Medium-term Management Plan 2027

To achieve the form and vision we have set for 2030, the Meiden Group formulated Medium-term Management Plan 2027 by backcasting from our target direction. During the period of the previous medium-term management plan, a positive ordering environment drove performance and each policy advanced steadily; however, clear issues appeared regarding the need to strengthen production capacity and accelerate initiatives for the future. As the investments we planted in Medium-term Management Plan 2020 bear fruit and we look to achieve significant growth for 2030, we will work to manage both "steady growth meeting needs" and "changes and challenges for the future," and have positioned Medium-term Management Plan 2027 as a critical three-year plan targeting top-line growth through additional investments into both the tangible and the intangible.

Medium-term Management Plan 2020
2018-2020

"Powerful Step" for a Jump

FY2020 results

Net sales: 231.2 billion yen
Operating income: 8.3 billion yen
ROE: 8.0%
ROIC: 4.2%

3-year capex:

39.5 **billion yen**

Medium-term Management Plan 2024
2021-2024

"High-quality" growth that includes both business expansion and improved profitability -The Jump-

FY2024 results

Net sales: 301.1 billion yen
Operating income: 21.5 billion yen
ROE: 13.9%
ROIC: 8.2%

4-year capex:

45.0 **billion yen**

Medium-term Management Plan 2027
2025-2027

"Steady growth meeting needs" + "Changes and challenges for the future"

FY2027 results

Net sales: 370.0 billion yen
Operating income: 25.0 billion yen
ROE: 10.0%
ROIC: 8.0%

3-year capex:

70.0 **billion yen**

2030-

Ideal State of Being

Work to build a new society through honesty to the earth, society, and people, and through the power of co-creation

- Sustainability partnerships -

Ideal Society

A resilient society where humans live in harmony with nature

A society that feels safe, prosperous, and exciting

A society where different communities and people can coexist

Looking Back on Medium-term Management Plan 2024

We faced a major change to the business environment during the period of Medium-term Management Plan 2024. Aging facilities increased the demand for renewals and the implementation of renewable energy in the domestic power market, while the introduction of a revenue cap system stabilized maintenance. Overseas markets boomed as demand for eco-friendly products grew, particularly in developed countries. We believe that these trends will continue for a while. However, the Social Infrastructure Systems Business was greatly impacted by long delivery times and the rising price of materials brought on by global inflation, but we saw signs of improvement in FY2024 thanks to the development of replacement products and new procurement sources. Also, while the end of subsidies and a saturated demand for early adopters caused sluggish growth in the EV marketplace, we predict that the movement towards decarbonization will continue.

In this environment, we exceeded targets with 18 billion yen in operating income and a 10% ROE, while achieving record highs for orders, net sales, and operating income in FY2024. On the financial side, compared to FY2021, the first year of Medium-term Management Plan 2024, our equity ratio rose from 35.1% to 40.7% and our net D/E ratio improved from 0.34 to 0.10, which created a solid financial base. However, improving efficiency, such as addressing a temporary worsening of inventory turnover caused by strategic inventory buildup, will be important issues going forward.

Financial and Non-Financial Indicators

Profitability	
FY2024 target	Net sales: ¥300 billion
	Operating income: ¥18 billion
FY2024 Result	**Net sales: ¥301.1 billion** **Operating income: ¥21.5 billion**
	Achieved

Efficiency	
FY2024 target	ROE: 10.0%
	ROIC: 8.0%
FY2024 Result	**ROE: 13.9%** **ROIC: 8.2%**
	Achieved

Non-financial indicators (environment)	
FY2024 target vs. FY2019	Scope 1+2: 6% reduction
	Scope 3 Category 11: 6% reduction
FY2024 Result	**Scope 1+2: 15% reduction** **Scope 3 Category 11: 11% reduction**
	Achieved

Financial soundness	
FY2024 target	Net D/E ratio: 0.25–0.30
FY2024 Result	**Net D/E ratio: 0.10**
	Achieved

Shareholder returns	
Dividend payout ratio	Stable at 30% level
Result (Reference) Total dividends over four years: ¥13.6 billion	**FY2021: 33.7%** **FY2022: 31.8%** **FY2023: 30.4%** **FY2024: 30.2%**
	Achieved

Non-financial indicators (human capital)	
FY2024 target	eNPS: 10% improvement compared to FY2021
	Female officer class (inside officers) : 1
	Non-Japanese presidents of local subsidiaries : 3
FY2024 Result	**eNPS*: 2% deterioration** **Female officer class (inside officers) : 1** **Non-Japanese presidents of local subsidiaries : 2**
	Partially achieved

*eNPS applies to Meidensha and MEIDEN ENGINEERING CORPORATION.

Main Achievements and Issues

	Main achievements	Main issues
Basic Policy 1 **Realization of high quality growth**	**Orders increased for the four consecutive years** Overseas orders expanded, mainly for Power Infrastructure **Operating income surpassed ¥20 billion** Increased sales of high value-added products such as Vacuum interrupter contributed	**Strengthening production capacity and further improvement of productivity** Capex and operational efficiency improvements aimed at obtaining further orders **Improving profitability of growth businesses** Business operations in the EV components business, etc. also based on market conditions **Responding to changing market needs** Environmental performance, digital integration, and response to changes in ordering patterns
Basic Policy 2 **Promoting sustainability management**	**Accomplished the Second Meiden Environmental Vision** Increased the share of renewable energy procurement in Japan and promoted energy conservation and electrification **Progress in initiatives to utilize human resources in line with the times** Implementation of human resource development system updates, MY Vision initiatives, etc.	**Consistency with and further initiatives for the 1.5°C scenario** Accelerating the transition from SF_6 gas and toward renewable energy, and further improving LCA **Improving employee engagement** Improving the workplace environment and evaluation/compensation systems in a busy work environment
Basic Policy 3 **Promotion of management ambidexterity**	**Cultivating awareness and a culture for new Businesses** Implementation of MAST Project, MEIAN Challenge, etc.	**Monetization of new business themes** Semiconductor processes, remote motor monitoring, etc.

Strategies for Realizing Value Creation

The Three Growth Strategies

Value Creation Through Our Business P.25-44

Growth Strategy 1
Products
Short-term
Manufacturing reinforcement and strengthening production capacity

Growth Strategy 2
Business
Medium-term
Expansion into new overseas markets and evolution of business models

Growth Strategy 3
Technology
Long-term
Research and development with an eye to society 20 years from now

Management foundation supporting growth strategy

Management Foundation Supporting Growth Strategy P.45-62

Deepening of green strategy / strengthening of human capital / acceleration of internal DX

Business Environment and issues

Market opportunities
- Infrastructure renewal and Increased semiconductor demand
- Environmental compliance, labor saving, and enhancement
- Expanding overseas markets
- Changes in commercial distribution and responding to the digital society

Management foundation
- Deepening of green strategy
- Utilizing human resources in line with the times
- Shift to data-driven management

Materiality

Realization of a carbon-neutral society	Building human resources and corporate culture that take on the challenges of the future
Realization of a safe, secure, and convenient society	Harmony between people and digital technology
Upgrading value provision	Sincere and responsible business operations

Approach to the Policies Inside Medium-term Management Plan 2027

To achieve our 2030 target of becoming a "Sustainability Partnerships," the Meiden Group drafted Medium-term Management Plan 2027 for future marketplaces so that we can respond to infrastructure renewals and increased semiconductor demand, environmental compliance, labor saving, and enhancement, expanding overseas markets, and changes in commercial distribution and responding to the digital society.

To address the issues in our management foundation of deepening our green strategy, utilizing human resources in line with the times, and shifting to data-driven management that remain from the previous medium-term plan, we plan to maximally utilize our core competencies of product technology and core technologies that are company strengths and steadfastly resolve these issues in this medium-term management plan. We will continue to grow while responding to changing markets as we contribute to improving social infrastructure and realize a sustainable society through changes and challenges for the future.

The Three Growth Strategies and Strengthening the Management Foundation that Supports Them

We have positioned Medium-term Management Plan 2027 with the concepts of "steady growth meeting needs" and "changes and challenges for the future" as critical components of the next three years. During this period, we look to achieve continued growth and discontinuous growth in existing businesses and advance the three growth strategies in the "Growth & Challenge" keywords while strengthening the management foundation that supports them.

Growth Strategy 1

Products

A strategy for growth through increased production capacity, improved product capabilities, and greater manufacturing productivity

To increase competitiveness and respond to vigorous demand in highly competitive domestic and overseas markets, we have proposed a growth strategy that relies on increased production capacity, improved product capabilities, and greater manufacturing productivity. Over three years we will spend a combined total of 26 billion yen or more overseas and domestically in capital investments in the areas of Power & Energy, Railway, Electronics Products, and more to increase production capacity and rebuild locations overseas.

Within Japan, we are seeing markets change with increased demand for Power & Energy and railway equipment, growing demand for semiconductors following the rapid rise of generative AI, and more. In addition to increasing our capacity to produce products that can respond to those demands, we will reduce costs by adjusting factory layouts, increasing productivity through automation and labor-saving initiatives, and reducing lead times as we strive to improve profitability. We also plan to further expand the scope of business bolstered by the tailwind of increased power demand around the world by increasing the production capacity of global bases in Power T&D.

Primary KPIs

Indicator		Primary KPI
Amount of capex in Power & Energy, Railway, Electronics Products, etc.	Japan	At least 13 billion yen
	Overseas	At least 13 billion yen
Production capacity		Improve 25% (compared to FY2023)
Lead times		Reduce by 50% (compared to FY2023)

Implementation Item 1 Increase production capacity of Power & Energy, Railway, Electronics Products, etc.

Japan: Expansion of equipment in Power & Energy, Railway, Electronics Products, etc.

For Power & Energy, we will add production equipment at our transformer factories to respond to the growing trend toward power transmission and distribution networks accompanying increased power demands for data center facilities and the introduction of renewable energy, in addition to the introduction of the revenue cap system. Full-scale operations will begin after FY2028, and will increase production capacity by 1.5 times compared to FY2024 levels. For Railways, we will enhance equipment to increase production capacity—including improvements to production efficiency—as we are receiving numerous orders for railway in Japan and high-speed railway overseas following the recovery of investment after the COVID pandemic.

For Electronics Products, we will bolster manufacturing facilities and expand production floorspace for vacuum capacitors to increase production output 1.3 times over current levels amid forecasts of medium-term growth in the semiconductor market from the growing demand for AI and data centers.

Numazu Works transformer factory

Overseas: Rebuilding Locations

We are planning to relocate and improve production capacity for our major Power T&D Business locations. In Singapore, we plan to relocate and consolidate a transformer factory and a switchgear factory in 2028. In the U.S., we will expand factories to increase vacuum circuit breaker production capacity by a factor of 2 compared to FY2024, while in India, we will increase transformer production capability by a factor of 1.2 compared to FY2024. In Germany, we are moving forward with preparations to increase surge arrester production for Medium-term Management Plan 2027 and the ensuing years. Along with these location rebuilds, we will expand European markets for vacuum circuit breakers and introduce 123 kV equipment to the U.S. market. We will also adopt strategies to accurately grasp the rigorous demand for transformers, such as working with the Power Grid Corporation of India Ltd.

A transformer being built in India

Implementation Item 2 Updates to products and systems that utilize featured technologies

Strengthening eco-friendly products

Demand for eco-friendly products is growing rapidly in the power marketplace. The transition to transformer equipment with a low environmental footprint is accelerating in Japan as demand grows for power transmission and distribution networks from upgrades to aging facilities and the introduction of renewable energy, and overseas markets experience the demand to switch to SF_6 gas-free products.

We will embrace these market environments and proactively increase the handling capacity of the vacuum interrupters and vacuum circuit breakers that are our forte. We will also contribute to reducing burdens on the environment by continuing to make EV-related products smaller and more efficient in response to the global electrification of mobility, and focusing on developing and expanding sales of building electrification components within the construction machinery field, where usability has been improved thanks to advancements in electrification technologies.

SF_6 gas-free vacuum circuit breaker

Strengthening Advanced and Labor-saving Technologies

We help our customers solve problems and make their facilities more efficient by continually improving our technologies and introducing labor-saving ideas. To respond to the growth in semiconductor production, we are actively developing pulse power supplies for semiconductor manufacturing equipment. This will allow us to support quality improvements and technological revolutions in the semiconductor manufacturing process.

Also, by introducing smart security technologies for infrastructure facility maintenance management, we will transition from conventional systems that rely on human oversight for maintenance to preventative safety systems that utilize IoT and AI technologies. This will improve maintenance reliability and make maintenance work more efficient.

Additionally, as the expansion of renewable energy makes predicting fluctuations in power generation more critical, we will strengthen load prediction technologies and help power systems operate more steadily.

Image of a remote monitoring screen

Pulse power supply

Implementation Item 3 Accelerate DX (Data Infrastructure Development and Utilization) to Improve Productivity and Reduce Lead Times

DX and Production Process Improvement Tailored to Manufacturing Methods

We streamline DX and production process to suit manufacturing methods based on the Meiden Monozukuri (Manufacturing) Standards to work toward the goals of increasing productivity and halving lead times.

Systems and Equipment

We help establish an “order receipt to shipment” series of production information infrastructures for the systems and equipment business to automate production management and streamline design.

Creating systems that link design and test data helps automate part of the test process.

These actions create highly competitive manufacturing systems that increase the value we provide to customers.

Mass Production

Introducing a preventative maintenance system that understands equipment conditions improves utilization rates by preventing unexpected equipment failures. Using IoT sensors and AI technologies to constantly monitor equipment conditions and predict the optimal maintenance schedule enables customers to plan maintenance work accordingly.

Furthermore, introducing a system of automated equipment and mixed production strengthens the ability to support high-mix low-volume manufacturing. Creating flexible manufacturing lines creates efficient manufacturing systems that respond to fluctuations in demand and prompt responses to customer needs.

Growth Strategy 2

Business

Developing New Services by Unearthing New Markets and Transforming Business Models

We will proactively work to uncover new areas of demand and overseas markets while breaking free from conventional business models focused on selling equipment so that we can transition to value-provision style services.

We plan to expand the Power T&D Business in North American, Indian, and Singaporean markets in anticipation of their respective growth, while also introducing SF_6 gas-free eco-friendly products into European markets following the introduction of new SF_6 gas regulations. As the semiconductor field continues its push towards miniaturization and layering, we will also strengthen our position by expanding sales of the highly profitable vacuum capacitors in the North American market and partner with semiconductor manufacturers to develop new technologies.

We are also expanding our business domains and the data utilization business with an emphasis on customer experience value as a key component of transforming our business model. In the data utilization business, we will focus on customer experience value and offer data-driven, value-added services to create long-term partnerships with customers and achieve continuous growth. By expanding our business domains, we look to transcend equipment sales and evolve into a service provider in multiple fields.

Primary KPIs

	FY2027 plan			
	Power Infrastructures	Public, Industrial & Commercial Sector	Mobility & Electrical Components	Field Service Engineering
Orders	111.0 billion yen	115.0 billion yen	100.0 billion yen	54.0 billion yen
Net sales	111.0 billion yen	113.0 billion yen	95.0 billion yen	50.0 billion yen
Operating income	10.5 billion yen	3.5 billion yen	3.5 billion yen	9.5 billion yen

Implementation Item 1

Development of New Overseas Markets in Power T & D, Railways, and Semiconductor-related Fields

Overseas Infrastructure

We will proactively open new markets for Power T&D and Railways.

In Europe, we expect environmental regulations to accelerate with the introduction of SF_6 gas regulations in 2028, and plan to operate in the market by emphasizing the superiority of our eco-friendly (SF_6 gas-free) products. Also, Southeast Asia and South Asia are set to add large-scale railway projects and we will strengthen development into these growing markets.

We will differentiate ourselves from competitors in these markets through the eco-friendly technologies we have cultivated and our high reliability, and look to expand our market share. Additionally, to achieve continuous business growth, we will examine establishing regional production systems and coordinating with regional partners for the future while creating systems that can promptly and efficiently respond to customer demands.

Singapore Mass Rapid Transit (MRT)

Semiconductor-related

In semiconductor-related fields, we will actively develop new overseas markets amidst a background of technological transformation.

The miniaturization and advanced layering of semiconductors will drive the creation of new market opportunities and present a favorable opportunity to grow business by utilizing our technical capabilities. Also, while competition to innovate intensifies between manufacturers of semiconductor equipment, we will strengthen and expand sales of our highly competitive semiconductor-related products, particularly our vacuum capacitors, into the North American market.

We are also examining building R&D centers near customers in order to respond quickly to market demands and work closely with customers. Doing so will allow us to accurately grasp regional technological trends and promptly develop products that meet customer requirements, expanding business and increasing our competitiveness in semiconductor-related markets.

Vacuum capacitors

Implementation Item 2

Diversification of value delivery methods in line with changes in the market environment

Accelerating Data Utilization in Business

The accelerated adoption of digitization and the diversification of customer needs have given rise to market environments that conventional, equipment sales-focused business models cannot easily accommodate. To respond to these changes, we are accelerating our efforts to implement data utilization in business that pursues customer experience value.

Specifically, connecting Meidensha products to a network, aggregating the collected data from products in the cloud, and then utilizing and developing it for O&M support and business provision will allow us to go beyond simply offering products by providing a comprehensive set of services. MEIDEN CONNECT sits at the nexus of this initiative.

MEIDEN CONNECT is a data accumulation platform for the visualization and analysis of customer and product data. This system enables smart maintenance, improves utilization rate, helps achieve optimization and efficiency, and more, generating new value that contributes to the success of our customers' businesses while creating continuous market competitiveness.

MEIDEN CONNECT

Expansion of Business Areas

To respond to changes in the market environment and the diversifying range of customer needs, we will achieve continuous growth by generating new value that surpasses conventional business areas.

Becoming a water infrastructure comprehensive engineering company

Building a one-stop system (equipment installation, operation and maintenance management, and servicing)

In the water infrastructure field, we aim to move beyond the conventional provision of equipment and transition to a water infrastructure comprehensive engineering company. By creating a one-stop system that provides everything from equipment installation through to operations and maintenance management and even extending to servicing, we will provide customers with a comprehensive set of solutions. This complete service system will achieve value creation through the entire water infrastructure lifecycle and contribute to creating sustainable social infrastructure.

Establishing our status as an EV testing service provider

In the mobility T&S field, we aim to establish our status as an EV testing service provider amongst the rapid expansion of electrification in mobility. By providing comprehensive testing services that accommodate the sophistication and diversification of EV-related technologies, we will support development and product quality assurance for automobile and parts manufacturers. In doing so, we will establish our position as a critical partner in the growing areas surrounding the EV marketplace and generate new business opportunities.

Participation in Smart Compact City (urban development)

In the railways field, we look to expand our reach from providing traditional railway systems to participating in smart compact cities (urban development). In the development of sustainable cities centered on railway infrastructure, we will contribute to urban development that both reduces burdens on the environment and enhances quality of life through improvements to energy efficiency in railway-related locations, construction of regional disaster prevention systems, development of new services that utilize digital technologies, and more. Through these initiatives, we will generate new value by moving from a simple infrastructure provider to a partner in comprehensive urban development.

Emergence from equipment sales and evolution to a service provider

In the hydropower field, we are looking to break free from equipment sales with the goal of becoming a comprehensive hydropower generator provider that covers everything from products and service provision through to power station operations and O&M. In addition to lower costs through equipment standardization and miniaturization, we will realize smart maintenance, expedite cooperation with other companies, address conventional issues such as high startup investment costs and the burden of maintenance management, and accelerate the development of underdeveloped potential hydropower sources.

Growth Strategy 3

Technology

Medium-term Management Plan 2027

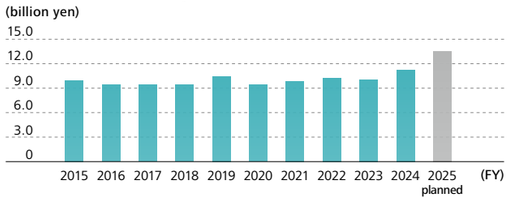
Research and Development for a Society Two Decades in the Future

We will utilize technology development that anticipates future social changes to continuously reassert our competitive position. Taking this idea as our central axis, we advance "targeted research" and focus on developing technologies that will act as the wellspring of future competitiveness.

Targeted research clearly defines technological trends for attention and has established three pillars of focus, "Direct current & high frequency," "Power chemtronics (electrochemistry X power electronics)," and "Digital twin O&M." These technological fields require ten to twenty years from research and development to social deployment, representing fields that we predict will fill important social roles twenty years from now, and areas with high affinity for our current business domains.

Research and development clearly describes the society we want to create, and systematically organizes the systems and components required to create that society. Beyond that, by working to concentrate acquisition of the core technologies where we exhibit our strengths particularly well, we can create innovative solutions that meet the needs of future markets.

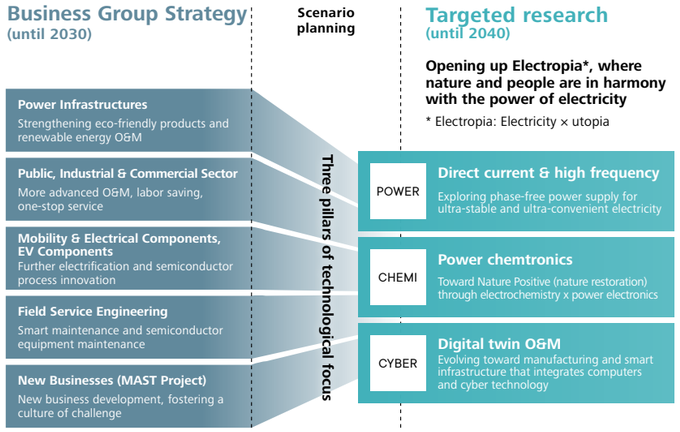
Trends in R&D expenses



Implementation Item

Acceleration of Directional Research

We work to strengthen "targeted research" to ensure future competitiveness. In doing so, we clearly depict the future society we want to create, and work to obtain the new core technologies required to achieve that end. Different from conventional technological development, this defines research themes derived from an image of an ideal society, and works to develop revolutionary technologies through shared value creation with partner companies and research institutions. Through this style of targeted research, we create technological foundations that anticipate social needs twenty years in the future and achieve ongoing growth.



Future-focused Themes

We promote targeted research under the slogan of "Opening up Electropia, where nature and people are in harmony with the power of electricity" and aim to restore and preserve the natural environment (nature positive) through stable power supplies and electrical technologies, and connect that with digital technologies to create next-generation infrastructure.

As for specific themes, the area of "Direct current & high frequency," includes prototyping and evaluating AC/DC converter SST systems, the area of "Power chemtronics" contains setting up CO_2 electrochemical reduction and recycling systems, and the area of "Digital twin O&M" includes establishing AI detection and analytic technologies using multimodal sensing.

Intellectual Property Strategies

Our specific initiatives involve strengthening ties between R&D Divisions and Business Units and advancing efficiency in intellectual property activities. We will achieve efficiency in intellectual property activities and create a system that applies generative AI to link patents and products. Also, to expand business opportunities connected to intellectual rights, we will expand requirement diagrams to include the form of use for our technologies and products and promote the acquisition of rights. Through these actions, we aim to build an intellectual portfolio that supports sustained growth by developing a wellspring of competitive strength from the simple acquisition of intellectual property rights.

Medium-term Management Plan 2027 Numerical Targets for All Companies

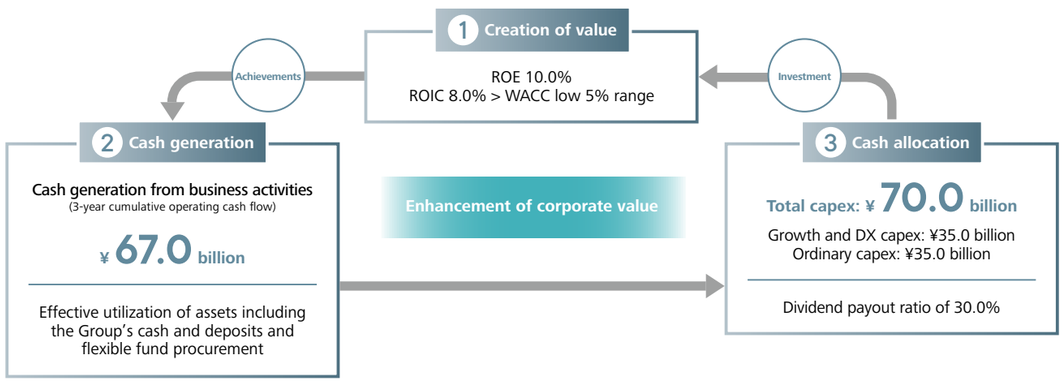
Financial and Non-Financial Indicators

		FY2024 (Result)	FY2025(Plan)*1	FY2027(Plan)*1
Financial	Orders	¥383.5 billion	¥340.0 billion	¥380.0 billion
	Net sales	¥301.1 billion	¥335.0 billion	¥370.0 billion
	Operating income	¥21.5 billion	¥20.0 billion	¥25.0 billion
	ROE	13.9%	—	10.0%
	ROIC*2	8.2%	—	8.0%
	Net D/E ratio	0.10	—	0.20 to 0.30
	Capex	¥11.9 billion	Accumulated 3-year total: ¥70.0 billion (of which growth capex and DX capex: ¥35.0 billion)	
	R&D expenses	¥11.2 billion	Accumulated 3-year total: ¥43.0 billion	
Non-Financial	Scope1+2*3	(15%)	(30%)	(40%)
	Scope3*3	(11%) (Category 11)	(20%) (All categories)	
	eNPS*4	(69.0%)	(65.0%)	
	Female officer class (inside officers)	1	3 or more (FY2030)	
	Non-Japanese presidents of local subsidiaries	2	5 or more (FY2030)	

*1. Planned exchange rate: ¥140/USD *2. ROIC = Operating income after tax / (Interest-bearing debt + shareholders' equity) *3. Scope 1, 2 and 3: Compared to FY2019 results *4. eNPS: Employee Net Promoter Score. NPS® is a registered trademark of Bain & Company, Inc., Fred Reichheld, and Satmetrix Systems, Inc. eNPS is stated as a percentage. Furthermore, eNPS applies to Meidensha and domestic affiliates(excluding EAML Engineering CO.,LTD. And MEIDEN UNIVERSAL SERVICE LTD.).

Management Conscious of Cost of Capital and Stock Price

To achieve both optimal capital efficiency and continuous growth, we promote management that is conscious of capital costs and our stock price. From the perspective of fiscal soundness, we strive to increase capital strength into large capex using a guideline of 0.20 to 0.30 for our net D/E ratio. In our investment strategy, we focus capex to businesses with high expectations for growth, and promote efficient capex allocation through strict evaluations based on profitability and growth. Also, to increase capital efficiency, we work to maximize shareholder value and reduce holdings of assets with little relevance to our businesses.



Create value and reinvest the cash generated to create further value