# Hitachi: Leading the World in DX and Decarbonization

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#### Maintaining a solid profit base amid major changes

In 2020, as the world confronted the dramatic impact of COVID-19, a number of pressing social and economic issues were brought to light. From the perspective of sustainability, activities targeting climate change and human rights have quickly emerged as the most urgent issues worldwide, including in Japan.

After the disruption of the past year, even capitalism itself is seeing a transformation from the long-practiced "shareholder capitalism" to "stakeholder capitalism," which prioritizes long-term value creation for a wide range of stakeholders. In addition to economic value, in the context of corporate activities, a greater emphasis is now being placed on environmental value and social value. Last year's Integrated Report demonstrated how the environmental changes brought on by the pandemic provided an opportunity to achieve things that we could not have achieved in the past. In keeping with emerging global demands, the Social Innovation Business has worked to offer remote, contactless, and automated solutions. By responding to these changes in the business environment, Hitachi posted an adjusted operating income ratio in fiscal 2020 of 6.5% in its five sectors—IT, Energy, Industry, Mobility, and Smart Life—all despite the negative effects of COVID-19. Although this figure represents a decline of two percentage points compared with the previous year, it exceeded the initial forecast of 5.3%. Though our response has allowed for an ideal V-shaped recovery following the decline into negative profits in fiscal 2008, Hitachi has continued to change. By embracing social innovation, Hitachi has been able to target structural reforms that allow it to better generate social innovations and create a solid profit

base that endured even during the COVID-19 pandemic. Furthermore, by strengthening cash management, we have increased operating cash flow by approximately ¥230 billion year over year and established a strong business base poised for sustainable growth in the future. These results are entirely due to the efforts of our employees. By making the health and safety of our employees, their families, customers, and business partners our top priority last fiscal year, we established a strong remote work environment that allowed us to focus our efforts on supporting customers and maintaining social infrastructures. I would like to express my deep appreciation to the employees who adapted themselves to the new normal and bravely continued to perform their duties in keeping with the changing needs of customers and society as a whole.

## Fiscal 2020 saw progress in expanding the Lumada business and strengthening the business portfolio

In fiscal 2020, Hitachi's Lumada business continued to grow despite the COVID-19 pandemic. Lumada has expanded steadily since it was first offered in 2016, and in November of last year, we started the Lumada Alliance Program, which was followed by the opening of the Lumada Innovation Hub Tokyo in April of this year. Additionally, we completed the acquisition of GlobalLogic, a leading U.S.-based digital engineering services company, which will enable us to further strengthen our global rollout and increase sales from 1.1 trillion yen in fiscal 2020 to 1.6 trillion yen in fiscal 2021, with the goal of accelerating this to 3 trillion yen by fiscal 2025. Until now, we have strengthened the business portfolio with a focus on becoming a company with business that can compete as a leader in the global market. Securing competitiveness is an essential condition in achieving digital solutions that will bring about social innovations that generate new value.

In fiscal 2020, we made substantial progress in strengthening our five sectors and reorganizing our business portfolio with a focus on readjusting capital relationships with listed subsidiaries. In addition to the sell-off of Hitachi Chemical in April 2020, in May of that year, we converted Hitachi High-Tech Corporation into a full subsidiary. Hitachi High-Tech boasts top of the line measurement and analysis technologies and undertakes business involving in-vitro diagnostics as well as semiconductor manufacturing equipment. In July 2020, we acquired ABB's power grids business, which has the top level market share and advanced technologies. This acquisition, which brought with it more than 15,000 customers in about 90 countries worldwide and welcomed approximately 36,000 outstanding employees into the Hitachi Group, contributed to the strengthening of our management base, which is essential to accelerating the rollout of Hitachi's Social Innovation Business on a global scale. Specifically, to effectively utilize the global operations of Hitachi ABB Power Grids throughout the entire organization, we are currently promoting the construction of common ERP systems and global shared services. From this, we expect to achieve cumulative cost reductions of 70 billion yen and 100 billion yen in these two fields, respectively, by fiscal 2025. In January 2021, we launched Hitachi Astemo through the integration of Hitachi Automotive Systems with three Honda affiliates: Keihin Corporation, Showa Corporation, and Nissin Kogyo Co., Ltd. These integrations will streamline the development of core parts and solutions in the shift toward electric power, which represents the key to developing the next-generation of automobiles, while securing a leading position and creating mobility solutions for the future. In April 2021, a decision was made to sell off Hitachi Metals by the end of this fiscal year. Moving forward, Hitachi Metals will strengthen its competitiveness and recover profitability under an ownership group led by the Bain Capital Consortium. In fiscal 2020, we decided to pull out of business operations on the Horizon project, the construction of a new nuclear power plant in the United Kingdom. In the nuclear power business, Hitachi will focus on the decommissioning and reactivation of power plants in Japan, a task of great social significance to society. Hitachi has been involved in the nuclear power business for 50 years, and we look forward to fulfilling our responsibilities through this business in the future as well, in line with the Japanese government's energy policies. The strength of our global business portfolio, which was built through a comprehensive process of business selection and concentration, was demonstrated throughout COVID-19. Even as we maintain the competitiveness of each individual business, we will further refine those strengths to demonstrate comprehensive capabilities in the context of digital solutions.

#### Stakeholder capitalism

The notion that a company creates long-term value for all stakeholders, including customers, employees, suppliers, local communities, and shareholders.

#### **Social Innovation Business**

Business that resolves a variety of issues faced by society and customers in a broad range of fields, especially social infrastructure, through the use of information technology (IT) and co-creation with diverse partners. Vision

#### Lumada business

Business that realizes social innovations through solutions and services that apply Hitachi's advanced digital technologies.

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#### Lumada Alliance Program

A program that builds ecosystems through an open innovation community based on matching with diverse partners to resolve social issues that cannot easily be overcome by a single company alone and accelerate social innovations that create value.

#### Lumada Innovation Hub Tokyo

The flagship location for the Lumada Innovation Hub, which serves as a hub for cocreation activities, connecting customers and partners to create innovations and creating new value by combining their respective knowledge and ideas.

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#### In fiscal 2021, we will complete the transition to a "growth mode"

Fiscal 2021 is the final year of the 2021 Mid-term Management Plan, in which we declared that Hitachi would become a global leader in the Social Innovation Business.

Our first area of focus will be to accelerate the global rollout of the Lumada business with the acquisition of <u>GlobalLogic</u>. GlobalLogic develops software for customers in fields such as healthcare, telecommunications, manufacturing, and the automotive sector, leveraging the strength of some 21,000 digital specialists and eight co-creation bases worldwide. Based on dialogues with customers, GlobalLogic provides solutions that resolve issues from a customer perspective, and we feel that this business demonstrates a high affinity with Hitachi's Lumada platform. Boasting strong trust relationships with customers and a customer retention rate of more than 90%, one of GlobalLogic's most attractive features in terms of technical capabilities is the scope of "Chip-to-Cloud" development, which enables collaborations ranging from frontline data and micro-programs in devices to cloud environments. By making GlobalLogic part of the Hitachi Group, we will strengthen co-creation with customers on a global scale. At the same time, we will combine GlobalLogic's engineering capabilities with Hitachi's system development capabilities to strengthen the development and provision of globally scalable applications and services, thereby accelerating DX in social infrastructure throughout the world.

We have established the major framework for future growth by acquiring powerful assets in a range of business domains, including JR Automation in 2019, Hitachi High-Tech and Hitachi ABB Power Grids in 2020, and Hitachi Astemo in 2021. Moving forward, we will leverage these assets to demonstrate synergy with digital technologies in each region and create an even more robust Hitachi.

In the past, Hitachi Astemo operated in the Smart Life sector, but starting from fiscal 2021, Hitachi Astemo will operate as an independent segment (the Automotive Systems Segment), as we aim to accelerate business growth in six segments. Although the effects of COVID-19 still linger, we will secure an adjusted operating income ratio of 8% in fiscal 2021, and in fiscal 2022, the first year of the new Mid-term Management Plan, we will bring this figure above 10%. We will position fiscal 2021 as the year in which we complete the transition to a growth mode, as we work to further strengthen profitability.

#### Becoming a platform provider that brings about DX for society

Ever since its establishment in 1910, Hitachi has taken a "product out" approach, bringing about innovations and responding to customer needs through product development and the leveraging of outstanding technical capabilities. Since the beginning of the 2000s, however, we have shifted our mindset from a product-oriented to a customer-oriented approach, as we strive to transform into a company that provides social innovations. The most significant change in direction toward customer-oriented co-creation took place in 2016, when we launched the Lumada business amid the rapid proliferation of digital technologies.

In this context, "customer-oriented" refers to an approach built on collaborating to discover and resolve the issues faced by customers. For example, if a customer in the manufacturing industry that owns several plants needs to reduce lead-time and increase quality, we share those management issues and work together to devise the ideal solution.

In recent years, the social issues that dominate our headlines have become increasingly complex and diverse, as can be seen throughout the world in the context of climate change, aging populations, natural disasters, and the resulting fragmentation of supply chains. We are seeing a growing demand to resolve these social issues not through an extension of existing solutions, but by using "value" as a starting point, with a view toward future society and the value that should be provided to make that society a reality. There are limits, however, to the issues that Hitachi can resolve on its own. To bring about social innovations that will create value in people's lives, it is essential that we undertake co-creation with a range of diverse stakeholders, including customers and partners. We believe that this presents an ideal opportunity to apply the strength of open approaches, one of the unique features of Lumada. By leveraging this strength, we have made Lumada an open platform that welcomes many stakeholders, and we have kicked off the Lumada Alliance Program to build an ecosystem that enables us to provide approaches and solutions to

social problems together with those stakeholders. Through the open innovation community that Hitachi provides, we will combine the diverse knowledge and expertise of our partners and create new solutions to social issues that would have been difficult to resolve alone. The solutions created through this process are registered in the Lumada Solution Hub where they can be further used by a variety of customers and partners to achieve a chain of value creation and continuous innovation. The Lumada Alliance Program already includes dozens of customer and partner companies. It is important to continue creating innovation through products and promoting business from a customer perspective, but we expect to see an increasing number of social issues that cannot be resolved without close collaboration and activities involving multiple companies. We are aware that as the public face of the Lumada business, Hitachi will be required to demonstrate strong leadership while exemplifying the social values we hope to advance. Furthermore, to resolve the issues unique to countries and regions throughout the world, we must provide a venue for co-creation, designed to promote discussion and increase awareness of customers' issues while developing solutions. With this in mind, Hitachi has established 11 co-creation bases around the world, including the United States, the United Kingdom, Thailand, and China. This year, we added eight co-creation bases run by GlobalLogic, mainly in Europe and the Americas. The Lumada Innovation Hub Tokyo opened this spring to gather DX specialists and to promote practical co-creation using real-world data. All co-creation bases are connected virtually to form a venue for embodying ideas to promote the development and provision of solutions more efficiently. We will continue to promote co-creation from a medium- to long-term perspective using the Kyōsō-no-Mori innovation base, as well as through collaboration and cocreation with research agencies in Japan and around the world. I have personally been conducting outreach activities to raise broader awareness of Hitachi as a company that promotes DX in social infrastructures on a global scale, and I am extremely pleased to see that recently we have received an increasing number of positive reactions from outside

For example, Hitachi is recognized as a Leader based on its' completeness of vision and ability to execution in the "2020 Gartner Magic Quadrant for Industrial IoT Platforms report" which evaluates providers of industrial IoT platforms\*. In addition, in June of this year, Hitachi was recognized for promoting the DX business using Lumada, as well as for its in-house digital applications, receiving the Grand Prix in the DX Stocks 2021 awards from the Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange.

the company.



### GlobalLogic ► P.29

#### **JR** Automation

An American robotic systems integration company acquired by Hitachi in December 2019. Involved in the construction of production lines and logistic systems using industrial robots for customers in the automotive, aerospace, e-commerce, and medical device industries, mainly in North America.

#### Hitachi ABB Power Grids

Began operations in July 2020, following the acquisition of the power grids business from ABB, a major heavy electrical equipment company headquartered in Switzerland. Provides the world's most advanced power transmission and distribution systems, products, and services, including micro-grids that achieve highly reliable electric power supply. and high-voltage direct current (HVDC) power transmission systems that enable large-scale energy transmission over long distances. In October 2021, the company's name was changed to Hitachi Energy, to show a strengthened commitment to sustainable energy in the future.

Vision

#### Lumada Solution Hub

A platform that gathers and catalogs new solutions developed through co-creation and enables those solutions to be built and introduced quickly and easily in cloud environments.

\* Gartner, Magic Quadrant for Industrial IoT Platforms, Eric Goodness, et al.,19 October 2020

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## Focusing on three fields: the Environment, Resilience, and Security & Safety

#### $\textbf{OT} \times \textbf{IT} \times \textbf{Products}$

Hitachi offers operational technology (OT) cultivated mainly in the social infrastructure field, along with advanced information technology (IT) and products. Hitachi's strength is in its ability to realize DX for customers and society by combining these three elements. Hitachi has always strived to improve people's quality of life and increase value for partner companies by making maximum use of its strengths in "<u>OT x IT x Products</u>" and offering consumer-centric digital solutions that use the Lumada platform, based on ideas from the customer's perspective. When thinking about the future from a value perspective, we need to create an ideal vision of people's lives at a certain point in the future—for example, in 2050— and then back track from that vision to determine what we should do now and what we should prepare. Thinking from that perspective, there are three fields in which Hitachi can create new value for society through the Social Innovation Business, and in which Hitachi can grow: the Environment, Resilience, and Security & Safety.

I would like to talk for a moment about Hitachi's vision for this future society and people's lives in the context of these three fields. In the environmental field, we will contribute to achieving a decarbonized, resource-efficient society. Hitachi will contribute to building a new society, mainly through the power grids business, which supports the transition to renewable energy; the automotive systems business, which promotes the transition to electric vehicles and other forms of electric power to achieve a decarbonized society; and the railway systems business, which accelerates green mobility.

For example, the society of the future will use electric power supplied by wind power generation. However, the locations where wind power generators can be installed are limited, so achieving this goal will require technologies that can supply energy efficiently across long distances. We will respond to these needs by developing solutions that incorporate direct current power transmission, transformer stations, and transformer devices. Replacing gasoline with electricity is one solution for achieving a society in which people are able to use carbon-free, next-generation automobiles. Rather than creating these solutions as an extension of existing technologies and businesses, we need to back track from this future vision and study issues such as power generation and energy storage before deciding how best to move forward.

Our goal in the second key field of resilience is to achieve a society that can withstand the fragmentation of public services and social systems arising as a result of natural disasters and insufficient resources. We need to build a resilient society that can recover quickly and protect people's lifestyles even in the face of disaster. Countries around the world are confronting aging infrastructure while also investing in digitization against the backdrop of rapid urbanization and population increases. Governments and companies must face the possibility of a decreasing labor force due to an aging population, as well as a resulting decline in economic activity. In the industrial world, amid continuing globalization and digitalization, and with the backdrop of insufficient resources, there is a growing demand for management systems that provide support to global supply chains and these systems could become a source of competitive superiority for other companies. In response to these issues, we will support sustainable public services and corporate activities by providing platforms for digital services that target public institutions and the financial industry; robotics SI and other innovative digital solutions as well as logistics services that link various parts of the supply chain, such as manufacturing, warehouses, and distribution; along with cybersecurity that protects all of these component elements.



Finally, in the security & safety field, as we enter an era in which it is said that people will live for 100 years, we will strive for a society in which everyone can live active lives, enjoying health in both body and mind. To help achieve this, Hitachi will develop and provide the mobility and building services and connected appliances required to build cities and support safe and healthy lifestyles from childhood to old age. In addition, Hitachi will spearhead the development of healthcare solutions that support healthy lifestyles for everyone throughout their entire lives. In creating the next generation of healthcare solutions, we must go beyond simply testing and treatment, we need to support healthy living through the entire life cycle, from prevention of illnesses through to the senior years, when long-term care is needed. We must also provide individualized healthcare and build healthcare systems that meet the diverse needs of different individuals and regions. In addition to contributing to testing and treatment through in-vitro diagnostics (IVD) technologies, particle therapy systems and pharmaceutical manufacturing solutions, we will improve people's quality of life by providing new healthcare services using data obtained from those systems and devices.

#### The environment: An urgent issue Aiming for carbon neutrality

Among the three fields mentioned above, there is no doubt that environmental issues are the most urgent. Earlier, I mentioned how Hitachi's businesses contribute to a decarbonized, resource-efficient society, but Hitachi's in-house corporate activities are also working toward this goal.

Hitachi declared its intention to achieve carbon neutrality at in-house business offices and production bases by fiscal 2030, and in December 2020, we were certified under the Science Based Targets initiative (SBTi) for these activities. In January 2020, Hitachi's Omika Works became the first factory operated by a Japanese company to be listed in the World Economic Forum Lighthouse under the "most advanced factory" category. The efficiency-boosting activities undertaken at Omika Works will be expanded throughout the entire value chain. Hitachi aims to achieve carbon neutrality across its entire value chain together with our customers by fiscal 2050. In April of this year, we appointed Executive Vice President Alistair Dormer as Chief Environmental Officer to accelerate these activities. We also incorporated environmental value into the compensation structure for executives as a KPI starting from April 2021 to promote a greater awareness of reducing CO<sub>2</sub> emissions in the context of day-to-day operations. We will accelerate the formulation and execution of environmental strategies as a leading company in the creation of environmental value, on par with the activities of leading environmentally-oriented companies.

## Fostering human resources with the ability to empathize with society

The value of human resources is an important element of Hitachi's sustainable growth. As I mentioned last year, in our efforts to promote the Social Innovation Business, it is essential that each Hitachi employee see social issues as relevant to their own lives. Each individual must take on the challenges faced by customers, markets, and regions throughout the world, and offer solutions. To do this, we will need to make a transition to job-based HR management, in which the right people are assigned to the appropriate positions according to their own goals and abilities.

In the work culture that we are aiming to create, employees announce the social issues that they want to take on. The company can contribute to these efforts by recognizing employees for their determination to take on these issues. In last year's Integrated Report, I gave an example of an assignment where I personally felt a strong motivation and sense of satisfaction, when I was in charge of introducing the Autonomous decentralized Transport Operation control System (ATOS)—a transport management system for the Tokyo area—in collaboration with East Japan Railway Company about 25 years ago. A real sense that you are contributing to society and words of appreciation from the customers are the driving force that creates a sense of autonomy

## Particle therapy system for cancer treatment

A treatment system that projects a particle beam (e.g., proton beam or carbon beam) to destroy or kill cancer cells. Treatment can be provided on an outpatient basis, with little impact on the patient's body, enabling treatments that maintain the patient's quality of life.

#### Creation of Social and Environmental Value

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Executive Officers' Compensation

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in each individual employee. I want to transform this positive force into motivational energy for the growth of Hitachi as a whole. We are putting in place an environment to support autonomy, including the "Make a difference!" in-house idea contest that began in 2015, and the Future Investment Division, an organization established directly under the president four years ago. In addition, Hitachi has conducted studies of new business creation and fields to be strengthened in the medium and long term based on trends in next-generation technologies and changes in the world at large.

#### "空己唯盡孚誠"— Feel empathy with heart empty and contribute to people with sincerity: The empathetic mind

Hitachi is driven by people with empathetic minds. This has been true throughout Hitachi's history. Hitachi was founded as a venture company by Namihei Odaira in 1910. Ever since its establishment, based on the corporate philosophy of "Contributing to society through the development of superior, original technology and products," Hitachi has put forward the founding concepts of harmony, sincerity, and a pioneering spirit, and has placed great value on a venture spirit. At the entrance to the Hitachi Central Research Laboratory, you will find the words of Kumeo Baba, one of Hitachi's founders, who said: "Empty your mind, and devote yourself to sincerity." One of the Chinese characters he uses is "孚," which is said to represent a mother bird protecting her eggs. Similarly, when we interact with customers, it is important that we adopt the stance of expressing empathy, putting aside our ego, and devoting ourselves to sincerity, transcending self-interest. I have personally taken the words "Feel empathy with heart empty and contribute to people with sincerity" as a personal motto, and I strongly believe this is the mindset that should be adopted by every employee involved in the Social Innovation Business as well as the next generation of leaders who will drive that business. Empathy brings greater happiness than self-interest. We will focus our efforts on fostering employees who see social issues as their own, involve those around them with passion, and strive to achieve goals together.

#### The role of the CEO and the essential attributes of next-generation leaders

I believe that the role of the CEO is to present a vision, lay out a path toward realizing that vision, and communicate this to others. I often say to future leaders, "Leaders must always see things from the perspectives of time, regions, and value, and pick up on trends." If you think about the values in each region, which change over time, then what needs to be done now will become clear, in the context of social, environmental, and economic value. Based on this view, the quality demanded of a leader is the ability to present a vision of how Hitachi's assets should be used to achieve a richer society, lay out a road map for realizing that vision, and communicate that road map to society.

When thinking about the company's vision, the important thing is how we define a rich society and people's happiness. I believe that society must enable each individual to freely pursue and realize his or her own form of happiness. We can make society more comfortable and convenient through the evolution of digital technologies and progress in robotics and AI, but humans ultimately control these technologies, so the central assumption is that people are able to use AI, robotics, and other technologies. This year, Hitachi established principles guiding the ethical use of AI, and in the context of ethics training for engineers as well, we will continue to communicate the importance of human-centric innovations.



#### To become a global leader in the Social Innovation Business

I've placed an emphasis on dialogue and engagement with shareholders and investors, and recently, I have had increasing opportunities to discuss a wide range of topics, including environmental issues and human resource development. Environmental, social, and governance (ESG) criteria are top priorities in corporate management and it is understood as responsibilities to society. To further merge business and sustainability, Hitachi established the Executive Sustainability Committee, comprised of members of the Senior Executive Committee (where I serve as Chairman) along with CEOs from the various business units and General Managers from the various Head Office divisions, to discuss and decide on important policies and initiatives. Regarding human resources, we will increase engagement with employees and the effective use of human resources on a global scale, and at the same time promote diversity and inclusion, with the goal of increasing the ratio of both female and non-Japanese executives and corporate officers to 30% by fiscal 2030. Hitachi will also strengthen its response to issues related to human rights that have come to light recently by conducting partner audits and building a human rights risk management structure. With regard to corporate governance, even looking at the composition of the Board of Directors, it is clear that we have built a structure that emphasizes independence and diversity with independent directors accounting for 10 out of 13 board members, six of whom are non-Japanese. We have also recently introduced environmental indexes into the evaluation of executive compensation, and we are strengthening risk management as well, for example, in terms of compliance, crisis, and business risks.

After making clear to all shareholders our policies regarding the allocation of management resources, we will ensure a stable increase in dividends, while at the same time considering the possibility of conducting share buybacks at the appropriate time, as part of efforts to share the fruits of growth with stakeholders.

Hitachi's ideal image as a global leader in the Social Innovation Business is directly in line with its public perception as a next-generation leader. We will continue our efforts to gain the trust of those around us by emphasizing openness and transparency while involving others with an empathetic attitude. At Hitachi, we believe that a true leader is not someone who stands at the head of the line and leads the way. Instead, a true leader looks toward the future with great perspective, gained from encountering new ideas while working tirelessly to implement policies that result in the best possible future for everyone. I will take every necessary step to bring Hitachi closer to this ideal image of a global leader. I look forward to your continued support as we continue this work together.

Hitachi's "Principles guiding the ethical use of AI in Social Innovation

> https://www.hitachi. co.jp/products/it/lumada/ about/ai/ldsl/document/ ai\_document\_en.pdf



**Diversity & Inclusion** ► P.42