & 2 + 3)

Enablers

5 External interaction
- Launch green bonds
- Improve ESG rating

● Green bond framework → (Continuous issue) ● Highest rank in each assessment
● ESG management system → (Expand eco-system)

*1 SBTi certified on Scope 1 & 2 carbon neutrality by 2030, Scope 3 40% reduction by 2030 vs. 2010, aligned with 1.5°C commitment. Certification will be updated for new targets.
*2 CO₂ equivalent   *3 Battery as a Service   *4 EV Value Chain as a Service   *5 Carbon Capture and Storage   *6 Direct Air Capture   *7 Battery Energy Storage System

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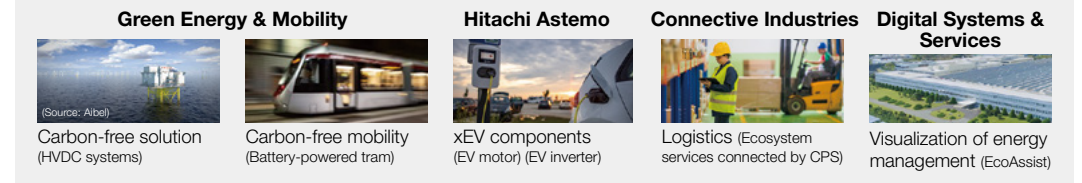## Specific GX for GROWTH, CORE Initiatives

GX for GROWTH

Through GX for GROWTH, Hitachi Energy will lead group contributions to reducing the carbon footprint of customers throughout the world. Our goal is to contribute to an annual reduction in CO_2 emissions of approximately 100 million metric tons by fiscal 2024, equivalent to about 1.1 trillion yen in monetary terms. Sustainable products and systems, power electronics and digital solutions are being deployed to build the foundation for a system of systems and enabling the energy transition. Technologies such as HVDC (High-Voltage Direct Current), FACTS (Flexible Alternating Current Transmission Systems) for power quality and digital solutions play an important role in the integration of renewables, long-distance power transmission, grid interconnections and ensuring flexibility, resilience, and efficiency. Additionally, Hitachi Rail successfully tested a storage battery–powered tram on a section of track in Florence, Italy. Hitachi will contribute to lower energy consumption in global urban transportation (railways). In the Green Energy & Mobility sector, with plans to invest 200 billion yen in R&D under the Mid-term Management Plan 2024, we will contribute to reducing CO_2 emissions from customers globally through the creation of new technologies, products and solutions that improve energy conversion efficiency. Hitachi Astemo is developing EV motors and inverters, which are key components amid the shift toward electrification in the next-generation vehicles (xEV) field and we plan to invest 300 billion yen in R&D under the Mid-term Management Plan 2024 for electrification.To accelerate activities, we continue to invest in future technologies such as hydrogen, artificial photosynthesis and carbon (or CO_2) utilization. Further, in utilizing services that create an ecosystem through the collection of vast amounts of data obtained in the real world (physical space) and analyzed in cyberspace, we will contribute to energy conservation in the manufacturing and logistics fields, etc.

Enable customers to reduce their footprint

FY2024 Target	**Contribution to CO_2 reduction: Approx. 100 million metric tons/year** (Equivalent monetary value: Approx. 1.1 trillion yen)[*2]

Customers GX for GROWTH 1	T&D	Non-fossil fuel energy	Oil	Gas	Transport	Automobile (car/motorcycle)	Building	Industry	Logistics
Life-cycle CO_2 reduction in annual products shipped[*1] (equivalent monetary value breakdown)[*2]	Approx. **89** million metric tons (Approx. 980 billion yen)					Approx. **6.5** million metric tons (Approx. 72 billion yen)	Approx. **7.2** million metric tons (Approx. 80 billion yen)		
Value Provided	**Energy Transition**					**Electrification**	**Energy Savings**		

*1 Base year FY2013   *2 Estimated carbon price as 11,000 yen per metric ton-CO_2 and converting CO_2 reduction by decarbonization solutions into monetary value
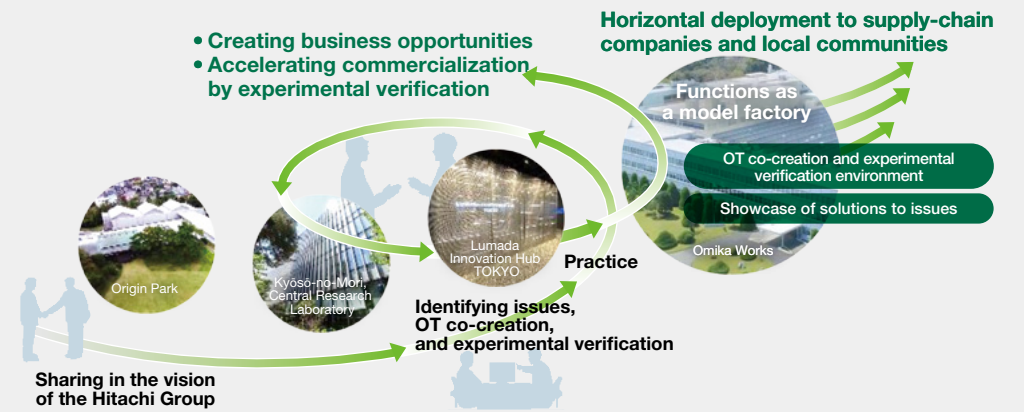
Sector focus business   GX for GROWTH 2

Green Energy & Mobility		**Hitachi Astemo**	**Connective Industries**	**Digital Systems & Services**
(Source: Aibel)				
Carbon-free solution (HVDC systems)	Carbon-free mobility (Battery-powered tram)	xEV components (EV motor) (EV inverter)	Logistics (Ecosystem services connected by CPS)	Visualization of energy management (EcoAssist)

Omika Green Network

In 2020, Hitachi's Omika Works (Hitachi City, Ibaraki Prefecture) was selected as a Lighthouse advanced factory by WEF (World Economic Forum), a first for the factory of a Japanese company. As a factory implementing Hitachi's Lumada solutions combining OT, IT and products, the Omika Works is engaged in resolving various issues and creating new businesses by mobilizing technologies and know-how in a variety of fields.

With this factory as a hub, Hitachi created the Omika Green Network to promote decarbonization alongside stakeholders, conduct various demonstrations in the Omika Works field and accumulate technologies and know-how related to decarbonization. These efforts aim to achieve carbon neutrality across the entire value chain and support customer business activities and environmental efforts through the provision of decarbonization measures to customers. We set the goal of realizing carbon neutrality at the Omika Works in 2024, returning the technology and knowledge gained to local communities and suppliers.

- **Creating business opportunities**
- **Accelerating commercialization by experimental verification**

Horizontal deployment to supply-chain companies and local communities

Functions as a model factory

OT co-creation and experimental verification environment

Showcase of solutions to issues

Omika Works

Practice

Origin Park

Kyōsō-no-Mori Central Research Laboratory

Lumada Innovation Hub TOKYO

Identifying issues, OT co-creation, and experimental verification

Sharing in the vision of the Hitachi Group

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GX for CORE

As a decarbonization initiative, Hitachi has set a goal for fiscal 2024 of reducing CO_2 emissions by 50% compared with fiscal 2010. The specific aim is to reduce emissions 33% by conserving energy and generating renewable energy. At Hitachi Rail's Tito Scalo plant (Italy), 50%–60% of all the energy used onsite is generated from sunlight, supplying more than 700 MWh of electricity per year through solar power and reducing 325 metric tons of CO_2 annually. We are aiming to reduce CO_2 emissions 33% by energy saving and renewable energy generation, 31% by renewable energy purchases, 26% by green power certificate purchases and 10% by high-quality credit purchases for neutralization. Combining various initiatives, we will reduce CO_2 emissions by 50% across the entire value chain by fiscal 2030 (compared with fiscal 2010), achieving carbon neutrality by fiscal 2050. To accelerate these efforts, Hitachi will invest 37 billion yen in energy conservation and renewable energy power generation over the next three years. To realize carbon neutrality by fiscal 2050, we are formulating plans to establish monitoring mechanisms and measurable KPIs for up and downstream CO_2 emissions. In terms of downstream CO_2 emissions, we are working toward two goals: CO_2 emissions source transparency and the development of energy-saving products.

On track to achieve carbon neutrality for Scope 1 & 2 by FY2030, strengthen commitment for CN by FY2050 and Circular Economy

Lead on Carbon Neutrality (Scope 1 & 2 + 3)

Scope 1 & 2: 50%[1] reduction of CO_2 emissions in FY2024 (37 billion yen investment for energy saving and an RE facility in three years)

Scope 3: 50%[1] reduction by FY2030, carbon neutrality throughout value chain by FY2050

Scope 1 & 2 decarbonization levers

Levers to abate CO_2 emissions

Energy saving + RE generation	RE purchase
33%	**31**%

RE certificate	Neutralization
26%	**10**%

Scope 3

Upstream	Downstream
Establishing monitoring scheme and setting visible KPIs	Accelerating reductions to promote CO_2 visualization and energy-saving products

[1] 50% reduction: base year FY2010

Completed/Ongoing projects

Mass-consumption type

- Energy saving/improve HVAC
- RE self-consumption

Yokohama Office

Okayama Data Center

Area intensive type 3 areas in Ibaraki

- Use as energy center
- Asset share
- Facility management BPO[2]

Hitachi
Hitachinaka
Tsuchiura

Rinkai Factory

Omika Works

Mito Works

Naka Site

Aiming for a 100% fossil-free factory (Hitachi Rail)

- Generating 50%–60% of energy from solar panels
- Expecting to reach more than 700 MWh
- Reducing carbon emissions by 325t annually

Tito Scalo Site, Italy

[2] Business Process Outsourcing

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Initiatives for Realizing a Circular Economy

Hitachi will promote the transition from a conventional linear economy to a circular economy with the aim of creating a resource recycling–based society. Defining KPIs that establish target values to be achieved by business units and major group companies, we set goals such as reducing the volume of manufacturing site waste disposed in landfills. In the procurement, development and design divisions, we promote resource conservation through the introduction of design methods that are easily dismantled and use recyclable materials. We will also promote eco-designs, including increased use of recycled and eco-friendly materials. Further, we will work on long-term product usage, including the reuse, repair, improvement and remaking of products that are no longer needed. To support customer needs as they shift from goods to experiences, and society as it shifts from ownership to usage, Hitachi will provide services utilizing leasing, pay-per-use systems and subscriptions to promote the effective use of resources and assets. In the field of technology developments supporting resource recycling, we will accelerate decarbonization efforts through the development of raw materials, products, tools, applications and services.

Recycling 99% of Transformers

Hitachi Energy is promoting efforts in cooperation with Sweden's Stena Recycling to reuse approximately 99% of materials generated from the disposal of old transformers. At the end of their life, old transformers are dismantled and recycled to minimize their impact on the environment. About 64% of materials are recycled; 35%, including oil, is either recycled or incinerated for conversion to energy; and the remaining 1% is used as scrap. The provision of services has already been launched in northern Europe, with plans to expand in the future.
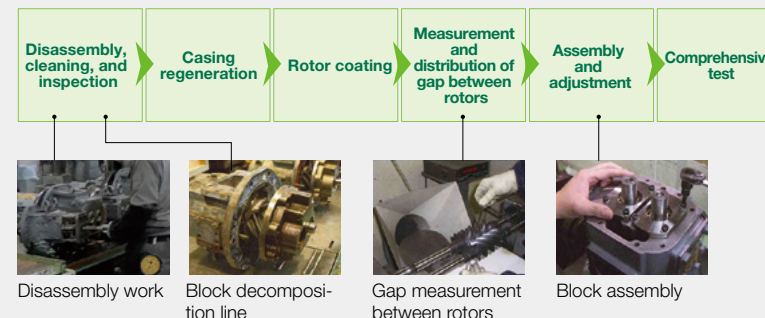

Transformer at the substation

Remanufacturing of Air Compressors (Hitachi Industrial Equipment Systems, Sullair)

Hitachi Industrial Equipment Systems and Sullair (US) promote rebuilding and remanufacturing of air compressors that have been in operation at customer sites for a long time. Air compressors received from customers are disassembled and inspected, and reusable parts are repaired and adjusted. They are then reassembled and performance inspected, and through other numerous steps, the air compressors finally restore their original performance and functionality. This allows fewer parts to be manufactured, and significantly reduces the energy required for processing raw materials relative to manufacturing new products.

Work steps

Disassembly, cleaning, and inspection → Casing regeneration → Rotor coating → Measurement and distribution of gap between rotors → Assembly and adjustment → Comprehensive test

Disassembly work   Block decomposition line   Gap measurement between rotors   Block assembly

Note: Photos are from Hitachi Industrial Equipment Systems

Participation in Public Forums

Hitachi proactively participates in numerous global public forums focused on global sustainability challenges.

COP26 (2021 Glasgow)
- Supported as Principle Partner
- Held the Hitachi European Innovation Forum
- Hosted Towards Net Zero—Greening Cities Through Low Carbon Connected Urban Transport

World Economic Forum (WEF, 2022 Davos)
- Participated in the mainstream climate leadership panel with the Alliance of CEO Climate Leaders

CDP Evaluations

Achieved CDP's Highest Score of "Grade A" in Climate Change and Water Security

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Mid-term Management Plan 2024 | Innovation Strategy

Innovation Strategy in the Mid-term Management Plan 2024

In the Mid-term Management Plan 2024, we will be focusing on generating innovation through digitalization to achieve global business growth. During the Mid-term Management Plan 2021, we opened Kyōsō-no-Mori and expanded co-creation with customers, while reorganizing technology platforms and acquiring business models through startup investment and collaborations. To further accelerate these initiatives under the Mid-term Management Plan 2024, the newly established Innovation Growth Strategy Division will formulate innovation investment strategies that will inspire the next of growth for customers, and under this strategy, promote the creation of digital service businesses and radical innovation.

Expanding Hitachi Group Investments in Innovation

Under the Mid-term Management Plan 2024, we will expand investments in innovation across the entire Hitachi Group for further growth. A cumulative total of 100.0 billion yen will be invested in advanced research during the three-year plan, expanding Groupwide R&D investment to 1.1 trillion yen. We will also invest an additional 50.0 billion yen in corporate venturing (CV). Through these investments, Hitachi aims to create radical innovation to solve future societal issues.

Innovation Promotion Structure for DX/GX Global Growth

Fully leveraging the Hitachi Group's technology platforms, human capital and the customer network, we will create DX/GX innovations under a global structure. The Research & Development Group with a highly diversified workforce of 2,300 people, will be leading the creation of innovation through digitalization and other technologies. Together with Hitachi Ventures GmbH (HVG), we will work to create innovation that will solve issues faced by customers and society through collaborations with leading startups in a wide-range of fields. The Global Intellectual Property Group is promoting the establishment of a new intellectual property platform to provide value to global customers under experienced global leadership. We will accelerate global business growth together with Hitachi Energy, GlobalLogic, and business units in each region.

Planetary Boundaries — Protect Earth Sustain society

Resolving customer and societal issues with data and co-creation

Wellbeing — A society where every individual is comfortable and active

MMP 2018	MMP 2021	MMP 2024
Pursued innovation through collaborative creation — Established a three-center structure for co-creation with customers (CSI), technology innovation (CTI) and exploratory research (CER)	**April 2019 Opened Kyōsō-no-Mori**	**Established Innovation Growth Strategy Division** — Formulate innovation investment strategies to inspire customers' next of growth
Launched NEXPERIENCE/Lumada — Established global collaborative creation hubs for co-creation with customers in Japan, North America, Europe, China and Asia	**Reorganized technology platforms** — Integrated the technology platforms of Hitachi Energy, Hitachi Astemo, Hitachi Vantara and GlobalLogic; created synergies	**Create digital service businesses** — Provide value through OT × IT × Products to support customer growth
Open Labs — Collaborated with the University of Tokyo, Kyoto University, Hokkaido University, University of Cambridge, Tsinghua University, and the KOBE Biomedical Innovation Cluster	**June 2019 Launched new CV fund company** — Acquired business models through startup investment and collaborations	**Create radical innovation** — Backcast from 2050 to resolve customers' future management issues

LUMADA

CSI: Center for Global Social Innovation, CTI: Center for Technology Innovation, CER: Center for Exploratory Research, CV: Corporate Venturing

Cumulative investment (over three years)	Advanced research investment: 100.0 billion yen	CV investment: 50.0 billion yen

Enhance R&D investment in advanced research

R&D investment (billion yen)

MMP 2021: 874.4 billion yen (812.1 / 62.3)
MMP 2024: 1.1 trillion yen (1,020.0 / 100.0)
About 200.0 billion yen higher
Sectors, Group companies
Advanced research investment (corporate)

Enhance investment in corporate venturing

Cumulative fund size (billion yen)

FY2019: HV Fund 1
FY2021: HV Fund 2
MMP 2024: 50.0 (Expand HV Fund)

Innovation Growth Strategy Division
Formulate and execute innovation investment strategies that stimulate further customer growth — **Keiji Kojima, President & CEO**

Research & Development Group   2,300 people
Drive innovation with digitalization and technologies to provide value through co-creation — **Norihiro Suzuki, CTO and GM of the R&D Group**

Global Intellectual Property Group   200 people
Establish intellectual property platform to provide value to global customers — **Stephen Manetta, CIPO**

Europe
Create the environment business in collaboration with Hitachi Energy and Hitachi Rail
Participate in the European Environment ecosystem — **Hitachi Energy: Gerhard Salge, CTO**

North America
Enhance creation of digital service businesses through cooperation with GlobalLogic, Hitachi Vantara and Hitachi Digital — **GlobalLogic: Sunil K. Singh, CTO**

China
Expand industrial GX/DX business in collaboration with local group companies
Strengthen decarbonization efforts — **Hitachi China: Yasushi Harada, CTO**

Japan
Promote customer co-creation targeting DX/GX, establish world-leading technology platforms, create radical innovation addressing planetary boundaries and wellbeing

Asia
India: Strengthen digital engineering
APAC: Focus on green buildings and smart cities

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Generating Digital Service Businesses with the Lumada Growth Model

Under the Mid-term Management Plan 2024, we will further develop the Lumada growth model to co-create innovation together with customers and promote digital services that address our customers' next management challenges. To ramp up the Lumada growth cycle, we will deepen our understanding of captured signs and changes in society and customers, draft together with our customers visions for new growth, and provide innovations to realize that growth. In the Lumada growth model, we will promote the categorization of business segment characteristics and operations as well as work with the global front teams to strengthen marketing activities, to materialize and scale up through co-creation.

Backcasting from 2050 to Generate Radical Innovation

In formulating the Mid-term Management Plan 2024, we explored future societal issues through repeated discussions with international organizations, universities, customers and startups. Based on these discussions, we understood that the societal challenges that need to be addressed as we approach 2050 are "an environmentally-neutral society," "a society which supports an active 100-year lifespan of its citizens," and "the co-evolution of digital technologies, people and society," and set them as areas of focus. We are addressing these concerns through such initiatives as "energy storage and supply" and "direct air capture" to realize a carbon-negative society; "minimally invasive cancer treatment" and "designed cells" to overcome cancer and intractable and infectious diseases; and "Ultra Big Data Management" and "silicon quantum computers" to facilitate a data economy and computing innovation. Hitachi will be taking on the challenge of creating radical innovation to resolve future issues by backcasting from 2050.

Value	Present	2030	2050
Environment	Arrival of a hydrogen-based society realizing carbon neutrality • Carbon pricing • Hydrogen mobility	• Carbon neutrality • Full-scale utilization of hydrogen energy	Environmentally-neutral society • Energy storage and supply • Direct air capture
	Development of a circular economy facilitating zero waste and a comprehensive recycling-based society • Restrictions on plastics	• Transition to bio-based and resource recycling	
Safety, Security & Healthcare	Eradication of cancers with biomedical technologies • Overcome COVID-19 pandemic	• Expansion of regenerative medicine, Cell therapy market expansion	Society with active, 100-year lifespans • Minimally invasive cancer treatments • Designer cells
	Advances in AR/VR enabling flexible workstyles • Remote work	• Remedy gaps using avatars and online education	
Resilience	Advances in AI leading to the automation of a wide range of operations • RPA acceleration due to labor shortage	• AI governance	Co-evolution of digital technologies, people and society • Ultra Big Data Management • Silicon quantum computer
	Acceleration of technology development cycles using quantum computers • Risk analysis, Traffic control	• Material and new drug developments	

Accelerating Outside-in Innovation through Startup Investments

Through investments and collaborations with startup companies, Hitachi will achieve radical innovation and acquire groundbreaking business models contributing to the expansion of the Lumada business. In 2019, we established Hitachi Ventures GmbH (HVG) and launched the first fund. We have now launched a second fund and invested in 17 companies. In May 2022, HVG CEO Stefan Gabriel was ranked 19th on the Top 50 Powerlist by Global Corporate Venturing. Under the Mid-term Management Plan 2024, we will expand innovation ecosystems with customers, startup companies, academia and others. Specifically, we will focus on three areas identified in backcasting from 2050: "achieving a decarbonized and carbon-negative society," "overcoming cancer and intractable and infectious diseases," and "promoting the co-evolution of digital technologies, people and society."

Foster innovation ecosystems

Innovation and research strategies — Customers and partners
Business units — Industries — Global institutions/governments
R&D — Radical innovation ecosystems — Academia
Startups — Ecosystems — Policies and frameworks
Cutting-edge facilities

Collaboration themes to accelerate radical innovations

Decarbonized society Carbon negative	• New approaches in carbon removal technologies • Negative-emission business model • Improved efficiency of artificial photosynthesis (photocatalysts and new devices)
Overcoming cancer and intractable and infectious diseases	• Fusion of biopharmaceutics and radiotherapies • Designed cell innovation technologies (genetic design, cell manufacturing and evaluation of cell functions)
Co-evolution of digital technologies, people and society	• Metaverse/Web 3.0 applications and business models (societal infrastructure and industrial fields) • Quantum applications and use cases • Quantum service business models

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R&D Strategy

Basic Policy of Hitachi's R&D

Hitachi's R&D strength is that it has established a value creation cycle based on owning platform technologies for OT × IT × Products, and know-how, and pursuing technology development through co-creation with customers and partners, adding to greater know-how.

Under the Mid-term Management Plan 2024, Research & Development will work closely with Hitachi Digital, the Global Environment Division and the Innovation Growth Strategy Division that are leading the growth strategy across the Hitachi Group. We will accelerate our initiative for the co-creation of value to further advance the Social Innovation Business, focusing on "Digital," "Green," and "Innovation" as the growth drivers. By generating innovation which will drive the Lumada growth model, we will contribute to the growth of our global business as well as create the next pillars of growth through radical innovation backcasted from 2050.

Accelerating Value Co-creation

We will develop Hitachi's unique co-creation approach, NEXPERIENCE, into a methodology to resolve societal issues and deploy the Lumada growth model. Through activities such as those in our university joint laboratories, we are capturing the *kizashi* (signs) of change in society and customers, to develop visions and business scenarios.

Initiatives in fiscal 2021 included participating in the Transition to Zero Pollution panel discussion hosted by Imperial College London in the United Kingdom to promote consensus-building on expectations and issues regarding a decarbonized, recycling-oriented society. Transition to Zero Pollution aims to achieve net zero emissions by 2050 (the state where the amount of CO_2 produced is equivalent to that removed from the atmosphere). Additionally, forums and roundtables were held at the H-UTokyo Lab. and Tsinghua University in China to discuss the realization of a carbon neutral society in each region. In fiscal 2022, we are proactively engaged in the creation of new innovations, including the establishment of a joint research center with Imperial College to accelerate the development of decarbonization and natural climate solutions.

Creating Growth Drivers

Hitachi is developing data-driven solutions under the Lumada growth model. By implementing the Lumada four-quadrant value co-creation cycle, our goal is to create growth drivers that support customer businesses. In Research & Development, we are furthering our understanding of customers' next business challenges while promoting the co-creation of innovations and digital services to resolve these issues. The Lumada growth model will be deployed worldwide together with GlobalLogic and others.
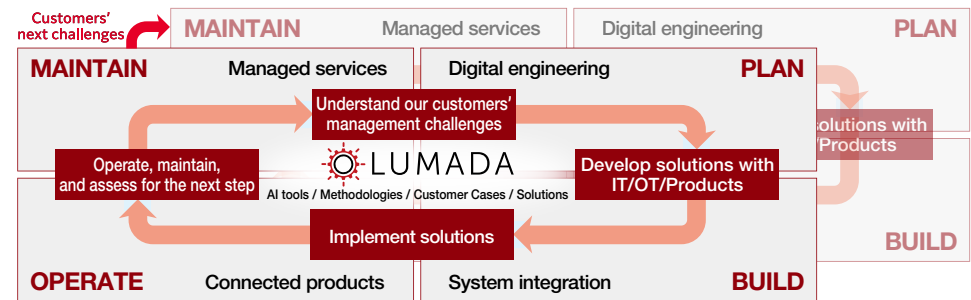
Examples of Value Co-creation in Finance and Public Services

	Current issue: Operational excellence	Next challenge: Create new demand
PLAN	Optimize work processes with design thinking	Design cross-industry financial and public service products based on OT know-how
BUILD	Increase work process system efficiency using "AI (RPA, dialogues, automated responses)," awarded first place in an international competition (SemEval2020)	Launch of Sustainable Finance Platform as inter-industry coordinated services using IoT and blockchain technology, implement an inter-industry coordinated IoT information distribution system
OPERATE	Hitachi's "Explainable AI" analyzes and evaluates operational data, and supports the implementation of AI in work systems, continuous operations and improvements	Data analysis with assured security in DFFT and Blockchain/NFT discussed at first GTGS hosted by the World Economic Forum
MAINTAIN	Hitachi's sensitivity analysis service automatically analyzes the voice of customers, and provides customer service improvements through product planning, sales strategies, risk countermeasures, and so on.	Offer value distribution services leveraging metaverse and Web 3.0

AI: Artificial Intelligence, RPA: Robotics Process Automation, GTGS: Global Technology Governance Summit, DFFT: Data Free Flow with Trust, NFT: Non-Fungible Token

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Examples of the Value Creation Cycle in the Fields of Energy, Railway and Transport

	Current issues: Innovations in asset management	Next challenge: Promote user transition to CN
PLAN	Optimize facility costs with design thinking	Consider asset optimization, including gas and hydrogen, based on a CN scenario created through shared understanding of issues with stakeholders in an industry-academia co-creation forum hosted by H-UTokyo Lab.
BUILD	Deploy Hitachi's digital maintenance platform and digital twin equipment diagnoses and management systems to maintain and improve analysis accuracy in line with changes in equipment status	Co-create and verify using the area energy management verification environment created at Kyōsō-no-Mori by combining Hitachi power generation, power storage, and equipment maintenance technologies
OPERATE	Implement remote and automated equipment inspections using "image diagnostics AI technology" that has achieved the highest level in an international competition (TRECVID2020)	Introduce DERMS to implement grid-edge control systems using technology such as Hitachi's grid edge solution for distributed energy sources
MAINTAIN	Provide condition-based services with Hitachi's APM which was selected as a Leader in the IDC MarketScape 2020–2021 Vendor Assessment	Provide multi-energy optimization service with EaaS and MaaS

APM: Asset Performance Management, CN: Carbon Neutrality, DERMS: Distributed Energy Resource Management System,
EaaS: Energy as a Service, MaaS: Mobility as a Service

Hitachi Product Strengths

Hitachi is promoting the provision of value to customers through OT × IT × Products. In terms of products, during the Mid-term Management Plan 2021, we were able to establish the top global technologies, winning prominent awards for high-speed railways, in-vehicle inverters, particle beam cancer treatment systems, and biochemical immune-assay systems.

In the Automotive System business, we are working on gearless, high-efficiency drive systems and multi-port EVs realizing the industry's most substantial size and weight reductions. Regarding the drive system (in-wheel motor), we aim to reduce energy loss by 30% compared to previous motors, and have been selected for support by the Japanese government's Green Innovation (GI) Fund, aiming for even higher efficiency.

In the measurement and analysis systems business (Hitachi High-Technologies), we will enhance the competitiveness of our semiconductor inspection and manufacturing equipment while integrating and analyzing data generated from equipment in processing, inspection, measurement and analysis to provide feedback on manufacturing processes and products to realize customer process innovations. Through co-creation with customers, we will use the data generated from products for predictive diagnostics, analytics visualization and optimizing operating conditions to contribute to reduced development time, improved yields in manufacturing, and increased productivity for customers.

Further Evolution of Lumada

In conducting R&D to further evolve Lumada, Hitachi is engaged in the creation of Lumada cyber-physical systems (CPS) that link the digital and physical spaces in real time. We are also focusing on the key technologies of AI, 5G, beyond 5G, security, electrification, and metaverse/Web 3.0. For the area of security, we are developing Public Biometric Infrastructure (PBI) technologies realizing data free flow with trust (DFFT) and promoting enhanced security for crypto assets. Regarding metaverse/Web 3.0, which will support future societal infrastructure, we will accelerate co-creations with startup companies.

Creating the Next Pillars of Growth

By backcasting from 2050, Hitachi is taking on the challenge to generate radical innovation for the next pillars of growth: "an environmentally-neutral society," "a society which supports an active 100-year lifespan of its citizens," and "the co-evolution of digital technologies, people and society."

To realize a decarbonized and carbon negative society, we are working to realize a large-scale, low-cost hydrogen production system; high-efficiency artificial photosynthesis; and a fuel production cycle fed directly by CO_2.

For "overcoming cancer and intractable and infectious diseases," we are working to develop even more advanced cancer therapy through technology such as automated positioning of particle beam radiotherapies. Furthermore, we are developing designed cells based on genetic modification and cell measurement technologies.

For the "co-evolution of digital technologies, people and society," we will further enhance ultra-high-speed database engines to realize data extraction performance speeds more than 100 times faster than conventional systems.

We are also accelerating developments for bio transformation (BX) and quantum transformation (QX), which will follow DX and GX.

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Intellectual Property (IP) Strategies

Becoming a Global Leader in IP Activities

Under the Mid-term Management Plan 2021, in line with the stated vision of becoming a global leader driving enhanced value through the use of intellectual property and the goal of realizing IP-driven social innovations, we engaged in value-based (Environment, Safety & Security, Resilience) intellectual property activities. In the Mid-term Management Plan 2024, we established a new vision to become a global leader that resolves societal issues and grows our DX and GX businesses using intellectual property. We will achieve further advances and growth in the our Social Innovation Business through the protection and use of intellectual property centered on Green, Digital and Innovative initiatives.

Additionally, in fiscal 2022, the name of the Intellectual Property Division was changed to the Global Intellectual Property Group. The position of Chief Intellectual Property Officer (CIPO) was newly established to lead Hitachi Group intellectual property activities, and Stephen Manetta, who brings a wealth of experience in global intellectual property management

Stephen Manetta
CIPO and General Manager, Global Intellectual Property Group

was appointed as CIPO. By sharing insights gained from regional intellectual property activities at a global level; and identifying beneficial insights, we will promote the creation of new value leading to innovation.

Hitachi formulates and executes an intellectual property strategy based on three pillars: "Competition," "Collaboration," and "IP for society."

"Competition" is the intellectual property strategy based on competition, centering on acquiring and using intellectual property rights with a focus on patent rights. We are formulating and strengthening the intellectual property master plans tailored to each business.

At the same time, "Collaboration" is an intellectual property strategy based on collaborative creation. As co-creation activities with customers and partners increase, we have expanded the scope of our IP activities to include copyrights, patents and trade secrets, as well as information assets such as data and information, to promote partnerships and build ecosystems.

"IP for society" involves activities utilizing intellectual property in specific fields of a highly public nature to maintain and evolve social norms. We will promote the creation of ecosystems and partners and contribute to the improvement of social value.

New Initiatives Linked to Innovation

We are also promoting activities that contribute to innovation by analyzing intellectual property information. For example, we are promoting the following initiatives in the environment field: Market analysis based on number of inventions by all applicants (Figure 1). Each dot represents a theme, with market growth potential estimates (horizontal axis) based on the compound annual growth rate (CAGR) of the most recent inventions, while market scale estimates (vertical axis) are derived from the cumulative number of inventions, which are then divided into four quadrants to analyze the degree of market maturity. For each theme, Hitachi's technology share (Figure 2) is estimated (horizontal axis) based on the ratio of Hitachi inventions among total inventions, while the degree of oligopoly is estimated (vertical axis) based on the ratio of top 10 companies among total inventions, from which we can analyze Hitachi's positioning. By combining these metrics (Figure 3) and identifying themes in areas where markets demonstrate high growth potential and Hitachi has a high technology share (orange area at upper left), we contribute to innovation activities by identifying growth areas where we can utilize Hitachi's powerful existing technologies to make proposals and share with other business divisions.

Figure 1: Number of inventions and growth potential in the environmental field
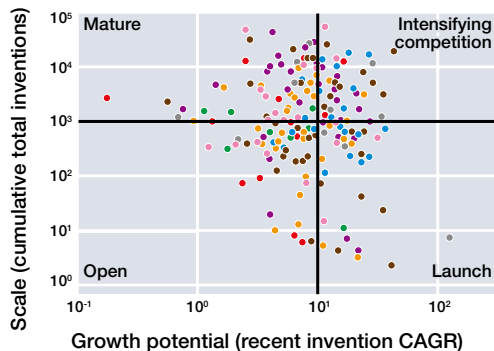
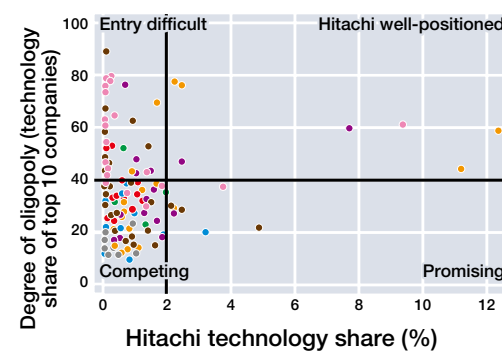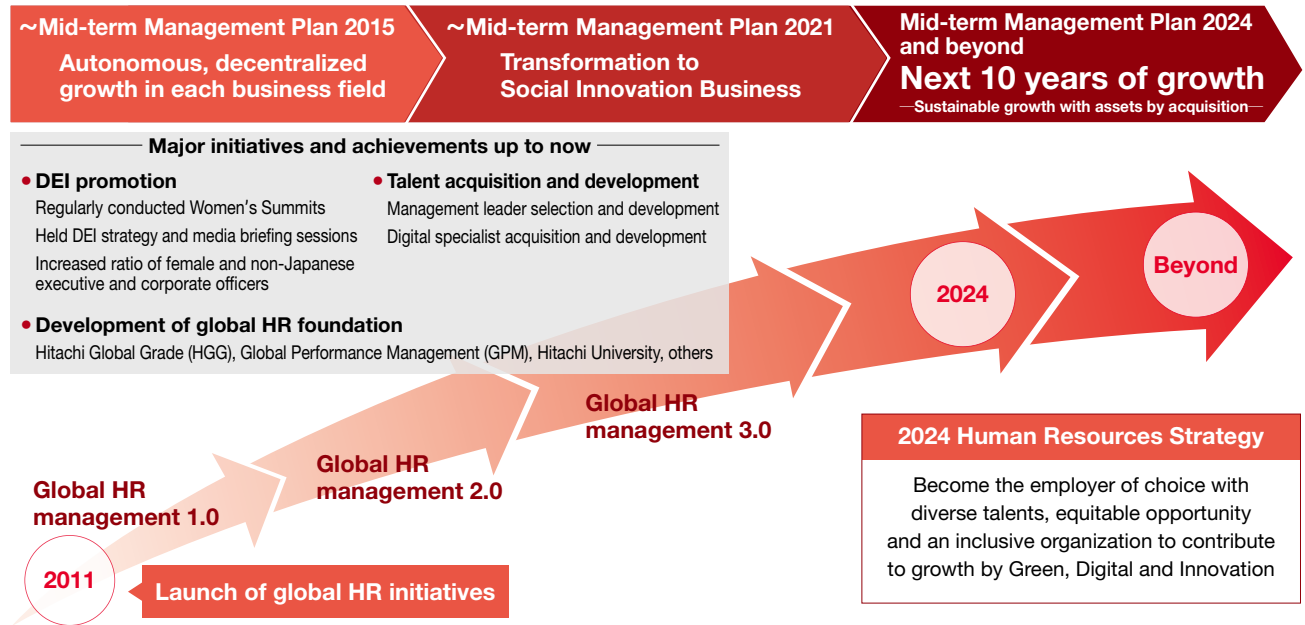### Figure 2: Hitachi technology's positioning in the environmental field

Figure 3: Hitachi's strategy matrix

		Degree of market maturity			
		Intensifying competition	Launch	Open	Mature
Hitachi superiority	Hitachi well-positioned	Theme A (e.g., smart grids)	Theme B (e.g., railway power regeneration)	…	…
	Promising	Theme C (e.g., combined renewable energy and storage)	Theme D (e.g., IT infrastructure resilience)	…	…
	Competing	…	…	…	…
	Entry difficult	…	…	…	…

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Human Resources Strategies

10 Years of Accelerating Global Growth Utilizing an Acquired HR Foundation

To develop the Social Innovation Business, Hitachi must explore social and customer issues and collaborate with customers to create unique new solutions. Over the past 10 years, we have retained and developed a diverse range of human capital, the driver of sustainable growth, and created an organization facilitating innovations and the creation of new value for a global and digital age. We believe human capital (people) is a wellspring of value in terms of Social Innovation Business global deployment. To realize a sustainable society, we will marshal the strengths of our more than 300,000 employees and continuously provide value to our customers and society.

~Mid-term Management Plan 2015
Autonomous, decentralized growth in each business field

~Mid-term Management Plan 2021
Transformation to Social Innovation Business

Mid-term Management Plan 2024 and beyond
Next 10 years of growth
—Sustainable growth with assets by acquisition—

Major initiatives and achievements up to now

- **DEI promotion**
  Regularly conducted Women's Summits
  Held DEI strategy and media briefing sessions
  Increased ratio of female and non-Japanese executive and corporate officers

- **Development of global HR foundation**
  Hitachi Global Grade (HGG), Global Performance Management (GPM), Hitachi University, others

- **Talent acquisition and development**
  Management leader selection and development
  Digital specialist acquisition and development

2024

Beyond

Global HR management 3.0

Global HR management 2.0

Global HR management 1.0

2011

Launch of global HR initiatives

2024 Human Resources Strategy

Become the employer of choice with diverse talents, equitable opportunity and an inclusive organization to contribute to growth by Green, Digital and Innovation

Main KPIs

Digital talent

■ Japan ■ Overseas

(persons)

FY2019	FY2021	FY2024
30,000	67,000	98,000
Overseas 11,000	38,000	59,000
Japan 19,000	29,000	39,000
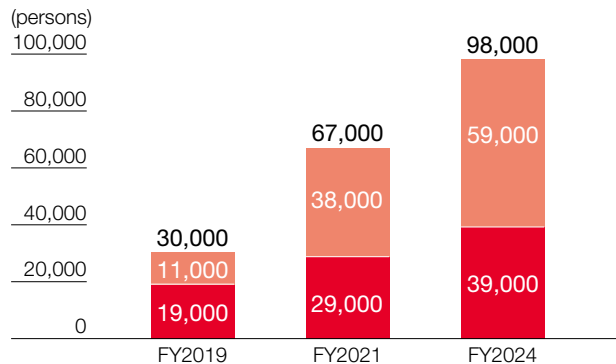
Ratio of female and non-Japanese executive and corporate officers

■ Women ■ Non-Japanese

(%) / (persons)

	FY2018	FY2021	FY2024
Line (Women)	2.6	10.1	15.0
Line (Non-Japanese)	6.4	11.6	
Women (persons)	2	7	
Non-Japanese (persons)	5	8	
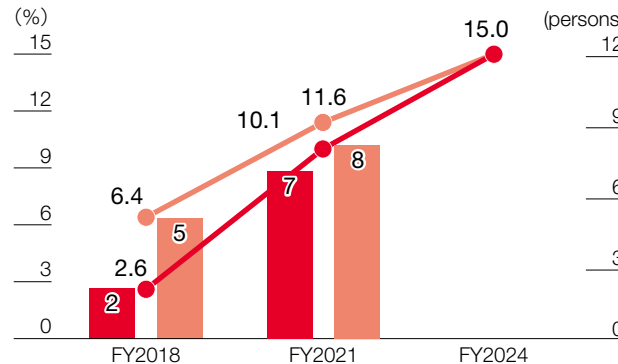
Employee engagement (positive response rate)

■ Japan ■ Overseas ■ Total

(%)

	FY2021	FY2024
Japan	56.2	60.0
Overseas	80.0	82.0
Total	65.0	68.0

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HR Strategy within the Mid-term Management Plan 2024

In this global and digital era, we must explore the needs of societies and customers throughout the world and provide services that resolve the issues they face. Human resources are the most critical driver in terms of facilitating the acceptance of diverse values, and of responding to the changing value sought by customers and to the increasing complexity and severity of social issues. Hitachi formulated the 2024 HR Strategy with the mission of acquiring and developing diverse human resources, providing equitable opportunity, and contributing to business through an inclusive organization. To grow business through a data-driven cycle of value co-creation with customers and a growth model that realizes higher earnings throughout the cycle, we aim to maximize talent (human capital and individual capabilities) and its engagement to achieve growth in each business. We also to promote inter-division collaborations and enhance global productivity and efficiency to cultivate an awareness and culture oriented toward sustainable growth. Specifically, we will acquire the global leaders and digital talent required to achieve growth. We will retain, develop and place the right people in the right places at right time within the Hitachi Group, and make an effort to enhance employee wellbeing and engagement. Hitachi will become the "Employer of choice" in global markets.

HR Mission, Vision and Strategy

The 2024 HR Strategy comprises three main pillars for realizing individual employee and organizational growth: People (talent), which involves acquiring, retaining and developing global and digital talent, positioning the right people in the right places, and promoting employee wellbeing and engagement; Mindset (culture), which involves the cultivation of a corporate culture realizing innovation, ongoing and autonomous skill development, including upskilling and reskilling in consideration of individual career development, and the promotion of innovations and change; and Organization, which involves promotion of the transformation to a high-quality human capital division that enhances DEI, breaks down organizational silos and engages in co-creation in order to ensure diverse human resources can work energetically with diverse values.

Hitachi will work to foster a corporate culture enabling the group's more than 300,000 human resources to maximize individual potential while coming together to create an organization where everyone plays an active role.

Mission	Contribute to business through diverse talents, equitable opportunity, and inclusive organization.
Vision	We lead transformation into "Employer of choice" in global market to become a vibrant "Talent Destination" that contributes to society

	Pillars	Key Initiatives
HR Strategy	**People** (Talent) Maximize talent (human capital and individual capabilities) engagement for growth	1. Acquire, retain, develop and allocate global leaders and digital talent to maximize their potential 2. Place the right people in the right places (matching) at right time in the Hitachi Group 3. Enhance employee wellbeing and engagement
	Mindset (Culture) Fostering a mindset and culture for growth	4. Embody Hitachi's founding spirit and cultivate global Hitachi culture to realize sustainable growth 5. Promote growth mindset (ongoing, autonomous skills development, including upskilling and reskilling) 6. Promote innovations and transformations: Ensure psychological safety and encourage the taking on of challenges
	Organization Promoting collaborations between divisions for growth and the realization of global productivity and efficiency	7. Break down organizational silos and collaborate to enhance customer value 8. Create new workstyles 9. Utilize digital technologies to transform HR with the provision of higher-quality HR services and solutions
	Foundation	• Ensure physical and mental wellbeing and safety • Strengthen exhaustive risk management (compliance, prevent incidents and accidents, respond to disasters, etc.)

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Diversity, Equity and Inclusion (DEI)

Hitachi is committed to implementing DEI (Diversity, Equity and Inclusion) in the organization to become a global leader and foster a sustainable growth of our business. Sustainability is the very core of Hitachi's business strategy, and to be a global leader in Social Innovation, Diversity, Equity and Inclusion is a crucial component for successful growth. A diverse workforce that represents society will allow the group to better understand customers and society's needs. For this reason, in Hitachi DEI strategy has been integrated into the core of the new MTMP as part of the Sustainability structure, with the aim to strengthen the management structure and integrate all the sustainability topics in one organization and to create a strong and coordinated approach toward ESG.

From this fiscal year, we have added "equity" as a key element of the DEI plan, showing a clear commitment to create "equitable opportunity for everyone." At Hitachi, we recognize that we are all different, and therefore each person may have different needs. By including Equity in our DEI strategy, we consciously seek to address the needs of each person based on their own unique circumstances. By recognizing differences, we are better able to provide everyone with access to the same opportunity and to fulfil their potential based on their will and competences.

There's growing evidence that Diversity drives innovation, as diverse teams, working in an inclusive environment, can lead to better ideas. By providing and fostering an equitable and inclusive environment, Hitachi will be able to create effective and innovative technologies to tackle climate crisis, respect planetary boundaries and increase people's wellbeing.

Being a global player, Hitachi is committed towards all the diversity pillars, such as age, gender, background, ethnicity, sexuality, religion, disability, marital status, and thinking style. All of those are relevant. To track our progress, Hitachi has identified and set KPIs for three main global themes common and applicable to all businesses, everywhere, which are gender balance, cultural diversity and multi generation. In 2021 Hitachi announced publicly a global commitment, to reach 30% female and 30% non-Japanese in executive and corporate officer positions by fiscal 2030 in Hitachi, Ltd. Each Business Unit and function part of the group at the global level also has set DEI targets for diversity in decision-making layers and female managers by fiscal 2024, in accordance with their business strategy. In addition to these KPIs, each business and region is setting specific targets focused on other dimensions, prioritizing and adopting actions according to their specific needs and business strategies.

Lorena Dellagiovanna
Vice President and Executive Officer, Chief Sustainability Officer, Head of Global Environment Division, and CDIO

Gender Balance

For our business to be successful, we want our workforce to have equal representation of the society we want to serve. About 50% of the world population is female. For this reason, we set specific targets for gender balance, creating more opportunities for women across the business. We provide access to roles through recruitment, offer opportunities for their progression into leadership positions and support to ensure a workplace where women can thrive. As the group, we are putting in place many activities on a global level. For example, in Japan, the company is providing support for a childcare-work balance, pre-maternity leave and reinstatement support seminars, and the development of childcare facilities, as well providing paternity-maternity leave seminars. As of fiscal 2020, the double-income ratio had increased to 30%, and participation in childcare leave and leave for the purpose of childcare among men had increased to 35%. We believe these efforts can improve wellbeing and promote personal diversity through participation in childcare.

Cultural Diversity

Being culturally diverse is about creating a team that reflects the global nature of our company. Hitachi has grown into a global innovation business from its Japanese roots, and our desire is that the global and diverse nature of our business portfolio should be reflected in our people, particularly at the decision-making levels. By providing the opportunity for more individuals from different nationalities to progress into leadership, we create opportunities for Hitachi to access new markets and sustain our global growth. For example, Hitachi's R&D team, being conscious that language can often present a barrier to integration, is working to place more English communication in their promotional activities, replacing Japanese-only communication.

Multi Generation

Technology and society change fast, and the voice of our younger colleagues is essential in Hitachi's approach to innovation. We seek to attract new generations of colleagues into our workplace and ensure they contribute to our thinking. We recognize the value that individuals can bring regardless of age and therefore our aim is that colleagues are recognized based on competence rather than age. For example, to attract and retain future talent, Hitachi Energy has set targets on early career hiring (under 28 years old), partnering with university relations and our Power+ trainee program. Its Diversity 360 scheme also focuses on lifelong learning. Hitachi Energy has also ensured that its recruiting policy creates an inclusive workplace by examining areas such as the office infrastructure and embedding flexible working practices.

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Enhanced Acquisition of Digital Talent

To expand the Social Innovation Business, Hitachi must retain and develop digital talent to drive Lumada business growth. In the Mid-term Management Plan 2024, we aim to become a global top-class DX company with plans to increase the ranks of digital talent from 67,000 at the end of fiscal 2021 to 98,000 by the end of fiscal 2024, mainly overseas, including at GlobalLogic and Hitachi Vantara.

GlobalLogic has systems in place and track record of timely human capital acquisitions required for business, leading to the reinforcement of global human capital in the Digital Systems and Services sector, the driver of the Lumada business Groupwide.

At the same time, in Japan, we are strengthening human capital by developing internal human capital and recruiting from outside the company.

In developing internal human capital, we will accelerate the bolstering of digital capabilities necessary for business growth through digital literacy e-learning to inculcate a basic understanding of digital transformation (DX) and Hitachi's digital business, DX training to develop basic human capital

able to engage in digital businesses as project members, and enhanced training programs for each skill and position, including OJT programs aimed at developing professional human capital able to plan and lead projects.

Further, when recruiting from outside the company, we seek new graduates who are treated competitively in the digital talent recruitment course, and promote the retention of talented human capital, including experienced mid-career hires in Japan and recruited directly from India, Eastern Europe and other overseas locations.

Digital talent

Develop internal human capital | **Recruit from outside** | **M&A**
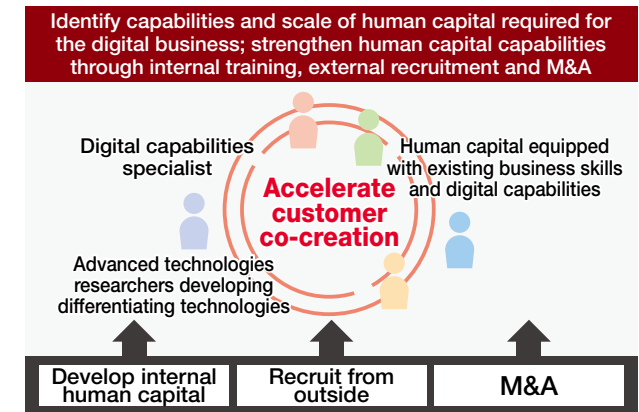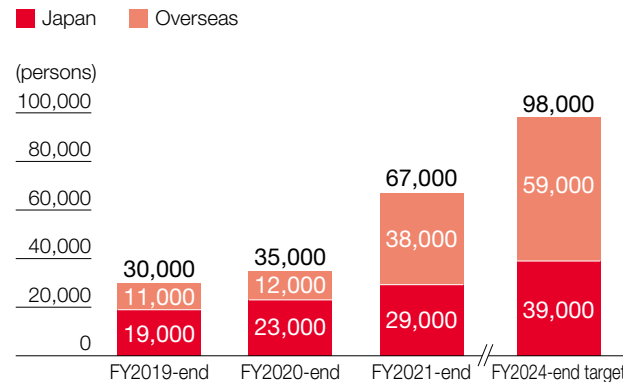
Promoting Job-based HR Management

In order to achieve global business growth, each employee must grow. In response to changes in the business environment, Hitachi's business direction, social issues in Japan and changes among individual employees, Hitachi is promoting job-based human capital management to support business growth. Specifically, we will promote awareness and behavioral changes by visualizing work duties and human capital, strengthening upskilling and reskilling education, recruiting and assigning work with clear job descriptions and maximizing individual performance, which will lead to growth throughout the entire organization.

Most recently, we are promoting measures that include revitalizing internal employment opportunities using the group's open recruiting system, strengthening support for managers through training that enhances manager capabilities, providing support for upskilling and reskilling in line with career goals, and introducing a learning experience platform.

Through these efforts, we aim to become a global leader in the Social Innovation Business by targeting individual and organizational growth, thereby fostering independence among Hitachi's human capital, organization and corporate culture.

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Enhancing Employee Engagement

Employee wellbeing is a necessary condition for increasing productivity, as well as a management issue. Creating comfortable work environments and workplaces where all employees can proactively engage in work and achieve results is the source of Hitachi's sustainable growth.

To this end, enhancing employee engagement is critical. Diverse human capital working with high engagement across countries, regions and companies is essential for maximizing human capital and organizational performance. Each year, we conduct Hitachi Insights, a global employee survey aimed at ascertaining employee understanding of Company strategies and measures, job satisfaction, and desire to autonomously engage in efforts to achieve results. Through this process, in addition to employee engagement, we quantify understanding of management policies, operational reforms, DEI, career development opportunities, health and safety, and growth motivation, and work to improve them.

Hitachi Insights results are shared by executives and managers at each workplace with other members of their organization, leading to specific improvement measures and the formulation of a PDCA cycle that creates rewarding workplaces. This facilitates the prioritization of human capital–related measures throughout Hitachi, workstyle reviews in each workplace, and productivity improvements.

Since this survey was introduced in 2013, scores have improved over the medium term. In fiscal 2021, Hitachi Insights was conducted in 14 languages for approximately 240,000 people worldwide, with a participation rate of 86%. The employee engagement index was 65% in fiscal 2021, and we aim to raise this to 68% in fiscal 2024.

By conducting this survey annually, we can evaluate and review initiatives, as well as measure effects directly linked to work and workplace improvements. In promoting a growth-oriented mindset among all employees (continuous and independent skills development, including upskilling and reskilling), we will accelerate innovations and transformations embodying Hitachi's founding spirit to inculcate Hitachi's corporate culture on a global scale.

Cultivating the Next Generation of Management Leadership

The rapid selection and development of management leader candidates is one of Hitachi's most important management issues. Thus, Hitachi is focused on the development of young leader candidates referred to as the Future 50.

Each year, 500 high-performing Hitachi employees around the world who have driven changes and innovation leading to noteworthy results are nominated for intensive development, with only 50 selected as members of the Future 50. Members from all over the world gather to discuss what is required for Hitachi Group growth. In making recommendations to management, they acquire the capabilities of next-generation leaders who can practice "I will" mindset and take resolute actions. Further, through participation in unconventional tough assignments* and internal and external training sessions, Future 50 members broaden their horizons and expand their perspectives beyond the responsibilities of the business areas in which they are engaged.

The Nominating Committee also holds discussions and individual interviews with incoming and subsequent CEO candidates to proactively develop the next generation of managers. Hitachi's management, including the Board of Directors, has strengthened its ability to respond to increasingly complex global social issues through diversity regardless of gender and nationality, as well as through a strict approach to the governance of various issues. Inculcating this change in management awareness among young leader candidates will lead to the global recruitment of truly talented human capital without reliance on age, gender or nationality, deepening and broadening the pool of next-generation leaders throughout Hitachi.

*Work duties with a relatively high degree of difficulty

Selection and Development of Management Leaders (pipeline construction)

Nominating Committee
Development and evaluation / Discussions

Incoming and subsequent CEO candidates
Select candidates for incoming and subsequent CEO successors from the talent pool of change leaders and reformers demonstrating noteworthy achievements

Management leader candidates (talent pool)
Human capital driving change and innovations, achieving noteworthy results (approximately 500 people)

Future 50 | Outstanding young employees (approximately 50 people)

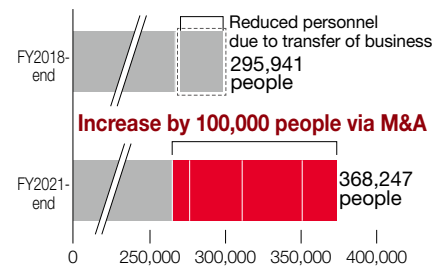|	
Nominating Committee	Conducts discussions and individual interviews with incoming and subsequent CEO candidates, participating in focused, medium-range development
Execution side	Selects and develops global management leader candidates (1) Discussions conducted at 30 Talent Committee meetings each year (composition changes annually) (2) Selection of approximately 500 employees developed mainly through stretch assignments (includes non-Japanese and female employees)
Execution side + Nominating Committee	Selects talented young people as members of the Future 50 and provides intensive training Allocates tough assignments, facilitates one-on-one sessions with the CEO and organizes lectures by Nominating Committee members, among other efforts

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Cultivating Global Hitachi Culture

Of the approximately 370,000 Hitachi Group employees in Japan and overseas (as of the end of fiscal 2021), more than 100,000 (about 30%) have joined the group over the past three years. While diverse human resources are the driving force behind corporate growth and innovation, there is also a need to repeatedly share the Hitachi Group Mission and Values to inculcate common understanding and behaviors.

As this is the inaugural fiscal year of the Mid-term Management Plan 2024, we are also making efforts to facilitate understanding through online meetings for group and global executives conducted by President and CEO Kojima and videos distributed to all employees. Town hall meetings are held with all business unit and division managers to explain the Mid-term Management Plan 2024 and divisional polices to all employees while reaffirming Hitachi's Mission and Values.

With the addition of new talent in the group, it is important to develop a human capital management system and inculcate Hitachi's corporate culture. To this end, it is essential that we deploy and utilize the global HR foundation Hitachi has been working on to strengthen internal communication among group companies, disseminating and sharing consistent messaging throughout the Hitachi Group. It is also important to implement cultural inclusion measures targeting employees who recently joined the group through M&A by respecting each company's unique culture and sharing and incorporating the necessary cultural features and elements for future growth. In the Mid-term Management Plan 2024, we will consolidate PMI knowledge accumulated through past M&A and other efforts in the Center of Excellence (CoE) established at our Corporate Division, creating a system that can be utilized for new projects.

Changes in consolidated employee numbers

Reduced personnel due to transfer of business
FY2018-end: 295,941 people

Increase by 100,000 people via M&A

FY2021-end: 368,247 people

0   250,000   300,000   350,000   400,000

Initiatives and Results Associated with GlobalLogic PMI

Steady efforts are already bearing fruit. For example, at the Make a Difference! idea contest held to promote our corporate culture, the Success Paths concept proposed by GlobalLogic, which joined the Hitachi Group in July 2021, was presented with the Gold Ticket* award for fiscal 2021. Make a Difference! is an idea contest launched in fiscal 2015 as a means of reforming the "I will" mindset aimed at new business and internal reforms. The Success Paths proposed by GlobalLogic focus on Hitachi employee engagement, utilizing an app that addresses individual careers as well as social activities (hobbies, volunteering, personal development and other pursuits). These efforts were recognized as a unique method for guiding employees down the path to success.

*Conferred to outstanding projects demonstrating high feasibility

Lumada Business Award Jointly Awarded to Hitachi Energy, Hitachi Vantara and GlobalLogic

The One Hitachi Acceleration for Green Digital Program powered by Lumada jointly proposed by GlobalLogic, Hitachi Vantara and the ABB power grids business (now Hitachi Energy), which became part of the Hitachi Group in July 2020, won the fiscal 2021 Lumada Business Award (Grand Prize), demonstrating that Hitachi's PMI is functioning effectively. These three companies provide services, including stabilized power distribution and the sale of surplus power to local users, to power transmission and distribution companies that utilize Battery Energy Storage Systems (BESS). This award was conferred in recognition of Hitachi's contributions to resolving issues faced by social infrastructure maintenance operators, including reliability modeling and equipment inspection solutions based on diagnostic imaging. In terms of cultural inclusion, while respecting the unique culture of each company that has become part of the Hitachi Group through M&A and other efforts, it is critical to foster global Hitachi culture by mutually sharing and incorporating cultural characteristics and elements necessary for future growth.

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Financial Strategies

In the Mid-term Management Plan 2024, we will shift into growth mode, achieve further advances in revenues and profitability, and take additional steps to enhance our ability to generate cash through organic business growth. To achieve Hitachi's growth through a financial capital strategy, we will continue to work on four priority issues: (1) further improvements to earnings capabilities through ROIC management, (2) improved capital efficiency through higher business asset turnover, (3) reduced WACC utilizing appropriate levels of leverage within the bounds of appropriate financial discipline, and (4) improved total shareholder return (TSR) by implementing shareholder return measures that consider share buybacks in addition to dividends.

Strengthening Cash Management

In the Mid-term Management Plan 2024, we will step up efforts to ensure that cash can be generated organically by our own business. To strengthen cash management, we will revise business processes while improving accounts receivable collections, ascertaining the impact of strategic inventory, and enhancing monitoring.

The challenge of generating cash is about not only maximizing operating cash flow, but also optimizing capital investment. Hitachi makes capital investments totaling around 400 billion yen each year. Going forward, certain criteria will be applied to select these investments with greater care. Capital expenditures in tangible fixed assets such as machinery and equipment will be carefully examined one by one. In addition, we will promote the digitalization of cash management, including the visualization of the entire supply chain, by spreading IT to manufacturing sites as well.

Capital Allocation

Over the three years of the Mid-term Management Plan 2024, we will expand core FCF to 1.4 trillion yen through the operating cash flow earned from organic growth and the careful selection of capital investments. Combined with the cash gained from the sale of assets, we will allocate capital in a well-balanced fashion between growth investment in the areas of digital, green and innovation, and shareholder return.

Specifically, around half of core FCF will be allocated to shareholder return comprising dividends and share buybacks. The remaining core FCF and cash earned from the sale of assets will be allocated to the growth areas of digital, green and innovation. While targeting a D/E ratio of 0.5x as a guideline for financial discipline, we will also implement our strategy by utilizing debt as needed.

Cash generation

Shareholder returns: 0.2 trillion yen
1.2 trillion yen
Asset sales 0.7 trillion yen
Core FCF 0.5 trillion yen
MMP2018 (3-year cumulative)

Shareholder returns: 0.3 trillion yen
2.1 trillion yen
Asset sales 1.2 trillion yen
Core FCF 0.9 trillion yen
MMP2021 (3-year cumulative)

Shareholder returns: Approx. 0.7 trillion yen
2.3 trillion yen
Asset sales 0.9 trillion yen
Core FCF 1.4 trillion yen
MMP2024 (3-year cumulative)

Capital allocation

While keeping D/E ratio of around 0.5x in mind, use debt flexibly as required

Growth investments
Strengthen strategic growth areas by asset replacement
• Focus on Digital, Green, and Innovation
Investment criteria
• Profitability: Adj. EBITA 10%+
• Asset efficiency: ROIC 10%+

Return to shareholders
Return approximately 50% of core FCF to shareholders
• Dividends: Stable dividends based on business growth
• Share buyback: Implement based on funding demands and business environment, etc.

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Basic Policy on Shareholder Returns

Returning profits to shareholders based on medium- and long-term business plans and achieving growth in total shareholder return (TSR) through the formation of appropriate stock prices are positioned as important management themes for Hitachi. Our policy is to provide stable dividends while securing the internal capital required to execute the R&D and capital investments that are essential to maintaining market competitiveness and increasing profits. Under this policy, we make decisions based on overall consideration of performance trends, financial conditions, and dividend payout ratios, among other factors.

In April 2022, we announced share buybacks of up to 200 billion yen. Going forward, we will issue stable dividends while also considering share buybacks, ensuring that the profits earned from business growth are properly returned to shareholders.

Progress on ROIC Management

In fiscal 2019, Hitachi introduced return on invested capital (ROIC) as a new corporate management index. ROIC indicates how much profit (after-tax business profit) can be generated on capital invested in a business. To improve ROIC and expand corporate value, returns must at a minimum exceed the weighted average cost of capital (WACC), which is the financing cost of the invested capital. Since introducing ROIC, we have promoted management that considers the cost of capital in addition to profitability throughout the group as a whole, and the ROIC tree has been tied directly to concrete actions at each workplace. Given a changing macroeconomic environment and other factors, we were unable to meet the 10% ROIC targeted in the Mid-term Management Plan 2021, but we have again declared this target in the Mid-term Management Plan 2024, and will further advance activities based on this target including action in each sector and business unit, revisions to business strategy itself, and other measures.

Improve profitability

ROIC increase drivers			Example of major action items (to be further broken down and assigned to each division)

Increase ROIC*1

Increase after-tax business profit
- Increase adjusted operating income ratio
  - Expand profitable revenues
    - Expand orders, determine appropriate orders received
    - Optimize customer portfolio
    - Expand overseas revenues
    - Expand Lumada revenues
  - Reduce costs
    - Reduce materials cost, outsourcing expenses
    - Improve production efficiency
    - Improve business efficiency
    - Implement structural reforms
    - Strengthen project management
    - Reduce loss costs
    - Withdraw/replace unprofitable business
- Reduce tax expenses
  - Implement appropriate tax management
- Increase equity in earnings of affiliated companies
  - Realize joint venture alliance synergies

Improve asset efficiency (Improved invested capital ≈ business asset efficiency)

ROIC increase drivers			Example of major action items (to be further broken down and assigned to each division)

Improve business asset efficiency (Increase asset turnover ratio)
- Increase working capital turnover
  - CCC*2 improvement
    - Early collection of trade receivables
    - Reduce inventories
    - Trade payables: Set appropriate payment dates
    - Acquire advance payments
- Increase fixed asset turnover ratio
  - Implement pre-investment checks and post-investment monitoring
  - Review held real estate, sell idle real estate assets
  - Manage goodwill
  - Review cross-shareholdings and equity-method investments
- Reduce cash on hand and interest-bearing debt
  - Improve accuracy of cash flow forecasts
  - Expand pooling

*1 ROIC = (NOPAT + Share of profits (losses) of investments accounted for using the equity method) / "Invested Capital" × 100
  NOPAT (Net Operating Profit after Tax) = Adjusted operating income × (1 − Effective income tax rate), Invested Capital = Interest-bearing debt + Total equity
*2 CCC: Cash Conversion Cycle

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Financing and Capital Costs

Financing is carried out through the means deemed most appropriate (e.g., cash on hand, borrowings, and gains from the sale of assets), based on a variety of conditions, including the timing and amounts required by the business. When financing through borrowing and other forms of debt, our financial discipline is to maintain a D/E ratio of less than 0.5 times and an interest-bearing debt/EBITDA ratio of less than 2.0 times. Regarding the cost of capital (hurdle rate) used for individual investment decisions, calculations and judgments are made on a case-by-case basis considering interest rates, country risks, and expected returns in the country where the investment will be made.

Ensuring Financial Stability

Ensuring the stability of the financial base is an important management issue for Hitachi. For this reason, we will continue our financial discipline policy of maintaining an A rating on issued instruments and a D/E ratio of less than 0.5 times. At the same time, we will ensure a return of profits with an awareness of shareholder returns, for example, through growth investments and continued increases in dividends. Our ability to generate cash is increasing steadily, and our ratings are as shown in the table below.

Rating company	Long-term	Short-term
S&P Global Ratings Japan Inc.	A	A–1
Moody's Japan K.K. (Moody's)	A3	P–2
Rating and Investment Information, Inc. (R&I)	AA-	a–1+

As of July 2022

Growth through the Digital Management Platform

To achieve global growth in the Social Innovation Business, improving the efficiency of management platform through digital technology is essential. As ABB's power grids business (now Hitachi Energy) and GlobalLogic, both acquired during the Mid-term Management Plan 2021, already possess global management platforms, we intend to deploy and utilize Hitachi Energy's advanced global operations platform for product-related businesses and GlobalLogic's advanced global operations platform for IT-related businesses within the Hitachi Group. We will work to build a common ERP across the entire Hitachi Group, utilize DX and Global Business Services (GBS), and implement a customer relationship management system (CRM). We will invest 80 billion yen to build out and introduce these systems by fiscal 2024.

Effects of Priority Measures

(billions of yen)

Priority Measures

ERP	**Sharing Management Data in Real Time** Utilizing the ERP system deployed globally by Hitachi Energy throughout the Hitachi Group will accelerate management decisions and promote reductions in costs associated with system usage, operations, maintenance and new developments. In fiscal 2021, we created a Groupwide common template based on Hitachi Energy's ERP system that commenced operations at Hitachi Channel Solutions bases in Thailand and Indonesia. In fiscal 2022, we will establish an office for the promotion of this common ERP system and accelerate the introduction and development of ERP at group companies.
DX	**Realizing Automated Operations and Predictive Management** Hitachi will realize predictive management and business process automation and sophistication based on ERP, CRM, data lakes and other information to enhance performance and improve the efficiency of indirect operations. Further, we will improve digital literacy among all employees to accelerate DX through the development of infrastructure and tools that expand the scope of in-house DX activities. In addition to the promoted utilization of data and automation of operations across all business divisions by fiscal 2021, from fiscal 2022, we plan to establish standard services and template platforms necessary for promoting DX in all operations and deploy them throughout the company with the ERP.
CRM	**Global Utilization of Account Information** We will deepen insights into new markets and enhance the utilization of sales activity information through the group-wide collection of market and customer information. Additionally, we will strengthen our customer approach in all areas through the promotion of coordinated customer support between business units and other measures. After the initial August 2022 launch of this platform in Japan, we plan to expand implementation to three companies: Hitachi Vantara, GlobalLogic and Hitachi Energy. The platform will be rolled out company-wide starting in fiscal 2023.
GBS	**SG&A Reduction by Operation Consolidation and Process Transformation** We will improve operational efficiency and productivity by building company-wide common management department operations (indirect operations such as human resources, finance, procurement, IT, etc.) as centralized shared services that can be used globally. At overseas bases and group companies, the shared service functions of Hitachi Energy and Hitachi Vantara will be applied. We have already introduced this concept to our regional companies such as those in North America, India, Europe and Asia. In Japan as well, we will expand shared service functions to standardize and consolidate business processes and have started to engage in pilots for process transformation.

ERP: Enterprise Resources Planning

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Financial Analysis of the Past Five Years

The following is a summarized financial analysis of the Hitachi Group for the past five years.

- The adjusted operating income ratio increased as a result of efforts to improve profitability. In fiscal 2020, despite the harsh business environment resulting from the COVID-19 pandemic, the profit ratio stayed above 5%.
- Despite fluctuations caused by business restructuring, efforts to improve profitability resulted in net income reaching a record high of approximately 600 billion yen in fiscal 2021.
- Efforts to strengthen cash management resulted in cash flows from operating activities rising to the level of approximately 800 billion yen.
- The payout ratio has remained between 20% and 30%, and the total of dividend payments has increased.

Adjusted operating income ratio

(%)

FY	2017	2018	2019	2020	2021
	7.6	8.0	7.5	5.7	7.2

(FY)

Cash flows

■ Cash flows from operating activities (billion yen)   ■ Core free cash flows (billion yen)
● Cash flows margin from operating activities (%)

FY-end	2017	2018	2019	2020	2021
Cash flows from operating activities	727.1	610.0	560.9	793.1	729.9
Core free cash flows	283.5	136.0	135.4	419.8	290.0
Cash flows margin	7.8%	6.4%	6.4%	9.1%	7.1%

(FY-end)

Trends in dividends

● Payout ratio (%)   ■ Total amount (billion yen)
○ Payout ratios excluding unordinary items (%)

FY	2017	2018	2019	2020	2021
Total amount	72.4	86.9	91.7	101.5	120.9
Payout ratio	20.0	39.1	104.8	20.2	20.7
Payout ratios excluding unordinary items		17.0	19.8		

(FY)

Total Shareholder Return (TSR)

The following illustrates Hitachi's TSR, with fluctuations in dividends and stock price reflected.
While continuing to improve profitability and distribute a stable dividend, Hitachi is making concerted efforts to increase shareholder value through management that is aware of its share price, based on business and financial strategies designed to improve TSR in excess of the cost of shareholders' equity.

— Hitachi share price
— TOPIX including dividends
— TOPIX Electrical Equipment including dividends
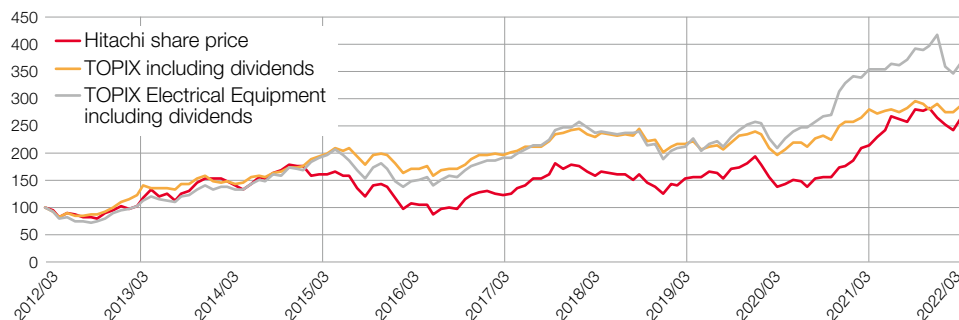
	Past 1 Year	Past 3 Years		Past 5 Years		Past 10 Years	
	TSR	TSR	Annual TSR	TSR	Annual TSR	TSR	Annual TSR
Hitachi share price	+25.7%	+81.0%	+21.9%	+120.9%	+17.2%	+161.5%	+10.1%
TOPIX	+2.0%	+31.2%	+9.5%	+44.3%	+7.6%	+183.3%	+11.0%
TOPIX Electrical Equipment	+3.6%	+72.4%	+19.9%	+91.2%	+13.8%	+261.5%	+13.7%

Note: The graph and table above show return on investment for investments made from the fiscal year ended March 31, 2012, taking into account dividends and stock prices as of the fiscal year ended March 31, 2022. Hitachi, Ltd. investment performance, including stock prices and dividends, is indexed using 100 as the investment amount as of March 31, 2012. The TSE Stock Price Index (TOPIX), which is a comparative indicator, is similarly indexed using data including dividends for electrical equipment.

CFO Message

Growth is one of the most important management objectives in the Mid-term Management Plan 2024.
We will optimally allocate cash brought from organic business growth, and generate further growth towards the future in conjunction with strengthening shareholder returns.

Yoshihiko Kawamura
Executive Vice President and Executive Officer, CFO, CRMO

Joined Hitachi in 2015 after serving as an executive officer at Mitsubishi Corporation and as an economist at the World Bank. Leveraging the experience he gained at Harvard Business School, he has driven structural reforms as CSO (Chief Strategy Officer) since 2018 and as CFO (Chief Financial Officer) since April 2020. Current position from April 2022.

I was appointed CFO in April 2020, in the second year of the Mid-term Management Plan 2021. Through various measures implemented during the Mid-term Management Plan 2021, such as reorganizing the business portfolio, revising low-profit businesses and establishing ROIC management to raise capital efficiency, we have transformed our business structure into one that is able to increase profit in a stable fashion.

Hitachi aims to constantly achieve business growth and generate profits and cash by using its 10 trillion yen in assets as a base, but the contents of the assets that contribute to earnings change considerably over time. How we think assets structure to maximize profit and cash in a rapidly changing management environment now truly requires "an awareness of the times and resource allocation" on the part of management. We will continue working to build a financial base to support that.

Results of the Mid-term Management Plan 2021

During the Mid-term Management Plan 2021, we were forced to revise our numerical targets in a severe management environment that continues to this day, with the COVID-19 pandemic, unstable international environment, semiconductor shortages, sharply rising material prices, etc. Under these difficult conditions, we have recognized the need to go back to the basics of management and have given greater priority to increasing our resilience to exogenous impacts, such as by thickening liquidity on hand.

Meanwhile, we have been steadily working on existing management issues for some time and have proceeded with considerable boldness to deconsolidate listed subsidiaries, and shift to a business portfolio centered on digital and environmental businesses. The acquisition of GlobalLogic and the ABB power grids business (now Hitachi Energy) is indicative of this. In parallel with these initiatives, in order to achieve an operating income ratio at the 10% level across the board, we checked all businesses with using operating income ratio of 5% as a basis (half of the target operating income ratio), and pursued integration and optimization as

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part of a review of low-profit businesses. We also responded by utilizing our relatively healthy balance sheet to undertake large-scale growth investments.

As a result of these activities, in fiscal 2021 adjusted operating income ratio stood at 7.2%, with net income attributable to Hitachi, Ltd. stockholders reaching a record high of 583.4 billion yen. In addition, I believe that our efforts to continue with our transformation even under this harsh environment have led to results, such as the cumulating 2.1 trillion yen in operating cash flow generated over three years.

The Challenge of the Mid-term Management Plan 2024

To become a leading global company, we will strive to (1) further improve profitability; (2) enhance the ability to generate cash; and (3) address the ongoing issue from the Mid-term Management Plan 2021 of boosting capital efficiency.

Growth through Lumada is a pillar of improved profitability. Working from a base of the assets shifted with a focus on digital and environmental businesses, we will improve profitability by raising the proportion of our businesses that are service-oriented, such as maintenance, upkeep and recurring services in each sector. I believe we can also improve profitability by continuing to implement reviews of low-profit businesses.

Enhancing the ability to generate cash is a major challenge now that we have completed a round of major M&A activities and asset sales. Moving forward, we need to focus on measures to ensure that organic profits will lead to cash generation. Corporate and Hitachi's business divisions are jointly operating a cash flow reform project. By further improving efficiency when profit recognized in profit and loss statements is converted into cash, we will achieve our Mid-term Management Plan 2024 target of core FCF totaling 1.4 trillion yen (cumulative total over three years). Key measures that make up the project include management that is

cognizant of the marginal efficiency of funds, the introduction of best practices beyond business, improved cash conversion management, cash flow visualization, and a shift in the internal mindset away from profits on P/L statements towards an emphasis on cash flow.

We will also continue to work on ROIC as a KPI to improve capital efficiency. We are already using the ROIC tree to spread understanding internally, and this is leading to grassroots action at each workplace. This has also strengthened the understanding that businesses unable to cover their capital costs are damaging corporate value.

Strengthening Risk Management

Amid an increasingly uncertain global climate typified by the crisis in Ukraine, starting this fiscal year Hitachi developed a structure to comprehensively monitor both financial and non-financial risks. This means that as CFO, I have taken on the concurrent role of Chief Risk Management Officer (CRMO). We have been working to quantify investment and the other financial risks by using a statistical method known as a value-at-risk model, and are currently revising consolidated management risks from having more than 800 companies under the group umbrella and geographic risks from overseas expansion from the perspective of overall management. We will also consider a well-balanced approach to non-financial risks, from quality assurance and compliance to safety and BCP measures in the event of natural disasters.

Enhancing Corporate Value through Dialogue with the Capital Markets

I personally place an importance on dialogue with the capital markets. We should be accountable to the shareholders who have invested in Hitachi in terms of how we manage the business, and we must also demonstrate appropriate

shareholder returns. Through dialogue with the capital markets, we often get comparisons with other companies, perspectives and insight from the capital markets, and advice of all kinds, making bilateral dialogue immensely productive. I believe that explaining the initiatives we will implement to achieve the performance targets outlined in the Mid-term Management Plan 2024 and steadily delivering on shareholder returns including share buybacks are an important part of building a relationship of trust with the capital markets.

Going forward, I think we will need to further consider how intangible assets such as human capital and intellectual property help improve corporate value, and link non-financial KPIs to financial value. I hope to lead efforts to shape a common language with the capital markets by exploring what factors of production affect the value (added value) of final goods and services, and considering the application of the concept of "factor endowment" in economics (a model to show the level of contribution that input resources such as capital and labor make in the creation of added value).

Value Creation Initiatives ⎯ Strategies by Sector

Digital Systems & Services

Promote digital transformation (DX) of customers'
business systems and social infrastructure
to help realize a sustainable society

Digital Systems & Services Business Structure

Services & Platforms **30**%

Main products and services

Lumada's core DX methodology and digital technology

- Experience design
- Digital engineering
- Applications
- Data analytics, artificial intelligence
- Cloud services
- Security
- IT products (storage/servers)

FY2021 Revenues **2,153.6** billion yen

Front Business **37**%

Main products and services

IT/digital systems in mission-critical fields

- **Financial Institutions BU**
  Development and operation of mission-critical systems and financial solutions for banks, insurance companies, and securities companies
- **Social Infrastructure Systems BU**
  Construction and operation of social infrastructural systems, defense systems, and control systems for public offices, municipalities, electric power companies, and transportation companies, and provision of digital solutions to those entities

IT Services **33**%

Main products and services

DX solutions and services

- **Hitachi Systems**
  System operation, monitoring, and maintenance and one-stop services covering the entire IT lifecycle
- **Hitachi Solutions**
  Solutions for productivity improvement and new business creation through combination of packages and services

Results and Forecasts

Revenues (billion yen) / Overseas Ratio (%)

- Front Business
- IT Services
- Services & Platforms
- Adj. EBITA (billion yen)
- Adj. EBITA ratio (%)
- ROIC (%)

ROIC (%): 8.3*1 → 8.8 → 10.0

FY2021 (result)	FY2022 (forecast)*2	FY2024 (target)
2,153.6/29%	2,290/33%	2,600/38%
948	985	—
842.7	860	—
776.4	840	—
281.4	300	400

Adj. EBITA ratio: 13.1 → 13.1 → 15.0
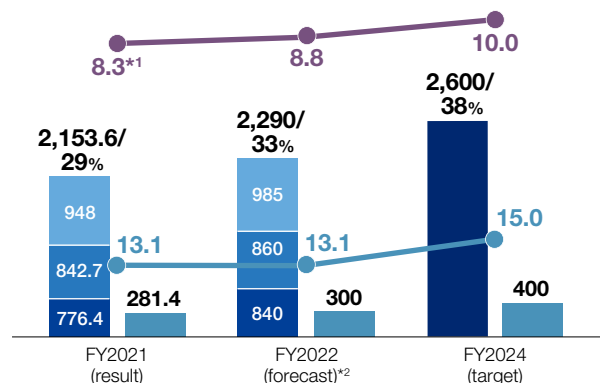
Lumada revenues (billion yen)

- Digital engineering
- System integration
- Managed services

FY2021 (result)	FY2022 (forecast)*2	FY2024 (target)
631	780	1,200
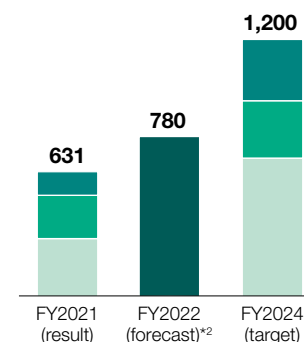
*1 Restated base of the impact of the GlobalLogic acquisition   *2 Announced on July 29, 2022

Strengths

The Digital Systems & Services Sector (DSS Sector) has approximately 100,000 employees and is responsible for operations in 50 countries and regions. It consists of three segments: Front Business (supporting social infrastructure with advanced IT solutions), IT Services (supporting customers' business DX with packaged solutions and services), and Services & Platforms (providing methodologies and the latest technologies necessary for DX).

The DSS Sector's strengths lie in its highly reliable system construction and operation capabilities cultivated over many years in mission-critical fields, such as finance, public services, electric power, and transportation; its know-how and solutions for realizing DX in collaboration with customers; and its numerous digital human resources that support these capabilities.

With GlobalLogic joining our ranks in July 2021, we have added two more powerful capabilities: design thinking and digital engineering.

We will leverage these strengths to create value in all quadrants, from understanding customer and social issues to creating agile solutions, system implementation and collaboration with products in the OT field, and secure service operation and maintenance in cloud environments. We will continue maintaining this cycle to foster the creation of new value and deliver DX for customers and society.

Mid-term Management Plan 2024: Vision

Over the period covered by our last two mid-term management plans (2018 and 2021), we implemented continuous reforms, including business restructuring, loss cost reductions through meticulous project management, and productivity improvements. As a result, we transformed ourselves into a business entity that can generate stable earnings and established a foundation for future growth. Under the Mid-term Management Plan 2024, we aim to achieve dramatic growth of Lumada in the DX market and become a top-class global business entity. We will achieve sustainable business growth for Lumada by both expanding revenues and improving profitability and continuously creating value as a partner in solving our customers' issues. To this end, we will work on the four KPIs listed on the right.

KPI	FY2021	FY2024
GlobalLogic revenues*3	1,280 million dollars	2,830 million dollars
Lumada Service Business ratio*4	46%	Over 50%
Lumada Overseas revenues ratio*5	35%	50%
Revenue of Whole Lumada Business	1.4 trillion yen	2.7 trillion yen

*3 Includes synergies/M&As *4 Percentage of services business in DSS's Lumada business *5 Percentage of overseas business in DSS's Lumada revenues

Market Environment

To address increasingly complex business challenges, customers are stepping up their use of digital solutions and services for business continuity and competitive advantage. At the same time, environmental issues and SDG-related investments are increasing against the backdrop of serious social issues. In this context, the global DX market, a target for social innovation projects that address business and social issues, is expected to continue growing at double-digit rates in all regions, reaching an average annual growth rate of 17% by 2025.

In Japan, as well, we look forward to increased IT investments targeting customers' business growth, as well as stepped-up DX initiatives and accelerated deployment and spread of cloud computing and digital technologies.

Digital Systems & Services Growth Strategy
Growth Driven by Lumada's Evolution

The DSS Sector is the core entity driving the three segments of Lumada's growth cycle—Digital Engineering, Systems Integration, and Managed Services—as shown below. With the addition of GlobalLogic to the DSS Sector in July 2021, we have gained design and digital engineering capabilities, enabling us to understand the issues facing customers and society in the global DX market while combining Hitachi's strengths in OT, IT, and products to come up with solutions more quickly. We are also confident that Hitachi Vantara will implement solutions developed by GlobalLogic on the cloud and provide them as services to global customers in the form of a recurring business. In the context of Lumada's growth cycle, the two companies—GlobalLogic and Hitachi Vantara—will work together to provide ongoing value, with GlobalLogic responsible for the first quadrant (Digital Engineering) and Hitachi Vantara the fourth quadrant (Managed Services).

Under the Mid-term Management Plan 2024, we will invest a total of 500 billion yen in business expansion and 200 billion yen in Lumada to complete the cycle of enhancing the strengths of each quadrant. Our aim is to accelerate growth by creating such cycles with more and more customers.

In addition, we launched Hitachi Digital in April 2022 to accelerate the global expansion of Lumada. Hitachi Digital will take the management lead in Silicon Valley. Together with Hitachi Vantara and GlobalLogic, it will collaborate with OT-related group companies, such as Hitachi Energy, Hitachi Rail, and JR Automation, to power the development and execution of our Lumada strategy.

GlobalLogic

GlobalLogic's strength lies in design-driven digital engineering. It enjoys a high level of trust from customers, having posted year-on-year growth in revenues of 38% in fiscal 2021. GlobalLogic has 38 engineering centers, nine design studios, and more than 25,000 design and software engineering professionals worldwide. For more than 20 years since its founding, it has deployed its capabilities in design, engineering, and data science to support the DX initiatives of customers around the world. Specifically, it provides "experience design" to create intuitive digital experiences that increase user engagement, "advanced engineering" to realize powerful digital experiences through solution development, and "content/data engineering" to derive insights from data and convert them into customer value. By offering these services as a total package, it is able to deliver unique value. It also engages in cross-selling and solution synergies with Hitachi Vantara, which is beginning to produce results.

For the Japanese market, we established GlobalLogic Japan in April 2022 to accelerate DX promotion for customers by combining Hitachi's business foundation in OT, IT, and products with GlobalLogic's strength in design-led digital engineering.

Lumada's growth cycle (4-quadrant model)

MAINTAIN   Managed Services   Digital Engineering   **PLAN**

Secure Data Management, Hybrid Cloud Compatibility

Consulting, Design and Digital Engineering Capability

GlobalLogic

Understand the customers' management challenges

Operate, maintain, and assess for the next step

LUMADA

Develop solutions with IT/OT/Products

Implement solution

Digitized Products in Other Sectors

Highly Reliable System Development

OPERATE   Connected Products   System Integration   **BUILD**

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Scale the Lumada Business

The DSS Sector will address the needs of customers and the market through three approaches. In addition to solving issues through collaborative creation with individual customers, we will leverage the strengths of each business group—in such areas as horizontal deployment of high-value-added solutions and creation of new markets in the ecosystem—to scale the Lumada business.

Continuously provide value	Horizontally deploy solutions	Take the lead in building ecosystems
Customer DX	**Domain DX**	**Social Infrastructure DX/GX**
Front Business / Services & Platforms	IT Services / Services & Platforms	Front Business / IT Services / Services & Platforms
Increase engagement with individual customers to obtain repeat orders	Horizontally deploy packaged solutions to attract customers and build a new cycle	Create new markets through social infrastructure DX/GX with numerous stakeholders

Customer DX

This is a field in which we can deploy the strengths of the Financial Institutions BU, the Social Infrastructure Systems BU, and other business units.

Case study

- **Sustainable management support for Sompo Japan Insurance**

  To support the insurance underwriting operations of Sompo Japan Insurance, we mobilized our "CMOS annealing" quasi-quantum computer to increase the number of policies analyzed and evaluated for risk 10 times, thus reducing overall business risk. We also expanded collaboration on multiple fronts to develop services that address social issues, such as AI-based infectious disease forecasting and corporate SX* support through HR tech.

  *SX: Sustainability transformation

Domain DX

Here, our approach is to attract new customers by horizontally deploying original services developed through co-creation with customers and solutions already proven in the market. This is an area where we can utilize the strengths of Hitachi Systems and Hitachi Solutions, which have solid track records in the horizontal deployment of services and solutions.

Case study

- **Value provision through horizontal deployment of proven solutions**

  More than 700 local governments have adopted Hitachi Systems' "ADWORLD" municipal solution, and the total number of users of Hitachi Solutions' "PointInfinity" digital marketing solution in Japan and overseas has surpassed 300 million.

Social Infrastructure DX/GX

This approach involves building a new ecosystem with numerous stakeholders to address complex issues that cannot be solved by customers and Hitachi alone. Such a business is only possible because Hitachi engages in a wide range of domains, including OT, IT, and products, and will actively promote it as one of the core businesses of the DSS Sector.

Case study

- **Corporate ESG management and capital market transparency**

  We launched our "Sustainable Finance Platform," which facilitates the collection and use of ESG data using digital technologies, such as IoT, blockchain, and AI, to create an ecosystem that connects financial institutions and operating companies through transparent monitoring and data analysis, and thus identify new market opportunities.

Strengthening and Expanding Digital Talent

We will continue to advance GlobalLogic's exceptional HR recruiting and development mechanism and expand it to Japan while upgrading overall development programs. By also expanding the mutual exchange of human resources with GlobalLogic, we will accelerate the development of IT engineers in Japan. Our DSS Sector will increase its digital talent by around 30,000 people in Japan and abroad over the three years through fiscal 2024.

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Growth Strategies of Business Units and Group Companies

Front Business

Financial Institutions Business Unit

The Financial Institutions BU builds and operates mission-critical systems with high levels of robustness and safety for the financial, insurance, and securities industries. It also develops and provides innovative financial solutions that help resolve customers' business challenges. Under the Mid-term Management Plan 2024, we aim to increase revenues and operating income from "financial DX" services in Japan and overseas, where the market is continuously growing, while strengthening efforts in "GX," earmarked as a new growth engine.

The Financial Institutions BU has expanded its Lumada business by developing solutions and providing services through co-creation with customers in the financial services industry. Going forward, we will leverage the strong relationships we have cultivated with financial institutions and combine them with the Hitachi Group's capabilities in the OT field to build an ecosystem that involves stakeholders from different industries. Our aim is to utilize various data to create and expand new service businesses and thus achieve further growth of the Lumada business.

In "financial DX," we are working on digitalization services that utilize Hitachi's DX and cloud technologies for the systems of financial institutions, as well as microservices that contribute to the DX of financial institutions. We are also striving to create a tourism MaaS that combines data from different industries with Hitachi's digital ticketing and settlement capabilities. We will collaborate with GlobalLogic and Hitachi Vantara to globally expand the knowledge and results we have obtained in Japan and overseas from creating these new financial services. In "GX," meanwhile, we are currently developing a solution to support the collection of ESG information of listed companies, with a full-scale launch planned for the second half of fiscal 2022. In addition, we will work with regional financial institutions, local companies, and local governments to develop regional revitalization services and help realize a sustainable society.

Social Infrastructure Systems Business Unit

The Social Infrastructure Systems BU is responsible for developing a wide range of mission-critical social infrastructure systems and IT services for public offices, municipalities, electric power companies, transportation companies, telecommunication providers, and defense contractors. It aims to be a business entity that innovates social infrastructure with data and digital technology by co-creating with customers and stakeholders to resolve various social issues. Leveraging its strength in system integration–driven value provision, it engages in "Customer DX" aimed at providing individual customers with new value digitally to monitor their business challenges, as well as "Domain DX" to horizontally deploy the know-how obtained through individual customer DX efforts across businesses in the same sector and other industries. The next strategy of this business unit is to become a provider of "Social Infrastructure DX/GX" solutions that collaborates with various stakeholders to deliver advanced services and solutions to issues facing society as a whole. Under the Mid-term Management Plan 2024, we will create a new growth-oriented service model by positioning "social Infrastructure DX/GX" as a pillar of business growth in markets where the Hitachi Group can demonstrate its strengths from the perspective of social value, market growth, and value creation through co-creation. Using OT and domain knowledge in synergy with IT, we aim to generate stable revenues and high profitability through a recurring business model that implements solutions to customers' issues and also converts value into assets.

To realize "Social Infrastructure DX/GX," we will participate in national and local government initiatives for the social implementation of Society 5.0 while collaborating extensively on a global basis in order to expand our business. In light of new government policies, we will utilize our unique digital technologies to support Digital Government, the safety and security of local communities and public spaces, and reinforcement of social infrastructure. In addition, we contribute to a decarbonized society by combining energy management (including the supply-demand balance and control) and environment-related solutions that have proven expertise. We will also use materials informatics technology to support value creation in various industrial fields aimed at realizing a sustainable society.

Case study

As a cooperative member of Japan Exchange Group (JPX) that issued the first Green Digital Track Bond in Japan, Hitachi will utilize its sustainable finance platform to smoothly collect and record operational data on the power generation facilities in which JPX has invested. By providing high levels of convenience to issuers and investors, we will encourage corporate ESG initiatives and help society as a whole, achieve carbon neutrality.

Case study

To address the rapid aging of social infrastructure facilities and falling numbers of experienced maintenance personnel, we will provide more advanced maintenance solutions through remote inspections using drones and diagnostic imaging. In addition to infrastructure providers, we will incorporate superior technologies through open innovation from companies, universities, and other organizations to strengthen AI platforms for facility inspections and achieve more efficient and cost-optimized infrastructure management throughout local communities.

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IT Services
Hitachi Systems

We have business systems across a wide range of industries of varying sizes and a diverse service infrastructure that includes data centers, network and security operation and monitoring centers, contact centers, and around 300 service locations throughout Japan for system operation, monitoring, and maintenance. Deploying these strengths, we provide one-stop services covering the entire IT lifecycle.

In addition to services and security solutions to facilitate digitization of frontline processes, we will focus on managed services that support system operation, maintenance, and monitoring in order to expand Lumada's business. To broaden recurring businesses promoted by the DSS Sector, we will also focus on "areas of continuous value delivery." Specifically, we will leverage knowledge accumulated in each of our businesses to build a new growth model, and we will use this model to provide cloud-managed services and software assets and thus expand our business.

In cloud computing, Hitachi will use the standardization of municipal systems as an opportunity to step up deployment of its "ADWORLD" municipal solution, which incorporates know-how gained through the fast-tracked standardization of Japan's National Health Insurance system. Through collaboration with local vendors, we will promote the horizontal deployment of this solution. By also incorporating our business in managed services for the Government Cloud, we will work to expand our share of the municipal government market.

In managed services, we will deploy Lumada's solutions in a stable and efficient manner to enhance our high-value standardization services, which include security monitoring, IT operations, contact centers, and business process outsourcing (BPO). By also incorporating industry-specific solutions, we will deliver our services to a wide range of customers, including small and medium-sized companies. In security monitoring, which will become indispensable with the spread of cloud computing, we will step up collaboration with domestic and overseas group companies with specialized skills and actively engage in Groupwide initiatives.

Hitachi Solutions

As a member of society and the Hitachi Group, Hitachi Solutions provides digital solutions, particularly for the manufacturing, logistics, and communications industries, thus helping resolve problems faced by customers and society. It also promotes sustainability transformation (SX) by servicing and providing high added value to existing commercial products.

We have been promoting data-driven management by stepping up internal DX to visualize management data and improve productivity. Utilizing our expertise in this area, in Japan we have provided solutions to support productivity improvement and new business creation in the priority areas of smart manufacturing, digital marketing, workstyle innovation, smart mobility, business cooperation, security, spatial information, and data acceleration. As a result, we posted steady sales growth despite the COVID-19 pandemic.

Overseas, meanwhile, Microsoft's Dynamics business performed well in Europe, the United States, and Southeast Asia, which are earmarked for advances in DX and high growth. Hitachi Solutions America has received a global "Microsoft Partner of the Year Award" for four consecutive years. In 2002, it was a "Winner" in Microsoft's "Dynamics 365 Supply Chain Management and Intelligent Order Management (IOM)" category.

Under the Mid-term Management Plan 2024, we will leverage "Hitachi Solutions DX Lab," a digital co-creation space, to accelerate co-creation with customers and partners and deliver solutions and services that help realize sustainable management and society. Internally, we will refine data-driven management and promote human resource development that draws on people's individual strengths. Here, we will create opportunities for employees to take on global challenges by holding SX-themed idea sessions and encouraging senior employees to excel. We will also swiftly roll out commercial products that reflect market trends, such as IoT and smart payment solutions, while collaborating globally with partners who excel in AI, blockchain, and other advanced technologies.

Case study

"ADWORLD" has been adopted by more than 700 municipalities nationwide, contributing to municipal DX by improving services for residents and overall administrative efficiency. Using this solution, Shibuya Ward undertook a complete renewal of its ICT infrastructure for workstyle reform and reduced paper use by 40%. Going forward, we will expand activities for system standardization in compliance with the Ministry of Internal Affairs and Communications' Municipal DX Promotion Plan and provide support for the Government Cloud.

Case study

Our "PointInfinity" digital marketing solution has been adopted by a wide range of customers engaged in building loyalty point management systems, including such convenience stores as FamilyMart. The total number of "PointInfinity" members in Japan and overseas now exceeds 300 million. Here, we provide comprehensive marketing support, from building membership and loyalty point programs to providing recommendations and effectiveness measurements using information collected by AI.

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Services & Platforms
Services & Platforms Business Unit

The mission of the Services & Platforms BU is to utilize co-creation and data to provide shared infrastructure and services that strengthen Lumada and enable continuous value creation.

Through IT platforms and services that support society's digital infrastructure in the era of "ultra-big data," we have helped resolve issues for customers in Japan and overseas.

In overseas markets, Hitachi Vantara is driving Lumada's global expansion by providing data management solutions, while GlobalLogic is using its strengths in design-driven digital engineering to provide DX services. In the domestic market, we also provide IT platforms that leverage our expertise in cutting-edge digital technologies and mission-critical system construction.

With the progression of DX in recent years, customers have become increasingly active in utilizing cloud services to revamp their core systems for business expansion and improved operational efficiency. Based on their DX strategies, they are increasingly demanding hybrid clouds that combine the advantages of both public clouds (which enable rapid startup and flexible expansion) and private clouds (which allow safe and secure use of important data on corporate systems, management, and the like). With this in mind, we will focus on providing digital engineering and hybrid cloud managed services to avoid operational complexity and achieve both agility and reliability in environments where multiple clouds and services are used together. Specifically, we will strengthen our data management infrastructure by linking storage virtualization, operational automation, data governance, and other technologies. We will also provide a one-stop service that covers everything from understanding customers' business challenges to formulating optimal cloud migration strategies, migration itself, and system construction and operation.

Through these efforts, we will support the digital infrastructure that is the key to our customers' DX. At the same time, we will strongly encourage innovation by addressing the problem of data silos, eliminating operational complexity, and ensuring protection and traceability of critical customer data.

Case study 1. Hitachi Vantara and GlobalLogic

Data-driven solutions for BMW Group innovation

Hitachi Vantara has been selected as a strategic partner for cloud storage and data management. It provides a storage-as-a-service solution called "EverFlex" to manage the BMW Group's worldwide IT infrastructure and deliver the high reliability required for mission-critical manufacturing and operations.

GlobalLogic provides design and digital engineering services for the development, enhancement, and maintenance of middleware for connected cars. In these ways, we support the BMW Group's data-driven innovation efforts, from the first quadrant (design and digital engineering) to the fourth quadrant (hybrid cloud support).
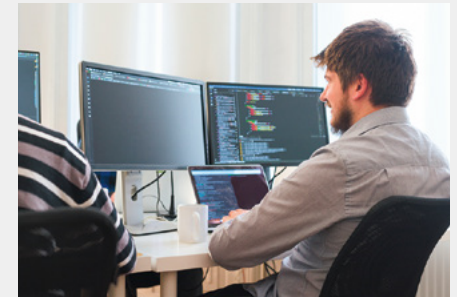
Case study 2. Hitachi Energy and Hitachi Vantara

Development of "Lumada Inspection Insights" to optimize inspection and monitoring of facilities

"Lumada Inspection Insights," jointly developed by Hitachi Energy and Hitachi Vantara, uses artificial intelligence (AI) to analyze satellite images, as well as LiDAR (a remote sensing technology) and temperature distribution and other images and videos, to help customers automate facility inspections, improve safety, reduce weather-related risks and environmental impacts from wildfires, and achieve sustainability targets. This solution leverages AI and machine learning to analyze equipment conditions and risks and identify various causes of failures and equipment stoppages. Through predictive analysis, it also assesses operational and environmental risks, enabling repairs to be made efficiently before a failure occurs.

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Value Creation Initiatives —— Strategies by Sector

Green Energy & Mobility

Ensure happiness of people around the globe through delivering green energy & mobility

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Green Energy & Mobility Business Structure

Nuclear Energy BU **7**%

Main products and services
- Nuclear power plant ABWR
- Fuel debris removal technologies
- Nuclear fuel cycle

Energy BU **9**%

Main products and services
- Renewable energy solutions
- Distributed energy resources solutions
- Service solutions
- Power semiconductors

Railway Systems BU **30**%

Main products and services
- High-speed and intercity trains
- Commuter trains
- Tram, monorail, driverless metro
- Signaling systems
- Traffic management system
- Turnkey solutions
- Operation and maintenance
- MaaS (Mobility as a Service)
- Asset management

Power Grids BU **54**%

Main products and services
- Automation systems
- SCADA (Supervisory control and data acquisition) systems
- HVDC (High-voltage direct current)
- STATCOM (Static synchronous compensators)
- Smart charging systems
- GIS (Gas insulated switchgears)
- AIS (Air insulated switchgears)
- GCB (Generator circuit breakers)
- Transformers

FY2021 Revenues 2,051.0 billion yen

Strengths

The emergence of climate change threats and increased geopolitical risks in recent years has led to huge investment in energy transition and electrification. The strength of this sector lies in its diverse products and solutions that contribute to those opportunities, which serves as a tailwind for our business. We will also leverage our strength to create new markets. For example, we expect high growth in development of mobility electrification for private car, public transportation (trains and buses) and mining industries, as well as managed services in microgrids expanding for diversification and decentralization of power supply systems.

Another strength of the sector is its robust business operations underpinned by a worldwide customer network and installed base. We will expand and strengthen this high profitable business by leveraging the installed base providing services with Lumada's digital technology for IT, OT, and products.

Results and Forecasts

Revenues (billion yen) / Overseas Ratio (%)

- Nuclear Energy
- Energy
- Power Grids
- Railway Systems
- Adj. EBITA (billion yen)
- Adj. EBITA ratio (%)
- ROIC (%)

FY2021 (result): 2,051/80% — Railway Systems 628.3, Power Grids 1,112.6, Energy 183.7, Nuclear Energy 150.7; Adj. EBITA 92.3; Adj. EBITA ratio 4.5; ROIC 2.0

FY2022 (forecast)*: 2,300/82% — Railway Systems 687.9, Power Grids 1,310.5, Energy 177.3, Nuclear Energy 160.4; Adj. EBITA 159; Adj. EBITA ratio 6.9; ROIC 4.2

FY2024 (target): 2,600/83% — Adj. EBITA 260; Adj. EBITA ratio 10; ROIC 8

Lumada revenues (billion yen)

- System integration
- Connected products
- Managed services

FY2021 (result): 222
FY2022 (forecast)*: 280
FY2024 (target): 344

*Announced on July 29, 2022

Mid-term Management Plan 2024: Vision

This sector has been established with the mission of "Create a sustainable society in which each individual can play an active role while protecting the global environment by using data and technology." Under the themes of energy transition, electrification and energy savings, we, as the Hitachi's core business sector for green value creation which is a pillar of our Mid-term Management Plan, will contribute to the realization of a carbon neutral society.

Through the acquisition of ABB's power grids business (now Hitachi Energy) and the Thales Ground Transportation System business, we will leverage our global installed base to accelerate our business transformation into a higher profitability model. We will also expand and implement Hitachi Energy's global operation system supported by digital technology across the entire Hitachi Group to support global growth.

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Green Energy & Mobility: Growth Strategy

Business Environment

Under such challenges as climate change and the Ukraine crisis, energy transition and electrification have been precipitously advanced in global market. The rapid increase in global investment in decarbonization is a tailwind for this sector, which has a diverse range of products and solutions that can help deliver decarbonization to multiple market segments. In addition to conventional infrastructure projects, we expect new business opportunities such as electrification of buses, trains, and other forms of mobility, as well as microgrids. Also, business-to-service conversion and GX (green transformation) aimed at creating a carbon neutral society will emerge and grow around the world.

Digital strategy By leveraging Lumada to enhance this sector's large installed base around the world, we aim to evolve it into a recurring business to increase the ratio of high profitable services. We will also use Lumada to address the challenge of business transformation, for example, dedicated core businesses such as maintenance, to foster the transformation of our overall business portfolio. In high growth segments, such as mobility electrification and microgrids, we will provide offerings combining IT, OT, and products as "One Hitachi." For example, we will further expand collaboration with Hitachi Vantara and GlobalLogic in the asset management business, including asset performance management (APM) and the use of digital technologies in eMobility and other fields.

Green strategy Hitachi aims to contribute to CO_2 reduction by 100 million metric tons annually by fiscal 2024 (monetary equivalent of approximately 1.1 trillion yen[*1]), and Green Energy & Mobility Sector's contribution will be more than 80% mainly by Hitachi Energy. For example, Hitachi Energy's high-voltage direct current (HVDC) transmission system and digitalization will contribute to the power grids' resiliency and renewables integration. In the nuclear power segment, we will accelerate development of new technologies, such as small modular reactors (SMRs). Meanwhile, EFaaS (Energy & Facility Management as a Service), attractive solution for energy sector, improves operational efficiency through the integrated management of energy and facilities, and contributes to CO_2 reduction by accelerating the introduction of distributed energy resources solutions.

We will focus on R&D investments in areas such as energy transition, electrification, and energy savings and develop new products and services that match the market's decarbonization needs in order to further increase our market share. The sector plans to invest in power electronics and

*1 Carbon price: CO_2 reduction contribution from decarbonization solutions converted to monetary value, assuming a carbon price of ¥11,000/t-CO_2

digital technologies, which are key to energy transition and electrification, during the period of the Mid-term Management Plan 2024. Using such technologies, we will also develop sustainable products and solutions and expand our service business in our installed base. Through these efforts, we will contribute to the achievement of a carbon neutral society.

Green Energy & Mobility Sector: Market Trends and Challenges

Major Market Trends				
Net zero (in 20-30 years)	Geopolitics and energy independence	Accelerate shift from fossil fuels to clean electricity	Expand electrification (mobility, industry, buildings)	Advances in remote and automation technologies

Challenges				
Local regulations, supply chain	Energy security	Power system resilience against climate change impacts	Mobility in a decarbonized, post-COVID world	Business process transformation

Leverage Lumada to Make the Social Innovation Business Highly Profitable

Lumada revenues

344 billion yen

FY2024 (target)

■ Managed service offerings
- Blade Total Service
- Remotely monitoring and supporting services
- Integrated substation maintenance management services solutions

■ System integration offerings
- Digital railway controls
- Lumada APM[*2], EAM[*3], FSM[*4]
- CNaaS[*5]

■ Connected product offerings
- IoT-enabled vehicles
- Energy management systems for microgrid
- Grid-eMotion™
- CNaaS
- Restart of nuclear power plants

*2 APM: Asset Performance Management *3 EAM: Enterprise Asset Management
*4 FSM: Field Service Management *5 CNaaS: Carbon Neutral as a Service

Wide Range of Green Product Examples from the Green Energy & Mobility Sector

SECTOR'S PORTION OF HITACHI'S CONTRIBUTION FOR CO_2 REDUCTION[*6] IN FY2024

>80%

Power grids   EFaaS   Nuclear power   eMobility

*6 Lifecycle CO_2 avoided emission in annual products shipped (base year FY2013)

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Energy Business

Market Environment

Energy transitions targeting a decarbonized society are accelerating on a global basis. We also see progress in grid restructuring, including the shift to distributed energy resources, virtual power plants (VPPs), and next-generation transmission networks, in line with the increasing introduction of offshore wind power and other forms of renewable energy. In particular, demand related to digitalization, such as predictive maintenance, distributed energy resources, and grid and operational optimization, continues to grow at a high rate. There is also growing momentum to reevaluate nuclear power in order to achieve zero emissions by 2050.

Japan is also accelerating its energy transition, and the government has set a policy to increase the ratio of renewable energy to 36%–38% by 2030. Its plan also calls for the development of long-distance direct current transmission lines to transmit electricity from offshore wind and other renewable energy sources to urban areas, as well as to consider the use of hydrogen. The domestic market is expected to continue growing against the backdrop of large-scale integration of renewable energy, energy management such as grids, increasing data centers and the shift to electric vehicles (EVs), natural disaster countermeasures, and the restart of nuclear power plants.

Business Strategy (Power Grids BU)

The power grids market and related areas are expected to grow against the backdrop of increased electricity demand from industries, buildings and IT sectors, electric vehicles (EVs) and electrification of railroads and the need to modernize the power grid to address supply and demand complexities like the integration of renewable energy and rising adoption of EVs to help realize a net zero society. Through collaborative creation with customers and partners led by Hitachi Energy, the Power Grids BU has established itself as a global market and technology leader to support an accelerated energy transition and pursue a carbon neutral future.

Hitachi Energy, which accounts for the majority of the Power Grids BU, operates four businesses: Grid Automation, Grid Integration, High Voltage Products, and Transformers. It has a broad portfolio of products, systems, software, and services, which together with Hitachi and its Lumada value co-creation cycle offer a unique combination of an energy and digital platform for utilities, as well as for customers in a variety of sectors, including industries, transportation, buildings, data centers, and cities. Sustainable products and systems, power electronics and digital solutions are being deployed to build the foundation for a system of systems and enabling the energy transition. Solutions such as high-voltage direct current (HVDC) technology play an important role in integration of renewables, long-distance power transmission, and interconnection of power grids across countries and continents.

As an increasing trend towards cross-sector integration, Hitachi Energy has developed innovative technologies like Grid-eMotion™—a flash-charging system for electric buses and commercial fleets supporting the electrification of the transportation sector. Another example is the EconiQ™ portfolio of environmentally efficient solutions that reduce environmental impact. In Japan, we will continue to introduce appropriate Hitachi Energy solutions to serve customer requirements.

In addition to continuously strengthening its power grids core business, the Power Grids BU aims to advance a sustainable energy future for all and achieve profitable and sustainable growth by doubling its digital and services businesses, and expanding its business at the grid edge of the energy system. The company is committed to innovation through synergies, partnerships, and pursuing organic and inorganic growth; the Power Grids BU will continue to strengthen its contribution as a partner, across the customer's lifecycle—supporting planning, building, operations and maintenance. Especially, in the Mid-term Management Plan 2024, Hitachi Energy aims at a 4%–6% CAGR annual revenue growth ahead of market, and to increase adjusted EBITA to 8%–12%.

By combining Hitachi's digital technology with Hitachi Energy's global top-level power grids business, the Power Grids BU will take advantage of its unique strengths with both energy and digital platforms to provide solutions for energy transition. We will also realize profitable and sustainable growth by placing Lumada's new value co-creation cycle at the core.

FY2021 Performance

NordLink—the interconnection linking Germany and Norway's power markets and enabling access to renewable energy

Hitachi Energy has delivered one of the world's longest and most powerful HVDC interconnectors (NordLink) to a consortium owned by Statnett (Norway's national power transmission and distribution company), TenneT (Germany's national power transmission and distribution company), and the state-owned German development bank, KfW. The NordLink enables exchange of renewable energy by connecting wind and solar power from Germany and hydro power from Norway, so that both countries can use their renewable resources more efficiently. Through the 623 km long, 1,400 MW HVDC interconnection, it is possible to provide enough electricity to meet the needs of 3.6 million German householdsX, which is equivalent to the total population of Berlin, Germany.

Hitachi Energy was responsible for the design, engineering and supply of two HVDC converter systems in southern Norway and northern Germany.

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Business Strategy (Energy BU)

The Energy BU will focus investments and resources on green and service businesses, aiming to become a business entity that contributes to decarbonization and carbon neutrality.

We will develop and promote core solutions and technologies to realize "Hitachi Carbon Neutrality 2030." We will also integrate technologies mainly in the three key fields of "renewable energy," "energy management," and "asset management" to deliver high-value-added solutions and wide-ranging services.

In the green business, we will leverage our expertise in wind power and other forms of renewable energy, as well as in distributed energy resources, hydrogen utilization, and power semiconductors, to generate growth. We will also promote next-generation microgrid demonstration models and create carbon neutral solutions that incorporate virtual power purchase agreements (PPAs).

In the power semiconductors business, we will develop core competencies such as low-loss and high-voltage technologies that contribute to decarbonization.

In the services business, we will enhance our digital service platforms and applications and develop data-driven services and other businesses using Lumada. We are shifting our emphasis from maintenance services to management services for energy, assets, and the like to address issues related to social infrastructure and production facilities in various industries.

FY2021 Performance

One-stop service for wind power facilities that uses drones and AI for inspection, maintenance planning, and blade repairs

In 2022, Hitachi Power Solutions began offering a one-stop service for wind power facilities that uses drones and AI for inspection, maintenance planning, and blade repairs.

This advanced maintenance solution, which uses drones and AI, will lead the way in decarbonization because it facilitates stable operation of wind power facilities, with inspections taking one-third the downtime of conventional services. We aim to contribute widely to wind power generation projects in Japan, including offshore wind power generation facilities expected to be fully introduced in the late 2020s.

Business Strategy (Nuclear Energy BU)

Leveraging its advanced technological capabilities and abundant knowledge, the Nuclear Energy BU is working to further improve the safety of nuclear power, which contributes to decarbonization and plays a role in energy supply stability as a base-load power source.

Specifically, we support the restart of nuclear power plants in Japan by ensuring that safety measures are taken in accordance with new regulatory standards set by the government. With a view to increasing plant value after restart, we are introducing a management system that utilizes digital technology while working to improve capacity utilization.

To foster the steady decommissioning of the Fukushima Daiichi Nuclear Power Station, we are developing technologies for fuel debris removal and using underwater remote-controlled robots with cameras to investigate the inside of reactor containment vessels. We will continue supporting the decommissioning of this power plant through the development of such technologies.

In the area of small modular reactors (SMRs), which hold promise as innovative nuclear reactors, we are developing the BWRX-300 together with our partner, GE Hitachi Nuclear Energy (GEH). This reactor uses boiling water reactor (BWR) technology, for which we have extensive experience in construction and operation. Our aim is to reduce construction costs through downsizing while ensuring world-class safety standards.

Hitachi will contribute to stable energy supplies and help realize a decarbonized global society through the restart of nuclear power plants and the revitalization of Fukushima in Japan, as well as deployment of the BWRX-300 in collaboration with GEH overseas.

FY2021 Performance

BWRX-300

Under joint development in the United States and Japan, the BWRX-300 is a compact, next-generation reactor with an innovative safety system that combines high levels of safety and economic efficiency.

A Canadian power company has already selected BWRX-300 as its reactor model and is preparing to apply for permits and approvals for its construction in Canada. Other countries, including the United States, Poland, and Sweden, are also conducting evaluations and studies based on the assumption that the BWRX-300 will be introduced.

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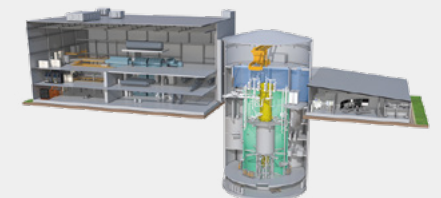
Mobility Business

Market Environment

Despite the ongoing impact of COVID-19 in fiscal 2021, lockdown restrictions were eased compared to fiscal 2020 and demand gradually recovered, mainly in Asia and Europe. Although the long-term impacts of the pandemic on the rail market are still not fully understood, railway demand is recovering and national governments around the world remain committed to investing in public transportation, where the "Living with COVID-19" lifestyle has taken root.

Railways, which are able to move numerous passengers at the same time consuming less energy, are attracting attention for their connection to reduced CO_2 emissions, and going forward, we believe investment in railways will continue over the long term as a solution supporting society, the environment and the economy in countries throughout the world that are promoting decarbonization. In the rail market, where automation, predictive maintenance and other digitalization initiatives are under way, we expect to see an increase in Smart Mobility and Mobility as a Service (MaaS) solutions that provide travelers with more seamless journeys when utilizing multiple transportation systems, including railways and buses.

Business Strategy (Railway Systems Business Unit)

Despite challenging market conditions caused by COVID-19, revenue expanded on steady orders in the Railway Systems BU in fiscal 2021.

In the rolling stock business, orders for projects with attractive long-term service agreements are on the rise. Specific achievements include an order to build and maintain next-generation high-speed trains for the "High Speed Two" high-speed railway project in the UK, and the commencement of a 30-year long-term high-speed railway rolling stock maintenance agreement with ILSA in Spain. In the United States, the strategic decision was made to construct a new assembly plant for rolling stock the Washington, D.C., metropolitan area. This plant will enable Hitachi to meet a wide range of demands in the North American rail market.

Hitachi also announced that it will acquire the Ground Transportation Systems business from Thales. Hitachi's rolling stock and other signaling and services-related businesses currently have a sales ratio of 6:4. With the acquisition from Thales, the strategy is to increase the ratio of the signaling and service businesses, which are considered to be more profitable. It is also geographically advantageous, enabling the development of new important markets such as Germany, Canada and Singapore. By combining the cutting-edge technologies possessed by Thales' signaling and services-related businesses with the digital engineering capabilities of Hitachi's Lumada and GlobalLogic, we will establish a foothold as a major player in the Smart Mobility and MaaS business models.

We are also accelerating technological developments to reduce CO_2 emissions. We aim to reduce fuel consumption by 20% or more with storage battery hybrid railcars introduced on intercity railways in the UK. In Florence, Italy, we successfully conducted the first test operation of a storage battery–powered tram, and are making steady progress toward the global expansion of rolling stock equipped with storage batteries. We are also working with JR East and Toyota Motor Corporation to develop environmentally friendly hybrid vehicles using hydrogen as an energy source.

In transforming our business from hardware to "services" and increasing investments in products facilitating a sustainable future, we aim to achieve revenue of one trillion yen and an adjusted operating income ratio in the double digits by fiscal 2026.

Rolling Stock 58%
- Manufacturing
- Service & maintenance

Rail Control 42%
- Signaling and control products
- Service & maintenance
- Turnkey solutions

FY2021 Revenues
628.3 billion yen

Japan 20%
Asia Pacific (excl. Japan) 15%
Americas 10%
EMEA 55%
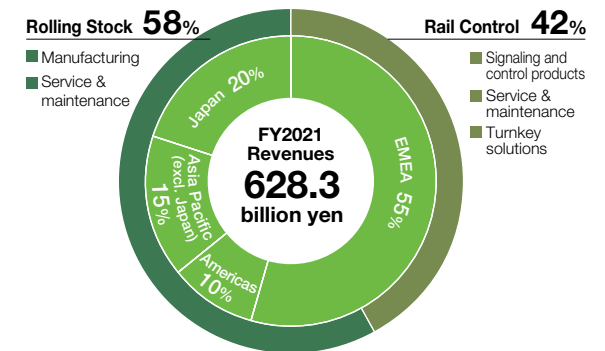
Smart Mobility Example Using Lumada

New Lumada Smart Mobility services launched in Genoa, Italy

In July 2022, Hitachi Rail announced the launch of Lumada Intelligent Mobility Management, a new suite of smart mobility solutions for cities, transport operators and passengers. The suite includes powerful tech for passengers and transport operators alike—connecting smart ticketing, traffic flow management and e-charging through a common analytics platform.

In the launch program, in Genoa, Italy, the new mobile app allows passengers to seamlessly access every mode of public transport in a city "hands-free" by registering the passenger's phone as it connects to the network of more than 7,000 Bluetooth sensors on buses, trains, private hire e-vehicles and even a cable car. The cheapest possible fare is automatically calculated at the end of each day based on the passenger's actual usage—and without needing to purchase a ticket.

For transport authorities, the new suite of smart mobility software empowers operators with a "digital twin" of the entire transportation network, giving real-time visibility of passenger and multi-modal transport flows around any city. By offering "as a service" business models to customers for these services, Hitachi Rail aims to make it easier than ever for cities, operators and passengers to accelerate the transformation to more sustainable transportation.
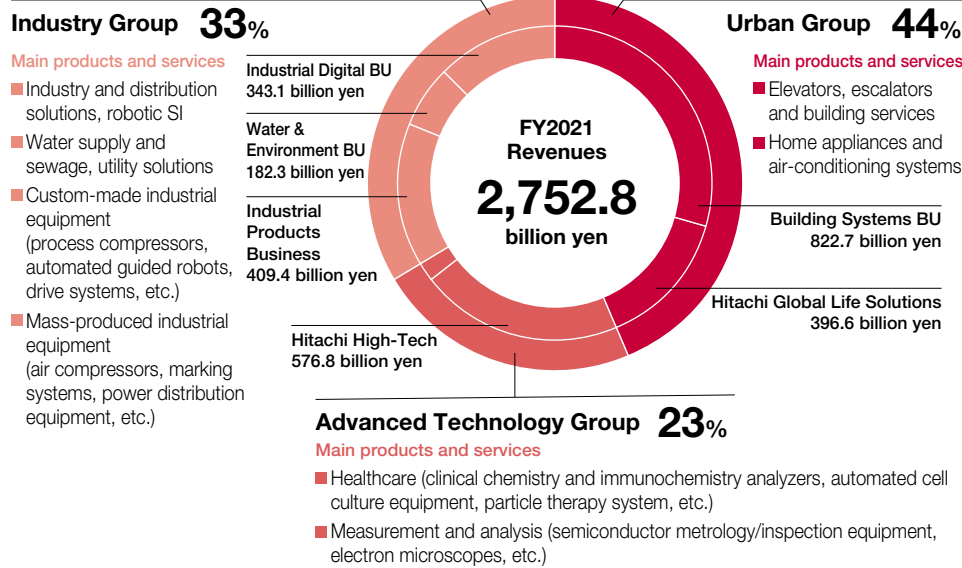
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Value Creation Initiatives — Strategies by Sector

Connective Industries

"Connecting data, value, industry, and society."
This sector brings together Hitachi's unrivaled products, connects them to use digital, and offers them as solutions. We aim to be "sustainable value creators."

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Connective Industries Business Structure

Industry Group 33%

Main products and services

- Industry and distribution solutions, robotic SI
- Water supply and sewage, utility solutions
- Custom-made industrial equipment (process compressors, automated guided robots, drive systems, etc.)
- Mass-produced industrial equipment (air compressors, marking systems, power distribution equipment, etc.)

Industrial Digital BU 343.1 billion yen

Water & Environment BU 182.3 billion yen

Industrial Products Business 409.4 billion yen

Hitachi High-Tech 576.8 billion yen

FY2021 Revenues
2,752.8 billion yen

Urban Group 44%

Main products and services

- Elevators, escalators and building services
- Home appliances and air-conditioning systems

Building Systems BU 822.7 billion yen

Hitachi Global Life Solutions 396.6 billion yen

Advanced Technology Group 23%

Main products and services

- Healthcare (clinical chemistry and immunochemistry analyzers, automated cell culture equipment, particle therapy system, etc.)
- Measurement and analysis (semiconductor metrology/inspection equipment, electron microscopes, etc.)

Results and Forecasts

Revenues (billion yen) / Overseas Ratio (%)

- Urban Group
- Advanced Technology Group
- Industry Group
- Adj. EBITA (billion yen)
- Adj. EBITA ratio (%)
- ROIC (%)

	FY2021 (result)	FY2022 (forecast)*	FY2024 (target)
ROIC (%)	9.4	10.3	13.4
Revenues / Overseas Ratio	2,752.8 / 47%	2,770 / 48%	3,200 / 51%
Urban Group	1,219.3	1,212	
Industry Group	632.7	681	
Advanced Technology Group	900.7	921	
Adj. EBITA	257.8	296	417
Adj. EBITA ratio (%)	9.4	10.7	13.0

*Announced on July 29, 2022

Lumada revenues (billion yen)

- System integration
- Connected products
- Managed services

FY2021 (result)	FY2022 (forecast)*	FY2024 (target)
525.6	808.6	1,115
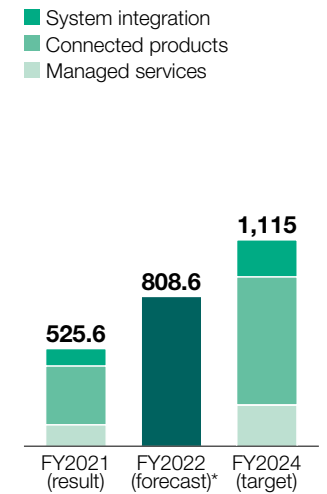
Strengths

Social issues, including the impact of COVID-19, natural disasters and increased geopolitical risks, impact all business areas and are becoming increasingly sophisticated and complex. Given these conditions, in addition to resolving issues that exist between organizations and companies, it is also important to comprehensively resolve interdisciplinary "boundary" issues.

Hitachi will focus efforts on planetary boundaries and wellbeing as its most critical themes. At the same time, in the Connective Industries sector, we will connect interdisciplinary domain knowledge across fields, connect products digitally by pooling products from different fields across fields, and resolve "boundary" issues using total seamless solutions connecting products, OT and IT.

Trends by field

	Urban field	Industry field	Healthcare field
	Comfortable office and home	Mass customization / Skills transfer	Adoption and spread of regenerative medicine / Develop cancer therapies / Expand preventive medicine
Impact of COVID-19	Changes in office demands	Heightened demand for automation / Actual infection risks / More flexible workstyles	Accelerate new drug development
Increasing natural disasters		Stricter CO2 regulations / Enhanced circular economy structure / Factory and logistics functions stopped	
Increased geopolitical risks		Sudden import/export restrictions and exchange rate fluctuations / Skyrocketing material and energy costs	Make pharmaceuticals into strategic products

Sudden changes in the social environment / Severed supply chains

Technology trends: AI, robotics, 5G/6G, quantum computers, metaverse, regenerative medicine

Resolution of "boundary" issues across fields is important

Hitachi's goal

Planetary Boundaries — Growth — Wellbeing

Protect the planet / Maintain social infrastructure — Society where all individuals are comfortable and active

Connective Industries Policy

Connect data, value, industry, and society

1. **Connect** interdisciplinary domain knowledge.
2. **Connect** products digitally by pooling products from different fields across fields into digital.
3. **Resolve "boundary"** issues using total seamless solutions connecting products, OT and IT.

Mid-term Management Plan 2024: Vision

In the Connective Industries sector, comprising the Urban Group, the Advanced Technology Group, and the Industry Group, Hitachi aims to digitally connect highly competitive products, including elevators/escalators, home appliances, measurement and analysis equipment, medical equipment and industrial equipment with the aim of achieving growth through total seamless solutions and recurring business. Revenue will expand, from 2.7 trillion yen in fiscal 2021, to 3.2 trillion yen in fiscal 2024, of which Lumada revenue will increase from 0.5 trillion yen in fiscal 2021, to 1.1 trillion yen in fiscal 2024. We will also expand business in North America as a focus area for global growth in an effort to increase green value.

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Digital Systems & Services   Green Energy & Mobility   **Connective Industries**   Hitachi Astemo

Connective Industries Growth Strategy

In the Connective Industries sector, Hitachi will implement three priority measures to expand business based on the Lumada growth model, in which the cycle of co-creation of value with customers is driven by data. In digital engineering, we aim to strengthen front engineering capacity, and in system integration, we aim to evolve and expand total seamless solutions. In connected products and managed services, we will strengthen recurring business by expanding and enhancing the functions of connected products.

Strengthening Front Engineering Capacity

Hitachi creates specific objects and policies by utilizing various methods of business concepts and issues analysis and provides integrated solutions and services. To accelerate the creation of digital synergies in this sector, in April 2022, Hitachi doubled its number of digital consulting staff in response to DX needs, to about 120 people. Strengthening front engineering capacity will further increase mobility, which drives the Lumada business cycle.

Developing and Expanding Total Seamless Solutions

"Boundaries" issues exist in all areas, including vertical boundaries between management and workplaces, horizontal boundaries between supply chains, and boundaries between different industries. It has become particularly important to provide places in industry, urban, healthcare and other fields facilitating connections in response to increasingly sophisticated and complex challenges in recent years. Given these conditions, Hitachi will model operations using cyber-physical systems (CPS) based on domain knowledge obtained from products to develop and advance total seamless solutions resolving "boundary" issues in the industry, urban and healthcare fields.
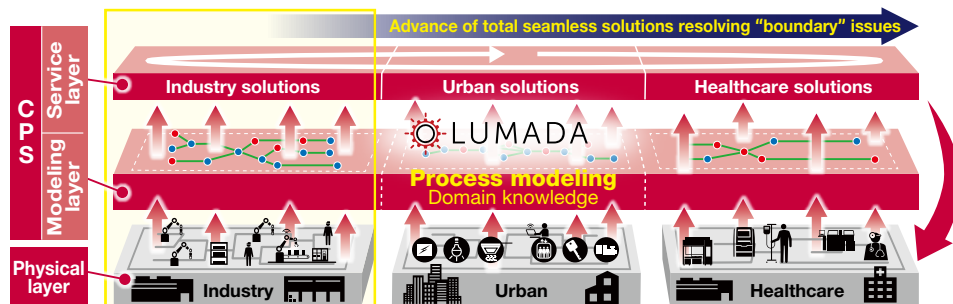
Strengthening Recurring Business by Expanding and Enhancing the Functions of Connected Products

In addition to providing products and services, we will expand recurring businesses such as maintenance and services, repairs and modifications, and replacements and recycling. The aim is to achieve a recurring business revenue CAGR of 6% from fiscal 2021 to fiscal 2024, exceeding overall sector revenue CAGR and driving growth.

One measure for strengthening recurring business involves the development of new services combining connected products and digital technologies. First, by substantially expanding the number of connected products, from about 0.8 million units in fiscal 2021, to approximately two million units in fiscal 2024, we will be able to gain a deeper understanding of the realities of customer issues. And in the second phase, we will also merge and strengthen advanced recurring service applications utilizing product data collected through IoT platforms. Through these efforts, Hitachi will develop and provide new services based on product business knowledge and digital capabilities to expand recurring business.
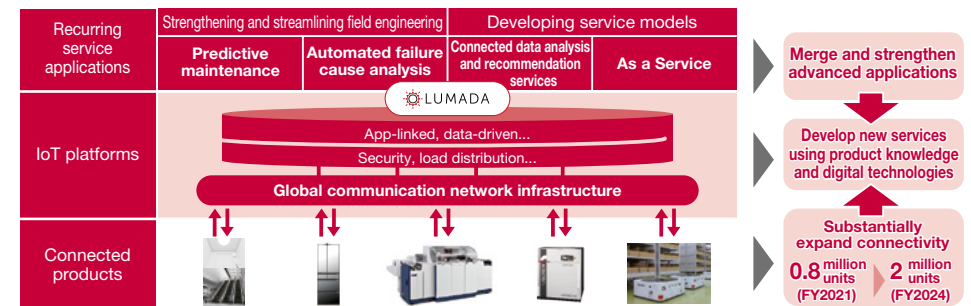
Global Business Strategy

Hitachi plans to increase its overseas revenue ratio from 47% in fiscal 2021, to 51% in fiscal 2024. In particular, we will proactively invest in North America, our key region in the global market, and aim for high growth of 22% CAGR between fiscal 2021 and 2024. In addition to strengthening the integration of robotic SI and digital technologies through the acquisition of JR Automation, we will launch a total seamless solution in North America to further expand our business by connected products such as air compressors, for which the business has been acquired from Sullair; semiconductor manufacturing and measurement equipment; and particle therapy systems.

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Urban Group

Comprising the Building Systems BU and Hitachi Global Life Solutions, this group aims to utilize digital technologies to provide connected products and strengthen solution capabilities.

Revenue

Hitachi Global Life Solutions 33%

Building Systems BU 67%

FY2021 **1,219.3** billion yen

Sales and manufacturing of elevators and escalators 63%

Building services 37%
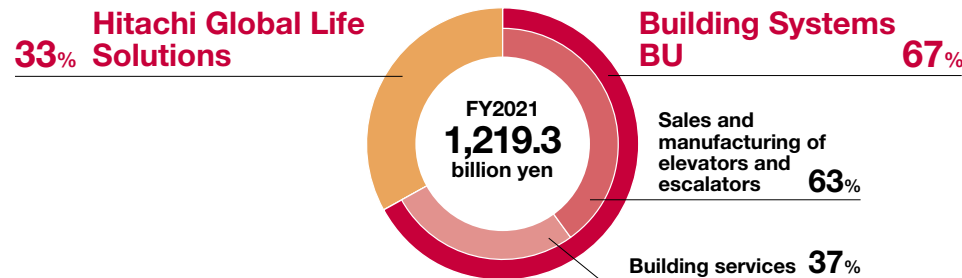
Building Systems BU

This business unit manufactures and sells elevators and escalators, and develops building services (comprehensive elevator and escalator maintenance services and modernization, as well as building solutions). As building-related needs become increasingly sophisticated due to changing market environments, Hitachi aims to become a smart building solutions provider resolving social issues such as prompting green buildings and the new normal.

In Japan, we will attempt to expand business by capturing the recovery in demand for elevator and escalator modernizations that had slumped due to the pandemic. Further, in May 2022, we comprehensively renovated our control centers, comprising the core systems and facilities that enable the remote monitoring and maintenance services for elevators, escalators and other building equipment, including the dashboard facilitating the digital transformation of building management, significantly enhancing quality and expanding menu options related to remote monitoring and maintenance services.

Outside Japan, we will accelerate the creation of synergies with Yungtay Engineering Co., Ltd., which became a wholly owned subsidiary in April 2022 (renamed Hitachi Yungtay Elevator Co., Ltd., in May). In addition to firmly maintaining a top share in terms of orders received in China, the largest market in the world, accounting for more than 60% of demand for new elevators and escalators, we will work to expand the maintenance service and modernization business, areas in which market growth is expected.

Additionally, by leveraging strengths in these core business areas, as well as combining building IoT platforms with strong products and services of the sector and Hitachi Group companies, we will provide smart building solutions supporting green buildings and the new normal to contribute to improving people's quality of life.

Hitachi Global Life Solutions

In addition to home appliances, air-conditioning systems and other product businesses, as well as the provision of maintenance services, we offer solutions utilizing digital technologies. With a long history of developing products from the consumer's perspective, this business is engaged in four areas: enriching life (connected home appliances), advancing and enriching medical care (cleanroom solutions), circular economy (recycling technologies, environmentally friendly products) and low environmental impact (air-conditioning solutions with low environmental impact). Specifically, this business focuses efforts on connected home appliances, including refrigerators and washing machines that can be controlled and managed with smartphones, air-conditioning remote diagnostics and maintenance systems using IoT, and the creation of solutions utilizing digital technologies. Further, through a joint venture with Arçelik in the overseas home appliance business, we will expand sales of Hitachi-brand products and accelerate the overseas expansion of the solutions business.

Total Seamless Solutions Business Example (Urban Field)

We connect building IoT platforms (including building IoT solutions and worker solutions) with products and systems in the Connective Industries sector, such as elevators, security, air-conditioning equipment, lighting, pumps and power supplies, to visualize and analyze all building data. This increases building management efficiency, improves operational quality and provides building users with safety, security and comfort.

Providing smart building solutions for overall optimization by seamlessly connecting "boundaries" between owners (managers) and users, common and private spaces, and facilities and systems.

Providing value

Management Efficient building management

Operation Maintaining and improving the quality of building operations

Life Providing a safe and comfortable building environment

Pumps

IoT sensors

Processing

Power supply

Analysis

LUMADA

BCP

Accumulation

Elevators

Building IoT platform

Air conditioners

Lighting

Security

Information on people flow

Improving building management efficiency and operating quality

Providing building users with safety, security, and comfort

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Advanced Technology Group

Comprised mainly of Hitachi High-Tech, this group aims to expand business by enhancing proprietary technologies for the healthcare and semiconductor fields and strengthening business creation capabilities.

Revenue

9% Others

Hitachi High-Tech 91%

FY2021
632.7
billion yen

30% Industrial Solutions

Analytical & Medical Solutions 28%

Nano-technology Solutions 42%
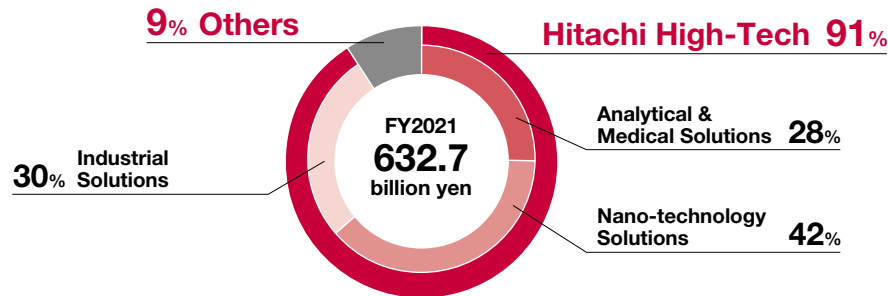
Healthcare, Measurement & Analysis Systems Business

In fields such as healthcare, nanotechnology (semiconductor), and social and industrial infrastructure, Hitachi provides solutions that resolve customer issues utilizing technological capabilities based on measurement, diagnostics, analysis and global sales capabilities.

In the healthcare field, Hitachi High-Tech boasts the world's largest market share in clinical chemistry and immunoassay analyzers, with more than 20 billion tests conducted each year throughout the world. In May 2022, Hitachi High-Tech entered into a strategic partnership with Invivoscribe, Inc. (United States), a global provider of blood cancer testing kits and services, with the aim of accelerating the molecular diagnostics business. Hitachi also enjoys a strong market share in particle therapy systems, which are able to treat cancer while maintaining quality of life with less physical burdens caused by treatment. In the semiconductor field, Hitachi High-Tech has strengths in plasma etching systems that enable ultrafine processing of semiconductors, as well as high-resolution, high-speed inspection equipment, built on a foundation comprising electron microscopes and other high-precision measurement and analysis technologies. In advanced CD measurement SEM, in particular, Hitachi High-Tech holds a global top share.

Total Seamless Solutions Business Example (Semiconductor Field)

We are engaged in utilizing product data and improving development and manufacturing efficiency through co-creation with customers to handle increasingly complicated challenges in semiconductor device structuring and manufacturing processes. As a result, the development period for new products and processes can be shortened in the development phase, yields can be improved in the prototype phase, and line productivity can be improved in the mass production phase. At present, we are already accelerating the creation of solutions at co-creation sites located near customers, and in 2022, a new engineering co-creation site was established in the United States located in Hillsboro, Oregon.

Consolidate and analyze data generated by Hitachi High-Tech semiconductor manufacturing products for processing, testing, measurement, and analysis, and feed that back into manufacturing processes and product groups

Customer co-creation sites

Service application platform
Use product data for predictive maintenance/ analysis visualization/ condition optimization

Feedback into manufacturing processes/products

LUMADA

IoT platform

Semiconductor manufacturing products

Micro processing | Contamination/ fault testing | Size measurement | Failure analysis

Semiconductor manufacturing processes

Development phase | Prototype phase | Mass production phase

Development phase
Shorten the development of new products and processes

Prototype phase
Improve the yield rate of new products and processes

Mass production phase
Improve the productivity of mass production lines

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Industry Group

The Industrial Digital BU, the Water & Environment BU and the Industrial Products business (Hitachi Industrial Products and Hitachi Industrial Equipment Systems) strengthen the global × digital business.

Revenue

Industrial Products Business 44%
- Mass-produced industrial equipment **67%**
- Custom-made industrial equipment **33%**

FY2021 **900.7** billion yen

Industrial Digital BU 37%

Water & Environment BU 19%
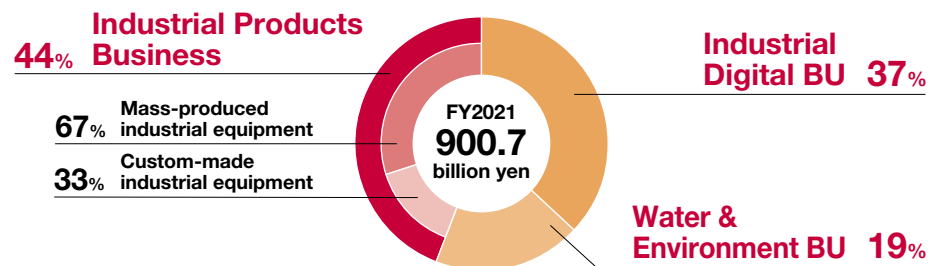
Industrial Digital BU

This business unit provides digital solutions and robotic SI integrating IT and OT in the industry and distribution fields. In Japan, we aim to establish a recurring growth model with Lumada, which will lead to sustainable innovation, by strengthening upstream consulting functions, expanding the SI business constituting the core business, and strengthening service businesses. Globally, we will focus on the North American market and accelerate business development combining the robotic SI of JR Automation, acquired in 2019, with digital technologies. Further, by integrating KEC, which handles robotic SI business centered on automobiles, with Hitachi Industrial Equipment Systems' robotic SI business engaged in assembly and conveyor lines for various manufacturers, Hitachi Automation was established in April 2022 to strengthen the robotic SI business in Japan and the ASEAN region.

Water & Environment BU

This business unit provides a wide range of utility solutions, from social infrastructure facilities for water supply, sewerage, etc., to air-conditioning and industrial plant facilities. We will further strengthen environmental and clean technologies with the aim of creating and expanding next-generation utilities business in electronics, semiconductors, pharmaceuticals, biotechnology and other key markets. Through the development of total seamless solutions originating in OT, we will maximize value across customer value chains and respond to increasingly complex social issues.

Regarding overseas markets, we are targeting global expansion rooted in local communities centered in the ASEAN region, which is our focus market.

Industrial Products Business

This business provides a broad lineup of custom-made and mass-produced industrial equipment that supports industrial and social infrastructure globally.

In the custom-made industrial equipment business, we aim to become a highly profitable business entity contributing to green initiatives. We will work to expand products, services and recurring business that reduces environmental burdens through electrified products, centrifugal compressors and logistics.

In the mass-produced industrial equipment business, we aim to establish a strong product business that contributes to the Social Innovation Business. While positioning air compressors and marking systems as global priority businesses, we are focusing efforts on expanding connected solutions (businesses including IoT controllers and location communication functions) and green products. Moreover, with regard to air compressors, we will pursue synergies with Sullair, acquired in 2017, and in marking systems, we are accelerating global developments with the April 2022 acquisition of Photon Energy (Germany), which has strengths in innovative laser marking systems, and Telesis Technologies (United States), which handles industry-leading laser markers, acquired in July 2022.

Total Seamless Solutions Business Example (Industry Field)

In collaborative creation with Suntory Beverage & Food, we have achieved enhanced product safety and security with the traceability of single bottle at a next-generation factory that continues to evolve. Massive volumes of data are collected from each line, which are then integrated and aggregated in various data formats used to trace and visualize factory data. Based on this effort, we have realized an IoT platform for overall optimization leading to the pursuit of safety, security and workstyle reforms. Further, we are contributing to system enhancement with products that include marking systems enabling high-speed special printing even on physical layers, as well as compact and low-floor automated guided robots.

IoT infrastructure that collects and consolidates data from production equipment and IT systems to be utilized for overall optimization

Suntory Kita-Alps Shinano-no-Mori Water Plant

SUNTORY
SUNTORY BEVERAGE & FOOD

3. Utilization
Utilize integrated and collected data for traceability, visualizing of factory data, etc.

Single bottle tracing | Visualization of factory data | Other applications

Applications

IoT platform
LUMADA

4. Action
Pursue safety and security, workstyle reforms, promote advances in factory management

High-speed special printing | Automated in-factory transportation

2. Connection
Integrate and collect various formats of data

Various information

1. Collection
Data collection

Equipment | Procurement | Production | Quality management | Shipment

Marking system | Automated guided robot

Better product safety and security with single bottle traceability

Realize evolving next-generation factory model

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Value Creation Initiatives — Strategies by Sector

Hitachi Astemo

We will contribute to a sustainable society and improved quality of life by providing world-leading advanced mobility solutions that satisfy our customers

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Hitachi Astemo Business Structure

Others 2%
· Software
· Aftermarket

Motorcycle Business 19%

· Brake
Disc Brake Caliper

· Suspension
Front Forks

· Powertrain

FY2021 Revenues
1,597.7
billion yen

Powertrain & Safety Systems Business 39%

· ICE*1
Engine Control Unit for Direct Injection

· xEV*2
Inverter

Motor

· AD/ADAS
AD*3 ECU*4

Stereo Camera

*1 ICE: Internal Combustion Engine *2 xEV: Electric Vehicles
*3 AD: Autonomous Driving *4 ECU: Electronic Control Unit

Chassis Business 40%

· Brake
Disc Brake Caliper

· Drivetrain
Propeller Shaft

· Steering
Electric Power Steering System

· Suspension
Frequency Reactive Damper Hydraulic

Results and Forecasts

■ Revenues (billion yen) / Overseas Ratio (%)
■ Adj. EBITA (billion yen)
●– Adj. EBITA ratio (%)
●– ROIC (%)

	FY2021 (result)	FY2022 (forecast)	FY2024 (target)
Revenues	1,597.7	1,800	2,000
Overseas Ratio	72%		
ROIC	3.5	5.2	11.0
Adj. EBITA ratio	3.9	5.1	9.0
Adj. EBITA	62.3	92	180

Strengths

Regarding powertrain and safety systems, we leverage advanced inverter and motor technologies honed through years of market experience to develop highly efficient electric axles with integrated gearboxes. Further, to realize autonomous driving, we provide core advanced technologies such as sensing technologies centered on stereo cameras, electronic control units and control software. In the chassis field, we will realize integrated vehicle control solutions for next-generation mobility by leveraging Hitachi's strengths in electronic and electrified brake suspension and steering products to link and control them as a system. In the motorcycle field, where we boast the world's top market share, we will lead advances by providing system products for powertrains, suspensions and brakes, leveraging our advanced technological capabilities and experience, including integrated vehicle control, driver assistance and control technologies for EVs. We will establish Hitachi as a global mega-supplier for automobiles and motorcycles by combining the wisdom of our diverse 90,000 employees at 359 bases spread across 26 countries and regions. (As of July 2022)

Mid-term Management Plan 2024: Vision

Hitachi Astemo aims to realize a sustainable society by providing cutting-edge mobility solutions. Specifically, we will provide environmental value by helping to realize a better global environment through highly efficient, internal-combustion engine and electric powertrain technologies that improve fuel efficiency and lower electricity costs. To create social value, we will improve safety and comfort through integrated vehicle control technologies, using autonomous driving (AD) and advanced driver-assistance systems (ADAS) and advanced chassis systems. In addition, we will utilize Lumada to advance mobility by realizing software-defined vehicles with in-vehicle software enabling advanced control, and over-the-air (OTA) update technologies for various control software. Through these efforts, we will create economic value totaling two trillion yen in revenues with an adjusted EBITA margin of 9% and ROIC of 11% by fiscal 2024.

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Hitachi Astemo Sector Growth Strategy

Business Environment

As carbon neutrality efforts accelerate around the world, the automotive and motorcycle industries are undergoing a once-in-a-century transformation, with competition intensifying in the Connected, Autonomous, Shared, Electric (CASE) fields.

In response to these market changes, the ratio of internal combustion engines (ICEs), which have been the mainstream up to now, is expected to decline in the next few years amid a significant shift towards xEV-related products (motors, inverters and electric axles).

With demand for safe and autonomous driving technologies on the rise, vehicles are increasingly equipped with sensors that recognize the physical world to facilitate AD and ADAS. At the same time, advanced technologies that recognize the physical world are advancing through the use of infrastructure coordination systems that leverage communication technologies.

In the chassis area, EV and autonomous driving solutions are in demand for advanced vehicle behavior control systems, facilitating the electric control of brakes, suspension, steering and other components.

In the motorcycle sector, demand is expected to continue growing in Asia—including India, the largest motorcycle market in the world—while electrification demand is increasing due to heightened environmental awareness.

At the same time, there is an urgent need to stabilize production by overcoming increasingly complex risks such as semiconductor supply shortages and the impact of COVID-19 on the supply chain.

Growth Strategy

To support CASE and increase market share, we will focus on developing AD and ADAS, advanced chassis and xEV-related products such as motors and inverters. For xEV-related products, we will invest 300 billion yen, including R&D expenses, by fiscal 2025 to ensure competitiveness. We will also leverage Hitachi Group R&D resources and engineering technologies possessed by Lumada and GlobalLogic to strengthen software development capabilities and create new advanced solutions for realizing software-defined vehicles.

We will contribute to improving QoL, realize a sustainable society, and strive to attain a leadership position as a global mega supplier. This will be achieved through digital solutions, improving safety and comfort mainly in the areas of autonomous driving and connected cars; green solutions that contribute to the global environment through electrification products and technologies that reduce emissions; and innovative solutions that anticipate the changes that will occur in the mobility field by 2050.

Regarding the creation of synergies from business integration*, we will maximize corporate value through the integration and optimization of our product portfolio and footprint as well as through operational improvements. Although semiconductor shortages are expected to persist, we will take focused measures to ensure stable procurement and delivery, including the securing of long-term contracts with customers.

*Hitachi Automotive Systems, Keihin Corporation, Showa Corporation, and Nisshin Kogyo Co. were integrated as Hitachi Astemo in January 2021.

Provide advanced mobility solutions that contribute to building a sustainable society

Social value
Improve safety, comfort and QoL with AD/ADAS systems and advanced chassis

LUMADA

Connected car technologies
Onboarding devices and software

Environmental value
Contribute to a greener world through efficient electrification technologies and products that improve emission reductions

AD/ADAS
Advanced environment recognition Integrated electronic control

Astemo
A technology company making the world a better place

xEV
Advanced electric powertrain package

Advanced Chassis
Integrated vehicle movement control

Economic value
A commitment to achieve 2.0 trillion yen in revenues; 9% adjusted EBITA margin; 11% ROIC in FY2024

Stereo Camera

Motor

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Business Strategy

The development of next-generation vehicle components (xEV, AD and ADAS, advanced chassis, next-generation motorcycles) is the mainstay of Hitachi Astemo's growth, thus we will prioritize investment in this area.

Powertrains

With powertrains, the key will be to expand mass production of xEV motors and inverters and develop new technologies for more efficient and compact e-axles. In fiscal 2021, Mazda's first mass-produced electric vehicle adopted our motors and inverters. We also provide powertrain products to many customers, including China's Geely Automobile Group, which uses Hitachi inverters in its hybrid powertrains.

Hitachi Astemo has developed compact, high-output inverters that are easy to install, reduce power loss to enhance energy-saving performance, and achieve a 50% size reduction compared to our previous products. In fiscal 2019, we commenced mass production of the world's first high-voltage (800 V) high-power inverter for EVs utilizing Hitachi's proprietary direct water-cooled, double-sided cooling technology. Moreover, our motors—which take advantage of the advanced analysis technologies, structural designs, material developments, production technologies and motor control technologies cultivated within the Hitachi Group—achieve more than 1.2 times the output torque per magnet volume compared to the competition. Hitachi Astemo's strengths also lie in its ability to make e-axles smaller and lighter by utilizing model-based technologies in the optimized design of compact and lightweight e-axles integrating motors, inverters and gears.

In addition, we established Hitachi Astemo Electric Motor Systems to strengthen the mass production of motors, with mass production systems now operational in Japan, China and the United States. Hitachi Astemo will expand its product lineup, and together with the development of advanced technologies that include new materials and software and the strengthening of cost competitiveness, aims to capture the top market share in both motors and inverters.

Safety Systems

Hitachi Astemo also leverages its strengths in the development of sensing and information processing systems required for realizing autonomous and connected vehicles. In fiscal 2021, Suzuki's new Wagon R Smile used our stereo camera with nighttime pedestrian detection capabilities. Honda's new Legend, a vehicle equipped with Level 3 autonomous driving launched in 2021, was equipped with an OTA-compatible electronic control unit for autonomous driving, developed by Hitachi Astemo. Leveraging Hitachi Group technologies, this autonomous driving system offers a one-stop solution, from data centers where software updates are distributed, to vehicle-side equipment.

Hitachi's OTA solution enables highly efficient and secure software updates leveraging its proprietary differential data update technologies and expertise in information security through wireless data communications. In linking this OTA solution with Lumada's digital solutions, it is possible to automatically update software based on optimal solutions derived from AI analysis of big data. For example, by collecting and analyzing real world information obtained from vehicle onboard control units and sensors from each system in multiple autonomous vehicles, it is possible to update the control software for safer autonomous driving. To promote advances towards software-defined vehicles, we are also promoting the transition from domain-type electrical and electronic (E/E) architecture, in which mechatronic control systems are separated for each of several major functions, to zone-type architecture, in which the vehicle is a single system.

In the future, Lumada will be linked to driving and vehicle behavior data acquired from on-board control systems that can be used for predictive maintenance, advanced safety and comfortable driving, and personalized services that anticipate user needs.

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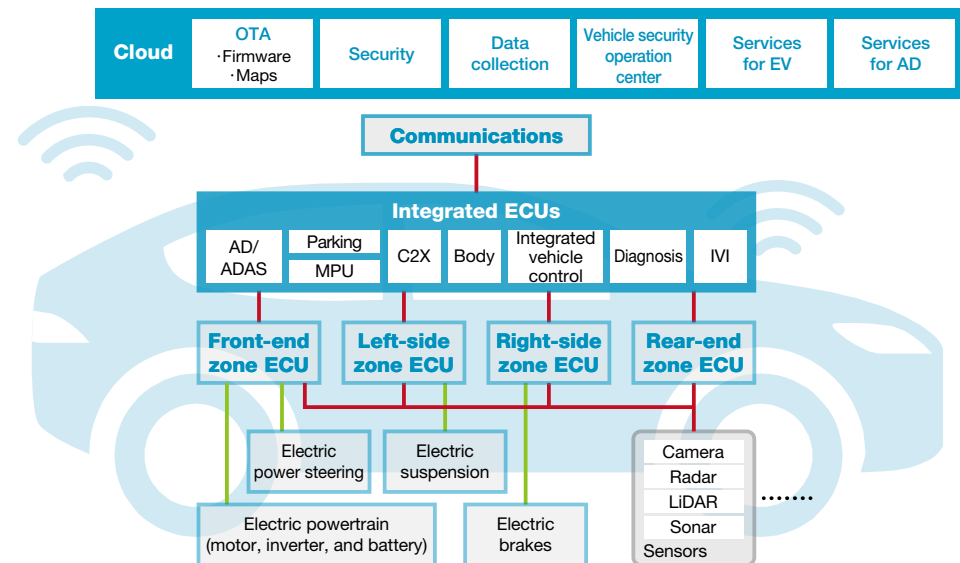
Chassis

To improve vehicle safety, it is important to advance chassis components that perform basic vehicle functions such as driving, turning and stopping. Leveraging strengths in the in-house development of brakes, suspension and steering systems, Hitachi Astemo contributes to realizing autonomous driving by converting these systems into electronic and electric devices, then linking and controlling them to integrally work in conjunction with AD and ADAS systems.

Utilizing suspension system technologies that facilitate a comfortable ride and stability, we jointly developed a shock absorber with AISIN, which was adopted by Toyota's new Land Cruiser, unveiled in June 2021. For brake systems that improve vehicle safety and fuel efficiency, we offer a wide range of products, including a regenerative braking system compatible with electric vehicles. In the area of steering systems, our products provide a high level of responsiveness and operability to meet the electrification needs of automobiles as well as a wide variety of other applications.

Motorcycles

One of Hitachi Astemo's pillars is products for small motorcycles, which are a mainstay of daily life in the Indian and Asian markets. We will respond to future increases in demand for advanced technologies, including the expansion of midsize motorcycles and electrification offerings. We will increase our share of the global market by leveraging Hitachi Astemo technologies and quality, providing products with specifications and cost competitiveness suited to market needs. Starting with integrated vehicle control technologies, we will leverage advanced technologies and a wealth of experience in driver-assistance and EV control technologies to contribute to advances in next-generation motorcycles that realize environmentally friendly vehicle safety, handling stability and ride comfort.

Specifically, we apply Hitachi Astemo technological expertise and promote technological innovations, including the electronic control of brakes and suspensions, and electronic fuel injection systems that comply with emission regulations around the world targeting a wide range of displacements, from small to large, and powertrain systems facilitating electrification. We will also develop suspension systems that provide high handling stability and riding comfort, braking systems that provide stable, reliable braking with a high level of safety and comfort, and driving support systems that contribute to the safety of motorcycles.

Synergies from Business Integration

We are also accelerating the creation of synergies through the business integration of Hitachi Automotive Systems, Keihin, Showa and Nisshin Kogyo, which was completed in January 2021. With this integration, we will establish a solid management foundation through structural reforms that include optimizing business locations and reducing procurement costs through centralized purchasing, efficiently allocating combined resources, integrating talent and fostering a new corporate culture while investing in higher-growth, higher-profit areas.

Strengthening Software Development

Hitachi Astemo meets the needs of automakers around the world by incorporating optimal software in its globally deployed products and systems. As the car itself now functions as a high-performance computer, the performance of in-vehicle software is directly related to creating new value and safe autonomous driving technologies. In April 2019, Hitachi Astemo enhanced its software development capabilities with the establishment of the Software Division to make use of its software developers. Additionally, through the acquisition of in-vehicle equipment software developer seneos (Germany) in April 2020, we have strengthened our front-end engineering capabilities to facilitate efficient software development. Further, approximately 170 digital talent within the Hitachi Group have transferred to Hitachi Astemo to promote digitalization business. With Lumada at the core, we expect to realize synergies from GlobalLogic's engineering and software development capabilities.

Investment Plan

We will invest approximately 300 billion yen, including R&D expenses, in xEV-related products by fiscal 2025, collaborating globally with Hitachi, Ltd.'s R&D divisions including use of their resources. As an example, in areas such as connected solutions, Hitachi Astemo will conduct R&D on the in-vehicle device side, while Hitachi, Ltd. will conduct R&D on the cloud side—effectively separating the areas of R&D and resource allocation.

Risk Management

While EVs are expanding as part of efforts to realize carbon neutrality, ICEs are expected to shift from an upward to downward trend in the next few years. In response, we will optimize our portfolio with changes in the business environment while shifting resources, redeveloping and retraining the professional skills of our human capital over the long term as needed.

Regarding concerns about semiconductor supply shortages, we will secure long-term contracts with vehicle manufacturers for parts delivery and share Hitachi's long-term planning with them to mitigate risk of shortages.

For parts procurement risks due to pandemic-related regulations in the COVID-19 era, we will work with our global networks and supply chains to mitigate risks and overcome challenging conditions while minimizing adverse impacts.

Addressing Risks and Opportunities

With the rapid advance of digitalization and complex developments in the political and economic landscape globally, the business environment is changing day by day. Hitachi monitors and analyzes this business environment, conducts risk management in terms of both responding to risks that should be anticipated and opportunities for further growth in light of social issues, Hitachi's competitive advantage and management resources, and strives to create revenue opportunities while controlling risks.

Strengthening of the Risk Management Structure and Its Aims

In April 2022, a Risk Management Meeting that deliberates important matters related to Hitachi management was established within the Senior Executive Committee. Chaired by the CEO with the Chief Risk Management Officer (CRMO) as vice chair, the meeting discusses and makes decisions on important matters relating to company-wide risks. By centrally managing the various risks faced by Hitachi, which has operations around the world, we are working to achieve a solid management foundation that is linked to our growth strategy.

Six risk-specific working groups have been set up under the Risk Management Meeting, investment risks, business risks, crisis management, compliance, group governance and regional risks. Each working group coordinates Group corporate functions across the organization while conducting activities to mitigate the respective risks.
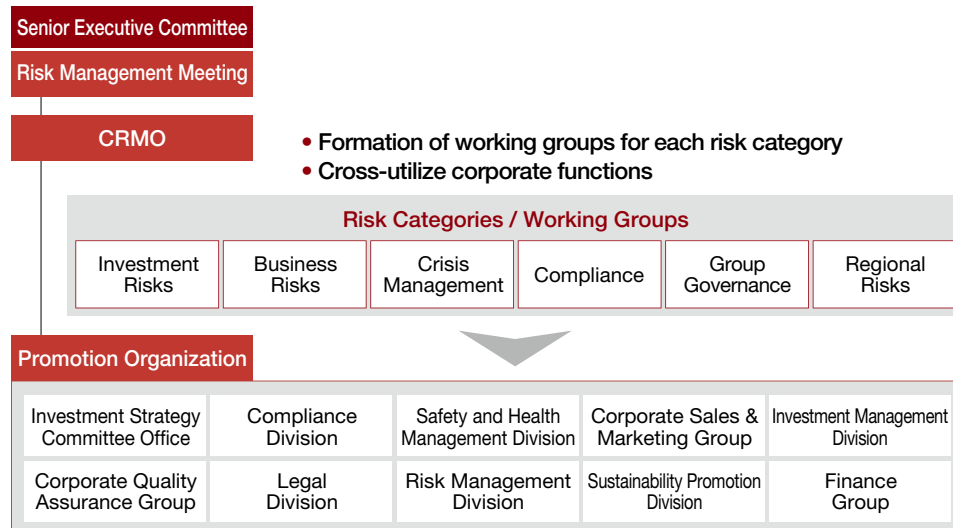
For example, the Business Risks Working Group discusses risks and responses in the global supply chain. Since control of consolidated management is important for Hitachi as a group made up of more than 800 companies, we must also develop plans to disseminate and manage guidelines and policies. This is an area the Group Governance Working Group will discuss going forward. Addressing regional risks in an effort to review the roles of local subsidiaries and achieve overall optimization at global sites, we will ensure that Hitachi's assets are utilized effectively.

Initiatives about investment risks, crisis management and compliance are introduced on the following pages.

Yoshihiko Kawamura
Executive Vice President and Executive Officer, CFO, CRMO

Risk Management Structure

Senior Executive Committee

Risk Management Meeting

CRMO
- Formation of working groups for each risk category
- Cross-utilize corporate functions

Risk Categories / Working Groups

Investment Risks	Business Risks	Crisis Management	Compliance	Group Governance	Regional Risks

Promotion Organization

Investment Strategy Committee Office	Compliance Division	Safety and Health Management Division	Corporate Sales & Marketing Group	Investment Management Division
Corporate Quality Assurance Group	Legal Division	Risk Management Division	Sustainability Promotion Division	Finance Group

Selecting Top Risks based on Global Risk Trends

In the Mid-term Management Plan 2024, we are utilizing knowledge from inside and outside the group to collect and analyze information on the external environment surrounding Hitachi and select top risks through the Risk Management Meeting.

Specifically, we have organized major risks under classifications such as disasters, accidents and epidemic; geopolitics and geoeconomics; economics, finance and markets; sustainability; investment and orders for projects; and operations. We then assess and narrow down the risks from the perspectives of the nature of risk events, expected time period, likelihood of occurrence and seriousness when occurring, and select the top risks, such as the risk of a major natural disaster in Japan that may significantly impact Hitachi's business. The six working groups consider and implement policies to respond to each of the top risks.

Addressing Investment Risks and Opportunities

To ascertain and appropriately respond to risks and opportunities related to investments (e.g., M&A, sale of assets, orders for projects), Hitachi has established a decision-making framework based on the following flowchart. Decision-making regarding individual investments (e.g., execution, business plan changes) is delegated from the Board of Directors as the highest level body to the head office Senior Executive Committee (which generally meets twice a month) or the relevant sector or business unit, based on the size and specifics of the matter. This facilitates flexible and appropriate decision-making. For important matters that fall under deliberation by the head office Senior Executive Committee, the Investment Strategy Committee working as its advisory body checks the risks, response measures for the matter from economic value perspectives such as profitability and cash flow as well as in terms of the impact on social value and environmental value. Following deliberation, the Investment Strategy Committee delivers a report that includes approval or rejection recommendations to the Senior Executive Committee, of which the CEO is also a member.

After executing an investment, Hitachi regularly monitors the achievement of business objectives and the plan while taking into account changes to the risk climate including the external environment. By generally having monitoring performed by the relevant business units, which are accountable for profits and closely associated with field operations, flexibility can be maintained, while the head office can still become involved depending on the importance of the matter. For changes to business plans, business withdrawals, asset sales and other matters related to important investment targets, the head office Senior Executive Committee engages in similar deliberations to the initial investment stage. For investment targets for which business is not proceeding as planned, a framework has been established to deliberate the merits of continuing a business, including the prospects of withdrawal, in an effort to enhance capital efficiency.

Conceptual Diagram of the Decision-Making Flow
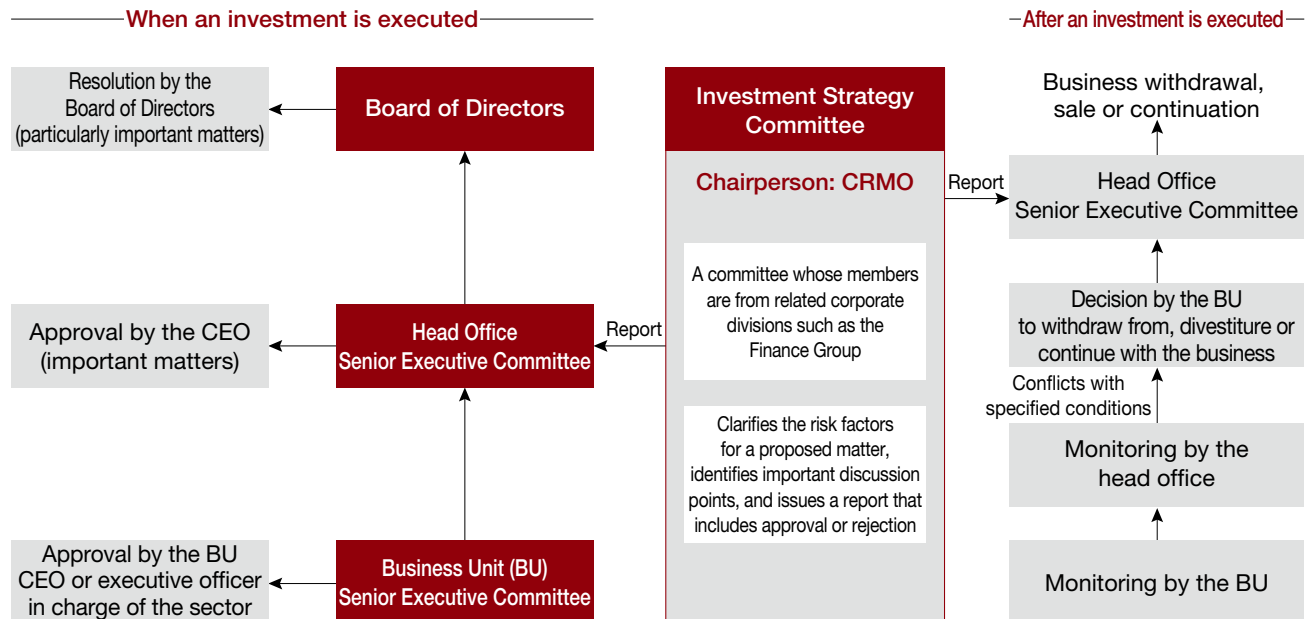
Quantitative Understanding of Risks

Hitachi calculates expected maximum risks (Value at Risk) assumed by statistical methods according to the type of assets held on the group's consolidated balance sheet.

We avoid missing out on growth opportunities by visualizing the capacity for growth investment, etc., considering consolidated net assets and other factors. We also engage in monitoring and hold discussions through the Risk Management Meeting to ensure that risks are not excessively unbalanced compared to Hitachi's consolidated financial strength.

We also quantitatively analyze and understand the state of risks and profitability on a regional and per-sector basis.

Crisis Management Initiatives

Based on the selected top risks, the Crisis Management Working Group promotes the development of response measures, including crisis management structures, for each risk. By making preparations under normal conditions, we have put systems in place to respond swiftly in the event a risk does materialize.
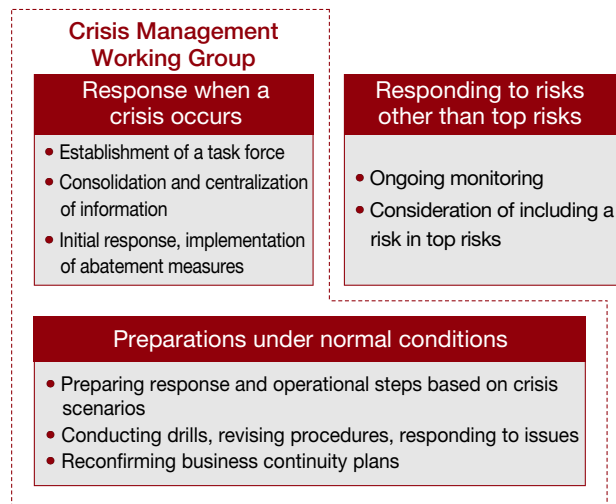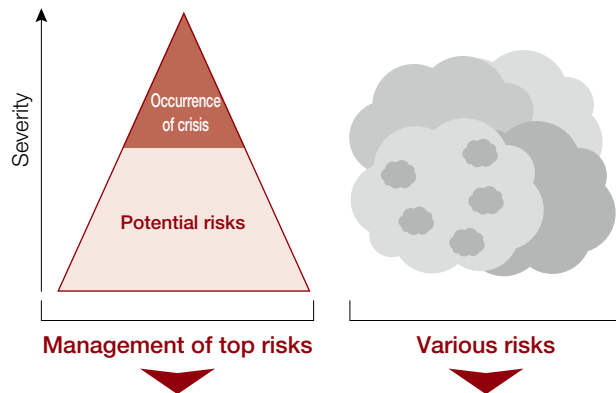
Compliance Initiatives

The Compliance Working Group is made up of members from the Compliance Division, Sustainability Promotion Division, Corporate Quality Assurance Group and Safety and Health Management Division.

For major compliance-related risks falling under business ethics and compliance, environmental compliance, quality compliance, and health and safety (fatal and serious incidents, etc.), information on the measures implemented by each department under regular conditions (development of regulations, training, monitoring, audits, etc.) and the response methods implemented in the event of an emergency (communication with internal and external stakeholders including top management when a major risk has materialized, etc.) are linked and shared amongst member of the Working Group as management methods for the different risk areas. By pursuing a greater level of global collaboration, we will strive to raise the level of risk management in each field and mitigate various risks.

Safety-First Risk Management

Three Hitachi Group companies, namely GlobalLogic, Hitachi Energy and Hitachi Vantara have sites in Ukraine. The safety and health of our employees and their families is the highest priority for the Hitachi Group. GlobalLogic, which has an engineering site in Ukraine, has approximately 7,500 employees. Based on the business continuity plan, top priority has been given to the safety of the site's employees and their families, and measures were taken to evacuate them to safe locations in Ukraine or out of the country. The company is now returning to normal operations with an operating rate of 96% and is working to maintain business continuity while ensuring safety (as of May 31, 2022).

For additional details regarding business and other risks, please see page 27 of the 153rd Securities Report.

► https://www.hitachi.com/IR-e/library/stock/hit_sr_fy2021_4_en.pdf

Responding to Climate Change Risks and Opportunities

Climate-related Financial Information Disclosure (Based on TCFD-based Recommendations)

In June 2018, Hitachi announced its endorsement of the recommendations by the Financial Stability Board's (FSB) Task Force on Climate-related Financial Disclosures (TCFD). The following contains key climate-related financial information in line with the TCFD's recommendations.

Governance

Hitachi sees climate change and other environmental issues as important management issues. Important matters concerning the group's sustainability strategy, including climate change measures, are discussed and decided on by the Senior Executive Committee and are presented to the Board of Directors according to necessity.

Hitachi's long-term environmental targets called Environmental Innovation 2050, which include reducing CO_2 emissions, were reviewed and approved by the Board of Directors when they were established and revised in fiscal 2021, and then shared with the public. In addition, the Audit Committee of independent directors conducts an audit of sustainability-related operations once a year, and Hitachi executive officers report on climate-related issues to the committee during the audit.

Additionally, as an external initiative, we have participated in the TCFD Consortium, which holds discussions on efforts to link companies' effective information disclosure and the information they disclose with appropriate investment decisions by financial institutions and others, as a Steering Committee member and contributed to their guidance formulation.

Strategy

We are responding to climate change by fulfilling our responsibilities as a global company by helping to achieve a decarbonized society and established long-term environmental targets called Hitachi Environmental Innovation 2050—as a transition plan to a decarbonized society— in fiscal 2016 under our Environmental Vision.

Moreover, in order to help limit the global temperature rise to 1.5°C as recommended in the Intergovernmental Panel on Climate Change (IPCC) Global Warming of 1.5°C report, in fiscal 2020 we announced a new and more aggressive target to achieve carbon neutrality at Hitachi factories and offices by fiscal 2030. Then in fiscal 2021 we also announced that we would seek to achieve carbon neutrality in our value chain by fiscal 2050.

Climate-related Risks

Climate-related business risks are considered based on TCFD classifications for a number of scenarios, such as (1) risks related to the transition to a decarbonized economy mainly occurring on the way to the 1.5°C scenario*, and (2) risks related to the physical impact of climate change that would materialize if the 4°C scenario* was reached due to global CO_2 emission reduction targets not being met. In considering climate change risks and opportunities, our assessments are categorized according to time span, namely short term (three years from fiscal 2022 to fiscal 2024), medium term (up to fiscal 2030), and long term (up to fiscal 2050).

*The scenarios for rising temperature referenced include the Fifth Assessment Report (released in 2014) and the Special Report on Global Warming of 1.5°C (released in 2018), both from the Intergovernmental Panel on Climate Change (IPCC). The 1.5°C scenario is a scenario under which, at the end of the 21st century, the increase in global temperatures from preindustrial levels is kept below 1.5°C. The 4°C scenario is a scenario under which global temperatures rise approximately 4°C compared to preindustrial levels.

Climate-related Opportunities

To achieve the CO_2 reduction targets set forth in our long-term environmental targets and Mid-term Management Plan 2024, it is important not only to decarbonize our business sites (factories and offices) but also to reduce CO_2 emissions from the use of products and services sold, which account for a large portion of emissions in the entire value chain. Developing and providing products and services that emit zero or very little CO_2 during their use will help meet society's demands for reduced emissions. This represents a business opportunity for us in the short, medium, and long term and constitutes a major pillar of the Social Innovation Business that we are promoting as a management strategy.

Risks and Opportunities for Individual Businesses based on Climate Change–related Scenarios, and Hitachi's Response

Hitachi operates a broad array of businesses with each business having its own set of risks and opportunities. We therefore selected businesses that have a relatively high likelihood of being affected by climate change and conducted scenario analyses on them and considered the business environment and our response under the 1.5°C and 4°C scenarios. Based on a review, Hitachi did not find any significant climate change–related risks that were difficult to respond to. Hitachi believes that we can adapt to a decarbonized society by switching the electricity used in many businesses to non-fossil-fuel–derived energy. We will closely monitor market trends and will develop businesses flexibly and strategically.

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The Business Environment and Responses under the 1.5°C and 4°C Scenarios (excerpts)

Target businesses	Railway systems	Power generation and power grids	IT systems	Industrial equipment	Automotive systems
The business environment under the 1.5°C scenario	**Business environment** Global demand for transport systems that emit less CO_2 per distance covered will grow with tighter CO_2 emission regulations in each country and region.	**Business environment** Global demand for electricity generated from renewable energy, nuclear power, and other non-fossil sources will grow with tighter CO_2 emission regulations in each country and region. Power networks will increasingly accommodate natural energy produced through distributed generation.	**Business environment** Demand for energy-saving, high-efficiency IT solutions will grow with tighter CO_2 emission regulations in each country and region. There will also be increased demand for data centers and data analysis systems to accommodate the expansion of financial services such as investments and loans for decarbonization businesses, green bond issues, and data utilization businesses.	**Business environment** Global demand for energy-saving industrial equipment will grow with tighter CO_2 emission regulations in each country and region.	**Business environment** Electric vehicles will rapidly spread with tighter laws and regulations on fuel efficiency and environmental standards, and increases in fossil fuel prices. Markets for alternative non-fossil technologies like hydrogen and biofuel vehicles will expand. The number of countries and regions with near zero sales of internal combustion engine vehicles will increase.
The business environment under the 4°C scenario	**Business environment** Demand for electric-powered transport will gradually increase even without tighter energy regulations. Damage from typhoons, floods, and other natural disasters caused by climate change will rise sharply.	**Business environment** The cost competitiveness of non-fossil energy will increase, and demand for renewable, nuclear, and other non-fossil energy will increase as the expansion of energy consumption pushes up the price of fossil fuels. Natural disasters caused by climate change will rise sharply.	**Business environment** Demand for new, high-efficiency technology will expand as multiplex IT systems in response to natural disaster BCPs will result in increased energy consumption. Demand will also grow for social and public systems to reduce damage from natural disasters.	**Business environment** Typhoons, floods, and other natural disasters caused by climate change will rise sharply.	**Business environment** Fuel efficiency laws and regulations will remain lax globally, and internal combustion engine vehicles will remain a major mode of transport. The modal shift will be slow, as conventional automobiles and motorcycles will remain predominant. Typhoons, floods, and other natural disasters caused by climate change will rise sharply.
Responses to future business risks (Business opportunities)	**Responses to business risks under the 1.5°C and 4°C scenarios** Continue to strengthen the railway business as global demand for railways will increase under either scenario.	**Responses to business risks under the 1.5°C and 4°C scenarios** Continue to enhance the response to relevant markets in view of expected higher demand for non-fossil energy under either scenario.	**Responses to business risks under the 1.5°C and 4°C scenarios** Continue to develop innovative digital technologies, nurture necessary human capital, and enhance digital service solutions that generate new value in view of the expected growth in demand for digital services and the subsequent market expansion under either scenario.	**Responses to business risks under the 1.5°C and 4°C scenarios** Under either scenario, continue developing energy-saving, high-efficiency products that use IoT technology. Focus particularly on connected products with communication features. Miniaturized, high-efficiency, low-loss products can also help reduce CO_2 emissions.	**Responses to business risks under the 1.5°C scenario** Promote R&D of electrification technology and other alternative technologies to enhance the response to new markets such as electric vehicles.

Notes:
1 This table is a partial extract. Please check the Hitachi Sustainability Report 2022 for more details including risks and opportunities under each scenario and financial information.
2 These scenario analyses are not future projections, but an approach used to consider Hitachi's climate change resilience. Future outcomes may differ from each scenario.

Risk Management

Hitachi evaluates and manages climate-related risks for each business unit and group company as part of a process of assessing risks and opportunities. The results of these evaluations are summarized by the Hitachi Sustainability Promotion Division, after which the Senior Executive Committee, and if necessary, the Board of Directors, deliberates the risks and opportunities perceived as being particularly important for the group as a whole to make decisions.

Metrics and Targets

Hitachi defines its medium- and long-term metrics and targets in Hitachi Environmental Innovation 2050 and implements detailed management of short-term metrics and targets in its Environmental Action Plan, which is updated every three years. Metrics for climate change mitigation and adaptation use total CO_2 emissions and the reduction rate in CO_2 emissions per unit. Hitachi also sets and manages a metric of its contributions to CO_2 reductions, which help achieve a comprehensively decarbonized society. Hitachi promotes efforts to reduce CO_2 emissions at its own business sites (factories and offices) using such as the Hitachi Internal Carbon Pricing (HICP) system, which that incentivizes capital expenditures that contribute to the reduction of CO_2 emissions.

Additionally, to accelerate the creation of environmental value to achieve long-term environmental targets, in fiscal 2021 Hitachi introduced the executive officer compensation scheme incorporating assessments that take environmental value into account. Hitachi also plans to spend approximately 500 billion yen as an R&D investment to create green value through the switching of energy sources, vehicle electrification, and so on over the next three years from now to fiscal 2024.

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Addressing Risks and Opportunities   Responding to Climate Change Risks and Opportunities   **Promoting of Information Security**   Occupational Health and Safety   Responsibility in the Value Chain   Quality Assurance   Business Ethics and Compliance

Promoting Information Security

Hitachi places "Ensuring cyber security" as one of the sub material topics under our material topic of "Safety and Security." To minimize information leaks due to incidents such as cyber attacks and risks that would interfere with business continuity such as operational shutdowns, Hitachi addresses information security from the perspectives of both value creation and risk management. Hitachi has established an Information Security Policy based on cyber security risk management, which is promoted under a structure where the Information Security Committee, chaired by the Chief Information Security Officer (CISO), determines action policies and various measures regarding information security and the protection of personal information.

Information Security Management

Hitachi has established the rules for information security in compliance with the ISO/IEC 27001 international standard and furthermore enhanced our rules with US government standard SP800-171. In light of the recent severe cyber attacks, the rules have been rolled out globally by Hitachi, Ltd., and the headquarters of each group company. Support through regional headquarters and the use of shared security services are also actively promoted. Policies and various measures determined by the Information Security Committee are thoroughly enforced at each workplace through the Information Security Promotion Council and other bodies. While Hitachi promotes new working styles through telework, due to the threat posed by the risk of vulnerabilities in the security awareness of employees, Hitachi has been conducting employee-focused awareness raising activities in addition to IT measures since fiscal 2020.

In addition, to detect global cyber attacks early on and respond to them swiftly, we conduct 24/7 security monitoring through a Security Operation Center (SOC), and employ an Incident Response Team (IRT) that collects and spreads threat information, and responds to incidents. To deal with cyber attacks that are becoming more sophisticated year after year, we have stepped up cyber monitoring efforts, such as the installation of Endpoint Detection and Response (EDR) systems to monitor the operation of equipment, and the implementation of monitoring to protect authentication systems.

Preventing Information Leaks

Hitachi employs device encryption, thin clients, electronic document access control and revocation software, ID management and access control through the development of authentication infrastructure, email and website filtering systems and other measures. We have also strengthened various IT measures including multi-layered defense against cyber attacks such as targeted emails. Additionally, to prevent information leaks from procurement partners, Hitachi checks and audits the status of information security measures at its procurement sources based on its own standards for information security requirements. Hitachi also provides procurement partners with business information inspection tools installed in information equipment and security training materials, and asks that business information stored on personally owned information equipment be checked for and deleted.

Education on Information Security

Hitachi conducts e-learning on information security and personal information protection for all officers and employees each year. In fiscal 2021, roughly 35,000 employees underwent the training (at Hitachi, Ltd.), achieving a 100% participation rate (excluding those who could not take the training due to leaves of absence, etc.). Hitachi prepares and promotes a wide range of educational programs for different subjects and purposes. Training on targeted email attacks and similar incidents includes actually sending simulated attack emails to employees as "simulated target attack email drills" designed to raise sensitivity to security through the experience of receiving such messages.

Thorough Information Security Audits and Inspections

Hitachi's information security is implemented in accordance with the information security management system PDCA cycle. Audits of personal information protection and information security are conducted for all group companies and divisions yearly. A chief auditor appointed by Hitachi's CEO conducts audits from an independent standpoint to ensure the impartiality and independence of auditors. Domestic group companies (169 companies*) conduct equivalent audits to Hitachi, Ltd., while self-checks consistent with global standards are promoted at overseas group companies. In addition, as workplace self-inspections, all divisions of Hitachi conduct checks of personal information protection and information security operation each year. In conjunction with these activities, each month checks are performed to confirm the operation of personal information protection measures with respect to 740 tasks that involve handling important personal information (as of March 2022) as a way to regularly monitor the status of these activities. In addition, a dedicated team performs on-site assessments periodically and checks vulnerabilities quarterly on the servers or other equipment that are exposed to the public. The team works to mitigate security risks by checking for deviations from self-checks.

*Including voluntary submission from partners.

Occupational Health and Safety

Hitachi places "Occupational safety" as one of the sub material topics under our material topic of "Business with Integrity." "Health and Safety Always Comes First" is the basic principle underlining the Hitachi Group Health and Safety Policy which is shared by all Hitachi Group companies, and reflects our commitment to develop a safe, secure, comfortable and healthy workplace free from accidents. We share the belief that all work-related injuries and ill health can be prevented, and that we are responsible for our own safety and health. We engage in practices to protect our health and safety and endeavor to build a culture that promotes mutual awareness.

Establishing the Occupational Health and Safety Management System

The Hitachi Group Health and Safety Leaders Meeting is held and attended by health and safety officers from each group company and representatives from each division. The members set plans and objectives for Groupwide health and safety strategies, review ongoing measures to improve occupational health and safety management system, and share the commitment from top management to make protecting the health and safety of employees their top priority. The Audit Committee also audits the results of group health and safety activities, plans, and policies every year. For critical health and safety issues, the status of occupational health and safety management is reported at least once a year to the Senior Executive Committee and at meetings of group company presidents.

In fiscal 2021, the Hitachi Group established Safety and Health Management Division that is responsible for promotion of occupational health and safety within the group and is overseeing a global management system. Under the division, the Hitachi Group has been continually working to improve our health and safety management system in collaboration with health and safety officers from each group company and representatives from each division.

Initiatives for Preventing Work-related Accidents

We have set goals of "zero fatal accidents and having lost-time accidents across group sites worldwide compared to 2018" by fiscal 2021 but were unable to meet the goals. In the light of this, we have set a new goal of "zero fatal accidents and halving the global accident rate compared to 2021" by fiscal 2024. In fiscal 2021, we promoted the effective utilization of risk assessments, the building and operation of a global health and safety management system, training to promote autonomous health and safety practices, and improvement measures utilizing IT and digital technologies. In addition, in the event of a fatal accident occurs at an overseas group company, a safety assessment is conducted by a third-party organization, and improvements are made such as strengthening the system, reviewing action plans, and raising safety awareness.

Although the total number of occupational accidents is declining, there are issues to work on such as improvement of the risky work environment and enforcement of the safety management

system including contractors and subcontractors. To address this, we are working to formulate guidelines for safety management system common to the Hitachi Group and comprehensive safety management evaluation methods that include contractors.

Initiatives to Improve Employee Health

Since the wellbeing of employees is essential to the sustainable growth of the Hitachi Group, we are making every effort to develop workplace environments in which employees can work safely without worrying about their physical and mental health. In fiscal 2020, new questions about wellbeing were added to the Global Employee Survey that is conducted annually, and the questions were expanded in fiscal 2021.

Additionally, in Japan we have steadily implemented hygiene and health measures, strengthened mental health support in line with changes in working styles, and made thorough efforts to prevent lifestyle-related disease. In the medium to long term, we will carry out initiatives based on a common hygiene policy after grasping the actual situations of occupational health measures and identifying issues globally.

Measures to Prevent Infectious Disease

We have been vaccinating employees against hepatitis A, tetanus, cholera, etc., to support infectious disease prevention during business travel outside Japan. In fiscal 2021, we asked that employees always stay home if they have a fever or feel unwell relative to COVID-19. We also urged the enforcement of preventive measures advocated by the government. The Hitachi Group recommends that employees be vaccinated against COVID-19 from the perspective of preventing infections and aggregation of the virus. In the workplace vaccinations implemented in Japan, approximately 75,000 people were vaccinated, including employees and their families at some sites.

Hitachi Group Global Safety Statistics (rate of occurrence)*
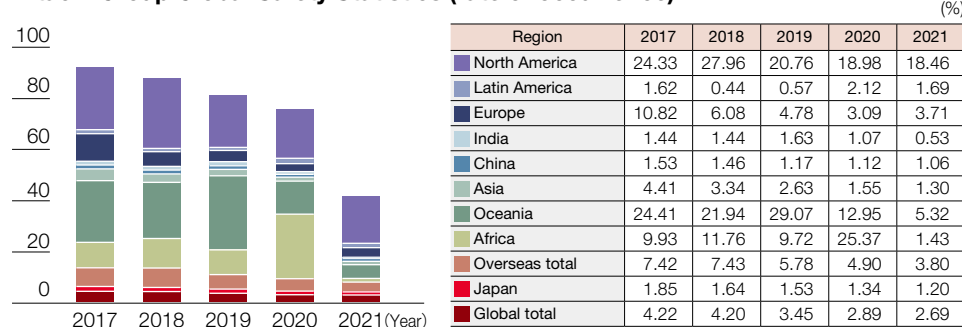
(%)

Region	2017	2018	2019	2020	2021
North America	24.33	27.96	20.76	18.98	18.46
Latin America	1.62	0.44	0.57	2.12	1.69
Europe	10.82	6.08	4.78	3.09	3.71
India	1.44	1.44	1.63	1.07	0.53
China	1.53	1.46	1.17	1.12	1.06
Asia	4.41	3.34	2.63	1.55	1.30
Oceania	24.41	21.94	29.07	12.95	5.32
Africa	9.93	11.76	9.72	25.37	1.43
Overseas total	7.42	7.43	5.78	4.90	3.80
Japan	1.85	1.64	1.53	1.34	1.20
Global total	4.22	4.20	3.45	2.89	2.69

*Occurrence rate is the rate of workplace accidents per 1,000 directly contracted employees (including cases without lost workdays)

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Addressing Risks and Opportunities | Responding to Climate Change Risks and Opportunities | Promoting of Information Security | Occupational Health and Safety | **Responsibility in the Value Chain** | Quality Assurance | Business Ethics and Compliance

Responsibility in the Value Chain

Hitachi places "Respect for human rights" as one of the sub material topics under our material topic of "Business with Integrity." Together with our procurement partners[1], we also promote responsible procurement including human rights considerations in the value chain. Additionally, to ensure the stable supply of products and services, whenever possible we endeavor to ascertain and mitigate risks in advance.

[1] Hitachi normally refers to its suppliers (including vendors or providers) as "procurement partners" who build business together on an equal footing.

Procurement

Procurement BCP and Framework

We are working to enhance procurement BCPs across the group companies worldwide so that the occurrence of incidents[2] does not disrupt business and have a significant impact on society.

[2] Incidents: Events that cause a disruption to business, including natural disasters such as major earthquakes

Sustainable Procurement and Framework

Hitachi instituted the Hitachi Group Global Procurement Code. It calls on group companies and procurement partners to give due consideration to human rights, labor practices, safety, ethics, quality, and security in the supply chain. Hitachi also established the Hitachi Group Sustainable Procurement Guidelines and the Green Procurement Guidelines, which are a code of conduct for procurement partners. We distribute them to approximately 30,000 procurement partners. We also ask for compliance and continually explain the contents through sustainable procurement seminars. Hitachi also conducts sustainability monitoring, where it evaluates and analyzes the state of sustainability initiatives by procurement partners through surveys. In fiscal 2021, we focused on human rights and environmental risk assessment, and provided feedback to the relevant procurement partners. Regarding the procurement of minerals, we established the Hitachi Group's Policy for a Responsible Supply Chain of Minerals, and pursue activities consistent with international guidelines.

We established the Sustainable Procurement Conference and Sustainable Procurement Office in fiscal 2021 to strengthen our sustainability activities.

Tackling Sustainable Procurement by Strengthening Global Partnerships

Hitachi has appointed procurement officers to oversee procurement activities locally in China, the rest of Asia, Europe, and the Americas. The officers carry out activities such as sustainability audits, sustainability monitoring, and sustainable procurement seminars for procurement partners in their respective regions to strengthen sustainable procurement.

Status of Sustainable Procurement Measures (Number of companies)

	FY2017	FY2018	FY2019	FY2020	FY2021
Sustainability Monitoring	131	345	291	271	[Human rights] 2,524[3] [Environment] 708[3]
Sustainability Audits	18	24	19	27	25
Sustainability Procurement Seminar for Suppliers	65	126	59	450	359

[3] Sustainability monitoring in fiscal 2021 was conducted focusing on the assessment of risks related to human rights and the environment.

Respect for Human Rights

Human Rights Due Diligence Initiatives

In the Hitachi Group Human Rights Policy, Hitachi commits to engaging in Human Rights Due Diligence (HRDD), appropriately educating employees, and other activities.

Hitachi has placed the Chief Sustainability Officer in charge of groupwide human rights promotion, while a project team established within the Hitachi, Ltd. headquarters for HRDD promotion plays a central role in promotional activities based on interdepartmental cooperation, such as considering HRDD promotion measures for the Hitachi Group and its procurement partners.

In addition, in fiscal 2020 we established the Hitachi Global Compliance Hotline, which consolidated the general consultation and reporting systems for harassment and human rights issues at the business sites of each business unit and group company. Going forward, Hitachi will work to make the hotline widely known to employees.

Initiatives to Deal with Child Labor and Forced Labor

In the Hitachi Group Codes of Conduct, Hitachi has made clear its stance of never tolerating child labor and forced labor internally or in its supply chain, and we work to thoroughly disseminate this stance among procurement partners. In March 2020, a report from the Australian Strategic Policy Institute indicated that one of Hitachi's procurement partners may be involved with forced labor of Uyghur people. In response, a third-party audit based on international standards was conducted to review the procurement partner's management systems and employee management in particular, but no issues regarding forced labor were found. In fiscal 2021, we made groupwide efforts to address "forced labor and violations of the rights of migrant workers," which is designated as a priority risk across the Hitachi Group.

Response to Technical Intern Trainee Issues

In 2018, the Organization for Technical Intern Training Groupwide issued recommendations for improvement regarding legal violations regarding training, and in 2019 Hitachi received an order for improvement from the Immigration Services Agency of Japan and the Ministry of Health, Labour and Welfare regarding systems for carrying out proper training. We submitted reports stating the completion of improvements to the Organization for Technical Intern Training by October 2019, and the reports were accepted. Hitachi has developed Groupwide policies, guidelines and check systems, conducts internal audits, and engages in other efforts to thoroughly prevent repeat occurrences of this nature.

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Addressing Risks and Opportunities   Responding to Climate Change Risks and Opportunities   Promoting of Information Security   Occupational Health and Safety   Responsibility in the Value Chain   Quality Assurance   Business Ethics and Compliance

Quality Assurance

Hitachi places "Safe and secure products and services" as one of the sub material topics under our material topic "Business with Integrity," and we are committed to ensuring product and service safety while putting the customer first. As stipulated in the Hitachi Group Codes of Conduct, we aim to meet customer needs and specifications when providing products and services. We strive to ensure quality and safety by setting independent standards as necessary, in addition to complying with all relevant laws and standards.

Hitachi's Basic Philosophy on Quality Assurance

Embracing the Hitachi Founding Spirit of "Harmony, Sincerity, and Pioneering Spirit," we thoroughly adhere to the basics and the right way and espouse the values of prioritizing morality over profits, placing great emphasis on sincerity in our quality assurance activities. Hitachi's unique practice of OCHIBO-HIROI (investigating the fundamental cause of incidents and completely preventing similar incidents) is a method that advances technology by analyzing and thoroughly learning from failures. When an incident occurs, we not only investigate the technical causes in a product, but also thoroughly discuss the processes, frameworks and motivating factors leading up to the incident, along with ways to prevent recurrences, in order to improve our product reliability and customer satisfaction.

Framework for Quality Assurance

Hitachi has separated the Quality Assurance Division from the Manufacturing Division in every business division. We have also made them independent of their business divisions and reinforced their reporting lines to the Quality Assurance Division at our head office, establishing systems for close information sharing between the two sides. In addition, we have strengthened governance by giving greater authority to the Quality Assurance Division at our head office and implemented thorough quality governance through regular internal audits. When a serious incident occurs, once identified it is promptly reported to the top management, including the chairperson and president, by the Quality Assurance Division of the BUs or group companies concerned.

Quality Assurance Activities

We promote activities to enhance quality assurance in terms of organization and management, technology and human capital across every process—from product planning and development to design, manufacturing, testing, delivery and maintenance services. Under our approach of making prevention the duty of quality assurance, we are strengthening our incident prevention activities, which go beyond recurrence prevention.

Technical Law Compliance Activities

Hitachi promotes internal awareness of product regulations, amendment trends, and enforcement dates in each country and region. We also work to clarify product-specific laws (with our product-specific laws map) as well as promoting regulatory compliance and implementing continuous process improvements with our product compliance management system.

Thorough Safety Design and Safety Monitoring for Products and Services

When developing products, Hitachi makes the safety of our customers' lives, health and property its top priority. We verify safety across every process, from development and production to sales and maintenance, and strive to ensure safety based on the prioritization of risk mitigation informed by usage information. We also conduct risk assessments from a wide perspective in coordination with related BUs and research laboratories.

Quality and Reliability Education

Hitachi regularly provides various forms of education and training related to quality and reliability with curricula tailored to attendees. All employees undergo e-learning courses on Hitachi's philosophy regarding quality, with quality assurance themes also dealt with in tiered training. Engineers are given field-specific technical lectures at various levels.

Product Safety Response When Incidents Occur

When an incident occurs, the division responsible for the product takes a central role and acts swiftly to ensure product safety. In the case of a severe incident, a status report is issued to top management, the relevant authorities are informed in line with legal requirements, and the incident is disclosed to customers through the website and other communication channels. We also have a structure in place to ensure that fast and appropriate action is taken. In the case we determine that retroactive action is necessary, we notify customers via newspaper advertising and websites to carry out the necessary repair or replacement program.

Reoccurrence Prevention Measures in Response to Inappropriate Conduct Discovered by Hitachi Astemo

In December 2021, Hitachi Astemo announced that it had uncovered improper conduct based on information provided by an employee regarding periodic testing on brake and suspension components and other activities. To ensure such incidents do not occur again, Hitachi Astemo established a new governance office to function as a headquarters and strengthen risk management, in addition to a dedicated auditing organization in the Quality Management Division. In December 2021, we established a special investigation committee through external legal counsel and we are working to enact sweeping measures to prevent reoccurrences.

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Addressing Risks and Opportunities   Responding to Climate Change Risks and Opportunities   Promoting of Information Security   Occupational Health and Safety   Responsibility in the Value Chain   Quality Assurance   **Business Ethics and Compliance**

Business Ethics and Compliance

Hitachi places "Business ethics and compliance" as one of the sub material topics under our material topic of "Business with Integrity." We expect our business practices to meet international rules and legal requirements and adhere to high standards of ethics and integrity.

Governance

The One Hitachi Compliance Program, led by the Hitachi Group Head of Ethics and Compliance, with oversight by the Audit Committee of the Hitachi, Ltd., Board of Directors, contributes to Hitachi's success by providing advice to managers, leaders and employees.

The Compliance Division works closely with Hitachi companies to streamline business ethics standards to drive the program's efficiency and effectiveness. Focusing on business ethics helps Hitachi attract, retain and engage the best employees and select the right business partners. It protects our reputation and relationships with stakeholders. It helps us deliver on our Mission, Values and Vision and provides a competitive advantage for Hitachi.

Outside Hitachi, the Compliance Division regularly exchanges ideas and best practices for compliance processes. Hitachi became a member of Ethisphere's Business Ethics Leadership Alliance (BELA) in October 2021. BELA is a globally recognized organization of leading companies collaborating to share best practices in governance, risk management and ethics.

Enforcing Policies and Guidelines

The Hitachi Group Codes of Conduct and Code of Ethics and Compliance (the Codes), are available in 15 languages or more, and define how we conduct our business. The Codes set standards for dealings with each other, customers, partners, and competitors. We also expect our business partners to commit to meeting our high standards of integrity.

The One Hitachi Group Compliance Program consists of regulations and guidelines such as compliance with the Competition law, preventing transactions with antisocial forces and money laundering, and preventing bribery and corruption. In fiscal 2021, the Compliance Division worked to address business ethics and compliance issues and improve policies, protocols, systems and measures related to their implementation.

- Policies for Preventing Bribery and Corrupt Practices

The Hitachi Group's Anti-Bribery and Anti-Corruption policy ensures that the Hitachi Group remains in compliance with all anti-bribery and anti-corruption laws. The policy details the provision or acceptance of entertainment or gifts, donations, or provision of political contributions by officers and employees. In addition to outlining spending limits on the value and frequency of entertainment or gifts to be provided to public officials, these policies prohibit facilitation payments. In fiscal 2021, we set limits on the amount of money spent on gifts or entertainment as part of sales activities to commercial parties and the number of times entertainment or gifts are provided.

- Competition Law Compliance Policy

The Hitachi Group's Fair Competition Policy addresses interaction with competitors and ensures awareness of points of caution related to business practices. In fiscal 2021, we revised the guidelines for preventing cartel activity and improved the relevant forms based on the revised guidelines.

- Hitachi's Tax Compliance Approach

The Hitachi Group ensures appropriate tax governance, established regulations governing tax-related matters, and informed employees involved in tax management of the regulations.

Business Ethics and Compliance Training

Our annual business ethics training on the Codes and anti-bribery and anti-corruption reinforces Hitachi's commitment to business ethics and integrity. It keeps employees informed and updated on our high ethical standards and obligations.

Our fiscal 2021 training course covered business ethics, bribery and corruption, gifts, travel and entertainment, anti-money laundering laws, fraud, antisocial forces, fair competition, export control, company assets, information owned by others, data protection, conflicts of interest, reporting and non-retaliation and the Hitachi Global Compliance Hotline (Whistleblower system). After completing the training, employees must certify that they will abide by the Codes and ethics-related policies and protocols.

Strengthening Our Speak-up Culture

Hitachi believes that a speak up/listen up culture—where employees are encouraged to raise concerns and feel confident that they can do so without fear of retaliation—is a key to early detection and prevention of ethical and regulatory problems. Employees may raise concerns and ask questions through their managers or any other manager, Human Resources, Compliance or Legal team member or the Hitachi Global Compliance Hotline. Hitachi Group employees and other interested parties can use the Hotline to report suspected violations of law and Hitachi policies and protocols relating to illegal or unethical conduct.

The Hitachi Group does not tolerate retaliation against an employee who cooperates with an investigation, raises a concern or reports suspected misconduct in good faith. Hitachi takes claims of retaliation seriously—anyone found to have committed a retaliatory act is subject to disciplinary action.

In fiscal 2021, we received more than 1,000 reports from all group companies worldwide.

Violation of Laws and Regulations

In fiscal 2021, there were no bribery/corruption or competition law–related incidents in which Hitachi was prosecuted or penalized by the authorities. Furthermore, Hitachi had no significant fines or nonmonetary sanctions for non-compliance with tax laws and regulations.

Corporate Governance

Hitachi views the expansion of long-term and overall shareholder returns as an important management objective. Hitachi, Ltd. and Hitachi Group companies maintain good relationships with a wide range of stakeholders, and we recognize that these relationships make up an important portion of our overall corporate value. Accordingly, we are striving to establish a system that will improve our corporate value primarily through the implementation of measures focused on promoting constructive dialogue. To advance these efforts effectively, we are working to improve our corporate governance by ensuring thorough separation between the oversight and execution of management, establishing a swift business execution system, and striving to achieve highly transparent management.

Message from the Chairman of the Board

Katsumi Ihara
Independent Director

On Being Appointed Chairman of the Board

Four years have passed since I was appointed as a Hitachi director. This period marks the final phase of Hitachi's major structural reforms, implemented for more than 10 years after the 2008 global financial crisis. During this time, Hitachi has been laying the foundation for growth by transforming individual businesses to be competitive in the global market and supplementing the necessary pieces with substantial M&A activities. We have finally entered a phase of full-fledged transition from structural reforms to global growth. The Mid-term Management Plan 2024, announced in April 2022, is based on this recognition.

Hitachi has invested a substantial amount of capital in M&A in recent years. It is an important responsibility of the Board of Directors to follow up on these acquisitions to ensure that the newly acquired assets generate synergies within the group and contribute to the enhancement of corporate value. At the same time, looking at the current business environment, we are in the midst of volatility, uncertainty, complexity and ambiguity (VUCA), such as rising geopolitical risks, inflation and supply chain disruptions. The Board of Directors continues to address the strengthening risk management system as one of its important themes.

Many of Hitachi's independent directors have management experience at global companies and possess a wide range of experience and knowledge. Above all, they have a strong desire to contribute to the enhancement of Hitachi's corporate value. Despite the challenging business environment, we will fulfill our responsibility in terms of management oversight to ensure rigorous and effective discussions leading to sustainable growth.

Board of Directors Composition and Effectiveness

At present, Hitachi's Board of Directors consists of 12 members, of which nine are independent directors, five are non-Japanese and two are women. They have a wide range of specialties, including top management experience at global companies and public administration backgrounds. At the Board of Directors meetings, these members pose sharp questions and opinions during lively discussion with executive officers. I feel that the current composition of the Board of Directors goes beyond formal aspects and substantially contributes to the enhancement of Hitachi's corporate value. In recent years, Hitachi has been focusing more on the digital

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field, so we have brought independent directors on board who are well versed in digital technologies. To maintain and improve the effectiveness of the Board of Directors, it is necessary to continuously secure directors with experience and knowledge that match the direction the company is heading. However, it is not an overnight task to invite people with management experience in global companies to serve as independent directors. I believe that the activities of Nominating Committee, which deliberates Board composition in light of Hitachi's future vision, including advances in ESG management contributing to the realization of a sustainable society, are extremely important in terms of ensuring the effectiveness of the Board of Directors.

Lively and Earnest Discussions at Board Meetings

Not all directors agree with agendas submitted to the Board of Directors. In the past, there have been cases where opinions on major M&A projects were divided. As large M&A projects entail significant risks, analysis from a variety of perspectives is essential, and it is natural that there will be differences in judgment. What is important here is not only that the agenda is passed, but also that the executive side understands the rationale behind points discussed and applies them to subsequent PMI and risk management.

In formulating Mid-term Management Plan 2024, the Board of Directors held five sessions to discuss the plan before it was announced. Independent directors provided a variety of opinions that were reflected, for example, in the new business promotion organization and the deepening of Lumada strategy. The technology strategy was also discussed in the form of backcasting from 2050, rather than focusing only on the three-year period ending in 2024.

Strengths of Hitachi's Board of Directors: Awareness of and Confidence in Mutual Respect

Since being appointed director, I felt that Hitachi's corporate culture is based on respect for the opinions of others. Executives sincerely listen to director opinions and are willing to incorporate them into their work. Further, directors have a passionate desire to contribute to the sound development of Hitachi's business based on their own experiences. Hence, all

directors attend the Board meetings after careful preparation, including reading through the materials distributed in advance and sorting out points to be confirmed. I think that effectiveness of Hitachi's Board of Directors is largely supported by this sense of mutual respect and trust.

Additionally, Board meetings are not the only opportunity for interactions between independent directors and executive officers. Opinions and questions from independent directors to executive officers are also exchanged on a daily basis via email, while executive officers seek the opinions of independent directors on specific area of expertise. Further, Hitachi has non-executive directors within the company who are familiar with Hitachi's business and worksites, effectively functioning as a bridge between independent directors and the company.

Before the COVID-19 pandemic, all directors attended meetings together, which gave them the opportunity to receive explanations from relevant parties and communicate with each other before meetings. Since fiscal 2020, Board members living overseas have had difficulties traveling to Japan and remote meetings have become the norm, limiting face-to-face communication. Going forward, while keeping an eye on the situation, we will use face-to-face opportunities as much as possible to further invigorate communication among directors and with executive officers to improve the quality of discussions and enhance the effectiveness of the Board of Directors.

Message from the Chairman of the Board   **Corporate Governance**   Independent Directors Dialogue

History of Hitachi's Corporate Governance Reform

1999

1999   Introduction of Objective Perspective
Management Advisory Committees
➤ Practical advice from experts in Japan and overseas

2003   Demarcation of Management Oversight and Execution
Transitioned to a company with committees (currently a company with nominating committee, etc.)
➤ Increased management speed and improved management transparency

2006   Enforcement of Companies Act

2010

2010   Enhancement of Interactions with Capital Markets
Launched Hitachi IR Day
(briefing on business strategy by division)
➤ Clarified commitment of business unit top management to capital markets

2012   Acceleration of Global Management
Increased number of independent directors, including non-Japanese directors, to comprise a majority

Development of Guidelines for Strengthening Governance
Development of Corporate Governance Guidelines

2014   Development of Stewardship Code

2015

2015   Began Application of Corporate Governance Code

2016   Enhanced Dissemination of Information about Medium- to Long-term Sustainability
Published the Integrated Report

2019   Accelerated the Social Innovation Business across Five Growth Fields
Executive vice presidents were placed in five sectors
Held ESG briefing sessions
➤ An independent director (chair of the Audit Committee) and the CEO shared their remarks

Hitachi's Corporate Governance Framework and Features (as of July 2022)
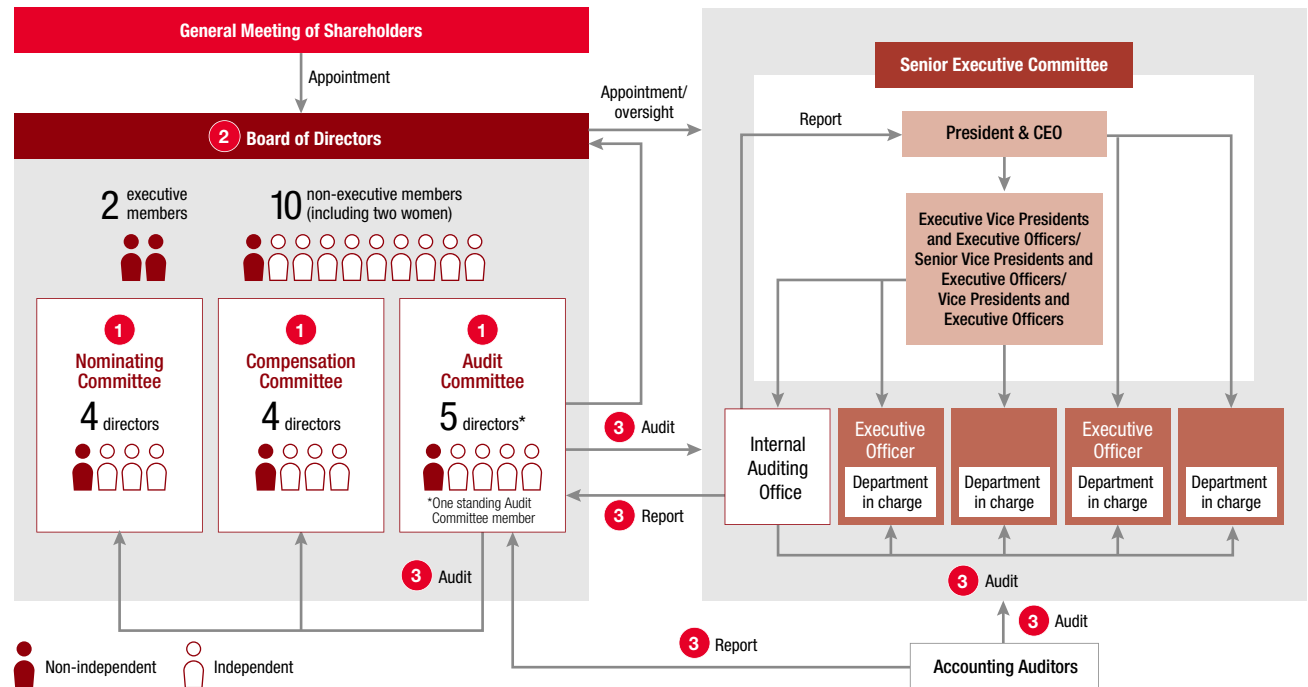
POINT ❶

Transparency in Management

Transitioned to a company with committees (currently a company with a nominating committee, etc.) in 2003.

Hitachi established the Nominating Committee, the Compensation Committee and the Audit Committee, with independent directors comprising the majority of members and serving as chairpersons. This system ensures transparency in management, separates the oversight and execution of management, facilitates the full exercise of oversight functions, and enables discussions and reports to be conducted appropriately within these three committees.

POINT ❷

Independence of the Board of Directors

Increased the number of independent directors, including non-Japanese directors, in 2012.

The Board of Directors, which is chaired by an independent director, has 12 members, including nine independent directors, two directors who are also serving as executive officers, and one director who is not serving as an executive officer. The chairman of the Board is an independent director. In addition, we have established a system that facilitates the full exercise of oversight functions by maintaining a separation between management oversight and execution.

POINT ❸

Enhanced Collaboration through Tripartite Auditing

Hitachi's Audit Committee and internal audit sections collaborate with third-party accounting auditors to strengthen Tripartite Auditing aimed at increasing the effectiveness of internal controls.

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Message from the Chairman of the Board   Corporate Governance   Independent Directors Dialogue

Experience, Knowledge and Capabilities Required for Directors

Hitachi Directors need to have a wide range of experience and knowledge in the global and diverse fields that are worthy of leading Hitachi's management to expand the Social Innovation Business globally, and have the qualities of a broad experience and expertise in management.
The experience, knowledge, capabilities and other qualities required for Hitachi directors are as follows.

Core Skills Core qualities that ensure management oversight efficiency and decision-making functions		Number of applicable directors
Corporate management	Corporate management experience and knowledge	12 people
Global business	Business experience outside Japan or management experience at a company that develops business globally	12 people
Risk management	Knowledge of risk assessment and management necessary to maintain operations	12 people
Finance and accounting	Knowledge and management experience pertaining to financial accounting necessary for medium- to long-term corporate value creation from a financial perspective	12 people

Professional Skills Expertise and experience that enhances discussions pertaining to the promotion of the Social Innovation Business		Number of applicable directors
Governments and international organizations	Leadership experience in government, governmental agencies, international organizations or economic associations that facilitate an understanding of and response to regulations and social issues, as well as practical experience at educational institutions	4 people
Legal affairs	Expertise and practical experience in legal affairs indispensable for global business and the development of new business	1 person
R&D and intellectual property	Expertise and practical experience in R&D or intellectual property facilitating the utilization of technology and the incorporation of new technologies	2 people
Digital	Practical experience in industrial fields vital for promoting digital transformation (DX) in the Social Innovation Business	4 people

Board of Directors Composition (As of July 2022)

Independence
(ratio of independent directors)

Independent directors
Nine people
75%
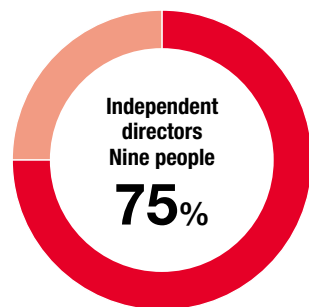
Diversity
(ratio of non-Japanese and female directors)

Non-Japanese directors
Five people
41.7%

2 female directors
(16.7% of overall director total)
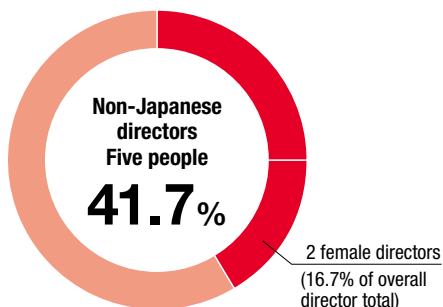
Diversity
(by country of origin)

Germany: **1** person
United Kingdom: **1** person
United States: **2** people
India: **1** person
Japan: **7** people

Industrial field

Finance
Retail
Transportation and logistics
Electricity and gas
IT and services
Energy and resources
Materials and chemicals
Automobiles and transportation
Machinery
Electric and precision instruments

Message from the Chairman of the Board   Corporate Governance   Independent Directors Dialogue

Highly Experienced Directors

At Board of Directors, discussions are conducted from a variety of perspectives by directors possessing a wealth of experience and knowledge pertaining to management, legal affairs, accounting, capital markets, government agencies and digital initiatives at global corporations.

Name	Notes	Main industrial fields	Positions at Hitachi and responsibilities
Katsumi Ihara	Engaged in Sony Group management, possessing a wealth of experience and insight in the field of international corporate management.	Electric and precision instruments, finance	Independent director ● Nominating Committee chairman ● Audit Committee member ▲ Compensation Committee member
Ravi Venkatesan	Possesses a wealth of experience and insight in international corporate management at Microsoft India and other companies, and in particular, the digital field and business in emerging markets.	IT and services	Independent director
Cynthia Carroll	Possesses a wealth of experience and insight as a manager of large international corporations including Anglo American.	Materials and chemicals, energy and resources	Independent director ● Nominating Committee member
Ikuro Sugawara	Held a leading position in the Ministry of Economy, Trade and Industry, and possesses a wealth of experience and insight in the administrative field.	General industry	Independent director ● Audit Committee member
Joe Harlan	Possesses a wealth of experience and insight in international corporate management, including at the Dow Chemical Company.	Electricity and gas, energy and resources, materials and chemicals	Independent director ▲ Compensation Committee member
Louise Pentland	Attorney licensed in New York and the UK possessing a wealth of insight into corporate legal affairs and corporate governance cultivated through experience as a Legal Officer at PayPal Holdings and other large global corporations.	IT and services, finance and retail	Independent director
Takatoshi Yamamoto	Possesses extensive insight into business and management in the fields of corporate analysis and international corporate management.	Finance	Independent director ▲ Compensation Committee chairman
Hiroaki Yoshihara	Possesses a high degree of professional knowledge and a wealth of experience in the fields of international corporate management, finance and accounting.	Finance, general industry	Independent director ● Nominating Committee member ● Audit Committee chairman
Helmuth Ludwig	Mainly engaged in Siemens Group management, possessing a wealth of experience and insight in international corporate management and the digital field in particular.	Machinery, manufacturing	Independent director ● Audit Committee member
Keiji Kojima	Engaged in R&D at Hitachi and its group companies, most recently in the Smart Life sector, possessing a wealth of experience and achievements, particularly in digital businesses related to Lumada global deployment.	IT and services	Director, Representative Executive Officer, President & CEO ▲ Compensation Committee member
Hideaki Seki	Engaged in managing Hitachi and group company elevator/escalator and automotive systems businesses, possessing a wealth of experience and achievements, including promoting the global expansion of these businesses.	Automobiles and transportation, machinery	Director ● Audit Committee member
Toshiaki Higashihara	Engaged in managing a wide range of fields at Hitachi and its group companies, including the social infrastructure and electric power system businesses, possessing a wealth of experience and achievements that include promoting the global expansion of Hitachi Group business.	Transportation and logistics, IT and services, energy and resources	Director, Executive Chairman, Representative Executive Officer ● Nominating Committee member

Message from the Chairman of the Board   Corporate Governance   Independent Directors Dialogue

## Administrative Performance of the Board of Directors

The Board of Directors approves basic management policy for the Hitachi Group and oversees the execution of the duties of executive officers and directors in order to sustainably enhance corporate value and the shareholders' common interests. The basic management policy includes the Mid-term Management Plan and annual budget compilation. The Board of Directors focuses on strategic issues related to the basic management policy, as well as other items to be resolved that are provided in laws, regulations, the Articles of Incorporation, and the Board of Directors Regulations.

Fiscal 2021 was a year in which we formulated the next Mid-term Management Plan, with the Board of Directors holding numerous discussions between executive officers and directors on the plan's direction and priority issues. At a Board meeting held in October 2021, then CEO Toshiaki Higashihara (currently Executive Chairman of the Board) provided a progress report on the 2021 Mid-term Management Plan, facilitating a common understanding among directors regarding issues that need to be strengthened in the next Mid-term Management Plan. This process was aimed at sharing Hitachi's aspirations as a Company and examining specific plan details. In promoting the execution of management strategies, more time is spent discussing and deliberating than is used to explain quarterly financial reports and business strategies. As for GlobalLogic, which plays a major role in promoting Hitachi's digital strategy, the Board of Directors is informed of the post-acquisition PMI plan and progress, and the status of promotion is shared on a regular basis. In terms of environmental initiatives, a report on Hitachi's participation in COP26 and the revision of long-term environmental targets was provided, affirming Hitachi's efforts toward the environment including carbon neutrality.

Board of Directors Meetings in Fiscal 2021

Fiscal 2021 Board of Directors Meeting Results	
Meetings held	Nine days
Average number of agenda items	7.5 per meeting
Average meeting length	3.5 hours (longest meeting 5.7 hours)

Discussion of Major Themes

Average time/meeting (minutes)
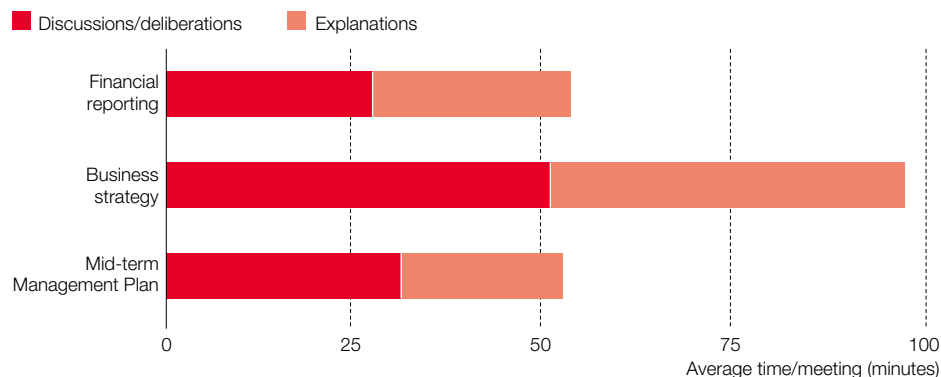
Providing Information to Independent Directors

The Board of Directors holds individual meetings and site visits to improve the effectiveness of the Board of Directors and increase opportunities for information sharing. Site visits were conducted on a limited basis in fiscal 2021 due to the impact of the COVID-19 pandemic, but through online participation in the Hitachi Social Innovation Forum, attendance at Internal Business Conference and Research Presentation Meeting held at research institutes, we provided opportunities to deepen understanding of the business and engage in dialogue with senior management and front-line employees.

Digital Research Presentation Meeting held on November 12, 2021

Visit to Hitachi Research Laboratory on May 12, 2022

Activities of the Three Committees

Nominating Committee

The Nominating Committee has the authority to determine proposals submitted to the general meeting of shareholders for the election and dismissal of directors. The Nominating Committee consists of four directors, three of whom are independent directors.

This committee determines director candidates, holds preliminary discussions concerning the appointment and dismissal of the CEO and receives advance reports on the selection and dismissal of executive officers.

In fiscal 2021, the Nominating Committee held meetings on 10 days.

■ Primary Activities

In addition to deciding upon the contents of proposals made concerning director appointments at the Annual General Meeting of Shareholders, the Nominating Committee confirmed and deliberated proposals for CEO appointments and confirmed receipt of a preliminary report on the executive officer system implemented in fiscal 2022. In addition, it promoted committee-related activities, including discussions and individual interviews aimed at developing candidates for future management and leadership positions.

Audit Committee

The Audit Committee has the authority to audit the execution of duties of directors and executive officers and to decide on proposals submitted to the general meeting of shareholders for the election and dismissal of accounting auditors. The Audit Committee currently consists of five directors, including four independent directors and one standing Audit Committee member.

Hiroaki Yoshihara, the chairman of the Audit Committee, has been involved in accounting and other business practices at the KPMG Group for many years and possesses a considerable wealth of knowledge concerning finance and accounting.

In fiscal 2021, the Audit Committee held meetings on 15 days.

■ Primary Activities

The Audit Committee conducted activities that were focused on its priority matters for consideration, which included the strengthening of collaboration and the facilitation of information sharing under a "Tripartite Audit" (audit by the Audit Committee, internal audit and audit by accounting auditors), and auditing of the establishment and operation of internal control systems from the perspective of risk management and validity of execution of duties. In addition, a standing committee member worked to obtain information as needed in a timely and accurate manner, mainly by collaborating with the Internal Auditing Office, among other departments, and attending important internal meetings such as the Senior Executive Committee, and facilitated information sharing with other committee members.

Compensation Committee

The Compensation Committee has the authority to determine remuneration policies for directors and executive officers and remuneration for individuals (including amounts of remuneration) based on them. Currently composed of four directors, including three independent directors, the committee strives to ensure objectivity, transparency, and fairness in the remuneration determination process. In addition, the Compensation Committee verifies and reviews details of the process used for determining remuneration for individuals, including assessments concerning basic remuneration amounts, evaluations of progress made toward individual targets, and performance appraisals that are tied to short-term incentive compensation.

In fiscal 2021, the Compensation Committee held meetings on five days.

■ Primary Activities

The Compensation Committee determined remuneration amounts for individual directors and executive officers in accordance with established policies while verifying and reviewing the processes and results of appraisals for performance and individual targets tied to short-term incentive compensation for executive officers. In addition, the committee reviewed the executive compensation system while giving due consideration to compensation granted to managers at global companies and the goal of sharing value with shareholders, and decided upon policies covering remuneration for directors and executive officers in fiscal 2022.

CEO Appointment, Dismissal, and Succession Plan

After a preliminary report to the Nominating Committee, Hitachi's Board of Directors decides upon the appointment and dismissal of executive officers with the goal of constructing an optimal business execution system for management. As stipulated in our Corporate Governance Guidelines, our basic policy concerning the CEO requires that individuals serving in the position of CEO have extensive experience and achievements in the field of company management. They must also be considered optimally suited for conducting management aimed at achieving Hitachi's goals of continuously raising its corporate value and further serving the common interests of its shareholders. Decisions regarding the appointment or dismissal of the CEO shall be made based on prior deliberations and proposals by the Nominating Committee.

Regarding our CEO Succession Plan, as the speed of change in the management environment accelerates, we are striving to build a system that enables us to appropriately and promptly secure and develop (both internally and globally) necessary management personnel who will provide leadership that will allow us to realize our growth strategies. Accordingly, we are also concentrating on providing training for selected employees while targeting the early development of candidates for future management positions. Moreover, we are developing next-generation leaders capable of acting authoritatively and resolutely by establishing forums where participants can discuss what is necessary for Hitachi's future growth and make recommendations to management.

Analysis and Evaluation of the Effectiveness of the Board of Directors

Hitachi evaluates the effectiveness of its Board of Directors each year in a continuous effort to maintain and improve its functions.

Fiscal 2021 Evaluation Process

	Points of evaluation
1. Questionnaire-based self-assessment by each director (February–March 2022)	• Composition: Diversity on the Board, the number and proportion of Inside and Outside directors, etc. • Visibility of responsibilities and roles of the Board • Meeting operation: Meeting frequency, deliberation time, agenda setting, quality of deliberation, Chairman's role, etc. • Contribution: Contribution to strategy building and change of company culture, contribution to constructive discussions, utilization of Director's knowledge and experience, discussions contribution to CEO succession plan, etc. • Understanding of the company: Hitachi Group Identity, risk factors, potential challenges and opportunities. • Three committees: Composition, responsibilities and roles, coordination with the Board, etc. • Supporting system for the Board: Provision of necessary information such as the Board materials, etc.
2. Discussions among independent directors (March 2022)	• Independent directors had a meeting and discussed the Board effectiveness there referring to the Board's activities in each evaluation items set out in the above 1.
3. Discussions at the Board meeting (May 2022)	• The Board analyzed and evaluated its effectiveness as a whole and confirmed the policy on approaches to further enhance the Board's effectiveness based on the results of the preceding process, considering comparison to the evaluation results of the previous year and measures taken for improving its effectiveness in fiscal 2022.

Evaluation Results and Future Initiatives

Evaluation results	
Overall evaluation in fiscal 2021	• The Board assessed that Board members are diverse and make use of their knowledge and expertise to speak out, having vigorous discussions especially on matters related to business strategies such as the Mid-term Management Plan targeting the medium- to long-term growth of corporate value. The Board concluded that the effectiveness of the Board as a whole is maintained.

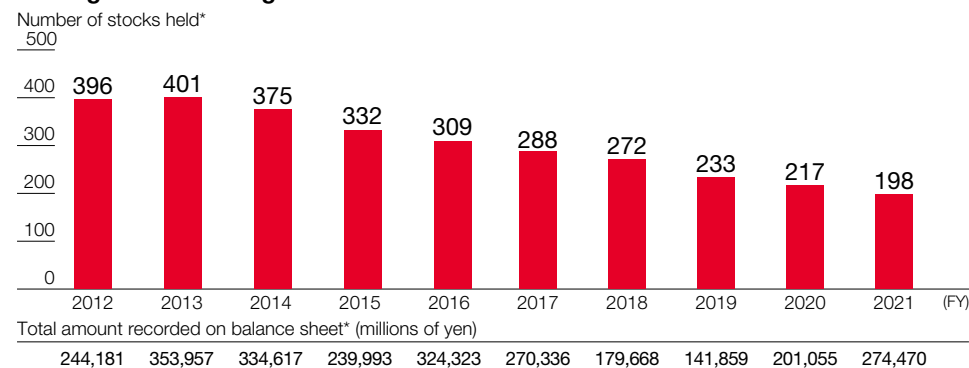| Future initiatives	
Further enhancement of corporate governance	• Provide opportunities to freely discuss corporate culture and the overall future of the business portfolio to deepen discussions. • Discuss specific strategies including important themes (such as GX and DX) in each sector and BU to confirm consistency with the Mid-term Management Plan.
Enhancement of the Board support system and improvement of practical issues in operations	• Post COVID-19, increase opportunities for meetings with BU CEOs and others and restart Independent Director visits to group sites. • Further improve structure and content of materials for Board meetings and ensure provision of materials well in advance of meetings.

Policy regarding Strategic Shareholdings

Policy on listed company strategic shareholdings

Hitachi's basic policy is not to acquire or hold other companies' shares except in cases where acquiring or holding such shares is necessary in terms of transactions or business relationships. We will promote reducing shares already held unless significance of holding shares or economic rationales of holding are confirmed.

The Board of Directors verifies the appropriateness of all stock holdings every year. To this end, each individual stock was reexamined as to the purpose of holding the shares and whether benefits from holding shares are in line with target level of capital efficiency. As the result of verification, we promote the sales of shares for which significance of holding shares and economic rationale are not confirmed. In the fiscal year ended March 31, 2022, we reduced the number of shares held in 10 listed stocks (total amount sold: 47,750 million yen).

Strategic shareholding status

Number of stocks held*

FY	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Number of stocks held*	396	401	375	332	309	288	272	233	217	198
Total amount recorded on balance sheet* (millions of yen)	244,181	353,957	334,617	239,993	324,323	270,336	179,668	141,859	201,055	274,470

*Total of listed and unlisted shares

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Director and Executive Officer Compensation

Basic Policy

- Compensation shall be such that it enables the company to attract necessary personnel to achieve an improvement in corporate value through global business growth.
- Compensation shall be commensurate with the roles and responsibilities of each Director and Executive Officer.
- Compensation for Directors shall be such that it enables them to exercise the management oversight functions effectively.
- Compensation for Executive Officers shall be such that it enables them to contribute to sustained improvement in corporate value through the execution of business and employs an appropriate balance between short-term performance and medium- and long-term performance.
- The level of compensation shall be determined considering compensation levels at other companies as well as economic and market trends.
- The Compensation Committee utilizes external experts to gain expert advice and an objective viewpoint, if necessary, for considering the details and amounts of compensation.

Compensation Structure

(1) Directors

Compensation for Directors is basic remuneration as fixed pay. The amount of basic remuneration is decided by adjusting a basic amount to reflect full-time or part-time status, committee membership and position, and travel from place of residence, etc. A Director concurrently serving as an Executive Officer is not paid compensation as a Director.

(2) Executive Officers

Compensation for Executive Officers consists of basic remuneration as fixed pay and short-term incentive compensation and medium- and long-term incentive compensation as variable pay.

The basic amount of basic remuneration, short-term incentive compensation and medium- and long-term incentive compensation is set based on the ratio of 1:1:1 as the standard, taking into account the composition of executive compensation for major global companies, in order to improve corporate value through the growth of global businesses. The higher the position an Executive Officer holds, the greater the proportion of variable pay is set to the total annual compensation.

If it is found that an executive officer has engaged in misconduct during their term of office, any compensation already paid shall be returned to the company (clawback provision).

Please refer to Compensation to Directors and Executive Officers on page 94 of the Annual Securities Report (The 153rd Business Term)

► https://www.hitachi.com/IR-e/library/stock/hit_sr_fy2021_4_en.pdf

Reflecting Sustainability Targets in Executive Compensation Evaluation

In fiscal 2021, Hitachi introduced evaluations that take environmental value into consideration in the executive compensation system for the first time with the aim of accelerating the creation of environmental value. All executive officers, including the CEO, set targets for environmental value and were evaluated for their achievement of individual targets.
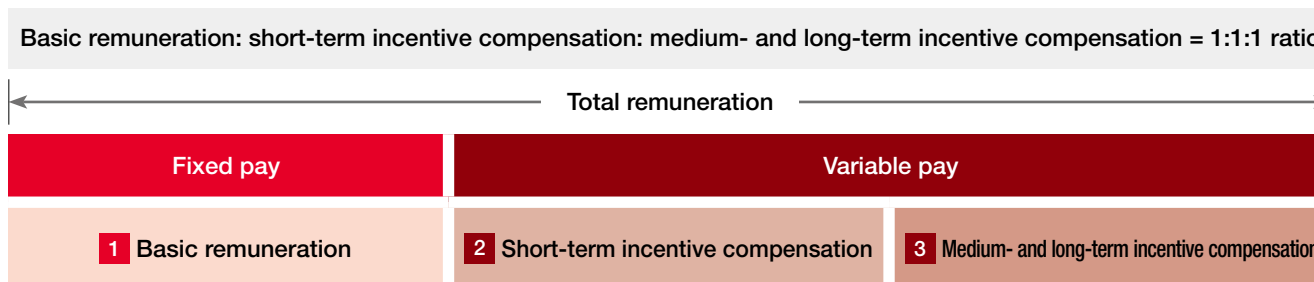
From fiscal 2022, in addition to environmental targets such as decarbonization and resource efficiency, we introduced quantitative and qualitative target setting for occupational health and safety and product quality in the compensation evaluation of all executive officers to further advance sustainable management.

Examples of Sustainability Targets Reflected in Fiscal 2022 Compensation Evaluations

	Sustainability targets
Decarbonization	• Efforts to realize carbon neutrality* in business sites (factories and offices) by fiscal 2030 • Efforts to achieve carbon neutrality* by fiscal 2050 throughout the value chain
Resource efficiency	• Efforts related to resource efficiency
Occupational health and safety	• Zero fatal accidents • Wellbeing initiatives
Product quality	• Efforts to enhance product quality

*Regarding fiscal 2030 and fiscal 2050 decarbonization targets, single-year targets are set Groupwide and for each BU.

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Compensation to Executive Officers (Fiscal 2022)

Basic remuneration: short-term incentive compensation: medium- and long-term incentive compensation = 1:1:1 ratio

Total remuneration

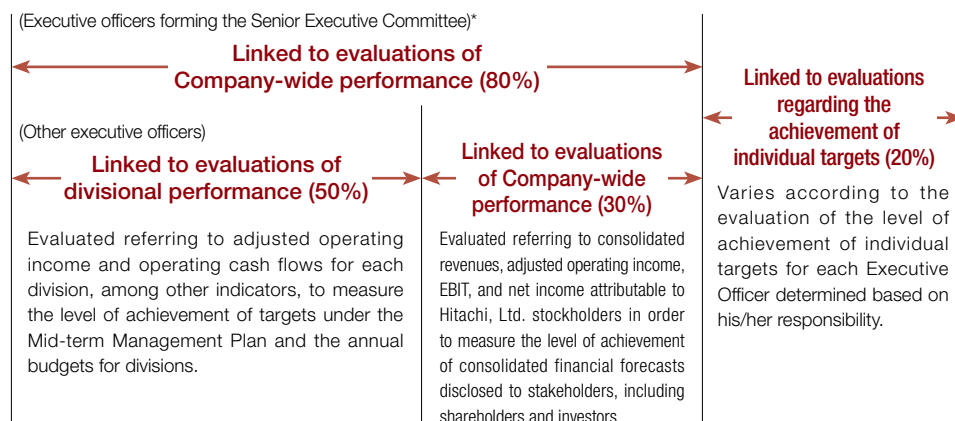| Fixed pay	Variable pay	
1 Basic remuneration	2 Short-term incentive compensation	3 Medium- and long-term incentive compensation

1 Basic remuneration
Set according to the relevant position by adjusting that amount to reflect financial results and individual performance.

2 Short-term incentive compensation
The amount of short-term incentive compensation is decided within a range of 0 to 200% of a basic amount set according to the relevant position by adjusting that amount to reflect financial results and individual performance.
From fiscal 2022, we are also working to further strengthen accountability by linking the achievement of KPIs, including sustainability indicators specified in the Mid-term Management Plan, to the performance evaluation of executive officers.

(Executive officers forming the Senior Executive Committee)*

Linked to evaluations of Company-wide performance (80%)

(Other executive officers)

Linked to evaluations of divisional performance (50%)   **Linked to evaluations of Company-wide performance (30%)**   **Linked to evaluations regarding the achievement of individual targets (20%)**

Evaluated referring to adjusted operating income and operating cash flows for each division, among other indicators, to measure the level of achievement of targets under the Mid-term Management Plan and the annual budgets for divisions.

Evaluated referring to consolidated revenues, adjusted operating income, EBIT, and net income attributable to Hitachi, Ltd. stockholders in order to measure the level of achievement of consolidated financial forecasts disclosed to stakeholders, including shareholders and investors.

Varies according to the evaluation of the level of achievement of individual targets for each Executive Officer determined based on his/her responsibility.

*The rates used for "other executive officers" apply when "executive officers forming the Senior Executive Committee" are in charge of sector or business unit.

3 Medium- and long-term incentive compensation
Shares of restricted stock were introduced in fiscal 2019 as compensation for Japanese executive officers and corporate officers (the executive positions next to Executive Officers) to promote management from a medium- to long-term perspective and to provide incentives to bring about a sustainable increase in enterprise value by further promoting senior management's shared values with shareholders through the holding of shares during their term of office. In fiscal 2020, a restricted stock compensation unit system[1] was introduced as compensation for non-Japanese executive officers and corporate officers. In fiscal 2021, the scope of the restricted stock compensation unit system was expanded to executives at some group companies.

Shares of restricted stock
- The restriction on transfers shall be lifted if executive officers resign from all of the positions of the company's executive officer, director, and corporate officer.
- With regard to one-half of the granted shares of restricted stock, the number of shares for which the transfer restriction is lifted shall be determined after ex-post evaluation. In the ex-post evaluation, the total shareholder return (TSR) of Hitachi stock over the three years from the beginning of the fiscal year when the medium- to long-term incentive compensation is granted is compared to growth rate of TOPIX over the same period.

TSR/TOPIX growth rate	Shares for which the transfer restrictions are lifted
120% or more	Transfer restrictions are lifted for all granted shares.
Between 80% or more but less than 120%	Transfer restrictions are lifted for part of granted shares[2].
Less than 80%	No granted shares have transfer restrictions lifted.

[1] A system in which restricted stock compensation units are granted to the eligible persons, and over three years from the start of the business year in which the restricted stock compensation units were granted, one-third of the number of restricted stock compensation units granted is paid in each fiscal year that passes, as Hitachi stock or cash.

[2] Number of shares for which the transfer restrictions are lifted = Number of granted shares × {(TSR/TOPIX Growth Rate Ratio × 1.25) − 0.5} Shares for which the transfer restrictions are not lifted shall be acquired by Hitachi without consideration.

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Internal Control over Financial Reporting

To ensure the reliability of its consolidated financial reporting, the Hitachi Group is establishing and implementing relevant internal controls. We evaluate their effectiveness by adhering to standards for the evaluation of internal controls related to financial reporting that are generally accepted as fair and reasonable.

Furthermore, we have established the J-SOX Committee with the goal of raising the effectiveness of these internal controls. This committee evaluates internal control effectiveness and establishes frameworks designed to improve and strengthen them.

Enhanced management of risk associated with global business expansion	Creation of a system focused on maintaining transparency and a sense of urgency

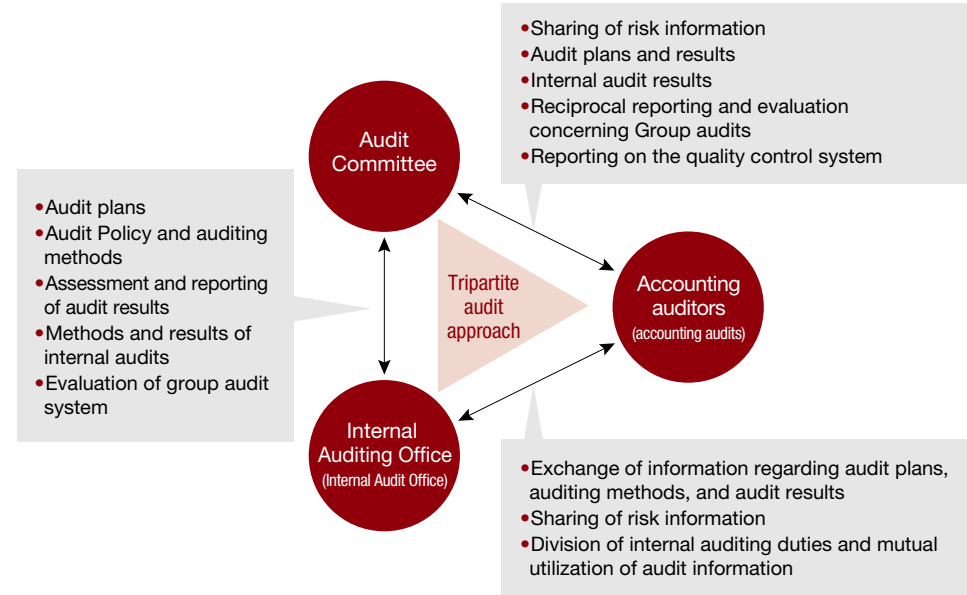**Internal Control Assessment Framework**
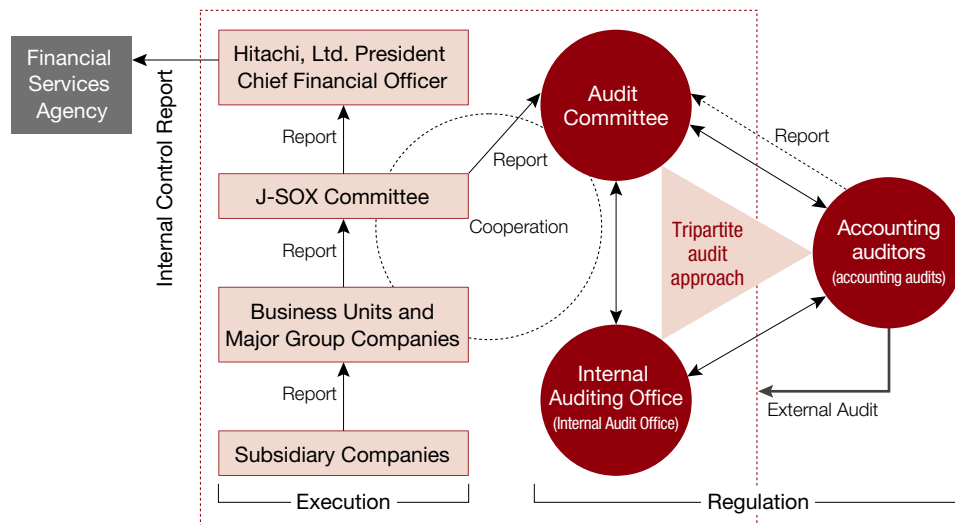
Enhanced Collaboration through Tripartite Audits

In pursuit of sustainable growth in corporate value, Hitachi's Audit Committee and internal audit section collaborate with third-party accounting auditors to strengthen its "Tripartite Auditing," which aims to increase the effectiveness of internal controls. The three parties communicate closely to share risk information and assessments concerning risk response while securing transparency and ensuring appropriate checks and balances.

Sharing of risk information and assessments of risk response	Ensuring transparency and a sense of urgency and improving the effectiveness of internal controls

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Building a More Effective and Efficient Auditing System

Audit Committee

The Audit Committee formulates audit plans in accordance with risk-based approaches and conducts audits for each consolidated business unit. Cooperating with the internal audit section audits, Audit Committee members meet directly with business unit heads. These members share concerns and issues related to the implementation of business strategies aimed at achieving sustainable growth that require attention with the internal audit section. At that time, the committee also verifies matters that carry high levels of risk in terms of quality, measuring these risks through employee awareness surveys and thorough implementation of business strategies.

Internal Audit Section

Hitachi's internal audit section performs regular internal audits of each business unit, business division and subsidiary. This section reports directly to the President and is independent from organizations that are subject to its audits. The internal audit section also formulates audit plans based on past audit records and the most recent business circumstances. In addition, this section performs audits while sharing information with the Audit Committee, ensuring their effectiveness. The internal audit section at Hitachi is responsible for confirming the legality and appropriateness of all business operations, including those related to accounting, production management, sales, purchasing, IT systems, compliance, and human resources. Furthermore, acting on behalf of our management team, the internal audit section confirms whether employees are well versed in the ideas and policies of management, whether operations are being carried out based on these ideas and Policies, and whether business strategies are being implemented in a way that will efficiently lead to sustainable growth.

Accounting Auditors

Accounting auditors perform audits that focus on the accuracy and reliability of our financial statements. First, they adopt a risk-based approach in response to the group's overall financial status. Applying this approach, they then determine the scope and methods of the audit, formulate an audit plan, and share opinions with the Audit Committee. Next, based on the audit plan, they perform audits on each of the five sectors and the business units that comprise them, enabling effective and efficient understanding of data related to Hitachi's finance department and each of its business segments. If, during the auditing process, our accounting auditors discover a degree of risk that could impact future financial statements significantly or issues that, even if monetarily small, could have a large qualitative effect, they share related information regarding these risks and issues and the progress on a response from the related divisions with the Audit Committee and internal audit section. They also work to improve and raise the effectiveness

of audits by submitting "management letters" containing points of concern and improvement suggestions through the finance department. Recently, they have also been working to raise the efficiency of checks on the accuracy of numerical figures by using some IT systems to investigate all cases rather than performing test-checking through sampling.

Topics

Sector Corporate Auditor System

To further raise audit effectiveness, sector corporate auditors were assigned in each core business field (sector) in April 2019. Through this action, we expanded the internal control system spearheaded by chief auditors and enhanced collaboration with executive vice presidents managing each sector, as well as with the Audit Committee.

Although sector corporate auditors do not act as organs under the Companies Act, they still assume responsibility for governance in each sector. Statutory auditors, which function as organs at Hitachi subsidiaries under the Companies Act, also report to sector corporate auditors and work to improve the effectiveness of Hitachi's internal control systems.

IT Utilization

When conducting business audits, we use IT systems to expeditiously search for reference information contained within materials submitted prior to audit in an attempt to improve efficiency. We are currently enhancing a system that will allow our internal audit section to share information with professional accounting auditors using a data lake. When reading audit reports submitted to the President by the internal audit section, the President must be able to quickly understand the issues identified by these reports and make prompt judgments concerning whether immediate action is required. In the future, our internal audit section will continue to maintain its transparency and independence while working to improve audit efficiency as one member of our Tripartite Audit system.

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Comprehending Management Issues through Dialogues with Stakeholders

In promoting the Social Innovation Business, Hitachi accurately detects a variety of social issues in each country and region, addressing these issues through co-creation with customers, governments, academic organizations, research institutions and a wide range of other stakeholders.

In response to the recent rise of ESG investing, Hitachi is proactively engaged in dialogue with shareholders and investors on both financial and non-financial information, while also focusing efforts on co-creation to improve disclosure of non-financial information. Going forward, Hitachi will continue to proactively promote dialogues with stakeholders, incorporating the takeaways into operations to realize sustainable management.

ESG Disclosure Study Group

How to address the rapidly changing global trend in ESG disclosure is a major challenge for many corporations and institutional investors in Japan. Hitachi, Ltd. is responding to this issue through co-creation with stakeholders. In June 2020, Hitachi took the lead in establishing the ESG Disclosure Study Group to explore ways of disclosing ESG information that contribute to long-term corporate value enhancement while also keeping an eye on global trends. The study group initially started with 19 companies, and as of June 30, 2022, more than 100 companies, institutional investors, auditing firms and public organizations are participating.

Study group activities are divided into phases according to themes, and in June 2022, the "ESG Disclosure Study Group Report 2022" was published including the results of these activities. This report contains ESG disclosure recommendations for corporations, institutional investors and standard-setting bodies and is disseminated to relevant organizations within and outside Japan. Hitachi, Ltd. serves as the co-chairman and secretariat of this study group, and leads these activities.

General Incorporation Association of ESG Disclosure Study Group / EDSG
▶ https://edsg.org/en/

Left: Tetsuo Kitagawa, Representative Director, ESG Disclosure Study Group (Emeritus Professor of Aoyama Gakuin University; Professor at Tokyo Metropolitan University)

Right: Norio Masuda, Co-Representative Director, ESG Disclosure Study Group (Senior Manager, Sustainability Promotion Division, Hitachi, Ltd.)

Kyoto University and Hitachi Joint Project

One of the key initiatives for the evolution of sustainable management is to quantitatively clarify the financial impact of non-financial values such as environmental and social values created by business activities, as well as intangible asset measures such as human resource policies. This is expected to further advance management and improve engagement with stakeholders.

Since 2021, Hitachi, Ltd. has engaged with these challenges through experimental research conducted in collaboration with Graduate School of Management, Kyoto University. Through academic and other approaches, it was quantitatively confirmed that Hitachi's initiatives toward the environment and human resources could have a positive impact on financial indicators (ROIC and WACC). In the future, we will clarify the causal relationship between non-financial and intangible asset measures and financial indicators, as well as employee survey results, to identify measures with a high degree of causal influence and lead them to measures to improve financial performance through non-financial and intangible asset measures.

Enhancing Hitachi Sustainable Management

Visualization of correlation and causality between non-financial and intangible asset measures and financial indicators, and quantification of financial impact is important.

Background

Global trends

Demand for disclosure linking financial and non-financial information

- IFRS Foundation announced an exposure draft of ISSB (non-financial information disclosure standards) in March 2022, indicating importance of "non-financial and financial connectivity"
- Revised Japan's Corporate Governance Code in June 2021 to reference the relationship between human capital and investment
- Securities Report revised in March 2020 upon request for disclosure of non-financial information having a medium- to long-term financial impact

Hitachi's activities

Mid-term Management Plan announcements

- Announced that Mid-term Management Plan 2021 will promote management focused on social, environmental and economic value
  ➤ Engaged in non-financial value visualization in collaboration with related departments
- Announced that Mid-term Management Plan 2024 will strengthen efforts targeting human capital management and the environment
  ➤ Correlation, causality, and quantification of financial impact are important

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Independent Directors Dialogue

Independent Directors Dialogue with Stakeholders

At Hitachi Investor Day 2022, held on June 13, 2022, a first-ever dialogue session was conducted by Hitachi independent directors. With Executive Vice President, CFO Yoshihiko Kawamura as moderator, independent directors Harufumi Mochizuki and Helmuth Ludwig exchanged opinions on the formulation of the Mid-term Management Plan, Lumada and Hitachi's vision, among other questions submitted in advance by institutional investors and analysts.

Harufumi Mochizuki
Independent Director
(in June 2022)

Yoshihiko Kawamura
Executive Vice President, CFO

Helmuth Ludwig
Independent Director

Discussions at the Board of Directors Meeting on the Mid-term Management Plan

Mr. Kawamura: My understanding is that the Board conducted in-depth discussions from early on in formulating the Mid-term Management Plan 2024 announced in April 2022. Please share that process.

Mr. Mochizuki: In formulating a Mid-term Management Plan, specific plans for the next three years are considered, but as a first step, it is extremely important that the directors and the executive officers share the same vision of what Hitachi wants to be. At Hitachi, the Board members and the executive officers have had a series of discussions, so we have a common understanding of what we want to be. On this basis, we discussed priority issues for the next three years and how to implement them. From the initial stages of plan formulation, the Board of Directors has held a total of five meetings to discuss. At these meetings, everyone provides opinions, thus a single agenda item can take up an hour or more. In this process, various opinions were provided by Board members from diverse backgrounds, but because we share the same underlying vision, discussions remained focused. The important thing is to make sure that everyone outside the

company understands it correctly, and independent directors have pointed out that it should be written in more specific terms. Through this process, I believe we were able to formulate an easily understandable Mid-term Management Plan focused on the essentials. For the past 10 years, I have served as a Hitachi independent director, following the company's transformation from the difficult period after the 2008 global financial crisis to the present. I have watched the process of Hitachi's incremental transformation into a global company. I am impressed that Hitachi has changed direction from a Japan-centric conglomerate to a Social Innovation Business with a clearly defined stance as a global leader in the Mid-term Management Plan 2024.

Lumada and the Mid-term Management Plan

Mr. Kawamura: Lumada is the lynchpin of the Mid-term Management Plan 2024. Dr. Ludwig, you have in-depth knowledge of the digital field, what is your assessment of this plan?

Dr. Ludwig: I studied engineering in Germany and joined Siemens in 1990. After that, for about the past 30 years, I have been engaged in business development in the automation and

digital fields—namely, the integration of virtual with physical. Just as GlobalLogic has joined the Hitachi Group, I also experienced a similar post-merger integration (PMI) at Siemens. It is my fervent belief that companies must have deep knowledge in their business domain and integrate operational technologies (OT) with IT capabilities to enhance competitiveness. With Lumada at the core of Hitachi's Social Innovation Business, there are two critical points. First, is to focus on competition and provide value to customers. To this end, Hitachi must understand how to improve processes, then link them to revenues. Second, solutions must be repeatable, which requires containerization. Hitachi's thorough knowledge of mobility, energy, industry and other business domains offers the potential for business scalability through the utilization of solutions in other fields.

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Achieving this will enable Hitachi to increase margins in line with expectations. Although the path forward is not easy, I think Hitachi is off to a good start and on the right track.

Large-scale M&A Discussions

Mr. Kawamura: Over the past two to three years, Hitachi has made a series of large-scale M&A transactions, making Hitachi High-Tech a wholly owned subsidiary and acquiring both the ABB power grids business and GlobalLogic. Given the risks associated with these deals, how were they discussed at the Board meetings?

Mr. Mochizuki: Repositioning our business portfolio is an important theme for Hitachi, and determining what to include and what to divest was one of the means of structural reform. Hitachi has made acquisitions in areas where synergies can be expected, while disposing of non-synergistic businesses, which has had a comparatively limited impact on finances and the balance sheet. The acquisition of ABB's power grid business and GlobalLogic is a 1 trillion yen deal, so the Board of Directors had a very in-depth discussion about it. Since the Board members shared the strategy underlying the discussion, the issues were very clear, and we confirmed that we could expect synergies as a growth engine for Hitachi in the true sense of the word. It was a very strategic discussion and a major decision. Further, I also believe that Hitachi's repeated experience with acquisitions has made it very sensitive to the discipline that must be observed when conducting M&A activities. While pre-acquisition due diligence is taken as a matter of course, the degree to which PMI is achieved is also a critical factor. Hitachi's skills have improved significantly over the past 10 years, including risk mitigation, efforts to realize synergies, and post-acquisition follow-up, including human resources,

while also experiencing some failures. I believe Hitachi has attained a global standard with regard to acquisition capabilities.

Dr. Ludwig: GlobalLogic is a company that has achieved amazing growth. The critical point was why it would be better off with Hitachi. The Board of Directors thoroughly discussed this point, confirming that the addition of GlobalLogic to the Hitachi Group will provide even greater value to customers. In M&A, it is of course important to select an appropriate target and realize the deal, but the PMI process afterwards is also extremely important. The question is how to integrate human resources with different backgrounds with a sense of speed. GlobalLogic is full of dynamism, strengthening Hitachi's business and attracting talented human resources. Employees have also been provided with a wider range of opportunities.

Hitachi's Business Portfolio and Vision for Further Growth

Mr. Kawamura: As Hitachi is involved in a variety of businesses, what are your thoughts on conglomerates (discounts)? Furthermore, what is required for a Company with over 100 years of history to achieve growth going forward?

Dr. Ludwig: Capital markets may not consider traditional conglomerates to be the best structure. However, I believe that in the future, conglomerates will have a different meaning. First of all, it is critical to have a clear vision and strategy. Hitachi, which is focusing efforts on sustainability and digital transformation, has a robust innovation strategy. In this sense, I think Hitachi's current business portfolio is more streamlined and closer to the conglomerate of the future. In a world where unexpected events often occur, corporations must be resilient. However, simply engaging in a wide range of businesses is not the answer. Hitachi must demonstrate synergies among businesses based on a clear vision, and to this end, I think the speed of decision-making will become increasingly important.

Mr. Mochizuki: Hitachi used to be a Japanese conglomerate with domestic sales accounting for 70% of its revenue. To become a global leader, Hitachi must generate greater profits, improve profit margins and continuously generate cash to compete on the world stage. It is also important to have strong leadership focused on the company's ideal positioning without losing the can-do spirit. Having watched Hitachi's trajectory over the past 10 years, my sense is that Hitachi possesses both of these attributes.

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Leadership (As of June 22, 2022)

Independent Directors*

Katsumi Ihara (71) ● ● ▲

Share ownership: 1,100 shares
Term of office as Independent Director: 4 years

2005	Executive Deputy President, Representative Corporate Executive Officer, Member of the Board, Sony Corporation
2009	Executive Deputy President, Corporate Executive, Sony Corporation Executive Vice President, Representative Director, Sony Financial Holdings Inc.
2010	President, Representative Director, Sony Financial Holdings Inc.
2011	President, Representative Director, Sony Life Insurance Co., Ltd.
2015	Chairman, Director, Sony Life Insurance Co., Ltd. (Retired in June 2017)
2016	Chairman, Director, Sony Financial Holdings Inc. (Retired in June 2017)
2018	Director, Hitachi, Ltd.

Ravi Venkatesan (59)

Share ownership: 400 shares
Term of office as Independent Director: 1 year, 11 months

1999	Chairman of the Board of Directors, Cummins India Ltd. (Retired in March 2004)
2004	Chairman, Microsoft India Pvt. Ltd. (Retired in September 2011)
2011	Independent Director, Infosys Ltd. (Retired in May 2018, served as Co-Chairman from April 2017 to August 2017)
2013	Venture Partner, Unitus Ventures LLC. (Currently in office)
2015	Chairman (Non-Executive), Bank of Baroda (Retired in August 2018)
2018	Special Representative for Young People & Innovation, UNICEF (Currently in office)
2020	Director, Hitachi, Ltd.

Cynthia Carroll (65) ●

Share ownership: 1,500 shares
Term of office as Independent Director: 9 years

1991	General Manager, Foil Products, Alcan Inc.
1996	Managing Director, Aughinish Alumina Ltd., Alcan Inc.
1998	President, Bauxite, Alumina and Specialty Chemicals, Alcan Inc.
2002	President & CEO, Primary Metal Group, Alcan Inc.
2007	CEO, Anglo American plc. (Retired in April 2013)
2013	Director, Hitachi, Ltd.

Ikuro Sugawara (65) ●

Share ownership: 0 shares
Term of office as Independent Director: 0 years

1981	Joined Ministry of International Trade and Industry of Japan
2010	Director-General of the Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry of Japan ("METI")
2012	Director-General of the Manufacturing Industries Bureau, METI
2013	Director-General of the Economic and Industrial Policy Bureau, METI
2015	Vice-Minister of Economy, Trade and Industry of Japan
2017	Special Advisor to the Cabinet of Japan (Retired in June 2018)
2022	Director, Hitachi, Ltd.

Joe Harlan (63) ▲

Share ownership: 1,100 shares
Term of office as Independent Director: 4 years

1999	Vice President and Chief Financial Officer, Lighting Business, General Electric Company
2001	Vice President, Corporate Financial Planning and Analysis, 3M Company
2002	President and Chief Executive Officer, Sumitomo 3M Ltd.
2004	Executive Vice President, Electro and Communications Business, 3M Company
2009	Executive Vice President, Consumer and Office Business, 3M Company
2011	Executive Vice President, Performance Materials, The Dow Chemical Company
2012	Executive Vice President, Chemicals, Energy and Performance Materials, The Dow Chemical Company
2014	Chief Commercial Officer and Vice Chairman, Market Business, The Dow Chemical Company
2015	Vice Chairman and Chief Commercial Officer, The Dow Chemical Company (Retired in August 2017)
2018	Director, Hitachi, Ltd.

Louise Pentland (50)

Share ownership: 1,100 shares
Term of office as Independent Director: 7 years

1997	Admitted as a Solicitor (UK)
2001	Senior Legal Counsel, Nokia Networks, Nokia Corporation
2007	Vice President, Acting Chief Legal Officer and Head of IP Legal, Nokia Corporation
2008	Senior Vice President and Chief Legal Officer, Nokia Corporation
2009	Admitted to New York State Bar Association
2011	Executive Vice President and Chief Legal Officer, Nokia Corporation (Retired in May 2014)
2015	General Counsel, PayPal, eBay Inc. Director, Hitachi, Ltd. Senior Vice President and Chief Legal Officer, PayPal Holdings, Inc.
2016	Executive Vice President, Chief Business Affairs & Legal Officer, PayPal Holdings, Inc.
2022	Executive Vice President and Senior Advisor, PayPal Holdings, Inc. (currently in office)

● Nominating Committee   ● Audit Committee   ▲ Compensation Committee

Each Committee is composed of the following members (chair names underlined)

Nominating Committee : <u>Katsumi Ihara</u>, Cynthia Carroll, Hiroaki Yoshihara, Toshiaki Higashihara

Audit Committee   : <u>Hiroaki Yoshihara</u>, Katsumi Ihara, Ikuro Sugawara, Helmuth Ludwig, Hideaki Seki

Compensation Committee : <u>Takatoshi Yamamoto</u>, Katsumi Ihara, Joe Harlan, Keiji Kojima

*Independent directors are directors who fulfill the qualification requirements to be outside directors as stipulated in the Companies Act and also meet independence criteria defined by Hitachi and stipulated by Japanese stock exchanges where Hitachi is listed.

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Message from the Chairman of the Board   **Corporate Governance**   Independent Directors Dialogue

Takatoshi Yamamoto (69) ▲

Share ownership: 12,800 shares
Term of office as Independent Director: 6 years

1995 Managing Director, Morgan Stanley Japan Limited
1999 Managing Director and Vice Chairman, Tokyo Branch, Morgan Stanley Japan Limited
2005 Managing Director and Vice Chairman, UBS Securities Japan Co., Ltd.
2009 Managing Director, CASIO COMPUTER CO., LTD.
2011 Advisor, CASIO COMPUTER CO., LTD. (Retired in June 2012)
2016 Director, Hitachi, Ltd.

Hiroaki Yoshihara (65) ● ●

Share ownership: 3,000 shares
Term of office as Independent Director: 8 years

1978 Joined Peat Marwick Mitchell & Co.
1996 National Managing Partner, the Pacific Rim Practice, KPMG LLP
1997 The Board Member, KPMG LLP
2003 Vice Chairman and Global Managing Partner, KPMG International (Retired in April 2007)
2014 Director, Hitachi, Ltd.

Helmuth Ludwig (59) ●

Share ownership: 2,800 shares
Term of office as Independent Director: 1 year, 11 months

2001 President, Software and System House Division, Siemens AG
2002 President, Systems Engineering Division, Automation and Drives Group, Siemens AG
2007 President, Siemens PLM Software, Inc.
2010 Global Head of Communications, Industry Automation, Siemens Corp.
2011 President and CEO, Industry Sector, North America, Siemens Industry, Inc.
2014 Executive Vice President and Chief Digital Officer, Digital Factory Division, Product Lifecycle Management, Siemens Corp.
2016 Chief Information Officer, Siemens AG (Retired in December 2019)
2020 Professor of Practice in Strategy and Entrepreneurship, Cox School of Business, Southern Methodist University (currently in office)
Director, Hitachi, Ltd.

Directors

Keiji Kojima (65) ▲

Share ownership: 100,800 shares

1982 Joined Hitachi, Ltd.
2011 General Manager, Hitachi Research Laboratory
2012 Vice President and Executive Officer
2016 Senior Vice President and Executive Officer
2018 Representative Executive Officer, Executive Vice President
2021 Representative Executive Officer, President & COO and Director, Hitachi, Ltd.
2022 Representative Executive Officer, President & CEO and Director, Hitachi, Ltd.

Hideaki Seki (65) ●

Share ownership: 12,000 shares

1979 Joined Hitachi, Ltd.
2011 Board Director, Hitachi Automotive Systems, Ltd.
2013 Vice President, Board Director, Hitachi Automotive Systems, Ltd.
2014 Executive Vice President, Board Director, Hitachi Automotive Systems, Ltd.
2015 President & COO, Representative Director, Hitachi Automotive Systems, Ltd.
2016 President & CEO, Representative Director, Hitachi Automotive Systems, Ltd. (Retired in March 2018)
2018 Senior Vice President and Executive Officer, Hitachi, Ltd.
President, Representative Director, Hitachi Building Systems Co., Ltd. (Retired in March 2020)
2020 Director, Hitachi, Ltd.

Toshiaki Higashihara (67) ●

Share ownership: 198,800 shares

1977 Joined Hitachi, Ltd.
2007 Vice President and Executive Officer (Retired in March 2008)
2008 President, Hitachi Power Europe GmbH
2010 Representative Executive Officer, President and Chief Executive Officer, Hitachi Plant Technologies, Ltd. President and Representative Director, Hitachi Plant Technologies, Ltd.
2011 Vice President and Executive Officer, Hitachi, Ltd.
2013 Senior Vice President and Executive Officer, Hitachi, Ltd.
2014 Representative Executive Officer and President & COO, Hitachi, Ltd. Representative Executive Officer, President & COO and Director, Hitachi, Ltd.
2016 Representative Executive Officer, President & CEO and Director, Hitachi, Ltd.
2021 Representative Executive Officer, Executive Chairman, President & CEO and Director, Hitachi, Ltd. Representative Executive Officer, Executive Chairman & CEO and Director, Hitachi, Ltd.
2022 Executive Chairman, Representative Executive Officer and Director, Hitachi, Ltd.

Message from the Chairman of the Board   **Corporate Governance**   Independent Directors Dialogue

Executive Officers

President & CEO

Keiji Kojima*

Overall management, railway systems business, nuclear energy business, energy business, power grids business and innovation strategies

Executive Vice Presidents and Executive Officers

Masakazu Aoki*

Assistant to the President (industrial digital business, water & environment business, industrial products business, industrial equipment systems business, building systems business, smart life & ecofriendly systems business, measurement and analysis systems business, and healthcare business)

Yoshihiko Kawamura*

Assistant to the President (finance strategies, corporate pension system, investment strategies, investor relations strategies, cost structure reforms, risk management, corporate auditing and corporate export regulation)

Toshiaki Tokunaga*

Assistant to the President (business for financial institutions, business for government, public corporation and social infrastructure systems, defense systems business, services & platforms business, social innovation business promotion and digital strategies)

Senior Vice Presidents and Executive Officers

Jun Abe

Services & platforms business

Katsuya Nagano

Business for government, public corporation and social infrastructure systems, and defense systems business

Hidenobu Nakahata*

Human capital strategies, diversity & inclusion strategies, corporate communications strategies, and safety and health management

Masahiko Hasegawa*

Marketing & sales strategies, regional strategies

Executive Officer

Claudio Facchin

Power grids business

Mamoru Morita

Management strategies

Toshiaki Higashihara*

General

Vice Presidents and Executive Officers

Noriharu Amiya
Railway systems business

Hitoshi Ito
Government & external relations

Kenji Urase
Energy business

Tadashi Kume
Nuclear energy business

Takashi Saito
Marketing & sales strategies (connective industries)

Kenichi Tanaka
Human capital strategies

Lorena Dellagiovanna
Sustainability strategies, environmental strategies, diversity & inclusion strategies

Hideshi Nakatsu
Water & environment business

Andrew Barr
Railway systems business

Kentaro Masai
Supply chain management (manufacturing strategies and quality assurance), safety and health management

Masashi Murayama
Cost structure reforms and information security management

Takashi Yoda
Regional strategies (China)

Takashi Iizumi
Healthcare business, measurement and analysis systems business

Tatsuro Ueda
Business for financial institutions

Tomomi Kato
Finance strategies and corporate pension system

Kohei Kodama
Legal affairs, risk management and corporate auditing

Norihiro Suzuki
Research & development

Jun Taniguchi
Digital strategies, services & platforms business

Kojin Nakakita
Regional strategies (APAC)

Seiichiro Nukui
IT strategies

Tatsuro Hoshino
Marketing & sales strategies (digital systems & services)

Shinya Mitsudomi
Urban business strategies, building systems business

Kazunobu Morita
Business for industrial digital

Note: Executive officers are listed by position and in Japanese alphabetical order within each grouping.
The asterisk (*) denotes executive officers who are representative executive officers.

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10-year Financial Data | 5-year Non-financial Data | Segment Highlights | Corporate Data and Stock Information

10-year Financial Data

➤ **Annual Securities Report**   https://www.hitachi.com/IR-e/library/stock/hit_sr_fy2021_4_en.pdf

Millions of yen

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	**FY2021**
For the year:	U.S. GAAP (through FY2013)		IFRS (from FY2014)							
Revenues	9,041,071	9,563,791	9,774,930	10,034,305	9,162,264	9,368,614	9,480,619	8,767,263	8,729,196	**10,264,602**
Adjusted operating income	422,028	538,288	641,325	634,869	587,309	714,630	754,976	661,883	495,180	**738,236**
Adjusted EBITA	—	—	—	—	—	—	—	—	609,107	**855,380**
EBIT	358,015	585,662	534,059	531,003	475,182	644,257	513,906	183,614	850,287	**850,951**
EBITDA	—	—	—	—	—	—	885,318	619,001	1,343,067	**1,392,840**
Net income attributable to Hitachi, Ltd. stockholders	175,326	264,975	217,482	172,155	231,261	362,988	222,546	87,596	501,613	**583,470**
Earnings per share attributable to Hitachi, Ltd. stockholders, basic (yen)	37.28	54.86	45.04	35.65	47.90	375.93	230.47	90.71	519.29	**603.75**
Earnings per share attributable to Hitachi, Ltd. stockholders, diluted (yen)	36.29	54.85	45.00	35.62	47.88	375.60	230.25	90.60	518.51	**602.96**
Net cash provided by operating activities	583,508	439,406	451,825	812,226	629,582	727,168	610,025	560,920	793,128	**729,943**
Net cash used in investing activities	(553,457)	(491,363)	(612,545)	(730,799)	(337,955)	(474,328)	(162,872)	(525,826)	(458,840)	**(1,048,866)**
Free cash flows	30,051	(51,957)	(160,720)	81,427	291,627	252,840	447,153	35,094	334,288	**(318,923)**
Core free cash flows	45,702	(186,042)	(176,448)	113,371	100,215	283,593	136,079	135,441	419,848	**290,082**
Net cash provided by (used in) financing activities	(180,445)	32,968	233,206	(26,467)	(209,536)	(321,454)	(320,426)	2,837	(184,838)	**202,739**
Capital expenditures (Property, plant and equipment)	742,537	849,877	431,201	528,551	377,545	374,901	414,798	399,643	359,897	**388,747**
Depreciation (Property, plant and equipment)	300,664	329,833	350,783	366,547	302,757	265,413	271,682	342,450	345,201	**382,922**
R&D expenditures	341,310	351,426	334,814	333,730	323,963	332,920	323,145	293,799	293,571	**317,383**
Total assets	9,809,230	11,016,899	12,433,727	12,551,005	9,663,917	10,106,603	9,626,592	9,930,081	11,852,853	**13,887,502**
Property, plant and equipment	2,279,964	2,342,091	2,472,497	2,500,226	1,998,411	2,124,827	1,956,685	2,165,311	2,408,887	**2,478,901**
Total Hitachi, Ltd. stockholders' equity	2,082,560	2,651,241	2,942,281	2,735,078	2,967,085	3,278,024	3,262,603	3,159,986	3,525,502	**4,341,836**
Interest-bearing debt	2,370,079	2,823,049	3,557,356	3,604,455	1,176,603	1,050,294	1,004,771	1,485,042	2,397,356	**3,126,712**

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	**FY2021**
										%
Adjusted operating income ratio	4.7	5.6	6.6	6.3	6.4	7.6	8.0	7.5	5.7	**7.2**
ROIC	—	—	—	—	—	—	8.5	9.4	6.4	**7.7**
Return on equity (ROE)	9.1	11.2	7.8	6.1	8.1	11.6	6.8	2.7	15.0	**14.8**
Return on assets (ROA)	2.5	3.5	2.9	2.4	3.0	5.0	3.3	1.3	4.8	**5.2**
D/E ratio (Including non-controlling interests) (times)	0.75	0.73	0.83	0.87	0.29	0.23	0.23	0.35	0.54	**0.58**
Total Hitachi, Ltd. stockholders' equity ratio	21.2	24.1	23.7	21.8	30.7	32.4	33.9	31.8	29.7	**31.3**
Dividend per share (yen) — Before share consolidation	10.0	10.5	12.0	12.0	13.0	15.0				
Dividend per share (yen) — After share consolidation							75.0	90.0	95.0	105.0	**125.0**
Dividend payout ratio	26.8	19.1	26.6	33.7	27.1	20.0	39.1	104.8	20.2	**20.7**

Note 1: Terminology differs under U.S. GAAP and IFRS for the following line items (U.S. GAAP/IFRS)
 • Sales/Revenues
 • Operating income/Adjusted operating income
 • Net income attributable to shareholders/Net income attributable to Hitachi, Ltd. stockholders
 • Net income per share attributable to Hitachi, Ltd. stockholders, basic/Earnings per share attributable to Hitachi, Ltd. stockholders, basic
 • Net income per share attributable to Hitachi, Ltd. stockholders, diluted/Earnings per share attributable to Hitachi, Ltd. stockholders, diluted
 • Stockholders' equity/ Total Hitachi, Ltd. stockholders' equity

Note 2: To represent actual management conditions more appropriately, adjusted operating income is presented as revenues less selling, general and administrative expenses, as well as cost of sales.
 3: Adjusted EBITA = Adjusted operating income + Acquisition–related amortization + Share of profits (losses) of investments accounted for using the equity method.
 4: "Core free cash flows" are cash flows presented as free cash flows excluding cash flows from M&A and asset sales, etc.
 5: On October 1, 2018, the company completed the share consolidation of every five shares into one share for its common stock. The figures for basic and diluted earnings per share attributable to Hitachi, Ltd. stockholders are calculated on the assumption that the company conducted this consolidation at the beginning of the previous fiscal year.
 6: ROA (Return on assets) = Net income / Total Assets (Average between the end of current fiscal year and the end of previous fiscal year) × 100

5-year Non-financial Data

➤ **Hitachi Sustainability Report**   https://www.hitachi.com/sustainability/download/pdf/en_sustainability2022.pdf

Human Capital		FY2017	FY2018	FY2019	FY2020	FY2021
Number of employees	Hitachi Group	307,275	295,941	301,056	350,864	368,247
	Hitachi, Ltd.	34,925	33,490	31,442	29,850	29,485
Average service (years)[1]	Hitachi Group	14.9	15.1	15.0	13.6	13.5
Turnover ratio (%)[1][2][3]	Hitachi Group	5.5	6.3	5.2	4.3	7.5

Percentage of Positive Responses to Employee Engagement Questions[4] (Hitachi Group)

		FY2017	FY2018	FY2019	FY2020	FY2021
Global average (%)		58	60	60	62	65
By region (%)	Japan	—	—	—	—	56
	Overseas	—	—	—	—	80

Digital Talent[5] (Hitachi Group)

		FY2017	FY2018	FY2019	FY2020	FY2021
Global (persons)		—	—	approx. 30,000	approx. 35,000	approx. 67,000
By region	Japan	—	—	approx. 19,000	approx. 23,000	approx. 29,000
	Overseas	—	—	approx. 11,000	approx. 12,000	approx. 38,000

Diversity, Equity and Inclusion[2]

		FY2017	FY2018	FY2019	FY2020	FY2021
Ratio of female employees (%)[1]	Hitachi Group	18.2	18.8	19.4	19.1	20.2
Ratio of female managers (%/persons)[1][6]	Hitachi Group	7.3 (3,325)	8.3 (3,975)	8.9 (4,302)	9.5 (4,641)	9.8 (4,762)
Ratio of female managers (%/persons)[6]	Hitachi, Ltd.	4.2 (577)	4.8 (635)	5.5 (700)	6.5 (768)	6.8 (785)

Ratios of Female and Non-Japanese Executives (Hitachi, Ltd.)

	June 2018	June 2019	July 2020	June 2021	June 2022
Number of female executives	2	4	5	7	9
Ratio of female executives (%)	2.6	5.0	7.1	10.1	12.2
Number of non-Japanese executives	5	7	6	8	13
Ratio of non-Japanese executives (%)	6.4	8.8	8.6	11.6	17.6

Note: Executive Officers and Corporate Officers

[Scope of Data]

[1] Approximately 50,000 manufacturing workers not registered in the employee database and approximately 35,000 employees of some newly consolidated companies are not included.

[2] The figures are based on enrolled employees with employment contract including those seconded from Hitachi Group to other companies and those taking leave, and excluding those seconded from other companies to Hitachi Group (as of March 31).

[3] Figures include only voluntary resignations.

[4] In fiscal 2021, the structure of questions measuring employee engagement was revised. In fiscal 2021, employee engagement will be based on four points: sense of pride in working at Hitachi; whether employees can recommend Hitachi as a wonderful place to work; job satisfaction and sense of accomplishment; and motivation to continue working at Hitachi for the foreseeable future, calculated from the average positive response rate.

[5] Disclosed starting in fiscal 2019. Human capital with any of the 12 capabilities necessary for digital business, such as data science and security, are defined as digital talent. The digital talent figure is the human capital total within each capability (total number of persons).

[6] Rising numbers of female managers in part reflect improved coverage of our human capital databases.

Safety Figures (Occurrence rate)[7][8] (Hitachi Group)	2017	2018	2019	2020	2021
North America	24.33	27.96	20.76	18.98	18.46
Latin America	1.62	0.44	0.57	2.12	1.69
Europe	10.82	6.08	4.78	3.09	3.71
India	1.44	1.44	1.63	1.07	0.53
China	1.53	1.46	1.17	1.12	1.06
Asia (excluding India, China and Japan)	4.41	3.34	2.63	1.55	1.30
Oceania	24.41	21.94	29.07	12.95	5.32
Africa	9.93	11.76	9.72	25.37	1.43
Outside Japan total	7.42	7.43	5.78	4.90	3.80
Japan	1.85	1.64	1.53	1.34	1.20
Global total	4.22	4.20	3.45	2.89	2.69

Occupational Health and Safety (Hitachi Group[9], includes contractors)

	2017	2018	2019	2020	2021
Number of fatal accidents[8]	4	0	5	3	2

[Scope of Data]

[7] Occurrence rate is the rate of workplace accidents per 1,000 directly contracted employees resulting in fatality or worktime loss of one day or more

[8] January to December each year

[9] Includes contractors

Sustainable Procurement Activities (Hitachi Group)	FY2017	FY2018	FY2019	FY2020	FY2021
Sustainability monitoring (companies)	131	345	291	271	[Human rights] 2,524[10] [Environment] 708[10]
Sustainability audits (companies)	18	24	19	27	25
Sustainability procurement seminars (companies)	65	126	59	450	359

[10] Sustainability monitoring in fiscal 2021 was focused on human rights and environmental risk assessment.

Environment

	FY2017	FY2018	FY2019	FY2020	FY2021
Reduction rate in CO_2 emissions per unit from products and services (base: FY2010)[11] (%)	—	—	19	20	28
CO_2 emissions at business sites (factories and offices) (kt-CO_2)	5,433	4,973	4,374	3,296	3,384
Total water use (million m^3)	38.54	37.02	36.41	26.35	25.61
Waste and valuables generation (kt)	1,356	1,384	1,302	1,061	1,111
Atmospheric emissions of chemical substances (t)	4,472	4,389	3,882	2,373	2,499

[11] New indicator established in fiscal 2019

[Scope of Data]

Hitachi, Ltd. and consolidated subsidiaries.

Number of companies: FY2017: 880; FY2018: 804; FY2019: 815; FY2020: 872; FY2021: 854

Data on the environmental load from operations applies to business sites with a large environmental load that are classified as category A.*

*All Group business sites are classified into one of three categories: A, B, or C, based on the Criteria for Classification of Environmental Management established by Hitachi, and the most suitable management is then conducted for each in accordance with the respective level of environmental risk. (see page 2 of Hitachi Sustainability Report 2022)

Segment Highlights

Hitachi Group Business Operation Framework (As of April 2022)

To further advance the Social Innovation Business and achieve growth centered on the themes of digital, green and innovation, on April 1, 2022, Hitachi revised its business operation framework into three segments comprising Digital Systems & Services, Green Energy & Mobility and Connective Industries, as well as Hitachi Astemo.

Digital Systems & Services
- Financial Institutions Business Unit
- Social Infrastructure Systems Business Unit
- Services & Platforms Business Unit
- Hitachi Systems
- Hitachi Solutions

Green Energy & Mobility
- Nuclear Energy Business Unit
- Energy Business Unit
- Power Grids Business Unit
- Railway Systems Business Unit

Connective Industries
- Industrial Digital Business Unit
- Water & Environment Business Unit
- Building Systems Business Unit
- Hitachi Industrial Products, Ltd.
- Hitachi Industrial Equipment Systems Co., Ltd.
- Hitachi Global Life Solutions, Inc.
- Hitachi High-Tech Corporation

Automotive Systems Business
- Hitachi Astemo

- Hitachi Construction Machinery Co., Ltd.
- Hitachi Metals, Ltd.

Segment   Business Unit   Main Group Companies   Listed Company

Revenues, Adjusted EBITA and EBITDA by Business Segment

Billions of yen

Business Segment	Revenues		Adjusted EBITA		EBITDA	
	FY2021	FY2022	FY2021	FY2022	FY2021	FY2022
Digital Systems & Services	2,153.6	**2,290.0**	281.4	**300.0**	358.6	**354.0**
Green Energy & Mobility	2,051.0	**2,300.0**	92.3	**159.0**	183.2	**193.0**
Connective Industries	2,752.8	**2,770.0**	257.8	**296.0**	358.9	**350.0**
Automotive Systems Business	1,597.7	**1,800.0**	62.3	**92.0**	154.8	**172.0**
Hitachi Construction Machinery Co., Ltd.	1,024.9	**430.0**	100.1	**36.0**	168.7	**67.0**
Hitachi Metals	942.7	**570.0**	30.7	**27.0**	80.7	**46.0**
Others	456.3	**460.0**	23.6	17.0	65.4	**47.0**
Corporate items & Eliminations	(714.6)	**(770.0)**	7.0	**(82.0)**	22.1	**215.0**
Total	1,0264.6	**9,850.0**	855.3	**845.0**	1,392.8	**1,444.0**

*Fiscal 2022 outlook is as of July 29, 2022.

Please refer to the following URLs for details on performance by division and performance by former division.
https://www.hitachi.com/New/cnews/month/2022/04/220428/2021_Ansup.pdf
https://www.hitachi.com/New/cnews/month/2022/07/220729/2022_1Qsup.pdf

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10-year Financial Data　　5-year Non-financial Data　　Segment Highlights　　**Corporate Data and Stock Information**

Corporate Data and Stock Information (As of March 31, 2022)

■ Corporate Name
Hitachi, Ltd.
(Kabushiki Kaisha Hitachi Seisakusho)

■ URL
https://www.hitachi.com/

■ Head Office
6-6, Marunouchi 1-chome, Chiyoda-ku,
Tokyo 100-8280, Japan

■ Founded
1910 (Incorporated in 1920)

■ Capital Stock
461,731 million yen

■ Number of Employees
　(consolidated)
368,247

■ Number of Shares Issued
　(common stock, including treasury stock)
968,234,877

■ Number of Shareholders
238,967

■ Administrator of
　Shareholders' Register
Tokyo Securities Transfer Agent Co., Ltd.
3-11, Kanda Nishiki-cho, Chiyoda-ku,
Tokyo 101-0054, Japan

■ Stock Exchange Listings
Tokyo, Nagoya

■ Accounting Auditor
Ernst & Young ShinNihon LLC

■ Contact
Hitachi, Ltd.
TEL: +81-3-3258-1111

■ 10 Largest Shareholders

Name	Share ownership (shares)	Shareholding ratio (%)[2]
The Master Trust Bank of Japan, Ltd. (Trust Account)	181,747,800	18.79
Custody Bank of Japan, Ltd. (Trust Account)	63,047,700	6.52
State Street Bank and Trust Company 505223	22,788,025	2.36
Nippon Life Insurance Company	20,000,099	2.07
Hitachi Employees' Shareholding Association	19,551,338	2.02
SSBTC CLIENT OMNIBUS ACCOUNT	18,282,639	1.89
JP Morgan Chase Bank 385632	17,799,073	1.84
State Street Bank West Client - Treaty 505234	16,509,187	1.71
NATS CUMCO[1]	15,671,900	1.62
State Street Bank and Trust Company 505001	14,656,120	1.52

[1] NATS CUMCO is the nominee name of the depositary bank, Citibank, N.A., for the aggregate of the company's American Depositary Receipts (ADRs) holders.
[2] Treasury stock (998,721 shares) is not included in the shareholding ratio calculation.

■ Ratings

Rating Company	Long-term	Short-term
S&P Global Ratings Japan Inc.	A	A–1
Moody's Japan K.K. (Moody's)	A3	P–2
Rating and Investment Information, Inc. (R&I)	AA-	a-1+

■ Independent Assurance of Environmental, Social and Governance Data

To ensure the reliability of the data disclosed we have received independent assurance of key environmental, social and governance performance indicators by KPMG AZSA Sustainability Co., Ltd. in the Hitachi Sustainability Report 2022.
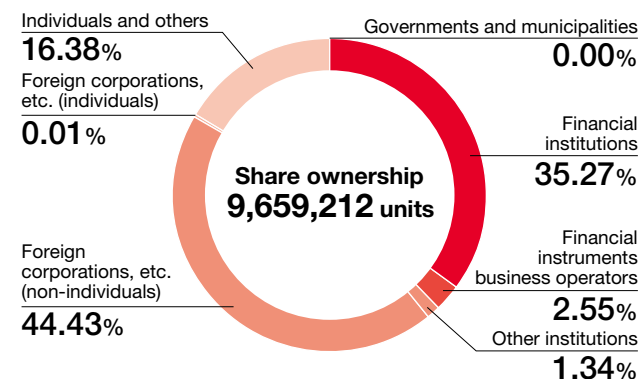
Indicators Subject to Independent Assurance

Hitachi Group	Ratio and number of female managers, number of sustainability audits, and CO_2 emissions at business sites.
Hitachi, Ltd.	Ratio of non-Japanese executives, female executives, and ratio and number of female managers.

■ Shareholder Composition

Class of shareholders		Number of shareholders	Share ownership (units)
● Governments and municipalities		2	92
● Financial institutions		205	3,407,137
● Financial instruments business operators		76	246,473
● Other institutions		2,426	129,714
Foreign corporations, etc.	● Non-individuals	1,112	4,291,973
	● Individuals	157	1,413
● Individuals and others		234,989	1,582,410
Total		238,967	9,659,212
Number of shares less than one unit (shares)		—	2,313,677

*Of 998,721 shares of treasury stock, 9,987 units are included in the "Individuals and others" column, while 21 shares are included in the "Number of shares less than one unit" column.

Individuals and others
16.38%
Foreign corporations, etc. (individuals)
0.01%
Foreign corporations, etc. (non-individuals)
44.43%

Governments and municipalities
0.00%
Financial institutions
35.27%
Financial instruments business operators
2.55%
Other institutions
1.34%

**Share ownership
9,659,212 units**

Integrated Reports Inquiries
Investor Relations Division
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