



Construction Business Unit

Hitachi Construction Machinery started off with the development of the first cable-operated shovel made from Japanese technology in 1949, as a part of Hitachi Ltd. For over 70 years, we have provided products that boast high reliability and durability on the foundation of our unique research and development, and advanced production technologies. In addition, we continue to produce highly functional and high value-added products adapted to social changes, such as electric construction machinery and ICT construction machinery.

Aiming to Build a Supply System Able to Respond 100% to an Expanding Global Demand

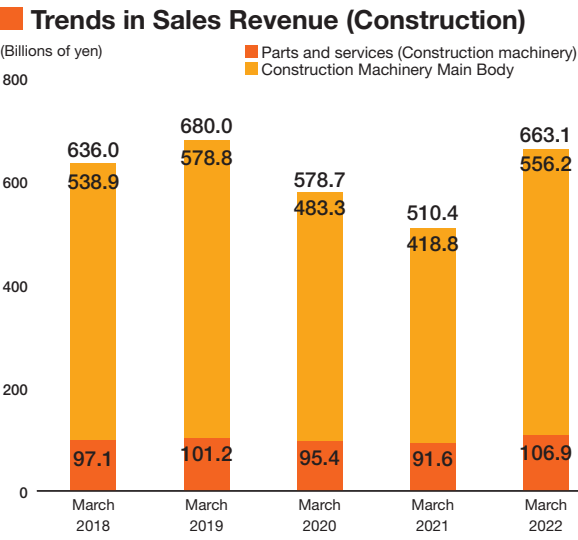
Construction machinery is the first requirement for any industry, whether it is urban infrastructure such as roads and rivers, housing, farming, or forestry. As the urbanization of emerging countries progresses on a global scale, and as carbon neutrality movements are progressing rapidly in developed countries, the demand for construction machinery is predicted to continue to extend greatly.

Hitachi Construction Machinery has development bases in Europe, China, India, Southeast Asia, etc., and we have worked on product development based on local market trends and customer needs. In recent years, we have been building a structure to raise awareness and focus on local demand. To do this, we are establishing development bases with marketing functions, like the European Application Center GmbH (EAC), which is responsible for the development of electric products in Germany. In April 2022, our organization transferred into a business unit system, which is a system where we have a complete understanding and view of the business from marketing to research and development, and even manufacturing, sales, and services. Through the transition, we are now able to increase transparency and reflect the voices of those on the ground more quickly. Under this system, we will provide the added value that customers desire, including services on the value chain.

In addition, we will improve our global supply capabilities to eliminate lost opportunities in sales. We aim to create a system where we can supply products of identical quality anywhere, regardless of whether in developed or emerging countries, by utilizing the Hitachi Construction Machinery Group's global production sites to their fullest. This also includes our current reor-

ganization promotions for major domestic production sites.

70 years of experience and achievements, overseas developments bases, and strong distribution networks	Strengths	Weaknesses (Issues)
	Opportunities	Risks
Urbanization of emerging counties, large investments in infrastructure development, and expectations for zero-emissions		Price hikes from geopolitical risks occurrences and the emergence of Chinese manufacturers



Focus on India

Promote Research and Development in Light of the Growing Needs for a Zero-Emissions Future.

India has overcome the spread of COVID-19, and as their economy gradually recovers, Prime Minister Modi announced an approximately 150 trillion-yen National Master Plan for multi-modal connectivity called Gati Shakti (Speed Power). The plan aims to create jobs for the young people and lay a foundation for India's development by establishing the next generations infrastructure. This enables the acceleration of the spread of EVs. On the other hand, fuel prices in India are of a globally high standard due to costs and taxation. This is because India is one of the biggest fuel-importing countries in the world, in addition to being affected by world affairs and exchange rate influences. However, in response to this situation, the government began searching for alternative electric supply mechanisms and fuels, and some companies began to consider introducing electric drive hydraulic excavators.

In April 2022, Hitachi Construction Machinery newly estab-

lished the Electric products development center in Tsuchiura Works, Ibaraki Prefecture, to advance research and development on electrification-focused zero emission construction machinery. There are approximately 40 employees in the Electric Products Development Department for compact to medium-sized class machinery. We also collaborated with the development base in India, and we are working in preparation for the decarbonization of construction machinery.

India is different from other developed countries, in the sense that the demand to reduce CO₂ emissions and improve fuel consumption is less triggered by CSR or ESG, and more for economic reasons. However, we can assume without a doubt that demand will eventually grow for electric-driven shovels. We will focus on trends in the Indian market in preparation for expansions in future demand.



Tata Hitachi Dharwad Works



Machines operating in India

Voice

Transforming to Become a Highly Maneuverable Organization that is Capable of Making Prompt Decisions and Executions

The organizational change to a business unit system is a large transformation we have never experienced. This change will allow us to promptly correspond to movements drastically changing in the world, such as resolution of customers issues, eco-friendly, America Business Strategy, DX, etc. Under this new system, we will first execute our current medium-term management plan, and then launch into creating the next medium-term management plan, beginning from fiscal 2023. As our business structure greatly changes, in the Americas unique development, capital structure, etc., we will progress to a higher stage, on the basis of our *Kenkijin Spirit*. We will transform into a highly maneuverable organization that is capable of making prompt decisions and executions to adhere to rapid changes happening globally as well. So, we hope you will look forward to it.



Hitachi Construction Machinery Co., Ltd.
Vice President and Executive Officer
Unit President, Construction Business Unit
Yusuke Kajita



Focus on Latin America

Expanding the Supply Chain Structure for Mining Components in South America

The Hitachi Construction Machinery Group is expanding its business structure for supplying mining components in cooperation with H-E Parts and Bradken, both of which joined our group in 2016 and 2017. For example, in Zambia, which is known for its largest copper mine in Africa, we have already been operating a remanufacturing facility and are establishing a business scheme that enables quick and reliable supplies of mining components.

South America is a region with abundant mining resources. In particular, Chile is a top-ranked country in terms of both copper reserves and production and has the highest concentration of copper mines in the world. Copper is an indispensable resource for the development of the AI/IoT society and it is widely used as a material for batteries and electronic devices because among metals, it has excellent electrical and thermal conductiv-

ity, as well as high workability and heat resistance. Non-ferrous metals such as copper are generally referred to as hard rocks and are harder than coal and other materials, which causes mining machinery used to excavate it from deep underground to wear out quickly. All subsequent downstream processes come to a halt if hydraulic excavators break down and stop at mining sites. Thus, it is extremely important that the excavators can be highly relied on to continue to operate 24 hours a day, 365 days a year. At the same time, the proper timing of replacing parts is important for stable operation.

The Group aims to establish a similar system for supplying mining parts in South America as soon as possible.



Voice

Taking News on Decarbonization as Business Chances to Expand Market Shares

Even though the demand for coal is expected to stagnate in the future, we believe that South America, where a large amount of copper ore is mined, is an extremely important market for the Hitachi Construction Machinery Group. Until now, we have relied on Deere's sales distribution network, but we are excited to create a new network with our customers with a concrete solution of zero emissions from fiscal 2022. Demand for decarbonization at mining sites is rising in not only South America but all over the world. We take a positive view of the movements of society as a whole as tailwinds for our group.



Hitachi Construction Machinery Co., Ltd.
Senior Vice President and Executive Officer
President, Mining Business Unit, General
Manager, America Business Division
Chairman of the Hitachi Construction
Machinery Americas Board of Directors
Sonosuke Ishii

Mining Business Unit

It requires a high degree of safety, durability, and maintainability to operate ultra-large hydraulic excavators and dump trucks, which operate in harsh environments such as mining sites. The Hitachi Construction Machinery Group offers high-performing, reliable products in addition to widely supporting mining operations for customers through our Fleet Management System and parts service.

Achieving Zero-emission Mining Operations Through Coordination with Our Group Companies.

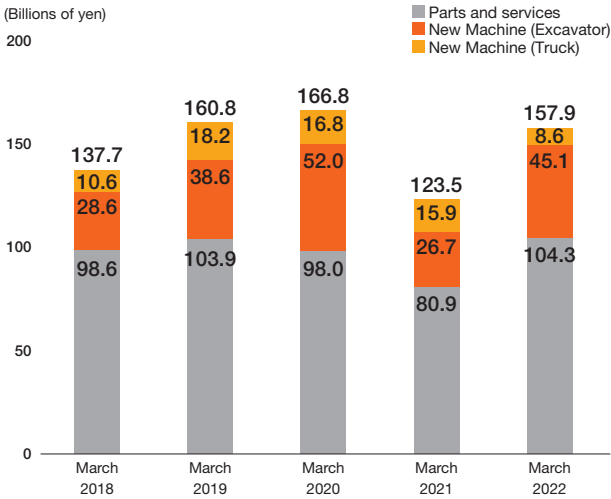
Many of the world's mining operations remain energy-intensive, consuming a large amount of electricity and emitting large amounts of greenhouse gases during operation. Electric power procurement and CO₂ reduction have both become important issues to customers operating mines. Therefore, the Group has set a vision of Net Zero Emission Mining, which aims to achieve virtually zero greenhouse gas emissions from mining equipment, and we are implementing a variety of measures to achieve this.

In our work processing Zero emissions for Dump trucks, which emit the most CO₂ of all mining equipment, we have been collaborating with ABB Inc., a major Swiss heavy electric equipment company, to develop an engineless, fully electric rigid dump truck that has trolley-powered battery charging. This joint development aims to achieve the full conversion from diesel engines to electric drive as the first step following the Memorandum of Understanding for Accelerating Energy Transitions toward a Carbon-Neutral Future in Mining signed in March 2021. Currently, we are trying to develop them in preparation for POC at the end of fiscal 2023.

In our mine operation support service, we aim to achieve autonomous operation of dump trucks in the North, Central, and South American markets by utilizing the Fleet Management System (FMS) provided by Wenco. In addition, we aim to expand the remanufacturing of mining parts that utilize the expertise that H-E Parts possesses.

Coordination with Group Companies with Strengths in Mining, such as Bradken, H-E Parts, and Wenco.	Strengths	Weaknesses (Issues)
	Opportunities	Risks
Increasing need for zero-emissions mining		Decrease in coal demand and the entrance of Chinese manufacturers to the mining industry

Trends in Sales Revenue (Mining)





Compact Business Unit

Compact products such as mini excavators and mini wheel loaders are becoming highly anticipated futuristic products that possess even more potential, especially in developed countries. This is due to their wide range of uses and high performance. Demand for these products is also increasing along with the development of infrastructure in emerging countries as well.

Corresponding to Strong Domestic and International Demand while Aiming for Future-Oriented Development

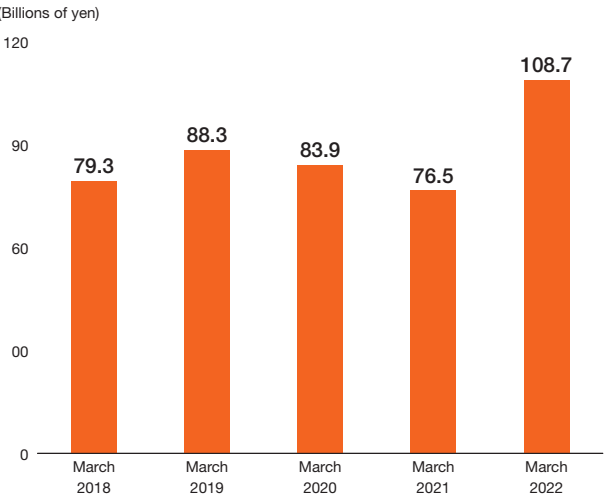
Our consolidated subsidiary Hitachi Construction Machinery Tierra Co., Ltd. (Koka, Shiga Prefecture) wholly manages our compact products from development and production to sales. Hitachi Construction Machinery Tierra has aimed to construct a highly effective production system through the automation and rationalization of production processes as well as strengthen their development capabilities for the global market. They are moving along with the expansion of production lines under their current plan to increase the capabilities of compact product production facilities 1.3 times by fiscal 2025. The company expects to meet the demand for product supply in North American markets through this plan, in which they started full-scale business developments in March 2022.

They also collaborated with European Application Center GmbH (EAC), the development base in Germany, to expand the line-up of battery-powered products to respond to the demand for electric construction machinery central to Europe. The company began taking orders in June 2022 for the 5-ton class ZX55U-6EB battery-powered mini excavator in addition to the 8-ton class ZE85 that was released in 2020. Furthermore, they are currently developing a 2.6-ton mini excavator.

Technical collaborations with the Construction Business Unit and Mining Business Unit became smoother through the Hitachi Construction Machinery Group's transfer to a business unit system. We additionally began collaborations on electrification. The Group will utilize the product testing facility from fiscal 2024 in accordance with the increase in production line-up to aim to upgrade the development of compact products, including their electrification. The facility will relocate to a neighboring location and expand functionality.

Speed of information disclosure and decision-making through an integrated development, production, and sales system	Strengths	Weaknesses (Issues)
	Opportunities	Risks
Expansion of increasingly urbanized areas and increased demand for products with advanced features		Aggression between specialty compact product manufacturers and manufacturers in emerging countries

Trends in Sales Revenue of Hitachi Construction Machinery Tierra.



Focus on Germany

Further Evolving Mini Excavators in the Environmentally Advanced Germany

Under the EU's 2035 policy to effectively prohibit new sales of gasoline-powered cars, we see rapid advances towards switches to EVs, especially in Germany, and the trend towards EVs in construction machinery has also become pronounced. Given that by switching from engine to battery-powered mini excavators for use in construction of over-crowded urban areas, we also benefit from the reduction of noise levels, leading to greater anticipation of electrification.

At Hitachi Construction Machinery, we have worked on electrification developments to meet customer needs while utilizing EAC and current machinery components with the intention of responding to market trends such as these. Our electric products attract attention from attendees from every country at the bauma international construction machinery trade fair held in Munich, Germany once every three years.

Mini excavators have recently come to be called tool carriers in Germany and customer needs are becoming more diverse. For example, highly functional and versatile products are in demand, such as ones that can: take a battery-powered hydraulic excavator as the base machine and add an attachment instead of a bucket, change the boom or arm itself and use it for new work, or ones that make it possible to interchange attachments from the drivers seat, etc. We will also listen carefully to these

types of latent demands and work to upgrade base machines as well as develop new functions.



Machinery exhibited at the bauma international construction machinery trade fair



ZX55U-6EB battery-powered mini excavator (5-ton class)

Voice

We will Continue to Provide Attentive Solutions for Our Customers Challenges

Demand for compact products mainly comes from urban areas in Europe, North America, and Japan. However, in recent years, urbanization is rapidly progressing in Asian countries, such as India, Indonesia, etc. As so, we believe that global demand will continue to grow in the future. Hitachi Construction Machinery Group envision a future where we will aim to become the best in the industry with compact products by 2030. To achieve this big goal we must approach it from selling both products and solutions in response to the three challenges our customers face: safety improvement, productivity improvement, and reducing life-cycle costs. We want to continue to provide solutions that suit our customers every need.



Hitachi Construction Machinery Tierra Co., Ltd.
President and Executive Officer
President, Compact Business Unit
Kazuhiro Ichimura



Spare Parts & Service Business Unit

An extremely important factor in construction machinery is to keep the site operating at all times. The Hitachi Construction Machinery Group contributes to reducing lifecycle costs by enabling our customers to choose the right parts for their business through providing a line-up of genuine parts, SELECTED PARTS, and remanufactured parts. Additionally, we are improving the accuracy of solutions that remotely detect predictions of machinery failure.

Meeting Our Customer Needs by Enforcing a Global Parts Supply System

It takes a vast number of parts to build construction machinery. More than 13 thousand parts are used to build a single hydraulic excavator. In addition, it is important to provide a variety of choices, as the performance and costs of parts needed by customers vary depending on the period of machine use, etc. Since 2006, the Group has made ICT technology-run support systems a standard feature in hydraulic excavators and has committed to monitoring the operating status of construction machinery. We have approximately 170 thousand contracts worldwide through our service menu ConSite, which we have provided since 2013. We boost the failure prediction detection rate based on aggregate data and strengthen our correspondence in the event of malfunctions, sales promotions, etc.

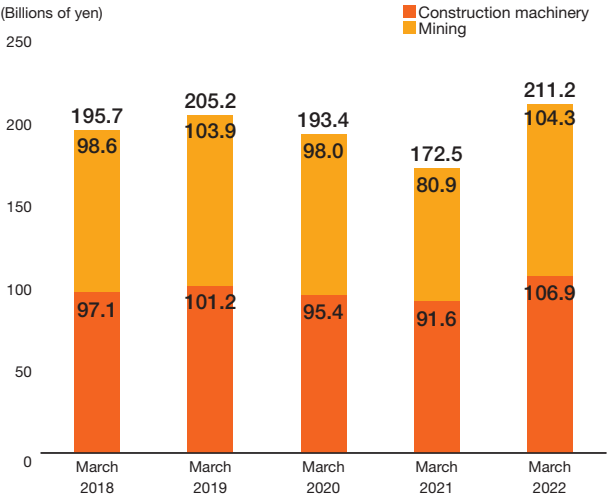
Under our fiscal 2021 plan to accelerate the development of e-commerce, we launched the Parts Online Store EC website, intended for domestic markets. Going forward, we are working to develop a global platform for parts sales. To strengthen the parts supply system, we launched the Ami Parts Center in Ibaraki Prefecture Inashiki-gun Ami-machi, which specializes in mining parts and began operations in July 2022, in addition to Tsukuba Parts Center, our global parts control base. We began operating a parts warehouse in Atlanta in March 2022 for the Americas, where we have started full-scale proprietary development. In addition, we plan to launch a few new parts warehouses within two to three years time.

Currently, we hold parts remanufacturing factories in Japan, Australia, America, India, Indonesia, Zambia, and South Africa, and we plan to construct new factories in Central and South America as well. Through parts remanufacturing network expansions such as these, we have set our target sales revenue for

fiscal 2022 to 35 billion yen (9% compared to the previous year).

Data-driven support based on ConSite, collaborations with regional headquarters in major regions	Strengths	Weaknesses (Issues)
	Opportunities	Risks
Market expansions through business development in North, Central, and South America		Disruptions to our supply chain due to infection and geopolitical risks, increases in steel prices
		Approaching used vehicle users, improving price competitiveness

Trends in Sales Revenue (Parts and Services)



Focus on Indonesia

New Parts Remanufacturing Factory for Mid- to Large-Sized Hydraulic Excavators Now in Operation

Due to geographical restrictions in Indonesia, an archipelago stretching approximately 5,000 km to the east and west, the timely supply of maintenance parts is in exceptionally high demand. The Hitachi Construction Machinery Group has supplied remanufactured parts mainly for mining machinery. However, the needs of customers in forestry and farming industries for high working machinery are on the rise, too. To respond to the voices of these customers, we established a new parts remanufacturing factory for mid-to-large-sized hydraulic excavators on the premises of the production base Hitachi Construction Machinery Indonesia's Factory No. 1 (Jakarta). This new factory began operations in June 2022.

The key to success in the parts remanufacturing industry lies in constructing a system that focuses on how quickly the used parts (cores) are collected, repaired, and shipped after being ordered. The adjacent location of the new parts manufacturing factory to the production base allows for smooth technological collaborations. This factory became a supply base for not only Indonesia, but also for the entirety of Southeast Asia, such as Malaysia, Thailand, the Philippines, and Vietnam. It also allows for the purchase of short-notice and low-cost remanufactured products. Another strength lies in the widespread use of ConSite: a system that allows for the constant monitoring of machinery in operation. We wish to utilize these strengths to contribute to our

customers safe machinery operations, as well as to reduce life-cycle costs.



Factory No. 1, Hitachi Construction Machinery Indonesia



In June 2021, Hitachi Construction Machinery Indonesia reached 40 thousand cumulative shipments of medium-sized hydraulic excavators

Voice

Aiming to Deepen Our Value Chain Business While Being Flexible to Changes in Customers and Society

In 2021, resource prices remained steady, allowing the parts and service business to finish with record high sales revenue and operating income. Parts and service business plays a major role in supporting Hitachi Construction Machinery's wide range of products while committing to revenue. Through our recent transfer to a business unit system, cross-divisional activities are more possible than ever. Taking advantage of this opportunity, we will further enhance our ability to make proposals to customers and promote initiatives to allow for flexible correspondence of their troubles. Simultaneously, we wish to firmly respond to societal demands to effectively use limited resources and reduce waste.



Hitachi Construction Machinery Co., Ltd.
Executive Officer
President, Spare Parts & Service Business Unit
Eiji Fukunishi



Rental & Used Equipment Business Unit

Hitachi Construction Machinery's rental business has an extensive line-up only an OEM could provide, so our customers can choose the best option for the scale and duration of their construction needs. Our used equipment business provides reliable used equipment to customers around the globe with certified used equipment under warranty as well as via parade auctions and online sales.

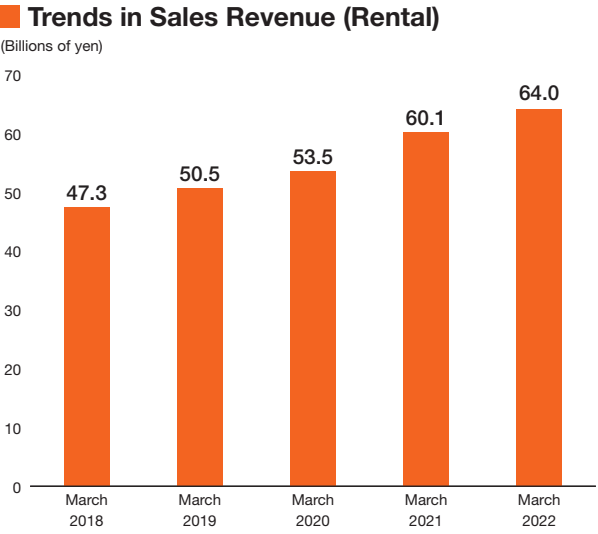
Striving to Enhance the Value Chain with Rental and Used Equipment

The idea of the sharing economy is based upon the sharing of goods, spaces, skills, etc., with many people. As this idea becomes more popular, mainly in developed countries, we can see a shift from ownership to rentals progressing within construction machinery as well. Over the past 30 years, the percentage of rentals in all construction machinery rose by approximately 50% in advanced countries, and it is forecasted that we will see the same trend in the future in emerging countries, such as India and Southeast Asia.

Hitachi Construction Machinery has continued to grow and steadily expand our service areas to Europe, North America, China, Australia, India, and Russia since we first started our rental business in 1996. Our rental equipment receives especially high evaluations from customers, as they can test the effectiveness of advanced technologies, such as ICT and electric excavators, onsite. We started developing the PREMIUM RENTAL brand overseas in 2017. This brand was formed when the Hitachi Construction Machinery Group and authorized new equipment dealers became rental asset holders and it provides customers with meticulously maintained equipment. Once the rental equipment is returned, they are resold as PREMIUM USED (certified used equipment under warranty). We can continue to provide services in the value chain such as parts remanufacturing and finance, for used equipment we sell, which receives proper maintenance. This leads to longer product life, which allows us to contribute to not only reducing life-cycle costs for our customers but also to global environmental conservation.

Moving forward, we wish to improve internet auctions of used equipment and the use of SNS to share information, as well as to further expand sales channels for quality used equipment.

High-quality product line-up only an OEM can provide. Enhanced support through collaboration with our parts & service division.	Strengths	Weaknesses (Issues)
	Opportunities	Risks
Spreading awareness of the sharing economy, fostering expectations for ICT and other advanced technologies		Price competitiveness with competing companies such as Chinese manufacturers, reduction of sales channels through engine regulations, etc.



Focus on United Kingdom

Meeting Region Specific Demands with a Line-up Only an OEM Can Provide

Rental use at construction sites in the UK is quite high. Currently, their rental ratio has reached 57% (according to our research). In 2019, the Hitachi Construction Machinery Group established Synergy Hire, a new company to conduct rental business in the U.K. market, and we have developed five bases focused in urban areas. In most cases, we rent out our latest model as a 1–2-year short term rental, and then resell it as excellent used equipment on the U.K. market after the rental is returned.

On the other hand, in recent years we have seen rentals of special applications for use with standard hydraulic excavators

on the rise as well. (Clamshell telescopic arms, short reach fronts, super long fronts, etc.) Synergy Hire was established by teaming up with the owner of a U.K. construction equipment rental company that had over 100 years of experience and possesses marketing skills suited to the region. For this reason, we can meet region-specific demand with our OEM line-up, and we believe it gives us an upper hand over our competitors.

Currently, Synergy Hire does business with approximately 300 companies. We will strengthen the development of special applications and expand market share within the U.K.



Clamshell telescopic arm excavators



Short reach excavators

Voice

We Want to be Actively Involved in Product Development with Reuse in Mind

We would like to raise the value of the company by providing a diverse offering and valuable goods for our customers that is not limited to rentals or used equipment but covers the entire value chain. Specifically, we are aiming for our rental business and used equipment business to meet a combined total of 180 billion yen in sales by 2025. In addition, through our change to a business unit structure this year, we created a system that allows for our deep involvement in the development and production of construction machinery by collaborating with the construction business unit. Moving forward, we must think about the value that equipment holds after it becomes used. Keeping this in mind, we would like to actively contribute to the development of products that are made on the premise of Reuse.



Hitachi Construction Machinery Co., Ltd.
Executive Officer and CMO, President,
Global Marketing Group President, Rental
& Used Equipment Business Unit
Hidehiko Matsui



New Business Creation Unit

Due to climate change, geopolitical risks, and the COVID-19 pandemic, VUCA* is becoming a reality, and the Hitachi Construction Machinery Group is being exposed to waves of tremendous changes. To survive in these times of change, we will challenge new value creation and seize every opportunity for growth, without getting caught up in existing business definitions and previous successful experiences.

*VUCA stands for Volatility, Uncertainty, Complexity, and Ambiguity

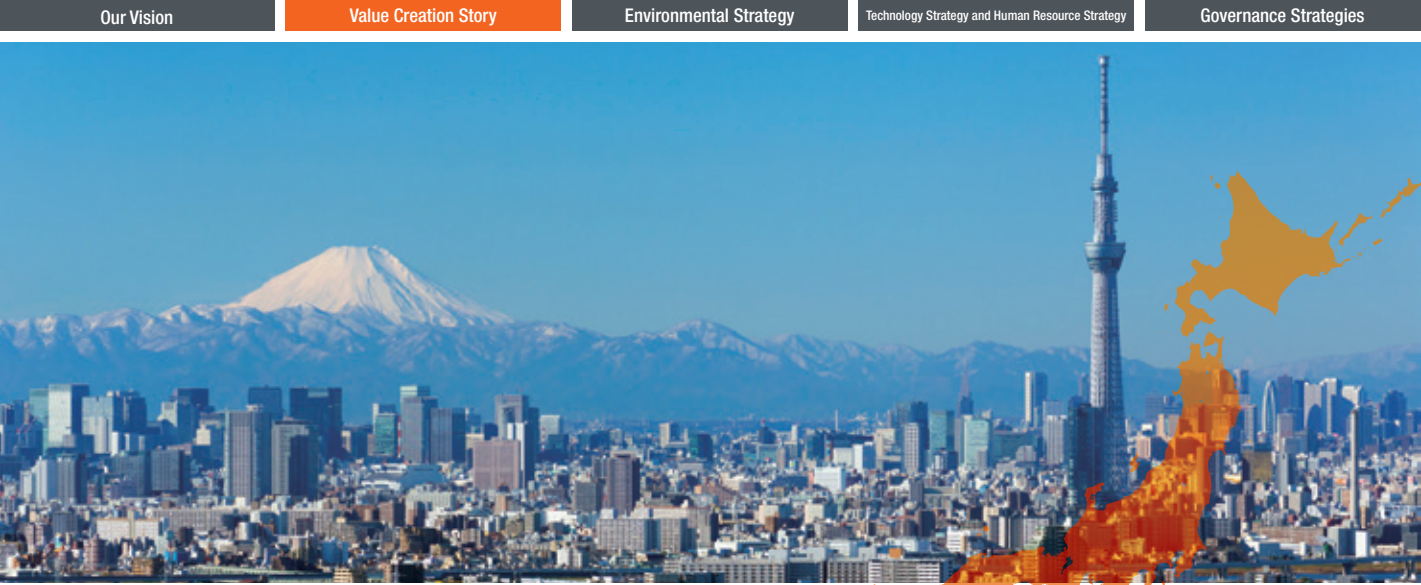
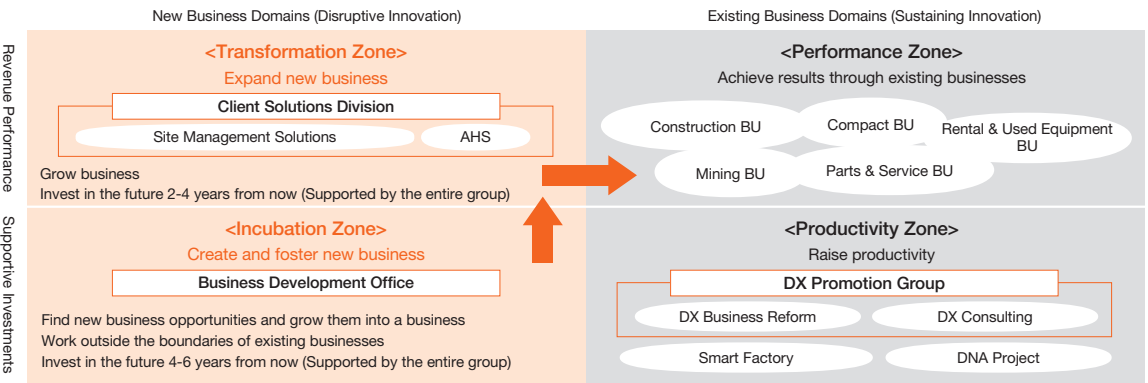
Promoting Foundation Building to Produce Disruptive Innovation

The New Business Creation Unit, established in April 2022, is composed of two main organizations. The first is the Business Development Office. This office will manage the incubation zone of the business. It serves to explore new businesses, collect business ideas, and shape and commercialize these ideas. The second is the Client Solutions Division. This division was established in 2016 to move away from traditional product sales to provide customer experiences. We identify the division as the transformation zone for business. The New Business Creation Unit will manage this division from its growing phase to its independent business phase by applying the appropriate KPIs. The New Business Creation Unit will manage this division from its growing phase to its independent business phase by applying the appropriate KPIs. The New Business Creation Unit will manage this division from its growing phase to its independent business phase by applying the appropriate KPIs.

ness phase by applying the appropriate KPIs. Hereafter, we will continuously incubate and transform new businesses from their early phase to their performance phase by establishing a risk-taking culture and process.

Two important initiatives in the New Business Creation Unit are DEI (Diversity, Equity and Inclusion) and Open Innovation. Diversity especially matters when it comes to creating brand-new ideas to bring new value to the markets. We are recruiting a wide range of members with different genders, nationalities, and experiences to construct an organizational foundation for active design thinking. Regarding open innovation, we already invested in two venture and capital funds, and we are rapidly increasing collaborations with start-ups. For example, in fiscal 2021, we invested in Baraja, an Australian start-up company that offers LiDAR technology essential for advanced autonomous driving.

The New Business Creation Unit Coverage Domains



Focus on Japan

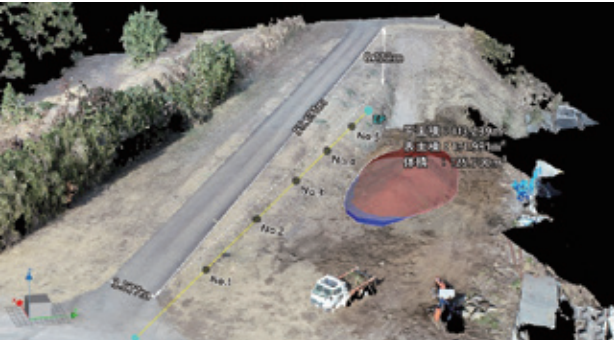
Transcending Conventional Framework to Contribute to Solving Customer Issues

To improve productivity at construction sites, the Ministry of Land, Infrastructure, Transport, and Tourism (MLIT) began the i-Construction initiative in 2016, a project aimed to increase productivity through the full use of ICT and 3D data. Over the course of seven years, ICT construction spread in public works under the jurisdiction of MLIT, and we expect to see further expansions in private construction and small-scale construction.

At on-site construction, there is a series of processes that include initial surveying, design and construction planning, construction, inspection, and delivery, etc. The Hitachi Construction Machinery Group proposes solutions through Solution Linkage Series for each individual process in this series, tailored to customer needs. For example, our new service Solution Linkage Point Cloud allows for the creation of point cloud data by simply uploading Unmanned Aerial Vehicle (UAV) photography to the cloud system. With general aerial photogrammetry, it was necessary to use expensive point cloud-creating software for analysis. However, it became easy to create. This service has been highly commended since we began offering the service in July 2022, and the number of customers adopting it are rising.

Both Solution Linkage Work Viewer Cloud and Solution Linkage Alert Viewer, which we began offering in April 2022, deal with safety-related solutions. With these services, it is possible to share real-time working conditions remotely by using in-vehicle cameras. These services will help increase operational safety.

Hereafter, we will expand the solution coverage to entire construction sites, and we will contribute to the customers' excellent experiences by improving safety and productivity.



3-D point cloud data created on the Solution Linkage Point Cloud (displayed on point cloud processing software)

Voice

Seizing New Business Opportunities and Taking on Challenges It is Our Mission to Restore that Culture Once Again

The New Business Creation Unit's mission is to create and grow new businesses. To make this a reality, we must create an organization and culture for change. By nature, Hitachi Construction Machinery has strong DNA for challenges. This is what has driven our company's growth since the beginning. Creating a new business cannot be done simply by forming an organization to create new businesses. Rather, there are things you cannot grasp without challenging yourself. Through this organization, we hope to continue to challenge ourselves in this rapidly changing world by demonstrating our Kenkijin Spirit to meet our customers' expectations.



Hitachi Construction Machinery Co., Ltd.
Vice President and Executive Officer
President, New Business Creation Unit
Hideshi Fukumoto