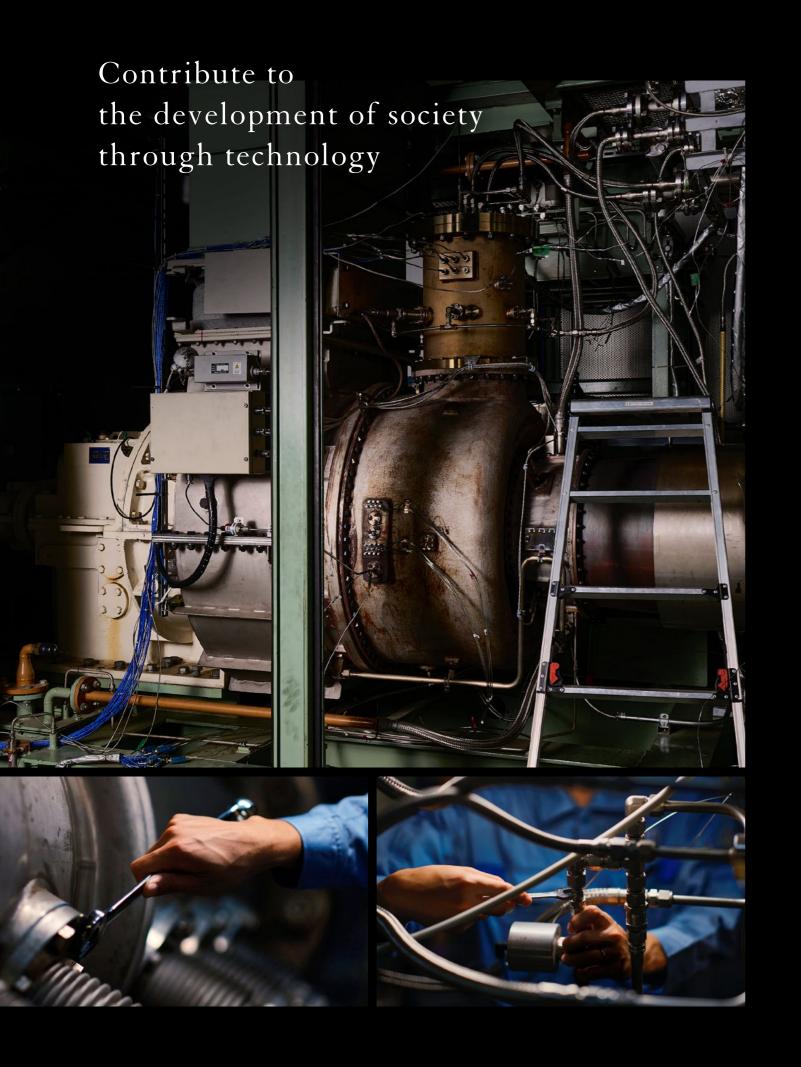
**IHI Integrated Report 2024** 













The IHI Group celebrated its 170th anniversary on December 5, 2023.

We owe this to the understanding and support we have received from our shareholders, customers, business partners, local communities, employees, and all other stakeholders. We would like to express our heartfelt gratitude.

# The IHI Group will go through transformation into a company that creates value chains,

looking beyond "Group Management Policies 2023".

#### The IHI Group creates Value Chains

In the Management Overview of the fiscal year ended March 31, 2024, we published the message "The IHI Group creates Value Chains" as our direction beyond the medium-term management plan "Group Management Policies 2023". By integrating, uniting, and enhancing diverse technologies as the sources of our value, the IHI Group forges new value for our customers moving beyond traditional products and services. We announced the message with the intention to bring together our employees' minds and aims by the end of the period for the "Group Management Policies 2023". I believe that my role is to not only accomplish what the "Group Management Policies 2023" set out, but also to show and connect the paths to be taken for the next medium-term management policies. The IHI Group will transform into a company that creates value chains in order to "Create a world where nature and technology work in unity",

which is its sustainability goal. The management team members have various opinions about the idea of value chain creation. In my opinion, because there are diverse opinions, it is important for top management to choose a direction. It is vital that top management bring its members' perspectives into alignment while discussing with various people.

# Creating value chains to fashion new business models

An example of value chain creation is the fuel ammonia value chain business. The key to creating a fuel ammonia value chain is to generate a need. The IHI Group is the world's pioneer developer of a combustion technology that uses ammonia as a fuel. By establishing this technology, we have created the value of ammonia as a carbon-free fuel. This newly created value of ammonia meets the needs of

direct users of the fuel. The IHI Group will develop value chains using its technologies to satisfy this type of demand. To fulfil needs that will continue to grow, we ought to keep improving our technological capabilities and expand the scale of our businesses. The IHI Group plans to "integrate", "unite", and "enhance" these technologies in pursuit of these ends, thereby taking part in the building of value chains as a partner.

The IHI Group is capable of contributing to building value chains as a partner not only because it has robust technologies, engineering skills, and expertise, but also because it is capable of identifying business risks related closely to technology and sharing them with its partners. In the case of the fuel ammonia value chain, I believe that we can draw on the IHI Group's technologies from upstream to downstream to make the chain stronger. We will keep ourselves informed about technical issues by our partner businesses and receive feedback from them on the value the IHI Group offers while working on tasks in each process. This information and feedback will be management resources for technological development and business model creation.

Looking back, LNG was first imported into Japan 55 years ago. Today, LNG is distributed around the world as a core energy source. If we had imagined what the whole LNG value chain would look like in 55 years, we could have been among the first players in chains other than the LNG tank chain. Being in such a position would have brought us multiple business opportunities, including participation in discussions about various new LNG-related specifications that were to be created. Joining the fuel ammonia value chain as a pioneering player will be a once-in-a-lifetime opportunity to put us at an advantage in terms of management strategies. Our businesses to date have revolved

around manufacturing, and our processes have ended when our products were sold. It is time to redefine our idea of business for the future. We will take a broad view of each value chain to identify the processes we should create or join, thereby creating more opportunities to offer value. More opportunities to offer value within a value chain means more opportunities to make a profit. If we also increase the value by creating synergy between the processes we join, our earning capacity may grow to an unprecedented level.

#### Value chains that "integrate", "unite", and "enhance" technologies

We cannot expect to regularly find opportunities to participate in the building of a value chain from the start. By "creating value chains", I mean one more thing, which is to create businesses of substantial scale that are built on technological value. The IHI Group's sources of value are the technologies that it has developed during the 170 years of the Group's history. Some of these technologies were mundane, and others were cutting-edge. By combining these diverse technologies, we generate new value and can be stronger than ever. For example, parts for jet engines use the IHI Group's technologies for simulation, materials, processing, and production, among others. Combining these technologies with other technologies in the same or different fields offers the potential for creating new value. When we create a business built upon the value of our technologies, we should focus on the strength of the IHI Group's core technologies and on the degree of the impact that the value generated by these technologies has on society, and study them in the context of our vision and the scenario of how to make it a reality.

# IHI Group will develop value chains using its technologies

#### **Our Approach to Portfolio Management** and Business Model

We plan to complete the discussion on our business portfolio review during the period for the "Group Management Policies 2023". Since we believe that the discussion must be complete before we move on to the next medium-term management plan, we have set the deadline for the portfolio review, which is also to speed up our investment in the Development-focus and Growth Businesses. When we discuss any of our Conventional Businesses, we focus on not only return on investment capital (ROIC), but also whether the business is essential for the IHI Group's value creation. The discussion has just begun, and we plan to examine each of the



businesses in the business portfolio review process, considering who is the best owner as well as competitive advantages, timelines, and return on investment, among other aspects.

Currently, each of the IHI Group's businesses uses its own business model. In the past, revenue from our Aero Engine, Space & Defense business made up for considerable drops in profits from our plant, social infrastructure, and offshore facilities businesses. When our aero engine business experienced a significant downturn during the COVID-19 pandemic, the other three business areas supported it. This was most likely a testament to the capabilities they had developed to do what they should be able to do as IHI Group's businesses, including risk management, in addition to the earning power each of the four business areas already had.

#### Future visions of the Conventional, Growth, and Development-focus Businesses, and timelines

The Conventional Businesses are to develop businesses centered on lifecycles, to work out businesses that will likely be the next Growth Business, and raise funds for investments. In FY2023, the lifecycle businesses (LCB) we are focusing on enjoyed a 52-percent increase in revenue compared to FY2019. With the high profit margins they have, LCB serve as our foundation of cash creation. We believe that these businesses have great potential for growth depending on how we develop them, and thus we will continue to work on their expansion. In the Growth Businesses, it is essential for us to make investments for future growth while continuing to achieve greater profits. The Development-focus Business works on high-risk and high-return businesses, leveraging the value created by our core technologies. In this process, the Conventional Businesses provide the resources needed. The fuel ammonia value chain business, which is part of the Development-focus Business, may remain in the investment phase for a while and begin to generate revenue in 2035 or thereafter. If we need capital for further growth and development as we move forward with these businesses, we should raise it by various means, including M&A.

IHI Integrated Report 2024 Management Message

#### Changing the ways we earn cash

We will need to generate operating cash flows (CF) as our highest-priority task. Our employees in sales or on the ground are more focused on revenue and profitability than ever. They should also approach their work from the perspective of how to earn cash. Old business practices from the past still linger in the Group, and we also face issues in how we receive cash and manage inventory. Even the aero engine business, our top earner, falls short of the mark when it comes to cash flow analysis and actions based on it. How we manage inventory and receive payments for our products and services in particular could use improvement. Long-term projects, which are typical in the bridges and energy businesses, require the challenge and creativity for fundamental changes to generate cash.

I believe that earning cash is the first step toward our transformation. I define it as one of the tasks that must be accomplished by the end of the period for the "Group Management Policies 2023".



#### DE&I as Part of the IHI Group's Culture

#### Initiatives for DE&I as the springboard for a new mindset for our employees

In FY2023, we clearly defined innovative human resources for the transformation of the IHI Group into a value chain creator, and communicated the definition to our employees as a model for their behavior to achieve their full potential. We believe that our corporate culture will become more conducive to transformation when each employee is motivated to become an innovative human resource and change the way they act accordingly. We also plan to hire more people with careers developed outside the Group. Diversity, equity, and inclusion (DE&I) is essential, as it allows employees with diverse experiences to exchange knowledge and pursue their careers in a fair way without becoming a homogenous group.

I have listed DE&I as one of the three priority measures for FY2024. The reason for the inclusion of DE&I among the priority measures is that I consider DE&I to be the key to our transformation. We have set 2024 as the year to broadly launch DE&I efforts in the IHI Group. With these words, I hope to convey the idea that we do not need to understand what DE&I is in the beginning because we can learn it as we go along. I do feel that many employees are still insensitive to the

importance of DE&I and have only a limited understanding of what it is about. Since we intend to move ahead with our activities for DE&I at a faster pace from FY2025 and onward, we will focus on enhancing employees' understanding of it during FY2024. Just telling them what DE&I is may not be enough to increase their understanding, and so we also provide hands-on experiences to employees as part of our efforts.

We believe that engaging in DE&I initiatives is acting to respect human rights. While there have been many incidents related to human rights around the world, it may be rare that people in Japan perceive human rights issues as something that concerns them. No one in the IHI Group doubts the importance of diversity, yet I think we should gain a deeper understanding of how critical it is to ensure human rights are protected. In my opinion, employees will be more likely to perceive human rights issues as their own concerns when they are encouraged to learn about DE&I and then to engage in lively discussions, rather than go straight into discussions about human rights issues and how to ensure these rights are respected. I believe taking this step will lead each employee in the IHI Group to consider the issues to be their own concerns, raising their awareness of human rights faster than ever.

# Making the right business and investment decisions, taking account of capital costs

# **Business Management in Alignment with Capital Markets**

I personally hope that the IHI Group's market capitalization will rise to 1.5 trillion yen sometime in the future. I believe that the current capitalization is at a conglomerate discount of hundreds of billions of yen. To fill the gap, we should provide detailed illustrations of our businesses to the markets. Through dialogue and engagement with our shareholders and investors, I believe that there are three key factors in high valuation of IHI stocks in the medium- to long-term.

The first factor is "no negative surprises". When I became the president in 2020, the IHI Group's biggest commitment was to prevent negative surprises. Today, our large projects no longer cause surprises, whereas a surprise of a different nature did arise, which was the PW1100G-JM powder metallurgy issue in FY2023. As investors tell us that they will not invest in a business that causes a negative surprise, it is essential for us to prevent an incident of that nature. I am keenly aware that, in capital markets, we must become a company in which shareholders and investors always feel safe investing. I will not farm out this whole task to our employees. I will be taking the lead in the efforts to prevent any negative surprises in all areas, including compliance and safety.

The second one is a clear business portfolio. Except for the Aero Engine, Space & Defense Business, we have many businesses for which we have not made it clear why we need them. I feel the need to clarify our business portfolio, including why we have these businesses and why we should continue to run them. This task is related to the business portfolio review. We plan to identify where we should make growth investments and then discuss whether continuing the business will lead the IHI Group to create value going forward. The Aero Engine, Space & Defense Business will not be excluded from this process. We are exploring the idea of earning investors' understanding by re-categorizing all our businesses according to the concepts of the Conventional, Developmentfocus, and Growth Businesses to make the right business and investment decisions, taking account of capital costs.

The third factor is the excitement the IHI Group generates among investors. This is the responsibility I have in my role. A European investor I talked with told me, "You should tell a story of your future growth", which opened my eyes to something I had not considered. Investors may understand what the Development-focus and Growth Businesses do, yet they need clarification of what the IHI Group is built upon, what it is growing, and what can be expected from the Group. Given that the IHI Group's businesses have long timelines, we are expected to provide a carefully crafted growth story. Our Independent Directors have the same opinion. We plan to proceed with discussing our growth story with our shareholders and investors to improve their understanding.

This is my fifth year as Representative Director and President. To establish a new IHI Group, it is essential to create an organizational culture where people can think freely and speak up. Actions toward transformation have become increasingly common across the company, yet we could use greater speed. I will remain committed to raising our corporate value, with employees of the IHI Group working together toward the same goal to solve social issues. Continued support and encouragement from our shareholders and investors would be greatly appreciated.

IHI Integrated Report 2024

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# **IHI Integrated Report 2024**

#### **VISION STORY BUSINESS STORY** Contents 059 **Conventional Businesses** Management Message 061 **Growth Businesses** Management Philosophy/ 065 **Development-focus Businesses IHI Sustainability Goal** Medium- and Long-Term Product Chronology **Business Portfolio Stance** 017 Transformation History of **Business Portfolio SUSTAINABILITY STORY Product Overview** Response to Main Opinions Sustainability Management from Shareholders and Investors 073 Climate Change and Natural Capital 077 **Human Talent Strategy VALUE CREATION STORY** 079 DE & I Roundtable 084 **Human Rights Business Model Supply Chain Management** 023 Value Creation Process Diagram Stakeholder Engagement 025 Value-Creation Scenario to Achieve Vision Corporate Governance 027 Six Types of Management Capital **IHI Independent Directors IHI Group Material Issues** Roundtable Carbon Neutrality Tripartite Talk 031 **Innovation Management Tripartite Talk DATA** 042 Message from the Managing **Executive Officer (Human Resources)** Financial Summary Message from the Executive Officer 107 Sustainability Summary (Finance & Accounting)

Progress of the

**Business Overview** 

**Group Management Policies 2023** 

Financial/Sustainability Highlights

#### Concept of the IHI Integrated Report 2024

We have prepared this report with the aim of communicating the IHI Group's future aspirations for 2030 and 10 years from now for the better understanding of our stakeholders. The IHI Group's sustainability goal is to "Create a world where nature and technology work in unity", and the Group is moving toward a transformation into a company that creates value chains. We hope you can read from the Integrated Report that the Group's corporate management is aimed at sustainability transformation (SX) and enhancing corporate value, with a mindset that integrates financial and non-financial information.

#### **Key Points**

#### Management Message → p.005

In the Management Message, the Chief Executive Officer himself explains the determination to transform into a company that creates value chains. He also explains the approach to portfolio management, which is essential for the future growth of the Group, and the permeation of DE&I through the Group.

#### Carbon Neutrality and Innovation Management of the IHI Group Discussed by the Management

Carbon Neutrality Tripartite Talk → p.031 Innovation Management Tripartite Talk → p.037

The Chief Executive Officer and the Senior Executive Officers held a roundtable discussion to demonstrate the transformation into a profit-making company while contributing to the realization of carbon neutrality in society. In addition, a roundtable discussion was held among the three Executive Officers in charge to demonstrate the innovation management system that generates sustained, discontinuous growth.

#### Strategies of the Growth Businesses and the Development-focus Businesses Discussed by the Officers in Charge

Growth Businesses → p.061 Development-focus Businesses → p.065

Detailed explanations of the Growth Businesses and the Development-focus Businesses, which are the key to long-term value enhancement, are provided in the form of interviews with officers in charge of these businesses.

#### The IHI Group's DE & I Frontline and Challenges and Expectations of the IHI Group from the Eyes of the Independent Directors of the IHI Group

DE&I Roundtable → p.079 IHI Independent Directors Roundtable → p.099

The DE&I Roundtable introduces the business division's current initiatives intended to create returns while paying attention to fairness, and the Independent Directors Roundtable summarizes the key points of monitoring the Company's transformation into a value chain-creating company and its future growth.

The Vision Story demonstrates the entire value-creation scenario of the IHI Group, and is the backbone of this entire report. In particular, CEO Ide explains in his own words, focusing on what a value chain-creating company means, a policy that goes beyond the "Group Management Policies 2023". In addition, the history and products of the IHI Group are introduced clearly and concisely.

The overall image of the IHI Group's value-creation scenario is summarized in this chapter. The Value Creation Story describes how the value creation process will create outcomes for society and the IHI Group, and contribute to sustainable growth in order to "create a world where nature and technology work in unity", which is what the IHI Group aims for.

The value creation process shown in the Value Creation Story is explained from a business perspective, with specifics on what strategies and initiatives are currently being undertaken

The value creation process indicated in the Value Creation Story is explained from the standpoint of the ESG management of the IHI Group. This chapter presents the current state of the IHI Group's four material issues: climate change; diversity, equity, and inclusion; human rights; and securing and maintaining stakeholder trust, as well as the IHI Group's strategy for moving toward its desired state.

and how they will lead to the future.

This data chapter lists and summarizes past performance for investors and other stakeholders to evaluate the IHI Group. We hope you will find the information useful in your analysis and dialogue.

VISION STORY

VALUE CREATION STORY

BUSINESS STORY

SUSTAINABILITY STORY

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Corporate Data/Share Information

Corporate Officers

Global Network

#### **Editorial Policy**

"Please create a report that excites you!" This was a piece of advice we received from an investor last fiscal year. Until then, we had been concentrating on improving each piece of content based on the Integrated Reporting Framework, Guidance for Collaborative Value Creation, and feedback from investors and other stakeholders, but these words made us all think. We realized that what excites us is what excites our stakeholders as well.

We at the head office divisions are in a position to closely feel and see the overall picture of the IHI Group's attempt to grow at an unprecedented scale and speed. In this fiscal year's report, we tried to create a sense of expectation and excitement about the IHI Group's future and the value-creation scenario that will lead to it.

President Ide stated that the policy for the IHI Group's overall priority measures for this fiscal year is to "overturn the conventional ways". We, the editorial team, have also reviewed the contents from scratch to improve the disclosure content. We will use this report as a tool to improve the quality of dialogue with our stakeholders and enhance effectiveness. We will ensure that the opinions and information we receive from the stakeholders are conveyed to the management team to continue to improve the management of the company.

Our company, which has celebrated its 170th anniversary, has grown together with many of our stakeholders to date. We will pass on to the next generation what our predecessors have handed down to us. We would like to ask our stakeholders for their candid opinions and guidance for our Group, more than ever before.

Editorial Team of the IHI Integrated Report

#### Scope

IHI Corporation and its major Group companies

#### Reporting Period

This report covers fiscal 2023, which began on April 1, 2023 and ended on March 31, 2024. However, information prior to and after this period may also be included.

#### Inquiries

Please contact us via the inquiry form on the IHI website. https://www.ihi.co.jp/en/contact/form/form\_ihi\_20701.html

#### Guide to Disclosure

In response to the requests of stakeholders, the IHI Group discloses information through several mediums.

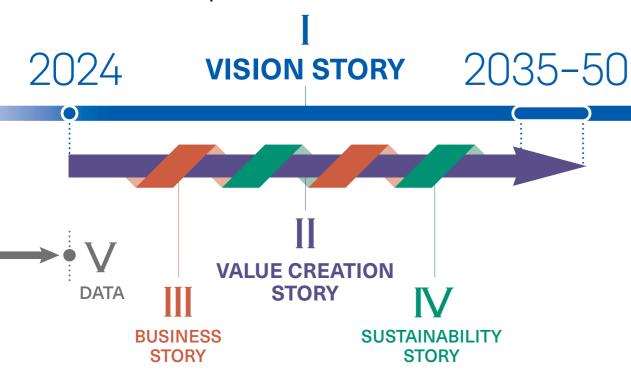
	Non-financial	Financial				
Annual Report	• Integrate	Integrated Report				
	• [Sustainability Data Book] • [Corporate Governance Report]	• [Annual Securities Report]				
Latest Information	Website [Sustainability] https://www.ihi.co.jp/ en/sustainable/	Website [Investor Relations (IR)] https://www.ihi.co.jp/ en/ir/				

## Questionnaire for the IHI Integrated Report (Microsoft Forms)

https://forms.office.com/r/VrR12ExVa2



#### Framework for Each Chapter



**Management Philosophy** 

Contribute to the development of society through technology

Human resources are our single most valuable asset

**Our Sustainability Goal** 

Create a world where nature and technology work in unity

013

The IHI Group has been providing technology in the form of products for 170 years. The technologies we have developed over the years range from the mundane to the cutting-edge. Combining them creates new value and turns them into something strong. The IHI Group creates value chains by connecting technologies with constant awareness of the value they create.

1853

Ishikawajima

Shipyard is established.

Dec 5

Asahi Maru, Japan's first Western style wooden warship

1856



Chiyodagata, Japan's first steam warship Source: Postal Museum Japan

1866



Japan's first elevator in the leisure building Ryounkaku Source: Edo-Tokyo Museum/ DNPartcom

1890

1896

Generator for the first made-in-Japan Asakusa Thermal Power Plant of Tokyo Electric Light Co., Ltd. Source: Electricity Museum



Tokyo Station Building The first steel-frame building without scaffolding (Japan's first mobile crane)



Wolseley, the first passenger car Amagasaki Thermal Power Plant for Kansai Joint Thermal Power Plant Company (Japan's largest 53,000 kW generating steam turbines)



(now Tsukuda, Chuo Ward, Tokyo)

1945

Ne-20, the first jet engine

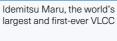
1955

Pencil Rocket, Japan's first rocket after the World War II



building in Nihonbashi

Japan's first tower parking for the Takashimaya department

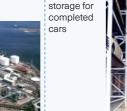


1966



Japan's first LNG tanks for Tokyo Gas Negishi Plant Source: Tokyo Gas

1969



made in Japan

World's first construction method "U Project" (on-board pulp plant)



Honda's engine equipped with IHI's turbo runs in the F1 and wins 15 out of 16 matches

1989

V2500 engine begins commercial operation



1993

Japan's first ultra supercritical pressure boiler for Hekinan Thermal Power Station (unit 3) Source: JERA



1994

The first H-II Launch vehicle (IHI is in charge of the first stage LE-7 engine, etc.) ©JAXA



1997

Shield machine for Tokyo Bay Aqua-Line



1998

World's largest suspension bridge, Akashi Kaikyo Bridge,



2004

Large 5,370m3 blast furnace for Sumitomo Metal Industries, Ltd. (Kashima) Source: NIPPON STEEL CORPORATION



Asteroid explorer Hayabusa returns to earth (IHI is in charge of the return capsule, etc.) ©JAXA



Huge LPG plant in Algeria (Phase 3)



2013

Epsilon test flight launch ©JAXA



World's largest 250,000 kl LNG underground tank for Tokyo Gas Ogishima Plant



2020

Yamba Dam (in charge of a complete set of mechanical equipment, including the main gate)



2021

Haga Utsunomiya LRT



2022

CO<sub>2</sub>-free power generation achieved with the world's first gas carbon production from CO<sub>2</sub> turbine using 100% liquid ammonia confirmed in the development of



World's top level yield of hydro-Sustainable Aviation Fuel (SAF) synthesis technology



IHI's Cumulative Turbocharger Sales Reach 100 Million Units

2023



Developing World's First Aircraft Engine-Embedded Megawatt-

2024

Class Electric Motor



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# Transition in Business Portfolio

The IHI Group recognizes that it has reached a point in its history where it is difficult to achieve sustained high growth for the company simply by extending the current growth path. Since our founding, we have made significant changes to our core businesses in order to achieve our own development while solving the difficult social issues of each era. With this track record and experience, the Group will continue to build an optimal business portfolio with multiple pillars of operations.



#### 2000: Succeeded Nissan Motor's aerospace business

Nissan Motor and Renault agreed on an alliance in March 1999. Under the "Nissan Revival Plan", in order to separate non-core businesses and concentrate management resources on the automobile business, Nissan's aerospace division was separated. The division became under the realm of IHI on July 1, 2000 and was transferred to IHI Aerospace. IHI Aerospace (IA) is now the base of space development for the IHI Group.

 2003: Succeeded NIIGATA ENGINEERING's power systems business 2019: Integrated the power systems business into IHI Power Systems

In 2003, Niigata Power Systems was established to take over NIIGATA ENGINEERING's power systems business. NIIGATA ENGINEERING was the first company in Japan to develop and manufacture diesel engines for marine use, and it is the foundation of our current power systems business.In 2019, IHI Group's Power Systems Business was integrated to form IHI Power Systems Co., Ltd.

 2009: Succeeded bridge and water gate businesses from Kurimoto Ltd. and Matsuo Bridge

The bridge and water gate business in Japan was facing fierce competition for orders due to a decline in public works projects. IHI took over bridge businesses from Kurimoto Ltd. and Matsuo Bridge, and a water gate business from Kurimoto Ltd., and established the businesses into IHI Infrastructure Systems (IIS). The plants of Kurimoto Ltd. and Matsuo Bridge adjacent to Sakai City, Osaka are currently being utilized.

# TRANSITION II BUSINESS PORTFOLIO



 2009: Established Japan Tunnel Systems Corporation
 2016: Established JIM TECHNOLOGY Corporation

The shield boring machine industry had a large number of companies compared to the shrinking market size, and each company was restructuring its production system in order to survive. Under these circumstances, IHI and JFE Engineering integrated their businesses in 2009 to establish Japan Tunnel Systems to strengthen the competitiveness of the shield boring machine business of both companies, and in October 2016, the tunnel shield boring machine business of Mitsubishi Heavy Industries was integrated to form the current JIM Technology.

 2013: Merged IHIMU and Universal Shipbuilding Corporation (owned by JFE Holdings) to establish Japan Marine United

In 2002, IHI's shipbuilding and offshore business was spun off and integrated with Marine United (merger of the shipbuilding division of IHI and naval ship divisions of Sumitomo Heavy Industries) to establish IHI Marine United (IHIMU). Furthermore, in January 2013, IHIMU merged with Universal Shipbuilding (merger of ship divisions of Hitachi Zosen and NKK) to establish Japan Marine United.

 2023: Transferred the large marine engine business of IHI Power Systems to MITSUI E&S Holdings

The large marine engine business of IHI Power Systems was transferred to MITSUI E&S Holdings, whose major business is marine engines. Through this transfer, IHI accelerated the reorganization of its power systems business portfolio.

Transition in Business Portfolio 018

As social infrastructure professionals in four business areas, the IHI Group solves various social issues and delivers prosperity and greater value to people's lives. The value that the IHI Group offers comes from its technologies. In the future, the IHI Group will focus on value itself, and by providing an entirely new form of products and services, the IHI Group will connect the value it creates with the value that its customers seek.

#### **★** = Value provided by the IHI Group

# serving as strengths

#### Power generation boiler

- Realization of low CO2 emission power generation
- Cutting-edge ammonia combustion technology

#### 2 Methanation plant

- ★ Generation and supply of e-methane
- Our proprietary catalyst with the highest durability

#### 3 LNG storage facility

- ♣ Ultra-low temperature energy storage
- Materials and welding technologies for cold storage

#### 4 Marine diesel engines

- ♣ Low CO₂ emission ships
- Decarbonized propulsion systems

#### **6** Onshore gas engines

- Realization of low CO<sub>2</sub> emission power generation
- Power generation engine compatible with decarbonized fuels

#### 6 Bridges

- Achieving economic growth and ensuring safety and security
- One-stop construction capabilities from design to maintenance

#### Gate facility

- Disaster prevention and mitigation through water management of
- Remote control and long-distance monitoring technology for water gates

#### 8 Transport systems

- ♣ Barrier-free transportation method
- Ultra-low floor vehicle design

#### Tower parking

- Efficient and speedy automobile parking and entry/exit
- Strensive delivery record and maintenance network

#### Jib climbing cranes

- hproved construction efficiency and shortened construction period for skyscrapers
- Control and transport technology for heavy objects

#### Automation and laborsaving systems

- \* Resolving labor shortages at logistics sites
- Product lineup to meet diverse customer specifications

#### Compressors

- 4 Highly efficient supply of industrial air
- Aerodynamic design, high-speed rotation technology

#### Vehicular turbochargers

- ♠ Improved environmental performance of various engines
- Aerodynamic design, high-speed rotation technology, mass-production technology

#### Aero engines

- Reduction of CO<sub>2</sub> emissions through improved fuel efficiency
- High technical capabilities throughout the life cycle

#### **(b)** Launch service business (Epsilon, SPACE ONE)

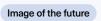
- Compact launches that lower the threshold for space utilization
- High-efficiency technology for the

#### Forest management, water utilization, and flood control for river basins

- ♣ Contributing to disaster prevention and mitigation
- Data collection and data analysis technology from land to space

#### High-density weather observation system **POTEKA**

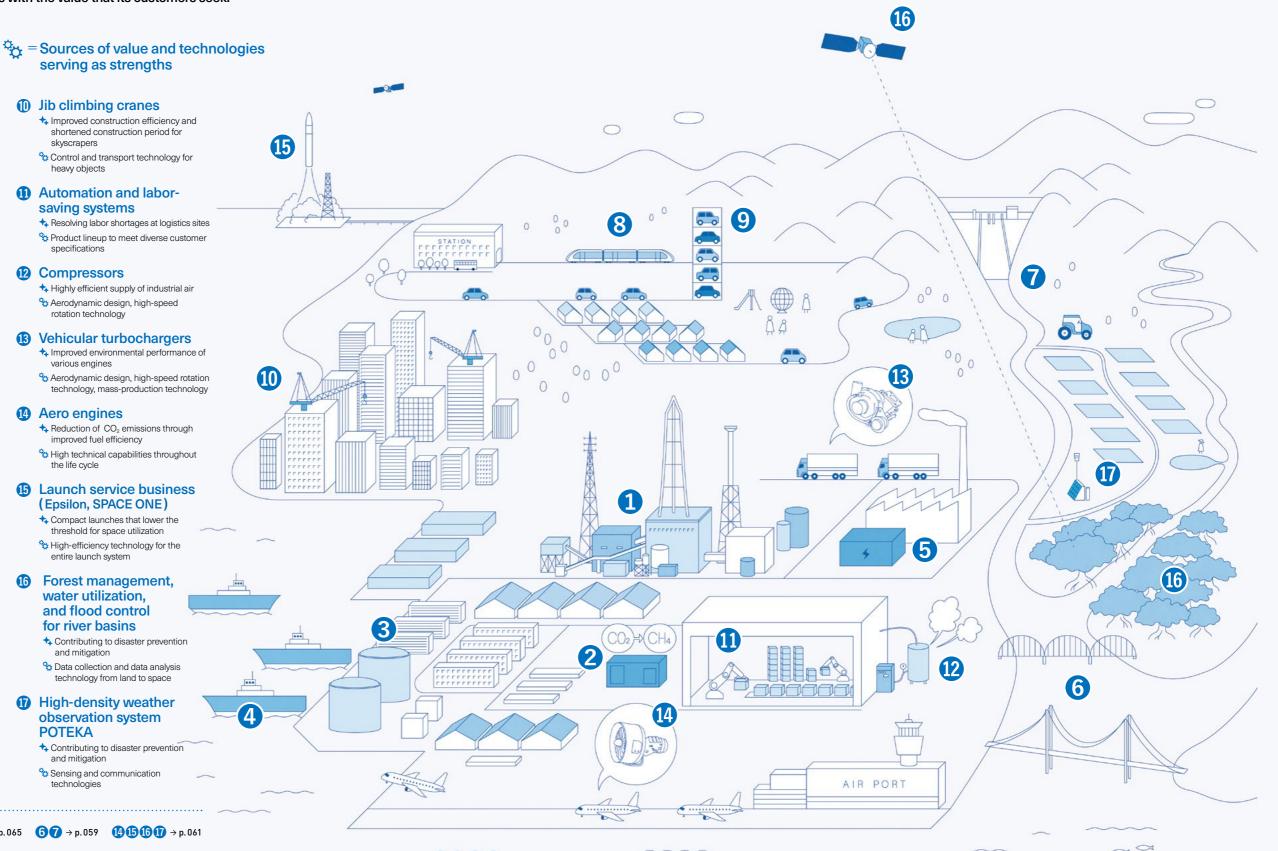
- ♣ Contributing to disaster prevention and mitigation
- Sensing and communication











# Response to main opinions from shareholders and investors

1	Would like to know more about the IHI Group's value-creation scenario	→ p.023
2	Would like to know management's thoughts on the IHI Group's carbon neutrality	→ p.031
3	Would like to know how management plans to continue to innovate to support sustainable value creation	→ p.037
4	Would like to know what those in in charge thinks about the human talent strategy to improve the IHI Group's corporate value	→ p.042
5	Would like to learn about the financial strategies that will support the achievement of "Group Management Policies 2023" and the creation of corporate value beyond it	→ p.045
6	Would like to know the progress of "Group Management Policies 2023"	→ p.049
7	Would like to learn the strategy and progress of Growth and Development-focus businesses	→ p.061
8	Would like to know why the IHI Group is so committed to DE&I	→ p.079
9	Would like to know the roles and thoughts of the independent directors of IHI	→ p.099

# VALUE CREATION STORY

- 023 Business Model
- 029 IHI Group Material Issues
- 031 Carbon Neutrality Tripartite Talk
- 037 Innovation Management Tripartite Talk
- 042 Message from the Managing Executive Officer (Human Resources)
- 045 Message from the Executive Officer (Finance & Accounting)
- O49 Progress of the Group Management Policies 2023
- 052 **Business Overview**
- 057 Financial/Sustainability Highlights



**Outcome** 

in the industry

Resilience Achieving carbon neutrality Achieving a global ecosystem

Lifecycle

perspective

Growth

**Businesses** 

Ecosystem Building and improving

Security Economic, national

and energy security

¥46.8 million

#### **Business Process**

Be aware of social issues

**Development** 

Businesses

Value chain

perspective

## **Output** Products and

services

**Growth Businesses** 

Aero Engines and Space

Civil aero-engines, defense,

and space businesses

# Value to be

#### co-created with stakeholders

#### investors • Medium- to long-term

Shareholders and

- growth and improvement in shareholder value
- Dividends of profits

#### Customers

- Environmental consideration through **IHI products**
- Labor saving, energy saving, automation

#### **Employees**

- Individual "growth+happiness"
- Job satisfaction through DE&I
- · Workplace where diverse human resources participate actively

#### **Business partners**

· Sustainable and highly competitive supply chain 

Government organizations, local communities, NPOs/NGOs

Favorable relationship

#### Value IHI Group offers to society

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

#### Achievement of carbon neutrality

Energy transition, energy transformation, carbon solutions



#### Realization of resilient social infrastructure

Realizing maintenance and disaster prevention and mitigation



#### Building an ecosystem

Labor saving, energy saving, and automation of customer value chains



#### Contribution to social security

Strengthening of defense capabilities and stable supply of energy

#### **Human Capital**

becomes the norm

,,	
Ratio of female managers (non-consolidated)	5.3%
Ratio of female officers	18%

148

#### Intellectual Capital

¥39.3 billion 8,172

#### **Financial Capital**

¥2,097.8 billion ¥402.2 billion Total capital ¥574.3 billion

#### **Manufactured Capital**

¥71.2 billion

#### Social and Relationship Capital

Relationship with business partners

#### **Natural Capital**

Energy	0.000
consumption	<b>2,322</b> ™

5,844 thousand m<sup>3</sup>

#### Management Philosophy

"Diversity, equity, and inclusion", "Securing and maintaining stakeholder trust"

"Contribute to the development of society through technology' "Human resources are our single most valuable asset"

**ESG** management

# "Climate change", "Human rights",

Returns to stakes and capital Capital flow Price market development products and set Conventional **Businesses** Solve challen

#### Businesses Clean Energy

**Development-focus** 

Fuel ammonia value chain businesses



#### Conventional Businesses

Resources, Energy & **Environment Business** 

Social Infrastructure

**Industrial Systems &** General-Purpose Machinery

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VALUE CREATION STORY

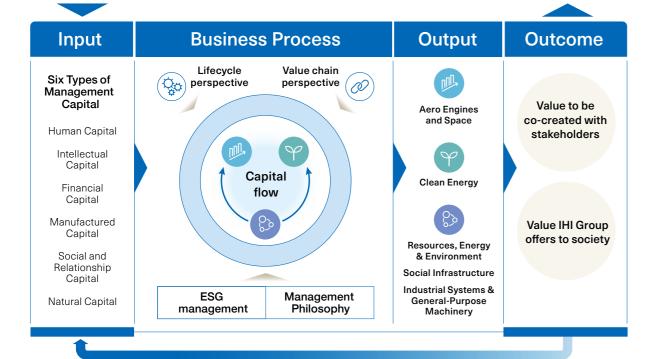
The business process at the center of the value creation process is based on the management policies of the three-year medium-term management plan "Group Management Policies 2023", started in fiscal 2023, and the business concept of creating value chains that extend beyond the management plan. In this endeavor, we enhanced a cyclical perspective of the business process by clearly showing the flow of capital acquired, which we had not done before.

The value-creation scenario we are currently presenting is not something static. We will transform our management by reflecting, onto the story, the changes in the external environment, as well as the feedback gained in interactions with stakeholders.

#### **Recognition of the Environment** and Challenges

"Decarbonization", "Resilience", "Ecosystem", "Security"

**IHI Sustainability Goal Create a World Where Nature** and Technology Work in Unity



#### Recognition of the Environment and Challenges

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In a society where instability has become the norm, we have been reviewing the business opportunities and risks to identify new business opportunities for raising our earning power while improving the sustainability of society. In particular, the IHI Group has been working on the four social issues of "decarbonization", "resilience", "ecosystem", and "security". With the impact of climate change becoming increasingly conspicuous and a global shift toward a decarbonized society expected to accelerate, the IHI Group will play a leading role in the industry in taking measures against climate change. To solve these four social issues, it is important that the IHI Group work together with various companies and build relationships to grow together. We believe that it is necessary to develop an ecosystem that includes customers.

#### **Key Points of Business Process**

#### Be aware of social issues

In order to recognize the actual social issues the IHI Group should be working on, we have to identify such issues by gathering information from regions, including other countries, and interacting with stakeholders. We will break free from the conventional mindset of an equipment seller, think of the world we want to create and ways to create that world, and recognize and identify the challenges to be solved

#### Identify customers' challenges and value

It is important that the IHI Group offers value through the lifecycle of customers' businesses and improves value by building an entire value chain in order to solve social issues through its business and achieve high, sustainable growth for the society and the Group. We need to examine the requests from customers in depth and discover challenges and value which the customers as such have not noticed.

While the IHI Group has offered value through products in limited formats, in the future it will focus on value itself, and by providing an entirely new form of products and services, the IHI Group will connect the value it creates with the value that its customers seek.

# (Q<sub>o</sub> perspective perspective Be aware of social is

Value chain

Lifecycle

#### Solve challenges through products and services and develop aftermarket

The IHI Group is engaged in the Aero Engines and Space, Resources, Energy & Environment, Social Infrastructure, and Industrial Systems & General-Purpose Machinery fields. In the Resources, Energy & Environment, Social Infrastructure, and Industrial Systems & General-Purpose Machinery fields, which it positions as the Conventional Businesses, the Group aims to achieve growth through exploitation and evolution of lifecycle businesses (LCB) to offer value with focus on the entire lifecycle of customers' businesses. It will invest the cash and human resources created and developed in the Conventional Businesses in the Growth Businesses (Aero Engines and Space) and the Development-focus Businesses (Clean Energy).

It is essential to leverage the technologies and diverse human resources of the IHI Group in order to discover the challenges and value of customers and develop them into businesses. Further, we are in the process of identifying the direction of creating value chains and changing the way we consider business so as to utilize the value created with our strong technical capabilities to boost our earning power. The social issues the IHI Group should be solving are too large for an individual company to solve on its own. Therefore, it is necessary to win the trust of diverse stakeholders in various countries and regions and build a structure for co-creating an entire value chain, and the top management of the IHI Group has been working on this on a daily basis.

#### Returns to stakeholders and capital

The social and financial value gained by solving social issues will be returned to stakeholders. To realize the IHI Sustainability Goal, the Group will make investments toward solving these social issues and improve its corporate value. In the "Group Management Policies 2023", the Group plans to allocate about 55% of its total investment budget of about 450.0 billion yen for the Growth Businesses and the Development-focus Businesses. In terms of human resources, we plan to shift 600 employees to the Growth Businesses and the Development-focus Businesses by the end of fiscal 2024.

#### Output and Outcome Generated by the IHI Group

The value the IHI Group will offer to society through its business activities can be roughly divided into value co-created with stakeholders and value the IHI Group offers to society. The value co-created with stakeholders promotes mutual sustainable growth. On the other hand, the value IHI offers to society is something that will solve the social issues it has currently grasped and will contribute to raising the sustainability of society.

	Basic Policy	Input (fiscal year ended March 31, 2024)	Related Material Issues	Future Initiatives and Ideal Vision
Human Capital	The IHI Group has been strengthening human capital in accordance with the Group Human Talent Strategy 2023 linked with the "Group Management Policies 2023". In order to achieve business transformation and corporate structural reform, we will implement human talent strategies aiming to balance a "Good + Strong" company and "Growth + Happiness" for all individuals	<ul> <li>Revenue per employee ¥46.8 million</li> <li>Ratio of female managers (non-consolidated)</li> <li>5.3%</li> <li>Ratio of female officers (non-consolidated)</li> <li>18%</li> <li>Number of employees with Ph.D. 148 (on a non-consolidated basis at IHI, at the time of joining)</li> </ul>	<ul> <li>Diversity, equity, and inclusion</li> <li>Human rights</li> <li>Work-style and operational process reforms</li> <li>Improvement of occupational health and safety standards</li> </ul>	<ul> <li>Promote DE &amp; I</li> <li>Improve employee engagement</li> <li>Allocate to the Growth and Development-focus Businesses</li> </ul>
Intellectual Capital	We will work on technology development to continuously provide new value, aiming to solve issues faced by society and our customers. Aiming to strengthen the competitiveness of Conventional Businesses, expand Growth Businesses, and create business in Development-focus Businesses, we will conduct everything from basic research to practical application in collaboration with a variety of partners.	<ul> <li>R&amp;D expenses</li> <li>¥39.3 billion</li> <li>Number of patents held</li> <li>8,172</li> </ul>	<ul> <li>Securing and maintaining stakeholder trust (Innovation management)</li> </ul>	<ul> <li>Acquire basic technology through open innovation</li> <li>Create new value that goes beyond products and services</li> </ul>
Financial Capital	We will strengthen our cash flow generation and actively invest in business transformation to achieve sustainable high growth, while balancing the expansion of our financial base and shareholder returns. The basic policy in stockholder returns is stable dividends, and we will aim for a consolidated dividend payout ratio of around 30%.	<ul> <li>Total assets ¥2,097.8 billion</li> <li>Total capital ¥402.2 billion</li> <li>Interest-bearing liabilities ¥574.3 billion</li> </ul>	• Securing and maintaining stakeholder trust (Disclosure of appropriate information in a timely manner)	<ul> <li>Improve capability to generate operating CF</li> <li>Strengthen earnings foundations</li> <li>Gain equity spread obtained by ROIC-WACC</li> </ul>
Manufactured Capital	Through our products and services, we aim to solve social issues and realize a safe, secure, and affluent society. We aim to establish manufacturing sites that place the highest priority on the safety and quality of our products and services, minimize environmental impact, and give full consideration to the safety of our employees.	<ul> <li>Capital expenditure</li> <li>¥71.2 billion</li> <li>Works</li> <li>7</li> </ul>	<ul> <li>Improvement of occupational health and safety standards</li> <li>Work-style and operational process reforms</li> </ul>	<ul> <li>Improve production efficiency through DX</li> <li>Make profits from growth investment</li> </ul>
Social and Relationship Capital	We uphold human rights, customer relationships, supply chain management, corporate citizenship, and others as material issues, strengthen engagement with the social and relationship capital, and engage with stakeholders in other countries and regions under the leadership of the top management.	Relationship with business partners	<ul><li>Supply chain management</li><li>Corporate citizenship</li><li>Customer relationships</li></ul>	<ul><li>Development of partnerships</li><li>Building industrial ecosystems</li></ul>
Natural Capital	We established the Environment Committee chaired by the officer in charge of ESG-related matters. The Committee deliberates and determines the measures to address climate change, resource recycling, and environmental protection in plants and offices. The Environmental management system has been established at each primary production plant as we strive to enhance the level of environmental management.	<ul> <li>Energy consumption</li> <li>2,322 TJ</li> <li>Water withdrawal</li> <li>5,844 thousand m³</li> </ul>	<ul> <li>Climate change</li> <li>Circular economy</li> <li>Conservation of the global environment</li> </ul>	<ul><li>Energy transition</li><li>Energy transformation</li><li>Carbon solutions</li></ul>

#### Relationship between Value the IHI Group Offers to Society and Management Capital

#### Achievement of carbon neutrality

It is necessary to acquire human resources capable of creating change in terms of human capital and develop a DE&I culture for that to realize carbon neutrality. From the perspective of intellectual capital, we are required to offer value throughout the lifecycle of a business. This necessitates generation of operating cash flow that would lead to growth investment in financial capital, shifting to manufacturing facilities that would allow monitoring and curbing of CO2 emissions in manufactured capital, and developing partnerships in social and relationship capital.

# Realization of resilient social infrastructure

Maintenance and disaster prevention and mitigation is important for realization of resilient social infrastructure. In this field, we believe that business development by the IHI Group contributes to preventative maintenance of bridges, maintenance of water gate facilities, and upgrade of water management. Management capital involved in this is primarily allocation of human capital to the Growth and Development-focus Businesses and offering value across the lifecycle in terms of intellectual capital.

#### Building an ecosystem

Development of ecosystem involves labor saving, energy saving, and automation of the entire value chain of customer, and in addition to human capital, it requires improvement in value of the entire value chain and creation of new value that goes beyond products and services in terms of intellectual capital. It also involves building an industrial ecosystem in social and relationship capital. From the perspective of financial capital also, it requires generation of operating cash flow for increasing growth investment.

#### Contribution to social security

Contribution to social security includes strengthening of defense capabilities and stable supply of energy. It requires shifting human resources to the Growth and Development-focus Businesses in terms of human capital and creation of value across the entire value chain in intellectual capital. With respect to financial capital, it requires generation of operating cash flow through growth investment, while improvement in production efficiency through DX of manufactured capital is also required upon raising production capacity in strengthening defense capabilities.

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Business Model

#### **IHI Group Material Issues**

#### **Identifying Material Issues**

The IHI Group has identified material issues to be prioritized to achieve sustainable growth as a company and realize a sustainable society.

As part of Project Change, formulated in 2020, the IHI Group is striving to "Create a world where nature and technology work in unity" in the near future. By setting this goal, the social issues the Group needs to address along with the value it aims to provide have been clarified. The Group has re-identified and revised its material issues according to the significance of each of the social issues to address with the

goals of becoming carbon-free, disaster prevention and mitigation, and materializing fulfilling lifestyles.

Subsequently, IHI Group ESG Management announced in November 2021 aims to address the global challenge of climate change, respect the human rights of those involved in the Group's businesses, and empower diverse human resources as the driving force behind value creation. The Group has identified particularly important issues that should be prioritized to ensure that its human resources are active and earn the trust of its stakeholders through integrity management.

#### **Identification Process of Material Issues**

#### Identify Material Issues According to Our Sustainability Goal Step 1 Step 2 Step 3 Confirm the conformity of **Extract issues** Identify material issues social issues Social issues, recognized worldwide, Each social issue extracted in Step 1 is Considering Step 1 and Step 2, a total are extracted by utilizing the following: verified regarding its conformity to of 16 material issues have been internal corporate policies and/or other identified. • Sustainability data public guidelines unique company traits such as the (GRI Standards, etc.) • SDGs • ESG rating standards (FTSE, MSCI, and • Group Management Policies 2019, Project Change • Society 5.0 (Japanese Business • Internal policies including the Basic Federation, "Keidanren") Code of Conduct for the IHI Group

#### **Material Issues**

• Information regarding the IHI Group's

risks

- Climate change
- Conservation of the global environment
- Circular economy

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- Diversity, equity, and inclusion
- Work-style and operational process reforms
- Occupational health and safety
- Human rights
- Supply chain management
- Corporate citizenship
- Consumer relationships

G

- Corporate governance
- Compliance
- Risk management
- Innovation management
- Information security
- Timely and proper disclosure

#### Particularly Important Issues Identified in IHI Group ESG Management

Climate change

Human rights Diversity, equity, and inclusion Securing and maintaining stake-holder trust

#### Targets and Results regarding Material issues

Material Issues	Vision	Metrics and Targets	Main Results for FY2023			
Climate change	Reduce the environmental impact of the entire social system	Achieving carbon neutrality throughout the value chain by 2050     FY2030: Reduce GHG emissions in half compared to FY2019 (Scope 1, 2)     FY2025: 12,000 t-COze reduction in GHG emissions (Scope 1, 2)     FY2025: Reduce energy consumption intensity by 3% compared to FY2022	GHG emissions (Scope 1, 2): 211,970 t-CO <sub>2</sub> e, reduced by 3,783 t-CO <sub>2</sub> e (compared to FY2022)  Energy consumption intensity Including special factors*1: 17.6 TJ/10 billion JPY, increased by 3.5% (compared to FY2022)  Excluding special factors*1: 15.6 TJ/10 billion JPY, reduced by 8.2% (compared to FY2022)			
Conservation of the global environment		Environmental accidents: 0     Environmental law violations: 0	Environmental accidents: 0     Environmental law violations: 0			
Circular economy		FY2025: Reduce waste emissions by 3% or more compared to FY2022     FY2025: Reduce water withdrawal by 3% or more compared to FY2022     FY2025: Revise the definition of recycling rate, determine final disposal amount (more than 90wt% of all waste)	Waste emissions: 25,410 t, increased by 10.3% (compared to FY2022)*2 Reduction in water withdrawal: 5,844 thousand m³, increased by 44.8% (compared to FY2022)*2 Conducted water stress regional surveys at 73 locations collecting environmental information, identified 6 locations (8.2%) in areas with High Risk or higher The definition of recycling rate was revised and finalized			

Material Issues	Vision	Metrics and Targets	Main Results for FY2023
Diversity, equity, and inclusion	Employees are fully able to demonstrate their talents based on common values     Connecting the power of diversity to value creation	FY2030: Increase the ratio of female Officers to 30% or higher     FY2030: Increase the ratio of female Managers to 15%	Ratio of female Officers: 18% Ratio of female Managers: 5.3% Ratio of female hires (university graduates): 19.8% Employment rate of people with disabilities: 2.62%
Work-style and operational process reforms	Improving productivity within the entire organization	FY2026: Increase the ratio of female Managers to 7% FY2026: Increase the ratio of female hires to approximately 20% among university graduates FY2023: Increase the employment rate of people with disabilities to 2.6%	2.02%  • Employee engagement: 54 points  • Registered employees with concurrent work outside IHI/side work within IHI: Approx. 140 in total
Occupational health and safety	Ensure workplace environment in which all employees can work safely and in good health	FY2023: Occupational health and safety rate Less than 0.6 (works divisions) Less than 1.2 (construction divisions)	Cases of occupational accidents (injuries with no time lost or higher, in Japan): 54     Occupational health and safety rate: 0.95 (works divisions) 2.10 (construction divisions)
Human rights  • Proactively fulfill the responsibility toward respecting human rights for all people		Conduct human rights impact assessments for about 160 IHI Group Companies in three years	Total number of companies conducting human rights impact assessments: 96 (of which 37 in FY2023) The IHI Group Co., Ltd. Human Rights Policy Implementation Guidelines were developed and distributed in Japanese, English, and Chinese
Supply chain management	Build sustainable supply chains	_	Established a grievance mechanism (from April 1, 2024)
Corporate citizenship	Engage in social contribution activities that enhance the value of the IHI Group while helping to foster the creation of a habitable and prosperous world	_	Total expenditure for social contribution activities: 532 million JPY (43 million JPY increase compared to the previous fiscal year)
Consumer relationships	Pay full attention to the safety of the products and services and continue to improve the quality level of the products and services by confirming whether they satisfy customers and users	_	QMS certification acquisition rate for domestic business sites and works ISO 9001: 90.6% Acquisition rate including other standards: 96.2%

Material Issues		Vision	Main Results for FY2023			
	Corporate governance	To earn the trust and support of the IHI Group's shareholders over the long term	Conducted trial introduction of ESG Index for the purpose of promoting ESG management in performance-based bonuses (annual incentives) for Officer renumeration (full-scale introduction from FY2024)			
	Compliance	Not only complying with laws and regulations, but also accurately understanding the changing values and demands of society and fulfilling its expectations	Compliance hotline reports: 314 Competition law violations: 0 Anti-corruption law violations: 0			
Securing and maintaining stake-holder trust   management   employ resourch   Innovation management   * Keep p the eny technoor   • Utilizin   Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • Utilizin   Utilizin   • View p the eny technoor   • View p the eny techn	Ensuring business continuity and the safety of Officers, employees, and their families; securing, preserving managerial resources, and maintaining public trust					
		Keep providing solutions that help solve social issues through the engineering capabilities centering on "Monozukuri" technology     Utilizing intellectual property in the business activities to help solve social issues and increase customer value	Research and development expenses: 39.3 billion JPY Patent acquisitions: 564 Patents held: 8,172 (4,094 in Japan, 4,078 overseas)			
	Information security	Ensure the confidentiality of customer and business partner information, along with company management and technical information, etc.	Information security measures evaluation: 3.8 (out of 5)			
	Timely and proper disclosure	Honestly fulfill accountability for management direction and major operations	Dialogue conducted with investors: 361 companies (99 Japanese investors, 262 overseas investors)     Dialogue conducted with bond investors: 30 companies (13 investors, 7 banks, 6 financial institutions, 4 securities companies)			

1HI Group Material Issues 030



# What type of vision do you have in mind toward carbon neutrality for the IHI Group?

Ide The significance of the presence of the IHI Group lies in creating a carbon-neutral society, which is one of the ways to embody the goal of the IHI Group to "Create a world where nature and technology work in unity". Carbon neutrality in the fields of energy, industrial machines, and aviation is also the Company's business field, and we consider it important. We need visions and strategies that combine both speed and scale with a global perspective on each field. In the energy field, we are striving to contribute to decarbonization on an unprecedented scale with clean energy such as fuel ammonia at the core. In the industrial machines field, we intend to work together with our customers to promote carbon neutrality realistically tailored to the customers' on-site needs. In the aviation field, we will further expand the overwhelming technological capabilities we have built up to date and aim to broaden our value chain. The value that the IHI Group offers comes from its technologies. We also have core technologies and research and development capabilities to achieve carbon neutrality. We are tackling our work every day with the enthusiasm and sense of mission that our technological and business developments will determine carbon neutrality worldwide.

# Please tell us your missions as top managers in achieving carbon neutrality.

Ide The largest mission as top managers is to forge a path for achieving carbon neutrality. The IHI Group will contribute to the realization of carbon neutrality through its businesses. We have to develop a scenario to clarify which technologies and businesses the IHI Group should engage in to realize a carbon neutral society. The approach of creating a value chain is important in this process. It is difficult to achieve the IHI Group's goal of global carbon neutrality by simply decarbonizing products alone, as has been the case in the past. In the future, we need to look at the entire value chain, from the procurement of raw materials to after-sales service, and increase the scale of decarbonization and our business by recruiting the necessary partners.

To this end, one of my roles as president is to encourage the Japanese government and overseas partners to identify and collaborate

with carbon neutrality strategies of the IHI Group and to obtain the necessary support from them. In fact, we are actively communicating the strategies and initiatives of the IHI Group to the world and seeking support from the Japanese government and relevant overseas organizations. My second role is to secure and allocate the necessary resources. The resources required to implement the carbon neutrality strategies include human capital with knowledges and skills that were not available in the IHI Group before. For example, we will acquire resources that we have hardly possessed in the past, such as human capital in the field of chemistry. I believe that the allocation of investment will shift from the traditional focus on tangible assets to an increased allocation to intangible assets, including human capital, intellectual property, IT, and digital transformation, all of which can illustrate the story of realization of innovations and proposals for improvement. I will allocate the acquired resources optimally on the basis of the implementation strategy and will maximize performance.

Tsuchida The role of communication that Ide mentioned is shouldered not only by the president, but also by us, the senior executive officers. This is because we believe that when the top management of a company communicates, people will be able to sense the seriousness and effectiveness of our efforts. There are two main initiatives pursued by the IHI Group to realize carbon neutrality. The first is to achieve carbon neutrality in our own business activities, and the second is to contribute to the carbon neutrality of society through products and services. We are communicating our specific implementation strategies for these two initiatives through dialogues with investors and seminars hosted by financial companies.

Morita In terms of more specific businesses, for example, we are sending out strong messages that the realization of carbon neutrality in the aviation industry depends on our technological and business development. The IHI Group has core technologies that can provide "propulsion", which is closely related to energy efficiency. We will also contribute to carbon neutrality by providing energy-efficient "propulsion". We are communicating specific implementation strategies externally to develop partners with whom we can collaborate.

# What are the implementation strategies unique to the IHI Group to achieve carbon neutrality?

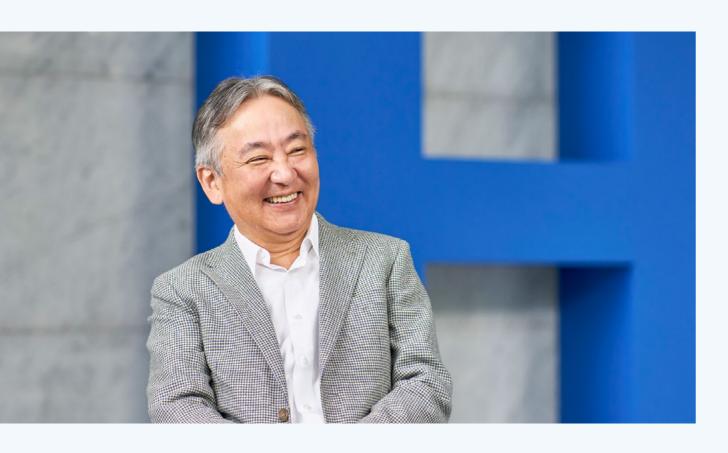
**Ide** As an implementation strategy, we will participate in the building of a value chain and will increase our contribution within the chain. To be highly involved in a value chain, we need strong technologies and experiences that are competitive with other companies. We have these in the fuel ammonia value chain and aero engines businesses; therefore, we have been able to participate in the building of a value chain from an early stage. With strong technologies and experience, we are able to attract partners who empathize with our vision, and we will be able to build a value chain that will be advantageous to our management strategy. Our basic approach in the implementation strategy is to acquire strong technologies and build a value chain based on the vision of the IHI Group. Visualization of the technology, human capital, and other resources held for strategic implementation will help clarify the strategically necessary resources. The aforementioned second role, which is securing and allocating the necessary resources, will play a key role in the success of the implementation strategy.

In terms of our implementation strategy in the energy field, we have based our strategies around the utilization

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of existing infrastructure. We will convert to fuels that do not produce  $\mathrm{CO}_2$ , such as fuel ammonia, while utilizing existing infrastructure. By doing so, we can promote transitions that achieve both steady reductions in  $\mathrm{CO}_2$  emissions for our customers and economic rationality. For example, simply converting 50% of the fuel in an existing coal-fired thermal power generation facility to ammonia can reduce  $\mathrm{CO}_2$  emissions by 50%. Meanwhile, for power generation combusted exclusively with fuel ammonia, we plan to offer the use of (transformation to) large-scale gas turbines. While utilizing existing infrastructure facilities, strategies that follow a roadmap that includes a realistic timeframe based on each country's circumstances are effective.

Tsuchida Turning to our business, our Conventional Businesses are served by typical facilities industry with high CO<sub>2</sub> emissions, such as steel, paper, and chemical industries. Until now, the IHI Group has provided high-efficiency equipment to meet the issues and needs of our customers, but from now on, we need to provide equipment that can also contribute to carbon neutrality and systems that operate them efficiently and without waste. Our products were based on the use of fossil fuels, so the current trend is a risk. However, we also see it as an extremely huge business opportunity. Without halting the production of our customers, we are aware that the IHI



Group's mission is to make proposals that make efficient, high-quality production with reduced  $\mathrm{CO}_2$  emissions possible. The key to the implementation strategy of carbon neutrality in the industrial machinery field is to maintain the existing machinery and equipment owned by the customers while changing the contents to be carbon neutral. Instead of replacing equipment with something completely new, as we have performed in the past, we must work together to chart a course toward carbon neutrality from a slightly longer perspective while prioritizing customers' production activities and economic rationality and move forward steadily, one step at a time.

Morita Compared with the industrial machinery field, a different style of change is called for in the aero engine field. The development of aircrafts requires a huge amount of capital, and to lower the associated risks, the basic approach is to conduct international joint development in which risks and profits are shared. Joint development was adopted in the recent development of next-generation fighter aircrafts operated by Japan, the UK, and Italy. Thus, joint development with partners from each country will be the basic approach in the development for achieving carbon neutrality in aircrafts. We will need to consider the entire value chain in the future, including the fields that the IHI Group is not involved in. For this, we need to build and strengthen the value chain, which will be beneficial for our strategies. For example, we are considering reinforcing the maintenance business to expand the value chain. We believe that this is a business that will lead to profitability and should be focused on, considering the prolongation of aircraft life and efficiency improvements. To do this, we again need to acquire strong core technologies ourselves.

# How do you see the changes in each market toward the realization of carbon neutrality?

Ide In the energy field market, demand for products and services that can realize carbon neutrality will increase. However, I believe that optimal solutions will differ depending on the circumstance of each country.

Securing and distributing energy requires large-scale infrastructure facilities that combine safety, economy, and other factors. This means that in the future, changing infrastructure facilities and systems to achieve carbon neutrality will require an enormous amount of financial resource and labor. Therefore, the optional solutions will vary according to various situations in each country, such as economic strength and geopolitical risks. For example, the use of liquified natural gas (LNG) in Japan began 55 years ago, and it has been said that coal will not be consumed any more. However, because of various

situations in each country, Germany still relies on coal-fired thermal power generation for approximately 31% of its energy mix, and the same is true in Japan at approximately 30%. In India, plans are underway to add 88 GW of coal-fired power generation capacity by 2032. When we think about realizing carbon neutrality for the entire earth, I believe that we must provide the most appropriate solutions considering the circumstances of each country.

**Tsuchida** We consider that the demand for products and services that have high production capacity and decarbonization volumes will grow in the industrial machines field. In steelmaking, blast furnace to electric furnace conversion is effective, but this consumes enormous amounts of electricity. Steelmakers are working to produce steel using hydrogen instead of coke (coal) and are experimenting with ammonia usage, which is easier to handle. Customers that handle compressors consume electricity in their daily operations. The IHI Group is also considering supplying clean electricity derived from ammonia to these customers. Additionally, by evolving operations that do not consume standby power from individual machines to systems, it is possible to optimize the overall system and minimize electricity consumption. We believe that we are able to make similar proposals in value chains of various fields, and this will further expand opportunities for the IHI Group.

The market for automotive turbochargers will disappear if the electrification of automobiles advances too quickly. However, hybrid vehicles are recently being reevaluated, which shows that transition requires time. For example, vehicles powered by fuel cells will newly require turbochargers for fuel cells that supply air efficiently. It is important to create new added value backed by technology while ensuring sustainability.

**Morita** Taking the movement toward carbon neutrality as one opportunity, there are growing efforts worldwide to take on the challenge of realizing various types of mobility in the aviation field. On the other hand, given the current demand and need for existing aircrafts, it is unlikely that demand will decline solely due to the effects of climate change. Rather, the demand is expected to increase due to the growing world population and globalization of the world economy. For future increases in demand, it is necessary to consider safety, economic rationality, comfort, and other factors, as well as respond to climate change. The IHI Group is strengthening its initiatives toward electrification in the field of "propulsion" of aircrafts, which is a field we excel in. Leveraging the core technologies of the IHI Group, we are developing and proposing an aviation energy management system that replaces conventional electric-powered equipment to operate them efficiently with minimal electricity consumption.

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Carbon Neutrality Tripartite Talk

#### What are the triggers for market expansion resulting from the realization of carbon neutrality?

Ide 2024 will be an extremely important year for the IHI Group, which is a leader in ammonia fuel technology. The world's first demonstration testing of 20% ammonia substitution at JERA's Hekinan Thermal Power Station has attracted much attention worldwide. If safe and stable power generation can be achieved using existing facilities, the adoption of fuel ammonia may increase, expediting the realization of carbon neutrality. Additionally, long-term durability tests for ammonia-fueled gas turbines began in June. In July, a demonstration of a tugboat powered by an ammonia-fueled engine for ships was held in Tokyo Bay.

Ide We are aware of JERA's plans to increase the ammonia combustion ratio to more than 50% from 2028 onwards. Furthermore, the IHI Group's project conducted with General Electric Company (U.S.). which is a project that develops heavy-duty gas turbines combusted exclusively with ammonia, is scheduled to be completed in 2030. Therefore, full-scale fuel ammonia utilization will begin around 2030. However, the key to proliferation and market expansion depends on technological innovation and a decrease in fuel ammonia price. We expect green and blue ammonia prices to decline to an economically

rational level in approximately 2030. With safety as our top priority, we are also studying the legalization of standards, such as ISO, with governments and various partners. In Japan, there is the impression that hydrogen is leading the way over ammonia. However, ammonia utilization is underway, as you can see in JERA. Ammonia is also increasingly being recommended in Europe. To promote the use of liquefied hydrogen, it is necessary to invest in a huge amount of new infrastructure that can handle liquefied hydrogen at -253° C. In contrast, ammonia is transported by LPG tankers, and existing LPG tanks can be used, so the infrastructure is already in place. Customers in industries are also accustomed to using ammonia with ammonia fertilizers.

Morita The aircraft market is expected to grow steadily at 3% to 4% per year and expand to achieve carbon neutrality in approximately 2035. In the aircraft industry, single-aisle aircrafts, aircrafts that have one aisle in the cabin, dominate approximately 80% of the aircrafts operating worldwide. One such aircraft, Airbus A320, began operations in 1988 with the first-generation V2500 engine, and the A320neo, powered by the second-generation PW1100G engine, began service in 2016. The third-generation engine is expected to be in the market in approximately 2035. It is expected that the third-generation engine will significantly reduce fuel consumption through





technological innovations such as electrification. We anticipate the adoption of alternative fuels, such as SAF and e-methane, and beyond that, hydrogen engines that use hydrogen. The business opportunities available to us, including a greater percentage of participation in engine development programs, are extremely large, and we feel that there are growing expectations for the technical capabilities of the IHI Group.

#### What should we look out for in the future of the IHI Group?

Tsuchida I believe that we will definitely move in the direction of increased profitability in our Conventional Businesses. The approach of updating the content of the customer's equipment without stopping its operation is efficient and can benefit both the IHI Group and the customers. Through the Exploit and Evolution of Lifecycle Business (LCB), we will upgrade only the equipment and functions that are required at the optimal time to achieve decarbonization, energy savings, unmanned operations, and more. Instead of simply taking a price-competitive approach, we will make proposals that maximize customer value from a long-term perspective even in small volumes and on a small scale while ensuring the company's own profitability. The customers also support our approach because the approach realizes not only carbon neutrality, but also a circular economy.

**Morita** The core of the fields of aeroengines and space is "propulsion". Through production innovations that leverage the IHI Group's renowned aero engine technology and digital transformation and business model reforms from the viewpoint of the value chain, the Aero Engine, Space & Defense Business will aim to achieve a revenue of 800.0 billion yen in fiscal 2030 and one trillion yen in fiscal 2040. The target operating profit margin is 15%. The feasibility of the civil aero engine and defense business is now in sight until approximately the first half of 2030, but beyond that, growth could change significantly depending on the development of the space business, and we are very excited about the future.

Ide Together with various governments and global partners, we aim to build a value chain for green ammonia in the Development-focus Businesses. Our policy is to develop this business with revenues of 900.0 billion yen, rivaling the Aero Engine, Space & Defense Business by approximately fiscal 2050. To this end, we aim to ensure good profitability through the strengthening of LCB and other means. Additionally, the three organizations, Corporate Strategy Headquarters, Technology & Intelligence Integration, and Business Development Headquarters, will function organically through continuous innovation and exploration of business opportunities from a value chain perspective, with the aim of creating a business that will become the next pillar after ammonia.

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The IHI Group is making a complete overhaul of its approach to business and technological developments in order to create businesses from a value chain perspective. The Group will reinforce the collaborations between business development and technological development and will aim to create an organization that will enable the generation of a Development-focus Business, which will follow the fuel ammonia value chain businesses.

The officers of the Business Development Headquarters, which creates new growth businesses, Strategic Technologies Division, which acquires strategic technologies for the future, and Corporate Research and Development Division, which is in charge of technological development, came together to discuss about the structure needed for the IHI Group to continue creating businesses from a value chain perspective and the transformation of corporate culture to achieve this.

# What are the missions of your headquarters?

- Kobayashi The main mission of the Business Development Headquarters is to lead and supervise the development of businesses that will become the next growth business, based on the business concept. We identify issues to be solved among social issues in and outside of Japan and build new business models from a value chain perspective, as well as create businesses that are rooted in the local community. For this, it is important to combine regional strategies, business strategies, and core technologies to develop businesses with speed and scale.
- Morioka The main mission of the Strategic Technologies Division is to lead the acquisition of technologies that have a high potential of becoming core technologies in the future. Starting with technologies, we envision future possibilities and create scenarios to achieve them, determining the technologies that need to be acquired. We are also responsible for acquiring the technologies needed for the business concepts created by the Business Development Headquarters. We continuously monitor both internal and external technology trends and swiftly acquire the necessary technologies. The strategic technologies we acquire will be the pillar that supports businesses with a value chain perspective.

• Kubota The main mission of the Corporate Research and Development Division is to nurture the strategic core technology candidates identified by the Business Development Headquarters and Strategic Technologies Division, to the level required for commercialization. In the past, the IHI Group tried to maintain a competitive advantage in product specifications, but we often found ourselves caught up in price competition with our competitors. Through these experiences, we learned that even if we can become front-runners, it is not always possible to develop large businesses with new technologies alone. To secure a competitive advantage. we will continue developing technologies from a value chain perspective, leveraging these experiences. At the same time, it is our important mission to enable the technology developers themselves to draw up future visions and scenarios and to research and develop proprietary and advanced technologies. Unique research and development in a rapidly changing world can lead to the realization of future visions and scenarios

# What kind of changes are taking place when you incorporate value chain perspective in business development as well as in research and development?

- Kobayashi The way we collect information is changing. Information gathering in business development is the most important factor in determining the success or failure of an idea or strategy. In business development with a value chain perspective, regional strategies are more important than ever, so we have a structure to explore the trends in other countries. More specifically, we are establishing business bases such as Washington Office and Brussels Office from fiscal 2024. Unlike the sales bases we have had in the past, these bases are established to explore the trends in the U.S. and Europe, which are necessary in the clean energy field. As we explore trends, we exchange opinions and information while offering input on what we think is the ideal state to the appropriate organizations in each country. This is a form of information gathering with a value chain perspective, an approach that was unthinkable with the conventional mindset of an equipment seller.
- Kubota Changes are also occurring in the collection of technical information. Before, we gathered information mainly at academic conferences. However, we renewed our understanding that important information can only be obtained in world's top ecosystems.\* Organizations and researchers that constitute top ecosystems are influential in the directions and trends of each country. Therefore, the technical information that can be obtained in the ecosystems is important for regional strategies and strategic technology acquisition. Currently, we are

#### Jun Kobayashi

Managing Executive Officer General Manager of Business Development Headquarters



#### Noriko Morioka

Managing Executive Officer General Manager of Strategic Technologies Division



#### Nobuhiko Kubota

Managing Executive Officer

General Manager of

Corporate Research and

Development Division,

In Charge of Group Engineerin



sending several people to study at universities and research institutes that make up the top ecosystem to participate in the development of cutting-edge technologies. We believe that making technical contributions in the top ecosystems will lead to the acquisition of critical technical information.

\*A community of world-leading researchers and engineers in a certain field.

- Morioka To obtain critical technical information, I
  believe that we also have to provide some important
  information or something equivalent. We can join the top
  ecosystem and have information shared because we are
  of some value. Information that can be obtained at top
  ecosystems cannot be acquired through internet search
  or by simple hearings. It is important that we have information that will be considered valuable prepared on a
  daily basis.
- Kobayashi What Ms. Morioka mentioned is common to the three headquarters (one headquarter and two divisions) in terms of information gathering. If we talk about world trends or some matters that others have not been aware of, they will in turn provide us with information that will lead to new businesses, such as information and a sense of issues that we are not yet aware of. From there, we can connect to collaborative activities, realizing business development which is one step ahead of others.
- Kubota Value chain perspective brings about changes not only in information collection, but also in the forefront of research and development. In the past, research and development was conducted independently in each area of the value chain and resources were dispersed, which sometimes caused us to lose out in business. Now with the establishment of the Business Development Headquarters and Strategic Technologies Division, the themes and directions to be focused on are shared

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across fields, enabling us to allocate resources flexibly and conduct research and development speedily. We are expected to put priority on what needs to be done, rather than doing everything we can, and we are conducting the research and development to meet this expectation.

#### What kind of human capital are you seeking and how are you strengthening your organizations for business development and technological development based on a value chain perspective?

• Kobayashi The human capital that is required in business development, based on a value chain perspective, is people who can come up with ideas that are not confined to conventional ideas. For example, people who act with the awareness that demand is created are better suited for business development than people who start by looking to see if there is demand for the business they envision. We could say that they are start-up human capital with an entrepreneurial spirit. We are trying to obtain human capital that can envision what they want the world to be like and how they can create such a world, and take the necessary actions. When training internal human capital, we have found it effective to provide on-the-job training to those who have the desired aptitude for the project, as there are individual differences in suitability.



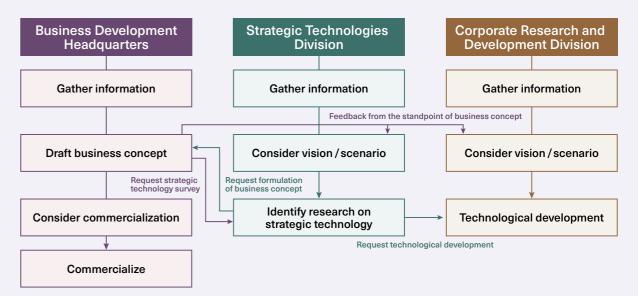
• Morioka In the past, we had an engineer who thought, "Can't ammonia be used for fuel?" This inspiration has led to the fuel ammonia value chain businesses we have now. The Strategic Technologies Division is considering training professionals who can develop technologies that can support the creation of value chains. But we are still in the process of exploring ways to nurture their "sense" and "desire" to create a new world. In any case, we believe that collaborations with external human capital and having external interactions have had a positive impact on reinforcing such senses and desires.

- Kobayashi As Ms. Morioka mentioned, acquiring external human capital while we establish organizational training methods is one solution that we can implement immediately. Commercialization of new businesses calls for a certain level of sensitivity and experiences in various fields. It is important to train internal human capital, but considering the speed of commercialization and expansion of scale, it is also necessary to hire diverse mid-career human capital.
- Kubota The three headquarters (one headquarter and two divisions) collaborate and strengthen organizational capabilities at the forefront of technological development. In the past, the engineers themselves were engaged in technological development with a certain amount of business concept. In this case, the technical level increased, but the level of business concept did not. When the business division confirmed a project, insufficient studies and critical problems were sometimes discovered, making it difficult to proceed with the project. Now, the process has been changed so that we collaborate with the Business Development Headquarters from an early stage as necessary, and raise the technical level and business concept level without being too reliant on the engineers' capability to come up with business concepts.



• Kobayashi Headquarters collaborate as appropriate. In addition, what is most important as organizations is that each headquarters achieving its mission. In technological development, we would like our staff to take on challenges toward the exciting future they aspire to, rather than strengthening their business perspectives. Even if they fail as a result of their challenges, what they have learned through the process and the facilities acquired will be an asset for future challenges. The Strategic Technologies Division focuses on identifying strategic technologies, while we are responsible for commercialization. Before the Business Development Headquarters was established, the boundaries of each organization's mission were blurred, and some projects did not go well. For example, since we developed the technologies for the fuel ammonia value chain businesses, we had two opportunities for considering major commercialization, but they did not bear fruit into a large-scale business concept.

#### Collaboration Structure of the Three Headquarters (one headquarter and two divisions)



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This is the third time, and we are where we are now. To avoid missing opportunities, it is important, as an organization, to maximize results by concentrating on areas in which each of our human capital excels.

#### How do the three headquarters collaborate?

• Morioka The Business Development Headquarters leads business development from the value chain perspective. Commercialization originates from either a business concept or from strategic technologies. When it originates from a business concept, the Business Development Headquarters first draws up the business concept and requests the Strategic Technologies Division to do research and specify the core strategic technologies. On the other hand, when commercialization originates from technological strategies, the Strategic Technologies Division first identifies the vision, scenario, and the strategic technologies that make commercialization possible. The planning of the business concept is then requested to the Business Development Headquarters. In both cases, Corporate Research and Development Division takes the lead in executing the actual technology acquisition.



• Kubota Research and development at Corporate Research and Development Division must proceed by constantly checking if the direction, development level, and speed of the research and development meet the requirements of the business concept. For this, we make sure that not only the managers but also the technology developers themselves are aware of the collaboration with the Strategic Technologies Division and the Business Development Headquarters. The officers of the three headquarters (one headquarter and two divisions) hold regular meetings and are in constant communication.

#### What are the issues for the IHI Group in making a business transformation with a value chain perspective?

- Morioka The entire IHI Group needs human capital that is interested, curious, and capable of asking questions and changing themselves in all things. Taking decarbonization as one specific example, the last decade has seen an increase in global awareness and a significant social shift. It is vital that we have a bold ideal about how the world should be, how we want to change the world, and what we want to do to make it happen. It is also important to keep taking on challenges to go beyond boundaries. We support the growth of our employees by defining "Set a Goal", "Tackle Issues", "Cross Boundaries", and "Implementation" as the required behaviors in the Group Human Talent Strategy 2023.
- Kobayashi We think that organizational homogeneity is something to watch out for, and the Business Development Headquarters takes special care not to homogenize. We share the view with the Human Resources Division that avoiding homogenization is a key point when investing resources in the Growth Businesses and the Development-focus Businesses in the future.

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• Kubota I also think that we need an organizational culture and human resources that encourage failures. A big inhibiting factor when we do something new is the mindset that does not tolerate failures. I believe it is important for employees to continuously take actions without being afraid to fail. The Corporate Research and Development Division encourages failures and implements a mechanism to systematically share our findings from failures.

#### What does a culture that tolerates necessary failures look like in the IHI Group?

- Kobayashi The top management and the managers both need to have a mindset that tolerates failures. I am in the position to receive many different proposals. I always ask the proposer to first implement the proposals even if I feel that they will not succeed. It is important that they think their way through, try it out to the end, and then fail. We all grow up by experiencing failures, so it is important for top management and managers to take risks and support the employees.
- Morioka It is also important to lead the way so that the employees will do everything that they need to do and then fail. Often, we see employees fail by doing only what they can and want to do. In the case of fuel ammonia value chain businesses, these businesses would not have developed into what they are now if engineers thought only about themselves and had made the utilization of boilers a strategy. The business concept was developed into the current large scale by considering what needs to be done from the value chain perspective, from upstream ammonia production to utilization of gas turbines. When the managers, including heads of divisions, clarify policies, decide what needs to be done, and exercise leadership, members can learn from their mistakes even if they fail, and this will lead to the next step
- Kubota There are also cases in which it is necessary to stop the process before it fails. While it is essential to focus on day-to-day development, it is also important to create a scenario that leads to the final exit. In the past, we had engineers who devoted themselves to development with enthusiasm alone, but it is difficult to succeed in commercialization. Scenarios should not be created by the Corporate Research and Development Division alone. It is important that they are co-created with the Strategic Technologies Division and Business Development Headquarters. The managers are increasingly setting the direction, discussing it, and stopping projects with the individual's consent.

#### Do you have any tips on how to accelerate business creation from a value chain perspective?

- Kubota In the field of research and development, we have changed the mechanism so that the awareness of the technology developers will be changed. In the past, research and development was based on the assumption that a project would continue for one year, but now we are accelerating the speed of research and development by increasing the number of projects that will be considered for continuation every three months. Moreover, with the collaboration of the division in charge of public relations, we are trying to make external announcements of technological developments at an earlier stage than in the past. By doing so, we can attract people who agree with our technology and ideas and co-create with us. Once co-creation begins, the required level and timing of technology become clear, and research and develop-
- Kobayashi In business development, making quick decisions at appropriate times accelerates business creation in the end. Until now, the IHI Group has often missed business opportunities because the Group missed the right timing and took too long to make decisions. Top management and managers need to delegate authority so that the frontline can make appropriate and quick decisions. It is also important to make an output of important matters at a timing which enables top management to make appropriate decisions.



• Kobayashi In May 2024, we have announced that we will become a company that creates value chains as the direction we will take beyond the "Group Management Policies 2023". We are already taking actions to realize this direction. To create new businesses, it is necessary to continue creating large-scale businesses that create demand by incorporating a perspective that balances both product-out and market-in approaches. To this end, we will strengthen the organic links among the three headquarters (one headquarter and two divisions) and continue to create innovation.

#### Message from the Managing Executive Officer (Human Resources)



It has been more than one year since the launch of the Group Human Talent Strategy 2023, that was developed to accomplish goals set in the Group Management Policies 2023. Would you please recapitulate the year as Managing Executive Officer (Human Resources)?

The Group Human Talent Strategy 2023 set the vision of balancing a "Good + Strong" company and "Growth + Happiness" for all individuals. We started by communicating these values across the Group and moved on to the current stage in which employees are encouraged to change behavior.

The shifting of resources and the evaluation system review, which are the priority tasks set out in the Human Talent Strategy, have been making steady progress. This is, I believe, a strong indication that we are on track for transformation. I am also

aware of issues related to DE&I and how to ensure human rights are respected, for which I am responsible as the Managing Executive Officer (Human Resources). I intend to act to address them.

How do you communicate to your employees about the values and system review set out in the Human Talent Strategy?

We share information about these values and system review via workshops.

In FY2023, we held workshops designed for participants to acquire a deeper understanding of "Group Management Policies 2023" and the Group Human Talent Strategy 2023 and to discuss what they should do to achieve the goals. In FY2024, we organized workshops to advance participants' understanding of the new evaluation and treatment systems, which are based on the views the Human Talent Strategy takes. These workshops were for all employees. We also run

workshops for managers, who play a critical part in our transformation. The workshops are designed to enhance their capabilities to lead their teams.

As we make necessary changes in our systems in rapid succession to move toward transformation, it is vital that we all share values and ensure that employees understand why those new systems are needed. This is why we are proceeding steadily with these activities.

Q

Would you describe what the changes to the systems to facilitate behavioral changes look like?

We revisited the descriptions of the human resources we seek as well as what we evaluate in order to update our evaluation system through the Human Talent Strategy. This new evaluation system specifies "Set a Goal", "Tackle Issues", "Cross Boundaries", and "Implementation" as the four components of the "Ideal Behavior & Action" that the IHI Group encourages its employees to take. Employees set their own goals based on the "Ideal Behavior & Action" to achieve their full potential. Instead of goals imposed from above, employees should have goals that prompt them to use their initiative, while those targets incorporate ideas held by their supervisors and people who work for them. Our employees' individual growth and happiness cannot be defined by their companies. I believe that it is vital for each employee to set goals that come from his or her independent mind and autonomy. Some employees may feel puzzled at the dramatic changes in the goal setting and evaluation approaches they have known. Yet I believe these processes are essential to change their behavior to an approach geared to taking on challenges.

# Q

What is required of the human resources who lead the transformation of the IHI Group?

The people who lead the transformation of the IHI Group should be proactive to achieve their own goals and control their motivation to continue the efforts. That is, they need to exercise leadership of their own actions.

And the people who pursue successful international careers should have expertise that can be useful anywhere around the globe. They should also be up for high-level challenges and practice gaining experience outside the Group. All this is because, given the importance of regional strategies today, they will need to view the whole IHI Group in an international context to identify and resolve issues, rather than viewing the Japanese and international markets as separate settings.

Each of them should show leadership that creates a positive and reciprocal impact, keeping in mind the strengths of the people they work with, in addition to finding and taking advantage of opportunities to leverage their own strengths. It is this leadership that is expected of the people who lead the IHI Group going forward.



What are the qualities that managers are expected to have to play a critical part in

The quality that managers are expected to have to run an organization is the ability to prompt the people who work for them to voluntarily change their behavior through management by objectives and performance appraisal. Therefore, an aptitude for people management is desirable for managerial positions. We plan to assign people to managerial posts based on not only their aptitude, but also their initiative, and provide training designed to improve one-on-one communication skills, coupled with coaching skills for raising people's awareness. As you see, we believe that it is vital to provide a system and environment conducive to exercising the skills needed in their roles.

Q

What is your idea of international talent management in the IHI Group, including an expanded talent pool, and the evaluation and selection processes?

Our talent management will be based on roles in each business location. This is in alignment with our plan to ensure that our offices across the globe will have the same roles and provide the same treatment. We are exploring how we will launch measures based on this idea first in Europe and Asia.

Our talent selection process will first present the position to fill and what it entails, so that people up for the challenge will apply for the job. We will work to ensure that the support each successful applicant will receive in acquiring the skills needed in the position will be consistent across the globe. In Europe, we are exploring the possibility of offering training opportunities based on the IHI Academy for skill acquisition. As for treatment, we intend to introduce a new role-based compensation system. This talent management will hopefully motivate diverse employees to achieve their potential, thereby animating the IHI Group.

Q

Would you give more details about the issues related to DE&I and how to ensure human rights are respected, which you mentioned as you recapitulated the year after the launch of the Human Talent Strategy?

The IHI Group must work to establish environments where people feel safe offering their honest opinions

and asking questions, and to transform its corporate culture into one that ensures human rights are respected.

Problems in our compliance have surfaced, including an improper test in the field of aero engines several years ago, and the recent cases of a suspected violation of antitrust laws and incorrect fuel consumption data. One of the common causes of these cases was that, as I see it, people did not feel safe enough to express their opinions to anyone in the workplace. This most likely has to do with the lack of people's understanding of and sensitivity to DE&I and human rights. I think this is a deep-seated problem in the IHI Group. I am aware that it will take some time to fundamentally solve this problem and that we will have to keep working on it.

Q

Would you talk about the initiatives to change the organizational and corporate culture?

I believe that the limited fluidity of human resources was a cause of the failure to make people feel safe enough to speak up.

The Human Talent Strategy sets out "bold and constant resource shifting in resources" as one of the priority tasks in line with the management resource allocation to the Growth and Development-focus Businesses included in "Group Management Policy 2023". This should facilitate a greater fluidity of human resources, and also lead to transformation of organizational culture.

Shifting resources will then facilitate diversity in the workplace, which prompts employees to have mutual respect for each others' uniqueness, values, and views, while ensuring fairness. That is, DE&I will be of critical importance.

I believe that, in addition to these internal transfers, it is also important for our employees to acquire experience outside their company and bring it into their workplace, and to interact with people working for NPOs, NGOs, or other external organizations to gain knowledge from them.

The IHI Group plans to provide leadership training to 600 employees who pursue successful international careers. We believe that we need about three times as many candidates for leadership roles, and each of them should have experience outside the Group. Some of these candidates are those who have been hired as mid-career employees. Therefore, the training will provide opportunities to experience work outside their regular settings through temporary assignments or transfers, so that they will build networks of people to collaborate with and communicate with people who have different values. All this will lead to gaining experience in generating and applying new ideas.

The President defines the year 2024 as "Year 1 of DE&I". Would you tell us about the initiatives to advance DE&I?

The meaning of Year 1 of DE&I lies in working to make diversity a reality and share its products.

One of the measures to promote DE&I is to facilitate women's career development. We have a greater number of women candidates for managerial positions than before, hire more women job applicants from external companies, and have prepared assistance and made changes to our systems for our female employees in order to facilitate a good balance between their work and life events such as childbirth and parenting. We have also added ESG metrics to our indicators for evaluation of our executive officers to determine their performance-based executive compensation. How the executive officers work to promote DE&I is part of their performance evaluated using the metrics in order to advance women's successful careers.

The Group Human Talent Strategy 2023 is a medium- to long-term strategy for the next three years and beyond. Would you give details about the efforts the IHI Group plans to make until 2025 and how they are connected to the Group's corporate value?

For example, our aero engine business is planning a joint development project in a way that the IHI Group has never experienced before. We need to find human resources capable of leading this type of project on schedule. We will start by hiring essential people from outside the IHI Group, and once they settle in, their knowledge will be harnessed to train the Group's internal human resources. Our plan is to assign 300 people to the aero engine business sector by the end of FY2024. We aim to hire 100 of them from outside the Group. We will bring in people from different business sectors because we also hope that they will achieve success in the IHI Group's growth area to experience what it feels like to accomplish personal development. The same idea applies to the shifting of resources to the Development-focus Businesses, centered on the creation of the fuel ammonia value chain.

We are committed to establishing a competitive advantage by focusing capital and human resources on the Growth and Development-focus Businesses. This will lead us to balance a "Good + Strong" company and "Growth + Happiness" for all individuals. We will continue to pursue our Human Talent Strategy to enhance our competitive advantage and achieve greater corporate value.

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#### Message from the Executive Officer (Finance & Accounting)



#### FY2023 Summary

In fiscal 2023, we recorded losses (losses due to special factors) due to the additional inspection program for PW1100G-JM engines incurred in the Aero Engine, Space & Defense Business Area and a loss related to the settlement of litigation involving a consolidated subsidiary in the Resources, Energy & Environment Business Area. Consequently, we recorded the largest operating loss to date, which significantly impaired our financial base, and we were unable to achieve a performance level that met the expectations of our stakeholders.

Summaries of the main items are as follows.

#### 1 | Business performance

We recorded an operating loss due to the losses resulting from special factors. The financial base has also been adversely affected to a large extent, and we recognize that this recovery should be a top priority.

If we exclude the losses due to special factors, operating profit surpassed 100.0 billion yen, and we are confident that we have steadily strengthened our ability to generate operating profit. Operating cash flows, on the other hand, remained at 62.1 billion yen, and we were unable to generate operating cash flows of over 100.0 billion yen as we upheld in the "Group Management Policies 2023". We will take steps to further strengthen our cash generating capabilities and use this to secure the investment funds to realize transformation.

#### 2 Shareholder returns

In terms of shareholder returns, we distributed the same level of dividends as in fiscal 2022. Although we recorded a net loss for fiscal 2023, we focused on stable shareholder returns because the loss due to special factors was a nonrecurring factor that would not affect our performance from fiscal 2024 onward.

#### 3 Stock price

The stock remained weak throughout fiscal 2023, but In July 2024, the stock price recovered to a level at or above the level before the special factors occurred. However. we regard that there is still a gap between the stock price and the intrinsic value of the Company considering our profitability and growth potential.

#### Early Recovery and Further Reinforcement of the Financial Base

Total equity (consolidated basis) at the end of fiscal 2023 decreased approximately 54.0 billion yen compared the end of fiscal 2022. Although the probability of occurrence is extremely low, we were reminded of how large the impact on business performance would be when a business risk materializes in the civil aero-engines business.

Excluding the losses due to the additional inspection program for PW1100G-JM engines, we have evaluated that we have the ability to generate stable operating profits at the 100.0 billion yen level, and we believe that achieving the operating profit target in fiscal 2025 upheld in the "Group Management Policies 2023" of 127.5 billion yen to be well within reach. We will make an early recovery of the damaged financial base by refining this earning power. Furthermore, we will identify the risks of each business, assess acceptable risks, and work to reinforce our financial base to withstand the occurrence of risks.

The keys to early restoration lie in the expansion of LCB (lifecycle business) and management of business fluctua-

LCB is characterized by the high profitability margin that can be expected compared to new constructions as well as the low risk of business performance fluctuations. The Project Risk Management Division monitors the screening process before orders are received and cost

management and risk assessment after orders are received, from a standpoint independent of the business divisions, to address the risk of fluctuations in business performance related to new and large-scale construction projects. The division has accumulated know-how for controlling the emergence of risks.

We believe that these initiatives will lead to stable generation of profits and will quickly restore the financial base.

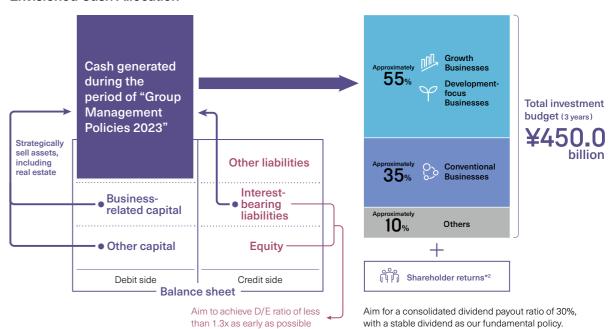
#### Securing Investment Funds to **Realize Transformation**

In our "Group Management Policies 2023", we have set a total investment budget at an unprecedented scale and decided on a policy in which 1) the source of funds for investment will be funded by generating ongoing operating cash flows of 100.0 billion yen or more, and 2) about half of the total investment budget will be allocated to the Growth and Development-focus Businesses

Without the special factors, we recorded 175.0 billion yen as EBITDA (total of operating profit and depreciation) for fiscal 2023, and we give it a certain amount of credit. However, the actual operating cash flows remained at 62.1 billion yen. This means that we are not converting profits to cash efficiently, so our cash generation capabilities must be further strengthened.

From fiscal 2024 and beyond, we expect cash outflows

#### **Envisioned Cash Allocation**



IHI Integrated Report 2024

related to the additional inspection program for PW1100G-JM engines. Therefore, we will consider systematic sales of assets, including real estates, and use of financial leverage within the scope of maintaining financial discipline.

#### Structural Reform of Balance Sheet to Reinforce Cash Generation Capabilities

We believe that the largest factor that is inhibiting the efficient conversion of profits to cash is the growing size of the balance sheet. The balance sheet shows the status of capital investments needed for future growth, and also has the characteristics of a risk buffer and a source of shareholder returns. Therefore, we will aim for a level that suits our medium- to long-term vision and strategy, but we are aware that our current balance sheet is not in an ideal state.

For this, in fiscal 2024, we will review the cash generating structure itself, including business and contractual practices, in addition to strengthening our existing efforts, such as reinforcement of inventory management to prevent excess and backlogged inventory, and obtaining

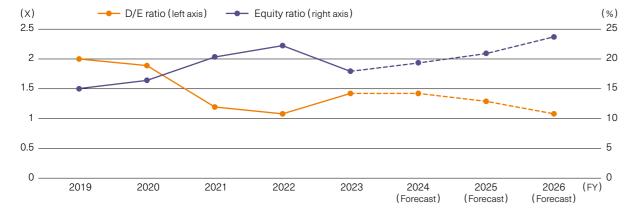
the advances received for construction projects. To conduct a structural reform of the balance sheet, our review will not only be on working capital. We will also consider the ideal state of possessing fixed assets and investment assets in line with the business strategies.

Furthermore, the D/E ratio at the end of fiscal 2023 deteriorated to 1.43x. We maintained our A-rating in the latest ratings (as of November 2023) by the rating agencies. However, we are aware that the ratings are subject to the early restoration of the financial base. Therefore, we will first recover the D/E ratio to below 1.3x, a level that is considered to be needed to maintain the ratings.

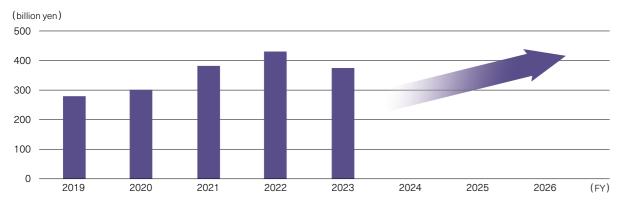
#### Working Toward the Implementation of Management That Is Conscious of Cost of Capital and Stock Price

The share price temporarily declined due to the losses related to the additional inspection program for PW1100G-JM engines. However, it has recovered to a level close to a record high in July 2024, with PBR standing at around 1.8x. We believe this is the result of

#### D/E ratio and Equity ratio



#### Trend of the equity ratio



the market's certain level of recognition of our efforts to strengthen profitability and our strategies to achieve sustainable high growth.

However, we believe our corporate value (market capitalization) considering factors such as our profitability and growth potential to be at least over 1.5 trillion yen (as of July 2024). If the market is convinced and can relate to our strategy for generating stable profits and cash, as well as our growth story for the future, we believe that the gap between the theoretical stock price and the market stock price will be narrowed, and we can aim for a PBR of around 3 times.

We estimate cost of capital (WACC: weighted average cost of capital) to be approximately 4%-6%, and if we can achieve 8% in ROIC, we can secure a sustainable growth and profitability. ROIC is an indicator that we can use to deploy in order to set and manage KPI in accordance with the issues of each division. However, we prioritize the use of operating profit margin as KPI for profitability and CCC (Cash Conversion Cycle) for improving capital turnover rate, and we are working to disseminate these KPIs within the Group. When I actually visit business divisions and affiliated companies and talk to the people there, I feel that there is a growing understanding and awareness of operating profit margins and CCC.

#### Approach to Shareholder Returns

We are continuing to consider the most effective ways of returning profits to our shareholders, depending on the circumstances. We regard that the current dividend policy, "the basic policy in stockholder returns is stable dividends, while aiming for a consolidated dividend payout ratio of more than 30%", would lead to the best shareholder return under the current circumstances and that it would best meet the expectations of our shareholders.

We recorded a net loss for fiscal 2023, therefore we had the option of either reducing dividends or not distributing dividends. However, we were confident that we were right on track in reinforcing our earnings power and that there will be no changes in our growth scenario. Therefore, we prioritized our principle of stable dividends and provided dividends at the same level as fiscal 2022.

For the time being, our priority is to quickly restore our impaired financial base and secure the investment funds to realize transformation, which we believe will lead to increasing the shareholder value over the medium to long term. Therefore, we believe that increasing dividends through increased profits should be the basis of our return policy and that decisions regarding share buybacks, which have a negative impact on equity, should be made after careful considerations.

#### **Achievement of "Group Management** Policies 2023" and Creation of Corporate Value Thereafter

The "Group Management Policies 2023" compiles the strategies that should be implemented in three years to create the Company's long term value. To implement these strategies, I believe that my role as an officer in charge of Group finance and accounting at the moment is to restore the impaired financial base as quickly as possible and to secure the investment funds to realize transformation.

In terms of the medium- to long-term value creation, we will have deep internal discussions on the business portfolio for 20 and 30 years from now, and the financial and capital strategy to support the portfolio. We will communicate the results of these discussions more carefully than ever before. I have explained the way we set KPI in order to achieve ROIC that exceeds the cost of capital, but cost of capital also plays an important role in the discussions on the future business portfolio. In addition to viewpoints such as the extent of the market's potential growth and whether our Company has a technological advantage or whether our growth story meets the market growth, we must closely examine whether we can stably achieve a ROIC that exceeds the cost of capital. It is necessary to make a judgement on whether to accelerate or decelerate business expansion based not only on short term business performance, but also with a medium- to long-term financial perspective.

At the same time, we also place importance on ESG initiatives, such as measures to address climate change, empower diverse human resources, and respect for human rights. We anticipate that it will take ESG initiatives 20 or 30 years for them to be reflected in accounting profits and corporate value. Therefore, when we promote ESG activities, we will incorporate a medium- to long-term viewpoint to consider whether such activities will lead to the sustainable growth of the society and our Group.

We recorded our largest losses in fiscal 2023. However, we will achieve the highest profit ever set in the "Group Management Policies 2023" as a management target during the period without fail. We will also create and implement a financial and capital strategy with the aim of becoming a Company that achieves sustainable high growth while solving social issues 20 or 30 years from now. We also intend to increase opportunities for dialogue with our stakeholders and will work to improve our corporate value while reflecting the opinions we receive in our management.

Message from the the Executive Officer (Finance & Accounting)

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#### **Progress of the Group Management Policies 2023**

#### Overview of the "Group Management Policies 2023"

We aim to achieve the management targets set out in the "Group Management Policies 2023" (FY2023-2025) and the vision of the IHI Group through business transformation to achieve strong sustainable growth and development of capability to realize transformation.

#### • Key points for the "Group Management Policies

In May 2023, the IHI Group announced the three-year medium-term management plan "Group Management Policies 2023" with fiscal 2023 as the first fiscal year.

In the previous Medium-Term Management Policy "Project Change", which was launched as a preparation period for business transformation, we aimed to return to a growth trajectory and drove forward transformation of the business model with focus on the Lifecycle businesses (LCB) and strengthening of our cost structure. At the same time, we started full-fledged efforts in the fuel ammonia value chain business to create a new growth business main pillar equivalent to Aero Engines.

In the "Group Management Policies 2023", we classified the existing businesses into three categories: the Conventional Businesses, the Growth Businesses, and the

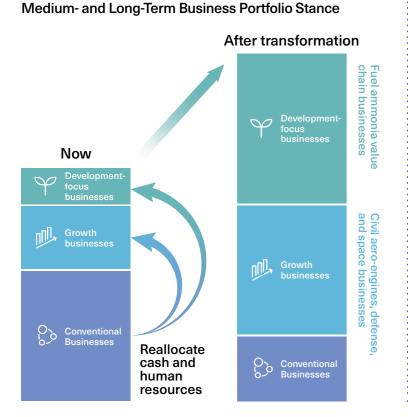
Development-focus Businesses. The two pillars that support our medium- to long-term growth are the civil aero-engine, defense, and space businesses, which are the Growth Businesses, and the fuel ammonia value chain businesses, which form the Development-focus Businesses, and we aim to leap forward to become a sustainable high-growth company by boldly shifting management resources (cash and human resources) to growth areas. In the Conventional Businesses, we will focus on exploitation and evolution of LCB to improve profitability. We will also focus on development and recruitment of the human resources required for business and corporate structure transformation. To achieve business transformation, we will work on improving customer value by pursuing advancement of our digital infrastructure and raising the efficiency of our work processes.

#### • Management Targets and Shareholder Returns

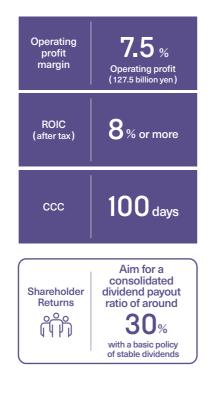
We set out management targets for fiscal 2025 of 7.5% in operating profit margin, 8% or more in return on invested capital (ROIC), and 100 days in cash conversion cycle (CCC), and aim to improve profitability and capital efficiency. The reference value for revenue is 1,700.0

The basic policy in stockholder returns is stable dividends, and we will aim for a consolidated dividend payout ratio of around 30%.

#### **FY2025 Management Targets**



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#### Progress of the "Group Management Policies 2023"

#### Results and Issues

Profits have been favorable in general when the impact of special factors is excluded, but there are issues remaining in our financial structure.

The financial results for fiscal year 2023, which was the first fiscal year of the "Group Management Policies 2023", were favorable in general, posting record actual operating profit when the impact of temporary special factors of the additional inspection program for PW1100G-JM engines and the IHI E&C settlement is excluded. However, the

D/E ratio worsened due to increases in refund liabilities and interest-bearing liabilities in addition to worsening of CCC caused by a rise in inventories and other working capital. While earning capability has been strengthened, we need to work on improvement of financial structure such as streamlining operating cash flows and the balance sheet.

In fiscal 2024, we are expecting to achieve the management target for ROIC (after tax) one year ahead of schedule, and operating profit margin is also likely to remain steady. On the other hand, given the financial structure issues, we aim to improve financial soundness through measures such as strengthening of operating cash flow generation capabilities, reduction of working capital, and sale of assets.

#### **Progress toward Management Targets**

Assumed foreign exchange rate: 130 yen per dollar [] = excluding special factors

	FY2022	FY2023	FY2024 (Forecast)	FY2025 (Targets)
Operating profit margin	6.1%	-5.3% [7.0%]	6.9%	7.5%
ROIC (after tax)	6.3%	-4.9%	8.3%	8% or more
CCC	120 days	107 days [132 days]	129 days	100 days
Revenue	1,352.9 billion yen	1,322.5 billion yen [1,493.2 billion yen]	1,600.0 billion yen	1,700.0 billion yen
Consolidated dividend payout ratio	30.6%		25.3%	30%
Dividends per share	90 yen	100 yen	100 yen	_

#### Progress made by each Business Steadily implemented initiatives to achieve "Group Management Policies 2023"



#### **Development**focus **Businesses**

Fuel ammonia value

While there will be upfront investments for the time being, these are expected to contribute to financial results starting in 2030 Expected to become a business that will be a pillar matching the Growth

Businesses in the medium to long term

• Development of the fuel ammonia value chain businesses is progressing smoothly, such as the world's first demonstration testing of a large-volume fuel ammonia substitution (20% of heating value) at JERA's Hekinan Thermal Power Station

#### Growth **Businesses**

Civil aero-engines, defense, and space

#### Favorable business environment continued as airline passenger demand increased When the impact of special factors is excluded, both actual revenue and operating profit exceeded pre-pandemic levels

- Costs of the additional inspection program for PW1100G-JM have been recorded in a lump sum in
- No change in expected number of aircraft on ground, compensation costs, additional maintenance costs, etc., in the additional inspection program except for the impact of foreign currency fluctuations
- The civil aero-engine business has transitioned onto the growth phase; defense and space businesses as well as civil MRO business have expanded steadily



#### Conventional **Businesses**

Resources, Energy & Environment, Social Infrastructure, Industrial Systems & General-Purpose Machinery

#### Made progress in preparation for resource shifts such as cash generation

- Sales and orders of Lifecycle businesses (LCB) have expanded smoothly (increased 50% compared to fiscal 2019), and we aim to further improve profitability
- We will accelerate transformation of low-profitability businesses into muscular business entities through structural reforms and review of our business portfolio

IHI Integrated Report 2024 Progress of the Group Management Policies 2023

#### Resource Allocation

# Enhance earning power and make investments for achieving strong sustainable growth

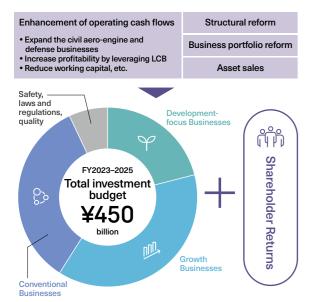
In the "Group Management Policies 2023", we had planned to continuously generate operating cash flows worth 100.0 billion yen or more and invest about half of the total investment budget of 500.0 billion yen in Growth and Development-focus Businesses. However, we decided to revise the total investment budget to 450.0 billion yen to strengthen our financial structure. We will make investments in a well-modulated manner by determining the priority, profitability, and implementation timing of individual investment projects.

#### **Balance Sheet Reform**

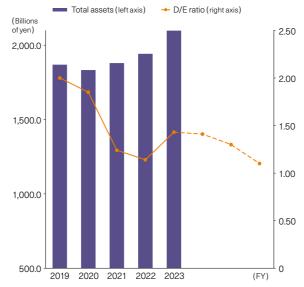
#### Improving D/E Ratio

Our D/E ratio improved from 2.0 times in fiscal 2019 to 1.1 times in fiscal 2022 as profitability rose. However, the ratio rose to 1.43 times in fiscal 2023, as we posted an operating loss and refund liabilities and interest-bearing liabilities increased. We will aim for a D/E ratio of around 1.1 times, the same as in fiscal 2022, by strengthening financial structure through improvement of profitability and asset sales.

#### Resource Allocation Strategy



#### Changes in Total Assets and D/E Ratio

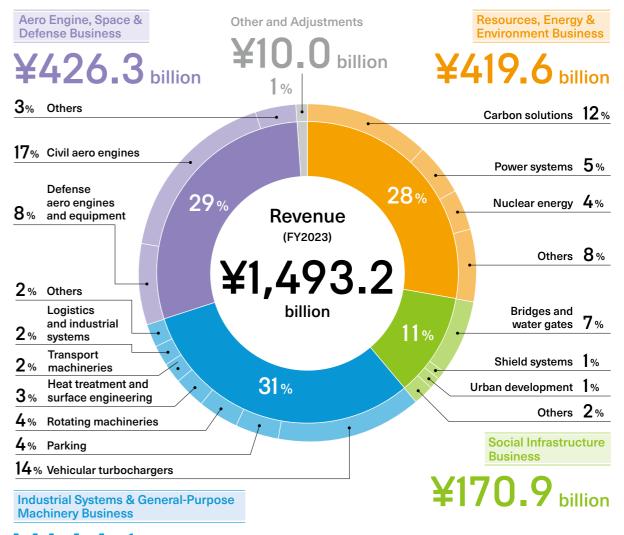


#### Performance by Business Area

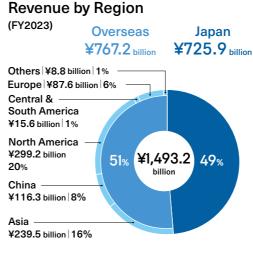
(Billion yen)

	Revenue	e, Operat	ing Profi	t, Operat	ing Profit	Margin						
	FY2022 (result)		FY2023 (result)		FY2024 (Forecast)							
	Revenue	Operating profit	Operating profit margin	Revenue	Operating profit	Operating profit margin	Revenue	Operating profit	Operating profit margin	Revenue	Operating profit	Operating profit margin
Resources, Energy & Environment	371.3	26.2	7.1%	419.6	32.4	7.7%	420.0	28.0	6.7%	430.0	31.0	7.2%
Social Infrastructure	171.0	17.0	9.9 %	170.9	15.0	8.8%	170.0	21.0	12.4%	210.0	18.0	8.6%
Industrial Systems & General-Purpose Machinery	436.5	18.0	4.1%	466.1	12.7	2.7%	470.0	22.0	4.7%	530.0	40.0	7.5%
Aero Engine, Space & Defense	364.1	36.1	9.9%	426.3	56.8	13.3%	540.0	66.0	12.2%	520.0	60.0	11.5%
Other	54.2	1.3		56.0	4.4		50.0	1.0		50.0	3.0	_
Adjustments	(44.4)	(16.8)	_	(46.0)	(17.2)		(50.0)	(28.0)	_	(40.0)	(24.5)	_
Total	1,352.9	81.9	6.1%	1,493.2	104.2	7.0%	1,600.0	110.0	6.9%	1,700.0	127.5	7.5%
FX rates		\$1 = 134	4.32 yen		\$1 = 145	5.27 yen		\$1 = 140	0.00 yen		\$1 = 130	0.00 yen

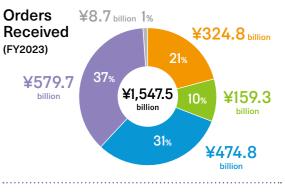
#### Business Overview (Except for Special Factors)

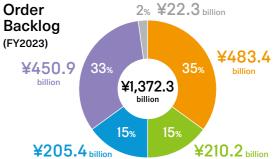






\*Note: Sum of percentages for all segments may not total 100%, as figures are rounded to the nearest 100 million yen.





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#### **Main Businesses**

#### Conventional Businesses

- ► Carbon solutions (power plants, process plants)
- Power systems
- (power systems plants for land use, reciprocating engines, gas turbines)
- ► Nuclear energy (components for nuclear power plants)

#### **Development-focus Businesses**

- Carbon solutions
- (utilization of ammonia, carbon recycling, methanation, etc.) ► Power systems (ammonia-fired engines, electrification of ships, etc.)

#### Value Creation and Sources of Strengths

The IHI Group has an extensive track record both in and outside Japan, such as an approximately 40% share of the domestic market for ultra-supercritical pressure coal-fired boilers. The Group also has differentiated technologies related to carbon solutions, such as ammonia utilization, that put us ahead of others. To realize an earth-friendly carbon neutral future, we will create value that contributes to decarbonization in each of the electric power, industry, and transportation markets.

#### FY2023 Business Results

Orders received except for special factors amounted to 324.8 billion yen, decreasing 17.4% year on year due to the absence of large projects. Revenue increased 13.0% year-on-year to 419.6 billion yen, driven by the carbon solution business. Operating profit reached a record high at 32.4 billion yen (operating profit margin 7.7%), increasing 23.4% year on year, as a result of the expansion of LCB and reinforcement of the cost structure. The operating profit for FY2024 is expected to decrease due to the revenue decrease in LCB.

#### Progress of "Group Management Policies 2023"

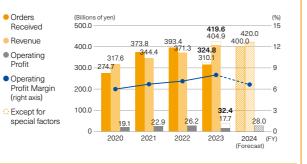
The operating margin of 7.2%, which is set as the profit target, was achieved two years ahead of schedule. Operating cash flow achieved the plan by strengthening the LCB. However, excepting for special factors, the plan was not achieved due to factors such as an increase in procurement costs. Improvement of cash generation capability is needed. In addition, we are accelerating discussions on business strategies to transform our business portfolio, and we are developing and utilizing human resources to adapt to changes in the business environment, such as reskilling and resource shifting. In the future, we need to further specify our focus points for business portfolio transformation.

#### Major Product Sales Revenue Composition FY2023

- Power systems
- Carbon solutions ¥171.8 billion
- ¥56.8 billion ¥115.0 billion
- ¥419.6

28%

#### Orders Received, Revenue, Operating Profit, **Operating Profit Margin**



#### Strengths, Business Opportunities, and Risks

- Strong capabilities in the engineering of large-scale structures. A rich track record in the energy industry both in and outside Japan
- Social implementation results of carbon neutral technologies such as ammonia utilization and methanation

#### Opportunities

- Expanding energy demand and rise of fuel conversion needs for power generation in emerging countries
- Increase in capital investments for clean electric power and eco-materials related to the demands of society
- ▶ Increase in demand for distributed power sources
- Increase in capital investments related to ammonia and hydrogen to realize a decarbonized society

- ► Shrinking of the thermal power generation business due to accelerating decarbonization
- Intensification of competition in emerging countries

#### \*Note: Sum of percentages for all segments may not total 100%, as figures are rounded to the nearest 100 million yen.

#### **Business Overview**

#### **Social Infrastructure Business**

Through business structural reforms we will enhance corporate value and rebuild a structure in which the strengths of the IHI Group can be maximized. At the same time, we will strengthen our order-winning capabilities, which are the source of cash and earnings. Furthermore, we will approach clients for appropriate price shifting and improved contract terms and conditions.

#### Main Businesses

- ► Bridges/water gates
- Shield systems
- ► Urban development (real estate sales and rental)

Value Creation and Sources of Strengths

For bridges, we boast a high market share in Japan, lever-

aging our engineering and construction capabilities in all

phases from design through construction to maintenance.

top market share in Japan for watergates, transportation

infrastructure through these businesses.

FY2023 Business Results

We also have considerable experience in the construction of

long-span bridges overseas. In addition, we have secured the

systems, shield systems and concrete construction materials. We will contribute to the building of safe, secure, and resilient

Orders received increased 19% year on year to 159.3 billion

yen, mainly for bridges/water gates, and the revenue amounted

to 170.9 billion yen, on par with the previous fiscal year. Despite

the expansion in the LCB, the operating profit decreased 12%

from the previous fiscal year to 15.0 billion ven (operating margin

8.8%), due to deterioration in the business environment, such

as price hikes, delays in cost reductions, and other factors. For

FY2024, we expect the operating profit to increase by 40% year

Progress of "Group Management Policies 2023"

Although we achieved the profit target, an operating margin of

receiving payments. Meanwhile, LCB is achieving steady results

8.6%, two years ahead of schedule, the operating cash flows

failed to meet the plan due to factors such as an increase in

for comprehensive customer support in inspection, diagnos-

tics, and management utilizing DX as well as in labor saving.

large-scale projects, rising materials costs, and delays in

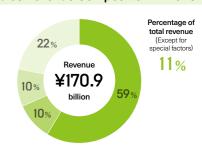
on year, as a result of revenue improvement and others.

- ► Transport systems
- ► Concrete construction materials

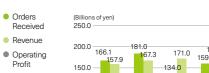
#### Major Product Sales Revenue Composition FY2023



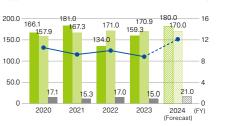
- Shield systems ¥16.5 billion
- Urban development ¥16.6 billion
- ¥37.3 billion



#### Orders Received, Revenue, Operating Profit, **Operating Profit Margin**



Operating Operating Profit Margin (right axis)



#### Strengths, Business Opportunities, and Risks

- ► Diverse technical knowledge and the ability to deploy businesses in a wide variety of businesses
- ► Comprehensive engineering capability from construction to repair of long-span bridges
- ► Abundant track record and high market share of each business

- ► Strong demand for new bridges in developing countries ▶ Increase in demand for renewal and maintenance of infrastructure
- facilities (LCB) in Japan, semi-developed countries and developed
- ▶ Increase in demand for pre-disaster prevention measures that incorporate hardware and software approach based on the river basin flood control project
- ► Measures to mitigate intensifying natural disasters based on the "Five-Year Acceleration Plan for Disaster Prevention, Disaster Mitigation, and Building National Resilience"

- ► Decrease in public investment projects in Japan
- ► Decrease in local installation engineers, and labor shortages
- ▶ Decrease in competitiveness due to slow response to changes in the business environment

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VALUE CREATION STORY

<sup>\*</sup>Note: The numbers in the pie chart are rounded to the nearest whole number for each item, so the breakdown totals may not equal 100%.

<sup>\*</sup>Note: Sum of percentages for all segments may not total 100%, as figures are rounded to the nearest 100 million yen.

<sup>\*</sup>Note: The numbers in the pie chart are rounded to the nearest whole number for each item, so the breakdown totals may not equal 100%

We aim to maximize cash by promoting activities to have customers recognize the value of the IHI Group and to expand LCB by strengthening collaboration across product and business areas. To this end, we aim to create a strong organization in which a diverse range of human resources can play an active role, and we will conduct business operations that enable employees to experience growth and fulfillment.



#### Main Businesses

- Vehicular turbochargers
- Parking
- ► Rotating machineries
- (compressors/separation systems/turbochargers for ships)
- ► Heat treatment and surface engineering
- Logistics and industrial systems (logistics systems/industrial machines)
- ► Transport machineries

#### Value Creation and Sources of Strengths

The Industrial Systems & General-Purpose Machinery business area holds the third largest share of the global market for vehicular turbochargers (No. 1 in Japan), the No. 1 share of the global market for cryogenic (ultra-low temperature) LNG BOG reciprocating compressors and surface treatment equipment, and the No. 1 share of the domestic market for mechanical parking systems, jib climbing cranes, and vacuum processing furnaces. The IHI Group provides solutions for industrial decarbonization, reduction of environmental impact, automation, labor saving, etc., through its unique and differentiated technologies cultivated over many years.

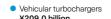
#### FY2023 Business Results and FY2024 Forecast

Orders received increased 4.1% year on year to 474.8 billion yen, mainly due to vehicular turbochargers. Similarly, revenue increased 6.8% year on year to 466.1 billion yen. Operating income decreased 29.2% to 12.7 billion yen (operating margin of 2.7%) due to the impact of cost increases in labor and energy, as well as the recording of structural reform expenses for the vehicular turbochargers SBU, despite progress in efforts to improve selling prices. In fiscal 2024, we expect operating income to increase by 73.2% year on year due to further efforts to improve selling prices and further expansion of LCB.

#### Progress of "Group Management Policies 2023"

The operating profit margin fell short of the plan due to the recording of restructuring costs and other factors. In addition, cash generation capability was lower than planned due to deteriorating profitability, despite progress in working capital reduction through efforts such as acquisition of advances and visualization of inventories and collaboration among production bases in the vehicular turbochargers SBU. As for LCB, LCB sales revenue increased in all SBUs as progress was made in integrating service bases and building a foundation to promote the use of digital technology. We are also working to improve employee engagement by maximizing the effectiveness of our own training and dialogue activities to promote well-being.

#### Major Product Sales Revenue Composition FY2023

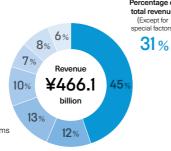


- Parking¥54.6 billion
- Rotating machineries
   ¥60.9 billion
- Heat treatment and surface engineering ¥48.3 billion
   Transport machineries
- ¥30.4 billion

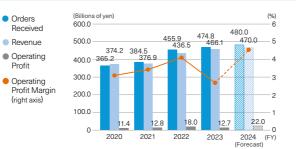
  Logistics and industrial systems
- ¥35.5 billion

  Others

  ¥27.4 billion



# Orders Received, Revenue, Operating Profit, Operating Profit Margin



#### Strengths, Business Opportunities, and Risks

#### rengths

- ► Extensive track record of deliveries to a wide variety of customers in the industry
- Manufacturing system and service network that can respond to the global requirements
- ▶ Technological capabilities for hardware that are environmentally friendly
- Capability to provide solutions to decarbonization, heat usage, automation, labor saving and other issues
- ➤ Capability to propose solutions and create value that go beyond the existing businesses/products and encompass the entire process value chain

#### Opportunities

- Expansion of global need for decarbonization, automation, and labor saving
- ► Room for expansion through business development across SBUs
- ► Growth of gas-related capital investments such as ammonia and hydrogen

#### Ris

- ▶ Shift to EVs in the automobile industry
- ► Changes in international supply chains due to rising geopolitical tensions
- Changes in the competitive environment associated with the promotion of digital transformation and spread of Al

#### \*Note: Sum of percentages for all segments may not total 100%, as figures are rounded to the nearest 100 million yen.

#### **Business Overview**

# Aero Engine, Space & Defense Business

We aim to achieve sustainable growth in all businesses, including civil aero-engines, defense, and space, in response to increasing demand for aircraft passengers, the Japanese government policy of "Fundamental Reinforcement of Defense Capabilities", and the expanding market for the space industry.

# Source: GE

#### Main Businesses

- ► Aero engines (civil and defense)
- ▶ Rocket systems and space utilization systems
- ► Defense systems

#### Major Product Sales Revenue Composition FY2023

- Defense aero engines and equipment ¥125.4billion
- Civil aero-engines
   ¥253.0 billion
- Others ¥47.8 billion



Percentage of otal revenue (Except for special factors)

#### Value Creation and Sources of Strengths

We will leverage our core technology in "Propulsion" to open new vistas for air transportation, defense systems, and space utilization and help bring forth a safe and affluent society. In addition to strengthening the lifecycle businesses and the supply chain of casting and forging products, which is one of the strengths of Japan, we will develop technologies such as electrification and hydrogen propulsion with a view to carbon neutrality and make new contributions to the defense and space fields.

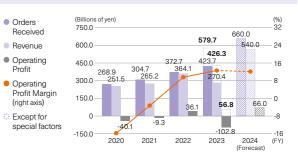
#### FY2023 Business Results and FY2024 Forecast

Orders received except for special factors amounted to 579.7 billion yen, a year on year 55.5% increase as a result of a rapid increase of the defense business to 268.4 billion yen, increasing 132.2% compared to the previous fiscal year. The defense business also drove revenue, which amounted to 426.3 billion, increasing 17.1% year on year. Operating profit amounted to 56.8 billion yen (operating profit margin 13.3%), increasing 57.3% year on year. This was a result of the increased sales of spare parts, depreciation in the yen, cost reductions, and other factors. Operating profit is expected to increase by 16.2% year on year in FY2024.

#### Progress of "Group Management Policies 2023"

Revenue and operating profit exceeded the pre-COVID-19 level (excluding impact of PW1100G-JM powder metallurgy issue). While continuing to reduce costs, particularly for the PW1100G-JM engine, which continues to observe increased production, we will further strengthen our working capital management. We will expand our business with awareness of the entire life cycle and value chain to realize environmentally friendly and economically efficient aircrafts, including weight reduction and electrification of engines, equipment, and airframe; development of Sustainable Aviation Fuel (SAF); satellite launch services using rockets; and usage of space, offshore, and land data obtained from satellites.

# Orders Received, Revenue, Operating Profit, Operating Profit Margin



#### Strengths, Business Opportunities, and Risks

#### Strengths

- ► Participation in the businesses for development and mass production of best-selling engines for civil aircraft from small to large and ultralarge classes
- ▶ Dual use of products and services for defense and civil purposes and business development through mutual use of knowledge
- ► Launch capabilities of rockets and satellites and various data collection technologies in the space field

#### Opportunities

- ► Growth in demand for new engines and aftermarket products that accompany growth in demand for global aircraft
- Expansion of defense budget
- Increase in demand for rockets and launches that accompany the growing demand for small-sized satellite launches

#### KISKS

- Supply chain disruptions and rising prices of casting and forging products
- Sudden decline in air transportation demand owing to global recession, infectious diseases, etc.
- ▶ Information leakage risks owing to cyberattacks

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VALUE CREATION STORY

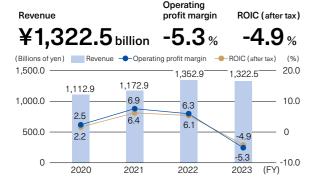
<sup>\*</sup>Note: The numbers in the pie chart are rounded to the nearest whole number for each item, so the breakdown totals may not equal 100%.

<sup>\*</sup>Note: Sum of percentages for all segments may not total 100%, as figures are rounded to the nearest 100 million yen.

<sup>\*</sup>Note: The numbers in the pie chart are rounded to the nearest whole number for each item, so the breakdown totals may not equal 100%

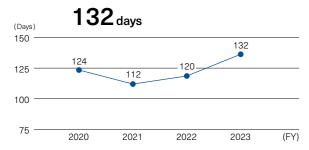
#### Financial/Sustainability Highlights

# Financial Revenue, Operating Profit Margin, and ROIC (After Tax)



Fiscal 2023 revenue was 1,322.5 billion yen, a decrease of 2.2% year on year. However, the actual revenue excluding special factors of 170.6 billion year amounted to 1,493.2 billion yen, increasing by 10.4% year on year. Operating loss of 70.1 billion yen was recorded impacted by special factors of 174.3 billion yen. However, actual operating profit was the highest ever at 104.2 billion yen, an increase of 27.2% year on year. The operating profit margin was -5.3% and ROIC was -4.9%. However, the actual operating margin improved by 0.9 pt to 7.0%.

#### Financial Cash Conversion Cycle (CCC)



The CCC target for fiscal 2025, which is the last year of the "Group Management Policies 2023", is 100 days. The CCC for fiscal 2023 was 107 days, improving by 13 days year on year. However, the actual CCC, except for special factors mainly due to the impact of PW1100G-JM engines, was 132 days, decreasing by 12 days year on year. The CCC for fiscal 2024 is expected to be 129 days, through the strengthening of working capital management and reduction, particularly in inventories.

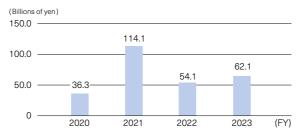
#### Sustainability GHG Emissions



In April 2023, we endorsed the GX League initiative established by Japan's Ministry of Economy, Trade and Industry. We are strengthening our efforts to achieve carbon neutrality in 2050 by reducing GHG emissions (Scopes 1 and 2) from plants and business facilities by half in 2030 compared to fiscal 2019. GHG emissions intensity in fiscal 2023 was 16.0 t-CO2e/100 million yen\*, decreasing by 12.6% compared to the fiscal 2019 result of 18.3 t-CO2e/100 million yen. We will continue to steadily implement reduction activities to achieve carbon neutrality. \*Without special factors: 14.2 t-CO2e/100 million yen

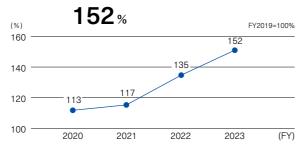
#### Financial Operating/Investment Cash Flows

#### ¥62.1 billion



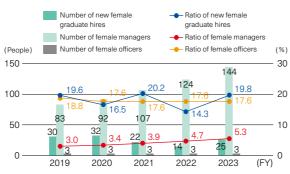
Cash flows from operating activities were in excess of 62.1 billion yen, increasing 8.0 billion yen compared to the previous fiscal year. EBITDA except for special factors reached 175.0 billion yen, increasing 23.9 billion yen year on year. Earning power has been reinforced, but there was an increase in the burden of working capital such as trade receivables and inventories. Cash flows from investing activities decreased 0.6 billion yen to 51.6 billion yen. In addition to expenditures for purchase of property, plant and equipment, and intangible assets of 60.9 billion yen, there were proceeds from a sale of assets of 12.1 billion yen.

# Financial Life Cycle Businesses (LCB) Revenue Index



In fiscal 2023, LCB revenue excluding the Aero Engine, Space & Defense Business Area, steadily increased 52% compared to fiscal 2019, the year we started to strengthen LCB in the previous medium-term management plan, "Project Change". In fiscal 2023, we instituted a full-scale shift of our human resources and cash flows from the Conventional Businesses to Growth and Development-focus Businesses. While building the optimal portfolio in the Conventional Businesses, we will aim for a continuous growth through exploitation and evolution of the Lifecycle businesses unique to IHI.

#### Sustainability Active Participation of Women



We strive to promote DE&I as part of our management strategy to create innovations to resolve social issues and realize our "Group Management Policies 2023" and Goal. In fiscal 2023, there were three female officers that remained unchanged in the past five years. However, the number of female managers increased by 61 in the past five years to 144, and the ratio of female managers has increased to 5.3%. In fiscal 2023, 25 female graduates were newly hired (ratio of new female graduate hires: 19.8%), of which 16 are technology-related staff.

# BUSINESS STORY OSS Conventional Businesses Growth Businesses Development-focus Businesses Medium- and Long-Term Business Portfolio Stance



# **Conventional Businesses**

We position the three business fields of Resources, Energy & Environment, Social Infrastructure, and Industrial Systems & General-Purpose Machinery as the businesses that form the core of the IHI Group.

They play the role of generating management resources (cash and human resources) to be invested in the Growth and Developmentfocus Businesses through exploitation and evolution of Lifecycle businesses (LCB) and structural reforms.

#### Value to Be Created

Resources, Energy & Environment, Social Infrastructure, and Industrial Systems & General-Purpose Machinery Businesses will create value through the lifecycle of machines and equipment owned by customers (e.g. failure prediction and extension of product life span). We will get into the lifecycle of customer businesses even further and feedback the insights we gain to the customers so as to offer more advanced products and services to them. The Conventional Businesses account for about 79% of the consolidated revenue in fiscal 2023 and about 58% of operating profit excluding special factors.

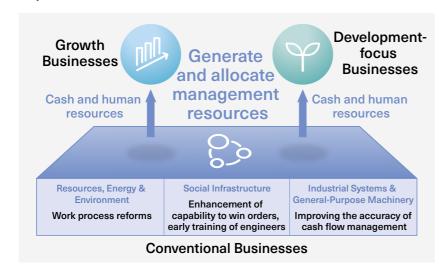
Roles in the "Group **Management Policies** 2023"

The expected roles of the Conventional Businesses are not only to make profits and earn cash to achieve management targets, but also to generate management resources, such as cash and human resources to be allotted to the Growth Businesses and Development-focus Businesses.

#### Strategies for Realization

The Conventional Businesses have been driving forward improvement of business efficiency through reduction of working capital, work process reform, and utilization of digital infrastructure so that they can maximize their operating cash flows. Resources, Energy & Environment has embarked on reforms of work processes to transform itself from the existing businesses into a Lifecycle business. Social Infrastructure is driving forward early training of engineers, enhancing the capability to win orders. Industrial Systems & General-Purpose Machinery is implementing measures including to improve the accuracy of cash flow management. We are working on expansion of the Lifecycle businesses in each field and aiming for sustainable growth.

#### Capital Flow Centered on the Conventional Businesses



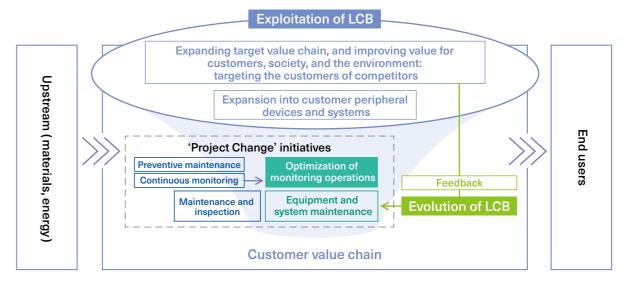
#### Value Created by Lifecycle Businesses (LCB)

We will accelerate achievement of strong sustainable growth and transformation into a company that can quickly adapt to disruptive environmental changes by transforming the existing business model centered on products and services into a LCB, which offers value throughout the lifecycle of customer businesses.

#### **Growth Strategy of LCB**

Resources, Energy & Environment is pursuing LCB-centered work process reform and organizational restructuring, leveraging DX as well as the expansion of the scope of its business, including introduction of LCB in boilers supplied by other companies and nuclear energy projects. In Social Infrastructure, we aim to expand into the infrastructure management business leveraging various DX tools. We will be carrying out bridge maintenance and management operations utilizing the IHI Group's proprietary bridge management support system (BMSS), consulting business including proposals for extending infrastructure life spans, and water gate inspection leveraging the GBRAIN water gate inspection support system and smartphones. Industrial Systems & General-Purpose Machinery boasts a large number of products, diverse human resources and technologies, and customer networks. Leveraging these strengths, we will expand LCB by working on the creation of new value that goes beyond the framework of products and SBU, not constrained by conventional boundaries and adopting the perspective of customers and markets.

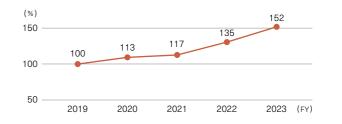
#### Growth Strategy Centered on Exploitation and Evolution of LCB



#### Trends in LCB's Performance

We started focusing on LCB from fiscal 2019, when the Medium-Term Management Policies "Project Change" was launched. Each business has been strengthening efforts for business expansion and development of mechanisms with LCB in their mind, which has been steadily bearing fruits. In fiscal 2023, net sales of LCB expanded 52% compared to fiscal 2019.

#### Change in LCB Revenue Index



059 060 IHI Integrated Report 2024 Conventional Businesses

# **Growth Businesses**

Aero Engines and Space has been positioned as a business field that will drive the IHI Group's growth.

The civil aero-engines, defense, and space businesses account for about 29% of the consolidated revenue in fiscal 2023 and about 55% of operating profit (excluding special factors). With the IHI Group's core technology "Propulsion" as a base, we will aim to achieve sustainable growth through maximization of synergy effects in each of the civil aero-engines, defense, and space segments and by creating new businesses.

#### Value to Be Created

Through the civil aero-engine business, we will contribute to the development of a safe, secure, and carbon-neutral air transportation system. In the defense business, we will support the development of Japan's security and related industries that are drastically strengthened strengthen by the country's defense capabilities. In the space business, we will contribute to the creation of new businesses such as satellite launches and forest management that utilizes satellite data.

#### Roles in the "Group Management Policies 2023"

In parallel with the expansion of the civil aero-engine and defense businesses, we will also work on bolstering operating cash flows. We will expand and strengthen the existing businesses centered on the aero-engine business so that they become pillars underpinning the medium- to long-term growth of the IHI Group. Simultaneously, we will continue planting the seeds for new business field creation looking beyond the "Group Management Policies 2023" and play a role in making the IHI Group leap to a sustainable high-growth company.

# Strategies for Realization

In the civil aero-engine business, we aim for stable growth in the highly profitable spare parts business given the steady expansion in airline passenger demand. Concurrently, we will expand our performance through a profit cycle starting from development and mass production to aftermarket services of the next best-seller engine. We will drastically reform production efficiency and business structure in order to achieve world-leading production efficiency and profitability. In the defense business, we expect to see expanded revenues in accordance with the Defense Buildup Program and improvement in operating profit margin following system reforms. The space business' strength lies in solid propellant rocket technology, and we will create new businesses leveraging it that will be growth drivers in the long term.

# Medium- to Long-term Future Aspirations

Revenue for the defense business is expected to be around 250.0 billion yen in fiscal 2030 (forecast for fiscal 2024 is 150.0 billion yen). The revenue target for the civil aero-engine, defense, and space businesses as a whole for around fiscal 2030 is about 800.0 billion yen (forecast for fiscal 2024 is 540.0 billion yen), and about one trillion yen around 2040, with an operating profit margin of 15% or more.

#### Forecast for Civil Aero-Engine, Defense, and Space Businesses Around 2030 ► Revenue of 800.0 billion yen, operating profit margin of about 15% FY2040 ► Revenue of 1 trillion yen, operating profit margin of 15% or more Promote as a long-term growth driver Further business expansion Space ¥250.0 can be expected through defense equipment transfer Defense Further growth from expansion in defense Promote technological Civil Aero development of electrification business engines and hydrogen propulsion for Continuous expansion as business foundation achieving carbon neutrality FY2023 FY2030 FY2040

#### Officer Interview

Driven by the expansion in the commercial aircraft market demand and the government defense budget, we will aim to realize revenue of 1 trillion yen and an operating profit margin of 15% or above by fiscal 2040 by improving cash generating ability through implementation of bold business reforms

#### Atsushi Sato

Managing Executive Officer
President of the Aero Engine,
Space & Defense Business Area



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# What are the IHI Group's strengths in Aero Engines and Space?

Our defense aero-engine business boasts the best technological capabilities and track record in Japan. A major strength of the IHI Group globally is its business base. This base can handle everything from engine design and development, production including formed and fabricated materials, MRO, to operational support. Its extensive track record and technical capabilities are highly respected, leading to the Group's participation in international civil aero engine development projects. While we do not have experience as a prime manufacturer of civil aero engines, we are involved in the development and manufacture of many aircraft engines currently operating around the world.

The next-generation fighter aircraft (same as GCAP), which will succeed the F-2 fighter, will be developed jointly by Japan, the U.K., and Italy. In

terms of our track record in fighter engine research and development, we have succeeded in the development of a prototype of the XF9-1 boasting 15-ton thrust (equivalent to that of the F-22 jet fighter's engine) in 2018. However, this is the first time for Japan that such a large-scale national project is being carried out via international joint development. We have been actively pursuing a human capital shift within the company and mid-career recruitment externally. Diverse human resources playing active roles are likely to boost our strengths and accelerate our growth.

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# What kinds of business opportunities do you expect?

We think we can significantly expand the scale of the defense business in the next five years. In December 2022, the Cabinet approved three strategic documents (National Security Strategy, National Defense

Growth Businesses 06

Strategy, and Defense Buildup Program), which considerably increased the required expenditure to about 43 trillion yen for the following five years (from FY2023 to 2027) compared with approx. 27.5 trillion ven in the last five years. There are some fields where the IHI Group can contribute by leveraging its strengths among the seven key capabilities for fundamental reinforcement of defense capabilities. Specifically, these include stand-off defense capabilities for launching missiles from outside the reach of radars and missiles of other countries (budget up from 200.0 billion yen to 5 trillion yen), integrated air and missile defense capabilities (budget up from 1 trillion ven to 3 trillion yen), and unmanned defense capabilities such as unmanned underwater vehicles (budget up from 100.0 billion yen to 1 trillion yen). We are expecting the revenue of the defense business to take a leap towards fiscal 2030 by expanding the IHI Group's contribution to the national security policy.

As for the space business, the Japanese government, in the Basic Plan on Space Policy announced in 2023, aims to double the market size of the country's space industry to 8 trillion yen by the early 2030s. The IHI Group aims to commercialize satellite launch service utilizing the Epsilon rocket, etc. In addition to expansion of services which use satellite data, we are also considering making contributions to national security as well as various other fields by offering more stable and high value-added satellite data through the development of a satellite data provisioning platform that operates multiple satellites in an integrated manner.

The civil aero-engines business will start shipment

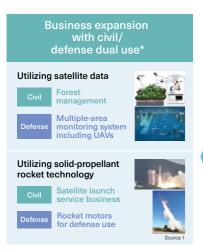
of GE9X engines for Boeing 777X this year. The next generation of GEnx engines for Boeing 787 as well as next-gen PW1100G-JM engines for Airbus A320 are expected to be launched In the mid-2030s. IHI's presence is expected to grow in the future in aircraft electrification, as the Group steadily advances development of an electric motor that can be mounted in the rear of an aircraft jet engine. Towards 2050, we expect commercialization of engines of the future that will have achieved carbon neutrality. Various architectures such as hydrogen engines, electrification, utilization of SAF, and hybrid engines are being considered for this purpose. We will strengthen technology development in collaboration with the government.

# What is the business model and how does it work?

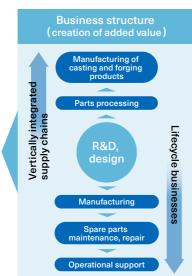
The burden of development is heavy in the profit model for civil aero engines, and losses will continue for about 10 years after the start of mass production. After about five years from delivery, spare parts sales and maintenance revenue will begin rising, and single-year cash flows become positive in about 15 years. While the profit model itself is presumed to remain the same in the future, we are witnessing shortened development time and reduction in backtracking of development due to advancements in tools and improvements in processes in design and development. The source of profits is spare parts, so we would like to create a mechanism for improving added value of maintenance, repair, and

# Business Expansion through Synergies of Technology and

Experience in Civil and Defense Applications; Creation of New Businesses



\* Dual use: Products and services that can be utilized for both civil and defense purposes Source 1 Air Self-Defense Force website





Source 2 Ministry of Defense website https://www.mod.go.jp/en/article/2022/12/9f3717bac3e9bca986f2 80ba73f7822065a9f2b.html overhaul (MRO) and for expanding profits. While it is not well known, there are third-party maintenance companies and parts suppliers overseas. In order to maximize earnings, it is extremely important to conclude comprehensive, long-term contracts with airline companies who are our customers.

As for the defense business, so far we had been expecting stable earnings, but some companies have withdrawn from the defense business in recent years, and the government is also aware of the issues. For that reason, the government revised the system to set the maximum value of operating profit margin at 10%, with a provision to add a further 5% corresponding to the contract period. As for the space business, it depends on the project, and it is difficult to provide an answer at this point in time.

# What are the measures to reinforce the mechanism for earning cash?

This business requires a large amount of working capital, so we recognize generation of operating cash flows as an issue. We established a transformation center in 2023 where we have been decisively carrying out radical productivity and business structure reforms in design, production, and procurement by taking advantage of our proprietary digital technology, against the backdrop of a sense of crisis stemming from the gap in productivity and profitability between us and foreign companies. We are promoting yield improvement involving significant quality improvement and reduction of inventory asset including work-in-progress inventory. Sales efforts play a large part in collection of trade receivables, but we are trying all possible means such as obtaining advances in defense projects. We are now in an inflationary environment, so we have been making efforts to incorporate various risks in the contract details to avoid the risks of soaring material prices and procurement after signing a contract.

#### What is the current status of the PW1100G-JM issue?

I very much regret that we could not detect the contamination beforehand in the powder metallurgy issue of PW1100G-JM. The engine was developed and is being manufactured in an international joint program by International Aero Engines LLC (IAE) established by Pratt & Whitney (P&W) of the U.S., Japanese Aero Engines Corporation (JAEC), and MTU Aero Engine AG of Germany. We have been in discussions with P&W and IAE regarding the issue on a daily basis to understand the situation, and discussing countermeasures. The expenses being shouldered by us have been within the scope we

had published earlier. The risk and revenue sharing partner (RRSP) method is the mainstream contract method for civil aero engines. It is difficult for a prime engine manufacturer to shoulder all the risks, and there remained challenges in information sharing, etc., with overseas parts manufacturers, which were beyond our reach. We will start supplying the new GE9X engine for Boeing 777X this year, and we have taken preventive measures based on our experience in this incident.

# How do you set medium- to long-term numerical targets?

As medium-term targets, we aim for 800.0 billion yen in revenue around 2030 (revenue forecast for fiscal 2024 is 540.0 billion yen) and about 15% in operating profit margin. The breakdown is: 250.0 billion yen (revenue forecast for fiscal 2024 is 150.0 billion yen) in revenue in the defense business, given the expansion in the defense budget. Additionally, revenue in the civil aero-engine business is steadily expanding, and combined with other businesses, it is expected to be about 550.0 billion yen (revenue forecast for fiscal 2024 is 390.0 billion yen), led by PW1100G-JM engines on the assumption that the commercial aircraft market will grow at a rate of 3 to 4%.

In the long term, we set a revenue target of 1 trillion yen and operating profit margin of 15% or more around 2040. We can predict our performance through around 2030 to a certain extent, but various architectures can be considered for civil aircraft engines from 2035 onwards. While profitability changes depend on the investment burden and the participation rate, the key would be improving the capability to generate cash and transforming the way we earn through MRO.

To achieve our numerical targets, we need to add 800 employees (including more than 200 from in-house resource shifting) in the three years from fiscal 2024. At the same time, we will improve business efficiency through utilization of DX and outsourcing. While the government will shoulder the capital investment for the defense business, we are planning to make additional investment for expansion of the plant block of Tsurugashima Aero-Engine Works around fiscal 2026 along with the growth in MRO of civil aero engines.

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# Development-focus Businesses

In the Development-focus Businesses, we acknowledge a wide variety of social issues in countries around the world, identify issues to be solved from the lifecycle and value chain perspectives, and aim to create new businesses that are rooted in the local community while building new business models.

Currently, this activity centers around the building of an Ammonia Value Chain. We will steadily build up the Ammonia Value Chain and, at the same time, continue to search for and create further new businesses.

Significance of the IHI Group's Construction of an Ammonia Value Chain The IHI Group aims to transform its business model from a model centered on selling equipment to one that provides value across the entire value chain. Currently, we are promoting the Ammonia Value Chain business as the center of this transformation. In order to contribute to our customers' efforts to reduce CO2 emissions, we aim to create and expand business by providing clean ammonia fuel in combination with the IHI Group's technologies in utilizing ammonia (downstream) and receiving and storing ammonia (midstream), and by building a value chain that links upstream and downstream.

Ammonia does not emit CO2 when burned. Focusing on this property, the IHI Group has been developing ammonia combustion technology for more than 10 years. As a result, we can provide equipment that utilizes world-leading technologies in ammonia combustion, such as boilers, gas turbines, and gas engines. Additionally, in ammonia-receiving and storage facilities, we are able to develop and provide facilities for ammonia by leveraging our experience in the LNG field, a field in which we boast top-class market share. By utilizing these advanced technical capabilities in the midstream and downstream of the Ammonia Value Chain, as well as by participating in ammonia production projects and supplying clean ammonia fuel to our customers, we can provide value throughout the value chain, connecting upstream and downstream. We are also developing methods to ensure the operation and safety management of equipment and facilities for the use of ammonia as a new fuel and building a platform to provide customers with measurements of the environmental value of the entire value chain. The IHI Group is able to enhance the value of ammonia as a new fuel and contribute to the realization of a decarbonized society, precisely because as a manufacturer, the IHI Group is committed to the entire value chain, including fuel supply.

Status of Constructing the Ammonia Value Chain

The Ammonia Value Chain business that the IHI Group is working on is making steady progress toward social implementation. In the upstream ammonia manufacturing projects, we are currently studying the manufacturing and marketing of green ammonia in India and Australia, and we believe that we are approaching the time of investment. In midstream ammonia storage and transportation, we have made progress with our domestic and overseas partners and are participating in a study of multiple ammonia-receiving terminals in Japan. In downstream ammonia utilization, we are making steady technological advancements and preparing for the social implementation of utilization equipment through various studies and tests. These include a demonstration test to convert fuel from coal to ammonia in a coal-fired thermal power generation plant, long-term durability testing conducted prior to demonstration for small-scale gas turbines combusted exclusively with ammonia, studies for the development and commercialization of large-scale gas turbines combusted exclusively with ammonia, and trials of ammonia engines for marine use.

Large quantities of ammonia are needed to use ammonia as fuel. Therefore, we must align the timing of upstream, midstream, and downstream social implementation. Even if ammonia utilization equipment becomes available, it cannot be operated without a supply of ammonia. Similarly, ammonia cannot be supplied without ammonia storage and transportation. By addressing the entire Ammonia Value Chain, the IHI Group will organically link upstream, midstream, and downstream in a timely manner to ensure social implementation.

#### **Development-focus Businesses**



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What are the roles that should be played by the fuel Ammonia Value Chain businesses and the operating structure?

We aim to accelerate the building and commercialization of Ammonia Value Chain, and to create a business that will be paired with the Aero Engine and Rocket fields.

The Business Development Headquarters leads the entire process and is in charge of drafting the strategies to build the value chain. Projects that concern utilization are carried out with the Resources, Energy & Environment Business Area, and the development of new technologies is performed mainly by the Strategic Technologies Division and Corporate Research and Development Division. Each division is working together to organically link all activities to maximize results in the minimum amount of time.

#### What numerical targets do you have?

The Group targets approximately 900.0 billion yen in 2050 as revenue from the entire Ammonia Value Chain business. We hope to generate value in the entire value chain, leveraging our strengths, the ammonia utilization technologies in boilers, gas turbines, and engines, as well as the ammonia receiving/storage technologies, and also participating in ammonia production and supply business. By building a value chain from upstream to downstream, we aim to create new businesses and expand revenue. In terms of profitability, we currently anticipate a profit margin equal to the average of the IHI Group. However, we believe that further improvements in profitability can be expected depending on the status of future technological development, the development of Lifecycle businesses, and the speed of the proliferation of fuel ammonia.

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What are the strengths and strategies that support the building of a fuel Ammonia

The IHI Group's strength lies in its ammonia utilization technologies that lead to decarbonization in the fields of electricity, industry, and marine vessels. And this is also the source of our competitiveness. In the early days of building the Ammonia Value Chain, it is very important to create the demand for fuel ammonia. The IHI Group is in a unique position in which we can not only attract off-takers leveraging ammonia utilization technology, but also build value chains quickly by investing in upstream green ammonia production projects and supplying ammonia to off-takers. First we will build small value chains to achieve results, continue to improve, and create and expand markets both in Japan and overseas to contribute to the realization of a decarbonized society.

Additionally, safety is extremely important in building and expanding Ammonia Value Chain. The IHI Group is able to provide a seamless safety management throughout the entire value chain, which is also our strength. We are collaborating with partners who have a proven record and experience in handling ammonia, and by further improving safety, we will create an environment where customers can use ammonia with safety and security.

Please tell us about the collaborations with your partners to build an Ammonia Value

To use ammonia as fuel and promote its widespread use, it is important to have the viewpoint of energy security (safety, economy, stable supply, and environmental friendliness). It is difficult to realize these points by the IHI Group alone, and it is essential to strengthen collaborations with governments and partners. Currently, we are partnering with Yara,\*1 which has knowledge of ammonia transportation, and Vopak,\*2 which has expertise in receiving and storing ammonia. Through collaborations with these two companies, we plan to build a large-scale ammonia receiving terminal which excels in safety and economic efficiency in Japan. We are also currently involved in exploring ammonia receiving terminals in five locations in Japan in order to develop an ammonia supply structure to off-takers.

#### We have also began collaborations with multiple partners in the ammonia production and supply business. We plan to produce 400,000 tons of green ammonia derived from solar power generation per year from 2028 with India's ACME Group,\*3 a leading renewable energy company, and to import the green ammonia to Japan. In Australia, we participate in a development project to produce green ammonia with Energy Estate, CS Energy, and Idemitsu Australia, and are exploring to produce and sell 500,000 tons of green ammonia per year. We plan to utilize the green ammonia to build an Ammonia Value Chain in Japan by 2030, and these are projects that can be guickly commercialized. A large demand in fuel ammonia can be expected in 2030 and onward; thus, we will also consider developing projects in areas such as the Middle East, Africa, and North and South America.

- \*1 Yara Clean Ammonia Norge AS, a group company of Norway's Yara International ASA, the world's largest nitrogen-based fertilizer manufacturer
- \*2 Royal Vopak, a Dutch tank terminal operator, which has world's leading capacity of storing oil, chemicals, and others.
- \*3 India's major renewable energy operator, which works on the production of green ammonia and hydrogen using renewable

Please tell us about the development of the supply infrastructure necessary to utilize ammonia as a fuel for power generation.

Improvement of facility safety assurance and development of supply infrastructure are necessary. For example, in April 2024, JERA began the world's first large-scale demonstration test to convert the fuel from coal into ammonia at a large-scale commercial coal-fired thermal plant of Hekinan Thermal Power Station in Hekinan City, Aichi Prefecture. This is a demonstration test to convert 20% of the coal used as fuel into ammonia at JERA's Unit 4 power plant with an output of 1 million kW, and our ammonia combustion technology is adopted in this experiment. In this demonstration test, we will verify stable combustion of ammonia and the reduction of nitrogen oxide emissions, and plan to increase the fuel conversion rate from coal into ammonia to over 50% by around 2028. JERA has experience and knowledge of using ammonia for denitrification, but this is the first time it uses ammonia on a large scale as fuel. Therefore, the plan is to construct a largescale receiving and storage facility for commercialization in the future.

Approximately 500,000 tons of ammonia will be required every year if 20% of the fuel is converted to ammonia at the Unit 4 power plant. At present, approximately 1.1 million tons of ammonia is consumed in Japan, and if commercial operations

begin with a 20% fuel conversion, this alone will account for half of domestic consumption. To improve the fuel conversion rate in the future, the development of supply infrastructure, such as ammonia storage and transportation, will be essential.

#### What are the achievements in fiscal 2023 and what are the challenges?

In 2023, we were able to make progress in studying each area from upstream to downstream in the value chain, and have collaborated with various companies to build the value chain. In the upstream ammonia production and supply business, we have reached an agreement on the collaboration with India's ACME regarding the production and sales of green ammonia, and studies are underway. In the fields of storage and transportation, we have begun examining the ways to build an ammonia supply structure with highly experienced partners such as Yara and Vopak. In the downstream ammonia utilization field, we have begun exploring the commercial use of small-scale ammonia-fired gas turbines with Malaysia's Gentari, and adoption of large-scale ammonia-fired gas turbine among the three companies, IHI, Singapore's SEMBCORP, and the U.S. GE. It was a year in which we made significant progress in our activities to build a value chain.

Meanwhile, we have also identified issues including the need to reinforce our human capital for the ammonia production and supply business and to strengthen our development system for large gas turbines. We will promptly address these issues.

#### How do you position 2024 for the IHI Group?

2024 will be a very important year for building the Ammonia Value Chain. The world's first ammonia substitution demonstration test (representing 20% of heat value) at JERA's Hekinan Thermal Power Station is attracting a lot of attention among the power generation companies around the world. We expect that the market will take off immediately as a result of the demonstration test. In addition, a long-term durability test of a small-scale gas turbine combusted exclusively with ammonia (IM270) began in Aioi Works in June. In August, a tugboat powered by ammonia reciprocating engine for ships use by IHI Power Systems was completed and will be used for demonstration voyages while engaged in towing operations. By demonstrating that ammonia can be used safely and stably as a fuel in the fields of electricity, industry, and shipping, we hope to improve the reliability of fuel ammonia and stimulate demand.

#### Progress Fuel with Ammonia Value Chain Businesses

#### Utilization

Joined with Adani to launch combustion trials deploying ammonia combustion technology at thermal power plants in India

#### Production

Initiated study with ENOC to explore feasibility of Dubai's first green ammonia production and sales project

#### Production

Partnered with ACME to explore green ammonia production and sales business in Oman

#### Production

Reached basic agreement with ACME on supplying green ammonia from India to Japan

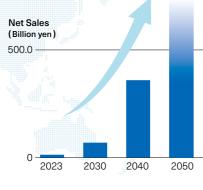
#### Utilization

Agreed with PETRONAS (parent company of Gentari) unit to commercially demonstrate world's first ammonia-fired gas turbine in Malaysia

#### Utilization

Undertook ammonia co-firing demonstration tests at JERA's Hekinan Thermal Power Station

#### Net Sales of Fuel Ammonia Value Chain Businesses



#### Utilization

Partnered with Sembcorp Industries, and GF Vernova to explore ammonia combustion facilities retrofitting at Sembcorp's gas-fired Sakra Power Plant on Singapore's Jurong Island

#### Storage and transportation

Agreed with Vopak to jointly study low carbon ammonia terminal development and operation

#### Production

Began exploring Indonesian green ammonia production/sales and co-firing business with Pupuk

#### Utilization

Agreed with GE to develop large ammonia-fired gas turbine

#### Production

Began looking to invest in green ammonia production and sales husiness in Australia -Participated as partner in joint venture of four Japanese and Australian companies-

#### Utilization

Finished ammonia and biomass combustion feasibility study with Malaysia's TNB Power Generation to decarbonize its coal-fired power station

067 IHI Integrated Report 2024

Development-focus Businesses

#### Medium- and Long-Term Business Portfolio Stance

#### Development-focus and Growth Businesses to underpin medium-and long-term expansion

We believe that the Growth Businesses and Development-focus Businesses will underpin the medium- and long-term growth of the IHI Group. We will allocate resources (cash/human resources) from the Conventional Businesses to Growth and Development-focus Businesses to achieve sustainable growth. We have already started reallocating human resources from the Conventional Businesses to Growth Businesses from FY2023 and plan to continue with this reallocation of resources in the future.



#### Transition in business portfolio

#### Conventional Businesses

We believe that portfolio revision of the Conventional Businesses is their most important need and have begun reviews from FY2023. We will further accelerate the reviews and discussions in FY2024 and classify the Conventional Businesses into growth candidates, businesses with a stable revenue base, and restructured businesses. We will implement strategies for each category.

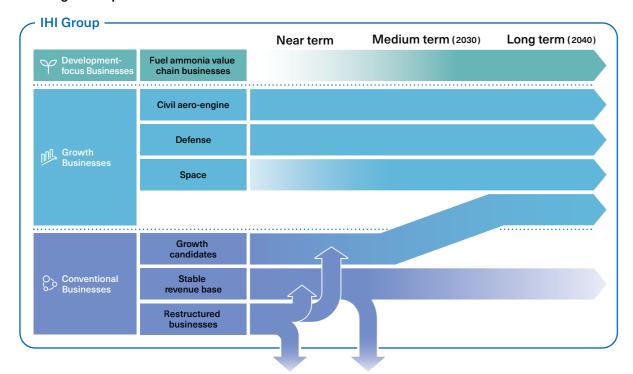
#### • Growth Businesses

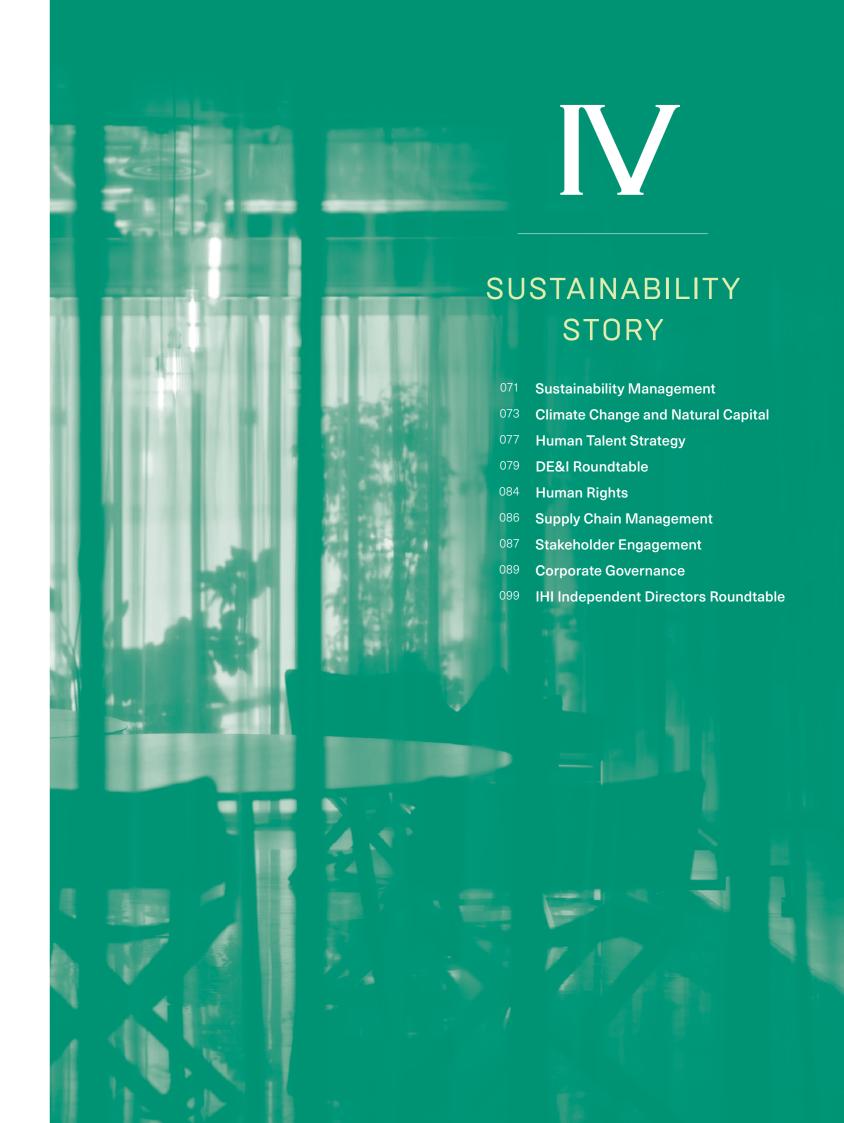
The Growth Businesses will drive the growth of the IHI Group, mainly in the civil aero-engine and defense businesses, and revenue in the space business is expected to expand from around 2030.

#### • Development-focus Businesses

The upfront investment phase is expected to continue for the time being, with revenue contribution beginning in and after 2030.

#### Envisaged corporate value creation





# **Sustainability Management**

#### **IHI Group ESG Management**

The IHI Group's management philosophy declares that we contribute to the development of society through technology, and that human resources are our single most valuable asset. Since our establishment in 1853, we have contributed to solving social issues facing era after era. Aiming to realize a sustainable society and achieve sustainable growth as a company, the IHI Group's ESG Management was announced in November 2021, stating we would face head on social issues as they change over time, give consideration to the natural environment and to society more than ever before, and find business opportunities in solving those issues. Aiming to realize a sustainable society and achieve sustainable growth as a company, we will face up to social issues as they change over time.

The goal of the IHI Group is to "Create a world where nature and technology work in unity". This means creating a society offering all people, including future generations, prosperous and secure lives to realize sustainability in both the global environment and people's lifestyles. To achieve that goal, the IHI Group redefined four social issues that the Group should work on, namely: "Achieving carbon-neutrality in the industry", "Achieving a global ecosystem resilient to climate change", "Building and improving industrial ecosystems", and "Economic, national, and energy security" in the "Group Management Policies 2023".

The IHI Group believes that "respect for human rights" and "diversity, equity, and inclusion" are important in addressing these social issues, and that "securing and maintaining stakeholder trust" through ESG management should be a priority.

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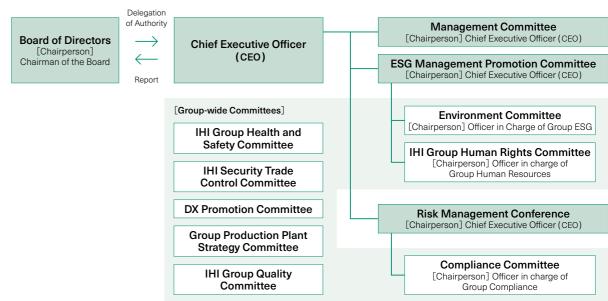
#### **Sustainability Promotion System**

The IHI Group has a duty to contribute to society and the environment in a way that will realize a sustainable society. The Group knows ESG management with clearly defined values is essential to governance making these contributions possible. The Group has established the ESG Management Promotion Committee, with the Chief Executive Officer (CEO) as its chairperson, for the purposes of examining basic policies and specific activities for ESG management as well as evaluating their progress and making improvements. Additionally, the IHI Group has established a Group-wide Committee to address issues such as the environment, human rights, and compliance throughout the entire company. The Group developed a system in which the policies discussed and decided upon by each committee are represented in the specific activities of each division. Matters related to important decision-making regarding ESG management are reported to the Board of Directors as appropriate, and ESG management is implemented Group-wide.

In fiscal 2023, an ESG Index which evaluates the initiatives on the reduction of greenhouse gas emissions, improvement of employee engagement, and promotion of DE&I, was incorporated in the incentive remuneration for Directors (excluding Representative Directors and Independent Directors) after a resolution by the Board of Directors. From fiscal 2024, the ESG Index is included in the individual performance evaluation based on the mission of each officer, for all officers except Independent Directors.

- Activities of the ESG Management Promotion Committee
   Main themes discussed in fiscal 2023
- 1 | Reduction of greenhouse gas emissions
- 2 Improvement of employee engagement
- 3 Initiatives on the promotion of DE&I

#### Sustainability Promotion System



		Committee		Group Compliance
	Overview		Chairperson	Number of Meetings Held
ESG Management Promotion Committee	tive policies,	nd makes decisions on initia- promotion systems, and for addressing the material rtant in ESG management.	CEO	In principle, twice a year. Additional meetings can be held at the call of the chairperson.
Environment Committee	Managemer drafts enviro and promote through a Pl reports and	ary body of the ESG  nt Promotion Committee, nment-related action plans es environmental activities DCA cycle. The Chairperson gives proposals to the ESG nt Promotion Committee.	Officer in Charge of Group ESG	In principle, once a year. Additional meetings can be held at the discretion of the chairperson.
IHI Group Human Rights Committee	Management through awaregarding hunational star culture respinitiatives that	ary body of the ESG  nt Promotion Committee, areness-raising activities uman rights based on inter- ndards, promotes a corporate ectful of human rights and at respect human rights business activities.	Officer in charge of Group Human Resources	In principle, once a year. Additional meetings can be held at the discretion of the chairperson.
Risk Management Conference	ment and di	verall IHI Group risk manage- scusses and approves sk management matters.	CEO	In principle, once a year.  Additional meetings can be held at the discretion of the CEO.
Compliance Committee	Managemer	ary body of the Risk nt Conference, deliberates nportant compliance policies es activities.	Officer in charge of Group Compliance	In principle, twice a year. Additional meetings can be held at the discretion of the chairperson.
	_			

Sustainability Management 0

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# **Climate Change and Natural Capital**

#### **Approach**

#### Approach to Climate Change and Natural Capital (Conservation of the Global Environment · Circular Economy)

The IHI Group implements management that embraces ESG values (ESG management) based on the desire to "Create a world where nature and technology work in unity". The Group's environmental initiatives continue to work to reduce the environmental impact on society at large in an effort to combat climate change, conservation of the global environment, and circular economy.

In particular, the IHI Group sees taking measures against climate change as a particularly important issue in ESG management and is doing everything possible to accomplish this. Climate change has an enormous social and economic impact and is a vital social issue for companies to address in order to realize sustainability and one that the IHI Group believes it should focus on.

#### Governance

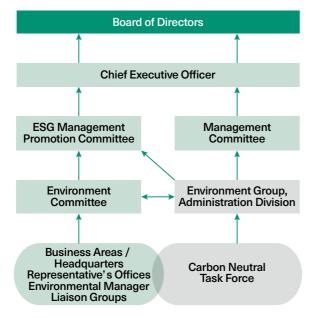
#### Structures for Implementing Initiatives to Become Carbon Neutral

The IHI Group deliberates on and determines approaches and important matters concerning climate change countermeasures through the Environment Committee, a Group-wide body.

In fiscal 2021, the Group established a task force comprising members from different divisions to promote initiatives to become carbon-neutral throughout the entire value chain. Until fiscal 2023, the Administration Division and Corporate Planning Division served as the secretariat to the task force, but in fiscal 2024, the secretariat was consolidated within the General Affairs Division to carry out these activities more efficiently and accelerate their implementation. Reports on the activities of the task force are made to the Environment Committee, which deliberates on them. The details of discussions by the Environment Committee are reported to the ESG Management Promotion Committee, and feedback received from management is disseminated throughout the Group.

Amid discussions at these meetings and committees, matters related to important management decision-making are deliberated on by the Management Committee, which serves as the decision-making body for management execution, and are then submitted to the Board of Directors.

## System for Achieving Carbon Neutrality



#### Structures for Initiatives to Natural Capital (Conservation of the Global Environment Circular Economy)

The IHI Group deliberates and decides on the approach and important matters concerning conservation of the global environment or circular economy also through the Environment Committee, a Group-wide body. Each office, plant, and business establishment has set up an environment committee to draft policies tailored to the needs of each region based on Group-wide policy.

#### Strategy

#### IHI Carbon-Neutral 2050

The IHI Group is committed to achieving the Paris Agreement's effort target of "Keeping the global average temperature increase to 1.5°C compared to pre-industrial levels" by promoting "IHI Carbon-Neutral 2050".

The Group aims to have direct and indirect greenhouse gas emissions (Scope 1, 2) from its business activities compared to 2019 by 2030 and achieve effectively zero emissions by 2050. As short-term measures, the Group established the IHI Group Environment Action Plan 2023 (FY2023–FY2025) and set targets of reducing total Scope 1 and 2 emissions by 12,000 t-CO₂e and reducing energy intensity (energy consumption per unit of sales) by 3% compared to fiscal 2022 through capital investment.

The Group also aims to achieve effectively zero greenhouse gas emissions released in upstream and downstream processes (Scope 3) by 2050. The Group

formulated the Scope 3 reduction roadmap and will reduce emissions with a focus on category 11 (use of sold products) and category 1 (purchased products and services), which have particularly large emissions, to achieve carbon neutrality across Scopes 1, 2, and 3.

Possessing decarbonization technology, the IHI Group will take the lead in contributing toward the realization of a global carbon-neutral society through its efforts in achieving this goal.

#### Risk and Opportunity Due to Climate Change

The IHI Group conducted simple scenario analyses of four business domains significantly impacted by climate change: the energy business, bridge and water gate business, vehicle turbocharger business, and the civil aero-engine business.

The first step set ①a carbon-neutral world as the highest transition risk and ②a world greatly impacted by climate change as the highest physical risk in our own independent scenarios drafted with reference to external scenarios created by the International Energy Agency (IEA) and Intergovernmental Panel on Climate Change (IPCC). The second step identified risks and opportunities for all four business domains. The third step assessed the impact each business has. The fourth and last step drafted countermeasures according to our findings.

In the future, the IHI Group will enhance its ability to leverage scenario analyses in business strategy through efforts, such as assessing the financial impact of climate change.

The IHI Group will proactively incorporate the concepts pursued by TCFD signatories in management policies and business strategies, contributing not only to the sustainable development of our Company, but society as a whole.

#### Strategy for Conservation of the Global Environment (Pollution Prevention and Biodiversity Conservation)

The IHI Group has set zero violations of environmental laws and regulations and zero accidents as environmental targets, and compliance with environmental laws and regulations, as well as the prevention of environmental accidents, are positioned as the top priorities for environmental activities at offices and plants.

Regarding the conservation of biodiversity, the Group believes that the sustainable use of natural capital is crucial for the continuation of business, and accordingly, it is focusing on measures to address climate change, which has a major impact on biodiversity. At offices and plants, they are implementing measures linked to the 2030 global targets specified in the Kunming-Montreal Global Biodiversity Framework (GBF), which was formulated at COP15.

#### Strategy for circular economy

The IHI Group aims to create a resource recycling-oriented society, thereby helping drive the transition to a circular economy. Therefore, in its business activities, the Group is working to reduce waste emissions through the 3Rs (reduce, reuse, and recycle) and to reduce water withdrawal and water consumption.

Also, in addition to providing resource-efficient products using minimal quantities of resource input and consumption, the Group is working to expand its business of providing comprehensive services that include reuse, repair, and maintenance throughout the entire product lifecycle.

Climate Change and Natural Capital

#### Scenario Analysis Process



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<sup>\*</sup> External reference scenarios

<sup>•</sup> A carbon-neutral world IEA 2DS (qualitative assessment based on the ETP2017 Global technology penetration in LDV stock by scenario, global electricity generation, etc.)

<sup>•</sup> A world greatly impacted by climate change RCP 8.5 (qualitative assessment based on the portions relating to wind and flood damage risk of IPCC AR5 WG2)

#### Main Risks, Opportunities, and Countermeasures Specific to Each Business (Four Main Business Domains)

	Energy Business	Bridge and Water Gate Business	Vehicle Supercharger Business	Civil Aero-Engine Business				
	(1) Risks, Opportunities, and Main Countermeasures in a Carbon-neutral World							
Risks	Declining demand for large fossil fuel power generation equipment	Increasing procurement costs (carbon tax, etc.) for materials with high CO <sub>2</sub> emissions (concrete, steel, etc.)	Declining demand for combustion engine vehicles unable to address carbon-neutral requirements and a falling demand for existing turbochargers	Declining demand for aircrafts due to carbon-neutral requirements and standardization of alternative highspeed means of transportation				
Opportunities	Increasing demand for fuel conversion, carbon capture and storage (CCUS), and other decarbonization technologies Increasing demand for regulated power supplies, storage energy, and Power-to-X to provide a stable energy supply as renewable energy becomes the standard	Increasing demand for roads(bridges and tunnels) to provide a more efficient transportation network     Increasing demand for railway construction due to expansion of railway systems overseas	Potential to secure market competitiveness and leverage an increase in demand for turbochargers by being first to market with new turbocharger products (electric products in addition to existing models) for carbon-neutral electric vehicles (PHEV, HEV, FCV, etc.)	Increasing demand for the development of aircraft engines supporting carbon neutral requirements and a rise in opportunities due to electrification of engines and utilization of advanced material technologies.				
Main counter- measures	Rapidly deploy carbon-neutral technologies to society     Promote technological development to stabilize the energy supply     Expand the lifecycle business through remote monitoring and other Internet of Things (IoT) technologies	Reduce construction schedules and labor costs by labor-saving, remotization, and improving construction methods through promoting digital transformation (DX)	Rapid development and commercialization of turbochargers for electric vehicles that comply with carbon-neutral requirement trends	Early commercialization of electric engines and advanced technologies such as advanced composites.				
	(2) Risks, Opportunities, and M	ain Countermeasures in a World (	Greatly Impacted by Climate Char	nge				
Risks	Extreme delays due to on-site construction stoppages or disasters caused by frequent severe weather	Extreme delays due to on-site construction stoppages or disasters caused by frequent severe weather	Suspension of production due to disrupted supply chains caused by frequent severe weather	Suspension of production due to disrupted supply chains caused by frequent severe weather				
Opportunities	Contributing to early recovery of equipment damaged in severe weather     Increasing demand for digital technologies to promote labor saving and remote operation	Increasing demand to build robust national infrastructure     Contributing in early recovery of infrastructure damaged in severe weather	No opportunities unique to our business	No opportunities unique to our business				
Main counter- measures	Expand the lifecycle business through www monitoring and other Internet of Things (IoT) technologies	Expand business beyond lifecycle business with wider perspective to include disaster prevention business     Create technologies and systems that contribute to maintenance, disaster prevention, disaster mitigation, and quick recovery of infrastructure	Strengthen supply chains	Strengthen supply chains				

#### Main Risks and Countermeasures Shared Across All Businesses

	Main Items	Main Countermeasures and Transitioning to Opportunities				
	(1) Transition Risks and Countermeasures for a Carbon-neutral	World				
Policy and legal	Introduction of carbon taxes, stronger industrial waste regulations, raising costs due to the adoption of renewable energy and energy-efficient equipment, etc.	Reduce costs in business activities through efficient production and distribution a well as the proper management of energy consumption				
Technology	Raising costs due to research to realize carbon-neutral products and services, failed technological development, etc.	Concentrate investments in technological development while staying acutely aware of policies, technologies, markets, and other social trends				
Market	- Declining demand for products and services with high $\text{CO}_\text{Z}$ emissions, etc.	Actively draft and promote business plans that always anticipate multiple business scenarios to adapt to dramatic changes in market structures				
Reputation	Lost opportunities due to poor evaluations of our response to climate change, declining social credibility, etc.	Disseminate easy-to-understand information about products and services that chelp both mitigate and adapt to climate change				
	(2) Physical Risks and Countermeasures in a World Greatly Imp	acted by Climate Change				
Acute/Chronic	Ceased business activities due to damaged offices and business sites caused by typhoons, floods, or other natural disasters, etc.	Incorporate the response to climate change into the business continuity plans of plants and offices to ensure the safety of Officers and employees and strengthen the supply chain     Draft, execute, and manage advance measures in anticipation of foreseeable flood damage				

### **Risk Management**

In addition to short-term business risks, the IHI Group also manages sustainability-related risks that affect the medium- to long-term business environment as a risk to conducting business. In particular the IHI Group assesses the medium- to long-term impact of these risks to the Group and convert them into short-term business risks. The Group has clarified the roles and responsibilities of its Internal Audit Division, corporate divisions, business areas, and business divisions (including affiliated companies), which are managed under a multi-layered risk management framework.

#### **Metrics and Targets**

The IHI Group aims to achieve carbon neutrality throughout its entire value chain by 2050.

In FY2023, the Board of Directors adopted a resolution setting a goal of having the Group's FY2019 GHG emissions from plants, offices, and other business establishments (Scope 1 and 2) by FY2030.

See p.107 for performance data.

#### Initiatives

#### • Reducing Scope3 Emissions

The majority of IHI Group's Scope 3 emissions fell under category 11 (use of sold products) with coal-fired power plant boilers accounting for most of these emissions during fiscal 2023. However, new boiler construction will be completed by fiscal 2025, with emissions expected to decrease significantly from fiscal 2026 onwards. The Group also aims to significantly reduce emissions from other products included in category 11 by 2050 by converting to clean energy and improving energy consumption efficiency.

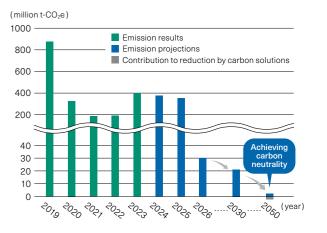
In order to achieve these goals, the IHI Group has devised a roadmap for reducing its Scope 3 emissions by 2050. In line with this roadmap, the Group will continue to reduce GHG emissions throughout the life cycle of our products from the material procurement, design, and manufacturing stages and use after customer purchase. Furthermore, the Group aims to create a carbon-neutral society by working to come up with carbon solutions to reduce its carbon footprint, such as building a fuel ammonia value chain and through carbon dioxide capture, utilization, and storage (CCUS).

Regarding civil aero-engines, which serve as the IHI Group's main product, the Group is working with business partners to make its entire supply chain, including material procurement, carbon neutral. Additionally, the Group is making efforts to improve

conventional aero engine fuel efficiency and develop revolutionary aero engines with the goal of improving aircraft energy efficiency as a whole. Moreover, the Group will be focusing on developing and expanding the use of sustainable aviation fuel (SAF) production technology, aiming for carbon neutrality across its entire

In particular, the IHI Group has taken an interest in fuel ammonia. The Group plans to build a value chain by leveraging its strengths throughout each stage in the process, from fuel manufacturing, receiving, storage, and utilization. This will be beneficial toward expanding the use of fuel ammonia and contributing to reducing GHG emissions among society as a whole.

#### Scope 3 Emissions Results and Projections



Scope3 Emissions Reduction Roadmap

		2020	2030		2040	2050
		Development of fue technology (ammo		Promotion a	nd expansion of products using fu	uel ammonia
	Transition to clean energy	F	Promotion and expansi	on of the use o	of biomass power generation	
	33	Development of methan	nation technology	Promotio	on of social implementation of e-	methane
Category 11		Deve	elopment and expansion	on of the use o	f SAF manufacturing technology	,
		Improvemen	t of conventional aero	engines		
	Improving energy	Development of r	revolutionary aero eng	nes	Launch of revolutionary aer	o engines
	consumption efficiency	Support for improving customer operations				
			Improvement of	product funct	ionality and ef ciency	
	Carbon	Sharing information and in	mproving cooperation amon	g business partne	ers	
Category 1	neutralization throughout the		Expansion	of carbon-neu	itral product purchasing	
	supply chain		Support for bu	isiness partne	rs to decarbonize their operation	ns
		Establishment of ammo	onia value chain	Е	xpansion of fuel ammonia suppl	y
Reduction contribution	Carbon solutions	Development of CC	US technology			
		Reductio	n contribution through	fuel conversion	on and introducing CCUS techno	ology

We have the Group Human Talent Strategy 2023 in place and are implementing it toward attaining the following two targets under our "Group Management Policies 2023": "Business transformation & business portfolio optimization to achieve strong, sustainable growth" and "Response to operating environmental changes and a corporate structure that enables transformation".

## **Basic Concept of Group Human Talent Strategy 2023**

#### • Ideal Vision for Future

In order to achieve business transformation and corporate structure reform, it is important to balance a good & strong company and personal growth & happiness. The IHI Group will promote the development of organizations and human capital capable of solving challenges faced by customers, industries and society by combining new leadership with agile self-transformation capability and thus committing to Goal achievement. Furthermore, by prioritizing the respect for humanity through the success and happiness of employees and new partnerships.

#### Material Issues & Priority Measures

To achieve the sustainability vision for the future, fiscal 2023 will be positioned as a turning point in terms of an evaluation axis, time axis, and relationship. 3 material issues are addressed and 11 priority measures are implemented, aiming to induce behavioral transformation in all employees and foster an organizational culture capable of accomplishing reform.

#### Shift to Organizational Culture for Successful Transformation

#### **Evaluation axis**

Focused on improvement in continuation of conventional practices

→ Encourage Challenges for transformation

Preference for pursuit of perfectness over

→ Preference for speed

#### Relationship

Focused on own workplace or closed

in-company network

→ Build new relationships

A "Good + Strong" Company

#### Coexist

"Growth + Happiness" for All Individuals

# New leadership

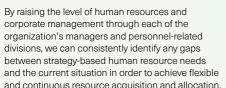


Through demonstrating leadership within the Company and during projects, globally competitive managerial and professional human resources raise the level of the organization so that others can take the lead themselves.

Institutional reform and cultivating a corporate culture that can assess the challenges of transformation



## The agility for rapid $- \sqrt{g}$ self-transformation



# Employee success/ happiness



We bring together a diverse and autonomous group of human resources for the sake of nurturing a place of self-fulfillment, one with respect for one another, empathy, as well as the ability to grow, and by

leading a healthy life, motivation to contribute to the organization occurs naturally

**Human dignity** 

#### √ Time ✓ Relationship change

✓ Evaluation

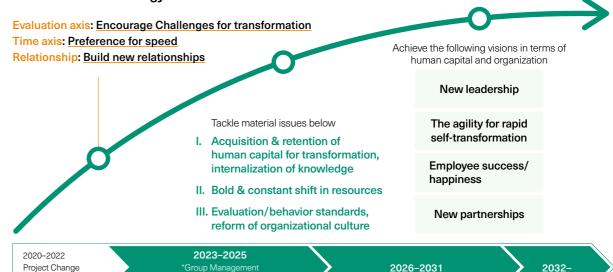


# New partnership



Strategies and policies are carefully and clearly developed, shared, and spread among each and every employee of the Group, and through an equal relationship between individuals and the organization, we collaborate and cooperate with a diverse group of stakeholders while contributing to mutual growth.

## Human Talent Strategy: Ideal Vision & Material Issues



### Progress of the Group Human Talent Strategy 2023

#### **Priority measures**

# Coordinated acquisition of

#### Acquisition & retention of human capital for transformation, internalization of

# human capital for transfor-

# Development & allocation of human capital for

# . Need to transition to a phase of internalizing the knowledge of human capital for transformation

#### . Continuing to review the system for developing management and specialist human resources (review of career design, human capital pool)

Current status as of the end of fiscal 2023

Improved hiring process for mid-career hires. In

the process of acquiring human capital where

Aero Engine, Space & Defense Business Area

the IHI Group's expertise is lacking, mainly in the

Key points

- In areas where the IHI Group's expertise is lacking, acquire systematically, instead of sporadically, human capital for transformation from external sources, ensure their retention and facilitate the internalization of their knowledge
- Change employment to system/practice matching labor market
- · Manage human capital for transformation acquired from outside in a manner different from usual practice in terms of job description, reporting line, etc

· Identify talent requirements for areas

of high urgency & high importance

such as "specific LCB departments of

Conventional Businesses", "specific

#### **Bold & constant** shift in resources

2022 FSG manage

Material issues

- · Establish organizational resource shift process
- Build organizational reskilling mechanism
- Promote self-directive career development
- Corporate divisions (Corporate Planning, Finance & Accounting, and Human Resources Divisions) led and collaborated with to transition to the formulation of proactive personnel plans based on a review of the business portfolio
- · Need to manage the quality of human capital, personnel expenses, and differences between plans and results based on the personnel plan · Need to further promote approaches to strength-
- en LCB in the Conventional Businesses in addition to a resource shift focusing on the demands of the Aero Engine, Space & Defense Business Area
- projects", and "head office-related departments", and address them intensively · Establish a resource shift process as soon as possible and operate it as a permanent one
  - Promote self-directive career development and reskilling in an organized

# Reform of Evaluation/behavior standards, organiza-

- Change desirable means of evaluation & treatment Improve human capital
- management power of "employees in supervisory
- · Improve employee engagement
- · Develop organizational culture based on ESG & well-being
- resources (DE&I)
- · Respect for human rights
- The direction of the IHI Group's transformation was communicated in the workplace and understanding improved through workshops on management policies and human capital strategy
- · Conducted skill training for employees in supervisory posts. Continuing to develop systems and frameworks for management and specialists, and effect measurement with 360 degree feedback Need to revise the evaluation system to develop it.
- into a wage and bonus system · In the process of developing an environment that
- will lead to empowerment of women and diversity · Continuing with activities to promote human rights awareness based on the Group Human Rights Policy
- · Sort out uniform behavior standards/evaluation items such as "encouragement of challenges" and "prompt response to customers", and conduct a fresh institutional review of linkage between evaluation and development/treatment
- Incorporate evaluation standards focused on ESG/well-being into a variety of measures to develop them as organiza tional culture

IHI Integrated Report 2024 078 Human Talent Strategy



In the Aero Engine, Space & Defense
Business Area (the "Aero Area"), a driver
of the Group's growth, we plan to deploy
internal and external resources on a
large-scale in the civil aero-engine,
defense, and space businesses.
A cultural shift in the organization
around the integration of diversity, equity, and inclusion (DE&I) is all the more
essential for the investment in the
Growth Businesses to bear fruits, given
that we need to attract diverse talent to
engage in it.

Four people (two managers in the Aero Area, a manager in charge of HR for the Aero Area, and the head of the DE&I group in the Human Resources Division) have discussed challenges and expectations around our organizational culture, focusing on DE&I, ahead of welcoming new joiners in the future.

# Integration and challenges of DE&I in the Aero Area

- Noda I am the DE&I Group leader at the Human Resources Division overseeing the entire Group. The DE&I Group is responsible for planning and implementing IHI Group-wide HR measures to promote DE&I. Our civil aero-engine, defense, and space businesses are Growth Businesses with the planned large-scale future deployment of resources. Given this, a shift in their organizational culture is required so that diverse talents deployed there can play active roles. In this roundtable meeting, two leaders in the Aero Area will discuss with two HR managers about shifting resources to Growth Businesses and embedding DE&I. Please introduce yourself and tell me what changes you have noticed happening in your workplace lately.
- Ishihara I joined IHI in 2003 as a new graduate. I worked as a production technology engineer at the Tanashi, Soma, Kure, and Aero Area works. I have been in a managerial role since 2015. I was the first female engineer in the Aero Area works to be appointed to a managerial position. From a gender perspective, I have always been in the minority since I joined IHI. DE&I became one of IHI's priority measures in FY2024, which I think is a significant change that took place recently. In addition, I often receive positive feedback about the activities of the Gender Gap Elimination Working Group, the members of which are engaged in an internal side job system. The situation around DE&I has changed rapidly in recent years.

#### Atsushi Hiruma

Sakura Ishihara

Aero Engine, Space & Defense Business Area Control Technology Department, Research & Engineering Division Electrification Group Chief Gender Gap Elimination Working Group Member



#### Atsushi Noda [facilitator]

Kyohei Funami

Aero Engine, Space & Defense Business Area

Planning and Administration Department

Head of General Affairs and HR Group

Human Resources Divisior Head of DE&I Group



Production Planning Department,
Production Center
Head of Production Planning Group
Gender Gap Elimination Working
Group Member

Aero Engine, Space & Defense Business Area

- Hiruma I joined IHI mid-career one and a half years ago. Before that, I worked for an automaker. I manage a technical team involved in an aircraft electrification project. Our mission is to create new businesses using new ideas and technologies. I see DE&I as an important part of culture because it enables us to incorporate in our work ways of thinking that didn't exist in the IHI Group before.
- Funami I joined IHI in 2004 as a new graduate and have been building a career in the HR field since then. I started at the Labor Section of Aioi Works and was later reassigned to the Human Resources Division. I had the opportunity to be involved in promoting women's active participation. My responsibilities included considering opening nurseries at factories. After that, I was engaged in HR operations for group companies and overseas subsidiaries. In 2022, I became a manager responsible for the HR function of the Aero Area. Because the Aero Area has been growing, our plan is to strategically acquire hundreds of diverse people internally and externally. The Human Resources Division has a major mission of welcoming diverse people to produce positive results.
- Noda The diversity promotion team was set up in the Human Resources Division. The team became an independent group and was realigned into the DE&I Group with the addition of equity and inclusion elements. When we looked at diversity alone, we saw women's active participation as an issue solely for women themselves. Similarly, when we held training for foreign employees, we invited only them to attend it, providing opportunities to learn about Japanese organizational culture and the like. The idea at that time was probably helping a minority group adapt to the majority's ways of doing things. But I have come to realize that the essence of inclusion is to encourage the majority to change, not the minority. Nowadays, we ask their supervisors and colleagues

- to attend such training sessions. By doing so, the participants have realized that promoting DE&I concerns not only minority groups, but everyone, requiring everybody to think together and adapt their behavior.
- Ishihara We once held a presentation on unconscious bias to deepen awareness of diversity. Many employees understood the concept, but not how they should act. This left them feeing unsure. Lately, the awareness that the matter concerns everyone is rising. Accordingly, higher engagement has become a priority among works' measures. I am encouraged by this growing momentum in DE&I promotion.
- Noda Mr. Hiruma has been with us for one and a half years, joining IHI mid-career. What are your thoughts about diversity and inclusion at the IHI Group?
- Hiruma DE&I has taken root to some extent at my workplace. Our team deals with new technologies and therefore includes many members who joined IHI from other companies, and have diverse backgrounds. We require the thinking of inclusion as we need to combine aircraft and various other technologies. On the other hand, there is a lot of implicit understanding in our organizational culture, with rules and targets often not clarified. Compared to the automaker I worked with before, where responsibilities lie also seems unclear. I think organizations that clarify targets and each employee's output toward them are more compatible with DE&I.
- Funami People hired as new graduates working in the same environment tend to read between the lines and pick up subtle cues. Even within IHI, the Aero Area has a unique culture that people from other divisions sense. The Aero Areas' highly confidential business nature has tended to attract similar people. I'm aware that this poses a challenge for the Human Resources Division in organizational development.

• **Hiruma** Strict confidentiality is not the only reason for the homogeneity among people in aircraft development. I think a tendency to concentrate authority in the hands of certain people is another reason. The auto industry requires a combination of various technologies to complete products. Meanwhile, cutting-edge technologies that only a small number of people can master are critical in the aviation industry. I suspect this has created a situation where the culture of a small team linked to those technologies has dominated the entire organization. I think the industry will enter a phase that requires the combination of various technologies. For instance, the electrification of aircraft requires both aircraft and electric vehicle technologies. Superior technologies are no longer the only element that makes business feasible. Combining various technologies is becoming increasingly important. Product development needs a workplace where people with various backgrounds can play active roles. This means that the ideal organizational culture will also change.



- Funami The homogeneity in the development function Mr. Hiruma mentioned seems to be directly reflected in homogeneity across the organization. In fact, the Aero Area, up until now, has had a top-down culture. In addition, in the business environment, our mission was to respond to the requests of public sector agencies. The business environment has changed, and we are required to act proactively, not passively. The Aero Area has become complex lately and requires close coordination with foreign companies. We cannot compete using only the existing ways of doing business.
- Hiruma I hope that the influx of new human resources on a large scale will prompt the Aero Area to review its unwritten rules and foster an organizational culture based on clearly stipulated rules.

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- Meanwhile, I think there is a risk that only people who can adapt to a unique culture will stay and those who cannot will be eliminated. I think we need company-wide support to avoid this risk, instead of leaving the task to the workplace.
- Funami The HR team for the Aero Area is also aware of Mr. Hiruma's point. We will take measures to enable diverse people to play active roles, focusing on DE&I and psychological safety. The management team has made a request around mid-career recruitment to hire people who will bring in changes. However, I think managers interviewing job candidates tend to hire people who are similar to themselves and easy to manage. We will consider this point as we seek to hire and retain people who can transform the organization.



- Ishihara My direct supervisor has experience serving as president of an affiliated company and, while managing the company, being involved in industry-academia-government exchanges across the same and different industries, including startups. The supervisor's approach is different from that of those who have built careers within the Aero Area, which I think has brought about a positive change in the organizational culture. My supervisor expects me to find solutions from perspectives that are different from before. This is inspiring. I have been reminded that this kind of cross-organizational personnel transfer is very important.
- Funami The management team is strongly aware of the need for a shift in organizational culture, actively rotating people within the Aero Area including executives. Personnel are moving dynamically for future business expansion, from which I sense a strong will to cause discontinuous transformation. We will aim to create an organization that will not be controlled by implicit understandings.

Noda The IHI Group positions 2024 as the starting year
of DE&I. I assume that each organization has different
priorities between diversity (D), equity (E), and inclusion
(I). What do you think?



- Hiruma I see DE&I as a means to achieve objectives. If it is considered a means, each organization would have different ways of utilizing diversity. I think there aren't enough discussions ongoing on what kinds of diversity are needed at each workplace. For example, homogeneity and uniformity may be more important than diversity for efficient assembly-line operations at works. On the other hand, diversity in experience matters when it comes to creating new things. I would like to deepen discussions at each workplace as to what kinds of diversity it requires, including in what ways diversity can bring positive effects and what are the effects of diversity in gender and nationality.
- Ishihara I think DE&I can be an objective. As far as I am concerned it may be a good idea to introduce a quota system\* in DE&I's transitional period. Supervisors and managers often have difficulty recognizing DE&I as essential just by acquiring knowledge through unconscious bias training. It is said that at least 30% of people involved in decision-making must be women in order to really have a sense of the benefits of diversity. I'm aware that some people speak about cases of reverse discrimination, but I think such voices will disappear once DE&I has taken root and yielded positive outcomes. We need to quickly raise it to a certain level. If we set DE&I targets for works, one of them would be to create a workplace that allows bottom-up decision-making. An environment of

thoroughly listening to the voices of people working on the shop floor is an essential element of DE&I. Due to the nature of the factory environment, the opinions of managers and team leaders tend to be more likely to reach high-ranking officers. I think people who are not managers or forepersons also have opinions and are voicing them to some extent. But their voices are less likely to be heard. This situation risks those in high-ranking positions believing that rank-and-file workers don't have opinions. I hope that the integration of DE&I perspectives will lead to an environment where everyone can freely voice their opinions and be heard.

\*A system for maintaining the ratio of a certain group of people above a certain level for the purpose of promoting social participation by that group



• Noda DE&I can be both an objective and a means at the same time. The Human Resources Division is also conscious of addressing DE&I as both an objective and a means of meeting the capital market's expectations and adapting to society. When we see DE&I as an objective from a business management perspective, creating an environment where diverse people can play active roles can lead to a lower cost for acquiring human capital. That is because, from workers' viewpoints, an environment that makes it easier for minorities to work also provides ease of working for all employees, and some job seekers would prefer an environment that allows diverse people to thrive, considering their own well-being. When we address DE&I as a means from a management perspective, DE&I initiatives would be effective in laying the groundwork for fostering innovation and adding approaches for solving issues. It's important that we take DE&I actions according to the situation of each organization.

DE & I Roundtable U

#### For attracting and retaining resources on a large scale

- Noda In FY2024, the Aero Area plans to recruit around 300 people as additional resources. Are you considering educating middle management in the Aero Area so that they can accept diverse people and let them thrive?
- Funami I think it would be effective to provide the education program we used when our nuclear energy business unit hired a large number of people. The program teaches methods of regular communication after new people have joined, among other things. I think we should monitor new joiners for an initial period to make sure that they settle in.

Careful follow-ups are needed for people internally reassigned to a different organizational unit in IHI as they are engaged in operations they have no experience with. Based on the belief that acquiring basic knowledge about the Aero Area will enable smooth communication in the workplace, we have launched quarterly training for new joiners to learn basics.

- Noda Only a little while ago, people tended to think whether a reassigned person could settle in the new environment was up to the person. The attitude and culture of the receiving unit will matter more in the future. In the Human Resources Division, the proportions of people in major posts who joined IHI mid-career and those who were transferred from business divisions are rising. Cases of sticking to old practices are definitely declining. With the addition of many mid-career hires, the Aero Area is likely to become an exciting workplace. New skills will be required of managers to unite their diverse teams. Ms. Ishihara has been in the minority, serving as the first female manager in Aero Area's production technology unit. When we recruit many human resources in the future, you will be in the majority, won't you?
- Ishihara Yes, that's right. I am aware that I am in the majority in the sense that I am an engineer who has been in the Aero Area all along. As a woman, I know the difficulty of voicing opinions and being heard properly as a minority. Based on this experience, I would like to create a workplace where new joiners can easily speak up. Nowadays, words such as engagement and psychological safety are used daily. That is a big change. I'd like to change the organizational culture, too.
- Hiruma I would like to spread the idea of equity more so that diverse people can take active roles. Equity, as I understand it, is about establishing an environment that makes it easier for those who have particular time pressures, such as those raising children, to work easily with the understanding of the people around them. For example, it is sometimes necessary to ask them to participate remotely in a project when they

have time instead of forcing them to attend face-to-face meetings. Generally speaking, this type of arrangement is likely to invite criticism, partly because Japanese organizational culture tends to prioritize harmony. But if we need their ability and technology to achieve project goals, we cannot afford the criticism. Having said that, the precondition for this is that the team sets clear goals and each member takes responsibility for their output, sharing it within the team.

- Noda I understand that it is not easy to ensure equity without clarifying goals and expected output. Without that clarified, the members may be evaluated based on their working hours, not their performance. It can be said that DE&I will not take root unless we gradually eliminate vague high-context culture.
- Hiruma I think IHI Group has many people who cannot assert themselves proactively and don't speak up much. To bring out the potential of such people to the maximum, managers must improve their communication skills. Some managers are good at eliciting the opinions of their team members, but improving the communication skills of all managers would be effective in maximizing organizational strength. Japanese women tend to be modest partly due to their cultural background; I am afraid that women's active participation will not progress unless we help them break out of their shells
- Ishihara We had a case where a female employee with three children was assigned to a post in the U.S., accompanied by her family, and she is thriving. Supervisors tend to think that a woman raising three children would not wish to be posted overseas. They should ask the candidate if she has the aptitude and skills for that. I feel that there may have been potential cases like this posting which may have become a reality if supervisors had asked.
- Funami Group Management Policies positions the Aero Area as a Growth Businesses. As a person in charge of HR, I feel it is a shame if we can not provide an environment that enables the people working there to thrive. We will establish an environment that enables the business, organization, and people to grow and thrive, from the perspective of DE&I.
- Noda Thank you for the honest opinions. They were very helpful. They have made me keenly aware of the challenges we have, including fostering a feeling of involvement for those in the majority, eliminating vague high-context culture, clarifying individual goals, removing homogeneity, and designing a system for women's active participation (quota system). Issues we need to solve are not limited to these. We have nevertheless made big progress in that all organizational units have deepened discussions as to what DE&I means for them. Let's keep working for the IHI Group's

# **Human Rights**

#### Basic Approach

The IHI Group formulated the IHI Group Human Rights Policy in December 2020 based on its management philosophy and its approach to human rights outlined in the Basic Code of Conduct for the IHI Group under the approval of the Board of Directors.

In IHI Group ESG Management, the Group has identified respecting human rights as one of its most material issues. Through human rights awareness activities based on international standards, the Group will fulfill its responsibility to respect human rights of all by fostering a respectful corporate culture and promoting human rights throughout its business activities.

#### History in Human Rights Initiatives

FY2015 • "Basic Code of Conduct for the IHI Group"

• "IHI Group Procurement Policy" formulated FY2017 • Reorganized from the Company-wide Dowa Promotion Committee to the IHI Group Human Rights Enlightenment Promotion Committee

FY2020 • "IHI Group Human Rights Policy" formulated

• "IHI Group Procurement Policy" revised

FY2021 • Human rights risk assessments started

FY2022 • Human rights impact assessments started • "IHI Group Code of Conduct for Business

Partners" formulated and disseminated FY2023 • "IHI Group Co., Ltd. Human Rights Policy

Implementation Guidelines" formulated FY2024 • Operation of Grievance Mechanisms started

# **Human rights awareness** promotion structure

The IHI Group established the Human Rights Committee as a Group-wide committee responsible for the "S" (Social) part of the ESG Management Promotion Committee. With the goal of fostering a corporate culture that respects human rights and promotes human rights initiatives, the Group plans and deliberates on the details of important policies and activities related to the promotion of DE&I focusing on "respect for human rights" and the "active participation of diverse human resources". Important matters such as activity policies, priority measures, and performance evaluations are discussed within the ESG Management Promotion Committee and then reported to the Board of Directors as deemed appropriate. The Group established a Task Team under the IHI Group Human Rights Committee as the body to promote human rights initiatives with regard to respect for human rights, in cooperation with related divisions and staff in charge of human rights at Group companies.

#### **Human Rights Awareness Promotion Framework**



Planning Div., Corporate Communication Div., Project Risk Management Div., Corporate Planning Div., Legal Div., and Marketing & Sales Headquarters

## **Human Rights Due Diligence**

In order to fulfill the responsibility when it comes to respecting the human rights of those affected by its business activities, the Group promotes the process of human rights due diligence and taking measures to respect human dignity in line with the United Nations' Guiding Principles on Business and Human Rights.

#### Human Rights Risk Assessments

In fiscal 2021, the IHI Group underwent a human rights risk assessment to identify potential and obvious human rights issues among IHI Group companies within Japan and overseas, with advice from outside experts. Based on analysis and the results of this evaluation, important human rights issues in the manufacturing industry,

#### Material Human Rights Issues

#### Prohibition of All labor that is forced under threat of punishment or for forced labor which the individual has not offered herself or himse voluntarily is prohibited. Prohibition of child Work by and employment of workers under the minimum age of statutory employment in the country or region in which the business operates is prohibited, and this labor Guarantee of equal Diversity and individuality are respected, and fairness and equal opportunity in job openings and employment, including in recruiting, promotions, remuneration, and training, is ensured. No Tolerance for Unjust discrimination and harassment based on race. Discrimination and skin color, sex, religion, birthplace, beliefs, age, disability, sexual orientation, and sexual identity, and other attributes are not permitted. Guarantee of safe The IHI Group strives to create and maintain safe and ensuring the health workplace are able to demonstrate their abilities to the of working people fullest extent. Respect of the The IHI Group respects basic labor rights, including basic rights of freedom of association and workers' right to organize and

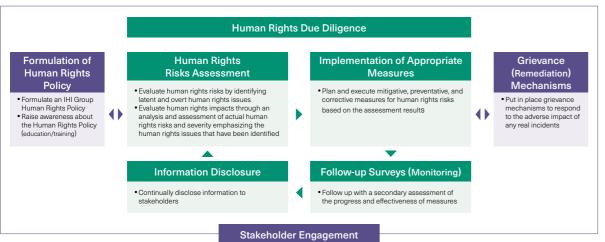
working people

engage in collective bargaining. Payment of wages and

management of labor hours are conducted appropriately.

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### Overall Human Rights Due Diligence



internal monitoring, and international social trends, the Group was able to identify key human rights issues. Thus, the Group has chosen its employees and business partners as its highest priority rights holders.

#### • Human Rights Impact Assessments

The IHI Group began carrying out human rights impact assessments at Group sites worldwide over three years between fiscal 2022 and 2024 to understand the actual state of material human rights issues. When conducting human rights risk assessments, the Group prioritizes overseas affiliated companies thought to be relatively high

### Human Rights Impact Assessment FY2022-FY2023 Survey Results, Issues Identified, and Countermeasure Status

Item Issues		Countermeasure Status		
Total Trends	Grievance mechanism mainte- nance shortfalls	Establishment of our reporting desk was completed in April 2024 and began operation		
	Shortfalls in dialogue with stakeholders	In parallel with dialogue held at our corporate divisions, each company is made aware of the importance of labor manage- ment dialogue, etc		
	Delays in diversity, equity, and inclusion (DE&I) efforts to ensure equal opportunities and treat- ment for employees	We are implementing initiatives to help foster an organizational culture emphasizing diversity		
Red Flags*	Child labor • Internal regulations regarding minimum working age • Age verification using verifiable means	We have established internal regulations and rules that comply with the minimum working age in each country		
	Discrimination and harassment • Providing equal employment opportunities and promotions and making a statement of no discrimination during recruitment	We are working to formulate policies that ensure equal employment opportunities and treatment		
	Guarantee of safe workplaces ensuring the health of working people  • Clarification of the health and safety system and system roles  • Communication regarding our Occupational Health and Safety Policy to all employees	We are establishing our occupa- tional health and safety policy and communicating it to all employees		

\*Five established core labor standards (prohibition of forced labor, prohibition of child labor, eliminating discrimination, recognition of freedom of association and the right to collective bargaining, and a safe and healthy workplace environment) set by the International Labor Organization (ILO) of particular importance in relation to IHI Group's material human rights issues

risk, targeting 59 companies in fiscal 2022 and 37 in fiscal 2023. Additionally, since awareness was lacking among IHI Group companies regarding the Group's material human rights issues, in fiscal 2023 the IHI Group Co., Ltd. Human Rights Policy Implementation Guidelines was developed and distributed in three languages: Japanese, English, and Chinese, and spread within the Group.

# Grievance (Remediation) Mechanism Maintenance

In April 2024, the IHI Group established a grievance mechanism on its corporate website for reporting human rights violations that can be utilized by all stakeholders in the Group's value chain. Cases reported through this point of contact will be handled fairly and appropriately through the Engagement and Remedy Platform provided by the Japan Center for Engagement and Remedy on Business and Human Rights (JaCER), of which the IHI Group is a regular member.

#### **Human Rights Awareness Activities**

The IHI Group strives to raise awareness to foster a corporate culture that respects human rights.

#### Results for FY2023

Classification	Target	Details			
Education and Training	Executive	How companies are connected to stakeholders			
	All employees	Human rights, Harassment Prevention (e-learning)  IHI Group Human Rights Policy (e-learning)			
	New graduate recruitments, mid-career hires				
	New managers	Examples of harassment that can occur during teambuilding and countermeasures toward them			
	Personnel*	Business and human rights			
DE&I Promotion month (December)		Delivering a message from the President (human rights and gender equality)			

<sup>\*</sup>management level, personnel in charge of risk management and compliance, or personnel involved in order acceptance and project reviews

# **Supply Chain Management**

# Approach of Supply Chain Management

The IHI group's procurement activities are based upon the IHI Group Procurement Policy, which consists of three pillars: "Fair and Impartial Procurement", "Mutually Beneficial Partnership with our Business Partners", and "Approach to Compliance and Social Responsibility".

Each procurement department in the IHI Group conducts its procurement activities in accordance with the Basic Rules of Procurement for IHI Group which reflects the procurement policy described in the IHI Group Procurement Policy, and takes its social responsibility by building sustainable supply chains.

The IHI Group endorses the aims of the Responsible Minerals Initiative (RMI), an international organization leading procurement responsibility over mineral resources.

#### **Initiatives with Our Business Partners**

In fiscal 2022, the IHI Group published the "IHI Group Code of Conduct for Business Partners", which sets out specific requests and expectations for the Group's business partners, on its website.

In the Code of Conduct, the IHI Group asks all its business partners and their supply chains for considering human rights/labor, health and safety, the environment, fair trade/ethics, information security, responsible procurement of mineral resources, and so on, on top of basic requirements such as legal compliance, quality, price, and delivery.

In addition to the publication on the website, the Code of Conduct was notified to the existing business partners through notification letter and information session. A basic agreement that clearly stipulates the respect for the Code of Conduct is concluded with the newcomers.

In addition, the IHI Group shares and deliberates activity policies and measures related to human rights issues in the supply chain, as well as their results, at the IHI Group Human Rights Committee.

# Risk Management for Strengthen Supply Chains

The IHI Group is globally promoting activities to strengthen its supply chain to prevent stagnation of corporate activities possibly caused by natural disasters, infectious diseases, conflicts, and emerged risks from the CSR procurement perspective, and so on.

In particular, the IHI Group, identifying important suppliers essential to business continuity, establishes its supply chain that is less susceptible to various risks.

#### Risk Reduction Activities

IHI Group is undertaking the following activities to reduce risks (for further details, please see Sustainability Data Book 2024).

- Supplier Management Using Self-check Sheets
- Utilization of Sustainability Assessment Service "FcoVadis"
- ► Operation of Grievance (Remediation) Mechanisms
- Human Rights Risk Reduction Activities
- Procurement Responsibility over Mineral Resources including Conflict Minerals

#### Responding to Anti-social Forces and Anticorruption

The IHI Group contractually requires business partners to prohibit all relationships with anti-social forces, and commits no acts of bribery toward foreign government officials as prohibited by the "Penal Code and the Unfair Competition Prevention Act" or against the laws enacted in the particular country. If any acts as said above are found, the IHI Group requests the relevant company(s) investigate and report it to the IHI Group.

# Stakeholder Engagement

#### **Dialogue with Stakeholders**

The IHI Group views its primary stakeholders with a significant influence over ongoing corporate activities as its customers, business partners, shareholders, investors, government agencies, local communities, employees, and NPOs/NGOs. As such, the Group values and engages in broad dialogue with these stakeholders. The Integrated Report and Sustainability Data Book are published as tools for this dialogue.

Topics with stakeholders that are considered particularly vital are reported to the Management Committee and Board of Directors, and are thus reflected in our corporate strategy.

#### Approach to Communications with Shareholders and Investors

The IHI Group builds stronger relationships based on trust with all shareholders and other investors by recognizing accurate, timely disclosure of corporate information as a core principle of a sound financial instruments market, which is why the Group actively engages in communication efforts. For this reason, the IHI Group enhances the scope of various materials disclosed both online and offline for active and fair informational disclosure.

The Group's basic policy is to promote highly transparent management throughout the entire Group. The Group always discloses accurate and fair information on important management and business matters in a timely manner from the perspective of investors in capital markets. The Group also sees honest Group accountability as a basic policy to define its management direction and main businesses.

In addition to stock investors, the Group also proactively engages in dialogue with bond investors. The IHI Group is deeply involved in active communication efforts with its domestic and overseas investors to gain greater understanding about the business activities.

In fiscal 2023, the management team visited North America, Europe, and Asia and held dialouges with local institutional investors

#### . Themes of the Main Dialogues Held with Shareholders and Investors

Classification	Main Dialogue Topics					
General	Status of deliberations regarding business portfolio     Outlook for future expansion of lifecycle business					
	<ul> <li>Impact of additional inspection program on PW1100G-JM Turbofan Engine</li> <li>Prospects for monetization of fuel ammonia value chain business</li> <li>Outlook for future expansion of defense business</li> </ul>					
E	Initiatives to achieve IHI Carbon Neutrality by 2050					
	Status of consideration for Scope 3 disclosure					
	<ul> <li>Disclosure status of interim targets regarding GHG emission reduction</li> </ul>					
	Strengths and the uniqueness of the IHI Group in addressing climate change					
S	Specific details about the initiative in the Group human resources strategy     KPIs for the Group human resources strategy     Scale of human investment					
	<ul> <li>Utilization status of employee-awareness survey results</li> </ul>					
	<ul> <li>Predicting human rights risks in the supply chain</li> </ul>					
G	Effectiveness of the Board of Directors     Activities of Outside Directors     Composition of the Board of Directors     Background of materiality identification     Status of deliberations at the Board of Directors regarding ESG and sustainability					

# Main Dialogue with Shareholders and

Investors	foreign investors such as growt portfolio mana rights exercise	es (99 Japanese investors, 262 s) Focusing on active investors h and value investors, analysts, agers, ESG personnel, voting ers, etc., of domestic and foreigivestors with a wide range of vles.				
IHI Representative	CEO  • Financial result briefi conducted: Twice • Dialouges held: 23 ti					
	Officer in Charge of Group Finance & Accounting	<ul> <li>Financial result briefings conducted: 4 times</li> <li>Dialogue with sell-side analysts conducted: 37 time</li> <li>Dialogue conducted with Japanese and overseas institutional investors: 91 times</li> </ul>				
	Dialogue conducted w     Japanese and oversea     tutional investors: 226					

See Sustainability Data Book 2024 for dialogue with other stakeholders

## **Third-party Evaluation**

#### MSCI Japan ESG Select Leaders Index

IHI got its inaugural inclusion in the MSCI Japan ESG Select Leaders Index, which Japan's Government Pension Investment Fund employs for its ESG investments. This sub-index of the MSCI Japan IMI Index tracks companies with excellent ESG ratings in each industry sector. IHI received an AA MSCI ESG Rating in 2023.

# **2023** CONSTITUENT MSCIジャパン ESGセレクト・リーダーズ指数

THE INCLUSION OF IHI IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF IHI BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI



THE USE BY IHI OF ANY MSCI ESG RESEARCH LLC OR ITS AFFILIATES ("MSCI") DATA, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSO ENDORSEMENT, RECOMMENDATION, OR PROMOTION OF IHI BY MSCI. MSCI SERVICES AND DATA ARE THE PROPERTY OF MSCI OR ITS INFORMATION PROVIDERS, AND ARE PROVIDED 'AS-IS' AND WITHOUT WARRANTY. MSCI NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI.

### **FTSE Blossom Japan Index** FTSE Blossom Japan Sector Relative Index

FTSE Russell has included IHI Corporation in the FTSE Blossom Japan Index for the first time and the FTSE Blossom Japan Sector Relative Index for the third straight year. Japan's Government Pension Investment Fund uses both benchmarks as leading environmental, social and governance (ESG) indices.

FTSE Russell, an information services subsidiary of the London Stock Exchange Group, designed those indices to measure the performances of companies with robust ESG practices in Japan.



**FTSE Blossom** Japan Index



**FTSE Blossom** Japan Sector Relative Index

#### CDP

The IHI Group responds to Disclosure Insight Action's (CDP) questionnaire related to climate change on an annual basis. In fiscal 2023, the Group was evaluated as Management Level score of B.

#### **EcoVadis Silver Medal**

The IHI Group received the Silver Medal for the top 25% of EcoVadis' comprehensive sustainability assessment in four areas: environment, labor and human rights, ethics, and sustainable procurement.





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# **Corporate Governance**

# Basic Policy and Organizational Structure

#### Approach

IHI defines corporate governance as a system that assures sustainable growth and maximization of corporate value by enhancing management efficiency so that IHI can leverage its innate capabilities to the fullest extent possible. To achieve this, IHI targets efficient and appropriate internal decision-making by clearly separating management monitoring and supervisory functions from the business execution function. Furthermore, by establishing the relevant internal rules and building a system to administer them, IHI ensures appropriate operations across the entire Group.

IHI promotes constant improvement of its corporate governance, aiming to earn the trust and support of its shareholders and other stakeholders over the long term.

#### Policies

IHI will work to enhance its corporate governance in line with the following basic policies set forth by its Board of Directors.

#### Basic Policy on Corporate Governance

- 1 Respect shareholders' rights and ensure equal treatment
- 2 Strive to cooperate appropriately with shareholders and other stakeholders
- 3 Fulfill our responsibility to be accountable to stakeholders and ensure transparency by appropriately and proactively disclosing information relating to the Company
- 4 Clarify the roles and responsibilities of the Board of Directors, the Audit & Supervisory Board Members and the Audit & Supervisory Board to enable them to adequately fulfill their management monitoring and supervisory functions
- 5 Conduct constructive dialogue with shareholders who have investment policies according with the medium- to long-term interests of shareholders

#### Structure

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IHI is a company with an Audit & Supervisory Board. Its Board of Directors makes decisions related to all important matters concerning the management of IHI and the Group, in addition to supervising the execution of duties by directors. The Board of Directors, which consists of 12 Directors (four of whom are Independent Directors), is led by the Chairman of the Board. The Independent Directors, who are appointed from among individuals with extensive experience and broad insight gained at the helms of management, or with a high degree of specialist knowledge and diverse experience, participate in the Board of

Directors' decision-making process, offer advice, and independently make recommendations. Five Audit & Supervisory Board Members (three from outside) audit the duties executed by Directors.

#### • Remuneration Advisory Committee

IHI set up the Remuneration Advisory Committee as an advisory body to the Board of Directors. The Remuneration Advisory Committee ensures the suitability and objectivity of officer remuneration. This six-person committee is made up of three Independent Directors, one Independent Audit & Supervisory Board Member, the Director in charge of Human Resources, and the Director in charge of Finance & Accounting, with an Independent Director acting as Chairperson.

#### Nomination Advisory Committee

IHI set up the Nomination Advisory Committee as an advisory body to the Board of Directors. This five-person committee is made up of the President and four Independent Directors, with the President acting as Chairperson for the purpose of ensuring proper implementation of officer appointments.

#### • Business Execution Structure

IHI has an executive officer system to strengthen the oversight and supervision of management by the Board of Directors and to speed up the decision-making process regarding business execution.

Executive Officers are appointed by a resolution of the Board of Directors (seven of 23 Executive Officers serve concurrently as Directors). The Chief Executive Officer (CEO) manages the duties of the Executive Officers, giving directions and supervision. The Executive Officers follow the CEO's directions to execute their assigned duties. The CEO also appoints members to the Management Committee to assist in decision-making and business execution. The Management Committee convened 37 times in fiscal 2023.

IHI has also set up the ESG Management
Promotion Committee and the Risk Management
Conference, both of which are chaired by the CEO
himself. The ESG Management Promotion
Committee (convenes at least twice a year) is an organization whose purpose is to consider basic policy and specific measures for ESG management, as well as to evaluate and improve the implementation status.
The Risk Management Conference (convenes four times per year) oversees the IHI Group's risk management and discusses and approves important matters related to overall risk management.

#### Corporate Governance Management Structure



#### **Roles and Composition of Organizations** Chairperson Audit & Remuneration Advisory Nomination Advisory Organization Board of Directors Supervisory Board Committee Composition Ratio of outside 33% 60% 67% 80% Chaired by Independent Chaired by Internal Audit & Chaired by Representative Chaired by Chairman of the Board

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#### Compliance

No. of meetings

held in 2023

#### Approach

The IHI Group implements its compliance program in accordance with the Basic Rules of Compliance for IHI Group and other internal policies. These activities are conducted not only to address legal compliance, but also to respond to the needs of society based on a full proper grasp of society's ever-changing values and expectations.

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To prevent a recurrence of the Civil Aero-Engine Maintenance Business quality issue that we experienced in fiscal 2019, we have been focusing on and reinforcing our compliance and quality assurance systems as part of our risk management activities. The IHI Group knows that living up to the expectations of stakeholders and earning their trust is vital to drive the sustainable growth of both customers and society.

#### Compliance Committee

The IHI Group, with its CEO serving as chairman, established the Compliance Committee, a Group-wide committee on compliance under the Risk Management

Conference. The Committee discusses and drafts important policies and promotes compliance activities, which include Competition Law violation and anti-corruption, among others. This Committee is made up of Heads of Compliance from each division, with the Officer in charge of Group Compliance as chairperson. Compliance Committee members roll out the decisions made by the Committee to each division by incorporating them into compliance activities tailored to the division.

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With regard to Committee activities, results from the previous fiscal year along with plans for the current fiscal year are reported at the Management Committee at the start of each new fiscal year.

In addition, the Legal Division acts as a secretariat to plan and execute compliance activities in accordance with the policies created by the Compliance Committee while also monitoring the progress of compliance activities in each division and providing guidance and support as necessary.

Compliance-related matters that are particularly important regarding operation and management are reported to and discussed by the Board of Directors.

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#### **Compliance Structure**



### **Number of Compliance Hotline Reports**

FY2020 FY2021 FY2022 FY2023	202	263	286	314	
	FY2020	FY2021	FY2022	FY2023	

(Scope: IHI and affiliated companies)

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#### **Project Risk Management**

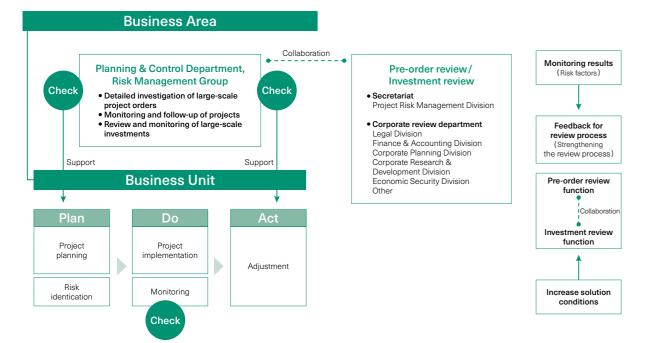
#### Approach

The IHI Group believes that the initial plan has a substantial impact on the subsequent results of both large-scale projects and investments, and therefore manages risk through established screening processes and systems before accepting orders and pursuing investments. In particular, the impact of the initial plan is particularly significant in the case of projects including new elements or elements that have not been implemented for a long time, and under management these impacts are taken into consideration.

#### Governance

As a pre-order and pre-investment review, we check the appropriateness and risks in the initial plan, confirm no experience and inexperienced factors, and conduct a review by internal and external experts, as well as a multilateral and comprehensive review by the review department.

#### **Project Risk Management System**



After ordering and investment are underway, we monitor the progress to ensure things are going according to the initial plan, if there are any new incidents, or that risks are handled appropriately in cooperation with the corporate review department and the department in charge of risk management of each business area. Post-order and post-investment monitoring results are regularly reported to the Management Committee and Board of Directors.

#### Risk Management

In continuation from fiscal 2022, during fiscal 2023, the IHI Group was especially focused on post-order monitoring, including on-site audits for large-scale projects by affiliated companies overseas, which are on the rise. By utilizing a mechanism launched in fiscal 2022, the Group is continuously reviewing and monitoring social trends and other factors regarding procurement-related risks that may affect the profits and schedules of large-scale projects.

As it continues to invest in Growth and Developmentfocus Businesses, in addition to current steps to prevent downward revisions, the IHI Group will seek information from the project formulation stage for highly novel projects, the number of which is likely to increase. The Group will identify risks at an early stage through information collection.

#### **Appointment of Officers**

#### Policies and Procedures

IHI's Board of Directors decides on ideal attributes for Officers and draws up independence standards for Independent Directors and Independent Audit & Supervisory Board Members. These standards are based on the requirements for independent directors/ audit & supervisory board members stipulated by the Tokyo Stock Exchange and their emphasis is to assure that Independent Directors and Independent Audit & Supervisory Board Members are genuinely independent.

IHI's Board of Directors sets the basic policy of appointing the most appropriate Officers according to the ideal attributes and the independence criteria for Independent Directors and Independent Audit & Supervisory Board Members with the aim of ensuring sustainable growth and increased corporate value for the IHI Group over the medium- to long-term.

In appointing officers, IHI's Board of Directors has supplemented the legally required procedures by establishing a Nomination Advisory Committee comprised of all the Independent Directors and the Representative Director and President. The Committee acts as an optional advisory body to the Board of Directors in order to enhance the Board of Directors' independence, objectivity, and

accountability, as well as to proactively obtain the involvement, advice, and supervision of the Independent Directors. It supervises appointment-related procedures to ensure that they are applied appropriately, and offers related advice.

Should members of senior management (Chief Executive Officer, Representative Director) or Executive Officers meet the dismissal criteria for Officers, a determination of such dismissal shall be resolved promptly by the Board of Directors.

#### Ideal Attributes for Officers

IHI appoints Directors and Audit & Supervisory Board Members who are healthy in mind and body and have all the following attributes:

- Deep understanding of, and empathy with, the IHI Group's management philosophy and vision
- ► The ability to contribute to sustainable growth and medium- to long-term increase in corporate value at the IHI Group by addressing societal issues in accordance with the IHI Group's vision
- Outstanding foresight, penetrating discernment, and ability to make appropriate decisions with regard to the management of the IHI Group
- Good character with a strong sense of ethics
- Ample experience as a corporate manager, or a high degree of specialist knowledge, combined with a broad, global perspective and insight

#### Approach to Ensuring Diversity in Key Human Resource Roles

Based on the Group Human Talent Strategy 2023, IHI has set targets respectively for developing the environment to actively recruit and develop human resources, promote them to management and executive positions, and promote their contributions, in particular for women among key human resource roles so that each woman employee is able to make greater contributions.

#### Targets (FY2026)

- Ratio of female Managers 7%
- ► Ratio of new female university graduate recruitment About 20%

Reference (FY2030) \*To be reviewed as necessary according to target progress

- ► <u>Ratio of female Managers</u> Aiming for about 15%
- ► Ratio of new female university graduate recruitment
  Aiming for 20% or higher

Moreover, IHI supports the Keidanren's Challenge to increase the proportion of female Officers, exceeding 30% by 2030.

	Tsugio Mitsuoka Hiroshi Ide	Title	Attendance at Board of	Period in Office	No. of IHI Shares	Appointments to Advisory Commitees and Attendance		
			<b>Directors</b> (Audit & Supervisory Board)		Owned	Remuneration Advisory Committee	Nomination Advisory Committee	
		Director and Chairman of the Board	18/18	10 years	19,800			
		Representative Director and President, Chief Executive Officer	18/18	4 years	6,700		Chairperson 5/5	
	Tsuyoshi Tsuchida	Representative Director, Senior Executive Officer	14/14	1 years	3,600			
	Hideo Morita	Representative Director, Senior Executive Officer	18/18	3 years	4,200			
	Akihiro Seo	Director, Managing Executive Officer	18/18	2 years	1,100	Committee Member 5/5		
	Jun Kobayashi	Director, Managing Executive Officer	14/14	1 years	600			
	Yasuaki Fukumoto	Director, Executive Officer	14/14	1 years	1,000	Committee Member 5/5		
	Noriko Morioka	Director, Managing Executive Officer	-	(New)	1,900			
	Yoshiyuki Nakanishi	Director	18/18	4 years	1,400	Chairperson 5/5	Committee Member 5/5	
Independent	Chieko Matsuda	Director	16/18	4 years	2,300		Committee Member 5/5	
таерепает	Minoru Usui	Director	18/18	3 years	3,600	Committee Member 5/5	Committee Member 5/5	
	Toshihiro Uchiyama	Director	18/18	2 years	700	Committee Member 5/5	Committee Member 5/5	
	Seiji Maruyama	Standing Audit & Supervisory Board Member	18/18 (14/14)	3 years	3,400			
	Tae Hozoji	Standing Audit & Supervisory Board Member	_	(New)	1,400			
	Aiko Sekine	Independent Audit & Supervisory Board Member	18/18 (14/14)	4 years	0			
Independent	Yumiko Waseda	Independent Audit & Supervisory Board Member	18/18 (14/14)	3 years	0			
	Kazuhiro Muto	Independent Audit & Supervisory Board Member	14/14(12/12)	1 years	2,100	Committee Member 2/2		

# Expertise and Experience of Directors and Audit & Supervisory Board Members (Skills Matrix)

	Name	Corporate Management	Technology Research and Development	Global Business	Sales Marketing	ICT/DX	Human Resources Management/ Development	Finance and Accounting	Legal/ Compliance/ Risk Management
	Tsugio Mitsuoka	•	•						•
	Hiroshi Ide	•		•	•				
	Tsuyoshi Tsuchida	•				•			•
	Hideo Morita		•	•					
	Akihiro Seo						•		•
	Jun Kobayashi			•	•				
	Yasuaki Fukumoto							•	
	Noriko Morioka		•						
	Yoshiyuki Nakanishi	•		•	•				
	Chieko Matsuda						•	•	•
dependent	Minoru Usui	•	•	•					
	Toshihiro Uchiyama	•		•	•				
	Seiji Maruyama							•	
	Tae Hozoji								•
	Aiko Sekine							•	
dependent	Yumiko Waseda								•
	Kazuhiro Muto			•	•	•			

Corporate management	Formulate and implement management strategies to achieve sustainable enhancement of corporate value	ICT/DX	Formulate and implement new business models and work styles utilizing ICT and DX, and promote IT risk management
Technology / research and development	Promote technology development and R&D that contribute to resolving social issues	Human resources management / development	Formulate and implement human resource strategies to maximize employee potential
Global business	Formulate and implement business strategies that contribute to resolving social issues from a global perspective	Finance and accounting	Formulate and implement financial strategies to achieve sustainable growth in corporate value
Sales/marketing	Formulate and implement sales and marketing strategies that contribute to resolving social issues from the customer's perspective	Legal/compliance/ risk management	Establish transparent, fair, and efficient governance and risk management systems

# Reason for Appointment and Expected Roles as Outside Officers

	Yoshiyuki Nakanishi	Yoshiyuki Nakanishi following experiences in sales of products and services of a global chemical manufacturer and involvement in operations of its key business, has gained abundant experience, accomplishments, and extensive insight into overall corporate management at the helm of the manufacturer, where he implemented various measures to respond to changes in the business environment. Aiming to have him reflect these qualities in the management of IHI and carry out management monitoring and supervisory functions from an independent perspective, the Company has appointed him as an Independent Director.
Independent Director	Chieko Matsuda	Chieko Matsuda has extensive experience and insight gained through financial and capital market operations and management consulting operations and an extremely high level of expertise in corporate and financial strategies as a researcher. In addition, she has broad insight as an outside officer of several companies. Aiming to have her reflect these qualities in the management of IHI and carry out management monitoring and supervisory functions from an independent perspective, the Company has appointed her as an Independent Director.
	Minoru Usui	Minoru Usui, after being in charge of technology development in an electronic equipment manufacturer that operates business globally, has gained abundant experience, accomplishments, and extensive insight into overall corporate management at the helm of the manufacturer, where he implemented various measures to respond to changes in the business environment. Aiming to have him reflect these qualities in the management of IHI and carry out management monitoring and supervisory functions from an independent perspective, the Company has appointed him as an Independent Director.
	Toshihiro Uchiyama	Toshihiro Uchiyama, after working on sales of products and services, production reforms in its overseas affiliated company, and other initiatives in an electronic equipment manufacturer that operates business globally, has gained abundant experience and extensive insight into overall corporate management at the helm of the manufacturer, where he implemented various measures to respond to changes in the business environment. Aiming to have him reflect these qualities in the management of IHI and carry out management monitoring and supervisory functions from an independent perspective, the Company has appointed him as an Independent Director.
Independer	Aiko Sekine	Aiko Sekine has accumulated abundant experience and insight as a partner of an audit corporation, and Chairman and President of JICPA, as well as abundant experience as an outside officer. Expecting such experience and insight to be reflected in the management auditing of IHI from an independent perspective, the Company has appointed her as an Independent Audit & Supervisory Board Member.
nt Audit & Su Member	Yumiko Waseda	Yumiko Waseda has abundant experience and insight as an attorney at law, with an extremely high level of expertise in intellectual property law, as well as extensive experience as an Independent Audit & Supervisory Board Member. Expecting these qualities and her independent perspective to be reflected in the management auditing operations of IHI, the Company has appointed her as an Independent Audit & Supervisory Board Member.
Independent Audit & Supervisory Board Member	Kazuhiro Muto	Kazuhiro Muto has gained abundant experience, accomplishments, and extensive insight into overall corporate management as an executive of a Japanese subsidiary of a globally active IT company, where he implemented various measures to respond to changes in the business environment including overseas business. Aiming to reflect these qualities in the management of IHI and expecting he can carry out management monitoring and supervisory functions from an independent perspective, IHI has appointed him as an Independent Audit & Supervisory Board Member.

## Executive Officers 20 males/3 females (ratio of female officers: 13.04%)

(As of July 1st, 2024)

Name	Position and Role	Main Responsibilities
Hiroshi Ide	Chief Executive Officer	
Tsuyoshi Tsuchida 🔹	Senior Executive Officer	In charge of Group Procurement, Group DX
Hideo Morita	Senior Executive Officer	In charge of Group Economic Security, Group Quality Assurance/Design Process, Production Base Strategy
Takeshi Kawakami	Managing Executive Officer	President of Social Infrastructure Business Area
Kouji Takeda	Managing Executive Officer	President of Resources, Energy & Environment Business Area
Akihiro Seo	Managing Executive Officer	In charge of Group Human Resources/Business Relating to Administration, Group Safety and Health, Group ESG
Nobuhiko Kubota	Managing Executive Officer	In charge of Group Engineering, General Manager of Corporate Research and Development Division
Noriko Morioka	Managing Executive Officer	General Manager of Strategic Technologies Division
Jun Kobayashi	Managing Executive Officer	General Manager of Business Development Division
Kiyoshi Nihei	Managing Executive Officer	President of Industrial Systems & General-Purpose Machinery Business Area
Yoshikazu Hamada	Managing Executive Officer	In charge of Business Relating to Shareholder Meeting / Board of Directors, Group Legal Affairs, Group Compliance, General Manager of Corporate Planning Division
Chie Fukuoka	Managing Executive Officer	General Manager of Intelligent Information Management Division
Atsushi Sato	Managing Executive Officer	President of Aero Engine, Space & Defense Business Area
Yukihisa Ozawa	Executive Officer	General Manager of Monozukuri System Transformation Division
Go Maeda	Executive Officer	Vice President of Social Infrastructure Business Area
Shotaro Tabata	Executive Officer	In charge of Group Operations, General Manager of Corporate Marketing & Sales Division
Yasuaki Fukumoto	Executive Officer	In charge of Group Finance & Accounting, General Manager of Finance & Accounting Division
Takao Tanaka	Executive Officer	Deputy General Manager of Business Development Division, General Manager of Americas Headquarters
Kazuya Ueda	Executive Officer	Vice President of Social Infrastructure Business Area, Representative Director and President of IHI Infrastructure Systems Co., Ltd.
Bernd Bahlke	Executive Officer	Vice President of Industrial Systems & General-Purpose Machinery Business Area
Chiyuki Nakamata	Executive Officer	Vice President of Aero Engine, Space & Defense Business Area
Kensuke Yamamoto	Executive Officer	Deputy General Manager of Business Development Division, Vice President of Resources, Energy & Environment Business Area
Noriaki Ozawa	Executive Officer	Vice President of Resources, Energy & Environment Business Area

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#### **Activities of optional committee**

#### Remuneration Advisory Committee

The committee met five times during FY2023 and deliberated on the policy and details of remuneration to be received by directors and executive officers.

Position	Name		Attendance at
Independent director	Yoshiyuki Nakanishi	Chairman	5 of 5 (100%)
Director	Akihiro Seo	Committee member	5 of 5 (100%)
Director	Yasuaki Fukumoto	Committee member	5 of 5 (100%)
Independent director	Minoru Usui	Committee member	5 of 5 (100%)
Independent director	Toshihiro Uchiyama	Committee member	5 of 5 (100%)
Independent audit & supervisory board member	Kazuhiro Muto	Committee member	2 of 2 (100%)*

<sup>\*</sup> Number of attendances at the Remuneration Advisory Committee held after assuming office

#### Nomination Advisory Committee

The committee met five times during FY2023 and deliberated on executive personnel matters. successor training plans, and other matters.

Name	Attendance at the Committee		
Hiroshi Ide	Chairman	5 of 5 (100%)	
Yoshiyuki Nakanishi	Committee member	5 of 5 (100%)	
Chieko Matsuda	Committee member	5 of 5 (100%)	
Minoru Usui	Committee member	5 of 5 (100%)	
Toshihiro Uchiyama	Committee member	5 of 5 (100%)	
	Hiroshi Ide Yoshiyuki Nakanishi Chieko Matsuda Minoru Usui	Hiroshi Ide Chairman Yoshiyuki Nakanishi Committee member Chieko Matsuda Committee member Minoru Usui Committee member	

- Remuneration shall be aimed at fully encouraging Directors and Executive Officers to perform their duties in line with management philosophy, Group vision, and Group management policy, and strongly motivating them toward the achievement of specific management goals to bring IHI's and IHI Group's sustainable growth and improve the medium- and long-term corporate value.
- Remuneration shall be structured with the appropriate allocation of a fixed base amount, an annual incentive (performance-based bonuses), which is linked to the operating performance of each fiscal year, and a medium- and long-term incentive (performance-based share remuneration), which is linked to medium- and long-term operating performance and corporate value aimed at broadly sharing a sense of value with stakeholders, and thereby shall contribute to performing with a sound entrepreneurial spirit.
- ► Under the management philosophy, "Human resources are our single most valuable asset", appropriate treatment shall be provided to Officers of IHI in consideration of IHI's management environment and the social roles and liabilities IHI undertakes.
- Framework of Annual incentive Remuneration and medium- and long-term incentive Remuneration

#### Performance-based bonuses (Annual incentives)

 Performance indicators and reasons for selection thereof Performance indicators shall be those that include: profit attributable to owners of parent underpinned by the aim of

# Policy on Determination of **Remuneration for Officers**

to titles and positions and weight of profit indicators are Consolidated profit, Consolidated operating cash flows and ESG Indicators are 40%, 40%, and 20%, respectively. ► Method of calculating The monetary amount of remuneration provided every fiscal year is calculated as follows, and the performance evaluation payout rate varies from a range of zero to approximately 200 depending on the percentage achievement of profit indicators, with a baseline value of 100 for the amount of payment when performance targets have been

achieved. In addition, regardless of the calculation

results, the annual incentive is not paid to Directors if no

maintaining common interests with our shareholders;

consolidated operating cash flow underpinned by the aim

of strengthening the capacity to generate cash necessary

for growth; and ESG indicators aimed at promoting ESG

management. ESG indicators are used to evaluate efforts

to reduce greenhouse gases, improve employee engage-

ment, and promote DE&I. Profit indicators corresponding



#### Performance-based share remuneration (medium- and long-term incentives)

 Performance indicators and reasons for selection thereof The performance evaluation period shall encompass the next three fiscal years, and performance targets for the final fiscal year of the performance evaluation period shall be established at the outset of the performance evaluation period. Moreover, the performance indicators shall be of primary emphasis under the Group management policies, with consolidated ROIC serving as a performance indicator underpinned by the aims of engaging in business operations that place focus on investment efficiency, achieving sustainable growth, and increasing corporate value. IHI shall furthermore review the possibility of making change to the performance indicators as necessary in alignment with review of the Group management policies.

► <u>Method of calculating</u> The number of shares to be delivered as performance-based share remuneration is calculated as follows, and the coefficient varies from a range of zero to approximately 150 depending on the extent of having achieved such target, with a baseline value of 100 for the number of shares to be delivered when performance targets have been achieved. A

monetary sum equivalent to the market value of the shares is to be delivered with respect to a portion of such remuneration.



#### · Remuneration of Independent Directors and **Audit & Supervisory Board Members**

Remuneration of Independent Directors shall consist only of a base amount in the light of their duties. Remuneration of Audit & Supervisory Board Members shall consist only of a base amount, as compensation for responsibilities for auditing the execution of business throughout the IHI Group. The amount shall be determined through discussions among the Audit & Supervisory Board Members. The base amount for Independent Directors and Audit & Supervisory Board Members shall be set at an appropriate level upon having considered factors that include roles and responsibilities assumed by the respective officers. Moreover, the Company shall perform verification by regularly surveying objective market data on remuneration researched by an external specialized institution.

#### Results for FY2023 Remuneration Total Amount of Remuneration, etc., Paid and **Number of Recipients**

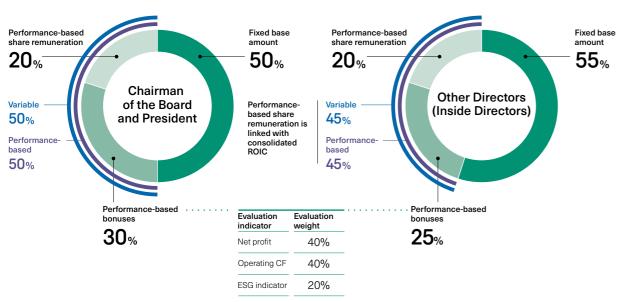
Officer	Total		Number		
Category	Amount Paid (million yen)	Base Amount	Performance- based Share Remuneration*1	Performance- based Bonus*2	of eligible officers (people)
Directors*	624	413	159	51	11
Audit & Supervisory Board of Members*	72	72	_	_	2
Independent Directors	100	100			8

\* Excluding Outside Directors and Outside Audit & Supervisory Board Members

Remuneration paid, etc., of directors and audit & supervisory board members, whose total amount paid to each position of directors and audit & supervisory board members, equaled or exceeded ¥100 million

Name	Officer	Total		Breakdown (milli	ion yen)
	Category	Amount Paid (million yen)	Base Amount	Performance- based Share Remuneration*1	Performance- based Bonus*2
Tsugio Mitsuoka	Director	111	70	30	9
Hiroshi Ide	Director	116	72	33	10

# Composition of Remuneration



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### **Approach Board of Directors Evaluation**

IHI has been evaluating the performance of the Board of Directors annually in principles since fiscal 2015 to further its effectiveness. The next evaluation of the Board of Directors is scheduled to be conducted during fiscal 2024.

#### Basic Effectiveness Evaluation Process



#### FY2022 Effectiveness Evaluation Results and FY2023 Initiatives

In FY2023, based on the effectiveness evaluation in FY2022, we have identified the following as issues to be addressed.

# Issues based on the effectiveness evaluation in FY2022

- More comprehensive deliberation and reporting of specific management strategies and important monitoring items
- From the standpoint of succession planning, expanding points of communication between Independent
   Directors who are members of the Nomination Advisory
   Committee and Executive Officers
- Provide information to Independent Officers and further improve communication between Officers as a basis for deepening deliberations

#### Initiatives in FY2023

- ► The most important theme to be debated throughout the year is the transformation of our business portfolio set forth in "Group Management Policies 2023"
- Planned debate of the other important Company-wide measures of human talent strategy and DX strategy
- Expanding dialogue between Independent Officers and Executive Officers
- Review of standards for discussion by the Board of Directors to enhance matters to be reported
- Provide information to Independent Officers and further improve communication with Independent Officers (office visits, meetings to exchange opinions, etc.)

#### FY2023 Effectiveness Evaluation Results and Future efforts

In the effectiveness evaluation conducted during the current fiscal year, IHI assessed itself that the

effectiveness of the Board of Directors of the Company continues to be ensured. In addition, in order to further enhance the effectiveness of the Board of Directors, the following matters are identified as issues to be addressed.

# Issues based on the effectiveness evaluation in FY2023

- ► Further enhancement of discussions on the composition of the Board of Directors, succession planning, roles and role allocation, etc., which are prerequisites for the Board of Directors to exercise its monitoring and supervisory functions
- Ensuring deliberation time and further deepening discussions on important issues to be discussed at the Board of Directors
- Expansion of information provision for appropriate decisionmaking
- Restructuring of effective Group governance based on reflection of the misconduct by a consolidated subsidiary of IHI

#### Initiatives in FY2024

- Discussions on the future vision and the way of monitoring and supervisory functions of the Board of Directors
- Setting of the management agenda for fiscal 2024 by the executive side and discussions at the Board of Directors based on this ("transformation of the business portfolio" and "enhance Group governance", etc.)
- Creation of documents that clearly organize the issues to be discussed and enhancement of information provision to Independent Directors

# Backup system for improving the effectiveness of Independent Directors and Independent Auditors

At IHI, Independent Directors and Independent Audit & Supervisory Board Members are briefed on the content and background of agenda items prior to monthly Board of Directors, and off-site meetings and others separate from Board of Directors are organized in order to provide opportunities for discussion regarding medium- to long-term strategies which include business portfolios, among others.

Furthermore, the Company also provides tour opportunities of its business locations, construction sites, and so on with the aim of deepening understanding of its business practices and products.

In fiscal 2023, the Company set up tours of a vehicle turbocharger manufacturing base and an elevated expressway bridge construction site.

The Audit & Supervisory Board secretariat assists the Independent Audit & Supervisory Board Members in executing their duties, and the Standing Audit & Supervisory Board Members report on the status of daily audits and share information.

# Functions and Roles of the Board of Audits

IHI has an Audit & Supervisory Board, which comprises five audit & supervisory board members (three of them are independent) who audit the duties executed by directors. The "Audit & Supervisory Board Division" (four full-time staffers) assists the audit & supervisory board members in the execution of their duties.

# Meetings of the Audit & Supervisory Board in fiscal 2023

During FY2023, the Company held meetings of the Audit & Supervisory Board a total of 14 times, with the attendance records of the individual audit & supervisory board members being as follows:

Classification	Name	Attendance at meetings of the Audit & Supervisory Board
Standing	Takashi Niimura	14 of 14 (100%)
Standing	Seiji Maruyama	14 of 14 (100%)
Outside	Aiko Sekine	14 of 14 (100%)
Outside	Yumiko Waseda	14 of 14 (100%)
Outside	Kazuhiro Muto	12 of 12 (100%)*

<sup>\*</sup> The totals in the table are different because the starting dates when the members assumed office are different

#### Activities in FY2023

The main resolutions, reports, discussion items, etc., of the Audit & Supervisory Board for FY2023 are as follows:

- Resolutions (6): Audit plan of the Audit & Supervisory Board, agreement on the proposal for the election of Audit & Supervisory Board members, agreement on the remuneration of the accounting auditor, etc.
- Reports (44): Audit status of the full-time Audit & Supervisory Board members, status of internal audits and evaluation of internal control, annual and quarterly financial reports, audit plan and audit report of the accounting auditor (including the content of Key Audit Matters (KAM)), report on non-assurance services of the accounting auditor, etc.
- <u>Discussions (7):</u> Audit report of the Audit & Supervisory Board, remuneration of Audit & Supervisory Board members, presence or absence of reasons for dismissal and appropriateness of reappointment of the accounting auditor, etc.
- Other (16): Exchange of opinions with the President and Representative Director, dialogue with department heads, etc.

The Audit & Supervisory Board focused on the implementation and progress of specific measures based on the "Group Management Policies 2023", which aims to achieve "sustained high growth" and "respond to disruptive environmental changes", and on the fostering of an environment and corporate culture that enhances the engagement of all employees of our group and brings out

their abilities. Based on the above and the status of the audit in FY2022, the Audit & Supervisory Board set and took action on the following six priority audit items for FY2023.

- The establishment and operation of the internal control system and compliance with important laws and regulations
- 2 Risk response status
- **3** Progress of structural reforms and execution of business strategies
- 4 Business status of associated companies selected based on management issues and risk perception
- Eradication of occupational accidents and status of initiatives aimed at promoting work style reform and DE&I
   (Diversity, Equity & Inclusion)
- 6 Status of initiatives aimed at reforming the corporate culture

#### Internal Audit Activities

The Internal Audit Division conducts internal audits of the Company and its group companies. The Internal Audit Division is independent in terms of internal organization, and its 30 staff members (as of March 31, 2024) do not hold concurrent positions in other departments or organizations.

The Internal Audit Division strives to develop, maintain, and improve internal controls across the entire Group by providing confirmation and advice regarding self-inspection performed by head office divisions on the basis of expert opinion, audits, and monitoring performed by regional headquarters with respect to Group companies within each of their regions, and internal audits performed by Group companies themselves.

The General Manager of the Internal Audit Division reports to the Chief Executive Officer (CEO) regarding all audit results as well as details on guidance and confirmation with respect to each of the aforementioned divisions and companies. Upon having compiled such reports, the General Manager of the Internal Audit Division regularly reports to the Management Committee, Board of Directors, and Audit & Supervisory Board. With respect to the internal controls over financial reporting, in accordance with internal control reporting systems under the Financial Instruments and Exchange Act, the Internal Audit Division compiles Group-wide internal control evaluations as an independent division, and ultimately reports to the Management Committee, Board of Directors, and Audit & Supervisory Board in the form of an internal control evaluation report.

Activities of the Internal Audit Division are disclosed to relevant internal divisions in monthly reports, and necessary information is shared with audit & supervisory board members and the accounting auditor at periodic information exchange sessions. Moreover, the Internal Audit Division performs self-assessments of its activities in accordance with the requirements in international standards stipulated by The Institute of Internal Auditors (IIA). It then compiles such assessments in annual activity reports and furnishes such reports to the Management Committee, Board of Directors, and Audit & Supervisory Board.



The IHI Group is working to transform its business portfolio in accordance with "Group Management Policies 2023". The advice and supervision of independent directors is crucial for strategy execution. Focusing on the "Group Management Policies 2023" and the strategy for subsequent growth, the four independent directors of IHI and Professor Nana Otsuki of the Graduate School of Management, Nagoya University of Commerce and Business, met for discussions.

Date: May 27, 2024 Venue: IHI Club Hall (25F, IHI Head Office)

#### Transformation of Business Portfolio

- Otsuki IHI Group is transforming its business portfolio to achieve its goal for the future. With the first half of the "Group Management Policies 2023" over, what is your view on the progress of the strategy?
- Usui We are seeing a favorable business environment for the IHI Group. The world looks up to Japan's monozukuri, and we are also seeing demand for upgrading infrastructure facilities. The decarbonization and aerospace fields are new frontiers for mankind. Since there are major business opportunities in these fields, we would like to focus on them more and raise the speed of implementation.
- Nakanishi In fiscal 2023, the impact of the aero engine incident was significant. If you exclude that, our performance was satisfactory in my opinion. On the other hand, I also feel that we have not been able to fully catch the wave in spite of running a business that matches the megatrends. We have been setting aside time at Board of Directors meetings to discuss the transformation of the business portfolio, but we are yet to translate the restructuring of portfolio into concrete action. We would like to see accelerated implementation and full preparation for risk-taking.
- Matsuda IHI Group boasts the excellent DNA of having made major contributions to the modernization of Japan



#### Nana Otsuki

Professor, Graduate School of Management, Nagoya University of Commerce and Business

Engaged in research on financial systems at financial institutions and credit rating agencies both in Japan and overseas. While working for a foreign securities company, she was highly regarded by global investors as a banking sector analyst. In addition to serving as an outside director and auditor of listed companies, Ms. Otsuki is also a member of councils and committees of the Ministry of Finance, the Financial Services Agency, and the Ministry of Education, Culture, Sports, Science and Technology.

after the end of the Edo period through shipbuilding, which was a cutting-edge industry of the time. I believe it is a company with great prospects given the tailwind in the external environment, but I feel it somewhat lacks in thinking about overall optimization with an eye to the future. In order to demonstrate the superb DNA unique to the IHI Group and ride the tailwind, I would say that we require quick decision-making based on a total optimization viewpoint.

- Uchiyama Last fiscal year, the Group had to allocate resources to address the aero engine incident, but I believe that the underlying tone of the business was favorable. As for transformation of the business portfolio, we have categorized the businesses into Growth Businesses, Development-focus Businesses, and Conventional Businesses, but discussions are still at the half-way mark regarding where to focus, especially in the case of Conventional Businesses. In terms of business selection, it is also necessary to acknowledge that IHI Group may not be the best owner of some of them.
- Otsuki I understand that the transformation of business portfolio is still midway, and you are entering the decision-making phase with a sense of urgency. You have to make difficult decisions such as spinoff or sale of businesses. What are your thoughts on the processes to be adopted in implementing the restructuring?
- Usui Unless we further clarify the growth strategy and clearly set out the IHI Group's vision, it will be difficult to carry out sales of businesses. For example, I would like a future scenario to be drawn up which is more specific as

## Yoshiyuki Nakanishi

Independent Director

Chairperson of Remuneration Advisory Committee

Nomination Advisory Committee Member

Nomination Advisory Committee Member



#### Chieko Matsuda

Independent Director



#### Minoru Usui

Independent Director

Remuneration Advisory Committee Member

Nomination Advisory Committee Member



#### **Toshihiro Uchiyama**

Independent Director

Remuneration Advisory Committee Member

Nomination Advisory Committee Member



to how the Group will grow in the aerospace field. It is not efficient to grow all the existing businesses in a balanced way, so we would like to prioritize and to narrow down the growth fields, and push forward in a focused and specific manner.

- Nakanishi Instead of taking an elimination approach, we need to make it clearer which businesses are to be the core. I think the ideal approach would be to set up a few core business pillars, and then as much as we can, sort out businesses that aren't linked to them. Upon discussing the restructuring of the business portfolio, we tend to fall into the trap of considering withdrawal or sale citing ROIC being below the cost of capital as the reason. The precondition for the best decision will be compatibility with the Group goal.
- Matsuda I would like to clarify our equity story and actively disseminate it to the capital market. As I would like the Group to become a frontrunner in the industry, it should ensure internally sharing a story which is convincing to its shareholders and other stakeholders, and increase the speed of the restructuring. I look forward to strong leadership from head office.
- Uchiyama Unless you are thinking on your feet, you probably will not be able to keep pace with the way the world is moving nowadays. In the Growth and Development-focus Businesses in particular, you have to have a strong will to take the lead rather than a mindset of following the competition. Otherwise, you will miss out on business opportunities. The presence of startups is growing in the aerospace and renewable energy fields, and spinoffs are one of the ways to compete with such emerging companies.

11 Independent Directors Roundtable 100

#### What does it take to increase the capital market valuation?

- Otsuki Since you came up with the interesting point of long-established companies versus startups, let me present a piece of data. When you compare the median age since inception of Nikkei Stock Average index companies with that of U.S. companies in the S&P 500 index and European companies in the STOXX Europe 600 index, as of last year, both Europe and U.S. companies were at about 30 years against about 80 years for Japanese companies. I am not generalizing, but I feel the age of a company and its relation to the company's willingness to take on challenges and innovate is a really interesting research topic. As independent directors, how have you been advising and monitoring to raise the capital market valuation of the IHI Group?
- Usui The Group's Management Philosophy says "Contribute to the development of society through technology", and if technology is seen as the core competence, it is necessary to offer opportunities for Ph.D. holders, who are the highly skilled resources of the company, to play more active roles.

I think investors and shareholders are expecting the IHI Group to generate value that only it can deliver. Another thing is, even if you are an engineer, you should be strongly aware of the impact the value created by technology has on society, rather than just paying attention to technology. Technology is there to make society better, and therefore engineers should not just focus on building rockets, but also set high technological goals of contributing to society and making money through rockets.



• Nakanishi The IHI Group is a group of highly talented engineers. At the same time, I feel it is slightly lacking in ideas to monetize its technological excellence. Offering a perspective on how to build a business model that generates cash while meeting social needs with the technology and knowledge it possesses is something we as independent directors can contribute to value generation at the IHI Group.

 Matsuda What I would like to offer is a capital market perspective. I always try to engage in discussions from a strategic perspective, while being conscious of how the Group is viewed by external stakeholders, including investors. As an engineer, it is important to have the desire to create high-performance rockets, but if you are an entrepreneur, you need a strong desire to make a profit from building rockets. I would like them to think more of how to structure the rocket business in addition to building rockets.



• Uchiyama I would like those in the implementing side to have a clearer awareness of what IHI Group's strengths are and what its differentiating factors are. Regarding business reports and also investment projects, if you can discuss the Group's position in the market, where it is heading, and what it is trying to do, then the direction for the company will become clearer.

#### Integration of sustainability strategy into company-wide strategy

- Otsuki I would like to ask about the Group's sustainability strategy initiatives. I could not find ESG-related items on the skills matrix published by the Group, but I assumed that this is something the Board of Directors are working together to promote. How far have the discussions progressed regarding the integration of sustainability strategy into company-wide strategy?
- Matsuda ESG is being discussed repeatedly at the Board of Directors meetings. The IHI Group has many companies that are compatible with social sustainability, and so I am paying attention to how it will combine sustainability with business strategy. For example, the fuel ammonia value chain businesses are directly connected to sustainability, I would like the Group to promote them so that they can generate returns as a business towards the goal of decarbonization.

- Nakanishi Promotion of ESG is frequently an agenda item in Board of Directors' meetings, and there is a high level of awareness among the senior management. Starting this fiscal year, we have incorporated sustainability targets, including active participation of female employees, in the evaluation indicators for performance-based remuneration to increase the linkage between solving of material issues and incentive remuneration.
- Usui It is important to make the company sustainable. To this end, we need to define a business portfolio that enables us to contribute to the achievement of sustainability in society, and clarify where we are heading. Restructuring of the business portfolio is also at the core of the sustainability strategy, so we should present KPIs in such a way that our progress can be understood from outside.
- Uchiyama Replacing fossil fuels with ammonia, which is an alternative fuel, is expected to have a considerable impact on climate change. In addition, the impacts of the improvements in performance and efficiency of aero engines as well as how we respond to electrification and alternative fuels such as SAF can be presented quantitatively, and I would like to externally disseminate them in a clear manner by using easy-to-understand figures.



- Otsuki Please share your views regarding investment in human capital, how to quantify the investment impact, pathways linking to future financial information, and establishment of DE&I in the corporate culture.
- Matsuda Transfers between the head office and business divisions have increased recently, and also the mobility of human resources has increased. We will become able to view our company from a relative and a bird's-eye perspective by gaining cross-border experiences beyond the boundaries of our own company. This also leads to innovation as well as enhancement of the capability to come up

- with business concepts, so I would like to see transfers promoted more actively. Regarding DE&I, IHI has been consistently appointing female officers through internal promotion. However, I feel it is necessary to make the current nurturing scheme more secure as a system.
- Nakanishi Regarding DE&I, it would be better if we increase the presence of foreign nationals. We have one foreign officer, but it appears to be too few for a company with a global business. I believe it is a must to incorporate the ideas of foreign nationals in management decisions for the Group to win against the global competition, so I would like to see it actively promoting them.

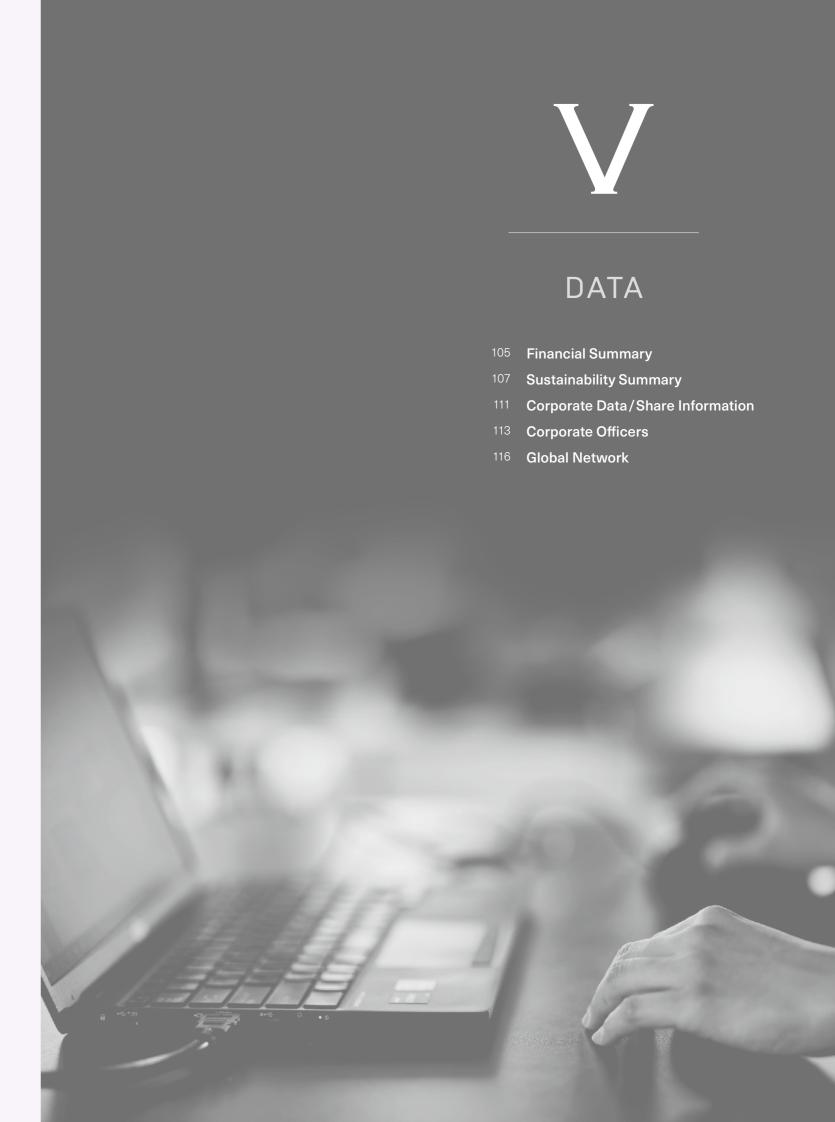


- Usui The IHI Group has many outstanding engineers with Ph.D.s, so I would like to discuss more how to refine our intellectual property strategy and leverage our technological value for the growth of the IHI Group. How to structure the organization is also important. For a large organization such as ours, we should discuss building an organization structured to operate in a total optimization way, where employees with specialized skills in sales, engineering, and so on can have cross-sectional functions cutting across multiple business domains. It is essential to identify high potential staff early on and nurture them in order to assign the right people to such posts.
- Uchiyama The organization will be revitalized if the Group identifies the quality and ability of its employees, gives them authority through early selection, and offers an environment where they can take on challenges. Further, we indeed need to increase the presence of foreigners in the management decision making process (as Mr. Nakanishi pointed out). I feel that the opinions and ideas of foreigners are not being heard. If we can listen to the opinions of people with different viewpoints, we would likely gain new insights on how to conduct our business.

- Otsuki Diversity is not limited to gender. The spread of diversity, including foreigners, can lead to innovation and also contribute to improvement in business performance. As the last theme, I would like to ask for your views on governance. Given the aero engine incident, what are the proposals you have been making from the standpoint of independent directors regarding the balance between the ability to earn cash and risk management of projects, as well as management consciousness of cost of capital and stock price, which is sought by the Tokyo Stock Exchange? Please share your thoughts, including from discussions at the Remuneration Advisory Committee meetings.
- Usui Regarding compliance, I feel that the Group
  has too many businesses and cannot keep an eye on
  everything. So, the best measure is to speed up the
  review of the business portfolio with focus on growth
  potential of the businesses. To strengthen governance, I feel it is time to make independent directors
  the majority. To ensure the company's sustainability,
  it is indispensable to have heteronomous functions in
  addition to autonomy within the company.
- Nakanishi I think there are no deficiencies in the
  internal control mechanisms at a certain level or
  higher, but I recognize that there are issues in
  communication with those on the ground. As for
  succession planning, insights, and ideas of
  employees can be confirmed through interviews
  with independent directors and executive officers.
  It is very important to know what the CEO
  successor candidates are thinking and what
  actions they are taking.

- Matsuda The most significant governance issue is the development of management talent. It is not simply about deciding the next president. Building a plan to develop management professionals will lead to strengthening of governance. The IHI Academy has already been implementing some initiatives, and we should build a mechanism that incorporates external viewpoints in order to select and develop the next-generation management layer who aim to become management professionals.
- Uchiyama It is a lesson learned from the aero engine incident that new technologies can involve major risks, which can also occur in the space-related and renewables fields. We are discussing how to predict and share or hedge such risks, including in the way we conclude contracts. One of the reasons behind compliance-related scandals may be that there are too many subsidiaries. It appears that the checking function of the head office is not functioning fully. At the same time, promotion of digitization is also a must. If we depend on manual operations too much, it can lead to human errors and compliance issues and it takes a long time to detect them. As for remuneration, I think it is desirable to move towards increasing incentive remuneration. I do not think a remuneration system which discourages employee autonomy would assist in appropriate risk-taking.
- Otsuki Investors are hoping that promotion of corporate governance would lead to improvement in capital allocation and trigger a major shift towards focus on profitability. Listening to your opinions, I strongly felt your passion for the IHI Group. The IHI Group suffered an unexpected incident in fiscal 2023, but I hope the Group will boldly review the business structure and achieve growth that exceeds market expectations.





# **Financial** Summary

IHI Corporation and consolidated subsidiaries/ For respective fiscal years ended March 31

The Company adopted the International Financial Reporting Standards (IFRS) in fiscal 2020.

Japanese GAAP/IFRS:
Profit attributable to owners of parent/ Average number of shares outstanding

★2 Japanese GAAP: Net assets/Total number of shares outstanding

Equity/Total number of shares outstanding

during the period

\*3 Japanese GAAP/IFRS: (Operating profit + Interest and dividend income) after tax/(Equity attributable to owners of parent + Interest-bearing liabilities)

\*4

Japanese GAAP/IFRS:
Profit attributable to owners of parent/ (Average of total assets at end of previous fiscal year and end of current fiscal year)

Japanese GAAP/IFRS: Profit attributable to owners of parent/ (Average of equity attributable to owners of parent at end of previous fiscal year and end of current fiscal year)

\*6 Japanese GAAP: Net interest-bearing liabilities/ IFRS: Interest-bearing liabilities/Equity

Cash flows from operating activities + Cash flows from investing activities

FY		2013	2014	2015	2016	2017	2018	2019	2019	2020	2021	2022	202
Standard	Ja	apanese GAAP	Japanese GAAP	Japanese GAAP	Japanese GAAP	Japanese GAAP	Japanese GAAP	Japanese GAAP	: IFRS	IFRS	IFRS	IFRS	IFR
Key financial highlights									<u>:</u> :			[E	Billions of yen
Orders received		1,458.9	1,664.3	1,605.3	1,389.8	1,505.0	1,399.2	1,373.9	: 1,280.0	1,097.0	1,261.2	1,366.1	1,376.
let sales / Revenue		1,304.0	1,455.8	1,539.3	1,486.3	1,590.3	1,483.4	1,386.5	1,263.1	1,112.9	1,172.9	1,352.9	1,322.
perating profit		53.2	63.2	22.0	47.3	72.2	82.4	60.7	47.8	27.9	81.4	81.9	(70.
are of profit (loss) of entities accounted for using equity method/ are of profit (loss) of investments accounted for using equity method		5.3	(1.7)	1.1	(3.5)	(33.0)	4.1	(12.9)	: (12.3)	(1.9)	1.1	(8.3)	0.
otal non-operating income		0	(6.7)	(12.3)	(25.3)	(50.8)	(16.7)	(28.5)	-	_	_		
ordinary profit / Profit before tax		53.2	56.5	9.7	22.0	21.4	65.7	32.2	29.1	27.6	87.6	64.8	(72.:
rofit attributable to owners of parent		33.1	9.0	1.5	5.2	8.2	39.8	12.8	8.2	13.0	66.0	44.5	(68.
&D expenses		33.5	37.0	41.6	35.5	38.6	36.5	38.1	40.0	26.8	29.8	34.0	39
apital expenditure		54.5	63.9	50.8	52.7	59.2	67.3	80.6	89.9	48.3	43.3	61.1	71
epreciation		40.4	43.2	46.7	46.6	44.8	42.9	53.8	66.3	69.8	67.5	62.9	70
nterest-bearing liabilities		357.8	410.6	374.5	371.9	322.2	355.0	488.1	612.7	605.9	505.5	519.4	574
et assets/Total equity		362.5	359.5	333.3	337.6	350.2	381.6	353.7	306.0	327.7	407.0	456.2	402
mployees (People)		27,562	28,533	29,494	29,659	29,706	29,286	28,964	29,328	29,149	28,801	28,486	28,23
ar shows date									<u>:</u>				ΓVe
er share data sic earnings per share*1		225.13	58.84	9.90	33.98	53.71	258.53	84.21	53.93	88.13	439.77	294.48	[Ye (450.7
ook value per share/Equity attributable to owners of p	arent per share*2	2,236.81	2,240.31	2,061.63	2,060.33	2,103.22	2,263.12	2,195.96	1,885.13	2,025.18	2,526.33	2,850.48	2,484.
nnual dividends per share		60.00	60.00	30.00	0.00	60.00	70.00	50.00	50.00	0.00	70.00	90.00	100.0
		20.00		00.00					:	****	****		
usiness area information									:			ſE	Billions of ye
esources, Energy & Environment	Orders received	494.6	582.7	532.7	352.8	378.0	285.5	316.9	316.9	274.7	373.8	393.4	310
	Order backlog	535.2	760.4	843.4	752.3	648.5	523.1	521.2	517.0	482.3	527.5	565.7	483
	Revenue	344.0	415.3	452.4	427.3	490.4	377.0	327.7	324.8	317.6	344.4	371.3	404
	Operating profit	11.6	24.0	(2.2)	(10.6)	(14.8)	3.3	3.7	3.9	19.1	22.9	26.2	17
ocial Infrastructure	Orders received	175.5	178.7	128.5	150.1	163.9	124.4	196.9	196.9	166.1	181.0	134.0	159
voidi il illiadot dottare	Order backlog	235.2	231.9	194.3	196.1	206.1	191.6	229.6	229.3	226.4	250.0	218.4	210
	Revenue	150.3	188.6	168.1	157.7	154.5	143.1	152.8	148.7	157.9	167.3	171.0	170
	Operating profit	2.3	(3.2)	(48.9)	(12.0)	13.9	14.2	13.4	13.0	17.1	15.3	171.0	15
dustrial Systems & General-Purpose Machinery	Orders received	370.6	415.0	421.8	420.5	474.0	458.9	420.1	420.1	365.2	384.5	455.9	474
dustrial Systems & General-Ful pose Machinery	Order backlog	108.7	121.0	138.0	148.4	161.0	180.3	190.8	189.8	175.3	180.7	201.0	205
	Revenue	397.8	411.7	404.7	411.6	459.0	441.0	406.4	404.5	374.2	376.9	436.5	
		15.1	10.2	12.6	17.5	18.9	23.1	11.4	12.9	11.4	12.8	18.0	466 12
ero Engine, Space & Defense	Operating profit Orders received	406.9	468.0	515.6	451.5	463.8	494.3	420.1	321.5	268.9	304.7	372.7	423
ero Erigirie, space & Delerise								420.1		248.5			
	Order backlog	440.3	510.7 434.8	541.0 500.2	511.0 471.9	533.0	562.6 492.2		491.7		283.8	293.4 364.1	450
	Revenue	406.0		58.4	53.0	463.7 60.1	492.2	480.8 40.3	369.7 20.8	251.5	265.2		270
	Operating profit	36.7	39.5	36.4	55.0	00.1	40.4	40.3	20.0	(40.1)	(9.3)	36.1	(102.
inancial indices									:				[%
ercentage of overseas sales/revenue		47.4	52.1	51.8	50.9	50.8	48.1	47.8	43.6	37.2	42.2	48.8	45
perating profit margin		4.1	4.3	1.4	3.2	4.5	5.6	4.4	3.8	2.5	6.9	6.1	(5.
OIC (return on invested capital)*3		5.3	5.8	2.3	5.0	7.7	8.7	5.7	4.1	2.2	6.4	6.3	(4.
OA (return on assets)*4		2.3	0.6	0.1	0.3	0.5	2.4	0.8	0.4	0.7	3.5	2.3	(3.
OE (return on equity)*5		10.5	2.6	0.5	1.6	2.6	11.8	3.8	2.8	4.5	19.3	11.0	(16.
ebt-to-equity ratio (times)*6		0.99	1.14	1.12	1.10	0.92	0.93	1.38	2.00	1.85	1.24	1.14	1.4
quity to total assets		23.1	20.5	18.6	18.8	19.9	21.0	18.7	15.0	16.4	20.3	22.2	17
CC (days)		_	_	_	87	83	97	120	92	124	112	120	1
lance sheet information									<u>:</u>			ſΕ	Billions of ye
urrent assets		901.2	1,053.7	1,100.5	1,073.8	993.4	987.8	1,076.0	957.6	946.6	1,023.9	1,085.7	1,210
on-current assets		595.1	637.1	614.5	618.9	640.0	676.6	664.7	911.3	886.2	855.6	856.2	887
otal assets		1,496.3	1,690.8	1,715.0	1,692.8	1,633.4	1,664.5	1,740.7	: 1,869.0	1,832.8	1,879.6	1,941.9	2,097
urrent liabilities		726.2	795.9	882.7	876.2	811.6	823.1	909.0	916.5	764.7	773.6	831.6	1,051
rovision for construction warranties, Provision for loss	on construction contracts		65.3	97.5	85.2	80.9	69.1	62.6	31.9	26.4	22.3	21.6	23
on-current liabilities	555 454511 551114015	407.5	535.3	498.9	478.9	471.6	459.7	478.0	646.4	740.3	698.9	654.1	644
tal liabilities		1,133.8	1,331.2	1,381.6	1,355.2	1,283.2	1,282.8	1,387.0	1,562.9	1,505.1	1,472.6	1,485.7	1,695
lareholders' equity/Total equity attributable to owners	s of parent	332.2	313.5	305.8	309.9	313.2	343.4	329.2	280.1	300.7	382.1	431.2	3,75
tal net assets/Total equity	o paront	362.5	359.5	333.3	337,6	350.2	381.6	353.7	306.0	327.7	407.0	451.2	402
tal liabilities and net assets/Total liabilities and equity	1	1,496.3	1,690.8	1,715.0	1,692.8	1,633.4	1,664.5	1,740.7	1,869.0	1,832.8	1,879.6	1,941.9	2,097
·									<u> </u>				·
sh flow statement information													Billions of ye
ash flows from operating activities		39.2	63.5	95.3	65.3	99.0	46.4	14.5	42.4	36.3	114.1	54.1	62
ash flows from investing activities		(62.2)	(74.6)	(35.5)	(28.9)	(47.9)	(79.2)	(75.8)	(85.5)	(40.4)	27.9	(52.3)	(51
ash flows from financing activities		11.3	33.4	(47.5)	(21.9)	(57.3)	16.4	115.2	96.8	(23.7)	(121.4)	(24.0)	(25.
hange in interest-bearing liabilities		4.0	52.8	(36.1)	(2.6)	(49.7)	32.8	133.0	(119.0)	(6.7)	(100.3)	13.9	54
			(11.0)					(61.3)	(43.0)	(4.1)			10

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82

2.35

81

74

78

2.39

66

2.55

100

59

81

2.62

# Sustainability Summary

Material Issues	Theme	Index	Scope of Data	Results FY2020	FY2021	FY2022	FY202
Environment - Reduce	Environmental Imp	pact -					
	·	GHG emissions (Scope 1+Scope 2) (t-CO₂e) *1	IHI and consolidated subsidiaries	225,066	220,138	215,753	211,97
	Energy  External evaluation  on of the animent Environmental accidents and violation of environmental laws/regulations  Costs to reduce the IHI environmental impact Environment-related capital investments  Normy Waste  Water	Scope 1 (t-CO2e)	IHI and consolidated subsidiaries	58,517	64,270	61,469	65,0
		Scope 2 (market-based) (t-CO <sub>2</sub> )	IHI and consolidated subsidiaries	166,549	58,517         64,270           166,549         155,868           20.2         18.8           ,462,000         177,593,000           ,075,000         4,197,000           162,000         145,000           1,000         1,000           8,000         8,000           14,000         14,000           4,000         4,000           ,184,000         173,211,000           2,283         2,348           974         1,084           1,276         1,229           7         5           26         31           20.5         20.0           B-         B-	154,284	146,9
		GHG emissions intensity (t-CO₂e/100 million yen) *2,*3	IHI and consolidated subsidiaries	20.2		15.9	16
		GHG emissions (Scope 3) total (t-CO₂e) *1		322,462,000	177,593,000	184,475,000	403,575,0
		#1 Purchased goods and services	IHI and consolidated subsidiaries	4,075,000	4,197,000	4,665,000	5,130,0
		#2 Capital goods	IHI and consolidated subsidiaries	162,000	145,000	205,000	239,0
		#3 Fuel and energy-related activities	Domestic consumption of electric power and city gas only	14,000	13,000	13,000	13,0
		#4 Upstream transportation and delivery	IHI	1,000	1,000	1,000	1,0
		#5 Waste generated in operations	IHI and consolidated subsidiaries	8,000	8,000	8,000	9,0
		#6 Business travel	IHI and consolidated subsidiaries	14,000	14,000	14,000	14,0
		#7 Employee commuting	IHI and consolidated subsidiaries	4,000	4,000	4,000	4,0
		#11 Use of sold products	IHI and consolidated subsidiaries	318,184,000	173,211,000	179,565,000	398,165,0
E	Energy	Energy consumption (TJ) *1	IHI and consolidated subsidiaries	2,283	2,348	2,294	2,3
	0,	Fuel consumption (TJ)	IHI and consolidated subsidiaries	· ·		1,019	1,0
		Electricity consumption (TJ)	IHI and consolidated subsidiaries			1,230	1,1
		Heat consumption (TJ)	IHI and consolidated subsidiaries	· ·		0	.,.
		Renewable energy used (TJ)	IHI and consolidated subsidiaries	,		45	
		Energy consumption intensity (TJ/10 billion yen) *2,*4	IHI and consolidated subsidiaries			17.0	17
F	xternal evaluation	Evaluation of CDP climate change	IHI and consolidated subsidiaries			В	В.
-	-Alerrial evaluation	Evaluation of ODI Climate Change	in and consolidated subsidiaries	(Management)		(Management)	(Manageme
Conservation of the	nvironmental accidents	Significant environmental accidents	IHI and consolidated subsidiaries		<u>-</u>	0	(Wanageme
alobal environment	nd violation of environ-	Major violation of environmental laws/regulations	IHI and consolidated subsidiaries	-	-	0	
mental	mental laws/regulations	Number of cases IHI paid fines, penalties, etc.	IHI and consolidated subsidiaries		-	0	
	Costs to roduce the	Investments (millions of yen) *5	IHI plants and offices			563	1,0
		Expenditures (millions of yen)	IHI plants and offices			151	3
-	Environment related	Experioritures (millions of yerr)  Energy-saving/climate change measures (millions of yen) *6	IHI plants and offices			127	
		Environmental risk measures (millions of yen)	·				5
		·	IHI plants and offices	2/1		432 3	53
0	N/+-	PCB measures (millions of yen)	IHI plants and offices	20.010			05.4
Circular economy V	vaste	Waste emissions (tons)	IHI and consolidated subsidiaries			23,044	25,4
		Of which, toxic waste emissions (tons)	IHI and consolidated subsidiaries			156	12
	A	Amount of valuable materials (recycled) (tons)	IHI and consolidated subsidiaries	· · · · · · · · · · · · · · · · · · ·		17,869	15,2
V	Vater	Water withdrawal (1,000 m³) *1	IHI and consolidated subsidiaries	-		4,037	5,84
		Public water (1,000 m³)	IHI and consolidated subsidiaries			670	2,32
		Industrial water (1,000 m³)	IHI and consolidated subsidiaries			737	7:
		Groundwater (1,000 m³)	IHI and consolidated subsidiaries	· ·		1,451	1,50
		Rainwater, rivers, lakes, etc. (1,000 m³)	IHI and consolidated subsidiaries			1,180	1,2
		Waste water (1,000 m³)	IHI and consolidated subsidiaries	3,373	3,265	3,181	4,8
Society – Materialize ar	n Affluent Society -						
	-	Consolidated number of employees	IHI and consolidated subsidiaries	29.149	28.801	28,486	28,2
I		Number of employees (IHI)	IHI			7,768	7,8
		Male	IHI			6,695	6,7
		Female	IHI			1,073	1,0
		Ratio of female employees (%)	IHI			13.8	13
Δ	Average years of	All employees	IHI			16.5	16
	service *7	Male	IHI			16.6	16
3	iei vice	Female	IHI			15.8	16
-	Furnover rate	Total turnover rate (%)	IHI			2.7	2
1	uniover idle	Rate of retirement due to personal reasons (%)					
		·	IHI			1.5	
<u> </u>		Turnover rate within 3 years of joining the company (%)	IHI			5.5	
	Employment	Number of new graduate recruitments	IHI, University graduates			98	1
		Male	IHI, University graduates			84	1
		Female	IHI, University graduates			14	:
		Ratio of female employees (%)	IHI, University graduates			14.3	19
		Number of mid-career hires	IHI	55	85	98 **8	16

IHI

IHI

\*8

\*6

\*7

Number of mid-career recruitment for FY2022 has been revised.

The total value for each item is rounded off and may not match the figures in the breakdown.

Net sales revenue as the denominator.

GHG emissions intensity in FY2023 is 14.2 t-CO<sub>2</sub>e/100 million yen, excluding special factors.

Energy consumption intensity in FY2023 is 15.6 TJ/10 billion yen, excluding special factors.

In FY2023, when consolidated subsidiaries are included, the amount is 2,010 million yen.

subsidiaries are included, the amount

Due to a revision in the scope of calculation, the average years of service for FY2021 and FY2022 have been

In FY2023, when consolidated

is 1,478 million yen.

\*2

\*3

\*9

As of April 1 each year.

\*10

As of June 1 each year.

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Number of employees from abroad \*9

Recruitment ratio of people with disabilities (%)  $^{*10}$ 

Re-employment rate of employees at retirement age (%)

5,072

51,222

26,148

25,074

39.3

4,094

4,078

3.8

Diversity, equity, and	Gender diversity	Number of officers *11	IHI	17	17	17	17
nclusion	,	Number of male officers	IHI	14	14	14	14
		Number of female officers	IHI	3	3	3	
		Ratio of female officers (%)	IHI	18	18	18	1
		Number of managers *12, *13	IHI	2,715	2,763	2,643	2,70
		Number of male managers	IHI	2,623	2,656	2,519	2,56
		Number of female managers	IHI	92	107	124	14
		Number of female general managers	IHI	23	31	38	39
		Number of female section managers	IHI	69	76	86	109
		Ratio of female managers (%) *12	IHI	3.4	3.9	4.7	5.3
		Ratio of female general managers (%) *14	IHI	2.1	2.8	3.6	3.7
		Ratio of female section managers (%) *14	IHI	4.2	4.6	5.4	6.4
		Local managers at overseas sites *12	China, Singapore, and United States	22	25	26	30
		Number of managers that joined IHI mid-career *12	IHI	234	230	253	30
	Work-life balance	Employees with reduced work hours	IHI	139	158	140	141
		Employees who have taken childcare leave	IHI	768	935	1,010	995
		Employees who have taken parental leave	IHI	137	128	198	185
		Male	IHI	31	60	78	89
		Female	IHI	106	68	120	96
		Percentage of employees who return to work after parental leave (%)	IHI	100	100	99.6	98.3
		Employees who have taken nursing care leave	IHI	2	6	3	10
		Average annual paid vacation days taken	IHI	18.73	17.37	18.65	19.78
		Monthly average overtime (hours)	IHI	13.00	18.90	21.60	21.90
	Human resources	Number of employees undergoing regular career development reviews	IHI and affiliated companies in Japan			15,327	14,939
	development	Male	IHI and affiliated companies in Japan	_	_	13,024	12,605
		Female	IHI and affiliated companies in Japan	_	_	2,303	2,334
		Average annual training hours per employee	IHI and affiliated companies in Japan	13.3	12.1	14.3	34.9
		Training expense per employee (yen)	IHI and affiliated companies in Japan			23,512	40,380
	Labor-management partnership	Employee union membership rate (%)	IHI and affiliated companies in Japan	58	59	60	62
	Engagement	Number of labor complaints received	IHI	0	0	0	0
		Employee engagement	IHI and affiliated companies in Japan	56	54	53	54
		Ratio of answered employee-awareness surveys (%)	IHI and affiliated companies in Japan	88	88	84	83
nproving	Occupational health	Participation rate of medical check-ups (%)	IHI and 35 affiliated companies	_	97	96	98
ccupational health	and safety	Rate of diagnoses made as a result of medical checkups (%)	IHI and 35 affiliated companies	72	71	72	72
nd safety standards		Participation rate of stress checks (%)	IHI and 35 affiliated companies	95	95	97	96
		High stress rate (%)	IHI and 35 affiliated companies	_	9	9	10
		Absenteeism (Ratio of employees who take three or more months of leave) (%)	IHI and 35 affiliated companies	0.8	0.7	1.3	1.4
		Presenteeism (Ratio of employees with restricted hours) (%)	IHI and 35 affiliated companies	2.1	1.8	1.7	2.3
		Smoking rate (%)	IHI and 35 affiliated companies	27	28	25	25
		Rate of occupational diseases *15	IHI and 31 affiliated companies	0.150	0.118	0.098	0.098
		Total injuries frequency rate *16	IHI and 31 affiliated companies	0.87	1.23	1.37	1.33
		Lost time injuries frequency rate *17	IHI and 31 affiliated companies	0.28	0.38	0.39	0.34
		Occupational accidents *18	IHI and 31 affiliated companies	38(0)	52(1)	56(0)	54(0)
		Employees	IHI and 31 affiliated companies	18(0)	31(1)	25(0)	26(0)
		Temporary employees	IHI and 31 affiliated companies	1(0)	3(0)	4(0)	2(0)
		Partners	IHI and 31 affiliated companies	19(0)	18(0)	27(0)	26(0)
corporate citizenship	Social contribution activities	Social contribution expenses (millions of yen)	IHI and consolidated subsidiaries	215	260	489	532
Principal Principal	pled Corporate Manag	romont					
Corporate	Corporate Manag	Average attendance of Independent Directors Board of Directors meetings (%)	IHI	97	100	99	97
overnance	governance	Average attendance of Independent Audit & Board of Directors meetings (%)	IHI	100	98	98	100
	30.0	Supervisory Board Members  Audit & Supervisory Board meetings (%)	IHI	100	100	100	100
ompliance	Legal compliance	Number of law violations Competition law	IHI and consolidated subsidiaries	0	0	0	0
p.ia.100	Logal sompliance	Anti-corruption law	IHI and consolidated subsidiaries	0	0	0	0
		Laws/regulations relating to PR activities	IHI and consolidated subsidiaries	0	0	0	0
		Expenditure to organizations Political organizations (millions of yen)	IHI	10	10	10	10
		Experiature to organizations Political organizations (millions of yen)  Economic organizations (millions of yen)	IHI	57	52	55	55
		Other major industry organizations (millions of yen)	IHI	122	119	122	
			IHI IHI and affiliated companies				123 314
		Number of Compliance Hotline reports  Ouglitus Compliance Training (Jacob)	·	202	263	286	
		Number of compliance Quality & Compliance Training (Japan)	IHI and subsidiary companies in Japan	24,085	26,243	25,870	25,379

Subsidiary companies overseas

IHI and consolidated subsidiaries

IHI and consolidated subsidiaries

IHI and consolidated subsidiaries

IHI and consolidated subsidiaries

IHI Group

IHI

3,261

2,252

26.8

4,104

3,972

3.4

4,938

1,871

29.8

4,167

4,244

3.7

5,334

2,007

1,385

34.0

4,119

4,245

3.7

622

# \*11

As of July 1 each year, members of the Board of Directors and Audit & Supervisory Board.

#### \*12

As of April 1 each year.

#### \*13

Due to a change in the calculation method, the total number of managers for FY2020 and FY2021 have been revised.

#### \*14

Due to a change in the calculation method, the ratios of female general managers and female section managers for FY2020–FY2022 have been revised.

#### \*15

People suffering from occupational diseases per million working hours.

## \*16

Fatalities or injuries caused by occupational accidents per million working hours.

#### \*17

Fatalities or injuries caused by occupational accidents per million working hours (excluding injuries with no time lost).

#### \*18

Fatalities caused by occupational accidents. Figure inside parentheses indicates fatal incidents.

training participants

Regional comparison in

Information security Information security measures Evaluation of information security measures (out of 5) (score)

number of patents \*20

Technology development Research and development expenses (billions of yen) \*19

Quality & Compliance Training (overseas)

Number of competition law/anti-corruption law training participants

Competition law

Anti-corruption law

Domestic patents

Foreign patents

### \*19

The total value for each item is rounded off and may not match the figures in the breakdown.

### \*20

Figures for domestic and foreign patents between FY2020–2022 have been revised.

Innovation

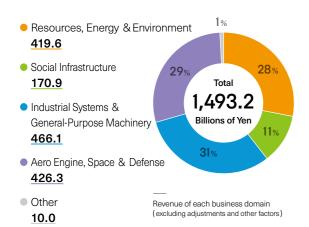
management

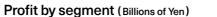
Intellectual property

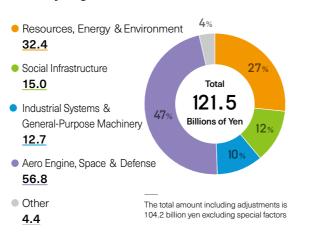
Sustainability Summary 110

Securities Code	7013
Stock Exchange Listings (Market Segment)	Tokyo (Prime)
Share Unit	100
Total Number of Authorized Shares	300,000,000
Number of Outstanding Shares	151,902,810 (not including 2,777,144 treasury shares)
Number of Shareholders	130,581
Fiscal Year	April 1 to March 31 of following year
General Shareholders' Meeting	June of each year
Record Date for Year-end Dividend	March 31 of each year
Record Date for Interim Dividend	September 30 of each year
Shareholder Registry Administrator/ Special Account Managing Institution	1-4-1 Marunouchi, Chiyoda-ku, Tokyo 100-8233, Japan Sumitomo Mitsui Trust Bank, Limited 2-8-4 Izumi, Suginami-ku, Tokyo 168-0063, Japan
	Sumitomo Mitsui Trust Bank, Limited

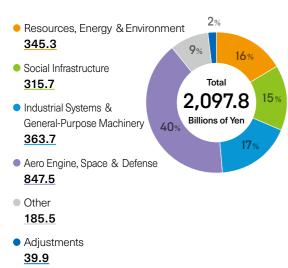
#### Revenue by segment (Billions of Yen)



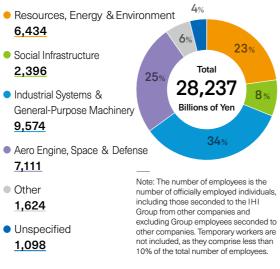




## Segment asetts (Billions of Yen)



### Employees by segment (Persons)



\*Note: Sum of percentages for all segments may not total 100%, as figures are rounded to the nearest 100 million yen.

#### Major Shareholders

Name	Number of shares held (thousand shares)	Shareholding ratio (%)
The Master Trust Bank of Japan (Holder in Trust)	23,366	15.38
Custody Bank of Japan, Ltd. (Holder in Trust)	8,589	5.65
NORTHERN TRUST GLOBAL SERVICES SE, LUXEMBOURG RE LUDU RE: UCITS CLIENTS 15.315 PCT NON TREATY ACCOUNT	4,189	2.75
Custody Bank of Japan, Ltd. as trustee for Mizuho Bank Retirement Benefit Trust Account re-entrusted by Mizuho Trust and Banking Co., Ltd.	3,218	2.11
IHI Suppliers Stock Ownership Association	2,891	1.90
IHI Employee Stock Ownership Association	2,717	1.78
The Dai-ichi Life Insurance Company, Limited	2,703	1.77
Sumitomo Life Insurance Company	2,284	1.50
BNYM AS AGT/CLTS 10 PERCENT	1,772	1.16
STATE STREET BANK WEST CLIENT - TREATY 505234	1,680	1.10

Shareholding ratios are calculated excluding treasury shares (2,777,144 shares).

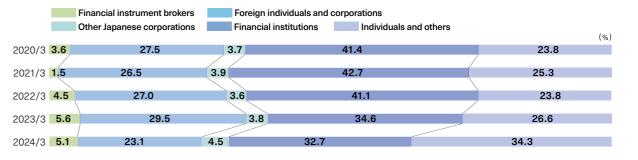
Treasury shares held by IHI is excluded from major

#### Stock Price Performance Comparison (TSR: Total Shareholder Return)

				(%)
Investment period	One year March 2023 to March 31, 2024	Three years March 2021 to March 31, 2024	Five years March 2019 to March 31, 2024	Ten years March 2014 to March 31, 2024
IHI	26.5	94.2	65.8	6.7
TOPIX	41.3	52.5	96.2	188.6
Machinery index	46.2	52.8	117.0	201.8

The above table shows the cumulative return if invested one, three, five, 10 years ago based on the index as of March 31, 2024.

#### **Shareholder Composition**



#### IHI Stock Performance and Average Daily Trading Volume



Note: The Company conducted a consolidation of common stock on a 10 for 1 basis on October 1, 2017. Data regarding share price and average daily trading volume prior to the consolidation of common stock is calculated on the basis of the consolidation having been implemented

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<sup>\*</sup>Note: The numbers in the pie chart are rounded to the nearest whole number for each item, so the breakdown totals may not equal 100%.

# Corporate Officers As of July 2024

#### Director

#### Tsugio Mitsuoka Date of birth: October 13, 1954



Apr. 1980 Joined IHI

Apr. 2010 Executive Officer; Vice President of Aero-Engine & Space Operations, IHI

Apr. 2013 Managing Executive Officer; President of Aero-Engine & Space Operations, IHI Jun. 2014 Director; Managing Executive Officer; President of

Aero-Engine & Space Operations, IHI Apr. 2016 Representative Director and President; Chief Operating Officer, IHI Apr. 2017 Representative Director and President; Chief Executive Officer, IHI

Apr. 2020 Representative Director and Chairman of the Board and President; Chief Executive Officer, IHI

Jun. 2020 Representative Director and Chairman of the Board: Chief Executive Officer, IHI

Apr. 2021 Representative Director and Chairman of the Board, IHI Apr. 2024 Director and Chairman of the Board, IHI (incumbent)

[Significant Concurrent Positions]

Representative Director, Japanese Aero Engines Corporation Outside Director, UBE Corporation

#### Tsuvoshi Tsuchida Date of birth: January 5, 1961



Apr. 1984 Joined IHI

Jun. 2015 President, IHI Logistics & Machinery Corporation Apr. 2020 Vice President of Industrial Systems & General-Purpose

Machinery Business Area, IHI Apr. 2021 Executive Officer; Vice President of Industrial Systems & General-Purpose Machinery Business Area, IHI

Apr. 2022 Managing Executive Officer; General Manager of Corporate Planning Division, IHI

Apr. 2023 Senior Executive Officer, IHI

Jun. 2023 Representative Director; Senior Executive Officer IHI (incumbent)

# Akihiro Seo

Date of birth: October 21, 1963



Dec. 2007 President, ALPHA Automotive Technologies LLC Apr. 2013 Manager of Planning & Control Department, Global Marketing Headquarters, IHI

Apr. 2017 Manager of Corporate Business Development Division, IHI Apr. 2018 General Manager of Corporate Planning Division, IHI

Apr. 2021 Executive Officer; General Manager of Corporate Planning Division, IHI

Apr. 2022 Managing Executive Officer; General Manager of Human Resources Division, IHI

Jun. 2022 Director; Managing Executive Officer; General Manager of Human Resources Division, IHI Apr. 2024 Director, Managing Executive Officer, IHI (incumbent)

#### Hiroshi Ide

Date of birth: February 16, 1961



Apr. 1983 Joined IHI

Apr. 2013 Managing Director, Jurong Engineering Limited Apr. 2017 Executive Officer; Vice President of Resources, Energy and Environment Business Area, IHI

Apr. 2019 Managing Executive Officer; President of Resources,

Energy & Environment Business Area, IHI Apr. 2020 Chief Operating Officer and President of Resources,

Energy & Environment Business Area, IHI Jun. 2020 Representative Director and President;

Chief Operating Officer, IHI Representative Director and President;

Chief Executive Officer and General Manager of Corporate Strategy Headquarters, IHI

Apr. 2023 Representative Director and President; Chief Executive Officer, IHI (incumbent)

#### **Hideo Morita**

Date of birth: October 20, 1961



Apr. 1986 Joined IHI

Apr. 2017 Division Director of Civil Aero-Engine Division. Aero Engine, Space & Defense Business Area, IHI Apr. 2018 Executive Officer; Vice President of Aero Engine,

Space & Defense Business Area, IHI Managing Executive Officer; President of Aero Engine,

Space & Defense Business Area, IHI Director; Managing Executive Officer; President of Aero Engine, Space & Defense Business Area, IHI

Apr. 2024 Representative Director, Senior Executive Officer, IHI

# Jun Kobayashi

Date of birth: May 23, 1964



Apr. 1988 Joined IHI

Sep. 2018 Assistant General Manager of Corporate Business Development & Solution Headquarters, and General Manager of Rome Office, Global Marketing & Sales Headquarters, IHI

Apr. 2019 General Manager of Global Business Development Group, Strategy Development Department, Social Infrastructure & Offshore Facilities Business Area, and Assistant General Manager of Corporate Business Development & Solution Headquarters, and General Manager of Rome Office, Global Marketing & Sales Headquarters, IHI

Apr. 2020 Vice President of Social Infrastructure & Offshore Facilities Business Area, and General Manager of Rome Office, Global Marketing & Sales Headquarters, IHI Executive Officer; General Manager of Solution & Business

Development Headquarters, IHI
Apr. 2023 Managing Executive Officer; General Manager of Business

Development Headquarters, IHI Jun. 2023 Director: Managing Executive Officer: General Manager of Business Development Headquarters, IHI (incumbent)

#### Director

#### Yasuaki Fukumoto

Date of birth: September 8, 1966



Apr. 1990 Joined IHI

Apr. 2014 General Manager of Accounting Group, Finance & Accounting Division, IHI Jun. 2018 Manager of Group Strategy Group,

Corporate Planning Division, IHI Apr. 2020 General Manager of Accounting Group, Finance & Accounting Division, IHI

Apr. 2021 General Manager of Finance & Accounting Division, IHI

Apr. 2022 Executive Officer; General Manager of Finance & Accounting Division, IHI

Jun. 2023 Director, Executive Officer, General Manager of

Finance & Accounting Division, IHI (incumbent)

#### Yoshiyuki Nakanishi Date of birth: November 3, 1954



Apr. 1978 Joined Dainippon Ink and Chemicals, Incorporated (now DIC Corporation)

Apr. 2010 Executive Officer; In Charge of Corporate Strategy Division and Kawamura Memorial Museum of Art. DIC Corporation Jun. 2011 Director; Executive Officer; In Charge of Corporate Strategy

Division and Kawamura Memorial DIC Museum of Art, DIC Corporation Apr. 2012 Representative Director; President and CEO, DIC Corporation

Jan. 2018 Chairman of the Board, DIC Corporation

Jun. 2020 Director, IHI (incumbent)

Jan. 2021 Director, DIC Corporation

Mar. 2021 Executive Advisor, DIC Corporation

[Significant Concurrent Positions] Outside Director, The Japan Steel Works, Ltd. Outside Director, SHIMADZU CORPORATION

# Minoru Usui

Date of birth: April 22, 1955



Nov. 1979 Joined Shinshu Seiki Co., Ltd. (now Seiko Epson Corporation) Jun. 2002 Director; Deputy Chief Operating Officer, Imaging & Information

Products Operations Division, Seiko Epson Corporation Nov. 2004 Director; Deputy General Administrative Manager, Corporate Research & Development Division; and Deputy Chief Operating Officer. Imaging & Information Products Operations Division, Seiko Epson Corporation

Nov. 2005 Director; General Administrative Manager, Production Engineering & Development Division, Seiko Epson Corporation

Jul. 2007 Director, General Administrative Manager, Corporate Research & Development Division, and General Administrative Manager Production Engineering & Development Division, Seiko Epson Corporation

Oct. 2007 Managing Director; General Administrative Manager, Corporate Research & Development Division, and General Administrative Manager, Production Engineering & Development Division, Seiko Epson Corporation

Jun. 2008 President and Representative Director; Chief Executive Officer, Seiko Epson Corporation

Apr. 2020 Chairman and Director, Seiko Epson Corporation

Jun. 2021 Director, IHI (incumbent)

Jun. 2024 Executive Advisor, Seiko Epson Corporation (incumbent)

[Significant Concurrent Positions] Outside Director, Sumitomo Pharma, Co., Ltd. Executive Advisor, Seiko Epson Corporation

#### Noriko Morioka Date of birth: April 23, 1964



Apr. 1987 Joined IHI

Apr. 2016 General Manager of New Technology Project Group, Engine Technology Department, Research & Engineering Division, Aero-Engine & Space Operations, IHI

Apr. 2018 General Manager of Corporate Business Development Department, Corporate Business Development & Solution Headquarters; Deputy Division Director of Research & Engineering

Division, Aero Engine, Space & Defense Business Area, IHI Apr. 2020 Executive Officer; Deputy General Manager of

Corporate Business Development & Solution Headquarters, IHI
Apr. 2021 Executive Officer; Deputy General Manager of Strategic Technologies Division, IHI

Apr. 2023 Managing Executive Officer; General Manager of Strategic Technologies Division, IHI

Jun. 2024 Director; Managing Executive Officer; General Manager of Strategic Technologies Division, IHI (incumbent)

#### Chieko Matsuda

Date of birth: November 18, 1964



Apr. 1987 Joined The Long-Term Credit Bank of Japan, Limited

Oct. 1998 Joined Moody's Japan K.K. Sep. 2001 Partner, Corporate Directions, Inc.

May 2006 Representative Director, Matrix, Inc. Oct. 2006 Vice President (Partner), Booz & Company, Inc.

Apr. 2011 Professor, Faculty of Economics and Business Administration, Tokyo Metropolitan University (incumbent)

Professor, Graduate School of Management, Tokyo Metropolitan University (incumbent)

Jun. 2020 Director, IHI (incumbent)

[Significant Concurrent Positions] Professor, Faculty of Economics and Business Administration, Tokyo Metropolitan University

Professor, Graduate School of Management, Tokyo Metropolitan University Outside Director, Asahi Kasei Corporation

Outside Members of the Board, Toyota Tsusho Corporation External Independent Director, Isetan Mitsukoshi Holdings, Ltd.

#### Toshihiro Uchiyama Date of birth: November 28, 1958



Apr. 1981 Joined NSK Ltd. Jun. 2008 Vice President; Deputy Head of Corporate Planning

Division HQ, NSK Ltd. Jun. 2009 Vice President; Head of Corporate Planning Division HQ, NSK Ltd.

Jun. 2010 Senior Vice President; Head of Corporate Planning Division HQ, NSK Ltd. Jun. 2012 Director: Senior Vice President: Head of Corporate Planning

Division HQ, NSK Ltd. Jun. 2013 Director; Representative, Executive Vice President;

Head of Corporate Strategy Division HQ, NSK Ltd. Jun. 2015 Director; Representative, President, NSK Ltd. Jun. 2017 Director; Representative, President and Chief Executive Officer,

NSK Ltd

Apr. 2021 Chairman of the Board of Directors, NSK Ltd. Jun. 2022 Director, IHI (incumbent) Jun. 2023 Advisor, NSK Ltd. (incumbent)

[Significant Concurrent Positions] Advisor, NSK Ltd. (incumbent)

Outside Director, Sapporo Holdings Limited

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#### **Audit & Supervisory Board Members**

#### Seiji Maruyama

Date of birth: August 4, 1962



Apr. 1985 Joined IHI

Dec. 2008 General Manager of Internal Control Assessment Division, IHI Apr. 2010 General Manager of Corporate Audit Division, IHI

Apr. 2012 General Manager of Administration Department,

Rotating Machinery Operations, IHI

Apr. 2014 General Manager of Tax Accounting & Overseas Project Group, Finance & Accounting Division, IHI

Apr. 2018 Deputy General Manager of Finance & Accounting Division, IHI Apr. 2019 General Manager of Finance & Accounting Division, IHI

Apr. 2021 Fellow of Finance & Accounting Division, IHI

Jun. 2021 Standing Audit & Supervisory Board Member, IHI (incumbent)

#### Aiko Sekine Date of birth: May 13, 1958



Apr. 1981 Joined Citibank, N.A., Tokyo Branch

Oct. 1985 Joined Aoyama Audit Corporation

Mar. 1989 Registered as Certified Public Accountant

Sep. 2006 Partner, PricewaterhouseCoopers Aarata, LCC (now PricewaterhouseCoopers Japan LLC)

Jul. 2007 Executive Board Member, Japanese Institute of CPAs (JICPA)

Jul. 2010 Deputy President, JICPA

Jul. 2016 Chairman and President, JICPA

Jul. 2019 Advisor, JICPA (incumbent)

Jan. 2020 Member, IFRS Advisory Council, IFRS Foundation (incumbent)

Jun. 2020 Audit & Supervisory Board Member, IHI (incumbent)

Sep. 2020 Professor, Faculty of Commerce, Waseda University (incumbent)

Oct. 2020 Trustee, International Valuation Standards Council (incumbent)

[Significant Concurrent Positions] Certified Public Accountant

Advisor, JICPA

Professor, Faculty of Commerce, Waseda University

Outside Director, ORIX Corporation

Outside Director, NIPPON STEEL CORPORATION

#### Kazuhiro Muto

Date of birth: February 14, 1963



Apr. 1985 Joined IBM Japan, Ltd.

Jan. 2009 Executive Officer; President of Finance Division ii, IBM Japan, Ltd.

Jan. 2014 Managing Executive Officer; President of Finance Division ii,

IBM Japan, Ltd.

Aug. 2014 Managing Executive Officer; President of System Product Division, IBM Japan, Ltd.

Feb. 2015 Managing Executive Officer; President of IBM Systems Hardware Business

Division, IBM Japan, Ltd.

Jul. 2016 Senior Managing Executive Officer; President of IBM Systems Hardware Business Division, IBM Japan, Ltd.

Sep. 2018 Senior Managing Executive Officer;

President of Panasonic Enterprise Division, IBM Japan, Ltd.

Jan. 2023 Advisor, IBM Japan, Ltd. (incumbent)

Jun. 2023 Audit & Supervisory Board Member, IHI (incumbent)

Aug. 2023 Vice President, Supervising cloud application,

ORACLE CORPORATION JAPAN Mar. 2024 Executive Operating Officer, ORACLE CORPORATION JAPAN (incumbent)

[Significant Concurrent Positions]

Executive Operating Officer, ORACLE CORPORATION JAPAN

#### Tae Hozoji

Date of birth: July 28, 1967



Apr. 1991 Joined IHI

Apr. 2015 General Manager of Security Export Control Group

Legal Division, IHI

Apr. 2019 General Manager of Recruiting Group, Human Resources Division, IHI

Apr. 2022 General Manager of Internal Audit Division, IHI

Apr. 2024 Fellow of Internal Audit Division, IHI (incumbent)

Jun. 2024 Standing Audit & Supervisory Board Member, IHI (incumbent)

## Yumiko Waseda



Apr. 1985 Registered as Attorney at Law; Joined Max Law Offices

Apr. 2005 Executive Director Governor,

Japan Federation of Bar Associations

Apr. 2016 President, Daini Tokyo Bar Association; Vice President,

Jun. 2021 Audit & Supervisory Board Member, IHI (incumbent)

[Significant Concurrent Positions]

Executive Director, Japan Law Foundation

Date of birth: January 29, 1960



(now Mori Hamada & Matsumoto)

Apr. 2004 Vice President, Daini Tokyo Bar Association

Apr. 2013 Partner, Tokyo Roppongi Law & Patent Offices (incumbent)

Japan Federation of Bar Associations

Aug. 2020 Executive Director, Japan Law Foundation (incumbent)

Attorney at Law

Outside Audit & Supervisory Board Member, Chugai Pharmaceutical Co., Ltd. Outside Director, SCSK Corporation

Regional headquarters

and Companies

Asia Pacific Headquarters

- IHI ASIA PACIFIC PTE. LTD.

China Headquarters

- IHI (Shanghai)

- IHI Americas Inc.

Management Co., Ltd

Americas Headquarters

#### - Business Development Headquarters

Domestic offices

- Head Office

Japan Base

- Akishima Office

- Yokohama Office (Engineering Center)

 Headquarters Representatives' Office, Aioi District

- Headquarters Representatives'

Global Network As of August, 2024

**Overseas Bases** 

- UK

- ITALY

- UAE

- INDIA

- ALGERIA

- TURKEY

- SINGAPORE

- THAILAND

- MALAYSIA

- VIETNAM

- TAIWAN

- KOREA

- BEIJING

- USA

- BRAZIL

- INDONESIA

- AUSTRALIA

- SHANGHAI

HONG KONG

Office, Kure District - Corporate Research & Development

# Domestic branches and

sales offices - Hokkaido Branch

- Tohoku Branch

- Akita Office

- Fukushima Office - Niigata Office

- Hokuriku Branch

- Chubu Branch

Shizuoka Office

- Hamamatsu Office

- Toyota Office

- Kansai Branch - Chugoku Branch

- Yamaguchi Office

- Shikoku Branch

- Kyushu Branch

- Okinawa Office

- Soma Aero-Engine Works

- Kure Aero-Engine & Turbo Machinery Works

#### Number of employees by business areas

Japan

• • • • • • • • •

and Africa

Americas

1,443 Asia and

Number of employees by business areas

#### **Domestic Main Works**

- Tsurugashima Aero-Engine Works

- Mizuho Aero-Engine Works

- Yokohama Works

Aioi Works

21,187

Europe, Middle East 1,695

Oceania 3,912

(FY2023)



# **IHI** Corporation

**Corporate Communication Division** 

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