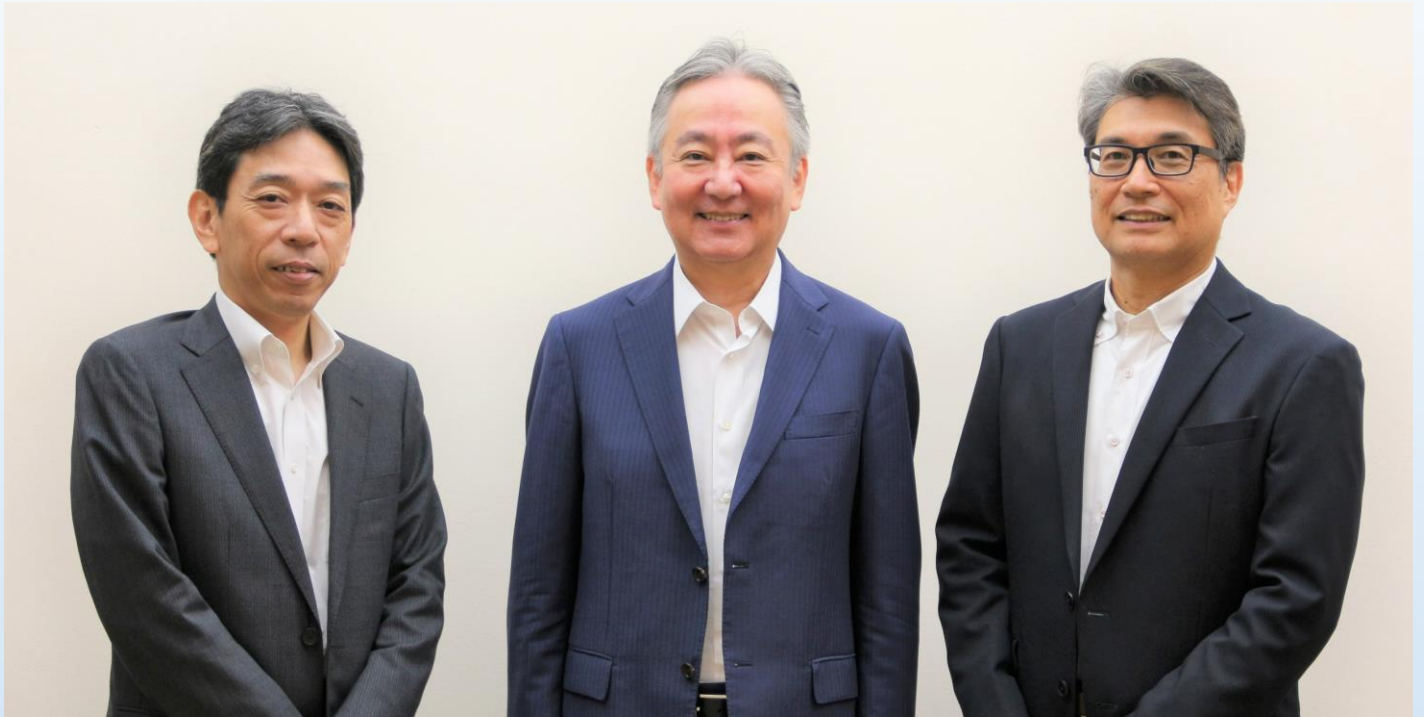




IHI Corporation

Sustainable Finance Framework

September 2023



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Division

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Top Message

The business environment surrounding the IHI Group is drastically changing. Large scale natural disasters such as severe floods and heat waves in various parts of the world due to climate change are occurring frequently. Excessive technology has exceeded its limits, affecting not only nature but also our daily lives.

Over the past 170 years, we have been engaged in a broad range of infrastructure businesses, including social infrastructure, aerospace, and energy, and have continued to challenge to solve various social issues. At a time when multiple and complex social issues such as climate change mitigation and adaptation are being faced, the IHI Group will once again boldly continue to try to solve them by combining its ambition for a better future, technology, and internal and external wisdom.

In May 2023, the IHI Group developed the Group Management Policy 2023 for “create a world where nature and technology work in unity”, continuing innovative change of business for high growth and revolution of corporate culture to meet change of various environment. In order to accelerate management based on ESG, we will engage sustainable high growth by boldly shifting management resources to the aero engine and rocket sectors and the clean energy sector, which we have defined as growth areas.

In the aero engine and space, in addition to strengthening the existing aero engine business, we are also working to reduce aircraft weight and create new businesses from the perspective of life cycle and value chain, such as SAF. Furthermore, in the clean energy, we are working to establish an ammonia value chain based on gas turbine utilizing the world's leading ammonia combustion technology and storage, and receiving terminals that boast top-class results.

We have formulated the Sustainable Finance Framework in order to make finance integral to business strategies based on the Group Management Policy 2023, and to promote transformation initiatives with stakeholders.

With the funds raised using this framework, we will work to solve social issues and create social value, while aiming to improve corporate value and achieve sustainable growth of our business.

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1 Introduction

1.1 Framework Overview

The IHI Group developed Transition Bond Framework in March 2022 and issued the Company's first transition bond in June 2022.

In April 2023, we updated our GHG emission reduction target to "halve FY 2030 GHG emissions (Scope 1 and 2) from FY 2019 levels," a more ambitious target against the backdrop of the further promotion of the "IHI Group's ESG Management" set forth in November 2021 and the ever-increasing global efforts to respond to climate change.

In May 2023, we formulated the Group Management Policy 2023 based on social issues to be addressed. We aim to make a further leap into a sustainable, high-growth company by boldly shifting management resources to growth areas.

Based on the above, we have formulated the Sustainable Finance Framework (Hereinafter, the "Framework") to raise investment funds smoothly for achieving sustainable high growth.

This framework enables IHI Group to finance through green, transition and transition-linked bonds and loans. The framework is based on the following principles and guidelines.

- Green Bond Principles 2021 (ICMA)
- Green Loan Principles 2023 (APLMA, LMA, LSTA)
- Sustainability Linked Bond Principles 2023 (ICMA)
- Sustainability Linked Loan Principles 2023 (APLMA, LMA, LSTA)
- Green Bond and Sustainability Linked Bond Guidelines 2022 (Ministry of Environment)
- Green Loan and Sustainability Linked Loan Guidelines 2022 (Ministry of Environment)
- Climate Transition Finance Handbook 2023 (ICMA)
- Basic Guidelines on Climate Transition Finance 2021 (Financial Services Agency, Ministry of Economy, Ministry of Environment)

<Alignment with the Four Disclosure Elements of Climate Transition Finance>

Four Disclosure Elements of Climate Transition Finance	Sections
1. Issuer's climate transition strategy and governance	1.5, 1.6, 1.7, 1.8, 1.9, 1.10
2. Business model environmental materiality	1.5, 1.6, 1.7
3. Climate transition strategy to be science-based including targets and pathways	1.6, 1.7, 1.9
4. Implementation transparency	1.6, 1.7

<Alignment with the Four Core Components of Green Bond and Green Loan>

Described in Chapter 2: Alignment with Four Elements of the Relevant International Capital Market Association Principles

<Alignment with the Five Core Components of Sustainability-Linked Bond and Sustainability-Linked Loan>

Described in Chapter 3: Alignment with Five Elements of the Relevant International Capital Market Association Principles

The IHI has obtained an external review from Japan Credit Rating Agency, Ltd., an external reviewer, regarding the alignment of the Framework with the Principles and Guidelines stated above.

1.2 About IHI Group

The IHI Group's history extends back to the establishment of Ishikawajima Shipyard, Japan's first modern shipbuilding facility, in 1853. The IHI Group has continuously developed original technologies for each era, and contributed to the development of society by providing products and services that are the foundation of daily life including by leveraging its shipbuilding technology in new areas, such as heavy machinery manufacturing, bridge building, plant construction and aero-engine production.

The IHI Group is deeply committed to contributing to society through technology, combining diverse engineering capabilities to meet expanding global needs for energy, urbanization and industrialization, and transportation efficiency.

1.3 Overview of Business

The IHI Group operates four main businesses: Resources, Energy and Environment; Social Infrastructure and Offshore Facilities; Industrial Systems and General-Purpose Machinery; and Aero Engine, Space and Defense.

【Resources, Energy and Environment】・・・Minimizing Environmental Impact

The IHI Group provides products and services through total lifecycles which generate best mix energy for earth and human by our extensive expertise and original technologies in various areas. It contributes to the stable supply of energy essential to industrial progress and comfortable lifestyles and the prevention of global warming.

◇Main businesses, products and service

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

【Social Infrastructure and Offshore Facilities】・・・Underpinning the Essentials of Modern Living

In social infrastructure, offshore and urban development, as well as in other areas, the IHI Group builds infrastructure using the technical skill and strong sensibility developed through our many years of achievements that underpins society and ensures people can live in safety and security. This allows us to contribute to the growth of nations and societies, promote offshore development and ensure safety and security.

◇Main businesses, products and service

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

【Industrial Systems and General-Purpose Machinery】・・・Transforming the World's Industrial Infrastructure

The IHI Group evolves industrial infrastructure around the world and support the future of "Monozukuri" by offering ceaseless technological innovative systems and optimal solutions skills. It contributes to enhancing the customers manufacturing processes and creating more sophisticate products that will satisfy their users.

◇Main businesses, products and service

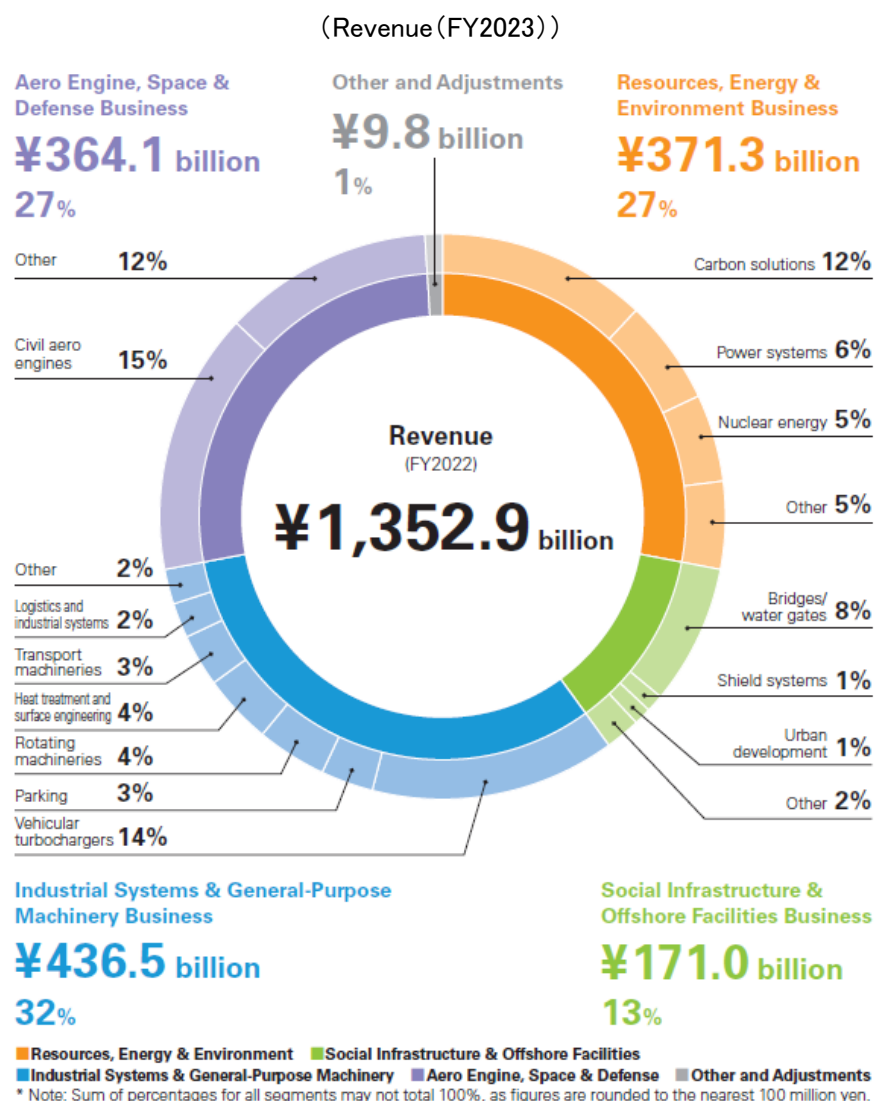
Vehicular turbochargers, Parking, Rotating machineries (compressors, separation systems, turbochargers for ships), Heat treatment and surface engineering, Transport machineries, Logistics and industrial systems (logistics systems, industrial machineries)

【Aero Engine, Space and Defense】・・・Opening New Horizons

In the aero engine and space business unit, the IHI Group draws on our range of state-of-the-art technologies and organizational skills to open up new possibilities in the sky and outer space. This allows us to contribute to develop systems that help make air travel and transport more comfortable, safer and better for the environment, and to expanding space utilization and development to help spread related services and software to benefit humankind.

◇Main businesses, products and service

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



1.4 Management Philosophy

The IHI Group positions being a good corporate citizen who develops together with society as our primary objective and fulfills our social mission through the below visions based on our management philosophies of “Contribute to the development of society through technology” and “Human resources are our single most valuable asset”

1.5 IHI Group Material Issues

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

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, which is more important than ever.

<Climate change>

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.

<Human rights>

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.

<Diversity and inclusion>

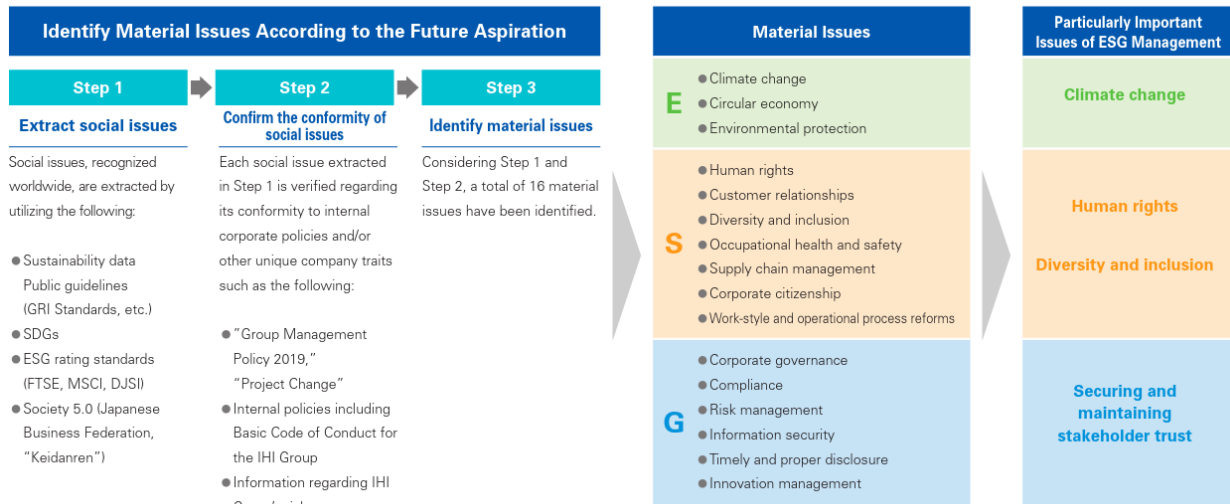
The employees are necessary to reform corporate culture as well as build workplaces and systems that empower people to reach their full potential. We drafted the Group Human Resource Management Policy to embed this basic approach to human resource management in the entire Group. This management policy expands various recruitment, assignment, development, and evaluation measure.

<Securing and Maintaining Stakeholder Trust>

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.

(Identification Process of Material Issues)

Identification Process of Material Issues

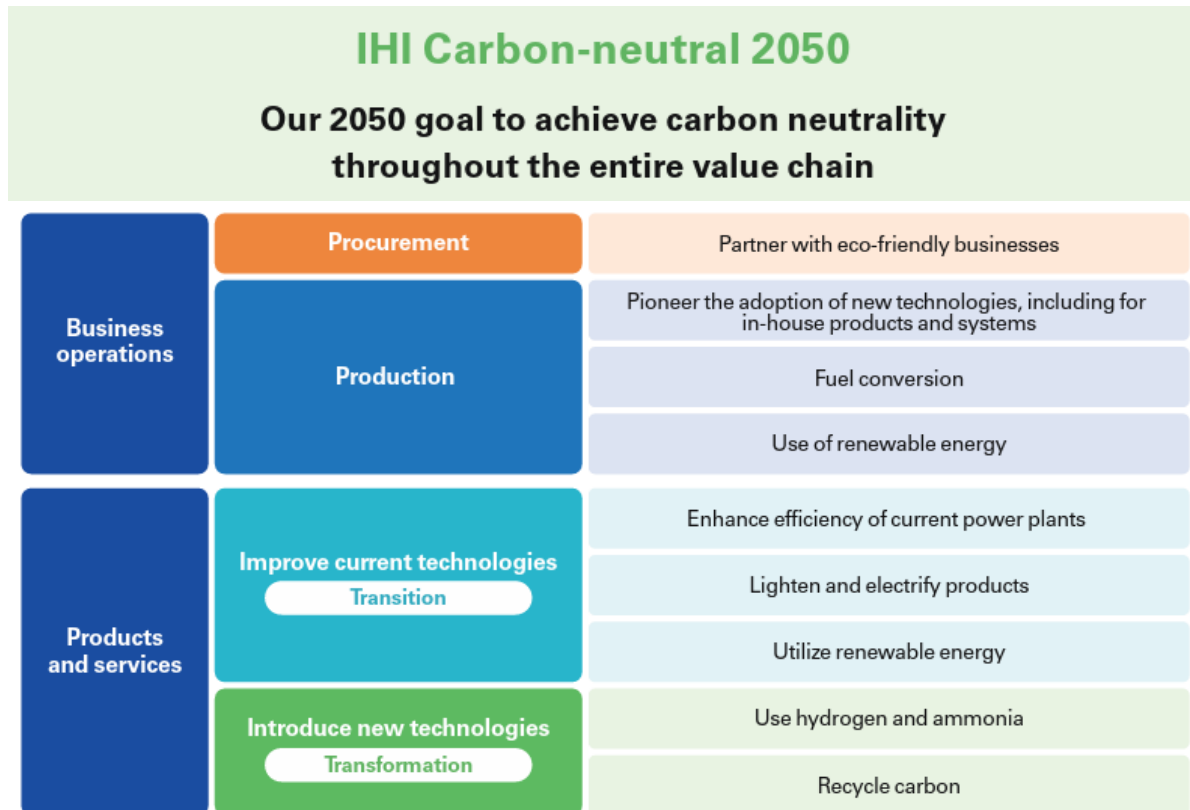


1.6 IHI Group’s ESG Management and Long-term Goal

1.6.1 IHI Group’s ESG Management

The IHI Group, which is seeking to create a world where nature and technology work in unity through addressing social issues partly by becoming carbon-free, has pledged to make its complete 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.



<Achieving the Goals through Business>

We are seeking to make our business activities carbon-neutral by actively introducing our products, systems, and other new technologies to reduce CO2 emissions from our production operations and by converting to fuels with low or zero CO2 emissions. We are also promoting the use of renewable energy. We are actively partnering with suppliers with environmentally friendly operations and working to achieve carbon neutrality throughout the value chain.

<Achieving the Goals by Providing Products and Services>

We have categorized initiatives using our products and services into the two actions of “transition” for our existing technologies and “transformation” primarily through new technologies. We intend to become carbon-neutral through providing such products and services. There are three “transition” components. The first is to increase the efficiency of existing power plants, such as by using advanced maintenance technologies to upgrade operations. The second is to lighten and electrify products, noteworthy examples being lighter, more heat-resistant aircraft parts and electric turbochargers. The third is to tap renewable energy sources. There are two transformation components. The first is to use hydrogen and ammonia, such as by early transitioning to pure

ammonia firing and establishing an ammonia value chain. The second is to minimize or eliminate CO2 emissions through carbon recycling, which covers methanation and carbon capture, usage, and storage, and direct air capture.

<Transition (Utilization of existing technologies)>

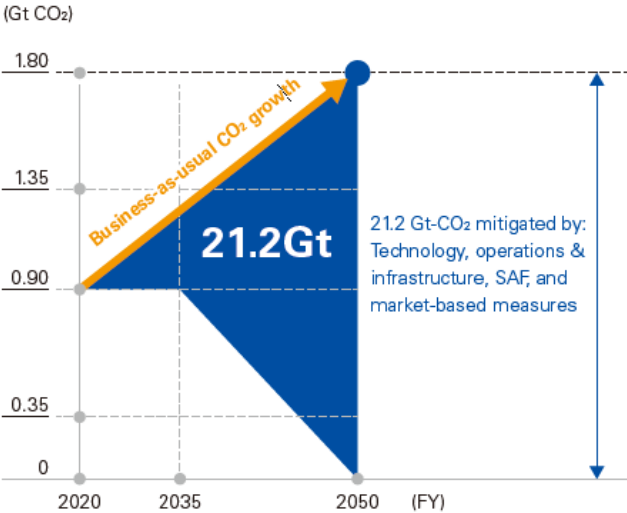
◇Weight Reduction, Electrification, and Alternative fuel in Air transportation Systems

The aviation industry is seeking to reduce CO2 emissions to make air transportation more environmentally friendly. In this direction, the International Air Transport Association in October 2021 resolved that the global air transport industry will aim to achieve net-zero carbon emissions by 2050. In December 2021, the Japanese Ministry of Land, Infrastructure, Transport and Tourism announced the schedule for reduction of CO2 emissions in the aviation field, and launched policies for investigating specific measures in the three fields of (1) introduction of new technology to aircrafts, maintenance items, etc., (2) operation improvement based on optimized flight profiles, (3) SAF introduction and promotion.

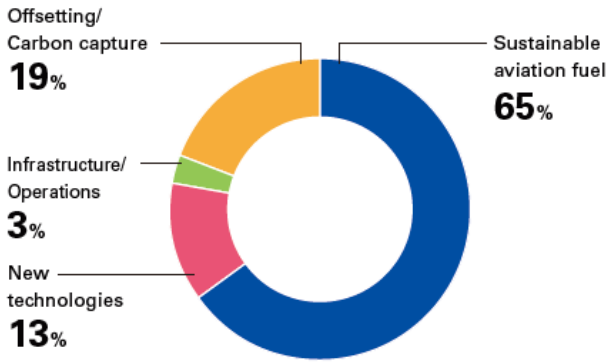
The IHI Group perceives these kinds of movements field as business opportunities. In particular, with the strength of our value chain and track record in developing the main parts for aircraft engines for the private sector, we are working on introducing new technologies for improving fuel consumption and reducing engine weight.

As a further transformation, we are targeting expansion of application of new technology for weight reduction, and the realization of engine and airframe systems applying our original electrification core technology. In addition, regarding SAF, too, which is a large element contributing to decarbonization, we must find the business opportunities and apply technologies developed in other fields while working on research and development toward introducing SAF.

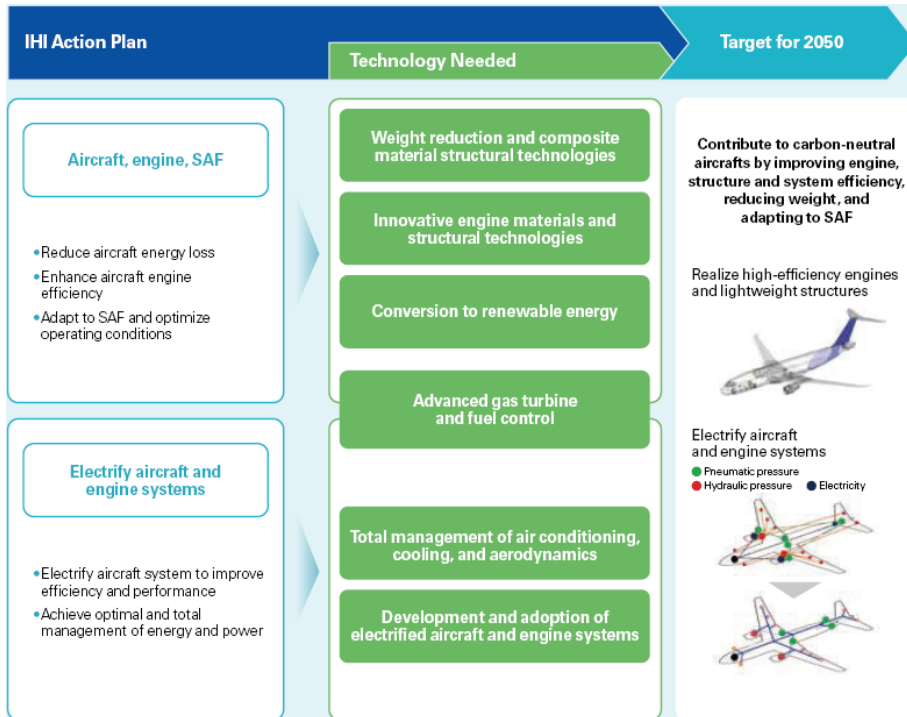
Net Zero: Aviation Carbon Emissions to Be Abated by 2050



Contribution to Achieving Net Zero Carbon in 2050



Source: Net-Zero Carbon Emissions by 2050, IATA Press Release No. 66, October 4, 2021

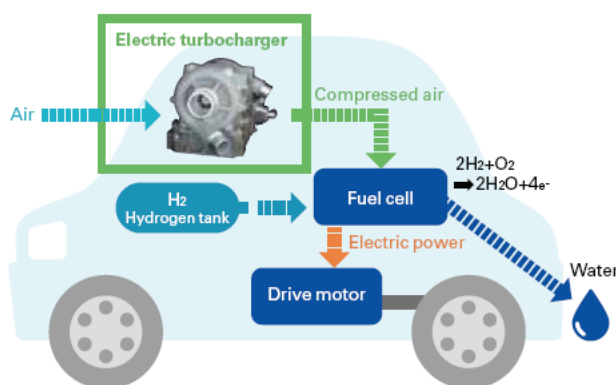


◇Automobiles Electrification

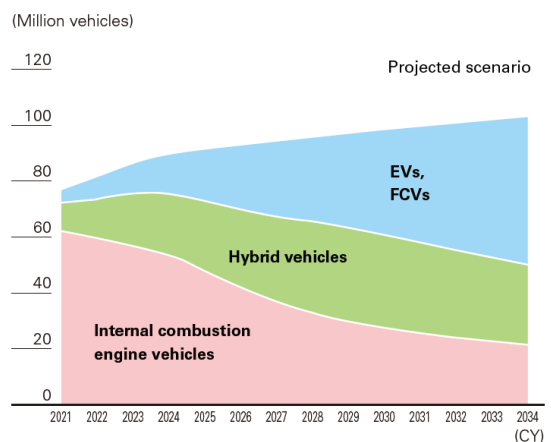
The transition to electrification is progressing rapidly in the automobile industry. While each automobile manufacturer is advancing development of technology for decarbonization in their respective scenario, we are working on decarbonization in the automobile industry through technological issue resolution in which each scenario is imagined.

For large commercial vehicles, production is expected to increase going forward because there is active development and partnerships for an advantageous FCV from the viewpoint of cruising distance, fuel filling time, and load capacity. Along with that, the demand for electric turbochargers aimed at FCVs is expected to grow steadily. The IHI Group perceives the electric turbocharger as a business opportunity, while making use of the technology and value chain for vehicle turbochargers.

How Electric Turbocharges Add Power to Fuel Cell Vehicles



Vehicle Production Volume Scenario

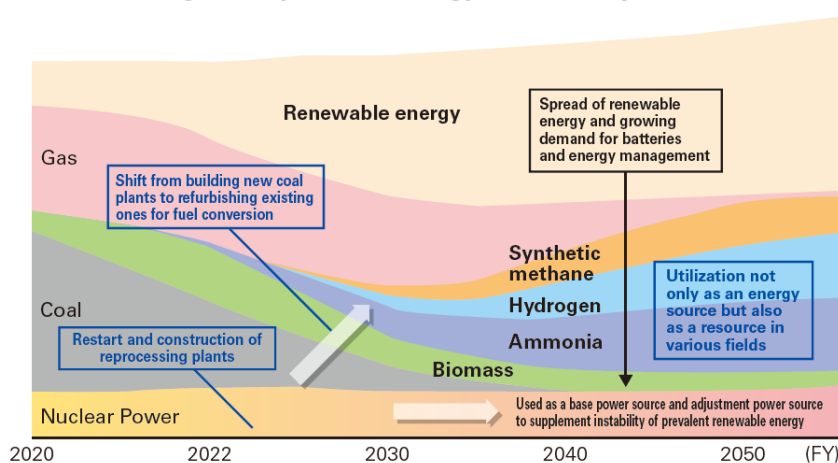


<Transformation (Introduction of New Technologies)>

The IHI Group will transition its energy mix toward 2050 for a society centered on the use of hydrogen, ammonia, and renewable energy. At the same time, in response to this spread of renewable energy, the IHI Group will be able to combine the use of nuclear power generation as a base power source with the adaptability associated with the rollout of small nuclear reactors.

In addition, we believe that decarbonization technologies that capture and use CO₂ will provide support during the transition period until 2050. Therefore, we consider the realization of decarbonization, in which environmental performance and economic rationality are compatible, to be a social issue that needs to be addressed. In particular, we establish ①Decarbonization of the energy value chain, ②Realization of safe and eco-friendly nuclear power generation capable of load adjustment, ③Realization of carbon recycling as three specific issues.

Estimated Change in Proportion of Energy Resources by 2050



◇Establishment of an Ammonia Value Chain

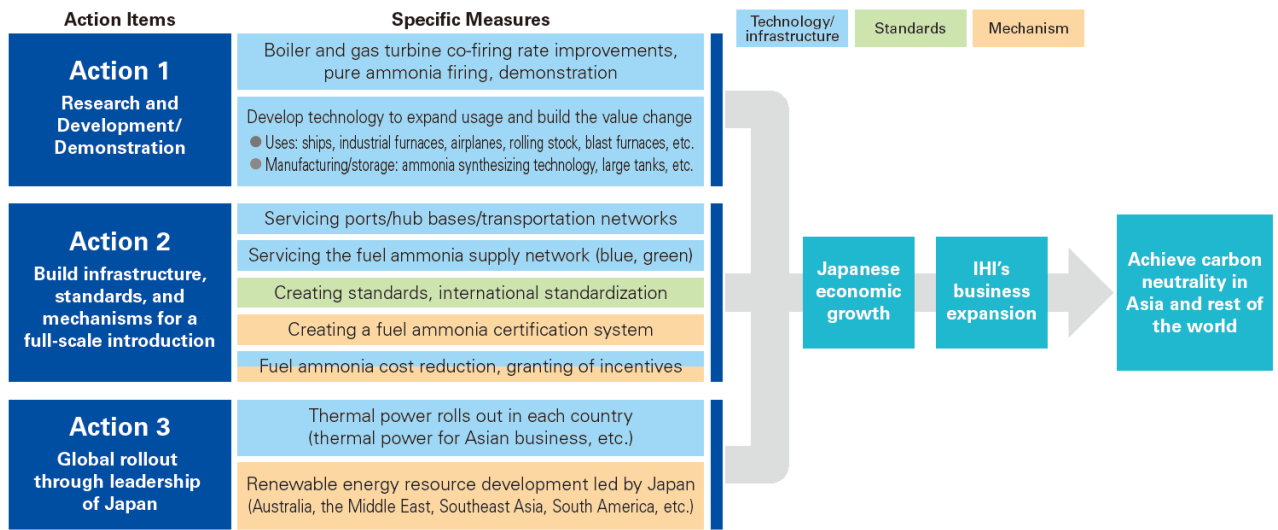
Since ammonia does not emit CO₂ during combustion, it can be used as a fuel to achieve decarbonization of thermal power plants. The IHI Group sees the entire value chain from ammonia production to utilization as a business opportunity and is implementing various initiatives.

Ammonia is currently used as a fertilizer and chemical raw material, and much larger amounts are required to meet the demand for fuel. Therefore, the IHI Group is considering participation in ammonia production projects, especially green ammonia production projects utilizing renewable energy sources, through Capital contribution. The IHI Group is a leading domestic manufacturer of LNG receiving stations and storage tanks. Taking advantage of this strength, we are working to expand our ammonia acceptance and storage technology, thereby contributing to the early and low-cost construction of an infrastructure to manufacture and store large amounts of ammonia.

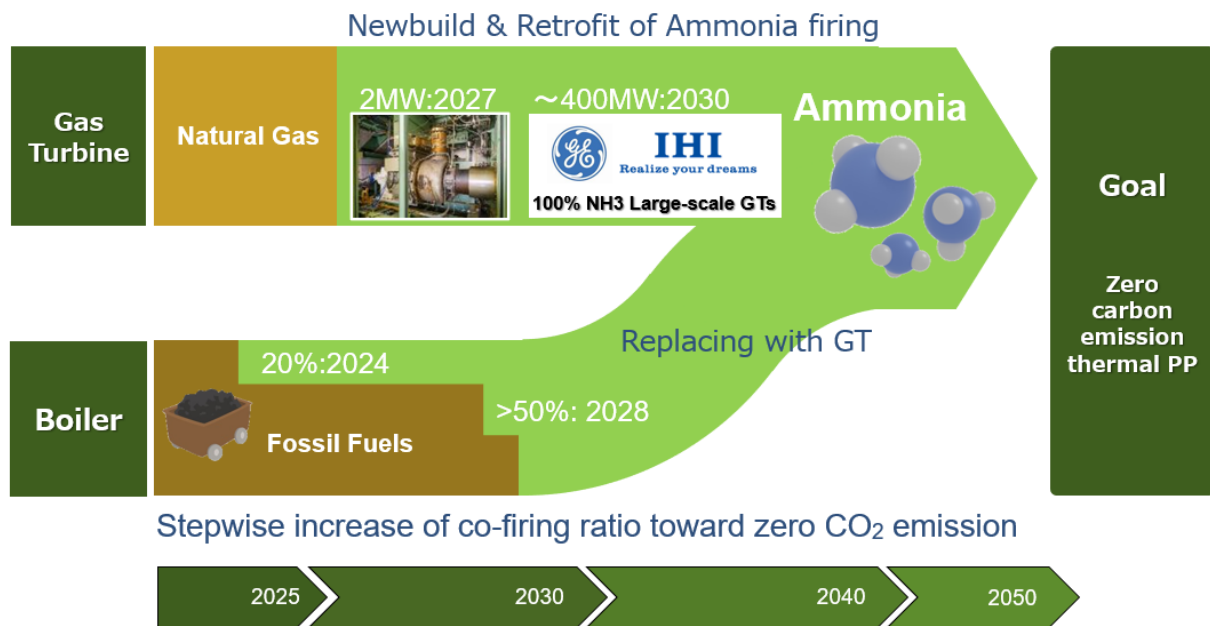
In the area of ammonia utilization, especially in the power generation field, we are working on the exclusive firing of ammonia in boilers and gas turbines utilizing combustion technology that we have cultivated over many years. We have already succeeded in an ammonia firing test at a boiler experimental facility, and is the only gas turbine in the world capable of firing ammonia in a liquid state.

As described above, we will take advantage of the strengths of the IHI Group throughout the value chain to ensure that business opportunities are captured.

Action Under Consideration by IHI for Implementation of Fuel Ammonia Society



<Roadmap of Ammonia Combustion Technology Development>



The goal of the IHI Group is to achieve zero emissions at thermal power plants. In order to decarbonize natural gas-fired power plants in the future, we are developing a combustor for an ammonia-fired gas turbine, aiming at a design that can be retrofitted to existing facilities. At present, reduction of coal-fired thermal power emissions is an urgent issue, and we are developing technologies for co-firing and exclusive firing of existing facilities, and promoting social implementation with partners.

◇Small-Scale Nuclear Power Generation

The Japanese government publicizes the progress in initiatives targeting R&D and demonstrations through international collaboration in small modular reactor (SMR) technology in Sixth Strategic Energy Plan. The SMRs of the US company NuScale Power, LLC which IHI invests in are capable of load-following operation by operating while controlling the number of units, and are expected to play the role of regulating power sources for renewable energy.

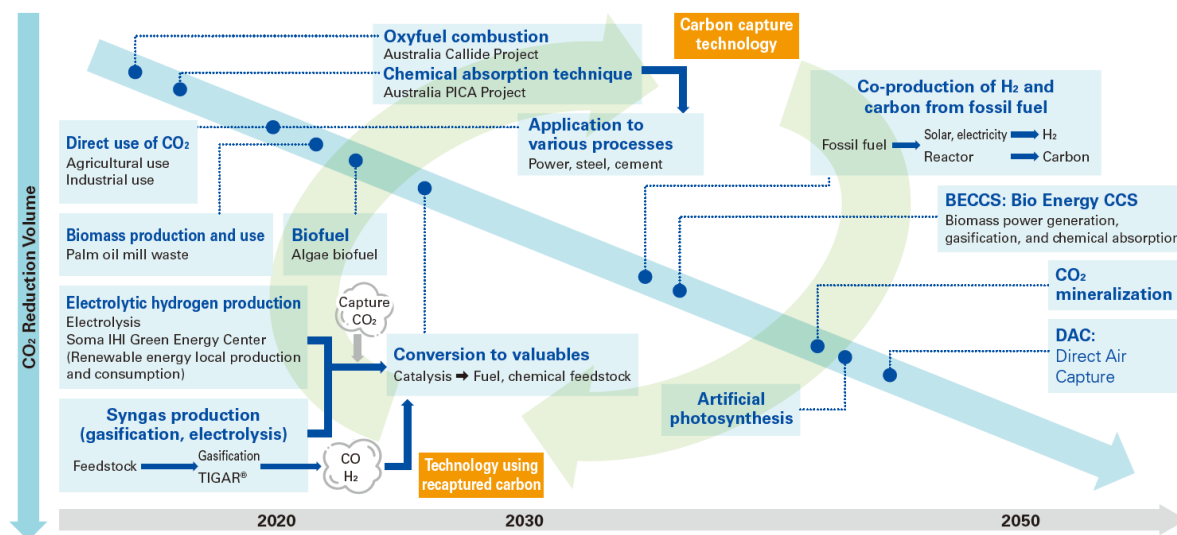
IHI has provided value to its customers globally through design and manufacture of primary components for nuclear power plants. Using IHI's existing technology and expertise as a starting point, we will contribute to further safety improvement of nuclear power and maintaining our technology at the forefront.

◇Carbon Recycling

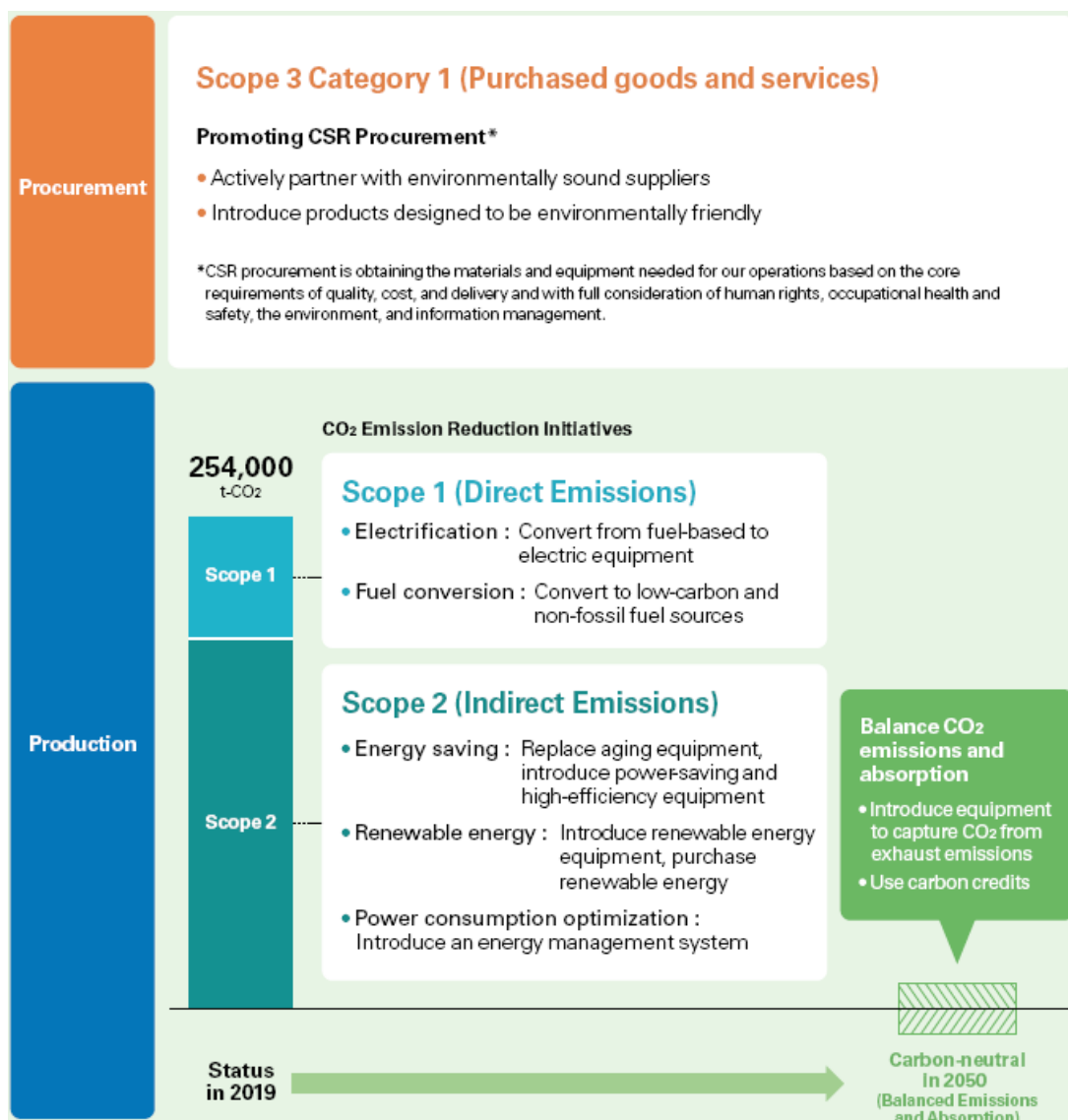
The IHI Group is not only developing CO₂ capture technology, but also technology to produce hydrogen efficiently, and technology to convert CO₂ to value-added materials through its reaction with hydrogen. By combining these three technologies, the IHI Group is conducting significant cost-cutting initiatives through the effective use of energy and other means. Toward commercializing them, we are going to provide CCUS technology (technology for carbon dioxide capture, utilization, and storage) to target industries searching for CO₂ capture as a decarbonization method, and the industry searching for carbon-neutral fuels and raw materials.

We are going to provide CCUS technology to target industries searching for CO₂ capture as a decarbonization method, and the industry searching for carbon-neutral fuels and raw materials. In addition, forest conservation that takes up part of carbon recycling not only fixes CO₂ but also leads to the protection of the ecosystem existing there. We will work on large-scale forest conservation by making use of our strengths in technology using artificial satellite data advanced over many years within space development, and climate observation and prediction technology.

Carbon Recycling Road Map



1.6.2 Long-term Goal



Since the publication of the "IHI Group' ESG Management " in November 2021, we have been working to reduce CO₂ emissions (Scope 1 and 2) in fiscal 2030, which are directly and indirectly emitted by our own business activities at our plants and offices, in line with the target set by the Japanese government (46% reduction in fiscal 2030 compared to fiscal 2013).

Against this backdrop, in April 2023, the IHI Group set a more ambitious reduction target of "2030 GHG (Scope 1 and 2) emissions by 50% from FY 2019" against the backdrop of strengthening global responses to climate change. The newly established interim target is based on fiscal 2019 and exceeds the policy of the Japanese government and the IPCC recommendations. By working toward achieving this goal, the IHI Group, which has decarbonization technologies, will contribute to the realization of a global carbon-neutral society.

With regard to Scope 3, we believe it is important to work together with those involved in the value chain, such as suppliers of materials and parts, and customers who use the company's products, to realize a "CO₂ recycling society.". the company will promote CSR procurement of materials and components upstream of Scope 3, and work to reduce GHG emissions through transition and transformation downstream of Scope 3, as described in the preceding paragraph (1.6.1 ESG Management of the IHI Group).

The actual results and reduction targets of Scope 3 will be disclosed as soon as it becomes available.

1.7 Group Management Policies 2023

Through the "Project Change" period, we are getting ready for business transformation, such as the full-scale implementation of the Lifecycle Businesses (LCB) and the Ammonia Value Chain Business. On the other hand, there is a need to further strengthen our corporate structure in order to cope with the new social environment in which instability becomes the norm.

The Group Management Policy 2023 promotes business transformation to realize sustained high growth, and at the same time accelerates the transformation of the corporate structure to be able to respond to disruptive environmental changes.

■Business transformation and business portfolio transformation to achieve strong sustainable growth

Aiming to solve the problems faced by customers, industry, and society, we will transform each business by diversifying our efforts to "provide value through the life cycle" and "build and enhance the value of the entire value chain" while utilizing the IHI Group's technology and wisdom. At the same time, we will transform our business portfolio by boldly shifting management resources to growth and development-focus businesses.

■Response to environmental changes and transformation into a corporate structure capable of realizing change

The IHI Group will thoroughly implement management centered on ESG once again, and actively promote the development and acquisition of transformational talent, which is most important in achieving the advancement of the digital infrastructure essential for business transformation and the transformation of the corporate structure.

<Growth Business: Aero Engines and Space>

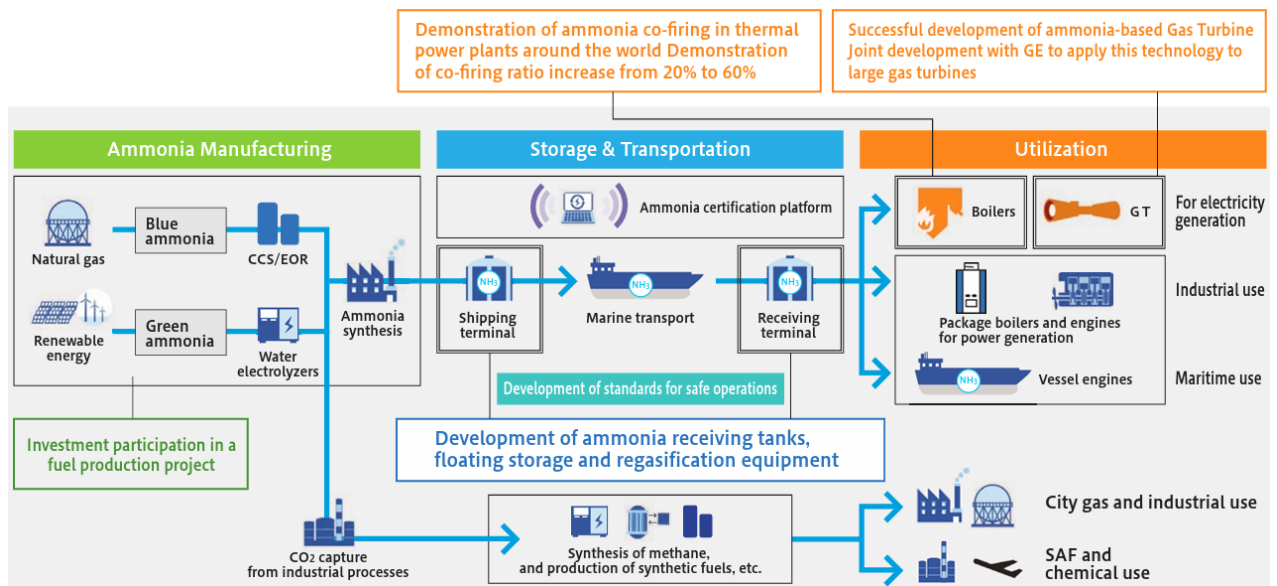
In the Aero engine and Space sector, which is positioned as a growth business, the rapid return to growth is expected in commercial aircraft as a result of the recovery from the coronavirus recession, and demand in the defense sector is also expected to expand. In order to meet such demand, we will reduce lead time and drastically improve operational efficiency through bold production reforms, while simultaneously increasing production of aero engines and rockets and improving profitability and capital efficiency.

In addition, the IHI Group will expand its business over the life cycle through the steady launch of businesses at new maintenance sites and initiatives in the materials business, thereby driving the growth of the IHI Group. We will also work to create new business areas from a value chain perspective, such as environmentally friendly next-generation aircraft and space, ground and underwater data utilization projects.



<Development-focus Business: Clean Energy>

IHI Group will focus on development of the clean energy fields, including ammonia, to make it the main pillar as Aero Engines and, Space. Against the backdrop of rising energy prices and increasing interest in carbon neutrality, the market potential for the use of ammonia as a fuel is expanding around the world. We will contribute to the early realization of the ammonia value chain by accelerating the creation of "produce, transport, and use" network with partners in Japan, Asia, the United States, and Europe, starting with gas turbines that utilize the world's leading ammonia combustion technology and storage and receiving terminal that boast top-class results.



<Core Businesses: Growth Strategy Centered on Exploit and Evolution of Lifecycle Businesses (LCB)

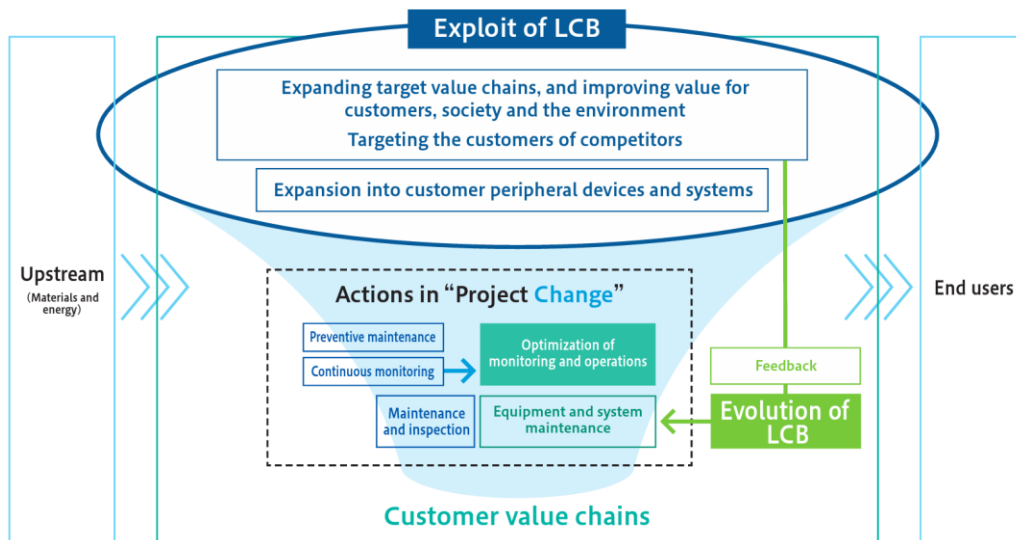
In the core business areas of Resources, Energy, & Environment, Social Infrastructure, Industrial Systems, and General-purpose Machinery, we will focus on cash generation through business structure reform, in addition to our growth strategy, which is not an extension of the past, based on the exploit (※1) and evolution (※2) of the LCB.

※1: Exploit of LCB

To improve the social and environmental value of customers by considering their entire life cycle and value chain, including not only individual products but also competitive products, as business opportunities.

※2: Evolution of LCB

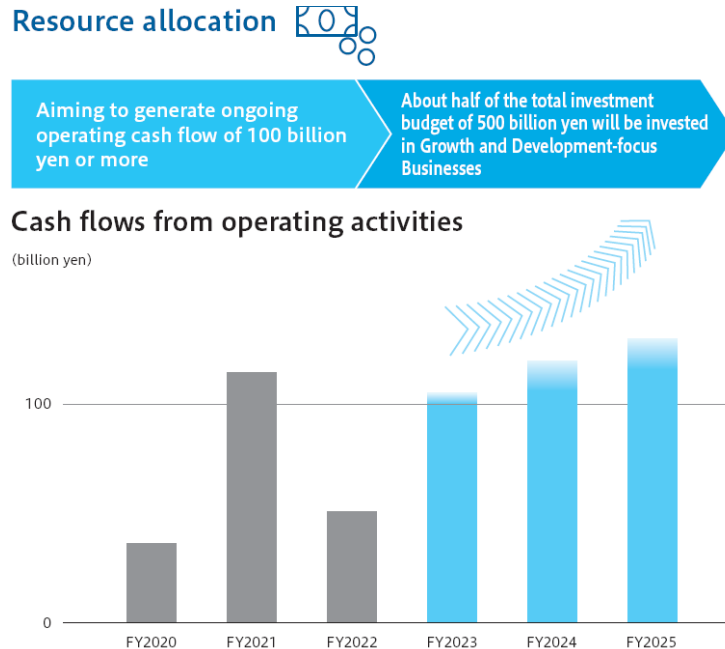
To further improve customer value by developing new products and services by increasing contact points with customers, noticing customer and market needs, and providing feedback on information obtained through digital use.



<Resource Allocation>

IHI Group will invest a total of approximately 500 billion yen over a three-year period beginning in fiscal 2023. About half of this investment budget will be invested in Growth and Development-focus Businesses.

At this juncture, the IHI Group does not expect any of these investment areas to impede fair transitions. We will disclose information as needed if requiring future investments equivalent to the just transition.



1.8 Significance and Goals of Sustainable Finance

The IHI Group will leverage its transition bonds to fund efforts to materialize its transition strategy and convey its ESG management initiatives to stakeholders. These include business partners, shareholders and other investors, governments, communities, and employees. We realize entire value chain carbon neutral and contribute to achieving global carbon neutral through implementation of the transition strategy. In addition, the IHI Group will endeavor to deepen stakeholder engagement by disseminating information in sustainable finance, helping reach Sustainable Development Goals and ultimately contributing to a sustainable economy.

1.9 Transition Strategy's consistency with roadmaps

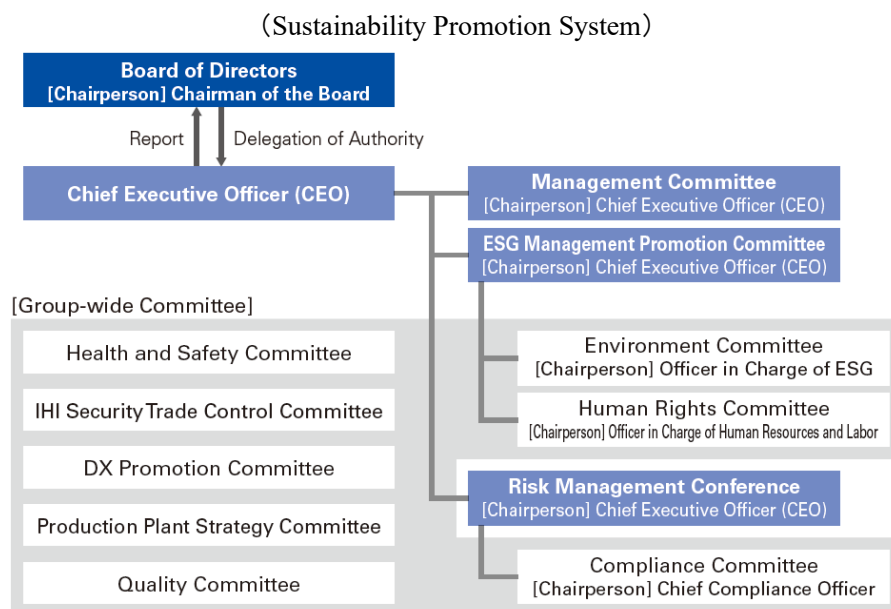
The IHI Group believes that our reduction target and transition strategy are in line with the following technology roadmaps based on Paris Agreement targets and Sixth Strategic Energy Plan and thus are science-based.

Business Areas	Roadmaps
Aero Engines and Space	<ul style="list-style-type: none"> • Process Chart for Promoting Decarbonization of Aircraft (Ministry of Land, Infrastructure, Transport and Tourism) • Net zero carbon 2050 resolution (IATA)
Clean Energy	<ul style="list-style-type: none"> • Road map to Zero Emission from International Shipping (Ministry of Land, Infrastructure, Transport and Tourism) • Technology Roadmap for "Transition Finance" in Chemical Sector (Ministry of Economy Trade and Industry) • Technology Roadmap for the Electricity Sector (Ministry of Economy Trade and Industry) • Technology Roadmap for "Transition Finance" in Gas Sector (Ministry of Economy Trade and Industry) • Technology Roadmap for "Transition Finance" in Automobile Sector (Ministry of Economy Trade and Industry) • Net Zero by 2050 (IEA)

※ The above roadmap is as of the framework publication date

1.10 ESG Management Promotion System

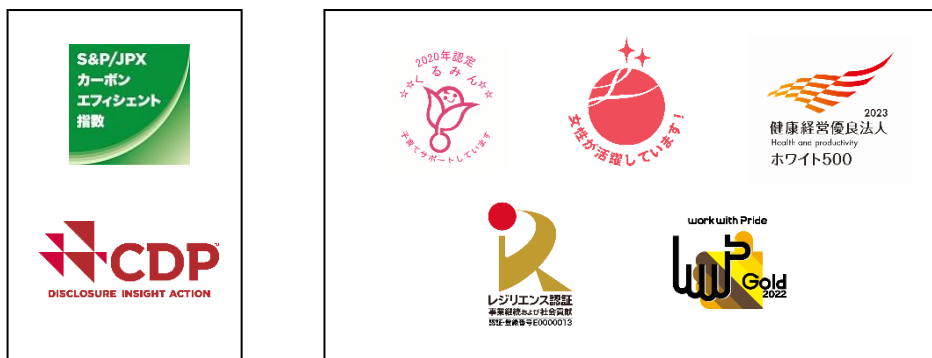
The IHI Group began considering basic ESG management policies and measures, consequently establishing the ESG Management Promotion Committee for the purpose of evaluating and improving the progress of the policy and measures implemented. ESG Management Promotion Committee, chaired by the Chief Executive Officer (CEO) discusses basic sustainability policy and measures, and reports to the Management Committee.



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 to play a role as a tool to formulate strategies able to strengthen risk management and cultivate business opportunities. The IHI Group put in place a task force under the ESG Management Promotion Committee in fiscal 2021 to advocate carbon-neutral initiatives. The IHI Group also conducts uncompromising risk management to fully and rapidly respond to any risks found by carefully identifying changes around business operations. The IHI Group is integrating TCFD Task Force activities and the risk management systems to create a PDCA cycle for climate change risks.

1.11 Evaluation by Third Parties

Various third-party agencies have evaluated the sustainability initiatives of the IHI Group worldwide.



2 Alignment with Four Elements of the Relevant International Capital Market Association Principles (for Finance with Specific Proceeds Usages)

2.1 Use of Proceeds

The IHI Group will use proceeds for new and existing expenditures, (such as for technology and product development costs, capital expenditures, and capital investment spending) relating to qualified projects meeting the following four eligibility criteria. The refinancing of existing expenditure is limited that within two years of transition bond funding.

Category		Projects (Example)	
1	Growth Business (Aero Engines and Space)	Weight reduction of aircraft Electrification of aircraft engine ✕	<ul style="list-style-type: none"> Improvement of gas turbine's efficiency, Development of Next generation engine, etc. (Use of Proceeds : Research and Development, Business Development, Capital Expenditure, Miscellaneous cost relevant to above mentioned projects and Capital Contribution)
		SAF ✕	<ul style="list-style-type: none"> Development synthetic catalysts and algae culture, etc. (Use of Proceeds : Research and Development, Business Development, Capital Expenditure, Miscellaneous cost relevant to above mentioned projects and Capital)
2	Development focus Business (Clean Energy)	Establishment of an Ammonia Value Chain	<Produce> <ul style="list-style-type: none"> Capital Contribution to green ammonia production projects and investment to ammonia synthesis system, etc. <Transport and Storage> <ul style="list-style-type: none"> Development of ammonia tanks, Capital contribution to large receiving and storage terminals, etc. <Use> <ul style="list-style-type: none"> Demonstration and commercialization of gas turbines that can operate on 100% firing, etc. (Use of Proceeds : Research and Development, Business Development, Capital Expenditure, Miscellaneous cost relevant to above mentioned projects and Capital)
		Realization off carbon recycling	<ul style="list-style-type: none"> Demonstration and commercialization toward CCUS, methane synthesis and e-fuel production, etc. Capital contribution to projects of conservation and management of Tropical Peatland (NeXT FOREST, etc.) (Use of Proceeds : Research and Development, Business Development, Capital Expenditure, Miscellaneous cost relevant to above mentioned projects and Capital)
3	Core Businesses (Utilizing Existing Businesses)	Electrification of automobile ✕	<ul style="list-style-type: none"> Development of electric turbochargers, etc. (Use of Proceeds : Research and Development, Business Development, Capital Expenditure, Miscellaneous cost relevant to above mentioned projects and Capital)
		Others	<ul style="list-style-type: none"> Capital contribution to Small Modular Reactors (SMR), etc.

4

**Reducing CO2 Emissions in
Business Operations
(Scope1, 2) ※**

▪switching to fuels for heat source equipment at business sites, promoting electrification, and upgrading to energy efficiency equipment, etc.
(Use of Proceeds: Capital Expenditure, Miscellaneous cost relevant to above mentioned projects and Capital)

※Projects recognized as green projects

Among the projects for use of proceeds to be appropriated, in the establishment of the ammonia value chain, corrosive and exothermic ammonia will be appropriately managed to reduce environmental impact. In addition, although nitrogen compounds (NOx) are usually generated when ammonia is burned, the company has succeeded in exclusively burning under NOx emission control. Furthermore, the reduction of greenhouse gases such as nitrous oxide (N2O) generated during combustion by the exclusive combustion of liquid ammonia in a gas turbine has been achieved by more than 99%. It has also been demonstrated that power generation at rated output can be achieved by the combustion of liquid ammonia alone. In order to contribute to the realization of a decarbonized society, we will promote efforts to build an ammonia value chain with appropriate management of ammonia.

For other projects, although no negative effects are expected at this time, the evaluation and selection process for all projects takes into consideration the potentially negative environmental and social impacts, and confirms that the equipment certification, approval, and environmental assessment procedures required by the installation country, region, and local government are appropriate for the target equipment and projects.

2.2 Process for Project Evaluation and Selection

IHI's Finance & Accounting Division, after consultation with business areas, SBUs, the Corporate Planning Division, etc., selects eligible criteria described in "4.1 Use of Proceeds" and target project candidates, and the General Manager of Finance & Accounting Division makes a final decision. In the operation and implementation of projects, we will cooperate with the relevant divisions and regularly monitor them in PDCA cycle.

2.3 Management of Proceeds

Funding and asset linkage, as well as the management of funding appropriations, are tracked and managed by IHI's Finance & Accounting Division throughout the internal management process. Tracking results are generally scheduled to be confirmed by the General Manager of the Finance & Accounting Division on a quarterly basis. Until the proceeds are appropriated, they will be managed in cash or cash equivalents.

We confirm that appropriated and unused funds are properly balanced through quarterly internal audits and quarterly reviews by quarterly auditors and accounting audits, in addition to the tracking management within the IHI Group.

2.4 Reporting

(1) Fund Appropriation Reporting

With respect to funded status, we will disclose the funded status on our website or to the lenders (in the case of loans) once a year until the proceeds from are fully funded.

If, even after the completion of the funding, a project subject to the funding is subject to an event that differs from our initial assumptions, we will promptly disclose on our website or to the lenders (in the case of loans) the event and the status of the funding accrual.

(2) Impact Reporting

Until the redemption or repayment, we will announce the following once a year on our website.

Category		Projects (Example)	
1	Growth Business (Aero Engines and Space)	Weight reduction of aircraft Electrification of aircraft engine ✕ SAF ✕	Report the outline of technologies and products, outline and progress of R&D plans and participating projects, etc., and explanations of targeted effects, etc. to the extent possible for disclosure
2	Development focus Business (Clean Energy)	Establishment of an Ammonia Value Chain Realization off carbon recycling	Report the outline of technologies and products, outline and progress of R&D plans and participating projects, etc., and explanations of targeted effects, etc. to the extent possible for disclosure
3	Core Businesses (Utilizing Existing Businesses)	Electrification of automobile ✕ Others	Report to the extent that disclosure is possible, such as the outline of technologies and products, and the progress and results of the business
4	Reducing CO2 Emissions in Business Operations (Scope1, 2) ✕	Report on activities to reduce CO2 and their effectiveness to the extent practicable.	

✕Projects recognized as green projects

(3) Reporting on ALL Aspects of IHI's Business

The IHI Group began publishing the IHI Integrated Report, bringing together the Annual Report and CSR Report, in 2015. We also produce the IHI Sustainability Data Book, which discloses detailed and comprehensive information on Group sustainability policies, stances, structure, and performance.

- IHI Integrated Report
<https://www.ihi.co.jp/en/ir/library/annual/>
- IHI Sustainability Data Book
<https://www.ihi.co.jp/en/sustainable/data/sustainabilitydatabook/>

(4) Reporting on Financial Position

IHI discloses securities reports and results information on its website.

Securities reports and results information

https://www.ihi.co.jp/en/ir/library/finance_report/

3 Alignment with Five Elements of the Relevant International Capital Market Association Principles (for Finance with Non-Specific Proceeds Usages)

Alignment with the five elements outlined under the ICMA Sustainability-Linked Bond Principles and LMA Sustainability-Linked Loan Principles (1. Selection of Key Performance Indicators (KPIs), 2. Calibration of Sustainability Performance Targets (SPTs), 3. Loan characteristics, 4. Reporting, 5. Verification) is described as follows.

3.1 Selection of Key Performance Indicators (KPIs) and Calibration of Sustainability Performance Targets (SPTs)

The KPI to be executed based framework is “CO2 emissions (Scope1+2)”

KPI	IHI Group’s GHG Emissions (Scope1+Scope2)
SPT	50% reduction in 2030 (Compared to 2019)

	FY2018	FY2019	FY2020	FY2021	FY2022
GHG emissions (Scope1+Scope2) (t-CO ₂ e)	329,602	254,227	225,066	220,138	215,753
Scope1 (t-CO ₂ e)	80,302	64,724	58,517	64,270	61,469
Scope2 (Market-based) (t-CO ₂)	249,570	189,503	166,549	155,868	154,284

※ Scope: IHI Corporation and consolidated subsidiary

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

※ Third-party Verification for the data in FY2021 and FY2022 is provided by an external reviewer.

※ Since fiscal 2022, the scope of measurement of GHG emissions (Scope1) has included CH₄, N₂O, HFC₅, PFC₅, SF₆, and NF₃.

In the "the IHI Group’s ESG Management" in November 2021, IHI Group positioned "countermeasures against climate change" as an important issue in ESG management, and had continued CO₂ reduction activities based on the Japanese government's policy of "46% reduction in CO₂ emissions in fiscal 2030 (compared to fiscal 2013)."

On the other hand, in April 2023, we decided to reduce GHG emissions (Scope1 and 2) in FY 2030 by half compared to FY 2019, in response to the need to strengthen global responses to climate change. The company, with its decarbonization technology, will take the lead in contributing to the realization of a global carbon-neutral society by working toward achieving this goal as a KPI of transition-link finance, exceeding the policy of the Government of Japan and the recommendations of the IPCC.

In addition to the SPT described above, the annual SPT may be determined in consideration of the financing period, etc. In such cases, disclosure will be made in statutory disclosure documents for bond issues or contract documents for loans, etc. at the time of financing.

If the IHI Group changes its SPT after implementation of transition-link financing, the SPT for transition-link financing already implemented will not be changed. If an unforeseeable situation (Significant changes in M & A activities, regulations and other institutional aspects, or occurrence of abnormal events) occurs at the time of publication of this framework, and it is necessary to change the definition of KPI or the setting of SPT, the reason for the change and the content will be disclosed on the company’s website.

3.2 Bond and Loan Characteristics

The financial and structural characteristics of the transition-linked finance executed based on this framework will change depending on the achievement of the SPTs.

Changes in financial characteristics include an interest rate increase(step-up)/decrease(step-down), execution of donations to organizations which aim to engage in environmental conservation activities, but are not limited.

The financial and structural characteristics will be specified in the statutory disclosure documents or contract documents formulated at each time of financing.

3.3 Reporting

We will report on an annual basis on its progress on the KPIs and the achievement or non-achievement of the SPTs. The reports will be published on IHI Integrated Report or IHI's website.

3.4 Verification

The progress of SPT against KPIs is scheduled to be verified by a third-party reviewer once a year after execution of transition-linked financing and before redemption or payment is completed.

Verification results are disclosed annually in the Integrated Report or on the company website or disclosed to lenders (for loans only).

【References】

- I. Green Bond Principles2021 (ICMA)
- II. Green Loan Principles 2023 (APLMA, LMA, LSTA)
- III. Sustainability Linked Bond Principles 2023 (ICMA)
- IV. Sustainability Linked Loan Principles 2023 (APLMA, LMA, LSTA)
- V. Green Bond and Sustainability Linked Bond Guidelines 2022(Ministry of Environment)
- VI. Green Bond and Sustainability Linked Bond Guidelines 2022 (Ministry of Environment)
- VII. Climate Transition Finance Handbook 2023 (ICMA)
- VIII. Basic Guidelines on Climate Transition Finance 2021 (Financial Services Agency, Ministry of Economy, Ministry of Environment)
- IX. IHI ESG STORYBOOK (December 2021)
- X. IHI Integrated Report (November 2022)
- XI. IHI Sustainability Data Book (September 2022)
- XII. Our Company Securities reports
- XIII. Our Company Website (<https://www.ihico.jp/en/>)

IHI

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