

IHI Sustainability Data Book 2022

Management Philosophy

Contribute to the development of society through technology

Human resources are our single most valuable asset

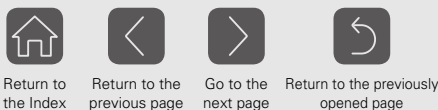
Our Future Aspiration

Create a world where nature and technology work in unity

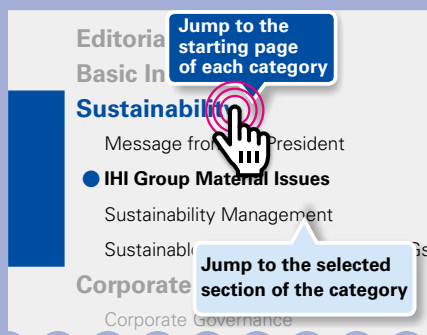
How to use this Report

There are navigation buttons and a sidebar on each page to make navigating through the pages easier.

How to use the navigation buttons



How to use the sidebar



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Editorial Policy

The IHI Sustainability Data Book 2022 is a comprehensive annual report to share information such as our sustainability policies, approaches, frameworks, and performance.

The IHI Group's Sustainability website provides the most up to date information about our sustainability.

Scope of the IHI Sustainability Data Book

IHI Corporation and its consolidated subsidiaries (Note: the report includes some non-consolidated information about IHI Corporation as well as details with a more specific scope)

Reporting Period

FY2021 (April 1, 2021 to March 31, 2022)

However, the report includes some information from before fiscal 2020 and forecasts of fiscal 2022 and later.

Publication Date

September 2022 (The previous Sustainability Data Book was published in September 2021. The upcoming Sustainability Data Book is tentatively set for release in September 2023)

Reference Guidelines

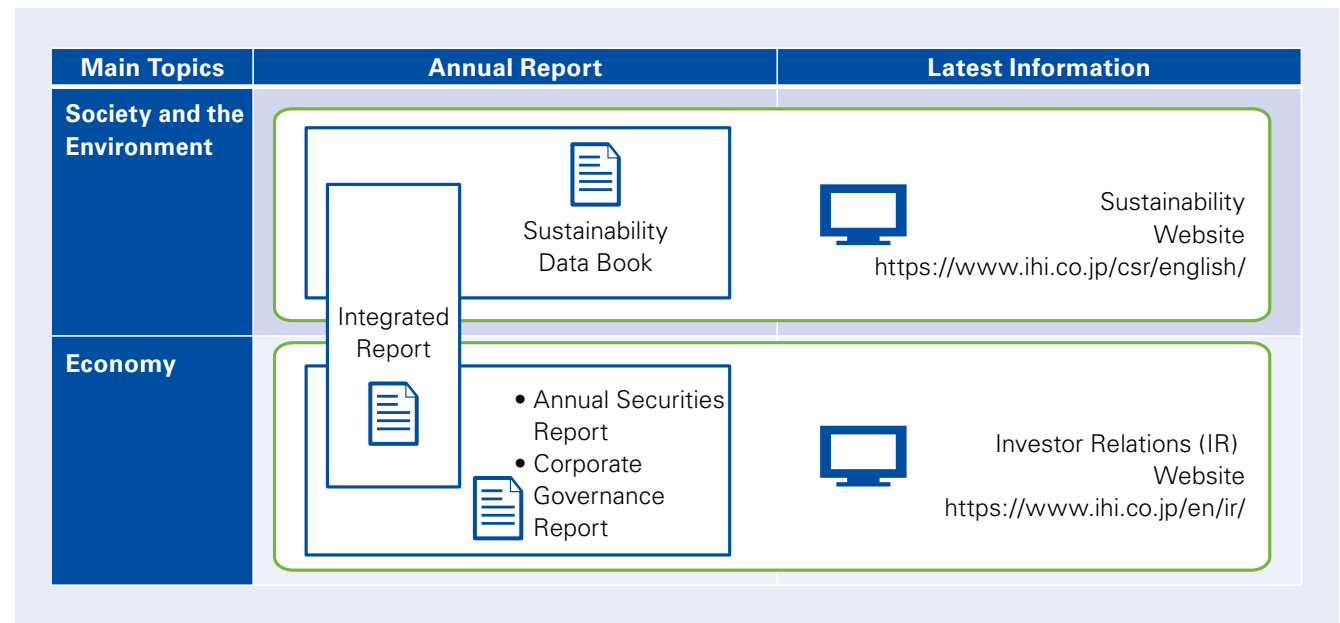
- Global Reporting Initiative (GRI) Sustainability Reporting Standards
- Sustainability Accounting Standards Board (SASB)
- Environmental Reporting Guidelines 2018, Ministry of the Environment
- Task Force on Climate-related Financial Disclosures (TCFD)

Disclaimer

The IHI Sustainability Data Book 2022 not only contains facts about the past and present but also business plans and forecasts as well as management plans and policies in place at the time of publication. The projections are assumptions and decisions made based on information available at that time of publication. These plans, forecasts, and policies are subject to change as the results of future business activities and circumstances fluctuate. The reader should consider the factors above when reviewing the information in this report.

Structure of Information Disclosure Regarding Main Sustainability Topics

In order to respond to the various requests of stakeholders, the IHI Group discloses information through several mediums.



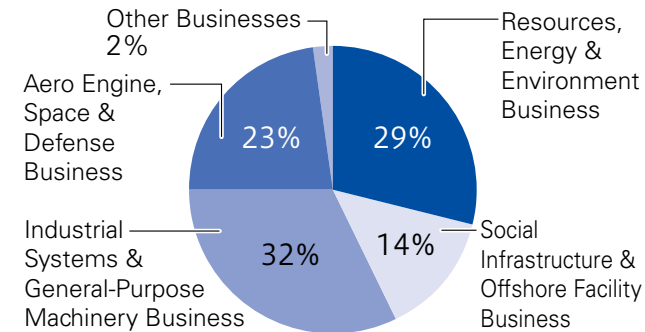
Basic Information

About IHI (As of March 31, 2022)

Company Name	IHI Corporation
Head Office	Toyosu IHI Building, 1-1, Toyosu 3-chome, Koto-ku, Tokyo 135-8710, Japan
President	Hiroshi Ide, President and Chief Executive Officer
Year of Establishment	December 5, 1853
Capital	107.1 billion yen
Revenue (Consolidated)	1,172.9 billion JPY (Fiscal year 2021 ended March 31, 2022)
Number of Employees (Non-consolidated)	7,779
Employees (Consolidated)	28,801
Works	7
Branches in Japan	8
Overseas Representative Offices	14
Group Companies	150 consolidated subsidiaries 59 subsidiary companies in Japan (43 subsidiaries and 16 associated companies) 142 affiliated companies overseas (120 subsidiaries and 22 associated companies)

Overall Business Framework (Fiscal year ended March 31, 2022)

Sales-Profit Ratio



Main Businesses

• Resources, Energy & Environment Business

Power systems (power systems plants for land use and power systems for ships), Carbon solutions (boilers and storage facilities), and Nuclear energy (components for nuclear power plants)

• Social Infrastructure & Offshore Facility Business

Bridges and watergates, Transport systems, Shield systems, Concrete construction materials, and Urban development (real estate sales and rental)

• Industrial Systems & General-Purpose Machinery Business

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

• Aero Engine, Space & Defense Business

Aero engines, Rocket systems and space utilization systems, and Defense systems

Basic Information

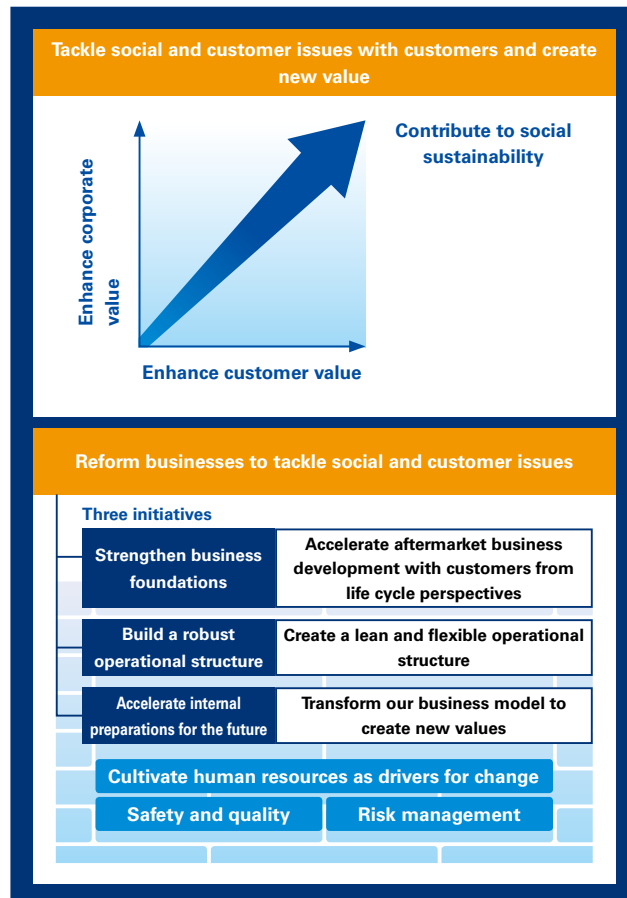
Medium-term Management Plan

The IHI Group launched the Group Management Policy 2019 in April 2019 as mid-term management policy. We further built on these policy efforts by spearheading Project Change in November 2020 as a new initiative which secures a three-year period from 2020 to 2022 to prepare and implement business reforms adapting to the ever-changing business climate. Project Change aligns with the basic concept of Group Management

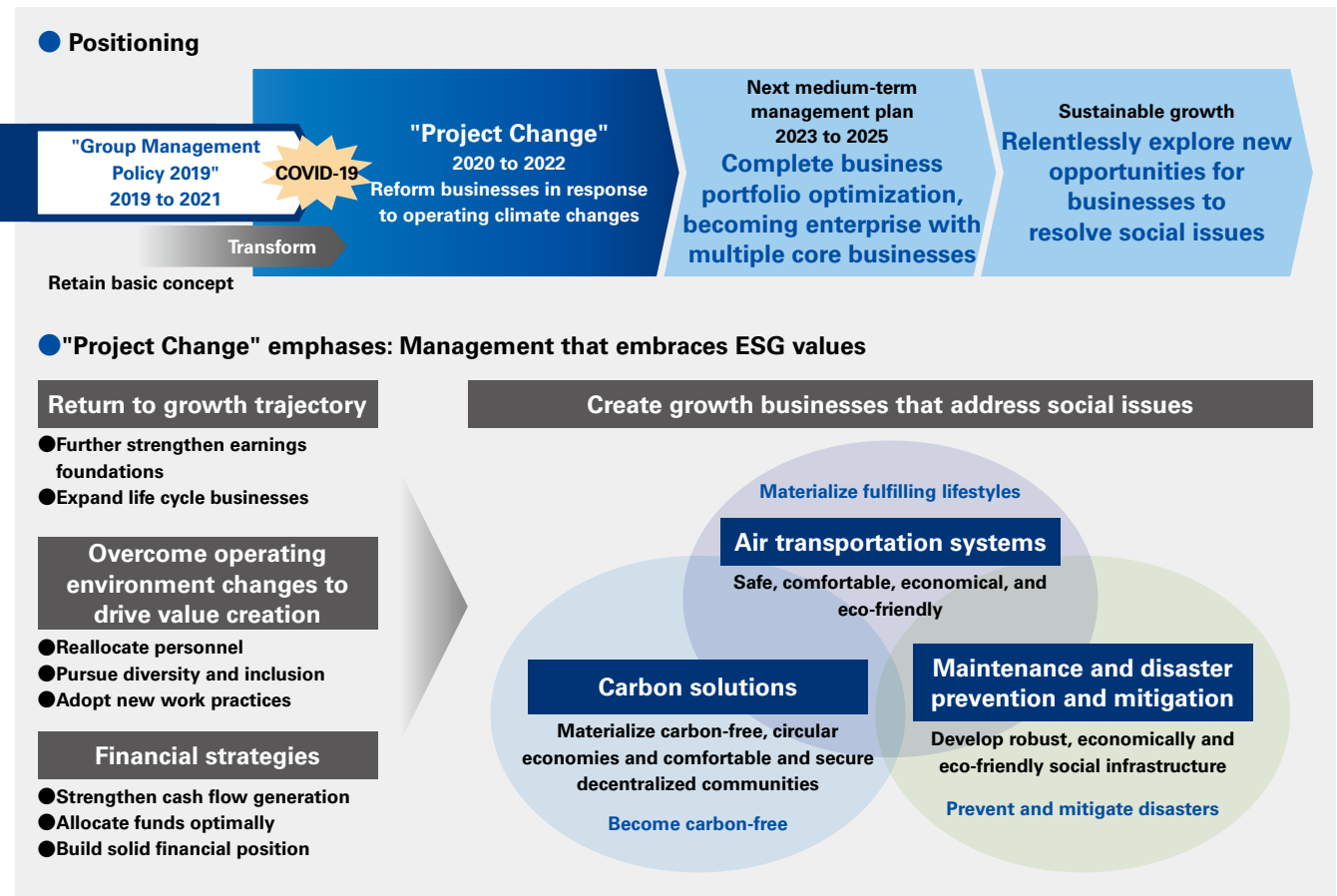
Policy 2019 to actualize a long-term approach.

Project Change aims to create growth businesses to not only revitalize our growth path but also help resolve social issues by strengthening earnings foundations and expanding life cycle businesses.

Overview of "Group Management Policy 2019"



Overview of "Project Change"



Basic Information

Basic Code of Conduct for the IHI Group

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. The Basic Code of Conduct for the IHI Group defines the practices necessary to embody this belief.

Basic Code of Conduct for the IHI Group

[web](#) **Your Guide to IHI Group's "Basic Code of Conduct"**

We at the IHI Group are committed to implementing what is necessary to meet the expectations and gain the trust of not only our customers, business partners, shareholders and colleagues, but also the local and international communities, while maintaining an awareness of global issues. By doing so, we aim to enhance our existential value as we move forward into the future and realize our Group's management philosophies of "Contribute to the development of society through technology" and "Human resources are our single most valuable asset."

Fundamental and Universal Principles of the Entire IHI Group

Respect for the rule of law and ethical conduct

We strictly observe laws and ordinances based on a clear understanding of their meaning. We also act sincerely and fairly and in accordance with high ethical standards so that we do not violate social rules or international norms.

Respect for human rights

We fully recognize the importance of, and always strive to respect, human rights during our business activities.

Promotion of mutual understanding

In order to promote mutual understanding with those around us, we strive to disseminate information on our business activities, explain the effects of these activities on the surrounding environment, and engage in an exchange of opinions with our broader communities on a daily basis.

Responsibilities toward People, Society, and the Environment

Responsibilities toward people connected with the IHI Group via our products and services

- 1 We establish relationships of mutual trust with the people with whom we are involved in the course of our business, help solve social issues in a variety of fields by using our abilities to the utmost, and develop and provide products and services to assure more comfortable lives for people around the world.
- 2 We pay full attention to the safety of the products and services we develop and provide and constantly strive to raise the quality level of our products and services by confirming whether they satisfy customers and users.
- 3 We deal appropriately with other parties in our business transactions and seek profit fairly, while at the same time we strive to establish fair and mutually-productive relationships with our customers and business partners.

Responsibilities toward those with whom we work

We strive to respect mutually the character and individuality of all people with whom we work and maintain a safe, supportive, and comfortable environment in which we can work easily.

Responsibilities toward local and international communities

- 1 With an awareness that each one of us is a member of society, we actively take part in initiatives to solve the problems faced by society.
- 2 No matter the region of the world where we conduct our business, we understand the value of the culture unique to each region and strive to meet the expectations of people living there.
- 3 We take a resolute attitude against organizations and forces that threaten social order and safety.

Responsibilities toward the global environment

Based on our recognition that the global environment provides the foundation for the existence of all societies and cultures, we take care so as not harm that which also will be needed by future generations and strive to protect, and reduce the burdens on, the global environment, not only in the course of our provision of products and services but also in all other aspects of our business activities.

Roles and Responsibilities of Senior Management

Roles of Senior Management

- 1 Senior Management recognizes that their role is to ensure the realization of this Code of Conduct and takes the initiative to demonstrate leadership in order to put the purposes of this Code of Conduct into practice.
- 2 Senior Management ensures that this Code of Conduct is known to all people with whom they work and constantly strives to establish, maintain, and improve effective internal systems and to enhance our corporate value.

Responsibilities of Senior Management

If a violation of this Code of Conduct occurs, Senior Management will strive to take the initiative to solve the problem, discover its cause, and prevent the recurrence of similar violations. They also will promptly disclose accurate information to society, clarify the responsibilities and scope of the authority of the persons involved, and impartially take disciplinary action even upon themselves.

IHI Group Code of Action

In order to comply with this Code of Conduct, we establish "IHI Group Code of Action" as the code prescribing how directors, officers, and employees of the IHI Group should make decision and take action in their daily work.

P.27 **IHI Group Code of Action**

Basic Information

Third-party Evaluation

S&P/JPX Carbon Efficient Index

IHI Group has been selected as a constituent brand of the S&P/JPX Carbon Efficient Index.

The index selects brands satisfying environmental information disclosure and carbon efficiency (carbon emissions per unit of revenue) standards according to their constituent selection and weighting process.



FTSE Blossom Japan Sector Relative Index

IHI Corporation has been selected as a constituent brand of the FTSE Blossom Japan Sector Relative Index, a stock market index for ESG investment.

The index is designed by FTSE Russell, a global index provider, to measure the performance of Japanese companies that demonstrate strong Environmental, Social and Governance (ESG) practices. The index is constructed so that each sector weights align with the Japanese equity market.



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 2021, we were evaluated as Management Level score of B-.

CDP is a non-profit charity established by responsible investors worldwide. The CDP sends an annual questionnaire to companies and local governments and releases the results in an effort to encourage more action on climate change.



Digital Transformation Stock Selection 2022

IHI Corporation has been selected in the Digital Transformation Stock (DX Stock) Selection 2022.

DX Stock is constructed by the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange to select outstanding companies from among TSE-listed companies that have established internal systems for promoting digital transformation, which is an approach that contributes to improving corporate value, and that have achieved outstanding digital utilization.



DX銘柄2022
Digital Transformation

Kurumin Certification

The Minister of Health, Labour and Welfare recognized the IHI Corporation as a company that supports child raising and granted us the Kurumin certification in 2007, 2011, 2015, and 2020.

Kurumin certification is a program that certifies companies that formulate an action plan based on the Act on Advancement of Measures to Support Raising Next-Generation Children and achieves the set goals as well as set conditions.



Eruboshi Certification

The Minister of Health, Labour and Welfare certified the IHI Corporation as an Eruboshi Company (2nd level) in 2017.

Eruboshi certification is a program that certifies companies that excel in promoting advancement of women and fulfill set standards based on the Act on Promotion of Female Participation and Career Advancement in the Workplace.



Health & Productivity Companies 2022 (White 500)

Nineteen companies* of the IHI Group have been selected as Health & Productivity Companies 2022 (White 500). The Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi (Japan Health Council) co-launched the White 500 program to recognize companies that consider employee health management from a corporate management standpoint and strategically implement activities to maintain and promote health.

* IHI Corporation, IHI Scube, IHI Plant Services Corporation, IHI Power Systems, IHI Jet Service, NICO Precision, IHI Infrastructure Systems, IHI AEROSPACE, IHI FINANCE SUPPORT CORPORATION, Chiba Warehouse, Takashima Giken, Japan Marine United Corporation, IHI CASTINGS, IHI Rotating Machinery Engineering, IHI Transport Machinery, IHI Logistics & Machinery, IHI Turbo, IHI Construction Service, and IHI Business Support Corporation



Basic Information

PRIDE Index Gold Award 2021

IHI Corporation has been awarded the highest honor of the PRIDE Index 2021 Gold Award. IHI Corporation's human resource policies for LGBTQ+, launch of a consultation desk, expansion of an ally program, and training to promote greater understanding about gender minorities were recognized and led to receiving the award for the fourth consecutive year.

The goal of the PRIDE Index is to help build working environments friendly to LGBTQ+ and other gender minorities. This index evaluates company initiatives via categories for the code of conduct, gender minority communities, enlightenment programs, personnel policies and programs, social contributions, and public relation practices.



Resilience Certification

The IHI Group renewed the Resilience Certification acquired in 2016 with the aim of improving its business continuity as a company that supports social infrastructure.

Resilience Certification is a certification system of the Association for Resilience Japan based on the guidelines for the certification of organizations contributing to national resilience. This certification certifies business operators that endorse the ideas of strengthening national resilience published by the Cabinet Secretariat's National Resilience Promotion Office and proactively work to ensure their business continuity.



Sustainability

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Message from the President

**With our values rooted in ESG,
we are directing our business
toward addressing social issues
and realizing a sustainable
society**

**In this era of great uncertainty, a company
willing to face difficult challenges is
a company with opportunity**

The unprecedented challenges society has been facing in recent years, including the human and economic impact of the COVID-19 pandemic and the global climate change caused by greenhouse gases, have created a widespread sense that society has stalled and uncertainty about our future. Many people may be wondering what the future will be for companies and ultimately, for themselves. However, even with this disruption, I am optimistic and see the situation as an opportunity.

Since our founding, the IHI Group has encountered innumerable problems and challenges; and we have directly and passionately confronted each one to find a solution. Looking back, the approaches we took were not always ideal, since we often prioritized economic outcomes and did not sufficiently consider the impact on the natural environment. Still, I believe we can learn from the past and apply the core values we have developed so that the IHI Group will play a major role in creating a better society.

In this era of great uncertainty, what should we do for society? As our Management Philosophy states, we can use our human resource assets and technologies to help people enrich their lives. We can do that with management that addresses social issues, gives greater consideration to the environment and society, and continues earning the trust of stakeholders through ESG management. The difficult times provide us with a once-in-a-generation opportunity as a company contributing to a sustainable society to create infrastructure for safe, secure, and enriching everyday lives.

**Moving forward with our aspiration
for a better, sustainable society**

In November 2020, we launched an initiative called “Project Change.” The project sets becoming carbon-free, preventing and mitigating disasters, and contributing to enriching the lives of all people as the core social issues we will address while we seek to create a world where nature and technology work in unity. Approaching these social issues as business opportunities will lead to sustainable growth as a company.

The challenges society is currently facing are extremely complex. One corporate group cannot solve them all. I want the Group to move ahead by sharing our aspiration to contribute to creating a better and sustainable society with our stakeholders and with new business partners. The IHI Group is making a concerted effort to carry out our new ESG management and fulfill our aspiration.



Hiroshi Ide,
President and
Chief Executive Officer
IHI Corporation

IHI Group Material Issues

Identifying Material Issues

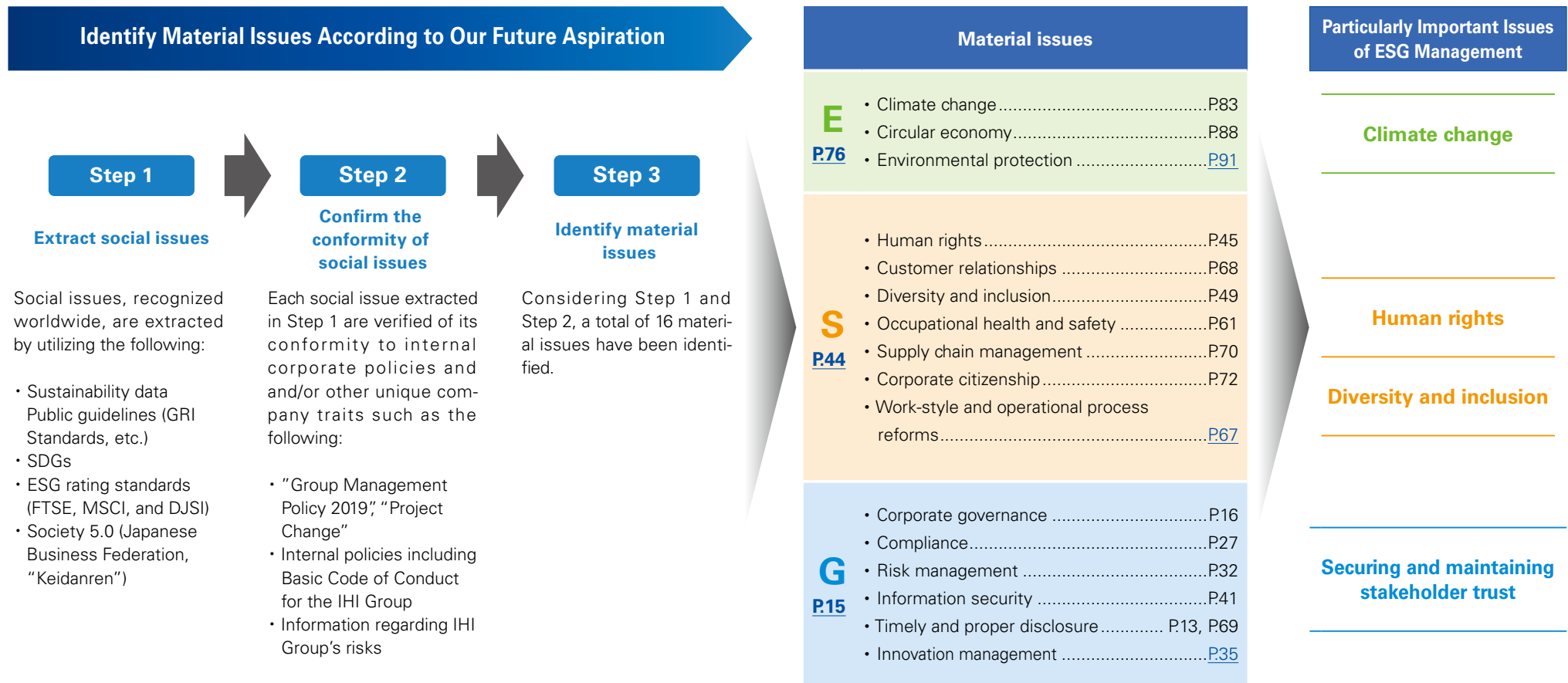
The IHI Group has identified material issues to be prioritized to achieve sustainable growth as a company and realize a sustainable society.

In “Project Change”, the IHI Group strives to create “a world where nature and technology work in unity” in the near future. By setting this goal, the social issues we need to address along with the values we aim to provide have been clarified. Our material issues have been re-identified and revised according to the significance of each in social issues of “Project Change”: Becoming carbon-free, disaster prevention and mitigation, and fulfilling lifestyles.

ESG management makes engaging in the global challenge of climate-related initiatives, respecting the human rights of everyone involved in our businesses, empowering diverse human resources as the driving force to value creation, and earning trust from stakeholders through integrity management more important than ever.

P4 Medium-term Management Plan

Identification Process of Material Issues



Sustainability Management

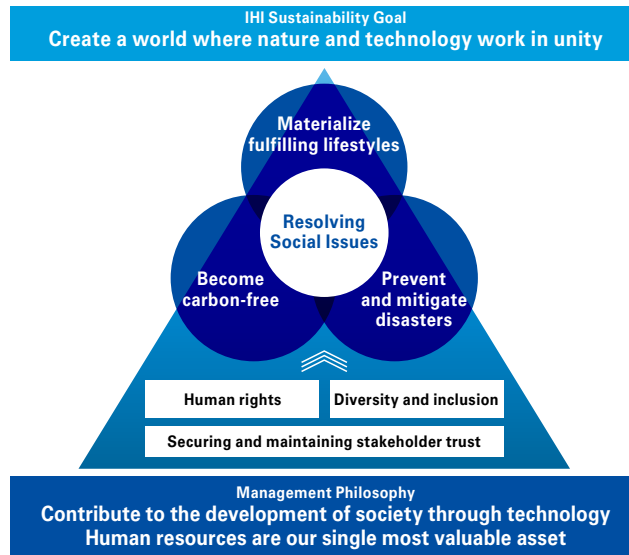
Approach

In “Group Management Policy 2019,” the IHI Group defined our approach as one that adapts to changes in the social environment from long-term perspectives. “Project Change” incorporates the basic concept of the Group Management Policy to tackle social issues and issues of our customers directly, ultimately realizing our goal.

IHI Group ESG Management

The IHI Group aims to create a world where nature and technology work in unity. This means protecting people from the threats of nature in a society offering safety, security, and prosperity to realize sustainability in both the global environment and people’s lifestyles. Our businesses will take on various social challenges to create social value as well as enhance corporate value.

IHI Group ESG Management



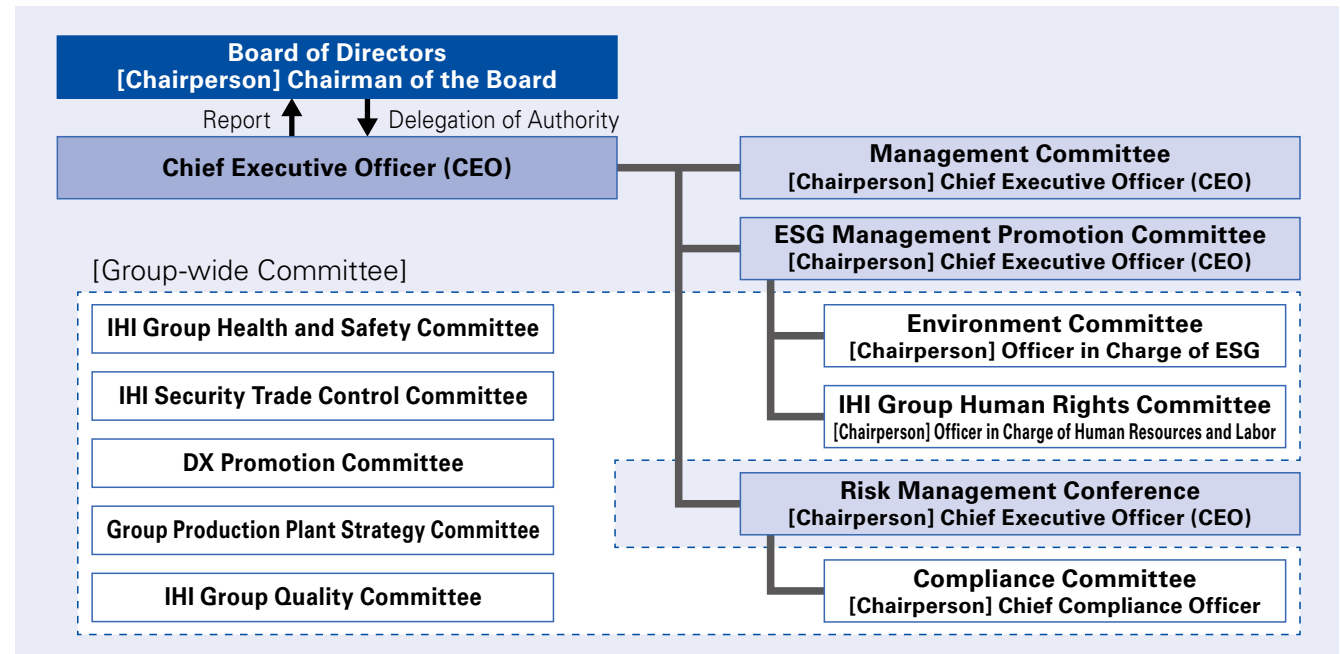
Structure

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. We know management with clearly defined values is essential to governance making these contributions possible. The IHI Group has begun

considering basic ESG management policies and measures, and established an ESG Management Promotion Committee for the purpose of evaluating and improving the progress of the policies and measures that have been implemented.

Sustainability Promotion System



ESG Management Promotion Committee

Chairperson	Chief Executive Officer
Secretariat	Corporate Planning Division
Members	Directors, Executive Officers, and General Managers
Meetings convened in 2021	2

Sustainability Management

Initiatives

Dialogue with Stakeholders

The IHI Group deems our primary stakeholders with a significant influence over ongoing corporate activities as customers, business partners, shareholders, investors, government agencies, local communities, and employees. As such, we value and engage in broad dialogue with these stakeholders. The Integrated Report and Sustainability Data Book are published as tools for this dialogue. We also released the IHI ESG STORYBOOK in fiscal 2021 to provide details about the ESG management philosophy. 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.

Main Results of Dialogue with Stakeholders

Stakeholders	Main Purpose of Dialogue	Example of Dialogues in 2021	Frequency	Reference
Customers	<ul style="list-style-type: none"> Contribute to solving social issues and customer challenges Ensure product safety 	• Conduct customer satisfaction surveys	As necessary	P68 Customer Relationships
		• Television commercials, newspaper advertisements, and IHI websites	As necessary	
		• Provide product safety information	As necessary	
Business partners	<ul style="list-style-type: none"> Engage in fair and impartial business dealings Cultivate mutually beneficial partnerships with our business partners 	• Make requests of business partners based on the IHI Group Procurement Policy	Regularly	P70 Supply Chain Management
		• Commend outstanding suppliers	Annually	
Shareholders & investors	<ul style="list-style-type: none"> Disclose accurate information in a timely manner Strengthen relationships based on trust Enhance corporate value 	• Convene the General Meeting of Shareholders	Annually	web IR
		• Hold financial results briefings and telephone conferences	Four times per year	
		• Attend one-on-one meetings	As necessary	
Government organizations	<ul style="list-style-type: none"> Form partnerships with government organizations 	• Participate in policy boards	As necessary	P35 Innovation Management
		• Participate in joint development and projects with government organizations	As necessary	
Local communities	<ul style="list-style-type: none"> Recognize ourselves as a member of society Contribute to solving social issues 	<ul style="list-style-type: none"> Hold community events Hold school visits 	As necessary	P72 Corporate Citizenship
Employees	<ul style="list-style-type: none"> Recruit and develop human resources as the most vital management asset 	• Conduct employee training	As necessary	P49 Diversity and Inclusion P27 Compliance
		• Conduct employee-awareness surveys	Annually	
		• Operate a compliance hotline	Regularly	

Sustainability Management

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 we actively engage in communication efforts.

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

Timely and Proper Disclosure

The IHI Group enhances the scope of various materials disclosed both online and offline for active and fair informational disclosure.

We are deeply involved in active communication efforts with our domestic and overseas investors to gain greater understanding about IHI Group business activities.

As in-person meetings (hosted annually worldwide) could not be held due to the COVID-19 pandemic once again in fiscal 2021, we created opportunities for dialogue through phone and video conferences with our management team and all investors in North America, Europe, and Asia.

Results of Shareholder and Investor Engagement in FY2021

Targets	Opportunities for Dialogue	Main Topics
Analysts and domestic institutional investors	Financial results briefings (telephone conferences and live streaming)	Nearly 100 people attended each of our briefings and telephone conferences this year. We provided a financial results breakdown for the term and progress of "Project Change".
Overseas institutional investors	One-on-one meetings (online)	These provided us with opportunities to discuss directly with a total of 100 overseas institutional investors. We discussed about business results and ESG management.
Individual shareholders	Information distribution service	The "IHI Integrated Report 2021" has been sent to members who applied for this service.

Support of International Initiatives

• Task Force on Climate-related Financial Disclosures (TCFD)

P83 Climate Change

• United Nations Global Compact

The IHI Group signed on to the United Nations Global Compact initiative to build a sound global society as a registered participating company in February 6, 2022. The IHI Group management philosophy and ESG management resonates with all ten principles of the United Nations Global Compact on human rights, labor, the environment, and anti-corruption. The Group supports these ten principles and works to realize a society of integrity based on them.

WE SUPPORT



Sustainable Development Goals (SDGs) Initiatives

Approach

The IHI Group incorporates each Sustainable Development Goal (SDG) into management and identifies material issues by the importance of achieving these goals. Retaining the basic concept of the “Group Management Policy 2019,” “Project Change” aligns the direction of each

business area with SDGs targets to contribute to the success of the SDGs through our businesses, in order to ultimately realize a sustainable society.

P.4 Medium-term Management Plan

IHI Group Business Area Direction

Create new values needed for social sustainability



Corporate Management

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Corporate Governance

Corporate Governance

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 functions related to their execution of duties. 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.

IHI will work to enhance its corporate governance in line with the following basic policies.

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

Corporate Governance

Structure

IHI has an Audit & Supervisory Board, which comprises 5 Audit & Supervisory Board Members (3 from outside) who audit the duties executed by directors. The Board of Directors, which consists of 12 Directors (4 from outside) and is led by the Chairman of the Board, makes decisions related to all important matters concerning the management of IHI and the Group, in addition to supervising Directors in their business execution. The Outside Directors, who are elected 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 make recommendations independently of managers who have been delegated the authority to handle day-to-day operations.

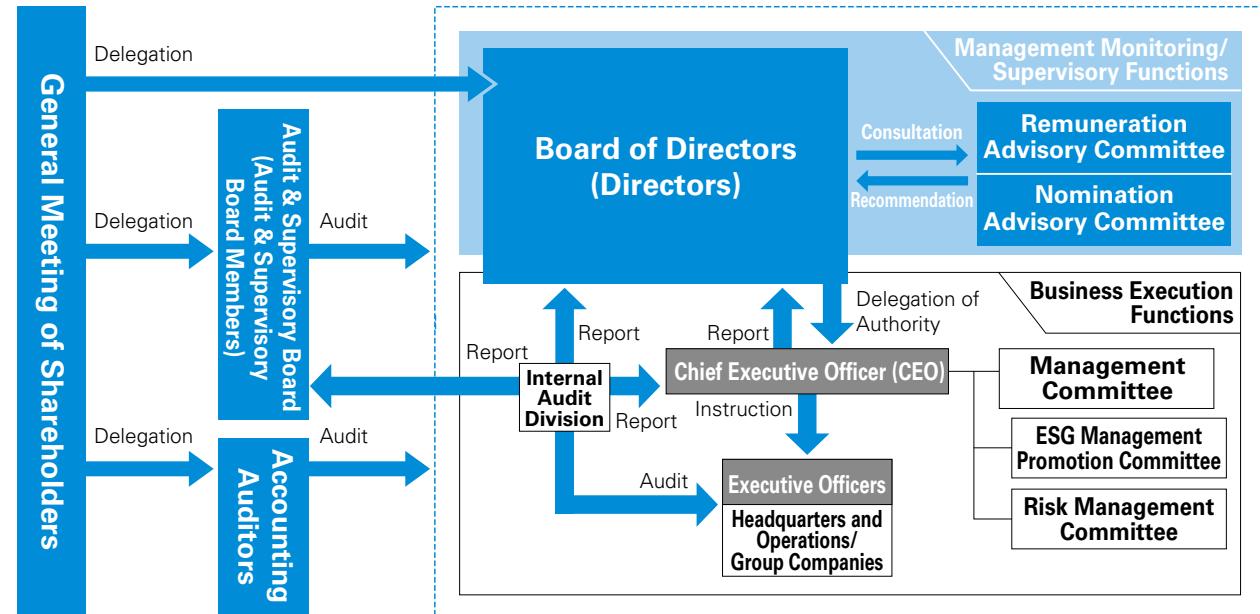
Remuneration Advisory Committee

IHI established 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 Outside Directors, one Outside Audit & Supervisory Board Member, the Director in charge of human resources, and the Director in charge of finance and accounting with an Outside Director acting as chairperson. The Committee convened three times with no absentees in fiscal 2021.

Nomination Advisory Committee

IHI established the Nomination Advisory Committee as an advisory body to the Board of Directors. This five-person committee is made up of the President

Corporate Governance Management Structure



and four Outside Directors with the President acting as chairperson for the purpose of ensuring proper implementation of officer appointments. The Committee convened six times with one absentee (once) in fiscal 2021.

Business Execution Structure

IHI has an Executive Officer system to strengthen the decision-making and supervisory functions of the Board of Directors, as well as to improve the efficiency of business operations. Executive officers are appointed by a resolution of the Board of Directors (7 of 22 executive officers serve concurrently as Directors). The Chief Executive Officer manages the duties of the Executive Officers, giving directions and supervision. The Executive Officers follow the Chief Executive Officer'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 2021.

As a body chaired by the CEO, the ESG Management Promotion Committee (convened at least twice a year), which considers, manages progress, and improves basic policies and specific measures for ESG management; and the Risk Management Conference (convened four times per year), which oversees overall IHI Group risk management and discusses and approves important risk management matter, are established.

P.11 ESG Management Promotion Committee

P.32 Risk Management Conference

Corporate Governance

Appointment of Officers

Policies and Procedures

The Board of Directors has defined ideal officer attributes for the Board of Directors. We have also drafted Independence Criteria for Outside Officers in accordance with the Tokyo Stock Exchange independent officer requirements to ensure the independence of Outside Directors and Auditors.

IHI's Board of Directors sets the basic policy of appointing the most appropriate Officers according to the ideal attributes for Officers and the independence standards for Outside Directors and Outside 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.

IHI strengthens the independence, objectivity, and accountability of the Board of Directors through a process that goes beyond the legal requirements for corporate Officer appointments. We have established a Nomination Advisory Committee as a voluntary advisory body comprised of the President and all independent Outside Officers to make sure Outside Directors actively oversee and advise on appointment procedures.

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

Ideal Officer Attributes

IHI appoints Officers who are healthy in mind and body and have all the following attributes:

- Deep understanding of, and sympathy 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

Dismissal Criteria for Officers

- The case of circumstances meeting the grounds for disqualification as a director set forth in laws and regulations
- The case of illegal or improper conduct or conduct constituting a breach of trust, or when there are reasons such as incompetence
- The case of remarkable loss of corporate value caused by negligence of duties
- The case when an individual lacks a prerequisite listed in the ideal attributes for officers

Independence Standards for Outside Officers

In addition to the requirements for independent Directors/Audit & Supervisory Board Members stipulated by the Tokyo Stock Exchange, IHI uses the standards below to determine independence.

1. Major shareholders

The Director should not be a major shareholder with 10% or more of the voting rights in IHI or serve as a Director, Audit & Supervisory Board Member, Executive Officer at a Company with committees, Executive Officer or employee, of a corporation that is a major shareholder.

2. Major clients, suppliers, etc.

The Director should not currently serve as a Director, Audit & Supervisory Board Member, Executive Officer at a Company with committees, Executive Officer or employee, of any of IHI's major clients, suppliers, etc. detailed below, nor should he/she have served as an

Executive Director, Executive Officer at a Company with committees, or Executive Officer, of such major clients, suppliers, etc. in the past.

- Major clients of the IHI Group (with transactions valued at 2% or more of IHI's consolidated revenue in the most recent fiscal year)
 - Major suppliers to the IHI Group (with transactions valued at 2% or more of the supplier's consolidated revenue in the most recent fiscal year)
 - A lender to the IHI Corporation listed as a major lender in the business report for the most recent fiscal year
3. Providers of specialist services (attorneys at law, certified public accountants, or consultants, etc.)
The Director should not be an attorney at law, certified public accountant, or consultant, etc. who receives ¥10 million or more of monetary consideration or other property from IHI annually besides compensation as an officer.
 4. Accounting auditor
The Director should not be a representative partner or partner of IHI's accounting auditor.
 5. Mutual exchange of Officers, etc. with IHI
The Director should not be assigned to a corporation with which IHI has a relationship of mutually exchanging Directors or Audit & Supervisory Board Members.
 6. Close relatives
The Director should not be the spouse or first- to second-degree relative of a Director, Audit & Supervisory Board Member, Executive Officer or equivalent executive-level employee of the IHI Group. In addition, the Director should not be the spouse or first- to second-degree relative of any person* referred to in 1 through 4 above.

* If a major shareholder or a major client, supplier, etc. is a corporation, this applies only to Directors, Audit & Supervisory Board Members, Executive Officers at Companies with committees, Executive Officers, or equivalent executive-level employees of the corporation in question.

Corporate Governance

Approach to Outside Officer Nominations

IHI also considers age, concurrent positions, period in office, and related matters when nominating candidates as Outside Directors.

Approach to Ensuring Diversity in Key Human Resource Roles

The IHI Group designates and actively promotes diversity and inclusion (D&I) as one important human resource strategy. The promotion of diversity and inclusion is all about employing people who have diverse backgrounds, experiences, and views. These efforts create new value and incite innovation. IHI actively recruits, develops, and promotes diverse human resources, especially women, to key corporate roles.

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Corporate Governance

Members of the Board of Directors (as of July 1, 2022)

Name Position at the Company	Reasons for appointment	Attendance at Board of Directors meetings in 2021	Term of office as Director	Company shareholding	Appointments to advisory committees	
					Remuneration Advisory Committee	Nomination Advisory Committee
Tsugio Mitsuoka Representative Director, Chairman of the Board	Tsugio Mitsuoka has led the IHI Group's management as the President of the Company since April 2016, by actively carrying out the selection and concentration of business operations and the transformation of business model in response to the changing business environment, as well as bolstering the risk management and ensuring compliance. Since April 2020, he has been working to strengthen corporate governance as Chairman of the Board of the Company. In the belief that his abundant experience and insight as corporate manager will be indispensable in the management of the IHI Group, the Company has appointed him as a Director.	17 of 17 (100%)	8 years	16,000 shares	–	–
Hiroshi Ide Representative Director, President	Hiroshi Ide has accumulated a great deal of knowledge mainly in the overseas marketing division for the energy and plant businesses. After serving as Managing Director of an overseas subsidiary, he has formulated business strategies with a long-term perspective as President of Resources, Energy and Environment Business Area for the realization of a carbon-free recycling society. Since becoming Chief Operating Officer in April 2020, and subsequently President in June 2020, he has led the management of the Group. In the belief that these abundant business experience, accomplishments, and insight will be indispensable in the management of the IHI Group, the Company has appointed him as a Director.	17 of 17 (100%)	2 years	2,900 shares	–	Chairperson
Takeshi Yamada Representative Director	Takeshi Yamada has accumulated a great deal of knowledge mainly in the finance & accounting field and corporate planning division. Since April 2017 as General Manager of the Finance & Accounting Division, he has been deeply engaged in formulation and execution of the Group's financial strategies. After being appointed Executive Vice President in April 2019, he has been focusing on strengthening communication with stakeholders while promoting improvements in the Group's financial structure. In the belief that these abundant experience and high level of insight into the Group's overall business management will be indispensable in the management of the IHI Group, the Company has appointed him as a Director.	17 of 17 (100%)	5 years	2,600 shares	Members	–
Masataka Ikeyama Representative Director	Masataka Ikeyama has accumulated a great deal of knowledge in the aero-engine technology development field, particularly as manager responsible for the Defense systems business, and subsequently, he was appointed as President of MEISEI ELECTRIC CO., LTD., a listed subsidiary, in 2019 and worked on management reforms of the said company. In August 2021, he achieved IHI's acquisition of 100% ownership of the said company as part of the IHI Group's efforts for creation of new growth businesses. Since then, at the Company, he has also been working to strengthen economic security of which the importance is growing. In the belief that these abundant experience, accomplishments, and insight will be indispensable in the management of the IHI Group, the Company has appointed him as a Director.	–	–	4,500 shares	–	–
Takeshi Kawakami Board Director	Takeshi Kawakami has accumulated a great deal of knowledge in the bridge design, manufacturing, and construction divisions. He subsequently served as the manager responsible for many projects, including overseas projects at a subsidiary operating bridge/water gate business, which the Company established through the acquisition of a leading Japanese company, and then as that company's President. Since April 2019, as President of Social Infrastructure & Offshore Facilities Business Area, he has led that business area in a globally competitive environment. In the belief that these abundant experience, accomplishments, and insight will contribute to the growth of the IHI Group, the Company has appointed him as a Director.	17 of 17 (100%)	2 years	2,100 shares	–	–
Yasuhiro Shigegaki Board Director	Yasuhiro Shigegaki has accumulated a great deal of experience and knowledge mainly in the research and development division. In addition to having served as Chairman of an overseas subsidiary that the Company acquired for the Heat Treatment and Surface Engineering Business, he has actively pursued global expansion to achieve growth as the manager responsible for the business. As the President of Industrial Systems & General-Purpose Machinery Business Area since April 2020, he has been leading the business in a globally competitive environment. In the belief that these abundant experience, accomplishments, and insight will contribute to the growth of the IHI Group, the Company has appointed him as a Director.	17 of 17 (100%)	2 years	2,600 shares	–	–

Name Position at the Company	Reasons for appointment	Attendance at Board of Directors meetings in 2021	Term of office as Director	Company shareholding	Appointments to advisory committees	
					Remuneration Advisory Committee	Nomination Advisory Committee
Hideo Morita Board Director	Hideo Morita has accumulated a great deal of knowledge as manager responsible for the development of space equipment, production, design, and engineering departments of the Aero-Engine & Space Operations. Since April 2018, he had led the Civil Aero-Engine Division, and subsequently as the President of Aero-Engine, Space & Defense Business Area since April 2021, he has been leading the business under environmental changes. In the belief that his abundant experience, accomplishments, and insight will contribute to the growth of the IHI Group, the Company has appointed him as a Director.	14 of 14 (100%)	1 year	3,000 shares	–	–
Akihiro Seo Board Director	Akihiro Seo has accumulated a great deal of knowledge, mainly in human resources and labor relations and in the corporate planning division, and then was engaged in promotion of a new business and served as the President of an overseas subsidiary established by the Company. He has been involved in a medium-term management plan as General Manager of Corporate Planning Division since April 2018, and been working on the formulation and promotion of the "IHI Group's ESG Management," which was released in November 2021. In the belief that these abundant experience, accomplishments, and insight will contribute to the management of the IHI Group, the Company has appointed him as a Director.	–	–	500 shares	Committee Member	–
Internal director total		100%	–	34,200 shares	–	–
Yoshiyuki Nakanishi Outside Director	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 the Company and carry out management oversight and monitoring functions from an independent perspective, the Company has appointed him again as an Outside Director.	17 of 17 (100%)	2 years	0 shares	Chairperson	Committee Member
Chieko Matsuda Outside Director	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 the Company and carry out management oversight and monitoring functions from an independent perspective, the Company has appointed her again as an Outside Director.	17 of 17 (100%)	2 years	700 shares	–	Committee Member
Minoru Usui Outside Director	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 the Company and carry out management oversight and monitoring functions from an independent perspective, the Company has appointed him as an Outside Director.	14 of 14 (100%)	1 year	700 shares	Committee Member	Committee Member
Toshihiro Uchiyama Outside Director	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 the Company and carry out management oversight and monitoring functions from an independent perspective, the Company has appointed him as an Outside Director.	–	–	0 shares	Committee Member	Committee Member
Outside director total		100%	–	1400 shares	–	–

Corporate Governance

Average Attendance of Outside Directors

(Unit: %)

Category	2018	2019	2020	2021
Board of Directors Meetings	98.6	98.1	96.8	100.0

Important Concurrent Positions of Outside Officers

Name	Position at the Company	Number of Important Concurrent Positions	Important Concurrent Positions at Other Companies
Yoshiyuki Nakanishi	Director	3	Executive Advisor, DIC Corporation, Outside Director, THE JAPAN STEEL WORKS, LTD., Outside Director, SHIMADZU CORPORATION
Chieko Matsuda	Director	4	Professor, Faculty of Economics and Business Administration, Tokyo Metropolitan University, Professor, Graduate School of Management, Tokyo Metropolitan University, Non-Executive Director of the Board, Kirin Holdings Company, Limited, Outside Director, T&D Holdings, Inc.
Minoru Usui	Director	2	Chairman and Director, Seiko Epson Corporation, Outside Director, Sumitomo Pharma Co., Ltd.
Toshihiro Uchiyama	Director	2	Director; Chairman, NSK Ltd., Outside Director, Sapporo Holdings Limited
Toshio Iwamoto	Audit & Supervisory Board Member	3	Chief Corporate Advisor of NTT DATA Corporation, Outside Director, Daiwa Securities Group Inc., Outside Director, East Japan Railway Company
Aiko Sekine	Audit & Supervisory Board Member	5	Certified Public Accountant Advisor, JICPA, Professor, Faculty of Commerce, Waseda University, Outside Director, ORIX Corporation, Outside Audit & Supervisory Board Member, Sumitomo Riko Company Limited, Auditor, Nuclear Damage Compensation Facilitation Corporation
Yumiko Waseda	Audit & Supervisory Board Member	2	Attorney at Law, Outside Audit & Supervisory Board Member, Asahi Group Holdings, Ltd., Executive Director, Japan Law Foundation

Ratio of Outside Directors

(Unit: %)

Category	2018	2019	2020	2021	2022
Ratio of Outside Directors	33	27	33	33	33

Members of the Audit & Supervisory Board (as of July 1, 2022)

Name Position at the Company	Reasons for appointment	Attendance at Board of Directors meetings in 2021	Attendance at Audit & Supervisory Board meetings in 2021	Term of office as Audit & Supervisory Board Members	Appointments to advisory committees	
					Remuneration Advisory Committee	Nomination Advisory Committee
Takashi Niimura Standing Audit & Supervisory Board Member	Takashi Niimura has accumulated a great deal of knowledge in the sales and marketing field since joining IHI. As the manager responsible for supervising domestic and overseas branches and affiliated companies, he has carried out sales strategies from a company-wide perspective, while globally expanding operations and managing risks according to the situation in each country. In the belief that his abundant experience, accomplishments, and insight will be effectively utilized in the auditing of the IHI Group, the Company has appointed him as an Audit & Supervisory Board Member.	17 of 17 (100%)	13 of 13 (100%)	2 years	-	-
Seiji Maruyama Standing Audit & Supervisory Board Member	Seiji Maruyama accumulated a great deal of knowledge, mainly in the areas of finance, internal control, internal audit and business management, and since April 2019 has worked on issues such as the Group's finance and accounting strategy, and improving the Group's financial position as General Manager of the Finance & Accounting Division. In the belief that his abundant experience, accomplishments, and insight will be utilized in the auditing of the IHI Group, the Company has appointed him as an Audit & Supervisory Board Member.	14 of 14 (100%)	10 of 10 (100%)	1 year	-	-
Toshio Iwamoto Outside Audit & Supervisory Board Member	Toshio Iwamoto gained extensive experience and broad insight as the executive of forefront IT company. Aiming for these qualities to be reflected in the auditing of the Company's management from an independent perspective, the Company has appointed him as an Outside Audit & Supervisory Board Member.	17 of 17 (100%)	13 of 13 (100%)	3 years	Committee Member	-
Aiko Sekine Outside Audit & Supervisory Board Member	Aiko Sekine has accumulated abundant experience and insight as a Representative Partner of PricewaterhouseCoopers Aarata, Japan, and Chairman and President of The Japanese Institute of Certified Public Accountants (JICPA). Aiming for these qualities and her independent perspective to be reflected in the auditing of the Company's management from an independent perspective, the Company has appointed her as an Outside Audit & Supervisory Board Member.	16 of 17 (94%)	13 of 13 (100%)	2 years	-	-
Yumiko Waseda Outside Audit & Supervisory Board Member	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 outside audit & supervisory board member. Aiming to have her reflect this experience and insight in the management oversight from an independent perspective, the Company has appointed her as an Outside Audit & Supervisory Board Member.	14 of 14 (100%)	10 of 10 (100%)	1 year	-	-

Average Attendance of Outside Audit & Supervisory Board Members

(Unit: %)

Category	2018	2019	2020	2021
Board of Directors meetings	92.6	100.0	100.0	97.9
Audit & Supervisory Board meetings	100.0	100.0	100.0	100.0

Corporate Governance

Knowledge and Experience of Directors and Audit & Supervisory Board Members (Skill Matrix)

	Name	Corporate Management	Technology Research and Development	Global Business	Sales Marketing	ICT DX	Personnel Affairs Human Resource Development	Finance and Accounting	Legal Compliance Risk Management
Director	Tsugio Mitsuka	○	○						○
	Hiroshi Ide	○		○	○				
	Takeshi Yamada	○						○	
	Masataka Ikeyama	○				○			○
	Takeshi Kawakami		○						
	Yasuhiro Shigegaki		○						
	Hideo Morita		○						
	Akihiro Seo						○		○
Outside Director	Yoshiyuki Nakanishi	○		○	○				
	Chieko Matsuda						○	○	○
	Minoru Usui	○	○	○					
	Toshihiro Uchiyama	○		○	○				
Audit & Supervisory Board Member	Takashi Niimura				○				○
	Seiji Maruyama							○	
Outside Audit & Supervisory Board Member	Toshio Iwamoto	○		○		○			
	Aiko Sekine							○	
	Yumiko Waseda								○

Business Execution Structure (As of July 1, 2022)

Director	Position and Role	Name	Main Responsibilities
○	Chief Executive Officer	Hiroshi Ide	In Charge of Business Relating to Internal Audit, In Charge of Risk Management, General Manager of Corporate Strategy Headquarters
○	Senior Executive Officer	Takeshi Yamada	Assistant to the President, In Charge of Group Finance & Accounting, In Charge of Business Relating to Corporate Planning, and Corporate Communication
○	Senior Executive Officer	Masataka Ikeyama	Assistant to the President, In Charge of Economic Security, In Charge of Group Quality Assurance, In Charge of Business Relating to Procurement, and Information Management
○	Managing Executive Officer	Takeshi Kawakami	In Charge of Monozukuri System Strategy, President of Social Infrastructure & Offshore Facilities Business Area
-	Managing Executive Officer	Yoshinori Komiya	General Manager of Intelligent Information Management Headquarters
○	Managing Executive Officer	Yasuhiro Shigegaki	In Charge of Production Base Strategy, President of Industrial Systems & General-Purpose Machinery Business Area
○	Managing Executive Officer	Hideo Morita	President of Aero Engine, Space & Defense Business Area
-	Managing Executive Officer	Kouji Takeda	President of Resources, Energy & Environment Business Area
○	Managing Executive Officer	Akihiro Seo	General Manager of Human Resources Division, In Charge of Human Resources and Labor, Safety and Health, ESG
-	Managing Executive Officer	Nobuhiko Kubota	General Manager of Technology & Intelligence Integration, In Charge of Group Engineering
-	Managing Executive Officer	Tsuyoshi Tsuchida	General Manager of Corporate Planning Division
-	Executive Officer	Tetsuji Fujimura	Vice President of Aero Engine, Space & Defense Business Area
-	Executive Officer	Kiyoshi Nihei	General Manager of Global Marketing & Sales Headquarters, In Charge of Group Operations
-	Executive Officer	Noriko Morioka	Deputy General Manager of Corporate Strategy Headquarters, In Charge of New Corporate Businesses Headquarters
-	Executive Officer	Jun Kobayashi	General Manager of Solution & Business Development Headquarters
-	Executive Officer	Kazuhiro Onitsuka	Vice President of Industrial Systems & General-Purpose Machinery Business Area
-	Executive Officer	Yukihisa Ozawa	Vice President of Resources, Energy and Environment Business Area
-	Executive Officer	Go Maeda	General Manager of Project Risk Management Division
-	Executive Officer	Shotaro Tabata	Vice President of Industrial Systems & General-Purpose Machinery Business Area
-	Executive Officer	Yoshikazu Hamada	General Manager of Legal Division, In Charge of Business Relating to Administration and Legal, Group Compliance
-	Executive Officer	Yasuaki Fukumoto	General Manager of Finance & Accounting Division
-	Executive Officer	Chie Fukuoka	General Manager of Corporate Communication Division

Corporate Governance

Remuneration for Officers

Policy on Determination of Remuneration for Officers

IHI approved revision of its policy for determining officer remuneration by a resolution of the Board of Directors on May 13, 2021. Content of the policy was referred for consultation to the Remuneration Advisory Committee, which accordingly deliberation on and reported findings thereof on a preliminary basis, prior to having been resolved by the Board of Directors.

Directors (Excluding Outside Directors)

1. Basic Policy on Determination of Remuneration

- Remuneration for Directors shall be aimed at fully encouraging Directors of IHI to perform their duties in line with the management philosophy, Group vision, and Group management policy, and strongly motivating them toward the achievement of specific management goals to bring sustainable growth of IHI and the IHI Group, and to improve the medium- and long-term corporate value.
- Remuneration shall be structured with the appropriate allocation of a fixed basic salary, 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 with consideration of the IHI management environment, and social roles and accountabilities IHI undertakes.

2. Remuneration Level and Allocated Ratios of Remuneration

- IHI shall appropriately establish remuneration levels and allocated ratios of remuneration upon having considered factors that include IHI's business characteristics, effectiveness of incentive remuneration, and professional duties. Moreover, the company shall perform verification by regularly surveying objective

market data on remuneration researched by an external specialized institution.

- IHI shall allocate the ratio of remuneration at approximate proportions of basic salary : performance-based bonus : performance-based share remuneration equal to 50%:30%:20% for the President, and the Chairman of the Board, and at approximate proportions of 55%:25%:20% for other Directors, subject to standard business performance.

3. Incentive System

(1) Performance-based bonuses (Annual incentives)

a. 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 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 individual evaluation indicators corresponding to tasks assigned to each executive. The performance indicators shall be reviewed as necessary, particularly upon encountering changes in the management environment and executives' duties.

b. Method of calculating remuneration

The monetary amount of remuneration provided every fiscal year is calculated as the amount of payments based on individual evaluation indicators added to the product of the standard payment amount corresponding to titles and positions multiplied by the performance evaluation payout rate corresponding with percentage achievement of profit indicators. 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 dividend is paid.

(2) Performance-based share remuneration (Medium- to long-term incentives)

a. 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 alignment with review of the Group management policies necessary.

b. Method of calculating remuneration

The number of shares to be delivered on an individual basis as performance-based share remuneration (a monetary sum equivalent to the market value of the shares is to be delivered with respect to a portion of such remuneration) shall be calculated as the standard number of shares to be delivered with respect to each of the job title rankings, multiplied by a coefficient aligned with the percentage of the consolidated ROIC target achieved. 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.

4. Procedures for Determining Remuneration

To ensure appropriateness and objectivity regarding matters of Officer remuneration, the Remuneration Advisory Committee set up by IHI deliberates and reports its findings on remuneration proposals before the Board of Directors makes decisions on such matters.

Remuneration of Outside Directors and Audit & Supervisory Board Members

Remuneration of Outside 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 basic salary of Outside Directors and that of Audit & Supervisory Board Members are set at the appropriate level taking into account the role and responsibilities of each officer. Moreover, the company shall perform verification by regularly surveying objective market data on remuneration researched by an external specialized institution.

Corporate Governance

Results for 2021 Remuneration

Details of Director and Audit & Supervisory Board Members Remuneration

(Unit: Million yen)

Officer Category (Persons)		Total remuneration	Total remuneration by type		
			Basic remuneration	Performance-based remuneration, etc.	
				Performance-based share remuneration	Performance-based bonus
Directors (15)	Internal Directors (10)	613	366	154	93
	Outside Directors (5)	48	48	–	–
Audit & Supervisory Board Members (7)	Internal Audit & Supervisory Board Members (3)	72	72	–	–
	Outside Audit & Supervisory Board Members (4)	36	36	–	–
Total (22)		769	522	154	93

* The total amount of performance-based share remuneration is the amount of the provision for share acquisition costs related to the granted points recorded in the fiscal year under review, which is different from the actual total payment amount.

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

(Unit: Million yen)

Name		Total remuneration	Total remuneration by type		
			Basic remuneration	Performance-based share remuneration	Performance-based bonus
Tsugio Mitsuoka	Director	115	66	29	19
Hiroshi Ide	Director	126	72	32	21

Ratio of CEO Remuneration to Average Employee Salary

Highest total annual remuneration (CEO) (Rounded to million yen)	126,000,000
Average annual salary (yen) of IHI employees (Total: 7,779)	7,364,797
Ratio (CEO: IHI employees)	17:1

Targets and Results of the Performance Evaluation Indicators for Performance-based Remuneration

Type of remuneration	Targets	Performance evaluation indicator	Weight	Margin of performance evaluation payout rate	Targets	Results	Performance evaluation payout rates
Performance-based bonus	Representative Directors	Profit attributable to owners of parent	50%	0–200%	Maximum: 51.0 billion yen Target: 30.0 billion yen Minimum: 15.0 billion yen	7.9 billion yen	0%
		Consolidated operating cash flow	50%	0–200%	Maximum: 130.0 billion yen Target: 80.0 billion yen Minimum: 60.0 billion yen	9.1 billion yen	122.1%
	Directors (Excluding Representative and Outside Directors)	Profit attributable to owners of parent	40%	0–200%	Maximum: 51.0 billion yen Target: 30.0 billion yen Minimum: 15.0 billion yen	7.9 billion yen	0%
		Consolidated operating cash flow	40%	0–200%	Maximum: 130.0 billion yen Target: 80.0 billion yen Minimum: 60.0 billion yen	9.1 billion yen	122.1%
		Individual performance evaluation	20%	0–150%	Set on an individual basis with evaluations drafted by the President and Representative Director and approved by the Board of Directors		Maximum: 100% Minimum: 0%
	Performance-based share remuneration	Internal directors	Consolidated ROIC	–	0–150%	Maximum: 15% Target: 12% Maximum: 3.5%	1%

* Performance-based bonuses paid with consideration to business execution during fiscal 2021.

* Performance-based share remuneration paid with consideration to the start of the performance evaluation period in fiscal 2019 to the end of the performance evaluation period in fiscal 2021.

* Results for profit attributable to owners of parent and consolidated operating cash flow performance indicators modified from the exchange rate presumed when drafting management plans.

* Some numerical results for speculative performance-based indicators related to performance-based share remuneration during the current period have been adjusted from the KPI and financial statements disclosed by IHI, such as excluding the impact of sales of investment properties.

Corporate Governance

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.

1. Evaluation Method

- An external consulting company administers an anonymous questionnaire to all Directors and Audit & Supervisory Board Members. Items covered by the questionnaire include the composition and operation of the Board of Directors, risk management, and culture of the Board of Directors.
- The external consulting company collects and analyzes the questionnaire responses.
- All relevant Officers are interviewed regarding the questionnaire and the analyzed responses.

The results of the above process are brought together in composition the form of a self-evaluation by the Board of Directors, and proposed points for improvement are identified.

2. Management of the Board of Directors in 2021

The effectiveness evaluation during the previous fiscal year discovered the need for the Board of Directors to more fully deliberate on ESG initiatives, the business portfolio, and other such important matters. Therefore, the Board of Directors deliberated on the following matters in fiscal 2021:

- Setting some priority subjects of Board of Directors in fiscal 2022 as a central topic (formulation of IHI Group ESG management, progress in creation of growth businesses, and succession plans)
- Innovating management to invigorate debate in Board of Directors meetings, such as providing more comprehensive briefings to outside directors beforehand through online meetings

3. New challenges identified by the effectiveness evaluation in fiscal 2021

The effectiveness evaluation in fiscal 2021 introduced a third-party assessment to enhance independence and objectivity of the analysis and evaluation. The comprehensive third-party evaluation analyzed and summarized its findings through specific measures that included interviews with all of the officers, reviews of the amount of time spent on deliberations, and remarks made in the meeting minutes in addition to the conventional analysis of questionnaires to ensure continuity.

The third-party assessment concluded that the Board of Directors effectively carried out decision-making and auditing functions of important management matters but still had room to find ways to grow and improve even more. More comprehensive debate on medium- to long-term strategies, monitoring, and risk management is one area in particular that the assessment saw as a high-priority challenge in which the Board of Directors could really improve. In light of these findings, the Board of Directors will take the following actions during fiscal 2022:

- Setting some priority subjects for the fiscal year with consideration to previous fiscal initiatives and new challenges (drive forward IHI Group ESG management, revise the Group vision, formulate the next mid-term management policy, and debate future business risks and opportunities)
- Start providing regular feedback to the Board of Directors about matters pointed out in Board of Directors meetings
- Enhance opportunities to foster communication between officers outside of Board of Directors meetings

The next evaluation of the Board of Directors is scheduled to be conducted during fiscal 2022.

Corporate Governance

Shareholder Composition

Shareholder Composition

[web](#) [Annual Securities Report](#)

[web](#) [Integrated Report](#)

Employee Stock Ownership Association Membership Rate

Of the IHI employees, 46.6% are members of the Employee Stock Ownership Association as of March 31, 2022.

Others

Corporate Governance Report

Please see our Corporate Governance Report for more information about IHI corporate governance.

[web](#) [Corporate Governance Report](#)

Cross-Shareholdings

Approach

Purpose of cross-shareholdings

IHI has established the following policy on cross-shareholdings.

As a general rule, IHI looks to reduce cross-shareholdings after engaging in a suitable dialogue with the issuing company. However, IHI may hold shares in strategic partners for business alliances, joint research and development, or other forms of collaboration for the purpose of pursuing medium- to long-term growth and increased corporate value for IHI.

Management of cross-shareholdings

IHI verifies and reports the propriety of individual shareholdings, including unlisted stocks, to the Board of Directors by confirming the mid- and long-term significance based on the holding policy and examining the economic rationality on whether the advantages and risks brought by the shareholdings are appropriate for the capital costs.

Criteria for exercising voting rights

The policy for exercising voting rights for cross-shareholdings requires IHI to determine whether each proposal will help improve the medium- to long-term corporate value of the company without harming its own corporate value. If any concerns arise about a particular matter, IHI decides how to exercise its voting rights through a dialogue with said company.

Results

In fiscal 2021, IHI has wholly sold two security names among its 132 security names of cross-shareholdings (44 listed and 88 unlisted security names) IHI owned.

Compliance

General Compliance

Policies

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.

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. We have also formulated the IHI Group Code of Action as guidelines to be followed in daily work by all IHI Group officers and employees.

IHI also designated a Compliance Day (May 10) as an annual event starting in fiscal 2021. A variety of actions are taken to raise awareness about compliance on that day, such as the release of a message from management and workplace dialogues. Compliance Day creates an opportunity to make the Civil Aero Engine Maintenance Business and other past issues personal for each and every person with the goal of continually raising awareness about compliance.

IHI Group Code of Action

1. We truly understand and will comply with any and all applicable rules.
2. We do not engage in any wrongdoing.
3. We respect human rights.
4. We make safety and quality for our customers a top priority.
5. We enter into fair and legitimate transactions.
6. We never impair the safety of ourselves or our colleagues.
7. We strictly manage and control information.
8. If we discover an issue, we report it immediately.

Basic Rules of Compliance for IHI Group

Compliance is the foundation for companies to do business in society.

The IHI Group shall act as follows in accordance with the Basic Code of Conduct for the IHI Group:

- Strictly observe all laws, internal rules, and other regulations.
- Act in a fair and responsible manner as business people

Tax Compliance

IHI Group Global Tax Policy

The IHI Group enacts the Global Tax Policy in accordance with "Basic Code of Conduct for the IHI Group", for the purpose of developing global tax compliance, and aims at growing sustainably and enhancing corporate value over the future.

1. Respect for the rule of law

The IHI Group observes the laws and ordinances on taxes of each country or region based on a clear understanding of their meaning. The IHI Group also acts sincerely and fairly with high ethical standards so that it does not violate social rules or international norms.

2. Transfer pricing

The IHI Group, by assessing transfer pricing in accordance with the laws and ordinances of each country or region and the International Transfer Pricing Guidelines, is committed to appropriately allocating income commensurate with the contribution of each Group company and to making proper tax payment in each country and region.

3. Tax planning

The IHI Group does not engage in tax planning for the purpose of tax avoidance.

4. Relationship with the tax authorities

The IHI Group, by providing information in the course of tax administration procedures and tax audits appropriately and in a timely manner, strives to maintain a sound relationship with the tax authorities of each country or region.

Compliance

Structure

Compliance Committee

The IHI Group established the Compliance Committee as a Group-wide committee on compliance under the Risk Management Conference. Made up of compliance officers from each division, with the Chief Compliance Officer as chairperson, the Compliance Committee deliberates and drafts important policies on compliance as well as promotes compliance activities.

Compliance Committee members roll out the decisions made by the Committee to each division by incorporating them into compliance activities tailored to the division. Compliance Committee members inform the Committee of progress made by the divisions and also use a PDCA cycle for compliance activities.

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 Structure



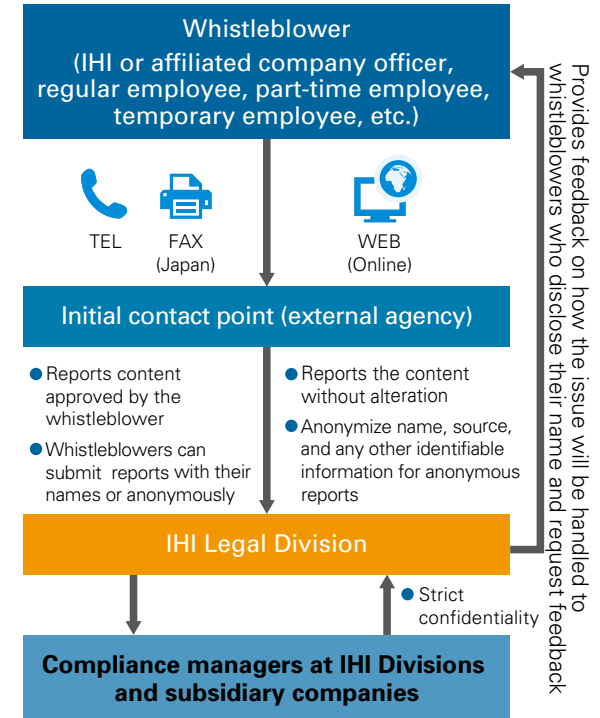
Compliance Committee

Chairperson	Chief Compliance Officer
Secretariat	Compliance Group of the Legal Division
Members	Compliance Officer of each division
Number of meetings convened in 2021	5

Compliance Hotline

The IHI Group runs the Compliance Hotline as an internal reporting system to quickly identify actions that violate or potentially violate laws, internal regulations, or internal and external rules by IHI officers and employees to allow IHI to take corrective action as soon as possible. This system prohibits retribution toward whistleblowers. Anyone who engages in retribution against a whistleblower will be disciplined in accordance with applicable employment regulations. IHI officers and employees can directly report to or consult with third-party experts outside of their chain of command via this hotline. The hotline is available inside and outside Japan, always in the appropriate local language.

Framework of the Compliance Hotline



Compliance

Education/Awareness Building

Quality & Compliance Training

IHI extended quality & compliance training to all group companies beginning in fiscal 2019. In fiscal 2020, IHI conducted a training based on case studies to identify potential causes of and risk factors that lead to quality compliance issues and to prevent similar problems from arising at the IHI Group. In fiscal 2021, we held the same training program again, mainly for those who had not yet taken it.

Compliance Day (May 10) Activities

IHI designated May 10 as an annual Compliance Day in fiscal 2021. Every year, we take various initiatives to raise awareness about compliance on this day. In fiscal 2021, top management broadcast a video message about the launch of Compliance Day, and workplace dialogues about compliance were held. The workplace dialogues offered a great opportunity to discuss daily thoughts on compliance and a wide range of topics in small groups at each workplace. In fiscal 2022, Compliance Day featured a video talk from a distinguished visiting lecturer, a video discussion between the Chief Compliance Officer and a representative employee, and workplace dialogues. The visiting lecturer talked about organization building and psychological safety around the idea that building a better organization develops better human resources.

Number of Compliance Training Participants

(Unit: People)

Item		Scope of Data	2018	2019	2020	2021
Officer Training		IHI and subsidiary companies in Japan	47	–	–	–
Line Manager Training		IHI and subsidiary companies in Japan	75	72	–	–
Quality & Compliance Training		IHI and subsidiary companies in Japan	–	27,866	24,085	26,243
		Affiliated companies overseas	–	1,774	3,261	4,938
e-Learning	Japan (Conducted as Quality & Compliance Training since 2020)	IHI and subsidiary companies in Japan	18,234	18,164	20,169	21,659
	Overseas	Affiliated companies overseas	1,126	1,214	–	–

Results

Number of Compliance Hotline Reports

(Unit: Reports, Scope: IHI and affiliated companies)

Item	2018	2019	2020	2021
Reports	238	239	202	263

Compliance

Competition Laws/Anti-corruption Laws

Policies

Commitment to Competition and Anti-corruption Law Compliance

More global and borderless corporate activities make compliance with various competition laws in each country indispensable to maintain and gain business opportunities in international markets. International rules prohibit conference of illicit benefit or and other forms of corruption.

We are fully committed to complying with competition laws, anti-corruption laws, and all other laws and regulations as part of the code of action for all the employees, officers, and directors of the IHI Group. IHI revised the IHI Group Competition Law Compliance Policy in fiscal 2021 to strengthen the competition law compliance framework. For instance, this policy calls for appointment of a Competition Law Compliance Officer for each division. In conjunction with this policy, the IHI Legal Division monitors the progress of compliance management in each of these divisions and advances ongoing initiatives. This includes support to put in place effective measures tailored to the actual conditions of each business.

The IHI Group also adheres to anti-corruption laws. The IHI Group Basic Policy Against Bribery of Public Officials prohibits bribes, facilitation payments, and other inappropriate payments and donations to public officials. To increase the effectiveness of this policy, we have drafted operating standards, appointed compliance officers, and put in place specific procedures in each division.

Structure

The IHI Group promotes educational and monitoring programs with the IHI Legal Division at the core of Group

compliance and risk management.

The IHI Group assesses the risk of violations of competition and anti-corruption laws as well as other compliance risks according to the above mentioned IHI Group rules. Each IHI Group company conducts risk assessments tailored to their business and addresses any issue found according to the level of risk with the support of the IHI Legal Division.

We also identify and handle any compliance issues at the earliest possible stage through the Compliance Hotline. If any major compliance issues are ever discovered, IHI establishes a task force led by the CEO to quickly and flexibly handle the issue while leveraging the knowledge of internal and external experts. This task force not only addresses issues but also introduces and supports measures to prevent recurrence.

Results

Competition Laws/Anti-corruption Law Violations

(Unit: Incidents, Scope: IHI and consolidated subsidiaries)

Item	2018	2019	2020	2021
Competition law	0	0	0	0
Anti-corruption law	0	0	0	0

Expenditure to Political Organizations, Economic Organizations, and Other Major Industry Organizations

(Unit: Millions of yen, Scope: IHI)

Item	2018	2019	2020	2021
Political organizations	10	10	10	10
Economic organizations	48	56	57	52
Other major industry organizations	101	120	122	119

Education/Awareness Building

Employee Training and Education

The IHI Group provides training to teach employees about various competition laws worldwide, such as the Japan Antimonopoly Act and Unfair Competition Prevention Act, the United States Sherman Antitrust Act, and competition law in the European Union. IHI trains all of its new employees on the basics of anti-corruption laws. We also regularly educate all employees about the United States Foreign Corrupt Practices Act (FCPA) and the United Kingdom Bribery Act 2010 while monitoring the risk of anti-corruption law violations in Japan and overseas. We gain feedback from participants about these awareness-raising activities, and the IHI Legal Division reviews the effectiveness of the program to help enhance compliance education every year.

Number of Training Participants

(Unit: People)

Item	Scope of Data	2020	2021
Officers and employees	IHI and consolidated subsidiaries	2,252	1,871
(Breakdown)	Japan	1,827	1,721
	Overseas	425	150

Compliance

Security Trade Control

Policies

The IHI Group properly implements security trade controls to maintain international peace and security. The IHI Group strives to reduce the risks of legal violations and economic sanctions by not only complying with the Foreign Exchange and Foreign Trade Act but also Group companies overseas also complying with all laws in each country and region they operate in as well as conducting trade controls with consideration to foreign laws with extraterritorial application.

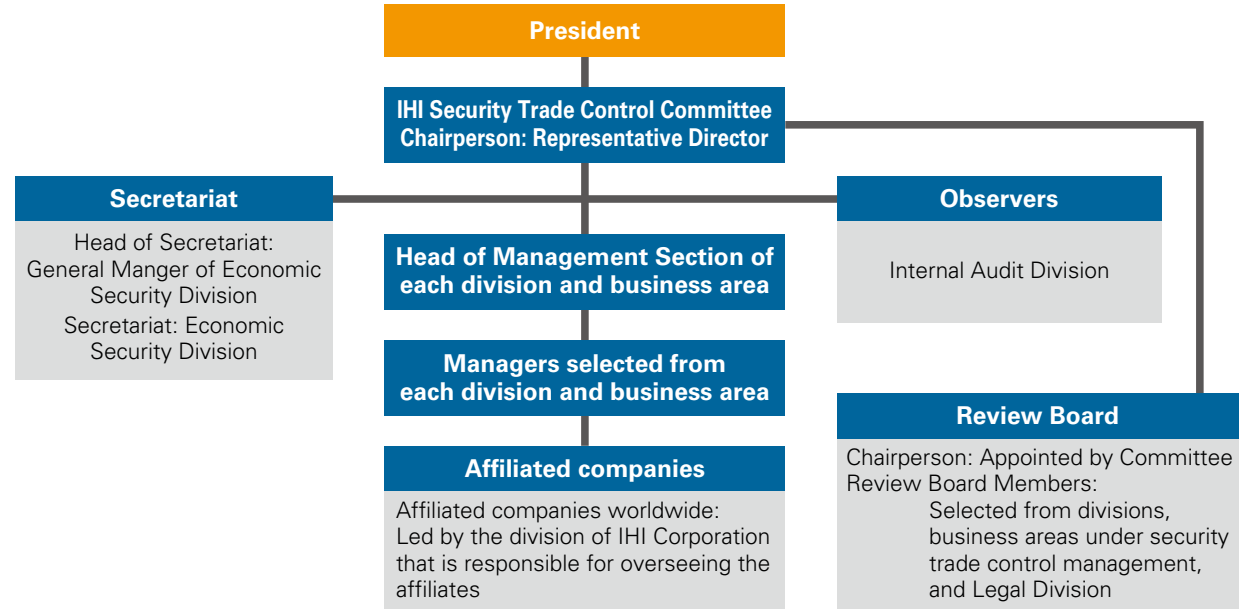
Structure

IHI Security Trade Control Committee

The IHI Group has established its own security trade control rules and set up an IHI Security Trade Control Committee. Under these rules, the Committee works to properly control trade.

The IHI Security Trade Control Committee is a Group-wide body led by President as chair with the Economic Security Division acting as secretariat. The members are made up of managers selected from each division and business area as well as review board members. IHI reviews security trade control, audits trade control practices, and conducts activities to share, raise awareness, and educate the Group on the latest information about relevant laws and regulations. We share areas needing improvement and areas of excellence pointed out during these audits with the Committee and with all management and employees, which improves the quality of management throughout the entire IHI Group.

Security Trade Control Structure



IHI Security Trade Control Committee

Chairperson	Representative Director
Secretariat	Economic Security Division
Members	Head of Management Section of each division and business area
Number of meetings convened in 2021	3

Risk Management

Risk Management

Policies

The IHI Group considers and engages in risk management as the top material issue of management. The basic objectives of risk management are ensuring business continuity and the safety of officers, employees, and their families, securing managerial resources, and maintaining public trust. We manage risk in accordance with the following action guidelines based on the "Basic Code of Conduct for the IHI Group".

1. Ensure the continuity of the IHI Group's business operations.
2. Improve the public reputation of the IHI Group.
3. Protect the IHI Group's managerial resources.
4. Avoid jeopardizing stakeholders' interests.
5. Achieve recovery from damage as soon as possible.
6. Take responsible action when an issue arises.
7. Meet public requirements regarding risks.

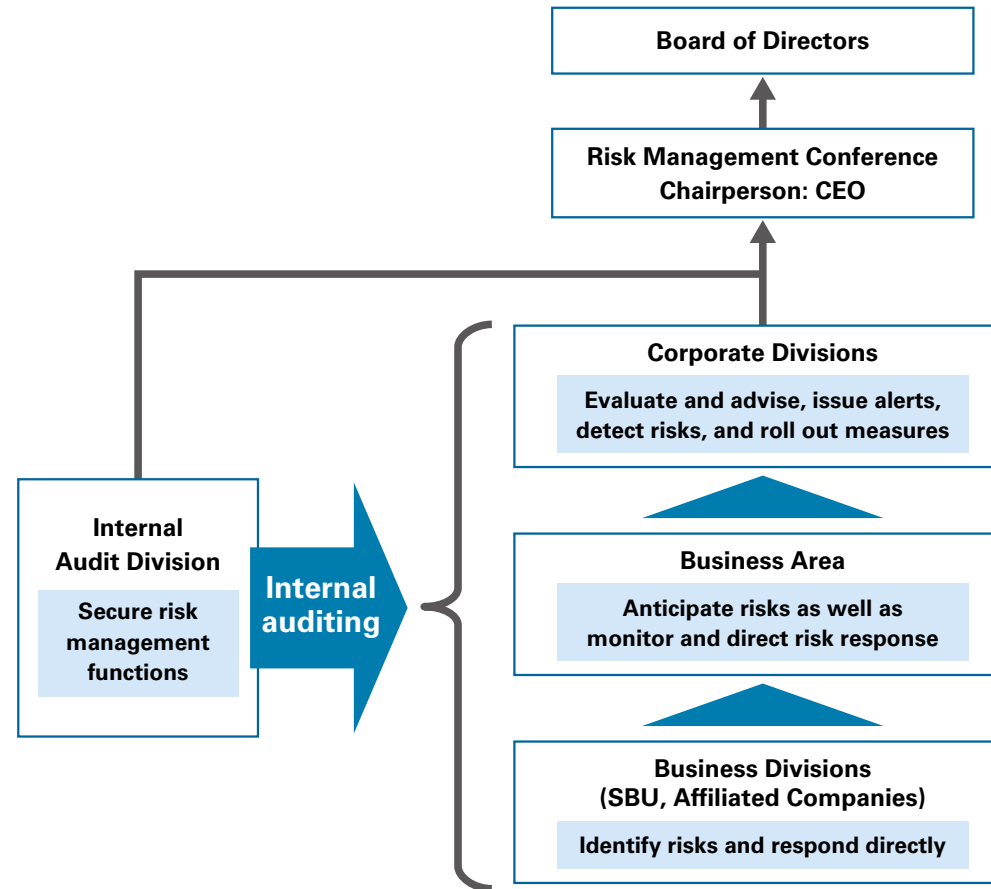
Structure

The IHI Group established the Risk Management Conference chaired by the CEO as a body to review policy initiatives, annual plans, corrective measures, and other matters vital to overall risk management. The Compliance Committee is positioned as the subcommittee of the Risk Management Conference.

P.28 Compliance Structure

IHI has clarified the roles and responsibilities of business divisions, including affiliated companies, the business area, corporate divisions, and the Internal Audit Division, as well as built a multi-layered risk management framework.

Risk Management System



Risk Management Conference

Chairperson	Chief Executive Officer (CEO)
Secretariat	Corporate Planning Division
Attendees	General managers of each Group Risk Management Unit, Presidents of each business area, and others nominated by the Chairperson
Number of meetings convened in 2021	4

Risk Management

Risk Management Framework

We formulate Key Policies on IHI Group Risk Management each fiscal year to prioritize risks that need to be addressed. Each IHI division and Group company worldwide move forward with independent risk management in accordance with these policies. Comprehensive risk management activities work to tackle over 100 common Group-wide risks. We also designate particularly important risks as the key risk management themes.

Group Risk Management Units made up primarily of corporate divisions provide information and training capitalizing on their expertise, monitor the progress of risk management activities, and offer support to each department.

Initiatives

In fiscal 2021, initiatives were conducted to strengthen risk management through key themes. Progress of these initiatives is verified on a quarterly basis at the Risk Management Conference, furthermore accelerating risk management through a PDCA cycle.

P27 Compliance

Key Policies for Risk Management in 2022

By anticipating changes in the market and taking measures to address multiple scenarios, we aim to steadily expand existing businesses and create new value that solves social issues. To ensure a robust business management platform supporting these measures, we strive forward uncompromising in our respect for economic security, human rights, and information security, which is more important than ever before, starting with compliance and quality.

• The Key Risk Management Themes for FY2022

The IHI Group will strive to foster sustainable growth and improve corporate value through focused efforts on each of the themes described below.

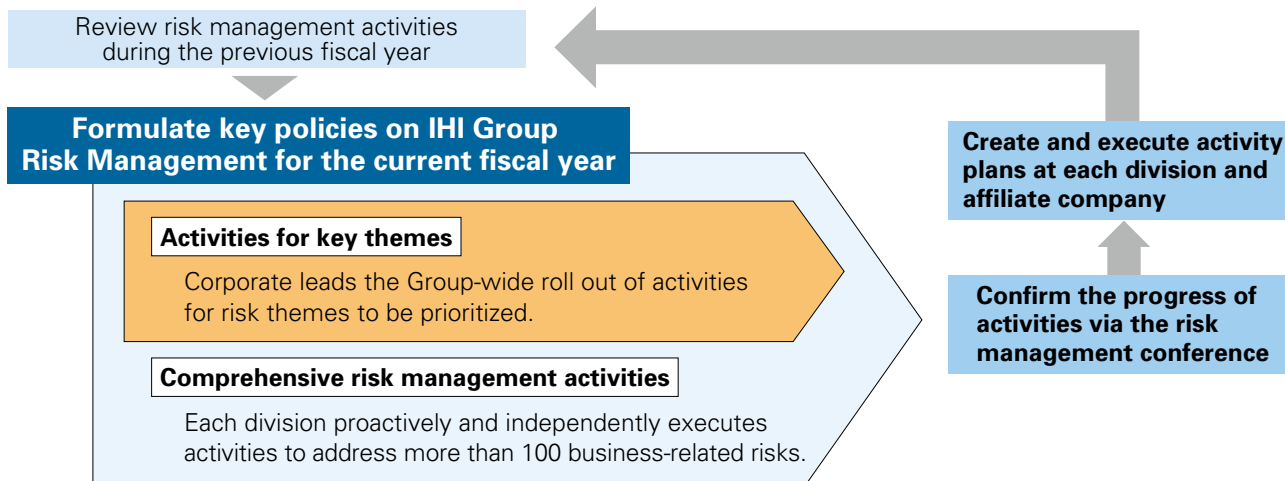
1. Responding to risks that hinder the securing of a solid business operating foundation
 - Compliance
 - Quality assurance
 - Economic security
 - Human rights
 - Information security
2. Risks that hinder the execution of business scenarios

• Review of Risk Management Activities by Board of Directors

The Risk Management Conference provides comprehensive reports on its investigation and review activities to the Board of Directors each quarter.

The Board of Directors evaluates the risk management activities reported by the Risk Management Conference and reflects the results in the risk management activities for the current fiscal year. These reports also play a role in drafting key policies for risk management for the next fiscal year.

Risk Management Activity Flow



Addressing ESG Risks

The business environment surrounding the IHI Group is dramatically changing such as initiatives for climate change and human rights issues arising from change in international affairs. In this business climate, the IHI Group is spearheading Project Change and the IHI Group's ESG Management to recognize ESG risks and opportunities and respond to them through activities on key themes as well as comprehensive risk management activities.

Risk Management

Crisis Management

Approach

We have defined a crisis management structure, response procedures, and Business Continuity Plans (BCP) for the entire IHI Group to respond to emergency situations as part of the Basic Rules on Crisis Management for IHI Group.

The IHI Group formed the Crisis Management Headquarters to take the necessary steps to minimize damage from an emergency situation with the potential to gravely impact corporate management and business activities.

Initiatives

Preventing the Spread of the Novel Coronavirus (COVID-19)

The IHI Group prioritizes the health and safety of employees, their families, and every other stakeholder above all and engages in measures to prevent the spread of COVID-19 infection and any potential cluster infections. Given this fundamental principle, guidelines are formulated individually for each department (offices, plants, and construction sites) to prevent the spread of the virus throughout the Group, considering national and local government policies and guidelines.

The IHI Group implements the following measures to reduce the number of employees at the office and ensure safety as part of its efforts.

1. Provide a work system to prevent infection.

Telework (work done from home) is formulated as a general rule. Furthermore, any work that requires an employee to come to the office combines various countermeasures, such as a combination of telework and flextime, to shorten their time in office as much as possible.

At plants and construction departments where working from home is less of an option, we have prepared measures that ensure a work environment avoiding closed spaces, crowded places, and close-contact settings. This includes measures adapting to the circumstances on each site, such as working in shifts, commuting to and from work more by car while increasing the number of buses and other vehicles for commuting.

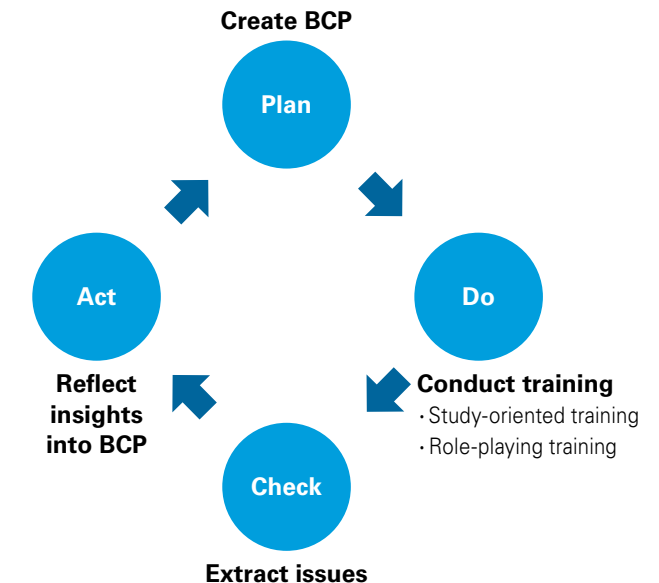
2. Initiatives to promote telework

The IHI Group is revising its operational processes with telework as a core component to prevent the spread of infection and to ensure business continuity. Our efforts shift internal approval, meetings, and education to online formats.

Disaster Prevention Initiatives

To prepare for severe disasters, the IHI Group has built a system to ensure both employee safety and business continuity. In addition, we have clarified the organizational structure and necessary actions in our internal rules, during both normal times and during times of disaster. IHI has also established a Business Continuity Plan (BCP) for each representative office, division, and affiliated company, which are continually revised through regular training and classroom work to verify the effectiveness. Every March, we conduct Group-wide response training, which the President and other management executives take part in to prepare for severe disasters. The training varies the day, time, and estimated damage of a disaster each year to test the effectiveness of the BCP from various angles.

Continual Revisions to the Business Continuity Plan (BCP)



Innovation Management

Technology & Intelligence Integration

Approach

The IHI Group fully leverages its strengths in a wide range of fundamental technologies to drive innovation. This approach not only helps us contribute to achieving the SDGs but also helps create a sustainable society. We aim to quickly commercialize technologies that can become new growth businesses.

That is why we promote short-term proof-of-concept* activities, construction of project frameworks that bring together members from various fields of expertise, and open innovation. Through these efforts, we accelerate technology development with the aim of realizing early practical application of technology that will contribute to new growth businesses.

* Proof of concept refers to validating the feasibility and effectiveness of new technology or business ideas.

Priorities in Technology Development

The IHI Group prioritizes technology development in the three growth businesses emphasized in Project Change: air transportation systems; carbon solutions; and maintenance, disaster prevention, and disaster mitigation. Every one of these initiatives is expected to address social issues.

We are furthering development relating to air transportation systems to realize lighter, more efficient engines as well as pioneering electrification technologies including engine embedded electric machines and air-cooling systems.

As for carbon solutions, we strive to develop and implement leading-edge technologies that allow carbon to be recycled, enable the use of hydrogen, ammonia, and renewable energy sources, and offer energy management for decentralized local production for local consumption.

We are also advancing the technology development for maintenance of bridges, water gates, and other vital social infrastructure by remote monitoring with ICT, and for disaster prevention and mitigation to cope with ever-increasing natural disasters due to climate change.

P.4 Medium-term Management Plan

Achieving a Carbon-neutral World

Combined application of technologies is essential to achieve carbon neutrality by 2050, requiring simultaneous development of alternative fuels with less CO₂ emissions, effective ways of CO₂ use, energy management systems, and multiple other technologies. During this transition period, it is also necessary to enhance the efficiency of existing power generation plants and research and develop ways to reduce CO₂ emissions.

• Renewable Energy

Our biomass power generation business has received contracts to refurbish many thermal power plants into plants for single-fuel firing of biomass power generation*. We are involved in every aspect of the biomass power generation from construction to operation and maintenance in order to support operations optimal for providing carbon-neutral power. The IHI Group continues to investigate and develop Sustainable Aviation Fuel (SAF), which will help reduce the CO₂ emissions from aero engines.

* Single-fuel firing of biomass power generation refers to the use of only biomass fuel in thermal power generation plants. Unlike co-firing that uses biomass fuel partially with the main fossil fuel, single-fuel firing of biomass fuel is considered to have net-zero CO₂ emissions.

• Ammonia as Carbon-neutral Fuel

The IHI Group has been developing technology for using ammonia not only as a low-cost, safe hydrogen carrier but also as a carbon-neutral fuel with no CO₂ emissions during combustion. We successfully demonstrated ammonia co-firing with coal at a commercial level for the first time in the world. The large-volume co-firing of fuel ammonia (20% of heating value) is scheduled to start in fiscal 2023, almost one year earlier than initially planned.

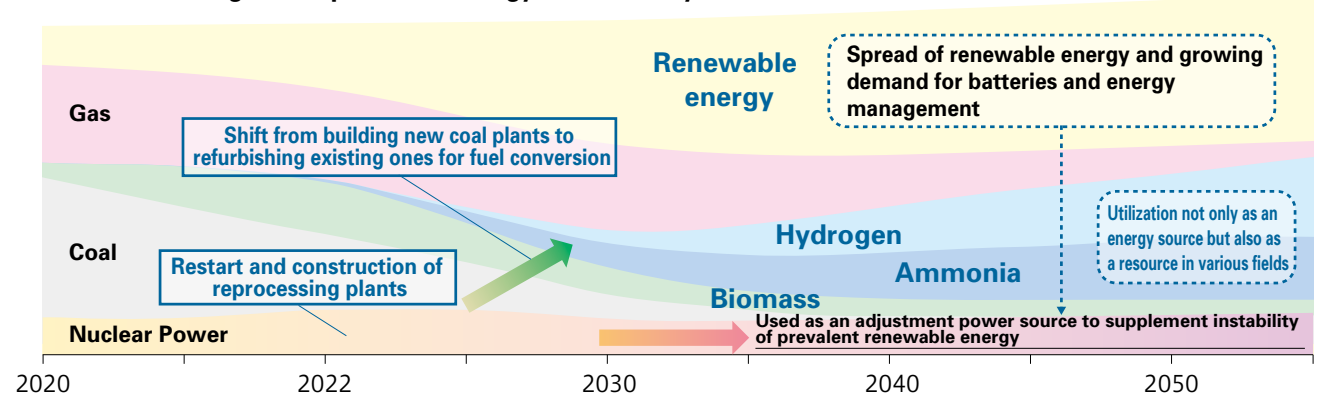
• Carbon Recycling

The IHI Group is also promoting the development of Carbon Capture and Utilization (CCU) technologies, which include the capture of CO₂ from exhaust gas of power plants or factories with the chemical absorption technique and directly capturing CO₂ from air with the Direct Air Capture (DAC) technology and the conversion of captured CO₂ into valuable products, such as methane used as fuel, lower olefin used as a raw chemical material, and SAF. These technologies offer promising prospects for carbon negativity through their combined application with carbon-neutral fuel and renewable energy.

• Energy Management Systems

The IHI Group is advancing the development of numerical models and algorithms by utilizing AI technologies to optimize the configuration and operation of energy systems.

Estimated Change in Proportion of Energy Resources by 2050



Innovation Management

Structure

The IHI Group drives open innovation at the IHI Tsunagu Lab and i-Base (Ignition Base) in Japan as well as the IHI Launch Pad in Silicon Valley and other overseas sites in Singapore and the rest of the world. With the active use of these innovation hubs, we are working to accelerate development of pioneering technology aiming at the innovative creation.

The IHI Tsunagu Lab and the i-Base are the hubs for open innovation where we put design thinking into practice toward rapid commercialization. The IHI Launch Pad strives to cultivate new business opportunities for the IHI Group in collaboration with the ecosystem in North America, including investors and startup companies. In Singapore, we are promoting pioneering technology development jointly with the Agency for Science, Technology and Research (A*STAR).

Making use of these hubs, we are working to encourage rapid innovation through extensive collaboration with customers and partners from the initial planning stage.



Education/Awareness Building

Projects at i-Base

The IHI Group opened i-Base in 2019 to use as an innovation hub aiming to foster early commercialization of new ideas. Project teams made up of members assigned from various divisions including sales, design, and development concentrate on projects there.

The spread of COVID-19 infection strengthened the need for public health measures to prevent infection throughout all of society. This gave IHI an opportunity to open the Infection Control Design Lab (ICDL) in fiscal 2021. The IC DL takes advantage of service design techniques with emphasis on customer businesses and spaces to create solutions that can prevent the spread of infectious diseases based on evidence together with those customers.

Proof of Concept (PoC)

The IHI Group concentrates resources on ideas with a high potential of success and advances research and development toward early commercialization by rapidly validating the concept of new ideas through short-term PoC, where we create a scenario for commercialization as a story and analyze its value hypothesis.

Design Thinking and Human Resource Development

The IHI Group incorporates design thinking into its business development with the aim of recognizing problems from a user perspective and inspiring innovation. We have constructed our new style of development by modifying design thinking to fit our business model. With this style, we are promoting speedy creation of new businesses.

We provide training programs on design thinking throughout the IHI Group. Human resource development will help us create new value to meet the needs of our customers and society. This is how we advance the establishment of a system allowing us to continually create innovative ideas.

Innovation Management

Main Commendations

Recognition for Technology Development

Commendation	Details
Technology Award (Combustion Society of Japan, Fiscal 2021)	Commendation for the low-speed two-stroke marine gas engine adapted to pre-mixed lean-burn technology, the development of which IHI started jointly with IPS and WinGD in 2010. With the release of this engine in 2015 as a start, engines of this type are now the standard for marine use.
The 42nd Symposium on UltraSonic Electronics Young Scientist Award (USE2021) (Symposium on UltraSonic Electronics)	Commendation for the presentation on the "Variability characteristics of reflected sound waves from sea surface using effective roughness of sea surface," which reports a quantitative evaluation technique to obtain sound propagation characteristics in sea water with ocean acoustic technology, which is used for acoustic communication and sonar.
JAMSTEC Nakanishi Award	Commendation for the above "Variability characteristics of reflected sound waves from sea surface using effective roughness of sea surface"
Development Award (The Japanese Society of Agricultural Machinery and Food Engineers, Fiscal 2021)	Commendation for the contribution to the widespread use of variable rate fertilization technology through the unique development of a fertilization map data format for the GPS guidance system for the support of variable rate fertilization (product name: GPS Naviliner), which allows farmers to easily create fertilization maps.
IVI Connected Manufacturing Award 2021 Award of Recognition (Industrial Value Chain Initiative)	Commendation for the "How to connect for mass customization" working activity that aims to gradually achieve a global standard for connected plants as part of Industry 4.0.

Recognition for Business

Commendation	Details
4th Japan Construction International Award (honored by the Minister of Land, Infrastructure, Transport and Tourism of Japan)	Commendation for the Maintenance and Rehabilitation Project of First and Second Bosphorus Bridge in Turkey, in which we achieved Japan's "quality infrastructure" overseas through our outstanding expertise and technical skills as well as project management and other capabilities. This is the second consecutive year receiving this commendation after we were honored for our work on the Osman Gazi Bridge last year.
Ignite International Engagement Award (Ignite Sweden Day 2021) (ISD2021)	IHI has been promoting open innovation efforts to create opportunities to cooperate and collaborate with startups in Sweden since fiscal 2019. IGNITE* commended IHI in that a series of specific discussions on a partnership with IHI in its events offered many Scandinavian startup companies opportunities to expand their businesses outside Europe. * IGNITE is a business incubation program providing companies with an opportunity to have one-on-one sit-downs with Sweden startups.
Letter of Gratitude from Seiko Hashimoto, Chairperson of Tokyo Organising Committee of the Olympic and Paralympic Games	Our security screening equipment, such as X-ray inspection devices and gate-type and hand-held metal detectors, and thermographic screening system trade-named FeverCheck® contributed to the Games operation.
Infrastructure Maintenance Project Award (Japan Society of Civil Engineers)	Commendation for significant contributions to sustaining and improving local infrastructure functions and betterment of local communities, economies, and lifestyles through infrastructure maintenance on the Morimura Bridge restoration, Route 2 Yodagawa Great Bridge floor slab replacement, and Wakato Bridge large-scale repairs.
Appeared in the State-of-the-Art of Small Spacecraft Technology published by NASA (October 2021)	NASA listed MEISEI as one of five Japanese companies having state-of-the-art technology based on NASA's standard for its attitude control devices for microsatellites (magnetometers/magnetic torquers).

Innovation Management

Initiatives

Technology Development Related to Project Change

• Air Transportation Systems

The IHI Group developed the world's first engine embedded electric machines that can be mounted in the aircraft jet engine rear-end to compensate for insufficient power associated with the electrification of aircraft and engine systems as a result of the More Electric Architecture for Aircraft and Propulsion project. We also successfully achieved the world's first air-cooling system for aircraft onboard 100kW-class high-power electronics, advancing the cooling technologies necessary to expand applications in the power electronics field.

• Carbon Solutions

The IHI Group successfully demonstrated the world's first liquid ammonia single-fuel firing on a 2 MW-class gas turbine leveraging its long-honed expertise in unique combustion technologies. Even in boiler applications for thermal power generation, we achieved ammonia single-fuel firing at a small test firing facility with controlling nitrogen oxide (NOx), which is an air pollutant. We participate in projects that aim to realize carbon neutrality in order to practically apply our technologies to society. These projects include a demonstration of supply network for blue ammonia* undertaken with the Saudi Arabian Oil Company and other partners, a feasibility study for the production of hydrogen from solar power generation driven forward jointly with CS Energy in Australia, and a demonstration of Japan's first water electrolysis energy management system capable of simultaneously managing multiple renewable energy sources, such as solar, wind, and waste (biomass) power generation, in Kitakyushu City, Fukuoka Prefecture, with the goal of locally producing and supplying next-generation CO₂-free hydrogen.

* Blue ammonia is a carbon-neutral fuel because CO₂ emitted during its production is captured and used for other processes.

• Maintenance, Disaster Prevention, and Disaster Mitigation

The IHI Group has been advancing technology development to realize optimal and efficient maintenance, operation, and management of social infrastructure. Recent climate change has increased the frequency of natural disasters. To address the growing threat, we have been endeavoring to bring about disaster prevention and mitigation technologies using ICT and IoT devices.

Presently, these efforts are being taken to mitigate damage from torrential rain, which is becoming more severe and more frequent recently. We are pushing forward the development of an integrated water control service to minimize flooding disasters via the centralized management of river administration facilities, including dams, water gates, and drainage pump stations located both up and down river. We also established the Disaster Prevention and Water Gate Technical Training Research Facility to develop human resources versed in the maintenance, management, and repair of floodgates.

Main Public-Private Sector Initiatives

• Direct Synthesis of CO₂-free Ammonia

IHI participated in the NEDO Feasibility Study Program on Energy and New Environmental Technology. Through this program, we aim to achieve technology that can directly synthesize CO₂-free ammonia from water and nitrogen. We are striving to build a carbon-free value chain by actively promoting the development of hydrogen and ammonia production and application technologies.

• Utilization of Hydrogen

The IHI Group received an order from Kogan Renewable Hydrogen Demonstration Plant in Australia to engineer, procure, and construct a demonstration plant. The project aims to produce and sell carbon-free hydrogen with renewable electricity from solar power. It will also sell surplus renewable electricity on the power market. IHI

will work together with CS Energy to lead decarbonization in Australia through the construction of this demonstration plant, capitalizing on the knowledge it gained in the development and operation of the Soma IHI Green Energy Center that opened in 2018.

Initiatives with Startup Companies

• North America

IHI Corporation and IHI Logistics & Machinery Corporation partnered with Boston-based startup Neurala, Inc. to develop the world's first system to autonomously scan the best-by date on food cardboard crates traveling on conveyor belts for delivery to and from distribution warehouses. Built-in deep-learning AI character recognition technology not only saves labor but also helps ensure food safety and reduce food loss. We are also exploring North American startups that have promising decarbonization technologies and considering partnerships with them.

• Asia

The IHI Group promotes research activities of startups in Southeast Asia while participating in the Startup Challenge organized by the Advanced Remanufacturing and Technology Centre (ARTC), a subordinate organization of A*STAR, with which we collaborate in various joint development projects as will hereinafter be described in detail.

• Europe

The IHI Group launched a base to promote open innovation at its Group companies in Europe with the goal of cultivating new businesses. The establishment of the base accelerates our research into European startups primarily in the fields of AI and IoT.

Innovation Management

Industry-University Initiatives

• Japan

IHI established a joint research program with Yokohama National University at the Research Center for Artificial Intelligence in an effort to expand applications for AI technologies in various IHI products and services as well as on manufacturing sites. To promote ever-evolving development, we are also expanding the collaboration to foster specialists in AI technologies throughout the IHI Group.

In September 2022, we have established IHI Corporation x Tohoku University Ammonia Value Chain Co-creation Research Center in the Material Solutions Center (MaSC) at the Tohoku University. The Center conducts research issues in creating an ammonia value chain from production, transport, and storage to consumption and their solutions to achieve a carbon-neutral society through the use of ammonia, which is a clean energy source that does not release CO₂ during combustion.

• North America

The IHI Group quickly gathers diverse information on new technologies for carbon solutions, on joint research subjects, and on energy and environmental policy trends in North America by capitalizing on its relationships with the MIT Energy Initiative and MIT CEEPR as well as its network of venture capitalists and startup companies.

• Asia

In Singapore, we conduct joint development with A*STAR across a wide range of fields, including our unique catalyst technology, to produce valuable products such as methane gas and lower olefin from CO₂, next-generation transportation, and advanced manufacturing technologies. In China, we have commercialized ventures in Chinese markets through collaborations with major Chinese universities and other local entities.

• Europe

The IHI Group established the IHI Additive Manufacturing Lab in the United Kingdom as a site to advance the development of additive manufacturing technology. To promote the use of road mapping to design technology and business strategies, we belong to IfM Engage's Strategic Technology and Innovation Management Consortium (STIM).

Technology Development Related to COVID-19

The IHI Group has increased the production of ozone-generating air purifiers and other products to prevent the spread of COVID-19 while developing and selling a low-noise, large-capacity model. We also developed and began sales of anti-bacterial spray by taking advantage of our expertise accumulated through a long-proven track record of delivering hygiene control devices to medical institutions and our technology in fine bubble (generation of nano-sized bubbles).

The IHI Group is promoting the development of technologies for infection control with the use of our technologies cultivated thus far and by cooperating with external entities through open innovation.

• Service to Prevent the Spread of Infectious Diseases

As a measure to prevent the spread of the COVID-19 virus, we are working to commercialize a ventilation support service that can assess the effectiveness of ventilation by visualizing unseen airflows easily in real time through its thermal fluid analysis and digital technologies.

This service not only provides advice on how to improve ventilation but also uses IHI sterilization and other devices to keep air clean. These innovations mitigate the risk of infection at evacuation shelters and in medical settings as well as in trains, offices, theaters, and other public facilities. Through this service, we aim to create environments prepared for the threat of infectious diseases so that people can come together safely.

Innovation Management

Intellectual Property

Policies

The IHI Group promotes intellectual property activities in an integrated manner with both its management policy and technological strategy. The business environment surrounding us differs from division to division and from company to company. Consequently, there are individual needs for intellectual property activities. The Intellectual Property Department of IHI Corporation drafts a Basic Policy on IHI Group Intellectual Property every year. Individual divisions and affiliated companies refer to this policy when establishing their own intellectual property policies tailored to their unique business, technology, and development environment.

The Basic Policy on IHI Group Intellectual Property in fiscal 2021 set the following three priority measures:

- (1) Intellectual property activities for returning to a growth trajectory, creating growth businesses, and improving cash flow
- (2) Early detection and defense against intellectual property risks
- (3) Development of a management system and human resources to better businesses through intellectual property

Intellectual Property Strategy

The IHI Group is promoting intellectual property activities integrally with both its management policy and technological strategy. We identify strengths and weaknesses of the IHI Group using information related to intellectual properties to help to create new value.

Education/Awareness Building

Intellectual Property Education

The IHI Group holds several training programs on intellectual property. They include basic training programs for first to fifth year employees, a program on patent

audits and rights acquisition policies for engineers in each business division and affiliated company and a program on copyright for all employees throughout the IHI Group. In addition to basic training programs, we provide practical training programs to help our employees improve their intellectual property literacy according to their needs. We also invite various lecturers for special courses to further develop the skills of those who take the key role in our intellectual property strategies. Note that we changed the basic training programs from compulsory to selective in fiscal 2021 to help employees flexibly select training programs according to their own career plan.

Intellectual Property e-Learning Participants

(Unit: People, Scope: IHI)

Item	2018	2019	2020	2021
STEP 1 (First-year employees)	168	167	187	94
STEP 2 (Second-year employees)	271	154	166	77
STEP 3 (Third-year employees)	314	246	154	62
STEP 4 (Fourth-year employees)	270	281	235	65
STEP 5 (Fifth-year employees)	269	249	271	66

Results

Annual Number of Patent Acquisitions

(Unit: Reports, Scope: IHI and affiliated companies in Japan and overseas)

Item	2018	2019	2020	2021
Number of patent acquisitions	1,017	1,094	819	711

Regional Comparison in Number of Our Patents

(Unit: Reports, Scope: IHI)

Item	2018	2019	2020	2021
Domestic patents	4,120	4,150	3,867	3,866
Overseas patents	3,047	3,502	3,808	3,936
United States	591	724	747	817
Europe	1,037	1,240	1,750	1,774
China	499	561	582	605
Korea	193	199	120	125
BRICs (excluding China)	137	142	125	120
Others	590	636	484	495

* Corrections have been made to the number of patents held in Japan for fiscal 2020.

Initiatives

Protecting Intellectual Property

The IHI Group makes a strict distinction between rights acquisition through patent filings and the confidentiality of knowledge through concealing when considering protection of intellectual property. We file necessary patent applications worldwide based on global business expansion. We carefully select countries to file patent applications through the forecasts in business and technology development.

We also respect third-party intellectual property rights. We research the patent filings of other companies as well as patent acquisition trends to reduce any business risks.

Information Security

Policies

The IHI Group has established the IHI Group Information Security Policy to ensure the protection of confidential information of customers and business partners as well as corporate management and technical information. We strive to properly manage information while maintaining and improving information security.

IHI Group Information Security Policy

The IHI Group hereby sets the following IHI Group Information Security Policy for the purpose of ensuring the security of information assets in its possession and thereby further solidifying its trust-based relationship with customers, users and society.

(Basic Activities)

1. The IHI Group will take appropriate measures with technology, organization and employees, in order to protect information assets against any leakage, theft, loss, destruction, illegal access, and disaster. In the event of any security problem regarding this information, the IHI Group will locate the cause as quickly as possible, and exert every possible effort to minimize the damage incurred.

(Information Assets)

2. "Information assets" refer to the information the IHI Group handles in the course of business activities, regardless of the type of media, and the equipment, facilities and services necessary for handling such information.

(Scope)

3. This Information Security Policy applies to all those using the information assets of the IHI Group, including but not limited to officers and employees of the IHI Group companies and temporary staff.

(Compliance with Laws, Regulations, etc.)

4. The IHI Group will strictly observe the laws, regulations and codes pertaining to the protection of information assets, and the requirements and obligations regarding information security provided for in the agreements with the customers.

(Education)

5. The IHI Group companies will provide all those using the information assets of the IHI Group with the necessary education on information security to enhance and maintain their awareness thereof.

(Management of Information Security)

6. The IHI Group companies will establish a mechanism of implementing and managing information security by taking measures such as establishing rules concerning information security and appointing persons in charge of information management, thereby conducting, maintaining and improving information security activities on a continual basis.

(Responsibilities of Senior Management)

7. The Senior Management of the IHI Group will set the example of enforcing this Information Security Policy. In the event of any infringement of this Policy, senior management will address the

situation properly by defining their authorities and responsibilities, and do their utmost to resolve the problems, diagnose their causes, and prevent their recurrence.

(Punishment)

8. Any action in violation of the rules of information security will incur punishment according to the employment regulations of IHI Group companies.

(Announcement)

9. This Information Security Policy will be announced and notified to all those using the information assets of the IHI Group as well as being announced to the public.

Information Security

Structure

The IHI Group has established an "Information Security Promotion Framework", chaired by the Chief Information Security Officer, for the purpose of information security management. The Information Security Subcommittee operates within the DX Promotion Committee as an organization in charge of promoting the company's information security activities overall. A General Manager is appointed at each IHI Head Office Division, Business Area, Business Unit, and Group company to accelerate activities under this framework.

Information Security Activity Promotion Framework



Information Security Subcommittee

Chairperson	General Manager of Intelligent Information Management Headquarters
Secretariat	Information Security Department of Intelligent Information Management Headquarters
Subcommittee members	Business Areas, Business Units, and Head Office Divisions
Number of meetings convened in 2021	3

Information Security Management System

The IHI Group convenes the Information Security Subcommittee three times a year to plan, implement, and evaluate information security measures in an annual cycle.

In fiscal 2019, we built a three-stage auditing framework for information security consisting of three types of audits by different auditors to strengthen checks ("C") in the PDCA cycle. Each organization (IHI divisions and Group companies) conducts its own internal audit, the corporate division executes documentation audits, and each Business Area, as the responsible division, implements on-site audits. In 2021, each Business Area conducted audits of information security measures at all of the Business Units and affiliate companies under its supervision. These sites work to improve any issues discovered during these audits.

Guidance on corrective actions for any issues that were found was provided by the responsible business area. Divisions and Group companies involved in highly sensitive national projects in the IHI Group must undergo annual reviews by an external specialized agency to renew the ISO 27001 international information security certification.

Measures to Prevent Information Leakage During Telework

Telework throughout the IHI Group as a measure to prevent the spread of the COVID-19 virus has gained traction as one of many work styles. However, working from home increases information security risks such as improper use, loss, or theft of information devices due to the higher number of information devices taken outside of the office.

To prevent the improper use of information devices, the IHI Group works to raise employee awareness through e-Learning and internal newsletters covering security compliance rules for work done outside the office. These rules specifically prohibit personal use of work computers

and prohibit work data from being stored on personal IT devices of the individual and/or family. Prior to the COVID-19 pandemic, the IHI Group had already provided specific computers, containing no work data, that are dedicated for external use. We have made it mandatory for these computers to be used for any work conducted outside the office. The use of these computers reduces the risk of information leakage upon loss or theft of these devices.

Education/Awareness Building

Employee Education

The IHI Group provides e-Learning to all employees on a yearly basis to deepen their understanding of information security rules and tools, and to maintain and raise information security awareness.

Rate of Participation in e-Learning

(Unit: %, Scope: IHI)

Item	2018	2019	2020	2021
Rate of Participation in e-Learning	96.8	83.0	96.0	96.8

Results

Information Security Measures

The IHI Group takes steps to address information security risks from three perspectives: rules, tools, and education. The rules include the IHI Group Information Security Policy, IHI Group Information Security Measure Standards, and Information System User Rules. We have adopted antivirus software and other security tools, which are always kept up to date.

Information Security

Evaluation of Information Security Measures

We assess the information security measures of the entire IHI Group quantitatively every year based on the benchmark for information security measures implemented by companies offered by the Information Technology Promotion Agency, Japan (IPA). The level of information security measures in fiscal 2021 was 3.7 out of 5. We will strive to achieve a score of 4, and further continue to improve our level of information security in fiscal 2022.

Evaluation of Information Security Measures

(Unit: Score, Scope: IHI and consolidated subsidiaries)

Item	2018	2019	2020	2021
Evaluation of Information Security Measures (Out of 5)	2.9	3.2	3.4	3.7

Materialize an Affluent Society

Human Rights	045
Diversity and Inclusion	049
Labor Practice (Occupational Health and Safety)	061
Work-style and Operational Process Reforms	067
Customer Relationships	068
Supply Chain Management	070
Corporate Citizenship	072

Human Rights

Policies

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.

Through human rights awareness activities based on international standards, we will fulfill our responsibility to respect the human rights of all by fostering a respectful corporate culture and promoting human rights throughout our business activities.

IHI Group Human Rights Policy

The IHI Group recognizes and contributes to solving global issues based on group management philosophies of “Contribute to the development of society through technology” and “Human resources are our single most valuable asset”. As the basis of this activity, we have established the “IHI Group Human Rights Policy” in line with the Basic Code of Conduct for the IHI Group. Through human rights awareness activities based on international standards, we will fulfill our responsibility to respect the human rights of all by fostering a respectful corporate culture and promoting human rights throughout our business activities.

(Scope)

1. This policy applies to all officers and employees engaged in IHI Group business (hereinafter “Officers and Employees”).
2. We will account for the Human Rights of all people in the course of our business activities.
3. We will request our suppliers and business partners to understand this policy and respect human rights.

(Compliance with international standards, laws and regulations, Basic Code, etc.)

1. We support and respect international standards for human rights (e.g. the Universal Declaration of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, and the UN Guiding Principles on Business and Human Rights) and will act progressively in line with these standards.
2. In the countries and regions where we conduct our business, we will strive to respect international standards while upholding the laws and regulations of those countries or regions.
3. We always act in accordance with the Basic Code of Conduct for the IHI Group.

(Human rights awareness promotion structure and human rights due diligence)

1. We will establish a system to systematically and continuously promote human rights awareness and will work proactively to resolve human rights issues.
2. We will develop a structure to understand and assess human rights risks and to evaluate and improve the effectiveness of our commitment

(human rights due diligence) and implement continuously.

3. When a potential or actual human rights risk is assessed or confirmed, we will promptly take corrective and preventive measures through appropriate procedures.

(Training)

We will provide our Officers and Employees with appropriate training continuously so that actions based on this policy will be implemented throughout our business activities.

(Dialogue and consultation, information disclosure)

1. We will maintain continuous dialogue and consultations with relevant stakeholders on the set of actions set forth in this policy.
2. We will periodically disclose information about our efforts and results on respect for human rights.

December 10, 2020

Hiroshi Ide

President and Chief Operating Officer
IHI Corporation

Human Rights

Structure

We established the IHI Group Human Rights Committee as a Group-wide committee. The Committee led by the officer in charge of human resources as the chairperson with members from the Head Office Divisions and Business Areas plans and deliberates important policies and promotes initiatives related to human rights. This body reports on important human rights activities at the ESG Management Promotion Committee as a way to consistently instill the importance of promoting human rights throughout the Group.

Human Rights Awareness Promotion Framework



IHI Group Human Rights Committee

Chairperson	Officer in charge of human resources
Secretariat	Human Resources Division
Members	President of each business area, General Manager of Procurement Strategy Planning, General Manager of Technology & Intelligence Integration, General Manager of Solution and Business Development Headquarters, General Manager of Intelligent Information Management Headquarters, General Manager of Global Marketing & Sales Headquarters, General Manager of Secretariat Div., General Manager of Economic Security Headquarters, General Manager of Corporate Planning Div., General Manager of Corporate Communication Div., General Manager of Legal Div., General Manager of Administration Div., General Manager of Finance & Accounting Div., General Manager of Project Risk Management Div., and General Manager of Human Resources Div.
Number of meetings convened in 2021	2

Education/Awareness Building

Employee Education

The IHI Group expanded training for publicizing its human rights policy in Japan and overseas as an initiative to raise awareness about human rights in fiscal 2021. In addition, we held stratified and selective training, Headquarters Representative's Office training, and external seminars, which have deepened understanding about important topics such as human rights, compliance, and harassment.

In fiscal 2022, training programs held more broadly throughout the Group worldwide will heighten employee awareness about the importance of respect for human rights in ESG management and future IHI Group initiatives.

Training on Creating Workplace Free of Harassment

The IHI Group conducted awareness training on power harassment for all Group executives and employees in Japan as a way for everyone to reflect on their own and their colleagues' words and actions.

Number of Human Rights Training Participants

(Unit: People)

Item	2021	
	Number of participants	Target
Training for new employees and mid-career recruits	109	IHI and affiliated companies in Japan
Selective human rights training	619	IHI and affiliated companies in Japan
Human rights policy (e-Learning)	27,867	IHI and affiliated companies in Japan and overseas
Harassment (e-Learning)	20,224	IHI and affiliated companies in Japan

Respecting Human Rights

Initiatives

The IHI Group is promoting diversity and inclusion as part of its human rights initiatives through ensuring fair employment, fair labor practices, and equal opportunities as well as creating a workplace free of harassment.

Due Diligence

• Overall Human Rights Due Diligence

The IHI Group endeavors to ensure the respect for human rights through a human rights due diligence process in accordance with the United Nations Guiding Principles on Business and Human Rights. The process ensures that the IHI Group fulfills its responsibility to respect the human rights of all people impacted by its business activities.

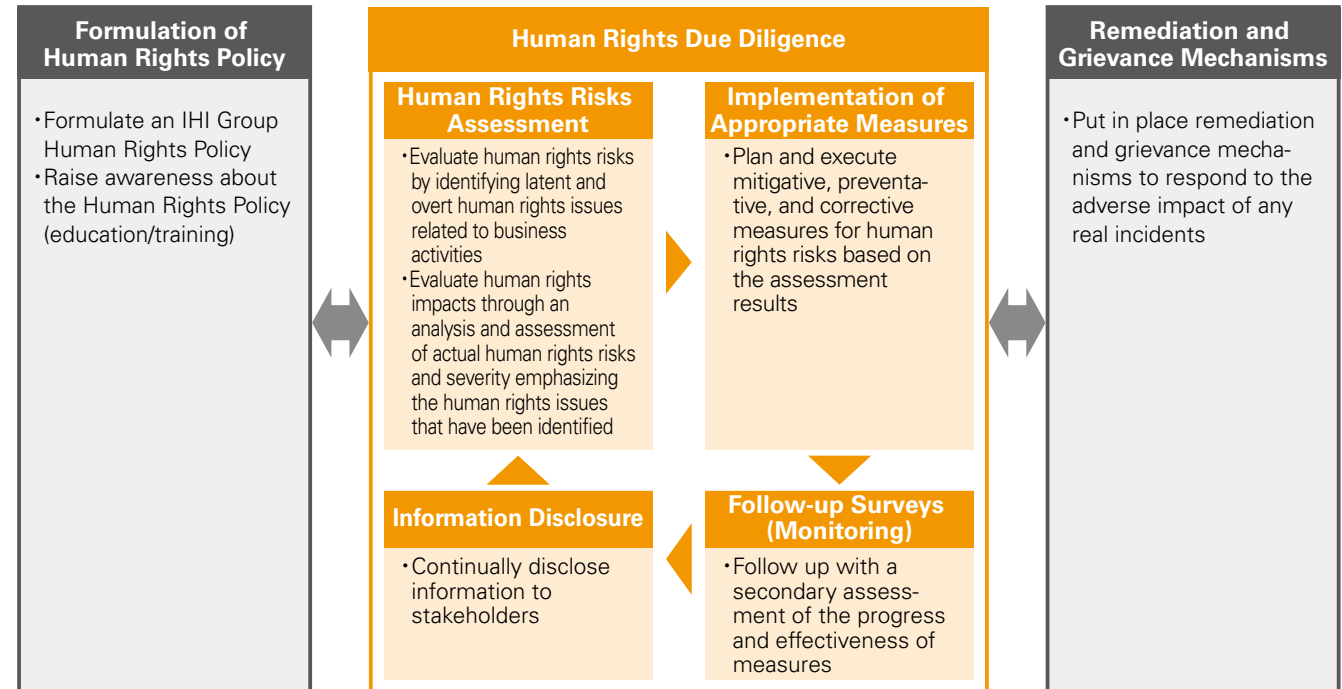
• Human Rights Risk Assessment Results

The IHI Corporation and IHI Group companies in Japan and overseas underwent a human rights risk assessment in 2021 while seeking advice from outside experts. The human rights risk assessment analysis and results, important human rights issues in manufacturing businesses, internal monitoring, and the trends of the international community make clear the important human rights challenges faced by the IHI Group. In addition, we have designated IHI Group employees and suppliers as top-priority rights holders.

Material Human Rights Issues

- Prohibition of forced labor
- Prohibition of child labor
- Guarantee of equal opportunity
- Prohibition of discrimination and harassment
- Guarantee of safe workplaces ensuring the health of working people
- Respect of the basic rights of working people

Overall Human Rights Due Diligence



Approach to the 2021 Human Rights Risk Assessment

Step 1

The IHI Group carried out human rights risk assessments to identify any latent and overt risks in its business fields and expansion by domain, nation, and region. Extracted a broad range of risks using social, occupational health and safety, and environmental risk data provided by outside experts.

Step 2

We also conducted interview surveys with each Business Area, the Procurement Strategy Planning Division, Human Resources Division, Corporate Communication Division, and Project Risk Management Division on the progress of management in addressing extracted risks and confirmed actual status of business activities, employment status, supply chain, and other status and evaluated them.

Step 3

Based on the results of Step 1 and 2, we identified human rights issues to prioritize prevention and response to as the IHI Group in cooperation with human rights experts.

Human Rights

• Progress and Initiatives of Human Rights Due Diligence

The IHI Group began carrying out human rights impact assessments at IHI Group sites worldwide in December 2021 to grasp the actual state of important human rights issues.

We plan to finish the survey and analysis of roughly 160 IHI Group companies by fiscal 2024. The fiscal 2022 impact assessments will prioritize the survey and analysis of overseas IHI Group companies in areas with a high risk of serious human rights issues.

We consult with stakeholders and take corrective action and remediation through the proper procedures for any human rights risks due to IHI Group business activities or concerns about human rights risks of IHI Group business activities that the assessment brings to light.

• Survey on Foreign Technical Intern Trainees

In fiscal 2021, we conducted a survey on the actual conditions of the foreign technical intern trainees directly employed by IHI Group offices and plants as well as partner companies including construction sites on IHI Group's premises.

The survey did not find any issues.

• Freedom of Association and Respect for Collective Bargaining

The IHI Group recognizes the freedom of employees to unionize and work together as a labor union and union members. Our Group will never treat anyone involved in the union unfairly. We also engage in sincere collective bargaining efforts founded in a mutual trust between IHI and the labor union.

Diversity and Inclusion

Human Resource Management

Policies

The IHI Group recruits and trains human resources as the most vital management resource. Our management philosophy ensures that we contribute to the development of society through technology and states that human resources are our single most valuable asset. We strive to realize a healthy, safe, work-friendly environment where everyone respects one another and prospers.

Group Human Resource Management Policy

The IHI Group believes having common values among the employees is necessary to reform corporate culture as well as build workplaces and systems that empower people to reach their full potential.

We drafted the Group Human Resource Management Policy to embed this basic approach to human resource management in the entire Group. This management policy expands various recruitment, assignment, development, and evaluation measures according to key group, global, and diversity attributes for ideal human resources.

Group Human Resource Management Policy

The IHI Group aims to create customer value by using engineering expertise to focus on manufacturing technology in line with the management philosophy and IHI Group Vision through the following:

- 1. IHI will define and raise awareness about ideal human resources shared by all Group employees to become an enterprise of professionals with excellent skills from perspectives of global manufacturing and engineering technologies as well as high quality products and services renowned worldwide.**
- 2. IHI will establish and carry out human resource management measures based on ideal human resources and provide Group employees with growth opportunities.**
- 3. IHI will provide a work environment where people of diverse backgrounds are in tune with the management philosophy and Group Vision of IHI and can reach their full potential.**

Ideal Human Resources

Integrity and Trust

For Customers and Society

Innovation and Creation

Teamwork

World-class Professional

Keywords

Group

Global

Diversity

Education/Awareness Building

Global Standardization of the Human Resource Management Policy

The IHI Group uses its new employee education program and various other education and training opportunities to promote the Human Resource Management Policy with all Group employees in Japan and overseas. More specifically, we have created a video in which employees from around the world discuss the concepts and episodes behind the ideal attributes during an online meeting. This video is also widely used for educational purposes and recruitment activities.

Diversity and Inclusion

Results

Number of Employees

(Unit: People, Scope: IHI and consolidated subsidiaries)

Item	2018	2019	2020	2021
Consolidated number of employees	29,286	28,964	29,149	28,801
IHI number of employees	8,011	7,741	7,796	7,779
Male	6,994	6,730	6,766	6,727
Female	1,017	1,011	1,030	1,052
Ratio of female employees	12.7%	13.1%	13.2%	13.5%

Number of Employees by Region

(Unit: People, Scope: IHI and consolidated subsidiaries)

Item	2018	2019	2020	2021
Japan	21,862	21,700	21,778	21,390
Asia Pacific	4,213	4,141	4,132	4,053
USA	1,352	1,292	1,122	1,291
Europe, Middle East, and Africa	1,859	1,831	2,117	2,067

Number of Employees by Business Area

(Unit: People, Scope: IHI and consolidated subsidiaries)

Item	2018	2019	2020	2021
Resources, Energy & Environment	6,467	6,812	6,595	6,514
Social Infrastructure & Offshore Facilities	2,359	2,399	2,469	2,443
Industrial Systems & General-Purpose Machinery	10,220	10,079	10,028	9,797
Aero Engine, Space & Defense	6,660	6,684	6,765	7,062
Others	2,619	2,014	2,320	1,945
Entire company (common)	961	976	972	1,040

Number of Employees by Age

(Unit: People, Scope: IHI)

Item	2018	2019	2020	2021
Under 30	1,780	1,612	1,520	1,401
30 to 39	2,277	2,198	2,313	2,327
40 to 49	2,171	2,119	2,078	2,086
50 to 59	1,389	1,462	1,575	1,687
60 and over	394	350	310	278

Number of Employees by Employment Status

(Unit: People, Scope: IHI)

Item	2018	2019	2020	2021
Regular employees	7,678	7,410	7,447	7,400
Male	6,694	6,438	6,456	6,397
Female	984	972	991	1,003
Ratio of female employees	12.8%	13.1%	13.3%	13.6%
Re-hires	84	88	93	109
Male	84	88	92	108
Female	0	0	1	1
Ratio of female employees	0.0%	0.0%	1.1%	0.9%
Second by other companies	249	243	256	270
Male	216	204	218	222
Female	33	39	38	48
Ratio of female employees	13.3%	16.0%	14.8%	17.8%
Constants and contract employees	83	91	107	102
Male	77	86	102	97
Female	6	5	5	5
Ratio of female employees	7.2%	5.5%	4.7%	4.9%
Part-time employees	498	496	476	453
Male	85	90	85	81
Female	413	406	391	372
Ratio of female employees	82.9%	81.9%	82.1%	82.1%
Fixed-term employees	106	101	81	35
Male	84	85	64	24
Female	22	16	17	11
Ratio of female employees	20.8%	15.8%	21.0%	31.4%
Temporary employees	1,325	1,330	956	986
Male	1,034	1,046	753	788
Female	291	284	203	198
Ratio of female employees	22.0%	21.4%	21.2%	20.1%

Diversity and Inclusion

Turnover Rate

(Scope: IHI)

Item	2018	2019	2020	2021	
Total turnover rate	4.3%	3.5%	2.9%	3.1%	
Rate of retirement due to personal reasons	2.0%	2.0%	1.1%	1.6%	
Rate of retirement due to personal reasons by age	Under 30	4.6%	4.9%	3.1%	3.9%
	30 to 39	2.3%	2.3%	1.2%	2.5%
	40 to 49	0.9%	0.8%	0.3%	0.5%
	50 to 59	2.7%	2.3%	2.2%	2.4%
	60 and over	39.3%	26.0%	34.8%	37.6%
Turnover rate within 3 years of joining the company	7.4%	6.8%	4.3%	3.4%	

Average Years of Service

(Unit: Year, Scope: IHI)

Item	2018	2019	2020	2021
All employees	14.9	15.8	15.1	16.3
Male	15.1	16.0	15.3	16.5
Female	13.2	14.5	14.2	15.5

Ratio of Answered Employee-awareness Surveys

(Scope: IHI and affiliated companies)

Item	2018	2019	2020	2021
Ratio of answered employee-awareness surveys	91.7%	91.4%	88.0%	88.0%

Employees Union Membership Rate

(Scope: IHI and 7 labor unions of consolidated subsidiaries)

Item	2018	2019	2020	2021
Employees union membership rate	73%	73%	72%	71%

Number of Labor Complaints Received

(Unit: Reports, Scope: IHI)

Item	2018	2019	2020	2021
Number of labor complaints received	0	0	0	0

* To quickly and fairly respond to labor complaints from employees, IHI established a committee in accordance with labor agreements.

Initiatives

Revisions to the Human Resource Treatment Policy

The IHI Group revised its Human Resource Treatment Policy in October 2021 to create an environment where everyone can take on challenges continually.

The policy puts in place evaluation, compensation, and promotion systems founded in skill development and motivation as well as links human resource development programs. This gives each employee a chance for early promotion, independent growth, and active participation in the workplace.

Fair and Equal Treatment

The IHI Group strives for fair and equal treatment according to the position and responsibilities of the employees, with a focus on performance and achievement. Our basic policy is not to simply comply with the minimum wage globally, but rather to provide a higher living wage.

Social Welfare Programs

Our non-statutory social welfare programs provide a variety of options employees can choose from as a way of supporting the needs of a diverse labor force including basic welfare such as residential and financial support for childcare, nursing care, education, recreation, and other various options.

Employee-awareness Surveys

The IHI Group conducts employee-awareness surveys targeting employees in Japan and overseas once a year to grasp the status of the employee engagement. To improve employee engagement through a PDCA cycle using these surveys, we visualize the organization, clarify IHI strengths and challenges, analyze the surveys, and plan and execute measures necessary for the Group in its present state.

Diversity and Inclusion

Human Resource Development

Policies

The IHI Group places cultivating ideal human resource attributes as the pillar of human resource development and lays out educational systems, a curriculum, and training plans for individuals in each department. We also support each employee's continuous effort for independent career development and growth so they can achieve their career plans.

In addition, we provide four main growth opportunities—career development support, on-the-job training, off-the-job training, and transfers to new business assignments—so every person can put in the work to develop these skills and advance their careers and promote human resource development in manner that remains consistent with evaluations and appointments.

P49 Human Resources Management

Career Development Program (CDP)

The IHI Group has introduced a Group-wide Career Development Program (CDP) in fiscal 2019 as a training system tailored to the career of each employee. Consultation with a superior based on an individual employee's career plan (future design) is held to discuss what challenges and training each employee must undertake to achieve their career plan. Through this initiative, we are supporting each employee to be able to independently think about their career plan as well as offer opportunities to grow through work and training so that they can continue their growth.

Career Development Program (CDP)

Considering an Independent Career Plan

- Support for Career Development and Changes

Discovery and Ongoing Learning

- Education According to Development Goals



Accelerating Growth Heightening Motivation and Satisfaction

- Coaching to Accelerate Individual Growth (Supervisor Support)
- ✓ Common organizational vision
- ✓ Clear development plan and mission
- ✓ Common development goals

Bringing Out the Skills and Growth of Each Person

- Opportunities to Gain Diverse Experiences and Learn Broad Viewpoints

Diversity and Inclusion

Human Resource Development Program

The IHI Group implemented and expanded in fiscal 2021 its voluntary/independent selective training to enable each employee to choose what, when, and where they learn depending on their career plan. We migrated our educational programs to one more focused on career development support programs and voluntary/independent selective training, which helps to accelerate growth and foster ongoing learning. An environment of ongoing independent learning helps expand the potential for everyone to fully participate.

Initiatives to Develop Diverse Human Resources

The IHI Group provides common education programs for diverse human resources to grow and actively participate, from training programs that groom human resources as management to new employee training (new graduates/mid-career recruits) and positional training for new key and managerial employees as well as assistant foremen. Employees take part in courses to learn global communication skills and gain cultural competency before taking a post overseas while strategically accumulating experience at overseas production plants and in major projects through our global human resource development programs.

IHI Group Education and Training Programs

(As of May 25, 2022)

IHI Group Education and Training Programs			Elective Training	Selective Training	Positional Training	
	Management Training	Professional Human Resource Training	Career and Selective Training	Positional Training	Global Human Resource Development Training	Diversity
	IHI Business School					
Managers	Senior Executive Program	I-Project Key Person (Kaizen Professionalism) Training Design Strategist Training Data Analyst Training Professional Procurement Training Production Management Training Professional Quality Training Professional Engineering Training	Career Management Training Career Design Seminar (By Stage of Career)	IHI-University (Approx. 300 Courses) Technical Skills (Specialist Courses) Business Skills Communication Skills Mental Fitness and Liberal Arts	Global Communication Skills and Cultural Competency Global Human Resource Training (Overseas Assignments, etc.)	Diversity Seminars (Work-life Balance Training) External Training and Cross-Industry Exchanges
Workplace Leaders	Strategy Planning Course (Open Course) Next Leader Course Development Course					
Senior Employees				New Employee Training Supporter Training		
Junior Employees						

Courses Designated and Recommended by Corporate Divisions

Diversity and Inclusion

Results

Participants in Main Training Courses and Total Number of Training Hours

(Scope: IHI and affiliated companies in Japan)

Item	2018	2019	2020	2021
Stratified Training				
Participants	3,300	3,276	1,882	672
Training hours	112,000	106,208	34,672	24,028
Selective Training Courses				
Participants (total)	6,200	3,343	1,948	17,430
Training hours	47,000	25,073	16,358	49,648
Company-designated Courses				
Participants (total)	–	–	–	253,716
Training hours	–	–	–	188,927
Average Annual Training Hours per Employee				
Training hours	16.7	19.8	13.3	12.1

*1 Group training programs changed to an online format and were conducted from the latter half of fiscal 2020 due to the COVID-19 pandemic, and the number of participants declined compared to the previous fiscal years.

*2 Due to reforms to the Group Human Resource Development Program in fiscal 2021, the number of participants and hours of each training course fluctuated compared to past years.

Employees Certified as Master Artisans

(Unit: People, Scope: IHI)

Item	2018	2019	2020	2021
Number of employees certified	37	41	39	41

* The Takumi (Master Artisans) Certification Program was renamed to the Master Artisans Program in 2019 to certify a larger number of candidates.

Initiatives

Career Development Support Program

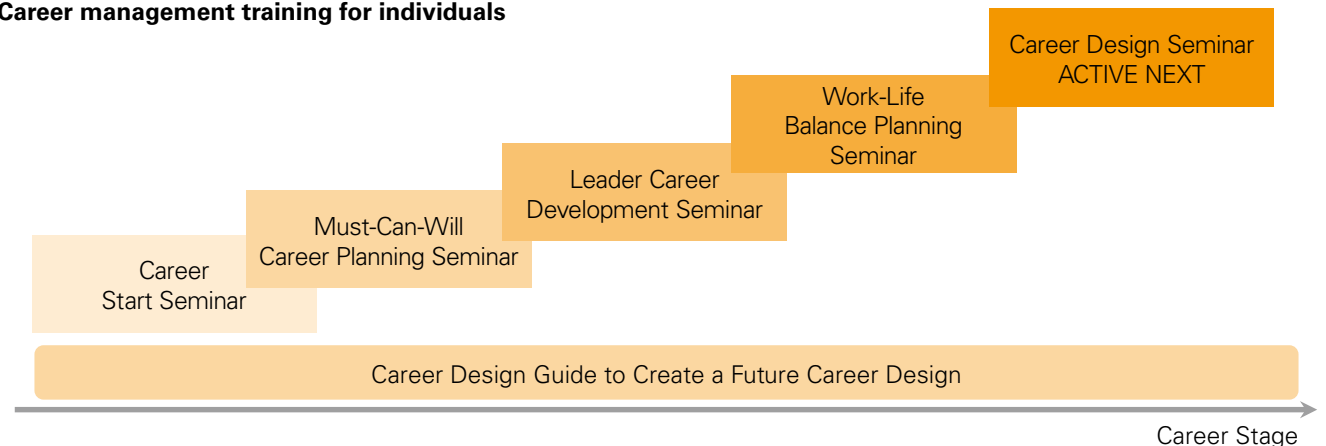
The IHI Group capitalizes on the Career Development Support Program as both an initiative to build a workplace where everyone can actively participate and to support the career design. Based on this program, we hold Career Design Seminars tailored to each career stage to help our employees consider and execute their plans for developing the skills necessary to better advance their

careers in the next five to ten years.

To go one step further toward realizing these career plans, we also strive to provide career management training to supervisors (understanding about career theories and enhanced coaching skills) because IHI is well aware that the support of superiors is crucial.

Career Development Support Program

Career management training for individuals



Career management training for supervisors

Coaching Guide to Support Independent Career Development and Career Management Seminar, etc.

Diversity and Inclusion

Independent Selective Training

The IHI Group put together full-fledged independent selective training in fiscal 2021 as a framework for each employee to choose and learn various subjects anytime, anywhere according to their career plan.

This training system provides over 300 different in-house

technical, business, and communication skill courses designed to help employees consider and take the initiative to gain the knowledge and skills necessary to achieve their career plan.

Voluntary/Independent Selective Training

Selective training (IHI-University)

Technical skills (approx. 200 courses)	Business skills (approx. 70 courses)	Communication skills (approx. 20 courses)
Physics/Chemistry Materials/Structures Heat/Fluids/Combustion Turbo Systems/ Mechanical Elements/Vibrations Production Processes Control/Sensing Project Management Intellectual Property Sales Procurement	Management Policy Sustainability/ESG Quality/Compliance DX Design Thinking Business Models Marketing Problem Solving/PDCA Finance/Accounting Engineering and Manufacturing Company Basics Management	Business Communication Team Building Coaching
		Mind (approx. 30 courses)
		Philosophy Leadership Motivation Diversity

• Relearning

We are expanding training programs for actively "relearning" knowledge and skills that are required to respond to the changing business environment and technological innovation.

As an increase in job mobility and optimal appointment is in progress, we offer support programs that enable employees to quickly play an active role.

• Passing Down Skills to Others

IHI strives to pass down welding, machining, and other core skills at each plant, which are the foundation of our manufacturing expertise. Many of our employees are experts in each of these fields. IHI has introduced a master artisan program to encourage employees certified as master artisans to pass on their skills to new up-and-comers.

• IHI Human Resources Development & Communication Center

We use the I-STEP Shonan IHI Human Resources Development & Communication Center (Yokosuka City, Kanagawa) for training and various meetings joined by Group employees from around the world. The Center is a base that promotes active communication and learning and where IHI Group colleagues from each corner of the globe can come together to share our corporate philosophy and values.

• Career Challenge Program

The IHI Group adopted the Career Challenge Program (open application system within the Group) in fiscal 2019 and made it available to all Group employees to provide everyone with opportunities to independently shape their career and develop their skills. A total of 150 employees have taken advantage of this program and advanced their careers as of the end of fiscal 2021. This career development has allowed more ideal placement of human resources across divisional and corporate boundaries through the IHI Group.

Diversity and Inclusion

Diversity and Inclusion

Approach

The IHI Group strives to promote diversity and inclusion as part of management strategy.

Diversity and inclusion aims to foster mutual respect and acceptance between people with diverse personalities and values regardless of individual attributes and cultivates an organizational climate in which everyone can fully utilize their skills. This type of corporate culture will link a wide range of approaches, inspire innovation toward solving social issues, and create new value.

More specifically, we are spearheading efforts to empower women as senior management candidates while leveraging the broad perspectives and ideas of young up-and-coming staff. We also help encourage opportunities both inside and outside of the company as a way to provide broader experiences and open minds. The IHI Group has always promoted mid-career recruitment as well as the active participation of women, foreign nationals, people with disabilities, and employees past retirement age. We are further advocating diversity from supporting work-life balance for employees raising children or taking care of sick family to the active participation of LGBTQIA+ gender minorities.

Education/Awareness Building

Diversity Training Participants

(Unit: People, Scope: IHI and affiliated companies in Japan)

Item	2018	2019	2020	2021
Empowering women, persons with disabilities, etc.	148	276	140	139
Work-life balance of employees raising children	34	134	53	125
Work-life balance of employees taking care of sick family	–	400	290	263

Participants in Training to Cultivate Local Managers at Overseas Sites

(Unit: People, Scope: China and Asia-Pacific region)

Item	2018	2019	2020	2021
Participants	36	42	–*	21

* Activities not conducted in fiscal 2020 due to the impact of the COVID-19 pandemic.

Targets and Results

Diversity Targets and Results

KPI	Targets	Target Year	2021 Results
Ratio of female employees	University graduates: About 20%	2026	University graduates: 20.2%
Ratio of female managers	7%	2026	3.9%
Female officers	Participation in Keidanren's Challenge to 30% by 2030 (activities to increase the proportion of female directors to more than 30% by 2030)	2030	18%
Ratio of employees with disabilities	2.4%	2022	Steadily exceeds 2.3%
Promotion of male employees to take childcare leave	Promote all applicable male employees to take childcare leave of at least a week, and promote 2 or more weeks	2022	70.8%

Diversity and Inclusion

New Graduate Recruitment Results

(Unit: People, Scope: IHI, University graduates)

Item	2018	2019	2020	2021
Total	158	153	194	109
Male (engineers)	113	95	133	75
Female (engineers)	7	16	6	14
Male (administrative)	25	28	29	12
Female (administrative)	13	14	26	8

Mid-career Recruitment Results

(Unit: People, Scope: IHI)

Item	2018	2019	2020	2021
Number of recruits	66	77	55	85
Recruitment rate	22.8%	23.4%	15.6%	33.9%

Female Recruitment Rate

(Scope: IHI, University graduates)

Item	2018	2019	2020	2021
Female recruitment rate	12.7%	19.6%	16.5%	20.2%

Number of Officers*1

(Unit: People, Scope: IHI)

Item	2018	2019	2020	2021
Total	17	16	17	17
Male officers	13	13	14	14
Female officers (outside)	4 (3)	3 (2)	3 (3)	3 (3)

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

Ratio of Female Officers*2

(Scope: IHI)

Item	2018	2019	2020	2021
Ratio of female officers	24%	19%	18%	18%

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

Number of Managers by Role and Gender*3

(Unit: People, Scope: IHI)

Item	2018	2019	2020	2021
Total	2,643	2,767	2,732	2,776
Male managers	2,569	2,684	2,640	2,669
Female managers	74	83	92	107
General manager class	22	23	23	31
Section manager class	52	60	69	76

*3 As of April 1 each year.

Ratio of Female Managers*4

(Scope: IHI)

Item	2018	2019	2020	2021
Ratio of female managers	2.8%	3.0%	3.4%	3.9%
Ratio of general managers	0.8%	0.8%	0.8%	1.1%
Ratio of section managers	2.0%	2.2%	2.5%	2.7%

*4 As of April 1st each year.

Number and Ratio of Employees and Number of Managers from Abroad*5

(Unit: People, Scope: IHI)

Item	2018	2019	2020	2021
Number of employees	89	81	82	74
Number of managers	8	10	13	14
Ratio of employees from abroad	1.0%	1.0%	0.9%	0.9%

*5 As of April 1 each year.

Number of Managers that Joined IHI Mid-Career*6

(Unit: People, Scope: IHI)

Item	2018	2019	2020	2021
Number of managers	204	220	234	230

*6 As of April 1 each year.

Diversity and Inclusion

Local Managers at Overseas Sites*7

(Unit: People, Scope: China, Singapore, and USA)

Item	2018	2019	2020	2021
Total	22	23	22	25
China	4	4	5	6
Singapore	8	7	6	5
United States	10	12	11	14

*7 As of April 1 each year.

Ratio of Employees with Disabilities*8

(Scope: IHI)

Item	2018	2019	2020	2021
Ratio of employees	2.21%	2.39%	2.35%	2.39%

*8 As of June 1 each year.

Re-employment Rate of Employees at Retirement Age

(Scope: IHI)

Item	2018	2019	2020	2021
Re-employment rate of employees at retirement age	84%	81%	81%	78%

Work Hours

(Unit: Hours, Scope: IHI)

Item	2018	2019	2020	2021
Monthly average overtime	22.50	21.10	13.00	18.90
Annual work hours	2,003.3	1,967.8	1,797.9	1,948.3

Average Annual Paid Vacation Days Taken

(Unit: Days, Scope: IHI)

Item	2018	2019	2020	2021
Average annual paid vacation days taken	18.36	19.40	18.73	17.37

Leave Acquisition Rate

(Unit: People, Scope: IHI)

Item	2018	2019	2020	2021
Employees who have used the reduced work hour program	158	161	139	158
Employees who have taken childcare leave	689	779	768	935
Employees who have taken parental leave Total	118	131	137	128
Male	8	21	31	60
Female	110	110	106	68
Percentage of employees who return to work after parental leave	100%	99.2%	100%	100%
Employees who have taken nursing care leave	6	7	2	6

Ratio of Male Employees Who Took Childcare Leave (1 Week or More)

(Scope: IHI)

Item	2018	2019	2020	2021
Ratio that took leave	25.2%	28.6%	26.5%	70.8%

Diversity and Inclusion

Initiatives

Mid-career Recruitment

The IHI Group actively pursues mid-career candidates as diverse human resources with a wealth of experience outside of its organization. Flexible and timely employment of human resources who have the capabilities demanded of our businesses and technological strategies are crucial in an ever-changing business environment. Our avenues to recruit human resources go beyond the regular hiring of new graduates to a variety of other channels leading to truly diverse human resources with the experience and expertise essential to our businesses.

Empowering Female Employees

The IHI Group executes a wide range of initiatives to help better develop the careers of all female employees. These initiatives not only recruit and develop outstanding human resources to promote to middle and top management but also define various goals to build a workplace environment where everyone can actively participate. Workshops and seminars are only a few examples of these efforts.

Network Leader Training helps female employees build a network of professionals around them centered upon female managers who act as real-life role models. In addition, we hold seminars taught by guest instructors as a way for women to forge a career path as managers. These seminars provide the guidance and coaching of supervisors to help female employees advance their careers while considering major life events.

Empowering Employees from Abroad

The IHI Group strives to create workplaces motivating fantastic employees to fully realize their potential regardless of their nationality. This includes broad assistance for foreign nationals working in the IHI Group. We offer a variety of training opportunities to enhance communication skills in Japanese while events such as those to encourage multicultural exchanges build broader professional networks. These are just some of the many things IHI does to promote work-friendly environments where foreign nationals can utilize all of their skills. Employees from abroad also encounter problems unique to foreign nationals. That is why IHI has put in place consultation services for employees from abroad.

Empowering Local Employees Overseas

The IHI Group is working to accelerate global expansion. Overseas, we recruit and nurture human resources with roots in the community according to the Group Human Resource Management Policy while considering the unique labor market and practices of each country. Our human resource development programs offer training to cultivate local managers, which also strengthens our Group management capabilities. Moreover, we emphasize the development of global procurement officers and advance training programs for local staff. In fiscal 2021, the IHI Group held Leadership Development, problem-solving, and other training programs. In the future, we will promote even more active participation by cultivating diverse human resources throughout the Group worldwide.

Empowering Persons with Disabilities

The IHI Group promotes the active participation of people with disabilities. We have put in place assistance programs, such as specialized support staff, across all occupations and aspects of life in society. We also support career advancement of each employee in addition to guidance and coaching by superiors. The IHI Group will always empower persons with disabilities, aware that everyone can reach their full potential with the right support and understanding in the workplace.

Building an Inclusive Workplace Regardless of Sexual Orientation or Gender Identity

The IHI Group is creating a working environment where LGBTQ+ employees can reach their full potential. As part of our support for gender minorities, we provide employment programs, corporate dormitories, and other benefits in addition to raising awareness about gender minorities through an ally program and other networking and enlightenment opportunities. In fiscal 2021, we held the IHI Group LGBTQ Alliance Conference and exchanged opinions about LGBTQ+ with a film as a topic with those that identify themselves as LGBTQ+.

* ALLY activities

An ally is a person who does not identify as LGBTQ+ but understands and supports the LGBTQ+ community.

Diversity and Inclusion

Empowering People Over 60

The IHI Group promotes the active participation of employees at retirement age in many different ways. We have adopted a program for each employee to decide when to retire between the ages of 60 to 65. Many senior employees are also taking advantage of a program that enables promotion of employees over the age of 60 to encourage people to persevere regardless of age. Programs to capitalize on the high level of expertise and skill also create a framework to better encourage employees at retirement age to play a greater role.

Hiring Temporary Employees as Regular Salaried Employees

IHI has put in place a system to hire temporary workers as regular salaried employees. This program lays a path for temporary employees who satisfy certain criteria to request a regular salaried position.

Providing Opportunities to Gain Diverse Experience

The IHI Group continually enhances the workplace to ensure that human resources with diverse backgrounds, experience, and views have a means to fully leverage their skills. We offer programs to nurture broader experiences and open minds as well as a wide range of opportunities.

- **Employment**

The IHI Group clearly defines the type of work and human resources critical to business and technical strategies that will realize its long-term business vision. This demands a strategic mix of new graduate and mid-career recruitment. We hire around the globe throughout the year while expanding the scope of our recruitment channels.

- **Transfer**

The IHI Group rotates staff between departments, dispatches employees to external training programs as well as to partner companies, government agencies, and startups. Our staff also participates in joint development projects with other companies, universities, and research institutes, which are just some of the many ways in which IHI provides access to a variety of experiences and differing viewpoints. To help facilitate the career development plans defined by each employee, we also recruit constantly from within the Group (career challenge).

- **Training**

The IHI Group provides opportunities to gain broader experiences and an open mind through active human resource exchanges outside the organization, such as external training and events as well as participation in various academic societies.

- **Concurrent In-house Positions and Side Businesses Outside IHI**

The IHI Group encourages everyone to gain broad experience both inside and outside the organization. We support employees to have concurrent positions inside IHI and side businesses (second jobs) outside of it in the hope of leveraging diverse viewpoints and ideas in management. Some examples include a second job as an advisor on university reforms or industry-university collaborations as well as concurrent in-house positions developing image recognition technologies or applications using AI and SNS. As of fiscal 2021, our employees have registered about 80 different side businesses and roughly 80 concurrent positions.

- **Work-Life Balance Programs and Consultation Services**

The IHI Group has put in place various hard and soft support programs to help employees actively participate in the company while raising children, taking care of sick family, or undergoing treatment for an illness of their own. We publish handbooks and leaflets to raise awareness and promote use of these support programs, hold seminars by external lecturers, and have set up a consultation desk with outside experts who can provide support based on the circumstances and needs of each individual.

In fiscal 2021, we created a handbook on balancing work and raising children focusing on male employees. To support employees wishing to have children, we created a leaflet to raise awareness about a program that supports fertility treatment.

Labor Practice (Occupational Health and Safety)

Policies

Ensuring health and safety is a foundation of our business activities and one of the extremely important management issues. Every month, IHI shares the progress of Group-wide occupational health and safety as well as health management to all officers. We actively strive to build a work-friendly environment where all Group employees can reach their full potential. The initiatives on the right are undertaken according to the IHI Health and Safety Policy as a way to ensure a safe and healthy workplace for everyone who works with the IHI Group whether Group or partner company employees.

IHI Health and Safety Policy

Based on our management philosophy of "Contribute to the development of society through technology" and "Human resources are our single most valuable asset," the IHI Group is committed to establishing a corporate culture that puts safety as the first priority. Specifically, based on the Basic Code of Conduct for the IHI Group, the following initiatives will be implemented to ensure a workplace environment in which all employees can work safely and in good health.

1. The "Five Safety Principles" will be taken as a principle shared throughout the Group and managers as well as all employees will engage in safety and health activities to prevent accidents.

[Five Safety Principles]

- Safety is our first priority
 - Never do or let anyone else do anything dangerous
 - Eliminate potential hazards
 - Strictly follow the rules
 - Make a real effort
2. We will endeavor to prepare facilities and provide opportunities to promote and maintain the mental and physical health of our employees, and create ideal workplaces in which employees can work in good health.
 3. While complying with relevant laws and regulations on safety and health, we will give full consideration to how our business activities affect local communities and endeavor to ensure safety and health as a member of society.

Labor Practice (Occupational Health and Safety)

IHI Group Health Management Declaration

IHI Group Health Management Declaration

The IHI Group will implement management that values the health of employees based on the management philosophy of "Human resources are our single most valuable asset".

We will support the proactive improvement of employee health and aim to energize the organization by maximizing employee vitality and capabilities. By doing this, we will contribute to the development of society through the growth of the IHI Group.

July 1, 2020

Hiroshi Ide

President and Chief Operating Officer

IHI Corporation

Specific Initiatives

The IHI Group will work on both corporate health management and work-style reforms. We will actively cooperate with labor unions and health insurance associations to spearhead the key measures below.

IHI asks every employee to strive to better their own health and take part in building an enthusiastic working environment.

1. Reduce individual and organizational health risks.
 - (i) Enforcement of working conditions according to the results of medical checkups.
 - (ii) Ensure the implementation of reactive mental health care measures.
(Improve the working environment through stress checks and a clear response to illnesses.)
 - (iii) Encourage employees to stop smoking and prevent second-hand smoking.
2. Improve individual and organizational health to invigorate the working environment.
 - (i) Assist each person to actively manage their own health.
 - (ii) Proactively implement active mental health care measures. (Build a working environment where enthusiasm and professional growth is felt so that everyone cultivates an enduring spirit.)
3. Promote better health for both employees and their families.
 - (i) Expand activities to better health of employees and their families.
 - (ii) Increase employee participation in medical checkups and health guidance.

Structure

Occupational Health and Safety Structure



IHI Group Health and Safety Committee

Chairperson	Officer in charge of Health and Safety
Deputy Chairperson	President of Social Infrastructure & Offshore Facilities Business Area and President of Industrial Systems & General-Purpose Machinery Business Area
Members	President of Resources, Energy & Environment Business Area, President of Aero Engine, Space & Defense Business Area, General Manager of Technology & Intelligence Integration, and other persons nominated by the chairperson
Secretariat	Human Resources Division
Number of meetings convened in 2021	4

Labor Practice (Occupational Health and Safety)

Education/Awareness Building

Employee Training and Education

The IHI Group provides education on health and safety specific to each position to everyone from new employees to management.

Work division employees undergo Supervisor Safety Training (SST) to learn about health and safety when promoted to assistant foreman or foreman.

Design and development employees on construction sites undergo Construction Safety Standard Training (CSST) to learn the ins and outs of construction health and safety as new and senior employees or group leaders and management.

Employees who are candidates for construction site director or supervisor undergo Site Manager Safety Training (SMST) to learn about on-site health and safety. We also provide follow-up training thereafter to expand knowledge about health and safety. The IHI Group also cultivates trainers for the SST, CSST, and SMST programs as a Group.

In addition, the Health and Safety Committee constantly reflects feedback from employees based on standards laid out in the occupational health and safety management system at works and research facilities.

IHI Group Health and Safety Training System Construction Divisions

Eligible Participants	New and transferred employees	Training upon entry on new construction sites	Construction supervisors and test driving coordinators instructing operators	Small-scale construction site and service construction managers	Health and safety officer Head office health and safety manager On-site health and safety manager
Details	New Employee and CSST Training	CST Training	Supervisor Training (SVST Training)	Site Manager Training (SMST I)	Site Manager Training (SMST II)

Work Divisions

Eligible Participants	New employees	Work safety leaders, acting assistant foremen, etc.	Upon appointment as an assistant foreman	Upon appointment as a foreman	Upon appointment as a plant manager
Details	New Employee Training	SST-1	SST-2	SST-3	New Manager Training

Note: CSST stands for Construction Safety Standard Training.

SMST stands for Site Manager Safety Training.

SST stands for Supervisor Safety Training.

Training Participants

(Unit: People, Scope: IHI and affiliated companies in Japan)

Item	2018	2019	2020	2021
Foreman Training	26	48	50	27
Assistant Foreman Training	83	103	90	82
Technical Leader Training	33	165	–	–
Basic Site Manager Safety Training (SMST) Course (Graduates)	260	169	125	69
Supervisor Safety Training (SST) and SMST Trainer Course (Graduates)	31	18	–	14

* Training in 2020 was not conducted due to the effects of the COVID-19 pandemic.

Labor Practice (Occupational Health and Safety)

Targets and Results

Occupational Accidents*1

(Unit: Incidents (figure inside parentheses indicates fatal incidents), Scope: IHI and 31 affiliated companies)

Item	2018	2019	2020	2021
Total	55 (0)	71 (0)	38 (0)	52 (1)
Employees	28 (0)	42 (0)	18 (0)	31 (1)
Temporary employees	4 (0)	4 (0)	1 (0)	3 (0)
Partners	23 (0)	25 (0)	19 (0)	18 (0)

*1 Fatalities caused by occupational accidents.

Total Injuries Frequency Rate*2

(Scope: IHI and 31 affiliated companies)

Item	2018	2019	2020	2021
Total injuries frequency rate	1.11	1.49	0.87	1.23

*2 Fatalities or injuries caused by occupational accidents per million working hours

Lost Time Injuries Frequency Rate*3

(Scope: IHI and 31 affiliated companies)

Item	2018	2019	2020	2021
IHI Group average	0.26	0.40	0.28	0.38
National average in manufacturing industry*4	1.20	1.20	1.21	1.31

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

*4 Scope: Business sites with at least 100 people (sample survey).

Occupational Health and Safety Rate (2021)

Item	2018	2019	2020	2021
Works divisions	Target	–	–	Under 0.7
	Result	0.75	1.17	0.62
Construction divisions	Target	–	–	Under 1.2
	Result	1.82	2.11	1.31

Severity Rate of Occupational Health and Safety

Item	2018	2019	2020	2021
IHI Group Average	0.01	0.01	0.01	0.18

Health Management

(Scope: IHI and 35 affiliated companies)

Item	2018	2019	2020	2021
Rate of medical checkups	–	–	–	97%
Participation rate of medical checkups	70%	71%	72%	71%
Participation rate of stress checks	96%	94%	95%	95%
High stress rate	–	–	–	9%
Absenteeism (employees who take three or more months of leave)	0.9%	1.0%	0.8%	0.7%
Presenteeism (employees with restricted hours)	1.7%	1.6%	2.1%	1.8%
Smoking rate	28%	27%	27%	28%

Rate of Occupational Diseases*5

(Unit: Incidents, Scope: IHI and 31 affiliated companies)

Item	2018	2019	2020	2021
Rate of occupational diseases	0.165	0.165	0.15	0.118
Deaths due to occupational diseases or illnesses	–	–	0	0

*5 People suffering from occupational diseases per million working hours (poor mental health/broken bones).

Labor Practice (Occupational Health and Safety)

Initiatives

Health and Safety Management

The IHI Group is committed to eradicating occupational accidents through Five Safety Principles that act as a Group-wide code of conduct.

We assess risk at our works and construction sites to identify and mitigate potential hazards through strict verifiable countermeasures. We conduct regular health and safety training for all of our employees to eradicate occupational accidents. We give support to business partners at works and construction sites to improve health and safety management in a cooperative effort to ensure safe working environments.

We carry out these health and safety initiatives as part of the occupational health and safety management system.

• Activities to Reduce the Risk of Occupational Accidents

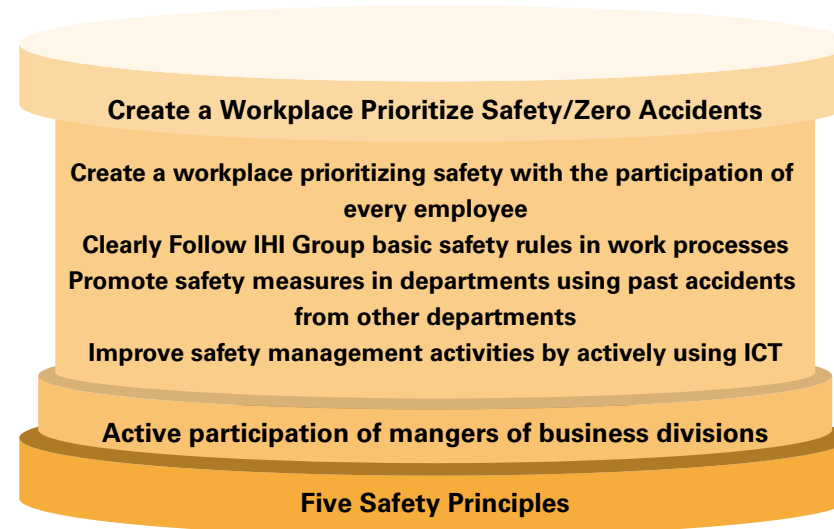
The IHI Group promotes health and safety activities after defining occupational health and safety policies, targets, and plans according to the standards set by the occupational health and safety management system. Our annual occupational health and safety management evaluations also drive improvements to eradicate occupational accidents.

We define items requiring our attention as well by identifying dangers and hazards related to machinery, facility, chemicals, and other such factors in order to reduce and eliminate them.

We rolled out the IHI Group Basic Safety Rules for the six most common types of occupational accident in fiscal 2020 and are focusing on eradicating these occupational accidents throughout the entire IHI Group.

Occupational Health and Safety Management Priority Items and Measures

In light of serious accidents in the past, the IHI Group works to build safe and secure workplaces by returning to its core principle to make safety the first priority.



IHI Group Basic Safety Rules

1. Falls from high places
2. Falls from medium and low places
3. Pinching or entanglement in machinery or devices
4. Pinching when handling heavy objects
5. Accidents when using hand tools
6. Accidents when using grinders

• Investigation Procedures and Observations in the Event of an Occupational Accident

The IHI Group assesses and analyzes factors of any occupational accidents through Group-wide disaster investigation procedures. The use of standardized accident report formats quickly shares information about an accident in the Group.

An analysis and evaluation of the accident information collected helps put in place measures to prevent any recurrence of the same or similar accidents throughout the Group.

Labor Practice (Occupational Health and Safety)

Health Management

The IHI Group believes greater employee well-being* helps improve individual productivity and invigorate their workplaces. That is why we strive for both physical and mental health management.

Our mental health education takes both reactive approaches, such as detailed follow-up with individuals suffering from mental illness, programs to help employees return to work, and reintegration programs, as well as active approaches, such as education to teach mental toughness to improve motivation and performance. These educational programs aim to build an enthusiastic workplace for everyone from new employees to senior management.

We also provide additional health measures to improve lifestyle habits and prevent metabolic syndrome, smoking and other such lifestyle illnesses.

* Well-being: condition where body and mind are healthy, a person is able to work in a lively manner, and both employees and organization are full of vitality

• Activities to Promote Health Management

The IHI Group engages in activities that heighten the well-being of Group employees and the organization as a way to accomplish the reforms that achieve a business. In fiscal 2022, we selected workplaces for well-being improvement and promoting activities to improve the workplace with a focus on management and communication.

• Main Dialogue Between Employee Representatives and Management on Health and Safety

The IHI Group convenes the Central Health and Safety Committee every year to engage in a labor-management dialogue about employee health and safety.

Health Management Priority Items and Measures

The IHI Group takes on activities to **better the well-being of Group employees and the organization as a whole**

to successfully build an environment where people can feel safe and enthusiastic about working.

* Well-being: condition where body and mind are healthy, a person is able to work in a lively manner, and both employees and organization are full of vitality

Vitality x Foundation Health Management



• Health Management of Employees Involved in the Nuclear Power Business

We regulate the exposure of all IHI or IHI Group employees working on nuclear power sites in accordance with internal radiation control standards to evaluate radiation damage caused by exposure (exposure dose control).

These health management standards are stricter than the radiation protection regulations and guidelines issued by the Japan Ministry of Health, Labour and Welfare. These management criteria control all IHI and affiliate company employee exposure to radiation and promotes both mental and physical health management. Everyone also

undergoes medical checkups and receives advice from industrial IHI physicians.

Preventing the Spread of the Novel Coronavirus (COVID-19)

P.34 Crisis Management

Work-style and Operational Process Reforms

Approach

The values that people have about work are diversifying. One requirement of a company chosen by outstanding human resources is an attractive workplace in line with diverse values. Another is a climate that helps foster greater creativity and productivity. At the same time, work is a part of life for every employee. IHI recognizes the necessity of providing an invigorating working environment at its core.

Structure

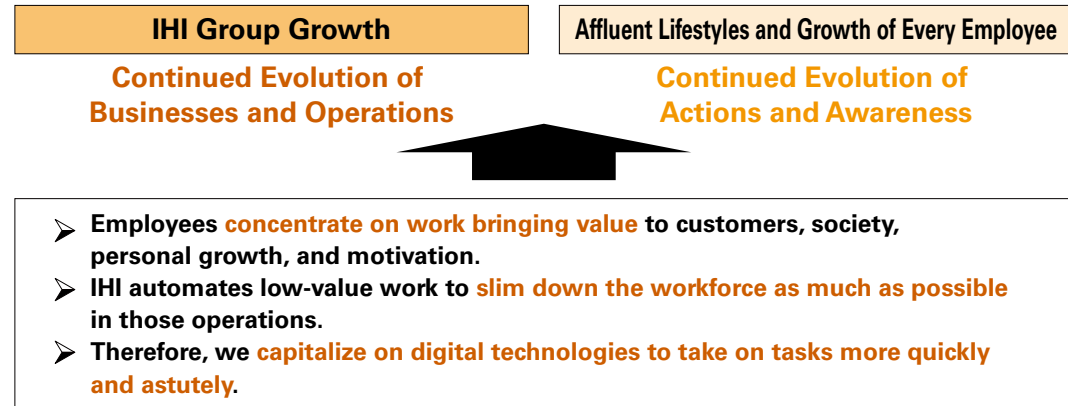
The IHI Group established the Smart Work Empowerment Division in April 2021 in an effort to create new work-styles (smart work) aiming to achieve Group growth alongside fulfilling employee lifestyles and growth.

Education/Awareness Building

The IHI Group has designated the IHI Stance on Communication as an approach to ensure smooth communication in a variety of situations. The IHI Stance on Communication guides and broadens the widespread use of communication tools and provides example applications for these tools.

We also communicate initiatives on smart working in the IHI Group every month as news as well as introduce good practices in various departments on the portal site of Smart Work Empowerment Division.

Ideal of New Working Styles (Smart Work)



Initiatives

Promotion of Diverse Work-styles

The IHI Group strives to realize work-life balance to achieve a work-friendly environment where every employee can find balance between their personal and professional lives. We offer programs and systems for everyone working at IHI to take actions proactively. Some employees have side jobs and businesses while others enter into career challenge and selective training programs. This corporate climate is motivating and offers each person a way to find a work-style matching their unique values. Various initiatives endeavor to enhance internal communications through engagement efforts, shift to online work formats and remote communications, and improve productivity to inspire ideas.

Creating New Working Styles (Smart Work)

In fiscal 2021, the IHI Group focused on improving productivity through the following activities so that each organization and individual can concentrate on high-value work.

- Shift and standardize approval processes done on paper to a digital format
- Set and promote Five Basic Meeting Principles to heighten efficiency and creativity (Smart Meeting Declaration)
- Prepare and roll out the rules and manners to ensure smooth, stress-free remote meetings

In addition, IHI knows the importance of bringing together expertise across organizational boundaries inside and outside of the company to inspire sustainable new value and innovation. Therefore, we are ramping up efforts to build communities and vitalize interactions between human resources.

The future requires emphasis on the active participation of the diverse human resources essential to making ESG management a success. The IHI Group will continue to review and put in place measures for new work-styles throughout the Group.

Customer Relationships

Quality and Product Safety

Approach

The IHI Group conducts its business based on the principle of contributing to the development of society by providing socially useful products and services that earn the satisfaction and trust of our customers, while paying sufficient attention to safety. The quality of our products and services is the bond of trust that connects the IHI Group with our customers and society, and we believe that ensuring quality is fundamental to our social mission and existence as a company.

IHI Group Quality Declaration

The IHI Group has indicated in the "IHI Group Quality Declaration" that quality is as much a top priority as safety. This reiterates our basic approach to manufacturing and our actions and awareness of quality.

IHI Group Quality Declaration

We, the IHI Group, shall:

1. Always put quality first.
2. Continue improving quality via Sangen-Shugi and communication.
3. Listen sincerely to issues, swiftly take action and share accurate information.
4. Provide quality assurance through compliance with rules and working appropriately.
5. All strive for the satisfaction of our customers.

Structure

Quality Assurance Framework

The IHI Group established the IHI Group Quality Committee as a Group-wide committee on quality. The Committee is made up of the Officer in charge of overall Group Quality Assurance as chair and the President of a business area, Executive in charge of quality for a business area, and Executive of the Head Office Division as its members. The Committee ensures that important quality policies are implemented as specific activities. The Committee also deliberates on the quality policy for the next year with implementation results and quality issues that occurred during the year in consideration.

Quality Improvement Promotion System



IHI Group Quality Committee

Chairperson	Officer in charge of Overall Group Quality Assurance
Secretariat	Monozukuri System Strategy Planning
Members	President of a business area, Executive in charge of Quality for business area, and Executive of Head Office Division
Number of meetings convened in 2021	2

Customer Relationships

Education/Awareness Building

Employee Training and Education

The IHI Group provides education and training tailored to each employee's career and job position, with the aim of raising employee awareness of the importance of product and service quality and safety.

For new employees, we provide training that helps them learn the importance of the customer's point of view from an early stage. Training for third-year employees focuses on ethics, the environment, and safety in a manufacturing company. In addition to regular e-learning programs on internal rules and important laws and regulations, each business area has established its own education and training system.

Number of Training Participants

(Unit: People, Scope: IHI and affiliated companies in Japan)

Item	2018	2019	2020	2021
Internal auditor training	105	74	31	29
Third-year employee training on quality management and product safety	352	314	211	81
Training seminars for newly appointed foremen and assistant foreman of manufacturing divisions focused on problem-solving and addressing issues in quality management	101	316	136	123
Professional Quality Training	–	6	7	6
Quality Assurance Division Manager Training	–	–	–	182

Initiatives

Quality Assurance Activities

In 2021, we conducted activities to raise employee awareness about quality through conducting case study and training on quality compliance and activities to firmly establish the IHI Group Quality Declaration as a quality improvement campaign. In order to strengthen quality assurance, we conducted Quality Assurance Division Manager Training and weekly quality assurance liaison meeting between corporate and business areas throughout the year to increase mutual understanding.

Ensuring Product Safety

IHI Group conducts life cycle risk assessments during product development and implements design measures to reduce risk as much as possible. We then provide residual risk information to our customers.

Customer Satisfaction Surveys

The IHI Group conducts customer satisfaction surveys through questionnaires and interviews. Survey items are determined according to the characteristics of each business, and the results are analyzed and shared with relevant departments, leading to improvement activities to further enhance customer satisfaction.

Disclosure of Information about Products and Services

The IHI Group discloses information about our products and services through various mediums, such as television and newspaper advertisements and the company homepage. This information helps familiarize the public at large about our company. We cooperate with all relevant internal departments to provide accurate information in accordance with copyrights, trademarks, and all other relevant laws and industry regulations. The effectiveness of these advertisements is evaluated to examine opportunities on areas of improvement.

Number of Law Violations

(Unit: Incidents, Scope: IHI and consolidated subsidiaries)

Item	2018	2019	2020	2021
Laws/regulations relating to PR activities	0	0	0	0

Adapting Products for Emerging Markets

The IHI Group changes the specification of certain products, taking into account local standards of emerging markets, usage conditions, and accessibility of components and materials of the products.

The IHI Group procures components for universal and process compressors in emerging countries, particularly parts with high accessibility in the local market and the same level of capabilities as those purchased in Japan, and other parts with less impact on compressor function and quality.

To rapidly and flexibly respond to the needs of customers overseas, IHI-Sullair Compression Technology (Suzhou) Co., Ltd. in China and IHI Dalgakiran Makina Sanayi Ve Ticaret A.S. in Turkey have implemented the localization of operations, including specifications and pricing. The IHI Group offers various options for specifications material changes, and additional coatings, ranging from gas absorption filters to compressor parts and cooling devices, in consideration of the environment where the products are used.

Supply Chain Management

Policies

The IHI Group Procurement Policy guides procurement activities around three main pillars: practicing fair and impartial procurement, establishing mutually beneficial partnerships, and responding to legal compliance and societal needs.

We promote CSR procurement that thoroughly considers human rights, labour conditions, occupational safety and health, the environment, and information management in addition to quality, price, delivery periods, and other basic procurement requirements for the materials and equipment necessary for our corporate activities. This requires suppliers to adhere to legal, regulatory and social codes, consider human rights, labour conditions, occupational safety and health, the environment, and information disclosure as well as ensure quality and delivery periods, strengthen competitiveness, engage in conflict mineral* initiatives, and promote CSR procurement throughout the entire supply chain. We also ask our suppliers to provide information regarding the progress of their CSR procurement initiatives to fulfill our corporate social responsibilities.

The IHI Group utilizes the IHI Group Procurement Policy as a reference to define the Basic Rules of Procurement for the IHI Group. These rules define our basic procurement philosophy, fundamental knowledge, and business criteria for all our procurement departments.

* Conflict minerals refer to minerals mined in contexts of armed conflicts that may inadvertently fund armed insurgents and fuel regional disputes.

IHI Group Procurement Policy

Basic Policy

1. Fair and Impartial Procurement

We provide business opportunities in an open manner to business partners from around the world, and welcome working with creative and competitive business partners. We also evaluate and select business partners in a comprehensive and fair manner based on factors such as quality, price, delivery schedule, technology development capabilities, and financial conditions.

2. Mutually Beneficial Partnership with Our Business Partners

We regard our business partners as value creators, and through seeking to realize optimal levels for quality, price, and delivery, together with procurement reliability, we aim to establish relationships of trust with our business partners and bring about the mutual enhancement of competitiveness and prosperity with them.

3. Approach to Compliance and Social Responsibility

We comply with the related laws that govern our local and global businesses. To fulfill our social responsibility, we shall conduct CSR procurement with due consideration not only of basic requirements such as quality, price, and delivery, but also of human rights, labour conditions, occupational safety and health, the environment, and information management.

Requests to Our Business Partners

The IHI Group asks for its suppliers' cooperation and understanding in the pursuit of the following values to further CSR procurement in collaboration with the suppliers while promoting business activities:

- (1) Compliance with Laws, Regulations, and Social Norms
- (2) Paying Attention to Human Rights, Labour Conditions, and Occupational Safety and Health
- (3) Respect for the Environment
- (4) Information Disclosure
- (5) Ensuring Quality and Delivery Periods
- (6) Enhancement of Competitiveness
- (7) Efforts to Address Conflict Minerals
- (8) Implementation Throughout the Supply Chain
- (9) Providing Information on Efforts

Supply Chain Management

Education/Awareness Building

The IHI Group prioritizes training and internal audits related to relevant procurement laws to continually strengthen compliance.

We conduct a variety of professional procurement and other training programs not only in IHI Group procurement departments but also all other departments with a need to understand procurement-related laws. The e-learning programs ingrain the IHI Group Procurement Policy in every IHI Group executive and employee and teach about the Subcontract Act, proper import declarations, features of customs areas, and other features of procurement. Employees in charge of IHI Group procurement learn the essentials of regular procurement work, such as the Subcontract Act, Logistics Special Designations under the Antimonopoly Act, the Japan's Stamp Tax Act, and proper import declarations.

Each IHI Group procurement division voluntarily reviews the Subcontract Act on a monthly basis and import declarations on an annual basis to ensure proper practices and to promote improvements. In addition, internal audits provide guidance regarding areas of improvement.

Overseas Procurement Network



Tokyo, Japan
London, England
New York, United States
Shanghai and Dalian, China
Seoul, Korea
New Delhi, India
Bangkok, Thailand
Singapore, Singapore
Kuala Lumpur, Malaysia
Ho Chi Minh City and Hanoi, Vietnam

Participants in Procurement Training

(Unit: People, Scope: IHI and affiliated companies in Japan)

Item	2019	2020	2021
Lecture on Subcontract Act*1	126	38	143
Lecture on Construction Business Act*1	48	40	98
Lecture on Overseas Procurement*1	81	78	82
Professional Procurement Training*2	643	233	642

*1 These three lectures are part of the professional procurement training and the numbers of participants are included in the numbers of participants for the professional procurement training.

*2 Professional procurement training was held only for the second half of 2020 due to COVID-19.

Initiatives

Strengthen Supply Chains

The IHI Group is promoting activities to strengthen the supply chain globally to prevent production and business activities from delaying due to natural disasters, infectious diseases, conflicts, and other incidents that are increasing in recent years.

We confirm the scope of impact of the prolonged delivery time due to a lack of semiconductors and implement preventative measures Group-wide, such as securing multiple suppliers, changing to specifications that have higher interchangeability, and securing appropriate stock in response to the increased time for delivery.

Recognition of Outstanding Suppliers

To further strengthen partnerships with outstanding suppliers, the IHI Group commends suppliers who have shown remarkable excellence. Fiscal 2021 saw the same endless lockdowns in cities as fiscal 2020 due to the COVID-19 pandemic. In this business environment, ten suppliers in Vietnam showed broad ingenuity to sustain engineering and manufacturing continuity. IHI sent these companies letters of gratitude to recognize them for these outstanding efforts.

CSR Procurement Monitoring

The IHI Group promotes CSR procurement that thoroughly considers human rights, labour conditions, occupational safety and health, and environmental management in cooperation with suppliers in accordance with the IHI Group Procurement Policy. In 2020, Japan formulated National Action Plan on Business and Human Rights according to the United Nations Guiding Principles on Business and Human Rights. In line with this, the IHI Group conducted CSR procurement monitoring for 173 of its suppliers in Japan and overseas in fiscal 2021. The results of these auditing activities played a role in furthering discussions with suppliers on a wide range of topics, including how to improve CSR procurement initiatives in the future.

Responding to Anti-social Forces and Anticorruption

The IHI Group contractually requires business partners to prohibit all relationships with anti-social forces and commit 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 business partner is found guilty of such acts, they are required to cooperate in the reporting and investigation process.









Corporate Citizenship

Approach

The IHI Group strives to contribute to society, as we believe corporate social responsibility means fulfilling the expectations of society.

The Group Management Policy 2019 sets targets selected from the Sustainable Development Goals (SDGs) for each of our business areas. These targets define the material issues for social contribution activities in regions where we operate businesses and construction sites. The IHI Group encourages every director, officer, and employee to recognize themselves as a member of society and to proactively respond to social expectations through activities that contribute to society.

Material Issues of Social Contribution Activities

Material Issues	Relevance to Business	Sustainable Development Goals (SDGs)
Coexistence with Local Communities	Establishing and maintaining good relationships with local communities is essential for smooth business expansion.	 
Development of Next-generation Professionals	Developing next-generation professionals in the manufacturing field and supporting research regarding future science and technology fields are essential to solidify the foundation for the coming industries, to drive IHI brand recognition, and to guarantee business continuity.	  
Environmental Protection	Supporting activities concerning preservation of the ecosystem, measures to combat extreme climate change, cultivation of natural bounties, and protection of our planet are essential for a sustainable business. This will consequently assist in raising employee awareness regarding environmental issues.	  

Targets and Results

Approximately 1% of the IHI Group's net income is dedicated to social contribution activities.

In fiscal 2021, we invested a total of ¥260 million, approximately 0.38% of ordinary income of the fiscal year, into activities concerning social contribution.

Social Contribution Expense

(Unit: Millions of Yen, Scope: IHI and consolidated subsidiaries)

Item	2019	2020	2021	
Breakdown by activity	Coexistence with local communities	382	71	103
	Development of next-generation professionals	104	135	111
	Environmental protection	16	3	21
	Others	17	6	25
Breakdown by expenditure	Cash investment	115	156	120
	Time investment	187	40	87
	Goods donations and site costs	217	19	53
Reference	Membership fees for local organization	13	14	13
	Operating costs	109	117	110

Activity Results

(Scope: IHI and consolidated subsidiaries)

Material Issues	Indicators		2019	2020	2021
Coexistence with Local Communities	Business interests*	Visitors to events	7,977	632	645
	Social/environmental interests*	Investments to Local Communities	382 million JPY	71 million JPY	103 million JPY
Development of Next-generation Professionals	Business interests*	Participants in science (manufacturing) classes	1,628	1,356	5,297
	Social/environmental interests*				
Environmental Protection	Business interests*	Participants in Hosted Events	165	60	254
	Social/environmental interests*	Environment protection area	3,860,000 m ²	12,652 m ²	12,652 m ²

* The indicators above for business and social/environmental interests defined by S&P Global are as follows.

Business interests: Factors directly related to product development, brand improvement, human resource development, and other such business interests.

Social/environmental interests: Factors linked to Sustainable Development Goals (SDGs) and other social/environmental interests.

Corporate Citizenship

Initiatives

Major Activities in 2021

The IHI Group worked to coexist with local communities, develop next-generation professionals, and conducted a variety of other unique activities on each business site in fiscal 2021 with the utmost caution taken to prevent the spread of the COVID-19 virus.

As a joint environmental conservation research and development effort with Ochanomizu University, the IHI Group began teaching educational seminars on the function of the forest and soil at neighborhood schools and public facilities to deepen understanding about the vital role of soil micro-organisms in the carbon dioxide cycle in addition to their impact on sustaining the food chain and ecosystem.

Joint Environmental Conservation Activities with Government and NGOs (Biodiversity Protection and Awareness-Raising Activities)

A vast green belt that stretches 6 km from north to south exists in the industrial area on the coast of the Chita Peninsula. The Inochi wo Tsunagu Project to protect and nurture the animals and plants in this green area is conducted by local governments of Chita City and Tokai City in Aichi, the Japan Ecologist Association of Support, universities, and local companies. IHI not only has embraced this initiative but also participates in managing the habitats of animals living in the area and conducts events to raise awareness of citizens about the activity. In fiscal 2021, we received the Minister of the Environment Award as recognition for our sustainable social development activities. The Japan Ministry of the Environment presents this award to companies and associations carrying out particularly outstanding environmental efforts among many that aim to build a sustainable society that contributes to environmental protection by overcoming pressing global environmental

issues.

We will continue to cooperate with NPOs and local governments regarding environmental protection activities and contribute to the local communities.

Coexistence with Local Communities

• Support of the Athletic Sports HARIMA ALBION 1st Division Nadeshiko League Women's Soccer Team

IHI entered into a sponsor agreement and has been supporting Athletic Sports HARIMA ALBION since fiscal 2016 as a women's soccer team from its hometown of Harima, Hyogo.

Athletic Sports HARIMA ALBION won the championship cup in the 2nd Division of the Nadeshiko League before moving up to play in the 1st Division from 2021. The core members of this team were even selected the best eleven. Athletic Sports HARIMA ALBION energize women's soccer in Harima, Hyogo. Players compete on lower division Athletic Sports HARIMA ALBION teams, such as U18 and U15, before going on to compete on high school and university teams. All aim to eventually join the Division 1 roster.

As a member of the local community, IHI provides a training field on the IHI Aioi Works premises. We also invite players to join IHI events, which creates opportunities for IHI employees and their families as well as the local community to interact with the team. The players also practice in training jerseys displaying the IHI logo.

We love energizing the passion for sports in our hometown of Harima through our continued support of Athletic Sports HARIMA ALBION.

• Donation of Disaster Prevention and Other Supplies to Food Banks

In 2021, the Tohoku Branch began donating disaster relief supplies nearing the expiration date from employees and their families to Food Bank Tohoku AGAIN, a non-profit organization in Tohoku. The effort embodies the hope of the Tohoku Branch to become even more integrated into the local community.

Food Bank Tohoku AGAIN delivers the food donations to single-parent families, students, impoverished families, and anyone else in need. In addition, the non-profit is engaged in a wide range of other efforts, such as running children's cafeterias and a private after-school program. The word "AGAIN" not only has the standard English meaning but also embodies "again"—a word meaning "please eat" in the Tohoku dialect with a very similar pronunciation.

We will promote these efforts at IHI Group companies and with business partners to expand the circle of support for Food Bank Tohoku AGAIN. In this way, the Tohoku Branch will continue its work to coexist with the local community.

Corporate Citizenship

Development of Next-Generation Professionals

• Jet Engine Class for Elementary and Junior High School Students

The IHI Group teaches classes at elementary and junior high schools to nurture next-generation science professionals. These classes are developed jointly with Ochanomizu University through a curriculum that teaches the wonders of science as well as how each individual can contribute to society through the science skills learned in school.

In fiscal 2021, we taught classes to 713 elementary and junior high school students at nine schools and public facilities in the vicinity of the headquarters as well as the Soma, Yokohama, and Kure Works. A student survey after the class received wonderful feedback, with comments saying: "I didn't realize science was so cool." "It was really fun learning how jet engines work. I want to learn even more." "It's amazing that I was able to use the things I learned in elementary school."

The IHI Group will continue to visit elementary and junior high schools near its business sites to teach students on themes related to IHI products in the hope of developing next-generation professionals.

• Learning to Fulfill the Dreams of Children

The IHI Group hopes to make the universe a stage for learning for children to recognize themselves as earthlings and cultivate a passion for life. We work with elementary, junior, and senior high schools near Mizuho Aero-Engine Works to create art to deliver to the stars, such as cosmological couplets, five-verse poems, and drawings, through general, language, science, and ethics education. The children's art is launched into space with an aerospace instrument, such as a private craft, rocket, spaceship, or international space station. Roughly 60,000 children have participated in the program over the last 21 years.

In fiscal 2021, we launched art made by 4,000 children from 31 local schools in 8 countries and regions. The IHI Group continued to offer and expand opportunities to write cosmological couplets (online) for children to encourage one another beyond countries and regions, which has allowed everyone to grow through this new online work experience program. We presented all the students who took part with a pin-back button designed by elementary and junior high school students near the Mizuho Aero-Engine Works as well as a certificate of their art being launched into space. Participants expressed how this class has provided wonderful memories. The IHI Group will continue to grow alongside elementary, junior high, and high school students through learning experiences to fulfill the dreams of children.

• On-site Suspension Bridge Construction Tour

IHI Infrastructure Systems hosts tours and visiting classrooms for neighborhood elementary, junior, and senior high schools on suspension bridge construction sites.

In fiscal 2021, 53 elementary school students in Kaizu City, Gifu, rode on an aerial work platform to see a bridge from above, sat in the driver's seat of a large-scale crane, and took a tour for a first-hand look at instructions given to crane operators using specialized on-site terminology and various other operations. We also took the students on a virtual tour that monitored an actual construction site.

Moreover, IHI visited and took 51 students from a high school in Masuda City, Shimane, and 60 students from an elementary school in Hamada City, Shimane, on virtual tours of construction sites as well as taught a class. The curriculum described a roadway under construction and explained construction sites using tools like a video of bridge-building sites in Japan and overseas. The children who took part asked many questions, showing excitement and great interest in the work to build bridges. We even received letters of gratitude and messages of thanks several days after the class. The IHI Group will continue to cultivate next-generation professionals through tours of construction sites in the future and contribute to establishing sustainable high-quality social infrastructure.

Corporate Citizenship

Environmental Protection

• Visiting Seminars on the Functions of the Forest and Soil (Biodiversity Class)

The IHI Group started a seminar on the functions of the forest and soil as a joint research and development project with Ochanomizu University. In fiscal 2021, we provided this class to elementary schools near business sites. The program observed soil samples from each schoolyard and from greenery areas on IHI Group business sites as well as the organisms living in it using microscopes.

The seminar offered discoveries about the various organisms living in the soil of the schoolyard, which are invisible to the naked eye, and understanding about the soil microbes thriving in the greenery areas on IHI business sites. We also explained the producers, consumers, and decomposers in forest and soil, and the importance of the ecosystem and biodiversity including the food chain, the carbon cycle, and photosynthesis. The seminar even described the impact climate change has on the ecosystem and biodiversity.

In fiscal 2021, we taught classes to 254 students at four schools and public facilities near the Soma, Yokohama, and Kagoshima Works. The students who took the class commented on how fun it was to learn so much about soil life, how much they want to share the importance of nature with those around them, and the joy of seeing and learning about the importance of microscopic organisms, even if they don't like bugs much.

To realize a sustainable society, the IHI Group will continue to conduct this seminar at a wide range of schools to share the importance of conserving a nature-rich environment and rich ecosystems, which will raise awareness about environmental issues.

• Participation in Forest Conservation Activities

The IHI Group conducts various environmental protection initiatives suitable for the environments around each business site.

In fiscal 2021, the Hokkaido Branch participated in activities run by the Hokkaido Forest Volunteers Association. One of these volunteer activities set up protective nets against damage caused by wild animals on forest land (88.5 ha) in Sumikawa, Sapporo City, Hokkaido. Sapporo City has had frequent damage caused by deer and other animals. The animals eat sprouting new seedlings and tree bark, which stops forest growth. The purpose of hanging these nets is to prevent this damage. As a role in fulfilling our responsibilities to these forests, this volunteer activity provided an invaluable opportunity to learn about the promotion of industry, conservation of national land, preservation of biodiversity, and other environmental protection efforts.

The IHI Group will always cooperate with local municipalities, non-profit organizations, and local companies in activities that properly protect surrounding environments.

• Initiatives by IHI Aioi Works (Disclosure of Habitats for Biodiversity)

IHI Aioi Works is surrounded by a rich natural environment, from the mountain forests to Aioi Bay. In the lush green grounds that make up 70% of its land area, the potential for biodiversity has been verified through plant and animal surveys and green infrastructure.

In fiscal 2018, the Association for Business Innovation in Harmony with Nature and Community (ABINC) praised IHI Aioi Works for its consideration of biodiversity with the "Business Location in Harmony with Nature (ABINC)" certification. Since then, we have been conducting surveys, from detailed topography of the mountain forest on our grounds to plant distribution. As a result, IHI has been able to digitalize and centrally manage this information as cartographic information to sustain biodiversity and improve the natural environment around Aioi Works.

In the future, we will use this data to create specific conservation plans and protect the diverse and plentiful forest resources.

Reduce Environmental Impact

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Environmental Management

Policies

The IHI Group advocated the creation of new value necessary to a sustainable society in the Group Management Policy 2019. Building on this as a base concept, "Project Change" outlines an ideal form that aims to create a world where nature and technology work in unity. That is why the IHI Group pursues ESG management that can realize this vision.

Our environmental initiatives continue to work to reduce the environmental impact on society at large in an effort to combat climate change and address other social issues. The work also helps cultivate new business opportunities and pioneer innovative business models. Our Group will continue to comply with all environmental laws and regulations as well as endeavor to reduce the environmental impact of our plants and offices in local regions. We will also propose low-carbon and carbon-neutral businesses using CO₂ emissions throughout the entire life cycle of our products and services as a core metric.

IHI Group Basic Environmental Policy

Article 1. Establishment of Environmental Management System

To ensure continuous improvement of environmental management, the IHI Group establishes an environmental management system, sets specific objectives and executes an action and a performance evaluation.

Article 2. Complying with Environmental Laws and Regulations

The IHI Group complies with environmental-related laws and regulations/agreements, policies/plans in related industries, and strives to stipulate and apply independent management standards to enhance environmental management.

Article 3. Provision of Environmentally-friendly Products

The IHI Group provides the society with the products/services that contribute to reduce environmental burdens.

Article 4. Reduction in Environmental Burdens in Business Activities

The IHI Group strives to preserve environment and reduce the environmental burdens in its all business activities.

Article 5. Environmental Education

The IHI Group, through environmental education, raises awareness of all people engaging in operations, including officers, employees, and temporary staff of IHI Group companies, thereby they are able to act having concern with environmental problems on their own.

Article 6. Disclosure of Information

The IHI Group actively participates in the society, disclosure information, and communicates to commune with local communities and preserve regional environment.

Environmental Management

Structure

Environment Committee

The IHI Group established the Environment Committee under the ESG Management Promotion Committee to take the lead on environmental activities at every plant and office throughout the entire Group. We promote and expand Environment Committee decisions at all Environmental Manager Liaison Groups in each business area and at the Headquarters Representative's Office. After constructive deliberation, IHI raises awareness and expands these decisions to all Group companies. Business areas and Business Units strive to reduce our environmental impact through capital investments to mitigate environmental risks—one Group-wide risk management initiative—legal and regulatory compliance, energy saving, waste emission reductions, and more. We draft action plans at the beginning of the fiscal year in line with each material subject and track progress as well as provide support using a PDCA cycle through the Environment Committee.

Environmental Management Systems Diagram



Environment Committee

Chairperson	Officer in charge of ESG
Secretariat	Administration Division, Corporate Planning Division
Committee members	Business areas, headquarters representative's offices, and environmental general manager at the Head Office divisions nominated by the Committee chairperson
Number of meetings convened in 2021	4

Collection of Environmental Information

The IHI Group collects environmental data related to environmental management at all overseas affiliates and consolidated Group companies (subsidiaries). Each Group company appoints both environmental general manager and environmental manager to oversee the decision-making and expansion of environmental activities at their organization. As the smallest unit of environmental activities at each company, the environmental management centers appoint a site environmental manager to take charge of particular environmental activities. The Group companies encompassed by environmental management engage in a variety of different businesses. These entities include companies with production plants, companies overseeing engineering, and on-site construction work as well as companies focused on only administration. Each environmental management center verifies the flow of energy, water, and other resources and builds systems to efficiently collect environmental data. The fiscal 2021 data shows figures current as of June 15, 2022.

Environmental Management

ISO 14001 (Environmental Management System)

The IHI Group has put in place Environmental Management Systems (EMS) at each primary production plant and other environmental management centers to manage environmental efforts with a PDCA cycle. Each of these environmental management centers is acquiring the ISO 14001 certification to ensure each established EMS satisfies international standards for environmental management.

These environmental management centers acquire the ISO 14001 certification through the most suitable review board based on its business activities.

ISO 14001 Internal and External Audits

The IHI Group always strives to enhance the level of environmental management through regular internal and external audits of each environmental management center. These audits evaluate the fitness and effectiveness of each EMS in accordance with ISO 14001 standards.

External audits conducted in fiscal 2021 did not find deficiencies at any of the ISO 14001-certified environmental management centers and affirmed that each EMS complied with all of the ISO 14001 requirements.

ISO 14001 Certification Status

Targets	Item	2021
IHI and all affiliated companies	Coverage rate (%)	80.8* ¹
	Number of sites	45
IHI and affiliated companies in Japan	Coverage rate (%)	61.7* ²
	Number of sites	37
Affiliated companies overseas	Coverage rate (%)	57.1* ²
	Number of sites	8

*1 Based on amount of energy consumption.

*2 Based on number of sites.

Education/Awareness Building

Environmental Education

The IHI Group environmental education includes Group-wide education programs and training for everyone in charge of environmental management at each environmental management center. The Head Office leads and monitors these training and education programs.

We have also designated every June as environment month. The IHI Group not only quizzes every employee on environmental topics but also shares information about familiar energy-saving activities through an internal newsletter to heighten their environmental awareness. In addition, the management team undergoes an e-Learning program on urgent climate-related issues.

Our environmental management centers have acquired the ISO 14001 certification and provide education and training according to those ISO standards.

Environmental Education and Training Participants

(Unit: People, Scope: IHI and affiliated companies in Japan)

Eligible Participants	Curriculum	2020	2021
Employees	e-Learning	Not conducted* ¹	4,625
	Environmental Quiz	Not conducted* ¹	4,220
Environmental officers	Group Energy Efficiency Training* ²	58	Not conducted
	Group Waste Training	62	Not conducted

*1 Activities were not conducted in fiscal 2020 due to the impact of the novel coronavirus pandemic.

*2 Total number of participants for the Group energy efficiency training held twice (some returning students).

Environmental Management

Targets

The IHI Group drafts environmental action plans every three years and strives to engage in comprehensive environmental initiatives.

The IHI Group Environmental Action Plan 2019 created three major pillars for environmental initiatives from fiscal 2019 to fiscal 2021: reduce the environmental impact of products and services; reduce the environmental impact of plants, offices, and other business establishments; and cultivate human resources to promote environmental management.

We extended this three-year action plan an additional year to run through fiscal 2022.

Results

Costs to Reduce the IHI Environmental Impact

(Unit: Billions of yen; Scope: IHI Corporation)

Item	2018	2019	2020	2021
Investments	6.96	6.52	3.34	3.57
Expenditures	1.43	0.78	0.23	0.92

Progress of IHI Group Environmental Action Plan 2019

Action Plans	Targets	2021 Progress and Results
Reduce the environmental impact of products and services	Reduce the CO ₂ emissions of products and services	Executed initiatives to reduce the CO ₂ emissions of products and services.
Reduce the environmental impact in plants, offices, etc.	No major violation of environmental laws/regulations and environmental accidents	Achieved no major violation of environmental laws/regulations and environmental accidents.
	Reduce per unit CO ₂ emissions by at least 3% by fiscal 2021 compared to fiscal 2018	Reduced per unit CO ₂ emissions by 15.3% compared to 22.2 t-CO ₂ emissions per 100 million yen in 2018 to 18.8 t-CO ₂ emissions per 100 million yen in 2021.
	Reduce per unit energy consumption by at least 3% by fiscal 2021 compared to fiscal 2018	Reduced energy intensity by 49.1% year-on-year from 39.3 TJ per 10 billion yen in 2018 to 20.0 TJ per 10 billion yen in 2021.
	Generate less waste each year between fiscal 2019 to fiscal 2021 than that generated in fiscal 2018	Reduced waste generation by 18.5% compared to 29,010 tons in 2018 to 23,663 tons in 2021.
	Use less water withdrawal* than the amount used in 2018 in 2019 and 2021	Water withdrawal increased by 0.3% compared to 4,182 thousand m ³ in 2018 to 4,195 thousand m ³ in 2021.
Cultivate human resources to promote environmental management	Develop professionals who can carry out environment management	Provided energy efficiency training to members in charge of these duties.

* Changed from amount of water consumption to amount of water withdrawal since 2019.

Environment-related Capital Investments

(Unit: Millions of yen, Scope: Non-consolidated IHI plants and offices)

Category	Amount invested* ¹	Cost effect* ²	Main items	Environmental impact mitigation* ³	Risk mitigation* ³
Energy-saving/climate change measures	61	6	Adoption of independent air-conditioning systems at plants, etc.	Energy consumption and CO ₂ emission reductions	No major violations of environmental laws/regulations or environmental accidents
Environmental risk measures	285	–	Renewal of aged equipment, etc.		
PCB measures	10	–	Renewal and update of equipment containing PCBs		
Total* ⁴	357	6			

*¹ Environment-related capital and construction investments for non-consolidated IHI plants and offices made in 2021.

*² Reductions in energy purchasing costs estimated over a year.

*³ IHI Corporation will consider additional approaches and examine the effectiveness in the future.

*⁴ The total value for each item is rounded off and may not match the figures in the breakdown.

Reduction of the Environmental Impact of Products and Services

Approach

The IHI Group certifies products and services as environmentally-friendly products and services if demonstrating outstanding contributions to the protection of the global environment for society and a reduction in our environmental impact. Environmentally-friendly designs will help us contribute to achieving carbon neutrality by 2050 while enhancing corporate value throughout the entire IHI Group.

The IHI Group certifies products satisfying the criteria below as environmentally-friendly products.

- The product incorporates environmental considerations at every stage throughout the life cycle from research, development, and design to procurement, manufacture, use, service, and disposal
- The product adheres to the ISO 14021 standard (Environmental labels and declarations—Self-declared environmental claims [Type II environmental labelling])

Initiatives

Environmentally-Friendly Products Certification Scheme

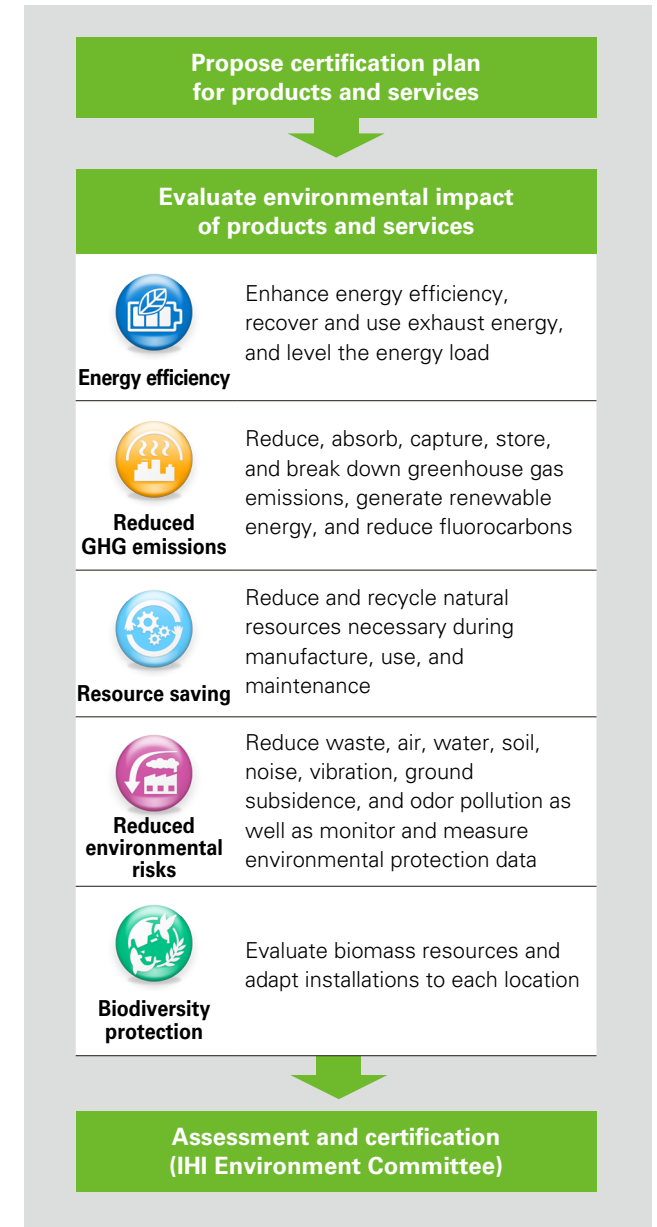
The IHI Group uses an environmentally-friendly products certification scheme to promote reductions in the environmental impact of its products and services. This system certifies products and services as having outstanding environmental performance. Such products and services help protect the environment and reduce our environmental impact.

Environmentally-friendly products and services also contribute to reductions of the environmental impact on society at large, which in turn helps protect the environment.

• Certification Process

The Group-wide Environment Committee evaluates the environmental performance of products and services based on IHI guidelines. We only certify products and services with outstanding environmental performance as environmentally-friendly. This review process assesses whether products and services incorporate environmental performance measures throughout every stage of the life cycle.

Certification Process of Environmentally-Friendly Products



Reduction of the Environmental Impact of Products and Services






Results

Environmentally-Friendly Products

Products and services certified as environmentally-friendly products are listed in the table to the right. The website below also introduces both certified and non-certified IHI products and services.

[web](#) **IHI-WORLD**

Certified Products

Products and services	Evaluation items				
	Energy efficiency 	Reduced GHG emissions 	Resource saving 	Reduced environmental risks 	Biodiversity protection 
Intake facility (Selective water withdrawal facility)					●
LRT (Light Rail Transit)	●	●	●	●	
New Transit System	●	●	●	●	
Active Noise Control System				●	
Silencer/Enclosure				●	
Noise/Vibration Consultation				●	
Diesel Engines	●	●	●	●	
Life Cycle Administrator (LC-A)	●		●	●	
TF-Detector	●		●	●	
MF-Detector	●		●	●	
Energy-saving Parking System NPC24H Tachikawa Midori-cho No.2 Parking Lot	●				
IHI IC Reactor	●		●	●	
ORC Power Generator HEAT INNOVATOR®		●	●	●	
LNG Smart Satellite	●	●	●		
Industrial photovoltaic power system		●			
Technology for cleaning, chipping and cutting surfaces without using water		●	●	●	
Cycles Management System	●	●	●		
Turbochargers for Vehicles	●		●	●	
ORC Power Generator Heat Recovery HR Series		●	●	●	
IWV-34C Vacuum Degreaser	●		●		
Toyosu Foresia Environmentally-Friendly Building	●	●	●	●	

Climate Change

Approach

Climate change has an enormous social and economic impact and is a vital social issue for companies to address in order to realize sustainability. The IHI Group sees climate change as one important management issue and is doing everything possible to combat it.

IHI Carbon Neutrality by 2050

The IHI Group has pledged to make its entire value chain carbon-neutral by 2050. We aim to be carbon-neutral in our processes overall by reducing the direct and indirect (Scope 1 and 2) GHG emissions from our business activities as well as Scope 3 emissions from the upstream and downstream processes in our value chain.

P.35 Innovation Management

Participation in Third-party Initiatives

In May 2019, the IHI Group became a signatory to the Task Force on Climate-related Financial Disclosures (TCFD) by resolution of the Board of Directors. This framework plays a role as a tool to formulate strategies able to strengthen risk management and cultivate business opportunities.



Structure

The IHI Group engages in environmental initiatives that include measures to combat climate change centered on the Environment Committee.

The IHI Group put in place a task force under the ESG Management Promotion Committee in fiscal 2021 to advocate carbon-neutral initiatives throughout the entire value chain. The Officer in charge of CSR led this task force made up of members selected from the business areas and corporate divisions in fiscal 2021 before the General Manager of the Corporate Planning Division took the helm in fiscal 2022. The Administration and Corporate Planning Divisions act as the secretariat. The Committee reports on its activities to the ESG Management Promotion Committee and other management team meetings to receive guidance and accelerate initiatives.

P.11 Risk management

P.78 Environmental Management

IHI Carbon-neutral 2050

Our 2050 goal to achieve carbon neutrality throughout the entire value chain

Initiatives to Become Carbon-neutral

Business operations	Procurement	Partner with eco-friendly businesses
	Production	Pioneer the adoption of new technologies, including for in-house products and systems
Products and services	Transition	Fuel conversion
		Use of renewable energy
		Enhance efficiency of current power plants
	Transformation	Lighten and electrify products
		Utilize renewable energy
Transformation	Introduce new technologies	Use hydrogen and ammonia
	Transformation	Recycle carbon

TCFD Disclosure

The disclosure items on the page below are recommended by TCFD.



- **Governance**
P.78 Environmental Management
P.83 Climate Change
- **Strategy**
P.85–87 Climate Change
- **Risk Management**
P.32–34 Risk Management
P.83 Climate Change
- **Metrics and Targets**
P.83–84 Climate Change

Climate Change

Targets and Results

The IHI Group aims to reduce CO₂ emissions from plants, offices, and other business establishments in line with the Japanese government's policy target of a 46% reduction in 2030 (compared to fiscal 2013 levels) and carbon neutrality by 2050.

Third-party Verification of Data

	No.1811004327
Environmental Information Independent Verification Report	
To: IHI Corporation	
1. Objective and Scope Japan Quality Assurance Organization (hereafter, "JQA") was engaged by IHI Corporation (hereafter, "the Company") to provide an independent verification on "CO ₂ Emissions (fossil fuel, non-energy derived) at Environment Management Sites of IHI Group" and "Total Energy Consumption at Environment Management Sites of IHI Group" (hereafter, "the Reports"). The content of our verification was to express our conclusion, based on our verification procedures, on whether the statement of information regarding GHG emissions and energy consumption in the Reports was correctly measured and calculated, in accordance with the "FY2021* IHI Group Environmental Information Collection and Calculation Rule" (hereafter, "the Rule"). The purpose of the verification is to evaluate the Reports objectively and to enhance the credibility of the Reports. <small>*The fiscal year 2021 of the Company ended on March 31, 2022.</small>	
2. Procedures Performed JQA conducted verification in accordance with "ISO 14064-3" for GHG emissions, and with "ISAE3000" for energy consumption, respectively. The scope of this verification assignment covers Scope 1 & 2 CO ₂ emissions and energy consumption. The verification was conducted to a limited level of assurance and quantitative materiality was set at 5 percent each of the total GHG emissions and total energy consumption in the Reports. The organizational boundaries of this verification include the head office of IHI Corporation, sixty-one domestic sites and thirteen overseas sites of the IHI Group. Our verification procedures include: <ul style="list-style-type: none"> • Performing validation of integrated functions to check the Rule prior to the on-site assessment. • Conducting on-site verification at the Company's three domestic sites: Mizuho Aero-Engine Works, Kure Aero-Engine & Turbo Machinery Works and Akishima Office. The location of sampling sites for on-site assessment were selected by the Company. • On-site assessment to check the Reports' scope and boundaries; monitoring points of energy consumption; CO₂ emission sources; and monitoring and calculation system. • Vouching: Cross-checking the activity data against evidence. 	
3. Conclusion Based on the procedures described above, nothing has come to our attention that has caused us to believe that the statement of the information regarding the Company's FY2021 GHG emissions and energy consumption in the Reports is not materially correct or has not been prepared in accordance with the Rule.	
4. Considerations The Company was responsible for preparing the Reports, and JQA's responsibility was to conduct verification of GHG emissions and energy consumption in the Reports only. There is no conflict of interest between the Company and JQA.	
 Sumio Asada, Board Director For and on behalf of Japan Quality Assurance Organization 1-25, Kamadasacho, Chiyoda-ku, Tokyo, Japan July 26, 2022	

* The covered data are CO₂ emissions (Scope 1, 2) and energy consumption.

CO₂ Emission and Energy Consumption Targets and Results

Action Plans	Targets	KPI	2018 Results (Base Year)	2020 Results	2021 Results
Reduce the environmental impact in plants, offices, etc.	Reduce CO ₂ emissions intensity at least 3% by 2021 compared to 2018	CO ₂ emissions intensity (t-CO ₂ /100 million yen)	22.2	20.2	18.8
	Reduce energy intensity at least 3% by 2021 compared to 2018	Energy consumption intensity (TJ/10 billion yen)	39.3	20.5	20.0

CO₂ Emission and Energy Consumption

(Scope: IHI and consolidated subsidiaries)

Item		2018	2019	2020	2021
CO ₂	CO ₂ emissions (Scope 1 + Scope 2)* ³ (t-CO ₂)	329,602	254,227	225,066	220,138
	Scope 1 (t-CO ₂)	80,032	64,724	58,517	64,270
	Scope 2 (market-based) (t-CO ₂)	249,570	189,503	166,549	155,868
	CO ₂ emissions intensity* ¹ (t-CO ₂ /100 million yen)	22.2	18.3	20.2	18.8
Energy	Energy consumption* ³ (TJ)	5,828	2,468	2,283	2,348
	Fuel consumption (TJ)	–	1,044	974	1,084
	Electricity consumption (TJ)	–	1,398	1,276	1,229
	Heat consumption (TJ)	–	–	7	5
	Steam consumption (TJ)	–	0	0	0
	Renewable energy used (TJ)	–	26	26	31
Energy consumption intensity* ¹ (TJ/10 billion yen)	39.3	17.8	20.5	20.0	

*1 Net sales as the denominator.

*2 Changed the method of calculating energy consumption since 2019.

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

Climate change

Initiatives

Reducing CO₂ Emissions from Business Activities

The IHI Group makes every effort to reduce CO₂ emissions from plants, offices, and other business establishments by both actively pursuing energy-efficient business practices and promoting the use of low-carbon energy.

Our energy-efficient initiatives not only enhance operations but also make all the necessary capital investments. We have put in place energy management standards to drive these operational improvements. These standards aim to provide ideal operation conditions and criteria to review operational management. These standards also become a knowledge base to conduct training on energy efficiency through outside experts in an effort to heighten the management quality of officers. Our capital investments systematically renew aged equipment with energy-efficient equipment and adopt renewable energy sources. Another aspect important to reducing CO₂ emissions is shipping and transport. The IHI Group strives to promote modal shifts through greater load efficiency and active use of marine vessels.

Risk and Opportunity due to Climate Change

• TCFD Initiatives

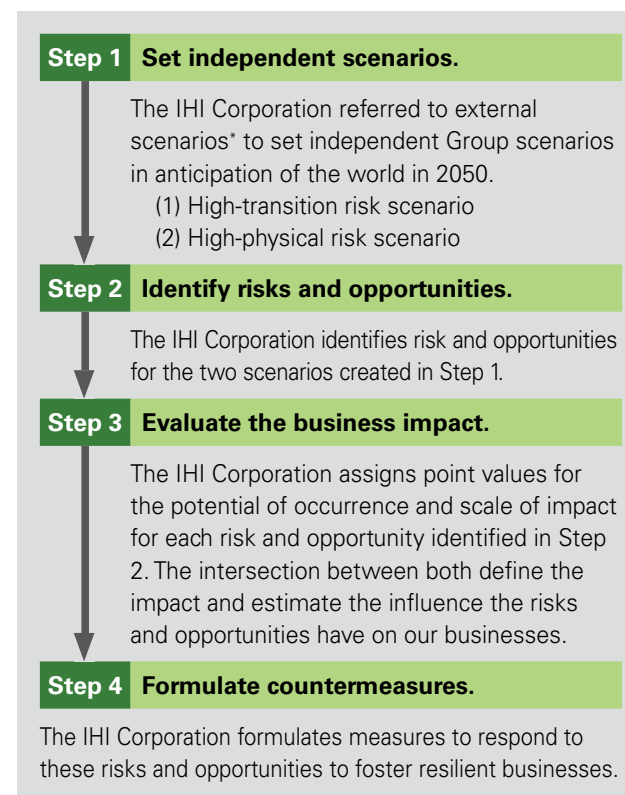
The IHI Group conducted simple scenario analyses of four business domains with a significantly large impact on climate change: the energy business, bridge and water gate business, vehicle turbocharger business, and the civil aero engine business.

The first step set (1) a carbon-neutral world as the highest transition risk and (2) a 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 (CC). 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. These policies and strategies will contribute to the development of a sustainable corporate group and society at large.

Scenario Analysis Process



* External reference scenarios:

- A carbon-neutral world
IPCC RCP 2.6, IEA 2DS Scenario, etc.
- A world greatly impacted by climate change
IPCC RCP 8.5, etc.

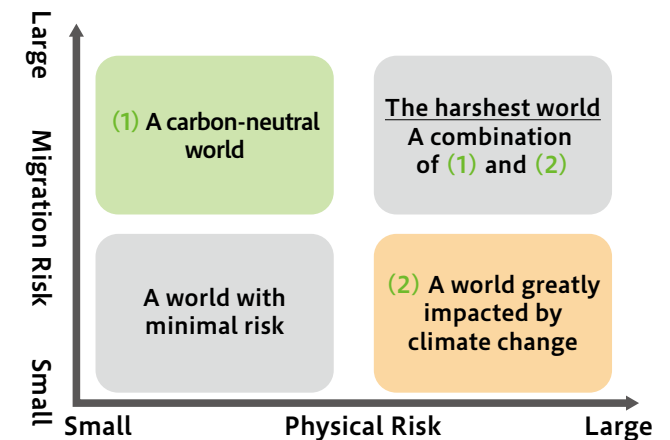
IHI Group scenarios:

(1) High-transition risk scenario

This scenario presents (1) a carbon-neutral world where society at large shifts to mitigate climate change and stop all greenhouse gas emissions.

(2) High-physical risk scenario

This scenario presents (2) a world greatly impacted by climate change that needs to adapt to the physical impact and directly confront drastic devastation by natural disasters.



Countermeasures set to address the two extreme worlds anticipated by these IHI scenarios enhance the resilience of IHI Group businesses against future risks.

The IHI Group can also reduce risks against the harshest world facing both these scenarios at the same time by integrating the countermeasures for each.

Climate change

The IHI Corporation divides the risks and opportunities identified for each of the four business domains and the countermeasures into two categories: **1. risks, opportunities, and countermeasures specific to each business** and **2. risks, opportunities, and countermeasures shared across all businesses**.

Risks, opportunities, and countermeasures in 1. are shown in the table below while those in 2. are shown in the table on the next page.

1. 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	<ul style="list-style-type: none"> Declining demand for large fossil fuel power generation equipment 	<ul style="list-style-type: none"> Increasing procurement costs (carbon tax, etc.) for materials with high CO₂ emissions (concrete, steel, etc.) 	<ul style="list-style-type: none"> Declining demand for combustion engine vehicles unable to address carbon-neutral requirements and a falling demand for existing turbochargers 	<ul style="list-style-type: none"> Declining demand for aircrafts due to carbon-neutral requirements and standardization of alternative high-speed means of transportation
Opportunities	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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.) 	<ul style="list-style-type: none"> 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 Countermeasures	<ul style="list-style-type: none"> Rapidly deploy carbon-neutral technologies to society Promote technological development to stabilize the energy supply Expand the life cycle business through remote monitoring and other Internet of Things (IoT) technologies 	<ul style="list-style-type: none"> Reduce construction schedules and labor costs by labor-saving, remotization, and improving construction methods through promoting digital transformation (DX) 	<ul style="list-style-type: none"> Rapid development and commercialization of turbochargers for electric vehicles that comply with carbon-neutral requirement trends 	<ul style="list-style-type: none"> Early commercialization of electric engines and advanced technologies such as advanced composites.
(2) Risks, opportunities, and main countermeasures in a world greatly impacted by climate change				
Risks	<ul style="list-style-type: none"> Extreme delays due to on-site construction stoppages or disasters caused by frequent severe weather 	<ul style="list-style-type: none"> Extreme delays due to on-site construction stoppages or disasters caused by frequent severe weather 	<ul style="list-style-type: none"> Suspension of production due to disrupted supply chains caused by frequent severe weather 	<ul style="list-style-type: none"> Suspension of production due to disrupted supply chains caused by frequent severe weather
Opportunities	<ul style="list-style-type: none"> Contributing in early recovery of equipment damaged in severe weather Increasing demand for digital technologies to promote labor saving and remote operation 	<ul style="list-style-type: none"> Increasing demand to build robust national infrastructure Contributing in early recovery of infrastructure damaged in severe weather 	<ul style="list-style-type: none"> No opportunities unique to our business 	<ul style="list-style-type: none"> No opportunities unique to our business
Main Countermeasures	<ul style="list-style-type: none"> Expand the life cycle business through remote monitoring and other Internet of Things (IoT) technologies 	<ul style="list-style-type: none"> Expand business beyond life cycle 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 	<ul style="list-style-type: none"> Strengthen supply chains 	<ul style="list-style-type: none"> Strengthen supply chains

Climate change

2. Main risks and countermeasures shared across all businesses

(1) Transition Risks and Countermeasures for a Carbon-neutral World

Category	Main Topics	Main Countermeasures and Transitioning to Opportunities
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 as 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 CO ₂ 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 can help both mitigate and adapt to climate change

(2) Physical Risks and Countermeasures in a World Greatly Impacted by Climate Change

Category	Main Topics	Main Countermeasures
Acute/Chronic	Ceased business activities due to damaged offices and bases caused by typhoons, floods, or other natural disasters, etc.	<ul style="list-style-type: none"> • 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 advanced measures in anticipation of foreseeable flood damage

Circular Economy

Approach

The IHI Group properly manages waste and water resources and strives to enhance resource efficiency and reduce the environmental impact to realize a sustainable society.

We advocate the reduction, reuse, and recycling (3Rs) of waste and properly manage and dispose of any waste produced by each environmental management center. Our water resource initiatives carefully manage water use and work to prevent any pollutants from reaching water resources through a deliberate water supply from stable water resources and proper equipment maintenance. The IHI Group has laid out chemical substance initiatives in the Basic Policy on Chemicals Information Management. We have identified prohibited and controlled substances regulated by both legal and customer requirements in each region and country where our products and services are available. Our supply chain also pinpoints and properly manages the chemical substances contained in products for the purpose of minimizing the impact IHI Group products and services have on human health and the environment.

IHI Group's Basic Policy on Chemicals Information Management

Basic Activities

1. The IHI Group independently manages chemical substance data by not only complying with the laws, regulations, and standards on the management of chemical substances in Japan but by also clearly grasping trends of global chemical management. Minimizing the health and environmental impact of IHI Group products and services enhances the competitiveness of our products.

Scope

2. All IHI Group Business Activities Education

Education

3. The IHI Group provides the necessary information and training on laws and regulations to heighten legal and regulatory awareness among all officers as well as IHI and partner company employees.

Structure

The IHI Group deliberates and decides on the approach and important matters of circular resources through the Environment Committee, a Group-wide body chaired by the officer in charge of ESG.

P.78 **Environmental Management**

Circular Economy

Targets and Results

Waste Emissions and Water Withdrawal Targets and Results

Action Plans	Targets	KPI	2018 Results (Base Year)	2020 Results	2021 Results
Reduce the environmental impact in plants, offices, etc.	Generate less waste than the amount generated in 2018 in 2019 and 2021	Waste generated (tons)	29,010	20,912	23,633
	Use less water withdrawal* than the amount used in 2018 in 2019 and 2021	Water withdrawal (1,000 m ³)	4,182	4,008	4,195

* Changed from amount of water consumption to amount of water withdrawal since 2019.

Waste Emissions and Water Withdrawal

(Scope: IHI and consolidated subsidiaries)

Item		2018	2019	2020	2021
Waste	Waste generated (tons)	29,010	27,564	20,912	23,633
	Toxic waste generated* ¹ (tons)	–	164	182	255
	Amount recycled* ² (tons)	–	61,799	15,067	16,164
Water	Water withdrawal* ³ (1,000 m ³)	4,182	4,251	4,008	4,195
	Public water (1,000 m ³)	–	750	651	664
	Industrial water (1,000 m ³)	–	868	799	792
	Groundwater (1,000 m ³)	–	1,948	1,731	1,691
	Rainwater, rivers, lakes, etc. (1,000 m ³)	–	685	827	1,047
	Waste water (1,000 m ³)	–	–	3,373	3,265

*1 The total of infectious wastes among the specified wastes and the specified controlled wastes.

*2 Waste reclaimed as valuable resources.

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

Circular Economy

Initiatives

Waste

The IHI Group strives to reduce waste by improving production yield at plants as well as sorting and recovering resources from waste.

To ensure all waste is disposed of properly, our waste management initiatives also review collection, transportation, and waste disposal contracts, verify final disposal through digital manifests, and confirm circumstances on-site at intermediate and final waste disposal sites.

• Cooperation with Third Parties to Reduce Waste Emissions

The IHI Group works with expert consultants to reduce the waste generated by its plants and offices. As a result, we discovered useful waste that can be recovered as valuable resources, and confirmed whether innovations to waste management could further reduce the remaining waste. Some of our business sites have already begun taking on specific waste reduction initiatives.

Water Resources

The IHI Group primarily uses public and industrial water as water resources. In regions with abundant underground and river water resources, we use these resources in combination with public water careful to reduce our water withdrawal. Therefore, each plant and office considers the water quality and quantity necessary for its use and chooses the best resource to withdrawal water.

In particular, we purify and distribute underground water through a relatively easy manner in regions with potable underground water. Cooling water for heat treatment furnaces and other equipment uses river or sea water instead of potable water. We also use heat exchangers to avoid pollution risks during water discharge. In addition, sprinklers on our grounds reuse water processed through tertiary treatment as an alternative to public water as much as possible.

• Water Risk Survey (On-Site Visits)

In fiscal 2021, the IHI Corporation conducted various audits centered upon water risks at 6 different sites. These audits also looked at energy management systems and the progress of PCB disposal.

Water risks in this report refer to risks of waste water from our plants, offices, and other business establishments contaminating public waters. These audits verified proper water management by visiting each site, interviewing the people in charge, and conducting physical on-site inspections. We also share the findings of these audits to raise awareness about water risks. IHI was also able to confirm PCB detoxification efforts were on track with plans. In the future, the IHI Group plans to successively audit whether plants that did not undergo on-site audits present any risk to public waters.

• Specific Efforts to Reduce Water Use

The IHI Group heightens awareness about reducing water use by tracking monthly (or bimonthly) water withdrawal by each environmental management center to graph annually for year-by-year comparisons. By monitoring the annual changes in water withdrawal for the same period each year, we expect the data will help us discover any leakage quickly.

Chemical Substances

Chemical substances used at our plants come with leakage and other risks, which may result in polluting the soil, water, or air. We must not only safely manage these chemical substances during use but also in every process, from warehousing to disposal. The IHI Group prevents leakage during purchase and transport and regularly verifies and inspects the retaining storage walls, deterioration on interior walls, and corrosion of transfer pipes. We regularly repair equipment with any deterioration or aging found during these inspections. Each of our plants is also updating Safety Data Sheets on the dangers of any chemical substances contained in products in light of legal amendments revising the list of controlled substances.

• Chemical Substances Contained in Products

Every IHI Group product containing chemicals complies with the list of regulated and controlled substances, which becomes longer each year. We aggregate data about the chemical substances contained in products throughout the supply chain and confirm whether any chemicals are prohibited or exceed acceptable levels. The IHI Group is also furthering a system to provide this same data to customers. Regulations to control the chemical substances contained in products are becoming more stringent than ever, not only in the EU but also in North America and Asia. Our Group pays extremely close attention and responds accordingly to regulations that apply to each product as one business risk.

Environmental Protection

Approach

The IHI Group has set compliance to environmental laws and regulations and the prevention of environmental accidents as the highest priorities of environmental activities in business. We have also set the reduction of the environmental impact from our business activities as a priority subject in our environmental targets designated for each Group site. We emphasize cooperation with the local communities in each region where IHI does business to advance environmental conservation activities according to the unique needs of each. These efforts include agreements to prevent pollution with local government agencies and residents.

Our plants and offices in particular are often located near water sources, which means initiatives to prevent any pollutants from reaching these water sources are imperative. Therefore, we have defined independent standards that go beyond the Water Pollution Control Law and other local governmental waste water standards based on the Environmental Management System (EMS) adopted at each site. We ensure that the standards are met through regular water sampling and analysis. In addition, the person in charge of drainage and coastlines at each site conducts regular patrols to visually inspect and make sure there are no oil or other floating chemicals or irregularities in water quality. In the event of any leakage of substances into waters from IHI plants or offices, our initial response follows EMS procedures to prevent any spread of the contaminants and damage, trigger an emergency response, including correspondence with relevant departments, in an effort to investigate the root cause and prevent recurrence. In addition to the above, measures and proper disposal to prevent soil contamination from oil, chemical, and other leakage used at offices, plants, and other business establishments are also vital.

To improve the management level of these activities, we conduct regular internal audits, environmental patrols, and external reviews according to the EMS adopted by each site.

Structure

The IHI Group deliberates and decides on the approach and important matters of environmental conservation through the Environment Committee, a Group-wide body chaired by the officer in charge of ESG. 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.

P78 Environmental Management

Targets and Results

No Major Violation of Laws/Regulations or Environmental Accidents (Unit: Incidents, Scope: IHI and consolidated subsidiaries)

Action Plans	Targets	2020 Results	2021 Results
Reduce the environmental impact in plants, offices, etc.	No major violations of environmental laws/regulations and environmental accidents	0	0

Compliance with Environmental Laws and Regulations

The IHI Group properly investigates any environmental incident that occurs on a Group site and evaluates the severity and underlying factors to reduce environmental accidents and legal violations as well as to prevent recurrence.

In fiscal 2021, our Group had no major environmental incidents or legal violations affecting management.

Number of Environmental Accidents and Violations of Law (Unit: Incidents, Scope: IHI and consolidated subsidiaries)

Item	2018	2019	2020	2021
Significant environmental accidents	0	0	0	0
Major violation of environmental laws/regulations	0	0	0	0
No. of cases IHI paid fines, penalties, etc.	0	0	0	0

Volatile Organic Compounds (VOCs) emissions (Unit: ton)

Item	2021	Scope of Data Book
Toluene	39	IHI Group sites that have submitted notification in accordance with the PRTR system by end of June 2022.
Xylene	29	
Ethylbenzene	6	
Tetrachloroethylene	2	

Ratio of Treated Toxic Waste (Waste Containing PCBs) (Unit: %, Scope: IHI and affiliated companies in Japan)

Item	2019	2020	2021
Electrical equipment containing high-concentration PCBs	99.8	99.7	99.9
Electrical equipment containing low-concentration PCBs	95.6	98.1	94.0
Fluorescent lamps	45.7	44.5	58.8

Environmental Protection

Initiatives

Water Pollution Prevention

The IHI Group monitors the quality of water discharged from offices, plants, and other business establishments. By defining and managing water discharge according to independent standards stricter than waste water standards, we protect the water quality of public waters from oceans to rivers where this water is discharged. We must not only maintain and rehabilitate waste water treatment facilities but also regularly renew aged equipment, devices, and meters.

The IHI Group also prioritizes measures to prevent leaks from unseen underground pipes as a key issue. Our other initiatives include measurements of the amount of water used in specific areas, creation of underground piping blueprints, and periodic replacement of underground piping.

We also define rules on chemical substance management based on the EMS at each environmental management center to prevent disasters and environmental pollution due to chemical substances used at plants and other business establishments. Our Group categorizes the hazardous, toxic, volatile, and combustible chemical substances it handles while defining equipment and handling standards to manage these substances in a way that prevents leakage into the environment.

Soil Contamination Prevention

The IHI Group identified specific areas at offices, plants, and other business establishments that use hazardous substances and other chemicals. We strive to prevent leaks of chemical substances by establishing operational procedures and periodic patrols. We manage 68 old factory sites and production bases via a database compiling survey results for the usage history of specific harmful substances* and oils. This survey data is used as a starting point for initial reviews when restructuring plant operations.

* Harmful chemical substances refers to lead, hexavalent chromium, mercury, and other substances listed in Article 2 of the Japan Soil Contamination Countermeasures Act.

Toxic Waste

The IHI Group is furthering its response to properly dispose of hazardous polychlorinated biphenyls (PCBs) waste by organizing a specialized team led by the Head Office.

As of March 31, 2022, we have successfully disposed of 99.9% of electrical equipment containing high-concentration PCBs and 94.0% with low-concentration PCBs. However, the IHI Group currently holds a large number of fluorescent lamps waiting for disposal. To date, we have successfully disposed of 58.8%.

Chemical Resources

The IHI Group identifies and manages emissions of chemicals regulated by the PRTR Law into the air, public waters, soil, sewers, and waste and provides proper notifications in accordance with laws and regulations. We are also suppressing emissions of Volatile Organic Compounds (VOCs) into the atmosphere in accordance with the Voluntary Action Plan for Establishing a Sound Material-Cycle Society by the Japan Society of Industrial Machinery Manufacturers.

Biodiversity

The IHI Group strives to recover and preserve the surrounding environment through environmental protection activities driven by cooperation between offices, plants, and other business establishments and local communities. We also have set an environment month for officer and employee enlightenment to raise awareness about biodiversity conservation.

Performance Objectives

Non-financial Summary

Material issues	Theme	Index	Scope of Data	Results					
				2018	2019	2020	2021		
Governance – Principled Corporate Management –									
Corporate governance	Corporate governance	Average attendance rate of outside directors	Board of Directors meetings (%)	IHI	98.6	98.1	96.8	100.0	
		Average attendance rate of outside Audit & Supervisory Board Members	Board of Directors meetings (%)	IHI	92.6	100.0	100.0	97.9	
			Audit & Supervisory Board meetings (%)	IHI	100.0	100.0	100.0	100.0	
Compliance	Legal compliance	Number of law violations	Competition laws	IHI and consolidated subsidiaries	0	0	0	0	
			Anticorruption laws	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	
			Economic organizations (Millions of yen)	IHI	48	56	57	52	
			Other major industry organizations (Millions of yen)	IHI	101	120	122	119	
		Number of Compliance Hotline reports		IHI and affiliated companies		238	239	202	263
		Number of compliance training participants	Officer training	IHI and subsidiary companies in Japan		47	–	–	–
			Line Manager Training	IHI and subsidiary companies in Japan		75	72	–	–
			Quality & Compliance Training (Japan)	IHI and subsidiary companies in Japan		–	27,866	24,085	26,243
			Quality & Compliance Training (Overseas)	Subsidiary companies overseas		–	1,774	3,261	4,938
			e-Learning**1 (Japan)	IHI and subsidiary companies in Japan		18,234	18,164	20,169	21,659
e-Learning (Overseas)	Subsidiary companies overseas		1,126	1,214	–	–			
Innovation management	Intellectual property protection	Patents held by region	Patents in Japan	IHI	4,120	4,150	3,867*2	3,866	
			Patents overseas	IHI	3,047	3,502	3,808	3,936	
Information security	Information security measures	Information security measures level evaluation (out of five) (score)		IHI and consolidated subsidiaries	2.9	3.2	3.4	3.7	

*1 Conducted as Quality & Compliance Training since 2020.

*2 Corrections have been made to the number of patents held in Japan for 2020.

Non-financial Summary

Material issues	Theme	Index	Scope of Data	Results				
				2018	2019	2020	2021	
Society – Materialize an Affluent Society –								
Diversity and inclusion	Number of employees	Consolidated number of employees	IHI and consolidated subsidiaries	29,286	28,964	29,149	28,801	
		Number of employees (IHI)	IHI	8,011	7,741	7,796	7,779	
			Male	IHI	6,994	6,730	6,766	6,727
			Female	IHI	1,017	1,011	1,030	1,052
	Average years of service	Ratio of female employees (%)	IHI	12.7	13.1	13.2	13.5	
		All employees	IHI	14.9	15.8	15.1	16.3	
			Male	IHI	15.1	16.0	15.3	16.5
	Turnover rate	Female	IHI	13.2	14.5	14.2	15.5	
		Total turnover rate	IHI	4.3	3.5	2.9	3.1	
			Rate of retirement due to personal reasons (%)	IHI	2.0	2.0	1.1	1.6
	Employee-awareness surveys	Turnover rate within 3 years of joining the company (%)	IHI	7.4	6.8	4.3	3.4	
		Ratio of answered employee-awareness surveys (%)	IHI and affiliated companies	91.7	91.4	88.0	88.0	
	Employment	Number of new graduate recruitments	IHI, University graduates	158	153	194	109	
			Male	IHI, University graduates	138	123	162	87
			Female	IHI, University graduates	20	30	32	22
			Female recruitment rate (%)	IHI, University graduates	12.7	19.6	16.5	20.2
		Number of mid-career hires	IHI	66	77	55	85	
		Recruitment ratio of people with disabilities (%)	IHI	2.21	2.39	2.35	2.39	
		Re-employment rate of employees at retirement age (%)	IHI	84	81	81	78	
		Number of employees from abroad	IHI	89	81	82	74	
	Gender diversity	Local managers at overseas sites	China, Singapore, and United States	22	23	22	25	
		Number of female officers	IHI	4	3	3	3	
			Ratio of female officers (%)	IHI	24	19	18	18
Number of female managers		IHI	74	83	92	107		
		Ratio of female managers (%)	IHI	2.8	3.0	3.4	3.9	
		Ratio of female general managers (%)	IHI	0.8	0.8	0.8	1.1	
		Ratio of female section managers (%)	IHI	2.0	2.2	2.5	2.7	

Non-financial Summary

Material issues	Theme	Index	Scope of Data	Results				
				2018	2019	2020	2021	
Diversity and inclusion	Work-life balance	Employees with reduced work hours	IHI	158	161	139	158	
		Employees who have taken childcare leave	IHI	689	779	768	935	
		Employees who have taken parental leave	IHI	118	131	137	128	
		Percentage of employees who return to work after parental leave (%)	IHI	100	99.2	100	100	
		Employees who have taken nursing care leave	IHI	6	7	2	6	
		Average annual paid vacation days taken	IHI	18.36	19.40	18.73	17.37	
		Monthly average overtime (hours)	IHI	22.50	21.10	13.00	18.90	
	Human resource development	Positional training* ³	Participants	IHI and affiliated companies in Japan	3,300	3,276	1,882	672
			Training hours	IHI and affiliated companies in Japan	112,000	106,208	34,672	24,028
		Selective training courses* ³	Participants	IHI and affiliated companies in Japan	6,200	3,343	1,948	17,430
			Training hours	IHI and affiliated companies in Japan	47,000	25,073	16,358	49,648
		Average annual training hours per employee	IHI and affiliated companies in Japan	16.7	19.8	13.3	12.1	
	Employees certified as master artisans	IHI	37	41	39	41		
	Labor-management partnership	Employee union membership rate (%)	IHI and 7 labor unions of consolidated subsidiaries	73	73	72	71	
		Number of labor complaints received	IHI	0	0	0	0	
Occupational health and safety	Occupational health and safety	Participation rate of medical check-ups (%)	IHI and 35 affiliated companies	70	71	72	71	
		Participation rate of stress checks (%)	IHI and 35 affiliated companies	96	94	95	95	
		Absenteeism (Employees who take three or more months of leave) (%)	IHI and 35 affiliated companies	0.9	1.0	0.8	0.7	
		Presenteeism (Employees with restricted hours) (%)	IHI and 35 affiliated companies	1.7	1.6	2.1	1.8	
		Smoking rate (%)	IHI and 35 affiliated companies	28	27	27	28	
		Lost time injuries frequency rate	IHI and 31 affiliated companies	0.26	0.40	0.28	0.38	
		Total injuries frequency rate	IHI and 31 affiliated companies	1.11	1.49	0.87	1.23	
		Rate of occupational diseases	IHI and 35 affiliated companies	0.165	0.165	0.15	0.05	
		Occupational accidents* ⁴	IHI and 31 affiliated companies	55 (0)	71 (0)	38 (0)	52 (1)	
			Employees	IHI and 31 affiliated companies	28 (0)	42 (0)	18 (0)	31 (1)
Temporary employees	IHI and 31 affiliated companies		4 (0)	4 (0)	1 (0)	3 (0)		
Partners	IHI and 31 affiliated companies	23 (0)	25 (0)	19 (0)	18 (0)			
Corporate citizenship	Social contribution activities	Social contribution expenses (Millions of yen)	IHI and 31 affiliated companies	635	519	215	260	

*3 In 2020, the number of participants and length of training hours have declined relative to the previous year, as group training was changed to online training from the second half of 2020.

In 2021, the number of participants and length of training hours in each training have changed compared to other years due to revision of the Group's human resource development program.

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

Non-financial Summary

Material issues	Theme	Index	Scope of Data	Results			
				2018	2019	2020	2021
Environment – Reduce Environmental Impact –							
Climate change	CO ₂	CO ₂ emissions (Scope 1 + Scope 2) ^{*5} (t-CO ₂)	IHI and consolidated subsidiaries	329,602	254,227	225,066	220,138
		Scope 1 (t-CO ₂)	IHI and consolidated subsidiaries	80,032	64,724	58,517	64,270
		Scope 2 (market-based) (t-CO ₂)	IHI and consolidated subsidiaries	249,570	189,503	166,549	155,868
		CO ₂ emissions intensity ^{*6} (t-CO ₂ /100 million yen)	IHI and consolidated subsidiaries	22.2	18.3	20.2	18.8
	Energy	Energy consumption ^{*5, *7} (TJ)	IHI and consolidated subsidiaries	5,828	2,468	2,283	2,348
		Fuel consumption (TJ)	IHI and consolidated subsidiaries	–	1,044	974	1,084
		Electricity consumption (TJ)	IHI and consolidated subsidiaries	–	1,398	1,276	1,229
		Heat consumption (TJ)	IHI and consolidated subsidiaries	–	–	7	5
		Steam consumption (TJ)	IHI and consolidated subsidiaries	–	0	0	0
		Renewable energy used (TJ)	IHI and consolidated subsidiaries	–	26	26	31
	Energy consumption intensity ^{*6} (TJ/10 billion yen)	IHI and consolidated subsidiaries	39.3	17.8	20.5	20.0	
External evaluation	Evaluation of CDP climate change	IHI and consolidated subsidiaries	B (Management)	B (Management)	B- (Management)	B- (Management)	

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

*6 Net sales as the denominator.

*7 The method for calculating energy consumption changed in 2019.

Non-financial Summary

Material issues	Theme	Index	Scope of Data	Results				
				2018	2019	2020	2021	
Circular economy	Waste	Waste generated (tons)	IHI and consolidated subsidiaries	29,010	27,564	20,912	23,633	
		Toxic waste generated* ⁸ (tons)	IHI and consolidated subsidiaries	–	164	182	255	
		Amount recycled (valuable resources) (tons)	IHI and consolidated subsidiaries	–	61,799	15,067	16,164	
	Water	Water withdrawal* ^{9,10} (1,000 m ³)	IHI and consolidated subsidiaries	4,182	4,251	4,008	4,195	
			Public water (1,000 m ³)	IHI and consolidated subsidiaries	–	750	651	664
			Industrial water (1,000 m ³)	IHI and consolidated subsidiaries	–	868	799	792
			Groundwater (1,000 m ³)	IHI and consolidated subsidiaries	–	1,948	1,731	1,691
			Rainwater, rivers, lakes, etc. (1,000 m ³)	IHI and consolidated subsidiaries	–	685	827	1,047
Waste water (1,000 m ³)	IHI and consolidated subsidiaries		–	–	3,373	3,265		
Environmental protection	Compliance with environmental laws and regulations	Significant environmental accidents	IHI and consolidated subsidiaries	0	0	0	0	
		Major violation of environmental laws/regulations	IHI and consolidated subsidiaries	0	0	0	0	
		Number of cases IHI paid fines, penalties, etc.	IHI and consolidated subsidiaries	0	0	0	0	
	Costs to reduce the IHI environmental impact	Investments (Millions of yen)	IHI	696	652	334	357	
		Expenditures (Millions of yen)	IHI	143	78	23	92	

*8 The total of infectious wastes among the specified wastes and the specified controlled wastes.

*9 Changed from amount of water consumption to amount of water withdrawal since 2019.

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



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