

# IHI REPORT



Interim Report for the 204<sup>th</sup> Fiscal Year

April 1<sup>st</sup>, 2020 to September 30<sup>th</sup>, 2020



**IHI will, while achieving a return to a growth trajectory, create pivotal, new businesses for the future.**

IHI Corporation

**Hiroshi Ide**

President and Chief Operating Officer

## While the timing of the resolution of COVID-19 pandemic is uncertain, please share your view on IHI's business situation for FY2020.

At IHI Group sites, both domestically and internationally, since the end of March this year we have been paying utmost attention to preventing the spread of infection, while continuing with our business activities.

During the six months under review, the accounts showed a significant decline in revenue and profits, with the recording of net sales of ¥482.8 billion and an operating loss of ¥6.1 billion. Loss attributable to owners of parent was ¥9.5 billion.

The primary factor behind this situation was a sharp decrease in air transportation demand due to the impact of the spread of COVID-19, which lead to a significant decrease in unit sales of new engines and in sales of spare parts caused by a deterioration in business conditions for airlines.

The full-year consolidated forecast of results for FY2020 had been undetermined, which had been a concern for shareholders. On November 10<sup>th</sup>,

2020, we announced a forecast for revenue of ¥1,150.0 billion, operating profit of ¥20.0 billion, and profit attributable to owners of parent of ¥1.0

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### Earnings Highlights

(Billions of yen)

#### Six months ended September 30, 2020 (Japanese GAAP)

Net sales	Operating profit	Ordinary profit	Profit attributable to owners of parent	Basic earnings per share
482.8	(6.1)	(10.0)	(9.5)	(64.37)

#### FY2020 Full-year consolidated forecast (IFRS) <sup>(Note 1)</sup>

Revenue <sup>(Note 2)</sup>	Operating profit <sup>(Note 3)</sup>	Profit before taxes	Profit attributable to owners of parent
1,150.0	20.0	10.0	1.0

#### <Reference> FY2020 Full-year consolidated forecast (Japanese GAAP)

Net sales	Operating profit	Ordinary profit	Profit attributable to owners of parent
1,150.0	8.0	(5.0)	0.0

(Note 1) The figures for the full-year consolidated forecast for FY2020 are based on International Financial Reporting Standards (IFRS) since IHI plans to adopt IFRS, in place of Japanese Generally Accepted Accounting Principles (Japanese GAAP), for consolidated financial statements starting from the account closing of the fiscal year ending March 31, 2021.

(Note 2) "Net sales" under Japanese GAAP is stated as "Revenue" under IFRS.

(Note 3) Operating profit on IFRS = Gross profit - Selling, general and administrative expenses + (on Japanese GAAP) Non-operating income / expenses & Extraordinary income / losses - Financial income / expenses

billion, which all together constitute a significant decline in revenue and profit over FY2019.

After considering the level of profit for the fiscal year ending March 31, 2021, we have regretfully decided that the interim dividend for the six months ended September 30, 2020 and the forecast for year-end dividend to be zero yen.

We sincerely apologize for the inconvenience and concerns caused to shareholders.

### What sort of path do you envision for the recovery in performance?

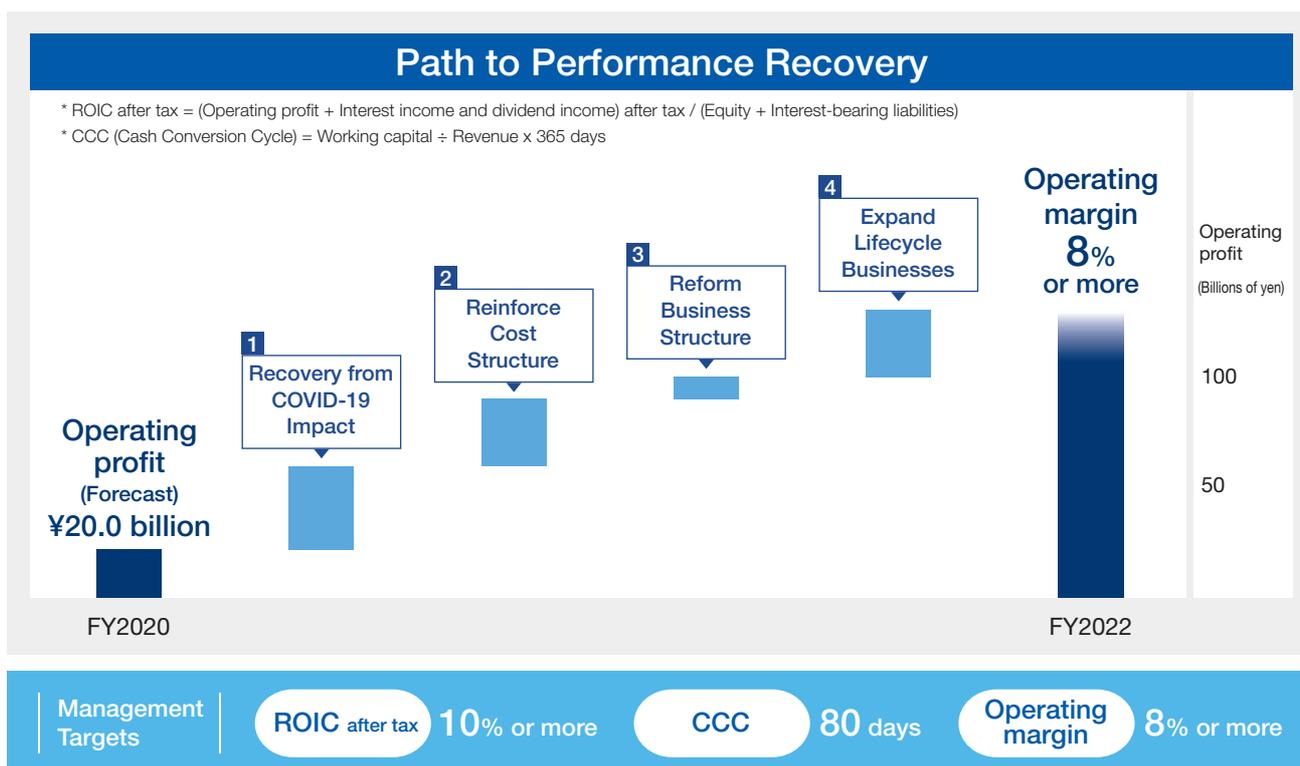
As the operating environment has changed dramatically, we reviewed the “Group Management Policies 2019”, which began in FY2019, and announced “Project Change.” Project Change inherits the basic concept of “Tackle social and customer issues with customers and create new value” established in the Group Management

Policies 2019, and will implement measures aimed to return the IHI Group to a growth trajectory.

In addition, the management targets set in the Group Management Policies 2019 have not changed, however the deadline for achieving these targets has been delayed one year to FY2022.

With the operating profit of FY2020 as a departure point for achieving management targets, there will be impact from the worsening of market conditions caused by the COVID-19 crisis. However, given improvements in profitability driven by the structural cost reforms we had already been implementing, business structural reforms, and stringent use of risk management to eradicate downturns in construction, we expect the operating profit to be ¥20.0 billion. Next, I will use the figure shown below to explain the paths we are embarking on to achieve the FY2022 management targets. There are four main points.

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## 1 Recovery from COVID-19 Impact

Regarding conditions in the market for civil aero engines, while there is no hint of recovery in air transportation demand on international routes, air transportation demand on domestic routes has begun to show signs of recovery following the resumption of economic activity in various countries.

According to forecasts from the International Air Transport Association, demand is expected to take several years to return to that of pre-COVID-19 levels, but from a comprehensive view of information obtained from our business partners and other factors, we assume that demand for the spare parts and the highly fuel-efficient, new engines supplied by the IHI Group will have recovered to a certain amount by FY2022.

As for the vehicular turbocharger business, the resumption of full-scale economic activity in China has resulted in a rebound in automobile-related demand, driving a gradual recovery in unit sales.

## 2 Reinforce Cost Structure

We will cut costs across the value chain and reinforce cost structure by building a organizational structure impervious to fluctuations in the level of sales. Although net sales in the vehicular turbocharger business have already declined due to the impact of the spread of COVID-19, as a result of reviewing the cost structure and lowering the break-even point, the business as a whole has seen an increase in profits. We will strive to expand similar measures to other areas of the IHI Group and ensure they are implemented.

## 3 Reform Business Structure

In the case of products and services for which the



IHI Group is currently unable to demonstrate a certain presence, we will continue to devise drastic countermeasures, shrink the scale of low-profitability products/services, and shift resources into areas expected for growth.

## 4 Expand Lifecycle Businesses

In the Group Management Policies 2019, we have pushed forward with initiatives in all business areas to expand Lifecycle Businesses, including operations/maintenance services, with the aim of strengthening the business foundations.

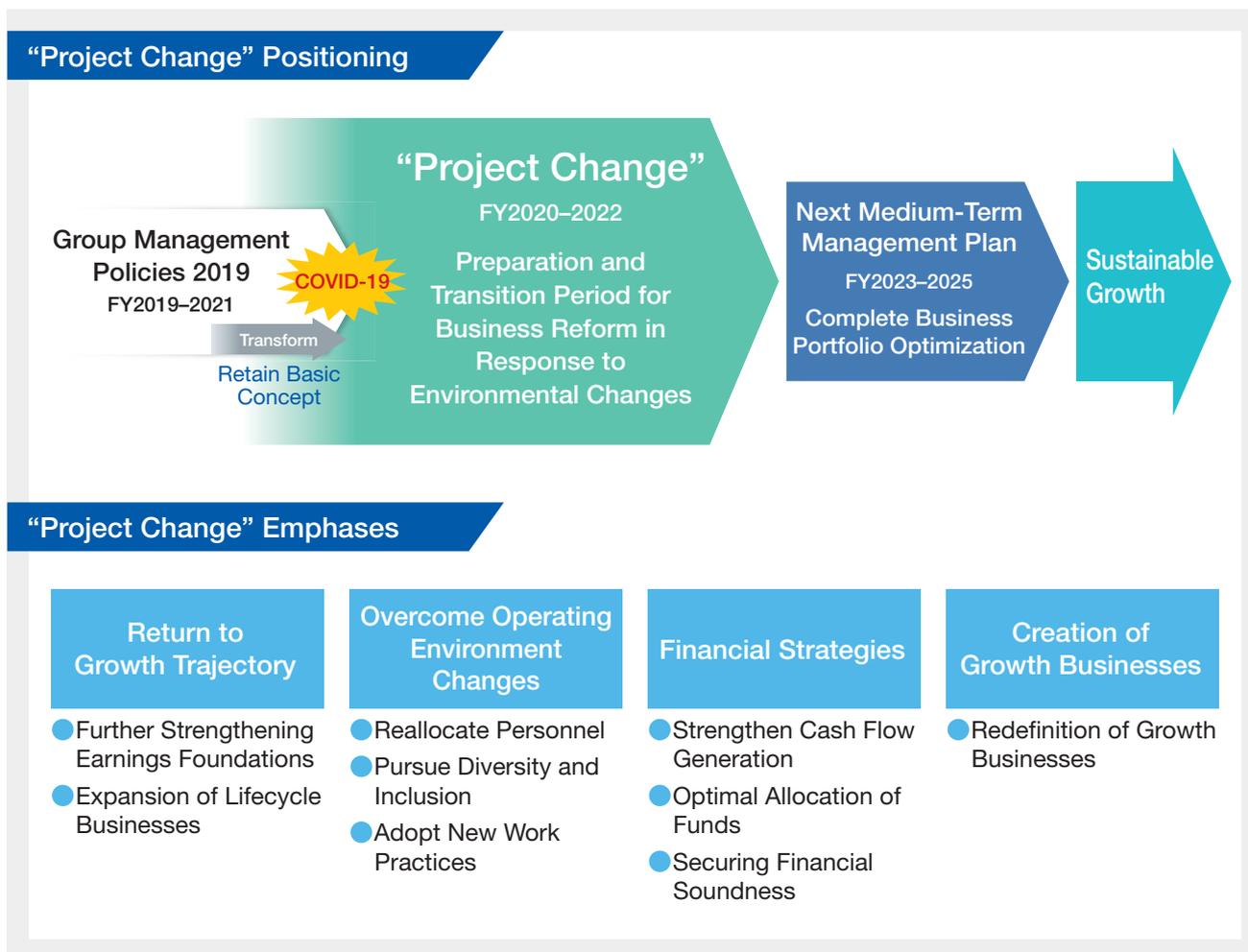
In addition to proceeding further with these initiatives and utilizing digital transformation technology to realize the provision of comprehensive services that are consistent with customer needs, we will deploy them globally. By FY2022, our target is to increase revenue from Lifecycle Businesses by 30%.

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### What measures are aimed at realizing sustainable growth?

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In Project Change, we are moving forward not only with programs to return to a growth trajectory, but



also with measures to realize sustainable growth for the IHI Group.

First, there is the transformation of the business structure to overcome changes in the operating environment. The changes in the operating environment brought about by the spread of COVID-19 can no longer be considered temporary. The IHI Group regards these changes in the operating environment as opportunities and is furthermore working to transform the business structure into one that can continuously generate innovation. As well as allocating human resources flexibly and optimally in line with the business portfolio, we will actively recruit professional staff. In addition, we will enhance business processes to

enable a more flexible work environment that combine telework and office work. In October, we established an organization directly under the President to further accelerate improvements to productivity by taking a stringent approach to eradicating meaningless tasks.

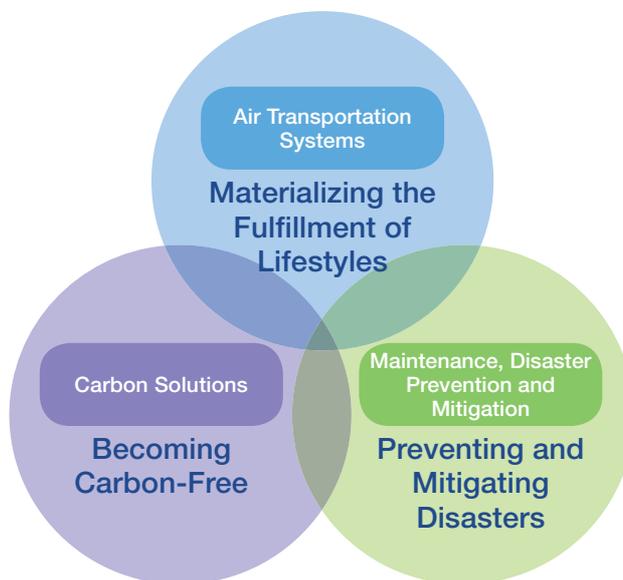
Next, regarding financial strategy, we will secure investment capital to swiftly generate new core earnings sources and optimally allocate funds while maintaining a sound financial position. In order to do so, the strengthening of our ability to generate cash is our top priority, and the IHI Group is working as a whole on these measures.

**Tell us more about the creation of growth businesses.**

To realize sustainable growth for the IHI Group, we must create new businesses that lead to the resolution of social problems.

The social issues set out in Project Change that are being addressed by the IHI Group are “becoming carbon-free,” “preventing and mitigating disasters,” and “materializing the fulfillment of lifestyles.” By resolving these issues, we seek to create economies where nature and technology are in harmony.

For the near-future social infrastructure in which IHI can provide value, we will redefine the three businesses of “air transportation systems,” “carbon solutions,” and “maintenance, disaster prevention and mitigation” as the core for building the growth businesses of tomorrow.



For details of each business, please refer to page 7.

**IHI Group’s Near-Future Social Infrastructure Contributions**

**Help Create Economies Where Nature and Technology are in Harmony**

Social Issues	Becoming Carbon-Free	Preventing and Mitigating Disasters	Materializing the Fulfillment of Lifestyles
Near-Future Social Infrastructures	<p>Decentralized, Low-Eco-Impact Community Infrastructure</p> <p>Robust and Eco-Friendly Social Infrastructure</p> <p>Safe and Clean Air Transportation Infrastructure</p> <p>Circular Energy and Resources Infrastructure Coexisting with Nature</p> <p>Space Infrastructure for Creating New Societies</p>		



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## Finally, please let us hear your enthusiasm as President of IHI.

The COVID-19 crisis hit right at the time when I assumed the role of COO in April, so the first task was to deal with its associated risks. However, changes in the environment are both a risk and, at the same time, an opportunity. The direction of the environment in which we operate is becoming clearer, as can be seen from the recent announcement in October by the Japanese government of its goal of realizing a carbon-neutral/decarbonized society by 2050.

The IHI Group will bring together all its strength to move forward swiftly with the transformation, return to a growth trajectory, and aim to restore dividend at an early stage. In addition, in order to build a strong IHI Group invulnerable to changes in the environment, we will create a new businesses that will rank alongside civil aero engines as one of the stars of the Group, thus realizing enhancements in corporate value.

I express my heartfelt gratitude to all IHI shareholders and look forward to their continued and invaluable support in the future.

## Air Transportation Systems

We continue to regard this as the core business of the IHI Group. In order to establish ourselves as one of the main players in the global aerospace sector, we must work on initiatives such as establishing a production center that leverages the digital transformation, operating factories that realize the highest levels of productivity globally, expanding the materials business, and establishing electrification technology without delay.

## [Materializing the Fulfillment of Lifestyles]

### [Becoming Carbon-Free]

#### Carbon Solutions

Becoming carbon-free is a global issue. Technology to achieve carbon-free operation must be developed not only for power generation facilities that supply energy, but also for industrial machinery that consumes energy. In addition, we will work on developing technology for optimizing, automating, and reducing the labor used in supply chains for energy, logistics, and industrial systems in preparation for bringing about comfortable, decentralized communities.

### [Preventing and Mitigating Disasters]

#### Maintenance, Disaster Prevention and Mitigation

With natural disasters occurring more frequently, maintenance, disaster prevention and disaster mitigation have become issues of shared importance at a global level, and what we believe the IHI Group has a significant role to fulfill. We will not only engage in large-scale maintenance of aging infrastructure, but also expand the value we provide across the value chain by developing infrastructure centered on maintenance, disaster prevention and disaster mitigation, such as building preventive maintenance systems.

Resources, Energy and Environment Business Area



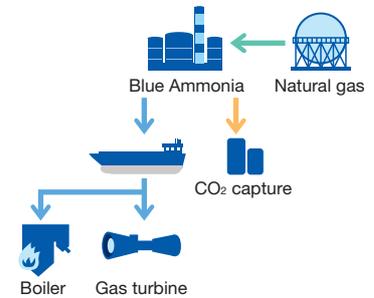
## IHI Conducts World's First Co-firing Testing Using "Blue Ammonia"

As ammonia does not emit CO<sub>2</sub> during combustion, IHI is focusing on this characteristic to assist in developing technology for its usage. Previously, Yokohama Works had conducted tests in the co-firing of natural gas and ammonia in gas turbine power generation facilities, and Aoi Works had worked on tests in co-firing pulverized coal with ammonia in coal-fired boilers. Now, IHI has conducted the first-ever test in the world involving the co-firing of Blue Ammonia.

During manufacture of Blue Ammonia, the emitted CO<sub>2</sub> is captured and stored or utilized, attracting attention as a carbon-neutral fuel. The Blue Ammonia used in these latest tests was supplied as part of demonstration testing of the supply chain for Blue Ammonia proposed by Saudi Arabian Oil Company and The Institute of Energy Economics, Japan.

The use of ammonia has become possible through the cooperation between the manufacturer side and the consumer side. This initiative was an important step towards linking the two sides. Going forward, we will continue to develop technology with the aim of realizing a carbon-free society using energy from ammonia.

Overview of Blue Ammonia co-firing test



Social Infrastructure and Offshore Facilities Business Area



## IHI Receives Orders for the Bangabandhu Bridge Construction Project in Bangladesh

IHI Group's IHI Infrastructure Systems Co., Ltd. has received orders jointly with Sumitomo Mitsui Construction Co., Ltd. in the People's Republic of Bangladesh for the west side of the Bangabandhu Sheikh Mujib Railway Bridge (Jamuna Railway Bridge) construction project.

Aging railway facilities in Bangladesh have been suffering from progressive deterioration, especially on railway bridges restrictions on transit speed and on the weight of rolling stock in transit have caused problems such as operational delays. Putting in place a railway network that can deal with the increase in rail transportation arising from economic development has become an urgent issue. Despite it constituting an important section of the Trans-Asian Railway, there has been progressive age-related deterioration in the Jamuna Multi-purpose Bridge, which is both a road bridge and the railway bridge. This project consists of the construction of a new railway-only bridge running parallel to the Jamuna Multi-purpose Bridge, funded by loans from the Japanese government.

Through participation in this project, the IHI Group is supporting improvements in the efficiency of logistics networks in Bangladesh and neighboring countries and working to enhance the safety of the railway network and its ability to deal with future rail transportation demand.



Conceptual image of the completed Jamuna Railway Bridge

## Industrial Systems and General-Purpose Machinery Business Area



### Development of Safe, Secure and Comfortable Parking Systems

IHI Transport Machinery Co., Ltd. is developing parking systems that are safe, secure and comfortable for the use of all people and vehicles.

In July of this year, domestic sales of the “Gran Series”, the industry’s first elevator parking system to use Artificial Intelligence (“AI”) and 3D sensors, have begun. In addition to being able to provide parking for 99.9% of vehicles sold in Japan in FY2019 (IHI estimate), this series of products is equipped with AI that learns usage patterns to achieve the shortest retrieval waiting time. In addition, because safety checks after retrieval are carried out by means of 3D sensors and the shutters within the parking system are closed automatically, this comfortable parking system can prevent people from forgetting to close shutters and enables a stress-free experience for users.

Going forward, in a society where ICT is developing rapidly, the IHI Group will continue to pursue “the next ideal parking system” and provide optimal solutions in response to diverse needs.



Conceptual image of Gran Series parking system

## Aero Engine, Space and Defense Business Area



### Entering the Satellite Launch Business

With the aim of entering the satellite launch business, IHI Group’s IHI AEROSPACE Co., Ltd. (“IA”) and the Japan Aerospace Exploration Agency (“JAXA”) have concluded the “Basic Agreement on the Development of the Epsilon S Launch Vehicle and the Implementation of the Launch Service Business.”

The Epsilon S Launch Vehicle is based on an improved version of the Epsilon Launch Vehicle developed by JAXA. It will share technology and components, etc. with the H3 Launch Vehicle to achieve synergy effects in improving development efficiencies and reducing launch costs, with the goal of enhancing its international competitiveness.

In addition to developing and manufacturing the launch vehicle, IA aims to operate all phases of the business, from winning new customers to carrying out launches, and is proceeding with development in preparation for the launch of demonstrator in 2023.

Taking the opportunity presented by the signing of this Basic Agreement, the IHI Group aims to use the entry into the satellite launch business to expand into the field of space transportation and will conduct development and begin global initiatives to obtain orders.



Basic Agreement Signing Ceremony



#### Inquiries regarding administrative procedures for stocks

Stock Transfer Agency Business Planning Department  
Sumitomo Mitsui Trust Bank, Limited  
2-8-4 Izumi, Suginami-ku, Tokyo 168-0063, Japan  
Telephone: 0120-782-031 (toll-free in Japan only)