

President's Message



Seiji Izumisawa

President & CEO

MHI Group management is dedicated to delivering new solutions that address the world's most pressing issues, particularly climate change.

We will continue providing fundamental infrastructure as the world recovers and moves forward from the COVID-19 pandemic

It is still hard to tell today how much impact the COVID-19 pandemic will have on our world, but I eagerly hope for a quick end to this dire situation. My heart goes out to all who have been affected by this disease, and I express our deep appreciation to the front-line health-care workers and the many others who are dedicating themselves to dealing with this life-threatening affliction.

In the wake of this pandemic, I believe what will be needed is not a "return" to the pre-COVID situation,

but rather a post-COVID "recovery" driven by major changes in our lifestyles, including the ways in which we work.

MHI Group, by integrating our technologies with the needs of our customers, will support the health of our fundamental infrastructure—in areas including energy, material handling and transport—and make positive contributions that will enable steady progress toward a full recovery.

The core thinking behind our corporate activities

Mitsubishi Heavy Industries traces its founding back to 1884. For more than 130 years, we have been supported, in spirit, by the commitments laid out in our three core principles*¹. Among them, I believe the one we must firmly uphold above all is our commitment to provide reliable and innovative solutions that make a lasting difference to customers and communities worldwide. This is our greatest mission.

In recent years the values embraced by our customers have diversified, expanding beyond purely economic considerations to include heightened awareness of environmental and social issues. In tandem, the issues that demand resolution are also changing.

How MHI Group grasps these emerging needs and adapts itself to them will be key, and we need to take a flexible approach to provide solutions that have real impact. In the past, we had at times insisted on being fully self-sufficient; but always restricting ourselves to in-house capabilities means we cannot grow. Now, by steadily embracing open innovation, it has become second nature for us to collaborate with external partners, while keeping some of our core capabilities in-house. Moving forward, therefore, we will respond to our customers' needs by maneuvering strategically between these two approaches.

*¹ See page 4.

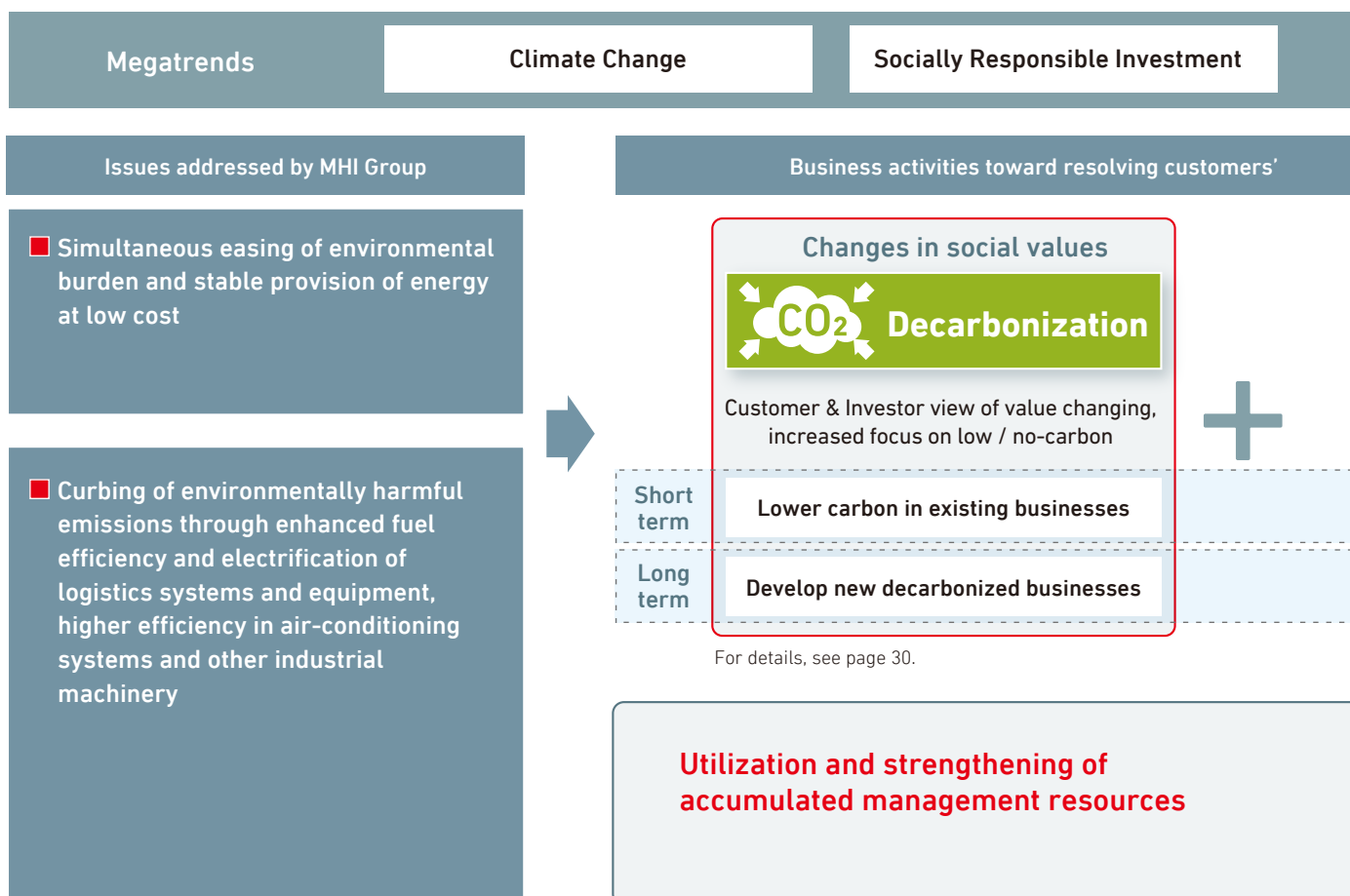
President's Message

Sustained growth by addressing the pressing issues of our time

MHI Group must continue to be a company that is turned to by our customers and society as a whole for solutions to their most pressing needs. Only by doing this can we achieve sustained growth. There are two areas in particular that we must focus on and make positive contributions to resolving: energy supply and climate change. Energy underpins our modern life and the lifestyles we enjoy, so the supply of energy needs to be environmentally sound, stable, safe and also economically viable. Renewable energies offer benefits in emitting no carbon dioxide in the process of generating power; however, a challenge exists in the susceptibility of renewables to changing meteorological conditions. To resolve these two intercon-

nected issues, what's important, I believe, is for us to adopt an approach that goes beyond debating two mutually opposing aims, instead seeking to provide appropriate solutions through discussion based on scientific analysis. A number of solutions that go beyond mere dichotomous thinking—how to develop energy sources for the future, and how to respond to swings in the volume of power generated using renewable energies—are conceivable. At MHI Group, we have the technologies, the knowledge and the experience necessary to make such solutions available, and today we are undertaking a variety of initiatives that will enable us to combine both aspects to meet the needs of our community.

► Sustained growth through contributions to resolving social issues

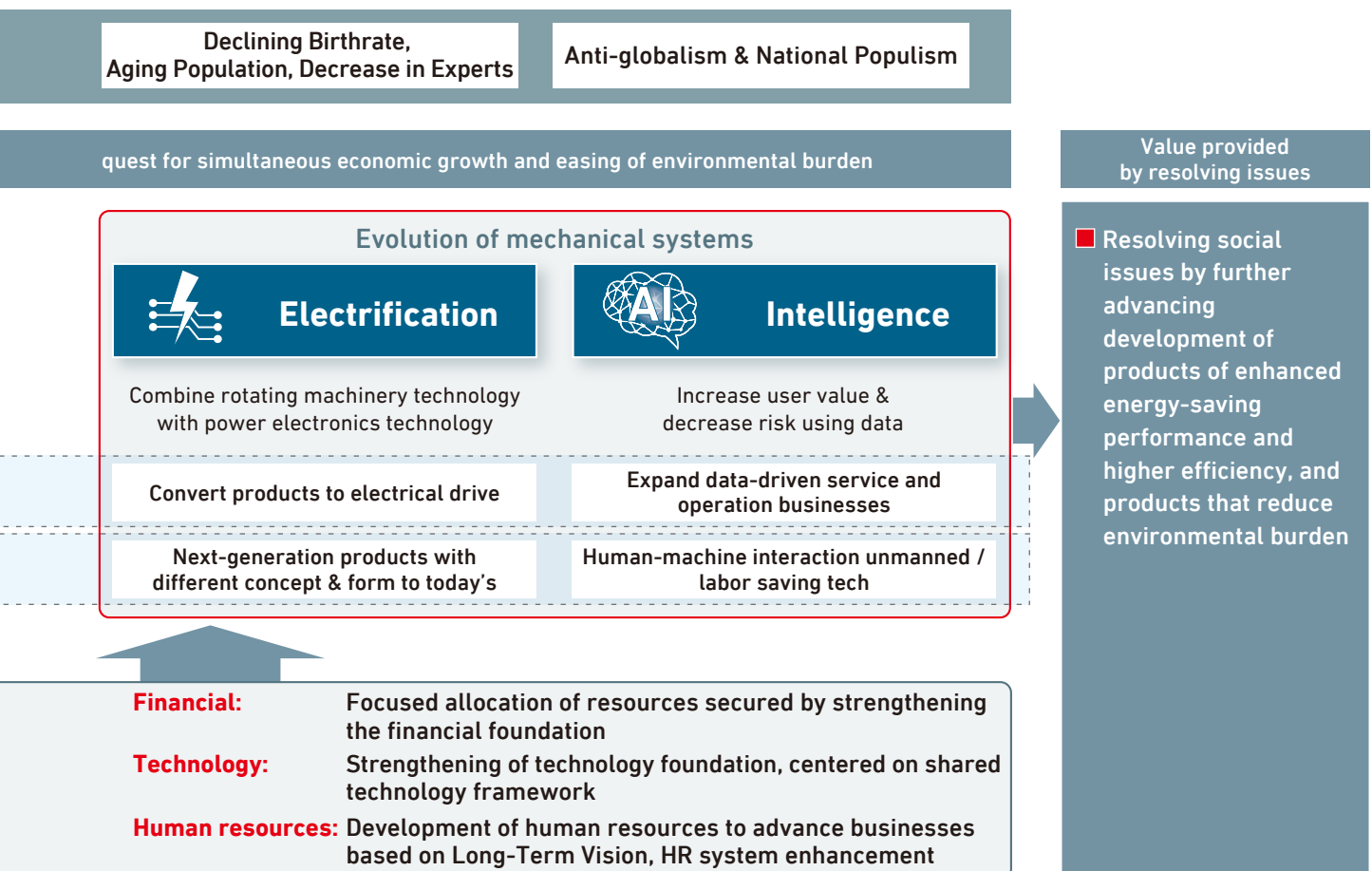


As an example, today we rely mainly on use of fossil fuels to generate power, but in the future I think we will see a shift to alternative fuels such as hydrogen*² that emit no carbon during power generation. Issues pertaining to the manufacturing and transport of these fuels present challenges in the near term, but going forward, we must no longer be satisfied to simply provide large-scale thermal power plants that use fossil fuels as their energy source. We must leverage broad resources to stably provide energy solutions that respond to the diverse needs of customers in their respective areas of the world.

We work on environmental issues other than climate change as well, in emerging nations and developing countries, we provide desulfurization and denitration equipment that reduces emissions of pol-

lutants into the air. To curb emissions of sulfur oxides from ships, we offer a desulfurization device known as a SOx scrubber. Environmental solutions like these are not directly linked to economic efficiency in its narrow sense, however, and for that reason such systems are not yet seen as absolutely indispensable in regions where environmental regulations remain less stringent. Nonetheless, because in the long term they will contribute to resolving the dual social issues of economic growth and reducing the burden on the environment, it is crucial for us to further develop our technologies and expertise in these areas and to continue proposing such systems to the customer as solutions for the future.

*² For details, see page 30.



President's Message

Providing solutions through cross-disciplinary combinations of technologies

Today, more than the face value of things, increasing importance is attached to the value gained by using things. Our job at MHI Group doesn't end with the delivery of a good product; our task is to provide solutions that will enable our customers, in the course of using our products, to offer better products and services to their customers, enhancing their own value.

The key to enhancing added value is to combine and utilize technologies drawn from multiple fields. Even for issues that cannot be resolved by individual technologies, combining different but complementary technologies can create new value. Also, new solutions can be born not only by combining technologies but also by combining multiple businesses into new businesses. For example, today we provide distributed power supply with minimal transmission loss, achieved by combining our technologies in renew-

able energy, power storage and engines. Another example is our power plants that emit no carbon dioxide, achieved by combining our technologies in CO₂ capture plants and thermal power plants. We are also undertaking development toward realization of high-temperature gas-cooled reactors*³. Furthermore, through application of AI and additive manufacturing (AM)*⁴ as elemental technologies, we will greatly expand the scope of solutions we can provide to our customers.

Until now, we had conducted research and development independently at research centers located across various regions, but these have now been aggregated into one Research & Innovation Center. This reorganization, which has focused on highly affinitive technologies, has enabled synergies between technologies and enhanced the cross-disciplinary



development of human resources. As a result, under our shared technology framework*⁵, which includes our research centers, when a promising finding is made in one SBU*⁶, that information can be readily shared with other SBUs. In addition, the establishment of the Research & Innovation Center has made it easier, through open innovation, to leverage external expertise. Going forward, we must begin cross-domain initiatives between our business divisions as well. Also, besides reorganization, we will resume our Groupwide job posting system, which enables human resources to move more freely within our Group. Through these various initiatives we will set the foundation that will enable us to provide new value and solutions unique to MHI Group.

To deliver such solutions, we must ensure protection of our intellectual property. We are now looking at how best to interconnect our business, technology development and intellectual property strategies, and how to protect our technologies and intellectual property. One approach is to form stronger patent groups that encompass whole facets of innovation, rather than patents that just cover specific technologies.

*³ For details, see page 30.

*⁴ A manufacturing method that uses 3D data to form a product from layers of materials.

*⁵ A comprehensive structure, overseen by the Chief Technology Officer (CTO), encompassing technology strategies, R&D into products and new technologies, ICT, value chains, etc.

*⁶ Strategic business unit: a unit within the strategic business evaluation system.

New business development driven by our new Growth Strategy Office

In April 2020 we took our functions relating to new business development, which were previously dispersed, and integrated them under a newly established "Growth Strategy Office." The new office will respond to major changes in the world and rapid technological innovations by exploring new areas that demand agility not possible in the business divisions, as well as new businesses that integrate existing businesses. Specifically, the Office will pursue three growth strategies: upstream/downstream expansion, growth of existing businesses, and development of new businesses.

Upstream/downstream expansion can be illustrated as follows. From the early phase of a project, the company approaches the customer, gains an understanding of its needs, and then not only proposes the design, construction and installation of a plant, but starts with a holistic analysis of the plant and services optimally suited to its needs. Upstream/down-

stream expansion also includes business relating to post-construction plant operation and maintenance.

To grow existing businesses, the company will target region-focused expansion. To begin, we will strengthen our sales networks especially in the U.S. and Asia-Pacific regions. Due to differing business scales and characteristics between individual products, it is necessary to devise methods for developing each specific business. The resources that can be allocated to a division capable of developing a business worth tens of billions of yen in scale differ, for example, from those we can allocate to a division that can develop a business worth just several billion yen, and this is why the company can't develop all businesses in an identical way. Accordingly, I will consistently seek to implement measures concerning how we can support business teams for global growth, or determine what incentives to offer by the Growth Strategy Office joining forces with our overseas bases.

President's Message

We are closely examining SpaceJet's development schedule while monitoring changes in the aviation market

Regarding our SpaceJet business, in February 2020 we announced that, in light of the state of progress in development, we would undertake a detailed examination of our 90-seat class M90 model's development schedule and defer initial deliveries until FY2021 or later. Moreover, because of the enormous impact of the coronavirus pandemic on the global airline industry projected over the long term, we will pursue development on a budget of appropriate scale considering the financial status of MHI Group as a whole. We are now continuing close scrutiny of our development schedule while monitoring the pandemic's impact on the market and business environment.

However, we hold to our view that, judging from global trends beyond the near term, the commercial aircraft business is an area destined for continued growth going forward. What's more, the SpaceJet has numerous superior features: for example, outstanding fuel efficiency, quiet operation and low emissions enabled by its innovative GTF engine technology and an airframe incorporating the latest aerodynamic design, coupled with robust durability achieved by its advanced structural design. Development will still require time, and during that time we will make a sound decision on how we should proceed with this business going forward.

We are aiming for an early return to growth, responding to the expectations of all our stakeholders

The message I want to convey to all our stakeholders—our customers, business partners, shareholders, employees, and society as a whole—is that MHI Group's overarching and unchanging mission is to provide solutions that improve the lives of people everywhere.

In 2019 I met with our overseas investors on several occasions. In Europe, strong interest was expressed in delivering technologies in the low-carbon or carbon-neutral fields and for the use of hydrogen energy to ease the environmental impact of economic activity. I also received many questions about ESG investment and the SDGs^{*7}. In the United States, interest focused on the latest trends in gas turbines from the perspective of shale gas utilization,

and I came away with a solid sense of their expectations of us and the enormity of our role. Energy is the driving force that underpins our lives and lifestyles, and when providing energy, because there are both short-term and longer-term approaches, and also given that needs differ by area, going forward we will propose optimal solutions that take into consideration the circumstances of each specific region.

Finally, in our 2018 Medium-Term Business Plan, MHI Group set a unique KPI known as "Triple One Proportion" (TOP), which refers to an ideal 1:1:1 ratio of net sales, total assets, and market value. While monitoring those three factors, with TOP we aim to attain a favorable balance between our business growth,



optimization of our balance sheets, and improving how we are evaluated by the stock market. TOP is a corporate management goal, and we will focus on this indicator to guide us in conducting our business operations, providing value to society, and deciding how to quantify allocations of the profit that accrue, and thus improve our overall management. While considering the TOP balance, we remain committed to delivering value for society in light of ESG and the SDGs, which will lead to increased corporate value so we can offer returns to all our stakeholders. Also, to respond to changes in our business environment arising from increasingly tense trade frictions between the United States and China and the ongoing coronavirus pan-

dem, we will bring forward our next Medium-Term Business Plan. An announcement in that regard will be made during the second half of 2020.

MHI Group will continue to evolve and pursue sustainable growth by responding rapidly to changes in our customers' needs and the needs of the world at large; by helping to realize a carbon-neutral society; and by providing solutions that bring greater added value through electrification and intelligent systems.

*7 SDGs: A set of 17 "Sustainable Development Goals" shared by the international community aimed at achieving a sustainable and better world by 2030. The core goals relate to poverty alleviation, economic growth, the environment, etc., appended by 169 specific targets for achieving those goals.