## **Financial Strategy**

# Summary of Financial Results and Business Plan

Conditions in FY2023 remained uncertain due to a number of factors, including global monetary tightening, fluctuations in foreign exchange rates, a steep rise in the cost of raw materials and energy, and rising commodity prices. Nevertheless, our initiatives with a focus on gross profit margin produced a successful outcome, and sales and profit significantly increased from the previous fiscal year across the Group. We posted net sales of ¥793.3 billion (up 11.4% year over year), gross profit of ¥111.8 billion (up 14.4%), business profit of ¥51.5 billion (up 10.8%), and EBITDA of ¥84.5 billion (up 4.9%). Furthermore, gross profit, business profit, and EBITDA each reached a record high.

For FY2024, which is the final year of the INFRONEER Medium-term Vision 2024, we expect to achieve the Group-wide target of ¥59.0 billion in business profit. With respect to the shareholder return policy, we introduced an interim dividend and increased the year-end dividend by ¥5 per share. The total dividends paid during FY2023 amounted to

	FY2023 results	FY2024 plan
Net sales	<b>¥793.3</b> billion	<b>¥839.9</b> billion
Gross profit	<b>¥111.8</b> billion	<b>¥125.1</b> billion
Business profit	¥51.5 billion	¥59.0 billion
EBITDA	¥84.5 billion	¥92.1 billion

¥60 per share, achieving the dividend payout ratio of 46%, which is above the target set in the Medium-term Vision. Furthermore, as we acquired ¥10 billion of treasury shares in FY2023, the total amount of treasury shares purchased during the period from FY2021 to FY2023 reached ¥40 billion. As a result, we achieved the target set in the Medium-term Vision one year ahead of schedule.

### Initiatives Related to Capital Strategy

As of the end of FY2023, the equity ratio and D/E ratio were 28.4% and 1.1 times, respectively, significantly deviating from the targets for the optimal capital structure. The main reason for this deviation was the large-scale investment made to acquire Japan Wind Development Co., Ltd. (JWD) and turn it into a subsidiary. Although the financial structure of the INFRONEER Group has significantly changed as a result of this investment, we consider it to be a proactive move from the long-term perspective of revenue expansion in the renewable energy business.

As we expect to continue making investments in the renewable energy business and other businesses to expand our revenue, we will work on "securing our funding capacity" and "minimizing funding costs" as part of our capital strategy, with an eye to improving the equity ratio and D/E ratio to contribute to the achievement of targets set in the INFRONEER Medium- to Long-term Vision.

For the time being, we will work on building an optimal capital structure by converting short-term borrowings for the acquisition of JWD into a long-term loan.

INFRONEER Medium-term Vision 2024 (Medium-term business plan until fiscal year ending March 31, 2025)			As of the end of FY2022	FY2023 results	Notes
Capital efficiency	ROE	9.5%	9.4%	8.6%	The ratio temporarily declined due to the increase in treasury shares; however, we will improve business profit by continuing to make proactive investments.
Optimal capital structure	Equity ratio	<b>30%</b> or more	37.0%	28.4%	While interest-bearing debt increased due to financing for th acquisition of JWD, we intend to improve these ratios through
	D/E ratio	<b>0.6 times</b> or less	0.4 times	1.1 times	bond-type class shares, etc., and thereby maintain our credit ratings.
Shareholder returns	Dividend payout ratio	30% or more	42.5%	46.0%	Annual dividend per share of ¥60 for FY2023
	Purchase of treasury shares	<b>¥40 billion</b> or more by FY2024	<b>¥30 billion</b> in FY2021 and FY2022	¥10 billion in FY2023 ¥40 billion from FY2021 to FY2023	We achieved the targets set in the Medium-term Vision.
	Total return ratio	-	69.5%	78.4%	FY2023: Dividend payout ratio (46.0%) + Purchase of treasury shares (30.4%) + Dividends for the Earth (2.0%) Started paying interim dividends from FY2023
Asset efficiency	Cross-shareholdings / net asset ratio	20% or lower	19.8%	25.8%	We sold approximately ¥3.9 billion of cross-shareholdings in FY2023. The shareholding ratio nevertheless rose due to increases in the stock prices of our cross-shareholdings FY23 3Q 24.1% → FY23 4Q 25.8%
cincioncy	Sale of owned assets	Carefully examine the status of use of the Group's owned assets and the like, and consider selling or integrating inefficient assets			

#### Funding Strategy in Connection to the Acquisition of JWD

With respect to converting the short-term borrowings for the acquisition of JWD into a long-term loan, we considered various funding methods by taking into account the securement of a financial base and improvement of capital efficiency.

The first method is the issuance of bond-type class shares as capital raising. The main target of bond-type class shares is individual investors. These shares do not become diluted as they do not bear voting rights and conversion rights, therefore the impact on financial indicators is limited, and they are recorded as capital for accounting purposes.

Following the amendment to the articles of incorporation that was approved at the general meeting of shareholders held in June, we issued Series 1 Bond-Type Class Shares in the amount of ¥100 billion on August 1, 2024. They were listed on the Prime Market of the Tokyo Stock Exchange.

The second method is the Zero Coupon Convertible Bonds (Green CBs), which is debt financing. We resolved the issuance of the bonds in the amount of ¥60 billion at the Board of Directors' meeting held on March 21, 2024 and completed the payment on April 8. This mechanism addresses concerns about the dilution of share value of existing shareholders by keeping conversion to a minimum through conversion restriction clauses.



Ceremony for the listing of Series 1 Bond-Type Class Shares

#### Sustainable Finance

We have established the value of "safety, security, and sustainability of our society and local communities" for the Group's business activities. We are striving to ensure the sustainable use of and our harmonious coexistence with natural capital, which forms the foundation of our business. Adopting a long-term perspective, we are actively addressing issues such as climate change, resource recycling, biodiversity, pollution control, and water security. Currently, we are proactively leveraging sustainable finance to promote these initiatives.

We announced the Green Finance Framework in August 2022. We amended the framework in March 2024 to add onshore and offshore wind power generation to the scope of use of procured funds.

We issued green bonds (¥10 billion) in September 2022 and Green CBs due 2029 (¥60 billion) in April 2024. Our Series 1 Bond-Type Class Shares issued in August 2024 are the first green bond-type class shares issued in Japan.

We believe that the Group's future vision of becoming an integrated infrastructure service company is highly compatible with the purpose of sustainable finance. We will therefore continue to actively take advantage of sustainable finance in the future.

► For details on sustainable finance, visit our website at: https://www.infroneer.com/jp/sustainability/finance/ (in Japanese)

### Reducing the Group's cross-shareholdings to zero by FY2027

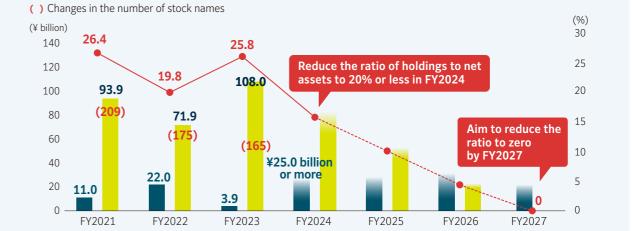
While we continued to sell off our cross-shareholdings in FY2023, the ratio of cross-shareholdings to net assets increased to 25.8% due to higher stock prices.

To further improve capital efficiency, we announced in August 2024 the policy to reduce the Group's cross-shareholdings over hy FY2027

In FY2024, we are aiming to sell over ¥25 billion of our holdings in MAEDA CORP. to bring down the ratio of cross-share-holdings to net assets to 20% or less.

### — Changes in the amount of the INFRONEER Group's cross-shareholdings sold and ratio of holdings to net assets

■ Amount sold 
■ Amount of holdings at fiscal year end (market value) 
← Ratio of holdings to net assets





# Strengthening both Our Financial Base and Shareholder Return to Achieve Further Business Growth

I was appointed to serve as the Executive Officer responsible for financial strategy of INFRONEER at the Board of Directors' meeting held on June 25, 2024. I have long worked in the financial industry, serving in various positions including financial officer for overseas and domestic asset management companies as well as investee companies of funds. Since I joined Japan Wind Development Co., Ltd. (JWD) in October 2015, I have been serving as the Corporate Officer and Chief Financial Officer. I am confident that the experience I have gained as both an investee and investor will become quite useful in executing the financial strategy of the Company.

We invested approximately ¥200 billion to acquire JWD. It was a large-scale M&A transaction with the acquisition

amount equivalent to approximately twice the Group's gross profit or approximately six times its net income. As we strive to become an integrated infrastructure service company by shifting to "de-construction," JWD will play a central role in developing renewable energy infrastructure in the Group.

As I continue to serve as the Corporate Officer and Chief Financial Officer of JWD while concurrently serving as the Executive Officer responsible for financial strategy of the Company, I believe I am in a good position to facilitate closer communication between the holding company and the business companies

In addition, collaboration with the Group companies will be further enhanced. For example, we will develop an end-to-end business value chain where JWD develops renewable energy projects with MAEDA CORP. building the infrastructure. JWD will then undertake operation, management, and maintenance of the infrastructure as well as the sale of

electricity. As JWD had developed wind farms in a joint effort with MAEDA CORP. even before it joined the Group, the two companies already understand each other to some extent. As a result, the post-merger integration (PMI) is progressing successfully, and it will not take long for Group synergies to take effect. I am confident that this M&A was the best way to expand the renewable energy business of the Group.

The business model for the renewable energy business, including wind power generation, requires investment in advance from a long-term perspective, as it takes time to generate revenues. It is important to promote the development of projects by efficiently procuring funds at an early stage before setting up project financing.

At the same time, we must maintain financial discipline and increase our capital efficiency as a Group-wide effort. With JWD becoming a member of the Group, I believe we have entered a new phase in terms of the business and financial dimensions. Going forward, the Group will increase its business profit by actively making growth investments, while increasing its capital efficiency by maintaining an optimal balance of equity and debt. The Company procured ¥200 billion to acquire JWD through a temporary bank loan. Its D/E ratio is expected to improve, however, through the accumulation of profits from the existing businesses and diversification of funding methods.

We will maintain our credit ratings while building a stable and secure financial base that contributes to growth and appropriate shareholder returns and avoiding share dilution as much as possible.

# Increasing Our Corporate Value by Promoting Capital Recycling While Maximizing Capital Efficiency

The Group recorded a significant year-over-year increase in sales and profits in FY2023, with gross profit, operating profit (business profit under IFRS), and EBITDA reaching record highs.

With rising geopolitical risks in the current international situation and higher raw material costs and resource prices due to exchange rate fluctuations, the environment surrounding the construction industry is not necessarily a favorable one. The fact that the Group was able to report very strong financial results in FY2023 under these circumstances proves that it is taking the right path.

Furthermore, for FY2024, which is the final year of our Medium-term Vision, we have set the following targets: business profit of ¥59 billion, ROE of 9.5%, and an equity ratio of 30%.

On the other hand, in terms of evaluation in the stock market, we are facing a new challenge as our stock prices fell after the execution of the M&A, with PBR remaining below 1.0x. To achieve PBR of 1.0x or higher, in the new phase with the addition of JWD, we need to once again clearly explain to our stakeholders how we will navigate this challenge not only via our growth strategy but also our financial strategy to achieve the targets set in the INFRONEER Vision 2030 (Medium- to Long-term Business Plan). In order to increase asset efficiency, we plan to reduce the Group's cross-shareholdings to zero by FY2027 to generate cash. To this end, we intend to

sell off ¥25 billion or more of our holdings in MAEDA CORP. in FY2024 to bring down the ratio of cross-shareholdings to net assets to 20% or less.

For the renewable energy infrastructure business, such as wind power generation projects that take longer to recover the cost of investment, we will use a combination of methods to accelerate the recovery of investment costs. For example, this could include selling a part of the investment. We will recycle capital by allocating proceeds from sales to new investments while reducing our assets and borrowings.

In order to promote a financial strategy that leads to increased corporate value, it is important to have a global perspective. The Group has voluntarily adopted the International Financial Reporting Standards (IFRS) since FY2023. As we strive to establish a business model that can be used globally, we have thus made it possible to compare our financial statements with those of other companies in the same industry around the world and ensure that accounting standards do not become a hindrance. Going forward, we will put efforts into ensuring that our overseas stakeholders see us as a corporate group that is worth investing in to attract a diverse array of overseas investors. Moreover, we can expect a smooth integration process if we decide to merge with or acquire an overseas company in the future if the two companies are using the same accounting standards.

To increase medium- to long-term corporate value, it is important to steadily implement initiatives set out in INFRONEER Vision 2030. I believe the role of finance is to expand the revenue base through new businesses while strengthening the existing businesses, and to provide investment support from the funding side to achieve growth.

In doing so, we are considering introducing an "INFRONEER ROIC" unique to the Group to increase added value. As the Executive Officer responsible for financial strategy, I will maintain close communications with our shareholders and investors to promote a better understanding of the future potential of the Group.



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Arena (Toyohashi City)

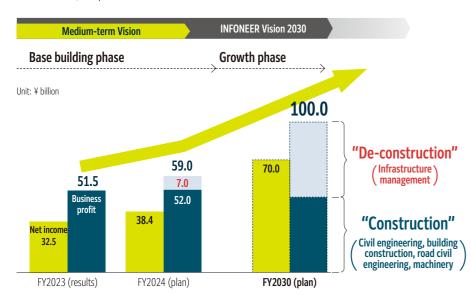
**Overview and Progress of INFRONEER Vision 2030** 

(Medium- to Long-term Business Plan)

#### Overview of INFRONEER Vision 2030

The INFRONEER Group aims to become an integrated infrastructure service company that provides one-stop infrastructure management services covering the entire process from upstream to downstream. To this end, we are promoting Group-wide strategies, centering on the three strategic pillars to address "productivity reform," "establishing a new revenue base," and "strengthening and improvement of corporate culture." The vision contains the phase for building bases for growth from FY2025 onward, setting out a range of targeted and specific initiatives for pursuing Group synergies, building a system for entering new business domains, promoting DX and shared services, and promoting M&A. According to this vision, we have set financial targets for FY2030 as follows: business profit of ¥100 billion or more (business profit margin of 8.0% level); net income of ¥70 billion or more; and ROE of 12% or more.

In FY2025, we plan to announce a new Medium-term Business Plan for FY2027.



FY2023 results	Target for FY2030
Business profit <b>¥51.5</b> billion	Business profit <b>¥100</b> billion or more
Net income <b>¥32.5</b> billion	Net income <b>¥70</b> billion or more
ROE <b>8.6</b> %	ROE 12 % or more
Dividend payout ratio 40.6%	Dividend payout ratio <b>30 %</b> or more

### Progress of INFRONEER Vision 2030 < Three Strategic Pillars >

### **Productivity Reforms**

#### Maximizing added value

#### Furthering profit margin management

We have sought to secure industry-high profit margins and maximize added value in our building construction and civil engineering segments by starting from the upstream of these businesses and by enhancing our ordering discipline/processes, quality, and cost management capabilities. This approach has been applied to MAEDA ROAD's road civil engineering business since the establishment of INFRONEER Holdings, and profit margins have improved by setting standards for profit margins on orders received based on construction project contract amounts and by pursuing thorough management. Profit margins have also improved in our manufacturing and sales business through transparent price negotiations despite the impact of soaring raw material prices.

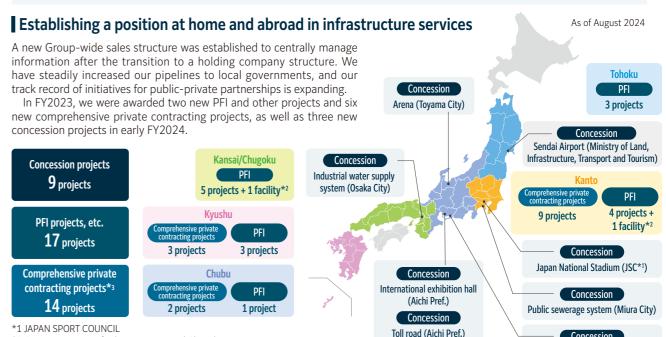
#### Providing high value-added products that meet customer needs

In our machinery business, we provide high-quality products in and outside Japan by taking advantage of our capability to handle design, manufacturing, sales, rental, and after-sales service in an integrated manner. In response to customer needs to address carbon neutrality, we have focused on developing and manufacturing hydraulic excavators with electric specifications. We will continue maximizing added value through the development and manufacture of high value-added products that meet customer needs.

#### Optimizing fixed expenses and administrative costs

- MAEDA CORP. has been working to streamline and outsource back-office operations. In FY2023, approximately 50 employees were reassigned from back-office departments to civil engineering, building construction, and infrastructure management business units, which produce added value, with the aim of adding value throughout the company.
- We are examining efficient management methods and effective utilization of assets owned by Group companies. Specifically, we are considering the sale of inefficient assets and value-enhancement measures to optimize fixed costs.

### **Establishing a New Revenue Base**



#### Further expanding business areas

\*3 Comprehensive private contracting projects: Refer to the glossary on page 84.

\*2 One project at two facilities in Kanto and Chugoku

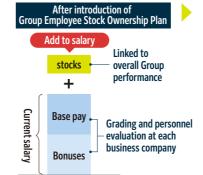
In January 2024, we made Japan Wind Development Co., Ltd. a wholly owned subsidiary to accelerate the expansion of our renewable energy business, one of the key pillars of our infrastructure operation business that sits at the heart of our growth strategy.

By complementing and mutually utilizing our capabilities and strengths, including know-how, technologies, and networks pertinent to the wind power generation business, we will become the one and only group capable of widely developing its renewable energy business in a consistently integrated manner and helping resolve all social issues toward achieving carbon neutrality.

### **Strengthening and Improvement of Corporate Culture**

#### Promoting a Group human resources strategy —introduction of Group Employee Stock Ownership Plan to foster Group engagement

We have decided to introduce a new stock benefit trust (J-ESOP) to grant our entire workforce of around 8.000—all regular and contract employees of INFRONEER Holdings and Group companies—the right to acquire shares of the company. This compensation will be offered in addition to current salary, starting from FY2024. Our rationale behind this is as follows: shares of INFRONEER are an embodiment of the shared entity of the entire Group and its corporate value, and by being offered to employees, they will play a catalyst role in increasing the centripetal force of the organization and fostering a sense of belonging to the same organization. To be more specific, we are looking to nurture employees' mindset in the following areas: "a sense of emotional attachment and closeness to the Group," "interest in business management," "interest in the stock market," and "consciousness of the Group's profit."



Туре	Target personnel	Details	Timing of stock-based compensation
(1) Payment upon retirement	All Group employees	2% of the Group's consolidated net income each year allocated in points equally	Accumulated amount paid out at retirement (more taxadvantageous than Type 2)
(2) In-service payments	(approximately 8,000)	2% of the Group's consolidated net income each year allocated in points equally	At the end of each Medium- term Business Plan
(3) Perpetual continuous payments	Employees who have worked for the Group for a stipulated period of time	500 points awarded for every 10 years working for the Group (10th year, 20th year, 30th year, 40th year)	For each period of 10 years
(4) Child allowance payments	Employees who have had children	<b>500</b> points awarded for each child born according to the number of dependent children (_th child x 500 pts) (e.g.: 3rd child x 500 pts = 1,500 pts)	Each time a child is born

Arena (Aichi Pref.)

1 point = 1 share

### Strengthening governance

▶ For details on enhancing governance, see page 65.



#### Soji Maeda

President and Representative Director MAEDA CORPORATION

Joined MAEDA CORPORATION in 1997; served as a Director and Managing Officer from June 2002; became the President and Representative Director (current) of the company in 2016; in October 2021, became the Director and Chairman (current) of INFRONEER Holdings.

### **MAEDA CORPORATION**

# Reinforce the Foundations of Construction and Increasing Earnings from "De-construction"

MAEDA CORP.'s non-consolidated financial results for the fiscal year ended March 31, 2024 saw record highs in both gross profit and operating profit. We have been able to maintain our strong performance despite rising material and labor costs. Two factors contributed to the performance. One is the payoffs from our strategy of tighter ordering discipline, which we have been working on for more than a decade to avoid relying on cost competition in the construction business. And the other is our strategy of participating in projects from upstream points and working with project owners to formulate projects from the early stages. This is reflected in the fact that our provision for construction losses is by far the smallest in the industry. While construction demand is strong in both the public and private sectors, the construction industry is under increasing pressure as the 2024 issue\*1—the strict enforcement of a legal cap on overtime hours—makes itself fully felt, sparking concerns about its impact on construction schedules, costs, and systems. It is important not to allow construction sites to carry risk burdens all by themselves, and we are looking to create an open environment where information is shared promptly from construction sites to branch offices and the head office so that the entire company can work together to deal with the situation. We are also stepping up cooperation with members of our Zenyu-kai association of partner companies.

We believe that upgrading our supervisor capabilities in this context is the key to our human resource strategy. We provide not only current supervisors but also executive candidates and mid-level employees with opportunities to receive solid training in the knowledge, abilities, responsibilities, and judgment required of supervisors, thereby laying the groundwork for developing human resources as well as preventing harassment.

More than 10 years have passed since we declared our "de-construction" policy even before INFRONEER existed, and we are finally getting a sense that it is gaining traction within the company. Several years ago, we established in-house organizations at our head office and branch offices dedicated to pursuing regional projects to strengthen public-private partnerships (PPP/PFI\*2).

The needs of local governments have risen since these organizations were first created, and we expect the market to grow in the years to come. Currently, there are about 30 concession projects in Japan, and the INFRONEER Group is participating in one-third of them. We are also working together with MAEDA CORP's Group companies FBS and JM in the comprehensive private construction projects of public facilities\*3 to identify the needs of a wide range of local governments and develop medium- to long-term projects, albeit on a smaller scale than concessions

## Create Added Value through the "De-construction" Approach

Collaboration with Group companies has become closer since INFRONEER was founded, enabling the smooth implementation of sales, construction, technological development, information security, group finance, and other measures. In the "de-construction" business, we are seeing an expansion in the range of proposals that take advantage of Group synergies, one of these being the successful bid placed in June 2024 for Toyohashi City's Arena BT Concession Project\*4, in which we joined with MAEDA ROAD in the bidding process. The renewable energy business, another pillar of our "de-construction" business, is expected to generate synergies with Japan Wind Development that will further accelerate development. As development progresses, we will have the option of transferring projects with increased added value to the secondary market, producing a profit base for the "de-construction" business. Such value-added creation through capital recycling is MAEDA CORP.'s strength that other companies in the industry lack.

I believe that Japanese companies should try to shift to business models that secure revenue through value-added proposals and distribute it to stakeholders rather than seek to expand market share by lowering prices. We are currently stepping up our sales activities in the construction business by entering the business from the upstream and making value-added proposals based on a "de-construction" mindset. We will strike a balance between "construction" and "de-construction" services as we fulfill our responsibility as the INFRONEER Group's core company to contribute to the Group's growth.

For the full version of the interview, visit our website at: https://www.infroneer.com/jp/sustainability/topics/comany3-top-message.html (in Japanese)



Aim to Be the Number One Company in the Road Construction Industry

#### Yasuhiko Imaizumi

President and CEO
MAEDA ROAD CONSTRUCTION Co., Ltd.

Joined MAEDA CORPORATION in 1981; served as a Director, Executive Officer, and other managerial positions from 2010; became President and CEO (current) of MAEDA ROAD CONSTRUCTION Co., Ltd. in June 2020; became Director (current) of INFRONEER Holdings Inc. in June 2023.

## MAEDA ROAD CONSTRUCTION Co., Ltd.

# A Turning Point for the Road Construction Industry

MAEDA ROAD's two main business pillars are the construction business, which involves road construction and building land-scape work, and the manufacturing and sales business, which involves the production and sale of asphalt mixture.

The road industry faces a challenge in not being able to easily pass on prices, even under very difficult conditions, as material prices soar due to higher crude oil prices and the impact of foreign exchange rates. Shipments of asphalt mixture have also been declining year by year, falling from 80 million tons 30 years ago to the 36-million-ton level in FY2023. While new road construction is expected to decline, maintenance and repair work will likely continue.

Despite a challenging market environment, we achieved year-on-year increases in both revenues and profits for the fiscal year ended March 31, 2024 with net sales of ¥256.0 billion and operating profit of ¥16.2 billion. We recognize that these results are in great part attributable to our efforts to shift our management orientation from sales to profits over the past two years or so. Specifically, our construction business secured a profit margin on orders received, and our manufacturing and sales business was successful in passing on higher raw material costs to sales prices in a timely manner. We will continue contributing to the overall performance of the INFRONEER Group by leveraging our strengths of community-based networks and high quality.

#### Foster a Corporate Culture That Does Not Fear Failure

The company is at a turning point requiring it to establish a third pillar of business that stands alongside the construction business and manufacturing and sales business to sustain growth into the future. In FY2023, we primarily took on two new businesses.

First, we established JAPAN BIO FUEL Co.,Ltd. to use waste animal and vegetable oils and fats to produce an alternative fuel to heavy oil as a business designed to help bring about society-wide carbon neutrality, and we have begun manufacturing biofuel for in-house use. We hope eventually to grow this business to the point where its biofuel products can be sold to outside parties. In addition, approximately 95% of the INFRONEER Group's CO<sub>2</sub>

For \*1 to \*2, refer to the glossary on page 84.

nificant impact on the environment and making carbon neutrality an urgent priority. We would like to play a leading role in the Group's efforts to create a sustainable environment by expanding the use of biofuels.

The second project involves the PPP/PFI\*1 and comprehensive private contracting\*2 businesses in which the Group is united in

emissions are generated during the production of our asphalt

mixtures, meaning that the road construction industry has a sig-

private contracting\*2 businesses in which the Group is united in its determination to become an integrated infrastructure service company. In FY2023, we participated in the Toyohashi Arena concession project together with MAEDA CORP. We expect the number of projects in which we can take advantage of our strengths to continue rising in the future.

We will carry out M&A and other initiatives that contribute to management from a long-term perspective and establish a third business pillar. Aggressive investment is essential for our continued growth. We will invest in facilities, technological development, and people, with a particular emphasis on "investment in people" at this critical juncture. In addition to enhancing benefits and welfare, we would like to actively arrange personnel exchanges with the INFRONEER Group as well as opportunities for taking on challenges. We will also introduce a career development system to create environments in which employees can maximize their potential. We will foster a corporate culture that makes employees unafraid of change or failure and willing to take on a variety of challenges.

Our goal of being the number one company in the road construction industry does not just concern performance. We are also focused on comfortable working conditions for our employees. We intend to maximize the abilities of all employees, to realize a company where everyone can thrive, and to improve our brand power to the extent that we can establish an image of MAEDA ROAD as a fascinating road construction company.

► For the full version of the interview, visit our website at: https://www.infroneer.com/jp/sustainability/topics/comany3-top-message.html (in Japanese)

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<sup>\*1 2024</sup> issue: Strict enforcement of a legal cap on overtime hours in certain industries, such as construction and transportation, from April 2024. These industries are required to improve operational efficiency and the working environment. For \*2 to \*4, refer to the glossary on page 84.



## MAEDA SEISAKUSHO CO., LTD.

# Achieve Growth on the Strength of the Manufacturing of Cranes Developed by Employing Custom-made Planning and Design

MAEDA SEISAKUSHO utilizes its unique technologies to provide a full gamut of services—from product planning to design—on a custom—made basis for special vehicles, factory equipment, and other ordered products widely used at construction sites and public facilities.

Prominent among these products are our crane products, including our signature spider cranes and crawler cranes, which have evolved over a long history since we started manufacturing them in 1968.

Our current challenge is to further expand sales of our products by leveraging the expertise we have accumulated over the years. Since the establishment of INFRONEER, we have manufactured construction machinery in small quantities and in many varieties and provided them to MAEDA CORP. and MAEDA ROAD. We are preparing and sharing case studies and introductory videos so that our technologies and products can be further utilized throughout the Group. We also intend to encourage sharing customer bases within the Group.

We are also aggressively expanding overseas, with our first overseas subsidiary—MAEDA AMERICA—established in 2022 in North America. The expansion of our distributor network in the U.S. has boosted sales of our spider cranes. In April 2024, we exhibited our new battery-powered knuckle-boom cranes and spider cranes at INTERMAT 2024, an international exhibition of equipment, machinery, and technologies for the construction and materials industries held in Paris, France. To our great satisfaction, these were very well received by visitors.

In the fiscal year ended March 31, 2024, sales of our own prod-

ucts such as crawler cranes and the Komatsu products we handle remained strong, resulting in year-on-year increases in both sales and profits. Although the cost of raw materials soared due to global inflation, we were able to absorb the higher costs through price increases and secured a crawler crane market share of more than 90%. We have also taken steps to prepare for fluctuations in business performance, such as promoting in-house production of electrical infrastructure to remain unaffected by supply chain disruptions.

# Work on the EV Conversion of Cranes and the Development of Other Innovative Technologies

We intend to further develop the strengths of our products to achieve further business growth. Specifically, we will proactively work on new technological development in collaboration with MAEDA CORP's ICI Center, an innovation creation hub, and enhance our system to provide machinery and equipment related to our infrastructure service business, including fleet maintenance and management of machinery. We will also promote the electric vehicle (EV) conversion of spider cranes to reduce environmental footprint.

Human resource strategies are key to further growth. To improve employee retention and productivity, we are focusing on reforming work styles and empowering women. We have created an environment that makes it easy to take leave, and we hold a Women's Workshop to encourage female employees to share information and resolve any problems they may have at work.

We hope through these measures to step up our performance as a percentage of Group sales and contribute to the Group's growth.

### **Synergy Topics**

To become an integrated infrastructure service company, it is essential that MAEDA CORP., MAEDA ROAD, MAEDA SEISAKUSHO, and other companies cooperate with each other and maximize their synergy as the INFRONEER Group. The following are efforts being made to deepen Group synergies through, for example, the infrastructure management business and personnel exchange mainly among the three companies.

We aim to further expand Group synergies, including those with Japan Wind Development, which joined the INFRONEER Group in January 2024.



#### Toyohashi Arena: MAEDA CORP. and MAEDA ROAD participate in consortium

In June 2024, a group in which MAEDA CORP. and MAEDA ROAD were participants signed a basic project operation agreement with Aichi Prefecture's Toyohashi City during the public solicitation procedures for the "Multipurpose Indoor Facility and Toyohashi Park East Side Area Development and Operation Project." Utilizing the INFRONEER Group's expertise in construction and infrastructure management, we will help create a bustling town with the arena at its core by rebuilding the aging municipal gymnasium and improving the surrounding park in an integrated manner and by taking on the long-term management of the project for a 30-year period.

This was MAEDA ROAD's first foray into the concession business. By taking on the challenge of arena projects for local governments—an area of endeavor expected to expand in the future—we will further demonstrate Group synergies and help lead the way to resolving social issues.



Exterior image of Toyohashi Arena

\* This is an artist's rendering at the planning stage and may be subject to change based on future discussions.



## Steady progress in personnel exchange and collaboration leading to Group-wide growth

Personnel exchanges, including secondments from business companies to INFRONEER and among business companies themselves, are becoming increasingly common. Being involved in Group-wide operations has in turn had a positive effect on the operations of business companies by broadening their perspectives and giving them access to knowledge not available to business companies on their own.

Transfers between business companies are also expected to lead to greater sharing of know-how in sales, design, and other areas, thereby raising the overall level of the Group.

We are also increasing the number of mid-career hires at the INFRONEER Group. Utilizing the experience and expertise of a diverse collection of people will lead to the growth of the Group as a whole.



#### **Group-wide sales cooperation**

We have made our sales networks stronger and more geographically extensive by utilizing the existing customer networks of our business companies to develop new customers for other business companies and by encouraging collaboration among business companies at the branch and sales office levels.

As a specific example, MAEDA ROAD received 71 direct construction orders from new customers in FY2023 by utilizing MAEDA CORP.'s customer network. Going forward, both companies aim to increase orders by mutually utilizing their networks and strengthening their collaborative sales activities.



#### First INFRONEER Group-wide Technology R&D Discussion held

The first Technology R&D Discussion for the entire INFRONEER Group was held in July 2024. To advance the creation of Group synergies and accelerate the development of new technologies and services in the R&D departments of our business companies, the executive officers of INFRONEER and the heads of the business and technology departments of all business companies gathered to identify research issues and engage in lively discussions on possibilities for joint research.

Going forward, we will enhance the quality and frequency of information sharing to strengthen cooperation among technology departments to create synergies as quickly as possible.



Technology R&D Discussion

▶ For the full version of the interview, visit our website at: https://www.infroneer.com/jp/sustainability/topics/comany3-top-message.html (in Japanese)

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### Message from the President of Japan Wind Development

Taking on the Challenge of Further Expanding the Renewable Energy Business, from the Development to the Operation and Maintenance of Wind Power **Generation that Contributes to Strengthening Our Profitability and Solving Social Issues** 



#### **Strengthening Governance is a Top Priority Establishing a Compliance System**

In June 2024, I was appointed President & CEO of Japan Wind Development (JWD), which joined the INFRONEER Group in January 2024. Having promoted the renewable energy business at MAEDA CORP. for years, I am very excited to take on the important responsibility of leading a business company in the Group.

Wind power generation is a core renewable energy source to achieve carbon neutrality across society. MAEDA CORP. has participated in the renewable energy business by taking advantage of its strengths in design and construction. With the addition of the JWD Group, which engages in all aspects of wind power generation from development to operation and maintenance, the INFRONEER Group has become the only corporate group capable of implementing wind power projects from upstream to downstream in a one-stop service.

The renewable energy business is the most critical initiative for the INFRONEER Group, which aims to be an integrated infrastructure service company. I am confident that the entire Group will grow as JWD takes on the core role of pursuing the renewable energy business and contributing to solving pressing social issues, including achieving carbon neutrality, while expanding its profitability.

To foster synergy in business, it is crucial to enhance the governance of JWD. The former president was indicted without arrest for bribery. In October 2023, it received administrative guidance from the Ministry of Economy, Trade and Industry, including establishing a compliance system. We sincerely apologize for any inconvenience or concern caused to our stakeholders.

Recognizing that the top priority for the entire JWD Group is to prevent a recurrence of this incident and restore trust, we will implement four initiatives to achieve

The first initiative is a complete replacement of the management team. The Nominating Committee of INFRONEER has appointed the new management team, including me.

The second is the restructuring of the internal organization. We have newly established a Legal and Compliance Department and formulated a code of conduct to prevent



Atsumi Wind Farm

corruption. We are also working to improve employee compliance awareness through education, human resources development, and reviewing our employee evaluation system.

The third initiative is reforming business processes to prevent inappropriate transactions. We reviewed our regulations on decision-making authority and clarified which matters should be referred to the Management Strategy Meeting and the Board of Directors of JWD and which matters should be referred to INFRONEER. To prevent inappropriate transactions, the Legal and Compliance Department and the Accounting Department check the contents of contracts in advance.

The fourth is strengthening the surveillance function. The newly established Internal Audit Department and the company's auditors conduct audits, respectively. In addition, INFRONEER's Corporate Audit Department will also conduct an audit to strengthen the check function. We have also established a whistle-blowing system for employees to report internal misconduct and a Compliance Committee consisting of two outside lawyers and me to implement governance reform.

These initiatives are reported to the Ministry of Economy, Trade and Industry and published on our website. We will make sure to implement specific measures under these initiatives to prevent a recurrence of misconduct.

▶ Report to the Ministry of Economy, Trade and Industry https://www.jwd.co.jp/info/経済産業省への報告について/ (in Japanese)

#### **Prioritizing Coexistence and Prosperity** with the Local Community by Implementing the Renewable Energy **Business with a Long-term Perspective**

The mainstream business model for renewable energy has been to generate stable income by utilizing the FIT system\*1. With the transition to the FIP system\*2, companies need to address a wide range of business areas in addition to power generation, including trading of power under a CPPA\*3. Like thermal and nuclear power, renewable energy is increasingly seen as a longterm infrastructure business.

In this respect, renewable energy businesses in the future will be limited to a handful of companies with the ability to carry out solid business operations, like JWD, which can coexist with the local community and plan their business from a long-term

Amid the increasing difficulty of project formation, we will utilize the INFRONEER Group's resources to enhance our ability to form projects in the upstream stage, expand our business domain to include not only power generation but also power trading and aggregation businesses and further refine the development capabilities of JWD and the operation and mainte-

nance (O&M) know-how accumulated over many years by its subsidiary, EOS Engineering & Services, thereby enhancing the corporate value of JWD.

It is also essential to create more opportunities for collaboration within the INFRONEER Group to create synergies from JWD's participation in the Group. Concrete dialogues have already begun, including discussions with MAEDA CORP. about joint business development and technical matters, discussions with MAEDA ROAD about utilizing human resources, and discussions with MAEDA SEISAKUSHO about crane technology. These are great stimuli for each company, and we expect them to lead to the creation of new added value.

JWD is an organization of employees, each with a high level of ability and the ambition to work in the wind power business. On the other hand, however, there are some teamwork issues. I believe that when every employee aligns in the same direction to demonstrate organizational unity, we can achieve greater strength. This is a part where management skills are tested, and we should bring out the strengths of our employees while respecting their individuality.

Even in the current difficult business environment, we still see growing demand for the use of renewable energy. The JWD Group has made a fresh start. We believe that the management's and employees' confidence and pride in their work will lead to the company's success and growth.

With a deep sense of mission to lead the renewable energy business, which is at the core of the integrated infrastructure service company that the INFRONEER Group aims to become, I will lead this business company with determination.

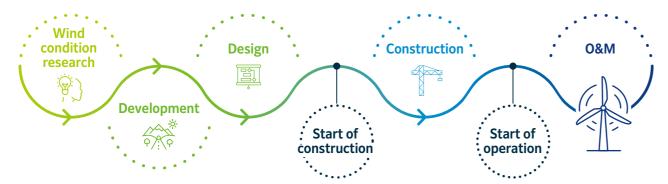
- \*1 Short for Feed-in Tariff, FIT is a system under which electricity from renewable energy sources is purchased for a certain period of time at a fixed price set by the government.
- \*2 Short for Feed-in Premium, FIP is a system for purchasing renewable energy electricity at a premium to the market price.
- \*3 Short for Corporate Power Purchase Agreement, under which a company purchases renewable energy electricity from a power generation company for a long period of time.

At a roundtable talk with employees



### **Japan Wind Development**

Here are the activities of JWD, which joined the INFRONEER Group in January 2024, with comments from employees.



#### Wind condition research

#### Researching Whether the Wind Is Suitable for **Power Generation**

The development of wind power generation begins with researching the wind conditions at the candidate site over at least one year in all four seasons to determine its suitability for power generation. Wind conditions include the state and characteristics of the wind, mainly speed and direction, their frequency of occurrence, and turbulence intensity. The annual power volume is predicted by analyzing the observed wind conditions and the impact of the development area's topography. For accurate wind condition analysis, it is important to observe wind conditions at representative locations of the development area close to the planned wind turbine installation site at an altitude close to the height of the turbine blades and to obtain data with no missing values or abnormal values.





#### **Implementing Community-rooted Development Projects**

The development period for a wind power plant generally takes eight years or longer, and the project period extends as long as 20 years. For a wind power generation project that takes many years, it is essential to gain an understanding of the local community and to coexist with them throughout the development stage. For this reason, we carry out a development plan while carefully considering the living environment and ecosystem. We also hold briefing sessions and other events to carefully explain the project to the local community members and engage in dialogue with them.

#### **Comment from employees**

The development of a wind power plant involves a wide range of tasks, including researching and selecting suitable locations for wind power generation facilities, explaining the project to local governments in and near the installation area, negotiating with landowners, responding to FIP bids, and negotiating with contractors. There are challenges in carrying out these extensive tasks, but the words of encouragement we receive from local governments and community members are what drive us. Hokkaido has a very high potential for wind power generation, so by formulating a new project, I would like to contribute to building a foundation that will give future generations a sense of living in peace.



Hiroyasu Sato, Manager Development Dept., Development Div. (Works at the Hokkaido Branch) Japan Wind Development Co., Ltd.



#### **Implementing Environmental Impact Assessments and Measures to Conserve the Local Environment**

When implementing a project, it is essential to coordinate it with the local community, including applying for permission to install observation towers necessary for wind condition analysis and feasibility studies. Once the necessary coordination with the local community has been completed, an environmental impact assessment will be carried out, and environmental conservation measures will be taken for the neighboring areas. The research covers the location's current status and prediction of the impact of the construction work and the power plant's operation. The assessment items include flora and fauna, noise and infrasound, water quality, sediment, and landscape. Field research will be conducted to assess the impact of the power plant's development and operation on the ecosystem and water environment, the risk of noise generation, and the landscape changes.



Briefing session for community members



#### **Constructing Wind Power Plants Utilizing Our Advanced Experience**

Japan experiences many earthquakes and is also frequently hit by large typhoons. For this reason, wind power plants are designed to resist earthquakes, strong winds, and other conditions comparable to those required under the design standards for skyscrapers. Land preparation must also be planned to withstand heavy rainfall and other natural disasters. Therefore, we spend more than two years designing a plant and commence construction only after obtaining the necessary permits and approvals.

The latest onshore wind turbines, which are mainly 160 meters high, are constructed using the largest cranes in Japan. The blades, the main component of wind turbines, are approximately 60 meters long, which is more than twice the length of a single car of the Shinkansen (bullet train) (the wingspan of a Boeing 787 is 60.1 meters). They are transported safely on public roads in special vehicles and then installed



Constructing a windmill

high up in the air using the large crane vehicle referred to above. Because we select locations with strong winds, our top-class engineers pay the utmost attention during the construction. We aim to build wind power plants that are accepted by the local community, considering the surrounding environment in terms of tree planting and slope construction.



#### **Achieving Stable and Safe Operation of Power Plants through Maintenance and Inspection**

Maintenance and inspection of wind power plants include remote surveillance of the operation, semi-annual or annual regular maintenance, irregular maintenance for troubleshooting and parts replacement, large-scale repairs to replace or repair main components (parts), facility diagnosis including non-destructive testing, and maintenance of receiving and transforming facilities. Through this maintenance and inspection, we diagnose the condition of the facilities and detect and prevent malfunctions at an early stage. In some cases, we respond to sudden problems and replace parts and components to achieve stable and safe operation of power plants.



Courtesy of EOS Engineering & Service Co., Ltd. (EES)



Engineers conducting maintenance work

#### **Comment from employees**

Our role is to maintain the performance of the wind power plants at an optimal level at all times and prevent severe accidents by detecting signs of deterioration or malfunction in the components through regular maintenance and inspection. The work requires me to brush up on my knowledge of electricity and machinery for wind power generation daily. Still, the most rewarding moment is when the knowledge and experience I have worked hard to gain are reflected directly in the project. As the market expands, I would like to focus on building an education system to develop future business leaders, in addition to improving my own skills.



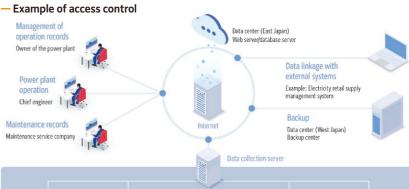
Kohei Ichise Atsumi Office, O&M Department EOS Engineering & Service Co., Ltd.

Courtesy of EOS Energy Management Co., Ltd. (EEM)

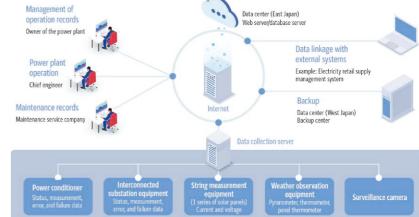


#### **Surveillance and Control of Power Plants**

EOS Energy Management (EEM), a member of the JWD Group, develops, manufactures, and sells remote surveillance systems for power plants. The company provides cloud services for remote surveillance of solar and wind power plants with a capacity of over 2 GW. It has also started online power plant control and automated document creation to improve the efficiency of our customers' power plant operations.



EEM



## Introduction to the Businesses of the INFRONEER Group

Breaking out of the shell of a construction company, we as an integrated infrastructure service company implement a business model that provides one-stop management of infrastructure from upstream to downstream.

MAEDA CORP., which celebrated its 100th anniversary in 2019, MAEDA ROAD, and MAEDA SEISAKUSHO established INFRONEER in October 2021. In January 2024, Japan Wind Development (JWD) joined the Group. The following outlines the wide-ranging businesses of the INFRONEER Group.



	(¥ billion)		
FY2024 performance targets (IFRS-based)			
Net sales	839.9		
Gross profit	125.1		
Civil engineering*1	28.0		
Building construction*1	31.3		
Infrastructure management*2	15.5		
Road civil engineering*3	36.3		
Machinery* <sup>4</sup>	9.3		
Others*5	4.7		
General and administrative expense	s 67.7		
Business profit	59.0		
Net income	38.4		
*1 MAEDA CORP. (non-consolidated) *2 Including an			

\*1 MAEDA CORP. (non-consolidated) \*2 Including an expected increase in profit by gains from divestment and M&A \*3 MAEDA ROAD (consolidated); Including depreciation of PPA assets \*4 MAEDA SEISAKUSHO (consolidated) \*5 Subsidiaries of MAEDA CORP.

(Persons

(consolidated)	8,037
Employees of major Group comp	anies
MAEDA CORP.	3,310
MAEDA ROAD	2,435
MAEDA SEISAKUSHO	563
IWD	137

<sup>\*</sup> Excluding part-time and fixed-term employees

#### - Major Group companies

	Segment	As of March 2024	Strengths and characteristics	
	Civil engineering	MAEDA CORP. civil engineering business (including real estate business)	Highest profit margins in the industry through "project formation from the upstream side" and "order discipline/management of process, quality and cost Almost no provision for construction losses Highest-ever backlog of highly profitable construction contracts	
	Building construction	MAEDA CORP. building construction business (including real estate business)		
INFRONEER Holdings	Infrastructure management	MAEDA CORP. infrastructure management business Japan Wind Development (consolidated) Aichi Road Concession Aichi road concession (anonymous association) Miotsukushi Industrial Water Concession Miura Sewerage Concession	Growth areas that no other companies possess, focusing on public-private partnership projects and renewable energy projects One-stop management of infrastructure from upstream to downstream Extensive experience and development know-how in the wind power generation business A special team dedicated to the operation and maintenance of wind power generation projects to maximize the generation volume	
ï	Road civil engineering	MAEDA ROAD (consolidated)	Top share in the industry both for road civil engineering work and asphalt mixture sales     Regional network with more than 220 locations in Japan	
	Machinery	MAEDA SEISAKUSHO (consolidated)	Komatsu's largest distributor in Japan     Strong presence overseas with distinctive products such as spider cranes	
	Others	JM Thai Maeda Corporation Limited FBS Fujimi Koken	Retailing business, construction materials manufacturing and sales, building management, real estate business, and other businesses	

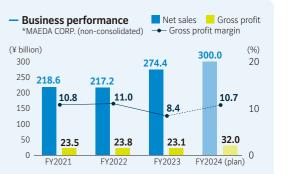
#### Civil Engineering Business >P. 47

The Civil Engineering Business engages in construction work, mainly dams and tunnels, and related ancillary activities, and is expanding the range of work including urban civil engineering, the design and construction of nuclear power plants, and defense-related construction. We have built long-term relationships of trust with our key clients by leveraging our strengths in sales, including proposals backed by our technological prowess and a high level of customer satisfaction in construction completion schedule, quality, and safety.



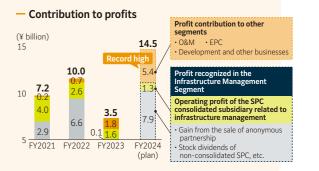
#### **Building Construction Business** > P. 49

The Building Construction Business engages in construction work, mainly large-scale projects such as redevelopment projects, high-rise condominiums, and related ancillary businesses. The business continues to grow through a wide range of projects, including the construction of office buildings, factories, laboratories, and large logistics facilities. The Building Construction Business also focuses on new initiatives that leverage its construction technology know-how, such as concession projects for arenas, stadiums, and other sports and entertainment facilities in collaboration with the Infrastructure Management Business and participating in luxury hotel projects.



#### **Infrastructure Management Business** → P. 51

The Infrastructure Management Business mainly engages in renewable energy businesses that invest in the development, construction, operation, maintenance, management, and sale of solar and wind power generation projects as well as public-private partnership projects that acquire the operating rights in public infrastructure projects and construct, operate, maintain, and manage them. Taking advantage of the engineering capabilities cultivated as a construction company, we have succeeded in starting businesses in a variety of fields of renewable energy business, including solar power, wind power, and biomass. In public-private partnership projects in Japan, we operate, as a pioneer in this field, with a variety of projects under management, including airports, roads, and industrial water supply facilities.



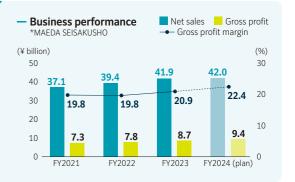
#### Road Civil Engineering Business >P. 53

The Road Civil Engineering Business engages in road civil engineering work and manufactures and sells asphalt mixtures. With over 220 locations throughout Japan, the business provides community-based attentive services, with the top share in the industry both for road civil engineering work and asphalt mixture sales. In the road civil engineering industry, we were quick to emphasize the use of low-carbon asphalt mixtures in sales negotiations. We also visualize  $\rm CO_2$  reductions using our original action reports, which help our clients promote their own environmental policies.



#### **Machinery Business** > P. 55

The Machinery Business manufactures, sells, and rents construction machinery and provides after-sales services. The business is the largest distributor in Japan for Komatsu, the largest manufacturer of construction machinery in Japan. In addition, it has strength in the development, manufacture, sales, and after-sales service of its own distinctive products, such as spider cranes. The number of units sold overseas is also increasing thanks to the expansion of the overseas model lineup and the establishment of sales networks in Asia, Europe, and the United States.





Our civil engineering business began with the construction of a hydroelectric power plant in 1919. Ever since, we have expanded to include a wide range of work, including dams, tunnels, shield tunneling, urban civil engineering, the design and construction of nuclear power plants, and defense-related facilities. Recently, we have also been actively working on highway renovation projects and renewable energy-related construction projects. We also participate in super large-scale projects such as the Linear Chuo Shinkansen and the Tokyo Outer Ring Road, leveraging our latest automation, DX, and labor-saving technologies.

Under the General Manager's Policy to "implement work style reforms and build an attractive organization by developing diverse human resources," we take pride in our work, respect each other, and work hard every day to improve our individual abilities.

We will expand our business domain to meet new values and needs to strongly support the INFRONEER Group's vision to be an integrated infrastructure service company.



Tadahiko Tofuku
General Manager of the Civil
Engineering Division
Senior Managing Officer
MAEDA CORPORATION

#### **Market Trends and Social Issues**

The market for civil engineering is expected to continue to see strong public investment due to the government's Fundamental Plan for National Resilience, the recovery from the Noto Peninsula Earthquake, and the reinforcement of defense facilities. On the other hand, the infrastructure facilities built during the period of rapid economic growth are now reaching the end of their useful lives, and the percentage of renovation work is increasing year by year. Due to the increasing typhoons, heavy rainfall, and other natural disasters caused by climate change and the growing concern about global environmental issues, the introduction of renewable energy that does not rely on fossil fuels is also increasing to achieve a decarbonized society.

MAEDA CORP. has participated in projects related to renewable energy, including wind and solar power. With the addition of Japan Wind Development (JWD) to the Group, we expect that the percentage of this field in our business portfolio will increase in the future.

On the supply side, meanwhile, construction materials and

energy prices remain high and labor costs are rising. The worker shortage due to the declining birthrate and aging population is becoming more apparent. As the construction of large-scale production facilities related to semiconductors and other cutting-edge technologies has been increasing recently, there is a shortage of labor even in rural areas. In 2024, restrictions on overtime work in the construction industry were enforced. Consequently, the labor shortage may worsen among cooperating companies, not just general contractors. Enhancing productivity and ensuring construction schedules are met are now crucial issues.

To solve these issues and ensure a sustainable business environment, we strive to improve productivity on the construction site, secure workers at cooperating companies, and maintain and improve technical levels. Specifically, we provide support to cooperating companies for recruitment advertisements, support for foremen training, and develop technology in collaboration with cooperating companies to improve our productivity.

#### **Strengths and Differentiation Strategy**

Our strengths in carrying out civil engineering projects lie in our superior abilities demonstrated on the construction site based on the "Principle of Three Actuals" (see the actuals on the actual site to understand the actual state) and our pursuit of technology that embodies our company policy (integrity, motivation, and technology). Our other advantage is that we are a highly flexible organization with strong collaboration and speedy information sharing between the head office, branches, and work sites, as well as the ability to make quick decisions and responses.

Our strengths in sales are the ability to make proposals backed up by our technological prowess and the high level of customer satisfaction in construction scheduling, quality, and safety. These strengths have enabled us to demonstrate our competitiveness in government construction bids and led to long-term relationships of trust with electric power companies, our existing key clients.

To deepen these strengths, we strive to strengthen our

human resource management, particularly the leadership of the managers. Recognizing the importance of supervisors' roles in exercising organizational strength and developing subordinates, we provide two-day training sessions with a wealth of practical content for branch and head office managers as well as construction site managers. In FY2024, we are also implementing the MAEDA Civil Engineering 3M Campaign under the slogans: "Communicate and listen to the objectives," "Laugh and listen

with a smile," and "Say and accept the truth even if it is unpleasant to hear" to build an attractive and stronger organizational structure.



Leadership training

#### **Progress of the Three Strategic Pillars**

Regarding "productivity reforms," we have implemented various measures on construction sites for years, including the use of ICT. With the restrictions on overtime work, we now focus on the effective use of engineering work centers to reduce work hours at construction sites. To reduce the workload of on-site staff members, the engineering work centers at the branch offices handle paperwork, photo filing, and other routine tasks. Local staff in Vietnam also perform on-site support work to improve productivity at the construction sites in the country.

Concerning "establishing a new revenue base," alongside the traditional construction service, we now have a new revenue source in Vietnam: a biomass pellet manufacturing and sales business. Furthermore, we expect to create new synergies by combining our engineering capabilities with the development

capabilities of JWD, which joined the Group in FY2023. We expect further opportunities in the conventional renewable energy business area.

As for "strengthening and improving our corporate culture," we promote the aforementioned leadership enhancement in human resource management. In addition, in response to the enforcement of the regulation setting the maximum working hours, each employee manages their working hours with a common understanding that "MAEDA CORP. does not accept the workplace climate of tolerating legal violations." We make the most of our construction review meetings to learn from past incidents and prevent work-related accidents, environmental accidents, and quality issues.

#### **Future Issues**

The construction industry faces a shortage of current and future workforce. On top of this, the regulation to set the maximum working hours, which applies to the construction industry, was enforced this year. In response, it is crucial to make the construction industry an attractive workplace by further improving the working environment and implementing a work style reform that strikes a balance between work and family life. To this end, we are improving the working environment by standardizing the specifications and equipment of workers' dormitories, implementing technological innovation by ICT and DX, and adopting diverse working styles and human resources.

As the scope of business expands to include areas other than construction, such as concessions, we must not only im-

prove and pass on the conventional construction techniques but also secure human resources who can handle these areas. It is crucial to increase the number of experienced workers by training and systemic job rotations, leveraging our experience as a construction contractor.

Quality problems and large-scale industrial accidents have been making headlines, and these are seen as major risks that could damage a company's reputation. To prevent such problems, we ensure the proper operation of our safety, quality, and environmental management systems. We also strengthen information sharing and collaboration between the head office, branches and construction sites to prevent problems as a unified organization.

#### **Comment from employees**

After joining MAEDA CORP., I gained experience as a construction manager in various types of construction work, including dams, large-scale land development, tunnels, expressway renovations, and road improvement. I am currently working on a road improvement project in the suburbs of Kobe City, a project to build a bypass on the Daini-Shinmei Road, which will help ease traffic congestion in the area.

MAEDA CORP. is said to have an open corporate culture. In fact, at every site, it puts the site first (the Principle of Three Actuals), responds sincerely to all parties involved, including clients, internal related parties, and cooperating companies, and listens to the opinions of the younger members. I feel that this "openness" has promoted my growth. Although there are issues of a worker shortage and long working hours, I want to pass on this corporate culture (mindset) along with our technical skills to future generations.



Junki Hirano Hasetani Construction Site, MAEDA CORPORATION



The Building Construction Business continues to grow through a wide range of initiatives, including redevelopment projects, large-scale construction of high-rise condominiums, office buildings, factories, research facilities, large-scale logistics facilities, and one of the largest arenas in Japan. Our growth has been supported by the technical capabilities and know-how we have cultivated over many years. However, with the recent push for work style reform, we need to reconsider our conventional approach, given the current situation where it is difficult to set aside time for training in know-how and skills and time for trial and error. I am confident that further technological innovation will be achieved by combining the strengths of the highly skilled, experienced employees with those of the younger, digital-native employees respecting each other.

We will contribute to the growth of the INFRONEER Group by emphasizing the importance of technological capabilities and ensuring that our refined technological capabilities are passed on to the next generation.



Hitoshi Wakiya
General Manager of the
Building Division
Director and
Senior Managing Officer
MAEDA CORPORATION

#### **Market Trends and Social Issues**

After the COVID-19 pandemic, private investment in the construction industry has been strong. The number of foreign tourists visiting Japan has recovered to around 80% of the 2019 level. At a cabinet meeting, the government decided on the New Tourism Nation Promotion Basic Plan. The demand for building accommodation facilities for workation and long-term stays as well as luxury hotels is increasing as growth is expected in the number of foreign tourists visiting Japan, the money spent per tourist, and the revitalization of tourism in regional areas.

In addition, with the return of manufacturing to Japan and increased investment in Japan by overseas companies, the industrial facilities sector, particularly semiconductor factories and data centers, is booming. As a result, there is a labor shortage in the equipment installation industry for electrical, air conditioning, and information and communications systems.

In the public interest area, the government promotes public-private partnerships (PPP/PFI\*), emphasizing the construction of stadiums and arenas to promote and revitalize sports and the local economy. Furthermore, the construction of Self-Defense Force facilities was added as a priority area as the "PPP Ministry of Defense version" in the government's budget. Also, local governments around the scheduled stations of the

Linear Chuo Shinkansen project are proceeding with town planning.

While these movements are a tailwind for the construction industry, it has been significantly affected by the sharp rise in material prices that began in 2021. Material prices have increased by 31% compared to 2021, and although the pace is slowing, they are continuing to rise. The sharp rise in labor costs is also remarkable, with an 11% increase in the last two years. In particular, the hike was significant in equipment installation work. As restrictions on overtime work were enforced in 2024, distribution costs are also expected to increase and we must keep a close eye on further price rises.

The aging of skilled workers and the shortage of workers are significant issues for the construction industry. Technological innovation through collaboration between construction companies and IT engineers is highly expected, such as using digital technology to improve productivity and using robots to solve the worker shortage. The way that general contractors work also needs to change, and the whole construction industry is expected to take action.

\* For PPP/PFI, refer to the glossary on page 84.

### **Strengths and Differentiation Strategy**

MAEDA CORP's Building Construction Business has strengths in its design and construction technology for high-rise condominiums with top-class technical capabilities and know-how in Japan. In addition to providing stable quality through the standardization of details, we can plan and execute rational construction processes. Thus, this is an area where we have shifted from reliance on individuals' knowledge and skills to knowledge management. We have many medium- to long-term projects scheduled, including redevelopment (housing) and construction of high-rise condominiums, which will remain the main focus of our medium- to long-term strategy for the Building Construction Business.

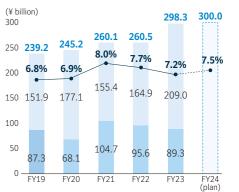
We also work on concession projects for sports and entertainment facilities such as arenas and stadiums in collaboration with the Infrastructure Management Business. In concession projects, we can apply the construction knowhow and technical capabilities MAEDA CORP. has cultivated over the years from the upstream stage. We can offer proposals with minimal running costs while maintaining design and functionality. We also can realize BT concession\* projects with appropriate construction periods and prices. These are the major points that significantly differentiate us from our competitors.

#### — Construction orders received \* Excluding real estate

Profit margin at time of order

Orders received per project

10 billion or above Less than 10 billion



### **Progress of the Three Strategic Pillars**

In the Building Construction Business, improving profit margin at the time of order receipt is also a key measure in the Mediumto Long-term Business Plan. Since FY2021, we have set a control value at 7% on average. In FY2024, we set 7.5% as a target value. These values will be increased gradually as planned. In addition to profit margin, physical productivity and profit per capita are also used as evaluation metrics, using past data by structure type and building use purpose for proper construction site management.

For "establishing a new revenue base," we established the New Business Planning Office, which exclusively implements "de-construction" measures, in November 2023. Currently, we participate in a luxury hotel project from the upstream stage. By standing on the side of the business owner, we can make the most of MAEDA CORP.'s know-how and technical capabilities. By investing as joint business owners and sharing the

risk, we assume more responsibility for the project's success and can expect further increases in the business value. We aim to create profits from businesses other than "construction" by completing projects that bring together the knowledge of partner companies.

As for "strengthening and improving our corporate culture," we are committed to developing human resources. In addition to training and developing know-how and technical skills in construction technology, it is essential to instill in many employees the "'de-construction' mindset" necessary for developing new businesses. This "'de-construction' mindset" is also crucial for creating added value in the existing "construction" business and for viewing entire projects from the perspective of a business owner. In 2024 and onwards, we plan to develop and begin a training program specialized in this area.

#### **Future Issues**

The Building Construction Business must establish a stable revenue base that is unaffected by market competition. The New Business Planning Office addresses these issues by conducting business development that combines investment and "construction" work. As the speed of commercialization is the key, we strive to build a flexible team and develop and appropriately allocate human resources.

We also need to improve both productivity and technical skills as the restrictions on overtime work have been enforced.

We are developing technologies to improve productivity, including "ATARE," a BIM system that automatically generates a rebar model from structural calculations, and "Rebar 360" that fuses BIM and the construction site to shorten the time required to take pictures of construction work and enable semi-automated report creation.

► For details on "ATARE" BIM system, visit our website at: https://www.maeda.co.jp/news/2022/08/23/5329.html (in Japanese) For details on "Rebar 360," visit our website at: https://www.maeda.co.jp/news/2024/02/19/5479.html (in Japanese)

#### **Comment from employees**

I was appointed as the original member of the department that would implement "de-construction" measures for the Building Construction Business in November 2023. We participate in high-profile projects, such as the 2025 Osaka Expo, and development projects involving our investment in the business, including hotels. When considering investing in a project, we fully leverage the strengths of MAEDA CORP. as a construction company, such as construction cost control and project schedule management. It's been about a year since the department was established. Although our task is challenging, including the difficulty of building consensus within and outside the company, I also feel the joy of constantly taking on new challenges through each project. As many of our projects are long-term, it will take some time to generate profits, but we will continue to actively work on creating new value.



**Kyohei Akata**Business Planning Group,
New Business Planning Office,
Building Division,
MAEDA CORPORATION

<sup>\*</sup> For BT concession, refer to the glossary on page 84.



The Infrastructure Management Business is steadily progressing as a driving force for an integrated infrastructure service company, particularly in public-private partnerships and renewable energy projects. In FY2023, we started the operation of the Miura City Public Sewerage Management Business under the concession method in April. We provide high-quality, sustainable infrastructure services by fully utilizing MAEDA CORP.'s accumulated expertise in infrastructure management.

In January 2024, Japan Wind Development (JWD) joined the INFRONEER Group, enhancing our capability to manage the renewable energy business comprehensively. In the context of the global movement toward carbon neutrality, the Group companies will collaborate to address social issues, which is our mission as an integrated infrastructure service company.



Motoi Higashiyama
Managing Officer
Deputy General Manager of
the Management Innovation
Division (responsible for
Business Strategy)
MAEDA CORPORATION

#### **Market Trends and Social Issues**

#### ■ Trends in the Public-Private Partnership Market

In June 2024, the Japanese government released the revised PPP/PFI\* Action Plan for FY2024. Overall, the government has made steady progress toward achieving the 10-year targets in the priority fields set out in the plan, with 25% of the targets achieved by FY2023 (the second year).

In the 2024 revised plan, the target number of PPP/PFI projects has been increased with an aim to resolve social issues—the tight fiscal situation, the declining working-age population, and aging infrastructure—and to drive a growth-oriented economy. The Action Plan was revised mainly in the following four points: (1) form cross-sector, wide-area PPP/PFI; (2) create an environment in which private sector businesses can earn appropriate profits through their efforts and ingenuity; (3) increase the 10-year target for the number of PPP/PFI projects and expand the fields in which PPP/PFI is applied; and (4) spread small concessions and other forms of PPP/PFI.

#### ■ Trends in the Renewable Energy Market

The Sixth Strategic Energy Plan formulated by the Japanese government promotes the maximum introduction of renewable energy, setting a target of 36–38% as the ratio of renewable energy in the power source mix in 2030. One issue that needs

to be addressed to further promote renewable energy is output control, which temporarily suppresses power generation when the generated electricity exceeds demand. Output control may disrupt the balance of supply and demand for electricity and cause a large-scale power outage. To promote decarbonization, it is crucial to use up all generated renewable energy, whose volume is easily affected by weather and other conditions.

Electricity storage is gaining attention as a way to efficiently utilize renewable energy. In particular, the 2022 revision of the Electricity Business Act has opened the way for the grid energy storage business to directly connect to power lines for charge and discharge. From FY2024, the market for receiving fees for adjusting the supply and demand of electricity has been fully deregulated. Unlike storage batteries installed alongside renewable energy sources, grid-scale batteries are directly connected to the grid and are used to respond to changes in supply and demand across the entire power system, rather than changes in the output from specific power sources. The government promotes the introduction of the batteries from the aspect of the system and budgets by revising the related laws. The importance of storage batteries is expected to increase further as the use of renewable energy expands.

\* For PPP/PFI, refer to the glossary on page 84.

### **Strengths and Differentiation Strategy**

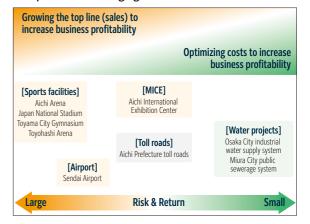
MAEDA CORP.'s advantages in public-private partnership projects are the experience, know-how, and data accumulated through its work in various fields as a pioneer company. In addition to cost reductions through the use of digital technology and accumulated data, our other strength is the ability to propose measures that will increase users. We are proud to be able to improve the efficiency and profitability of many projects that would be difficult for other companies. We have also built strong partnerships with domestic and global companies. Especially in the arena and stadium operations, we work with these partners to provide the most advanced entertainment spaces in Japan.

In the renewable energy business, we have succeeded in commercializing projects in a wide range of fields, including the development and operation of biomass power generation, in addition to solar and wind power generation. The addition of JWD to the INFRONEER Group has strengthened our structure for implementing wind power generation projects from upstream through downstream, leveraging the strengths of each Group company.

We aim to create synergies by combining the engineering capabilities developed through our "construction" business with the financial capabilities (ability to deal with business risks) developed through our experience in managing a wide

range of infrastructure and our extensive business track record. By doing so, we will enhance the value of the Infrastructure Management Business and provide society with sustainable infrastructure services with high profitability.

#### - Experience in managing various infrastructure



#### **Progress of the Three Strategic Pillars**

Regarding "productivity reforms," we aim to increase productivity in infrastructure management and link it to new business development. To this end, we will develop models and management techniques that will enable more advanced and efficient infrastructure businesses, utilizing our experience in business planning and management as well as the fields in which we are currently operating.

Concerning "establishing a new revenue base," we will promote the "de-construction" business by utilizing our know-

how accumulated to date to develop and commercialize new business models for public-private partnership projects and renewable energy projects.

As for "strengthening and improving our corporate culture," we will develop and strengthen managers and prospective managers who can handle projects by leveraging the unified efforts of employees in the head office and branch offices in engaging in business proposals and operations.

#### **Future Issues**

To achieve strong sales and profits stably through the "de-construction" business, it is necessary to increase the number of projects undertaken and win more projects. As such, it is essential to implement the Three Strategic Pillars. We recognize the issues of declining profitability due to cost increases arising from the recent labor shortage and rising prices, the number of PPP projects announced by local governments, and the delay in the expansion of projects with high flexibility that allows private businesses to demonstrate their ingenuity.

In the renewable energy business, many projects, especially

wind power projects, take a long time to commercialize. We believe there is room for improvement in the structure and speed of implementation.

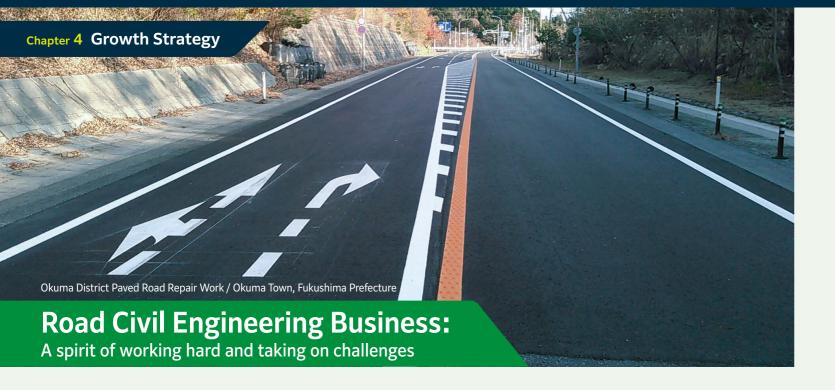
To overcome these issues, we will thoroughly implement the Three Strategic Pillars. We will also focus on creating more projects in an efficient and stable manner by further improving productivity in project formulation and management and by demonstrating MAEDA CORP.'s achievements and strengths to local governments and other organizations at an early stage before commercialization.

#### **Comment from employees**

I am currently engaged in the Osaka City Industrial Water Supply Specified Management Business. It is a 10-year concession project where a special purpose corporation (SPC) (Miotsukushi Industrial Water Concession) funded by four companies, including MAEDA CORP., operates Osaka City's industrial water business. I participated in the project from the proposal stage. After the SPC was formed, I became a member and am managing the "live" operations. We have experienced problems that were not anticipated when we first proposed the project. However, the days spent discussing with the SPC members and searching for solutions have been very stimulating. When we solve a problem, we feel a very strong sense of achievement. I am always keenly aware of the responsibility of managing important water infrastructure that supports local industrial activities by supplying industrial water to our customers in a stable and sustainable manner. As a member of the INFRONEER Group who will continue to take on infrastructure management projects, I would like to diligently work on my tasks with a commitment to always question how infrastructure should be managed.



Shinpei Fukutomi Miotsukushi Industrial Water Concession Co. Ltd. (temporarily transferred from MAEDA CORP.)



MAEDA ROAD was founded in 1925 as Takanogumi Co., Ltd., and we will be celebrating its 100th anniversary in 2025. Since its founding, the company has expanded its sales by focusing on the Road Civil Engineering Business (construction business) and the Manufacturing and Sales of Asphalt Mixtures Business (manufacturing and sales business). It has now grown to have approximately 200 sales offices and factories nationwide. We continue to provide safety and comfort in people's lives by leveraging the technical capabilities cultivated since our founding and our nationwide network, remaining close to the local community. To achieve further growth in the Road Civil Engineering Business, we will strengthen our foundation by securing labor and improving our technical capabilities, as well as taking on new challenges, including DX, observational construction control systems, and decarbonization.



Kazuhiro Nishiyori
General Manager of the
Engineering Division
Director and Managing Officer
MAEDA ROAD CONSTRUCTION
Co., Ltd.

#### **Market Trends and Social Issues**

#### ■ Trends in the Construction Market

Although the number of new road construction projects is declining, the number of maintenance and repair projects for aging roads is expected to increase. Overall, the number of projects is expected to remain flat. As the COVID-19 pandemic has ended, private-sector investment is expected to remain steady, and we expect the same for completed projects. On the other hand, labor shortage due to the aging of workers is a significant issue.

#### ■ Trends in the Manufacturing and Sales Market

The amount of asphalt mixtures produced nationwide has been decreasing year on year. It reached a record low of around 36 million tons in FY2023. We expect that the decline will continue to a certain level. The cost of raw materials keeps rising due to the continued weakening of the yen and high oil prices. We expect these changes will continue in the future, considering the uncertain outlook of the global situation. In our industry, it is difficult to pass on the cost increases to sales prices.

As a social issue, the road industry recognizes that the transition to decarbonization is the most crucial issue. The road industry significantly impacts the environment, and large amounts of CO<sub>2</sub> are emitted during the production of asphalt mixtures. We predict that environmental value will increase as we move toward achieving carbon neutrality by 2050. We will be required to implement stronger measures, including introducing CO<sub>2</sub>-free electricity in compliance with RE100 and expanding the number of factories that can ship "ecole\*1," our environmentally friendly medium-temperature asphalt mixture.

There are also other social issues, such as the declining birthrate and aging population, a shortage of workers, and depopulation in rural areas. We predict that comprehensive private contracting projects\*2 for road maintenance and management through collaboration between the government and private sector will be promoted to solve these issues.

- \*1: "ecole" refers to low-carbon, medium-temperature asphalt mixture manufactured using a mechanical foaming technology.
- \*2: For comprehensive private contracting projects, refer to the glossary on page 84.

### **Strengths and Differentiation Strategy**

MAEDA ROAD's strengths lie in our nationwide network and high mobility. Shifting our focus from sales to profit, we conducted order-taking activities that emphasized the profit margin at the time of order receipt, passed on cost increases to sales prices in response to the external environment, and took other measures to improve profits. As a result, our performance improved in FY2023. We expect the external environment to continue changing rapidly, but we will respond flexibly by leveraging our strengths.

As a strategy for differentiation, in the construction business, we will strive to increase orders for government construction projects and private-sector prime contracts. As for government construction projects, we hold technical proposal study meetings and post-bid review sessions with MAEDA CORP. to discuss the improvement of our technical score and technical proposal ranking. In March and April 2024, we succeeded in obtaining two consecutive orders for construction work from

NEXCO East Japan, which contributed to breaking our record for the highest order amount received. With projects from other customers as well, our efforts are steadily bearing fruit. Regarding private-sector prime contracting, we will work to win orders by strengthening ties with existing customers, seeking new customers, sharing information between Group companies, and actively engaging in referral marketing.

In the manufacturing and sales business, we will emphasize the benefits of low-carbon mixtures in our sales activities. Low-carbon mixtures are manufactured with less  $CO_2$  emissions than normal asphalt mixtures, and our factories across Japan can manufacture and sell the product. We also visualize  $CO_2$  reductions using our unique action reports, which help customers appeal their own environmental actions. We strive to play our role in achieving carbon neutrality for the entire society by selling our value-added products.

#### **Progress of the Three Strategic Pillars**

Regarding "productivity reforms," we have been working to manage profit margins at the time of order receipt and consolidate and eliminate sales offices and sites. Starting from FY2024, we have also strengthened our measures to manage the neighboring sites as a Group. Through this measure, we aim to make better use of human resources within the Group and further improve the efficiency of our construction work.

Concerning "establishing a new revenue base," we emphasize the biofuel oil production business of our subsidiary, JAPAN BIO FUEL Co., Ltd. We have started deliveries of biofuel to 18 factories, mainly in western Japan. In the future, we will expand into eastern Japan and establish a sales structure for external customers, promoting its growth as a third pillar of our business. We also strive to expand sales of our product, the cold asphalt mixture mild patch. Although we have sold the product through the BtoB channel, we are exploring the BtoC market through new channels such as e-commerce and teleshopping. We will accumulate sales data and use them to explore new needs

As for "strengthening and improving our corporate culture,"

we strive to realize a five-day workweek by developing technologies that contribute to IT, DX, and labor-saving, including renovating our core system. We have also revised our personnel system, which will allow employees to thrive. We are committed to creating an environment where every employee can grow by reviewing our training system and providing support for acquiring qualifications.



JAPAN BIO FUEL

#### **Future Issues**

As the construction industry is facing a serious shortage of workers, MAEDA ROAD must become more attractive to be chosen by prospective employees. Based on the idea that "people are the company's greatest asset," we will work to create attractive workplace environments and invest in human resources as a leading company in the industry. To this end,

we must deepen our profit-oriented mindset even further and secure profits so that we can continue to make sufficient investments.

We will continue to work with all stakeholders to create a path that will lead us into the future.

#### **Comment from employees**

With the motto "A value lies dormant in a single drop," every employee puts their heart and soul into their work. My job is to inspect whether each of the various processes to treat raw materials derived from plants and animals is being carried out correctly. At first, I was confused by all the unfamiliar work. However, as I continued, I acquired a wide range of skills and techniques, and I began to feel fascinated and interested in the possibilities of biofuel oil. I feel fulfilled in delivering bio-heavy oil, which has a low environmental impact, to MAEDA ROAD's asphalt plant, and I feel happy when I see asphalt pavement made from bio-heavy oil on the street. I will continue to do my best to develop this business, which I can proudly say is an important job that will change the future of the Earth.



**Hiroyuki Maeda** Manager, JAPAN BIO FUEL Co., Ltd. (Temporarily transferred from MAEDA ROAD)



In September 2023, MAEDA SEISAKUSHO launched "Forwarder," applying the technology it had cultivated over many years in the development of its products. Forests are essential for realizing carbon neutrality and protect-

ing biodiversity. However, Japan's forestry industry faces many challenges, including safety issues and a shortage of workers. MAEDA SEISAKUSHO continues to support the forestry industry in Japan by expanding its product lineup.

MAEDA SEISAKUSHO also boasts top-class sales in Japan as the master distributor for Komatsu Ltd. To solve issues such as the serious shortage of construction workers and improve safety at construction sites, we will introduce Smart Construction to a wide range of construction sites. Together with our customers, we will strive to resolve a diversity of social issues.



Masayoshi Ito
Managing Director
Executive General Manager of
the Research and Development
Headquarters
MAEDA SEISAKUSHO CO., LTD.

#### Market Trends and Social Issues

Demand for construction machinery varies from region to region and country to country, but the construction industry is expected to grow worldwide. The demand for construction machinery is especially increasing in emerging and developing countries as infrastructure development and urbanization progress. Even in developed countries, demand for construction machinery remains stable, driven by the renovation or repair of aged infrastructure and recovery from disasters.

The Asia-Pacific region is anticipated to emerge as a major market in the future because of the increasing government investment in infrastructure development and the promotion of capital investment in the region.

However, some construction projects are still delayed in some regions due to the prolonged impact of the COVID-19 pandemic. The demand for construction machinery changes every year as the global demand for environmental consciousness and energy conservation is growing. We must pay close attention to trends and policies in each country to accurately grasp demand fluctuations and respond flexibly.

Needs for used and rental machinery are also growing because of the increasing number of construction projects, replacement demand, and rising new machine prices. Although this growing demand may have an impact on new machine sales, the used machinery and rental businesses have the potential to become new sources of revenue.

In recent years, compliance with environmental regulations has become a social issue. Initiatives to address environmental issues, such as exhaust gas, climate change, and pollution, have a significant impact on the construction machinery industry worldwide. Governments around the world implement various measures to mitigate the negative impact of construction machinery on the environment. Manufacturers are also developing eco-friendly products to flexibly respond to strict environmental regulations.

Another social issue is the labor shortage due to the decreasing working-age population. In particular, the shortage of skilled workers is severe, causing construction delays and cost increases. To address this labor shortage, we must improve work efficiency and safety by integrating digital technologies such as GPS and AI and taking labor-saving measures such as automation and remote control.

### **Strengths and Differentiation Strategy**

One of MAEDA SEISAKUSHO's strengths is its technological capabilities, which allow us to handle all processes from design and manufacturing to sales, rental, and after-sales service. Our engineers visit construction sites in Japan and overseas to research the market and develop products that reflect global needs. We ensure customer satisfaction by providing original products such as spider cranes and crawler cranes, developing made-to-order products that meet the diversifying customer needs, offering rental proposals, and providing machine maintenance and other after-sales services.

As companies have been required to respond to environmental concerns and the declining working-age population in recent years, we develop products that meet customers' needs through this one-stop structure. We also strive to expand our market share by building relationships, responding to customers' needs quickly and accurately, and providing high-quality products.

Our extensive sales and service network, which extends from Japan to overseas, is also an advantage. In 2022, we established

a subsidiary in Houston in the United States to expand sales in North America, the largest construction machinery market in which we have struggled to compete. We will continue to expand our business domains by taking advantage of the business know-how and the regional networks we have built up to date.



Automatic spraying and plastering carriage

### **Progress of the Three Strategic Pillars**

Regarding "productivity reforms," we have further improved value-added productivity and expanded earnings through business reforms, which have led to the expansion of our rental business domain, fewer total working hours through the introduction and utilization of DX, and an increase in maintenance orders. We will continue to aim to maximize productivity and improve profitability through innovation by strengthening our ICT system, implementing business reforms that utilize DX, and conducting proposal-based sales that leverage the superiority of MAEDA products.

Concerning "establishing a new revenue base," we worked to expand our overseas market and increase revenue through collaboration within the Group. Overseas sales volumes increased as we expanded the product lineup, including U.S.-specification

models, and built sales networks in Asia and South America. We will continue our effort to expand our business domain, creating synergies by building a global network and strengthening collaboration within the Group.

As for "strengthening and improving our corporate culture," we have been implementing various measures to achieve zero accidents, creating an environment where diverse human resources can thrive, and working to improve corporate value through ESG management. As a result, employees' safety awareness has increased and  $\text{CO}_2$  emissions have been reduced through the introduction of hybrid products. We will continue strengthening our corporate structure by ensuring safety, health, and compliance.

#### **Future Issues**

In recent years, demand for used machinery has been on the rise due to an increase in the number of construction projects and the capture of replacement demand. In addition, we face a labor shortage due to the declining working-age population and must comply with environmental regulations. MAEDA SEI-SAKUSHO will introduce products to the market that fully utilize electrification and IoT technology to achieve carbon neutrality and reduce work processes and manpower at worksites.

We also strive to expand sales by building a system for recycling used construction machinery. We will also capture new demand by expanding into emerging and developing countries, particularly in Asia. To this end, we aim to accurately grasp the characteristics and needs of the market, develop products that meet those needs, build partnerships with local companies, expand our sales network, and achieve our business plan.

#### **Comment from employees**

I am working in sales to general contractors using my experience working at a dam construction site for MAEDA CORP. I listen to the needs and requests of customers who order custom-made machinery and equipment for civil engineering and building construction sites and handle comprehensive tasks, including proposal, development, design, production, construction, and maintenance.

I am working on developing and operating an integrated maintenance and management system for machinery owned by business companies in the INFRONEER Group, with the aim of creating further synergy between the business companies. We are also working with MAEDA CORP. to develop machines that will make tunnel renovation work more efficient and save labor. Because each custom-made product is different, making proposals is hard work. However, I feel happy and proud when it is completed and highly evaluated. We will further strengthen the collaboration between business companies through personnel exchanges and technology sharing. At the same time, we will continue to strive to use MAEDA SEISAKUSHO's engineering and mechanical capabilities to contribute to better proposals and products.



Makoto Uchiyama Deputy General Manager, Sales Div. 2 / Domestic Sales Division, Industrial Machinery Headquarters MAEDA SEISAKUSHO CO., LTD.

### Key Related Businesses (FBS, Japan Managment, Fujimi Koken)

The key related businesses include the retail business, manufacturing and sale of construction materials, building management, and real estate business. This segment recorded net sales of ¥59.0 billion and segment profit (business profit) of ¥2.2 billion.

#### FBS CO., LTD.

# **FBS**

#### **Outline of Business**

- Building management (Building management and operation, equipment inspection, security, etc.)
- Construction (New construction, repair, seismic reinforcement, renovation, etc.)
- Civil engineering\* (Soil improvement, reinforcement of structures, etc.)
- \* Fujimi Koken succeeded the civil engineering business as of March 31, 2024.



#### Strengths

- Comprehensive capabilities to provide one-stop service in everything from design and construction to building
- Ability to make proposals to increase asset values with an eye to future values



#### **Contributing to sustainable communities** and safety/security through comprehensive management

Here are some examples of the comprehensive management services we provided during FY2023. First, we started providing our service to Koga City, Ibaraki Prefecture. We maintain and manage the city's facilities with an emphasis on preventive maintenance, while working closely with city officials on the management and repair of the city's main facilities. In addition, we have obtained a preferential right to negotiate with Fukutsu City, Fukuoka Prefecture on the provision of a comprehensive management service (to start in April 2024). This is a joint project with SUNLIFE Co., Ltd., a group company of Fukuoka Jisho Co., Ltd. We believe we won this project because the city recognized a synergy effect between the hometown advantages of SUNLIFE and our own track record in providing comprehensive management services.

We will continue to work on increasing our corporate value by providing safe, secure, and sustainable facility services to community residents.



Sowa Office (Koga City, Ibaraki refecture)



Fukutsu City Office (Fukutsu City, Fukuoka Prefecture)

#### Japan Management (JM)

#### **Outline of Business**

- Upkeep and maintenance of buildings/ equipment
- Buildings/equipment life cycle management
- · Energy management
- Regional revitalization
- Comprehensive management of municipal facilities

#### Strengths

- Nationwide network with franchises across the country
- Local professionals who can help companies increase their work efficiency by utilizing IT
- Know-how accumulated through maintenance and management of 210,000 facilities



#### Operation and management of river stations along the Kano river basin in Kannami Town and Izunokuni City, Shizuoka Prefecture

In 2019, we started the operation and management of River Station Izu Gateway Kannami in Kannami Town, Shizuoka Prefecture and launched an initiative for the effective use of parks as part of our regional revitalization business. In October 2023, we also started a management and operation service for River Station Izu Joyama (Park-PFI) in Izunokuni City.

JM collaborates with local companies to solve local issues based on the principle of "the more, the merrier" and create communities that are deeply rooted in the region by working side by side with local governments.

Going forward, we will also work on solving issues surrounding the operation and management of urban parks, which place a heavy financial burden on local governments.



Hot-air balloon event held at River Station Izu

### Fujimi Koken Co., Ltd. (FKK) フジミ互研株式会社

#### **Outline of Business**

• Manufacturing and sales of secondary concrete products, such as building components made of concrete segments and precast concrete, and SEED form\*

#### Strengths

- Differentiation from other companies with its unique technologies (SEED form, REED construction method\*2, one-pass joints)
- Nationwide business through alliance factories (SEED form, REED construction method)
- Stable and continuous supply of manufacturing services to other major construction companies (precast for construction)



<sup>\*1</sup> The SEED form refers to a precast formwork that significantly increases the durability and crack dispersibility of building structures by mixing reinforcing vinylon fiber into the base material of high-strength concrete with a low water-cement ratio. \*2 The REED construction method refers to a structural form and construction method of steel concrete composite structure bridge piers using H-shaped steel beams with projections and SEED form.

#### Taking on a challenge to manufacture prestressed concrete floor slabs

With rapid changes such as soaring material prices and a drop in large-scale segment projects affecting the business environment over the past few years, we have installed new manufacturing equipment and started making prototypes to manufacture prestressed concrete floor slabs. This is the first step in our plan to fully modify our factories, and we intend to continue to promote our manufacturing business by adapting to the times.

We will undergo a major transformation, such as the unification of our manufacturing and construction at factories other than the Namegawa factory with the integration of the former FBS's civil engineering division. It also includes the expansion of our market to the Chubu and Kansai regions through the M&A of Nihon Segment Kogyo Co., Ltd. As a newly reborn company, Fujimi Koken will add more value to its products and construction services and enhance its technical capabilities.



Making prototypes of prestressed concrete floor

## **Drivers for Accelerated Growth <IT and DX Strategies>**

Three pillars of the business strategy

Creation of new

added value

Digital workplace

corporate culture

### Overall Policy

The INFRONEER Group's growth strategy truly embodies digital transformation (DX) as it weaves the Group's digital strategy into its business strategy with the goal of creating "a world where there's no limit to what can be asked from and what can be delivered by infrastructure services."

First, under the "Business × IT Strategy," we aim to create an ecosystem of business activities covering the entire infrastructure service value chain by supplementing and expanding the Group's diverse engineering capabilities with digital technology. We will proceed with the strategy in an integrated manner through initiatives such as increasing the productivity of both front- and back-office operations in each segment, sharing and utilizing information across different business domains, and developing BI tools that support optimized personnel allocation and fast decision-making.

Second, the "Data Utilization Strategy" has been formulated to promote and ensure the utilization of data across the Group by treating data as an important Group asset. We believe one important key to differentiating ourselves from other companies is to maximize the value of our data through the infrastructure service value chain. We will develop an integrated data

platform for the entire Group and establish data utilization rules and a system to operate them. At the same time, we will create a framework to provide specialized training and support with an aim to increase the data literacy of all employees and to cultivate and develop human resources equipped with data analysis skills.

Three pillars of the digital strategy

Third, the "Digital Infrastructure Strategy" sets out the fundamental policy to integrate the Group's IT infrastructure, such as its information security, communication and file-sharing tools, device procurement and operation, ID authentication, and networks. It aims to create flexible and safe IT infrastructure that can quickly respond to business needs. This IT infrastructure will support the growth and sustainability of our business while continuing to incorporate the latest technologies.

These three medium-term digital strategies form the backbone of the overall enterprise architecture\* of the Group.

\* Enterprise architecture refers to a framework that visualizes the organizational structure and roles of a company and the information system that supports them at two points in time, the present and the future, and is used to examine overall optimization.

### Initiatives to Increase Productivity and Expand Group Synergies

#### Creating the Group's IT infrastructure

INFRONEER is working on developing IT infrastructure to maximize synergies across the Group while leveraging the strengths of business companies. While it is important to integrate our IT infrastructure to increase efficiency and promote data utilization, we are not integrating everything in a uniform manner. Instead, we are maintaining our flexibility and adaptability by taking into account the business activities of each business company and the loose coupling of necessary components.

Specifically, we are sequentially implementing initiatives to achieve the optimal state of our Group infrastructure in each domain. It involves, for example, facilitating information-sharing through the Group's communication platforms and optimizing costs through joint procurement of PCs and other devices within the Group.

### Security Initiatives

#### Developing the Group's information security system

We consider the enhancement of our information security to be an important management issue and are developing a security system that is consistent across the Group. We have established a cross-Group Computer Security Incident Team (CSIRT) to strengthen our ability to respond to security incidents. In addition, we are conducting security risk assessments at each of our Group companies, organizing and analyzing information related to threats to organizations such as cyberattacks, and promoting initiatives such as employee training to increase our security level. Through these initiatives, we will support the sound and sustainable growth of the Group's business.

► For details on information security, visit our website at: https://www.infroneer.com/jp/sustainability/governance/information-security.html (in Japanese)

#### Initiative to Utilize Generative AI and Evolve toward New Business Models

#### Developing generative AI infrastructure

We are focusing on utilizing AI and have worked on adopting generative AI at an early stage. We developed an internal AI chat service (Duck Chat) in April 2023 and deployed it across Group companies, thereby enabling Group employees to use AI technology in safe and secure manner. We also provide training programs to Group employees to increase their AI literacy.

For our next challenge, we are working on developing our own small language model (SLM) to train generative AI on Group knowledge so that it can provide support for highly specialized work and help us increase productivity.

Rather than just adopting a solution provided by AI, we test and assess various technologies and accumulate knowledge over time so that we can quickly deliver value in response to advances in technology and the needs of our businesses. This is another advantage that the Group wields in its utilization of AI.

Generativ Al	Duck Chat 2.0: Used as a task-specific tool as it supports different formats such as audio and video  Duck Chat 3.0: Used as a specialized tool that requires advanced business knowledge			
	2023	2024	2025	
	Safe and secure use of generative Al	Use of generative Al that is linked to tools	Use of generative AI that has been trained on the Group's data	
	Duck Chat 1.0	Duck Chat 2.0	Duck Chat 3.0	
Input	•Text	•Text •Audio, video •Internal documents	•Text •Audio, video •Internal documents	
Output	•Text chat	Text chat     Task-specific tool     Create minutes     Generate images     Provide automated     responses, etc.	Text chat Task-specific tool Highly specialized tool Support the creation of construction plans Support the creation of various proposals, etc.	
AI engine	•GPT-3.5 → <b>GPT-4 Turbo</b>	•GPT-4o + RAG	+ Our own SLM for Group data	

Duck Chat 1.0: Used as a Teams app for text chat

#### Promoting the Group's data management

We regard data as our strategic information asset and promote initiatives to strengthen Group-wide data management. We have established an organization whose mission is to achieve Group-wide data management. Also, we are verifying hypotheses in business as a data utilization practice while establishing rules and policies for data handling. Currently, this initiative is led by the IT/DX Department. Going forward, we will work on establishing a structure and system infrastructure to enable each division to make business improvements and create new value by leveraging data.

In order to effectively implement this initiative, it is important to create an environment where necessary data is systematically gathered and easily accessible to anyone who needs it. To achieve this, our future challenge is to increase the data literacy of business divisions and create an easily comprehensible data catalog and concierge service.

#### Diagnosing the remaining useful life of water pipes using AI and environmental big data

In 2023, we obtained an exclusive development license for water supply concession projects for a "Remaining Useful Life (RUL) Diagnosis System" designed for water pipes. The system was developed by Fracta, Inc.

In the water supply business in Japan, the number of pipes exceeding the statutory useful life of 40 years is rapidly increasing. It will therefore be vital to determine the replacement timing of these pipes based on the degree of deterioration. The RUL technology leads to optimizing the pipeline renewal plan over the medium to long term by diagnosing the remaining useful life of pipes using environmental big data covering the entire nation and a statistical AI method. We are focused on actively leveraging cutting-edge technologies, including the RUL Diagnosis System, and developing the skills of engineers responsible for the development of such technologies, with an aim to establish new business models such as achieving the operation of infrastructure based on performance specifications. As part of this effort, I spent time at the head office of Fracta in Silicon Valley in the United States and learned about the mechanism, basic statistics, and development methods of this technology. Leveraging the experience I gained in the U.S., I will work on advancing our initiatives so that this will become one of the core technologies of the infrastructure management business.



Integrated Infrastructure Services Strategy Department INFRONEER Holdings, Inc.

For more details on exclusive development license contract with Fracta, Inc., visit our website at: https://www.infroneer.com/jp/news-article/2023/11/16/765.html (in Japanese)

#### Participation of citizens and utilization of digital tools—TEKKON game app for collecting infrastructure data

In 2023, we established infOinf Inc. to conduct various activities under the theme of "Learn, Collect, and Use" with the vision of "Making people more familiar with infrastructure." It seeks to develop new ways of managing infrastructure through the participation of citizens and the use of digital capabilities. For example, infOinf uses the

TEKKON game app to collect infrastructure-related big data with the cooperation of everyday people, shares information on its website, and plans and hosts events to promote participation and help people gain a better understanding of infrastructure and infrastructure services.

TEKKON is an infrastructure data collection game that promotes social good. Users can earn points by posting photographs of infrastructure such as manholes and power poles. Collected data is used in the maintenance and management of infrastructure.





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