

A large satellite is shown in orbit above Earth's cloud-covered surface. One of the satellite's solar panels is prominently displayed, featuring the word "Hirata" in a large, white, sans-serif font. The solar panel has a blue hexagonal grid pattern. The satellite's complex structure, including various instruments and antennas, is visible on the left side of the frame.

Medium-Term Management Plan (FY2022–2024)

May 13, 2022

Hirata Corporation

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Looking Back on Medium-Term Management Plan
(FY2018–2020)

2

Medium-Term Management Plan (FY2022–2024)

1

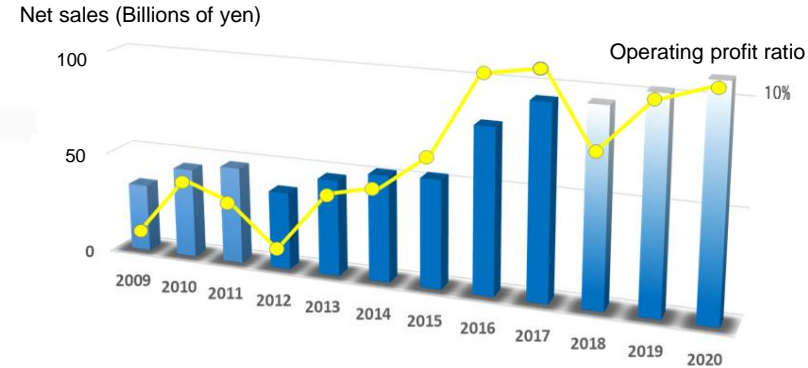
Looking Back on Medium-Term Management Plan
(FY2018–2020)

2

Medium-Term Management Plan (FY2022–2024)

Outline of Previous Medium-Term Management Plan (FY2018–2020)

Group Slogan	Hirata is striving to become the Top Integrator of Production Systems for Our Global Customers	
Targets for final fiscal year (2020)	<ul style="list-style-type: none"> ➤ Consistently achieving consolidated net sales above 100 billion yen ➤ Targeting operating income margin of 10% or more 	
Aims of FY2018–2020 Medium-Term Management Plan	<ul style="list-style-type: none"> ➤ Expansion of scale (net sales and profit) to ensure growth potential ➤ Improvement of profit structure to ensure management stability 	



Item		Content of plan
Basic strategies	Strengthening order-receiving/production/development systems	Amount of capital investment 15 billion yen R&D expenses 5 billion yen ➤ Construction of new plant in response to an increase in orders and production in growing markets ➤ Utilizing M&A and strategic alliances as means for our growth strategy
	Deepening and expanding existing business	Acquisition of new regions and customers in the EV and semiconductor fields
	Venturing into growth markets	
	Establishing mass production business and commercialization	Mass production: Move to mass production by modularizing individual design products Commercialization: Development and sales promotion of single item goods
Corporate governance-related initiatives		➤ Newly establishing a department specializing in Group compliance ➤ Improving reporting routes for cases of misconduct and emergencies ➤ Improving IT infrastructure and understanding and strengthening information security

Review of Management Indicators, Basic Strategies, etc. of FY2018–2020 Medium-Term Management Plan

Review of Management Indicators	Target	FY2018–2020 Medium-Term Management Plan			Three-year cumulative total	Reference: FY2021
		FY2018	FY2019	FY2020		
Net sales	100 billion yen	77.3 billion yen	65.6 billion yen	65.3 billion yen	—	67.0 billion yen
Operating profit ratio	10% or more	8.1%	4.2%	7.7%	—	5.7%
Capital investment	Cumulative total 15 billion yen	4.13 billion yen	2.58 billion yen	3.16 billion yen	9.87 billion yen	1.47 billion yen
R&D expenses	Cumulative total 5 billion yen	1.16 billion yen	1.0 billion yen	0.86 billion yen	3.03 billion yen	1.02 billion yen

Review of FY2018–2020 Plan's strategies, etc.	Results (FY2018–2020)	Tasks/Challenges	Recognition of Management Issues	
Basic strategies	Strengthening order-receiving/production/development systems	<ul style="list-style-type: none"> -Promotion of commercialization of key components -New business-related investment -Development of organizational management system and internal rules to promote investment development 	<ul style="list-style-type: none"> -Supplementing of existing resources to promote business strategies -Enhancing the performance of the investment/R&D plan promotion system 	<p>Further strengthening of our technological advantages and profitability are issues</p> <p>For current strengthening of profitability</p> <ul style="list-style-type: none"> -Investment in key technologies to increase profitability and efficiency in growth markets (EV/semiconductor fields), strengthening of human resources, and active collaboration with outside companies that does not limit us to in-house resources -Sharing of values, organizational strengthening, and strengthening of cooperation to enhance Plan's feasibility <p>For strengthening of management bases that underpin long-term sustainable profitability</p>
	Deepening and expanding existing business/Venturing into growth markets	<ul style="list-style-type: none"> -Expansion of business scale in semiconductor transfer field -Accumulated achievements as a top-tier manufacturer for both major and start-up companies in EV field -Expansion of compatible processes by development of elemental technologies in growth fields (EVs/semiconductors) 	<ul style="list-style-type: none"> -Thorough management of project profitability -Technological developments that meet customer needs -Strengthening of collaborative system between Group companies 	
	Establishing mass production business and commercialization	<ul style="list-style-type: none"> -Expanded and upgraded lineup of ECO electric series products (to a total of 61 types) for which a Hirata-developed, compact, high-efficiency DC brushless motor was adopted -Standardized registration of ECO electric series products by top-tier automobile manufacturers 	<ul style="list-style-type: none"> -Further expansion and upgrade of lineup of ECO electric series products with HIRATA BLUE MOTOR* as their core technology -Expansion of business scale by developing new sales channels for ECO electric series products <p>* HIRATA BLUE MOTOR is a registered trademark of our company.</p>	
Corporate governance-related initiatives	<ul style="list-style-type: none"> -Clarification of issues by evaluating effectiveness of Board of Directors' meetings -Introduction of delegation-type corporate officer system -New Compliance and Internal Control Department 	<ul style="list-style-type: none"> -Enhancement of Board of Directors' meeting discussions regarding medium- to long-term management strategies, etc. -Strengthening of internal control systems and risk management systems, including those of Group companies 	<ul style="list-style-type: none"> -Formulation of Hirata Group policy and expansion of specific initiatives relating to contributions to a sustainable society -Promotion of digitalization in operations and plants in response to accelerating pace of digitalization 	

1

Looking Back on Medium-Term Management Plan
(FY2018–2020)

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Medium-Term Management Plan (FY2022–2024)

Positioning of Medium-Term Management Plan (FY2022–2024)

Mission Statement: “We courageously pursue technological innovation while contributing to the betterment of mankind, development of individuals and enhancement of our company’s capabilities.”

Basic Policies

- (1) Business expansion in growth markets
- (2) Strengthening competitiveness as a global company
- (3) Strengthening of ESG management initiatives
- (4) Realization of management in line with new normal era

Priority Measures

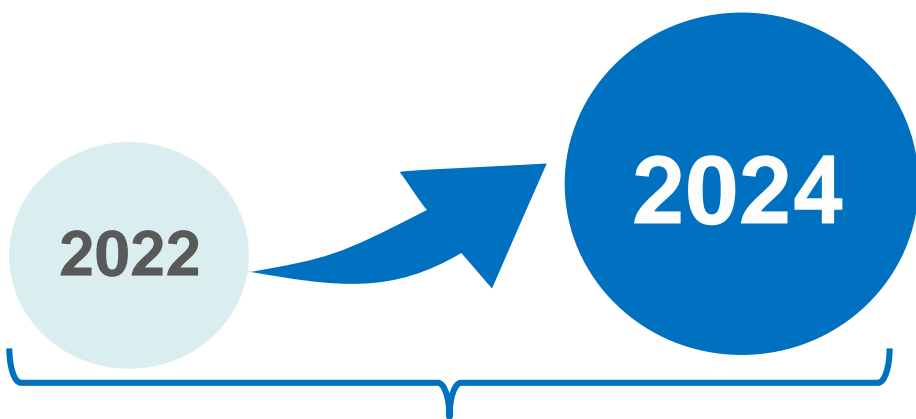
Thorough profitability management that utilizes DX

Growth strategy for EV-related equipment business

Growth strategy for semiconductor-related equipment business

Initiatives for new businesses

Sustainable improvement in corporate value



人技章献
Jin - Gi - Kou - Ken
To make *everyone* involved in Hirata *content* and *contribute* to society by means of *technology*

Transformation to competitive management structure

As a group, establish management bases and work to expand business in growth markets while securing profit from existing businesses

Basic Policies and Measures

Strengthen profitability

(1) Business expansion in growth markets

Recognition of EV and semiconductor markets as growth markets

- Review of business portfolio
- Concentrate resources, promote growth in EV field of the automotive-related equipment business and the semiconductor-related equipment business
- Efforts to create new businesses and expand business areas

(2) Strengthening competitiveness as a global company

Global support

- Optimization of development and production systems within the Group
- Strengthening of cooperation within the group

Business initiatives

- Thorough profitability management that utilizes DX
- Strengthening of product competitiveness

Strengthening of management bases

(3) Strengthening of ESG management initiatives

Improving corporate value through ESG management

- Formulation of basic sustainability policy
- Building of a promotion system
- Identify materiality (important issues), visualize goal-setting and initiatives
- Appropriate information disclosure and enhanced dialogue with stakeholders

(4) Realization of management in line with new normal era

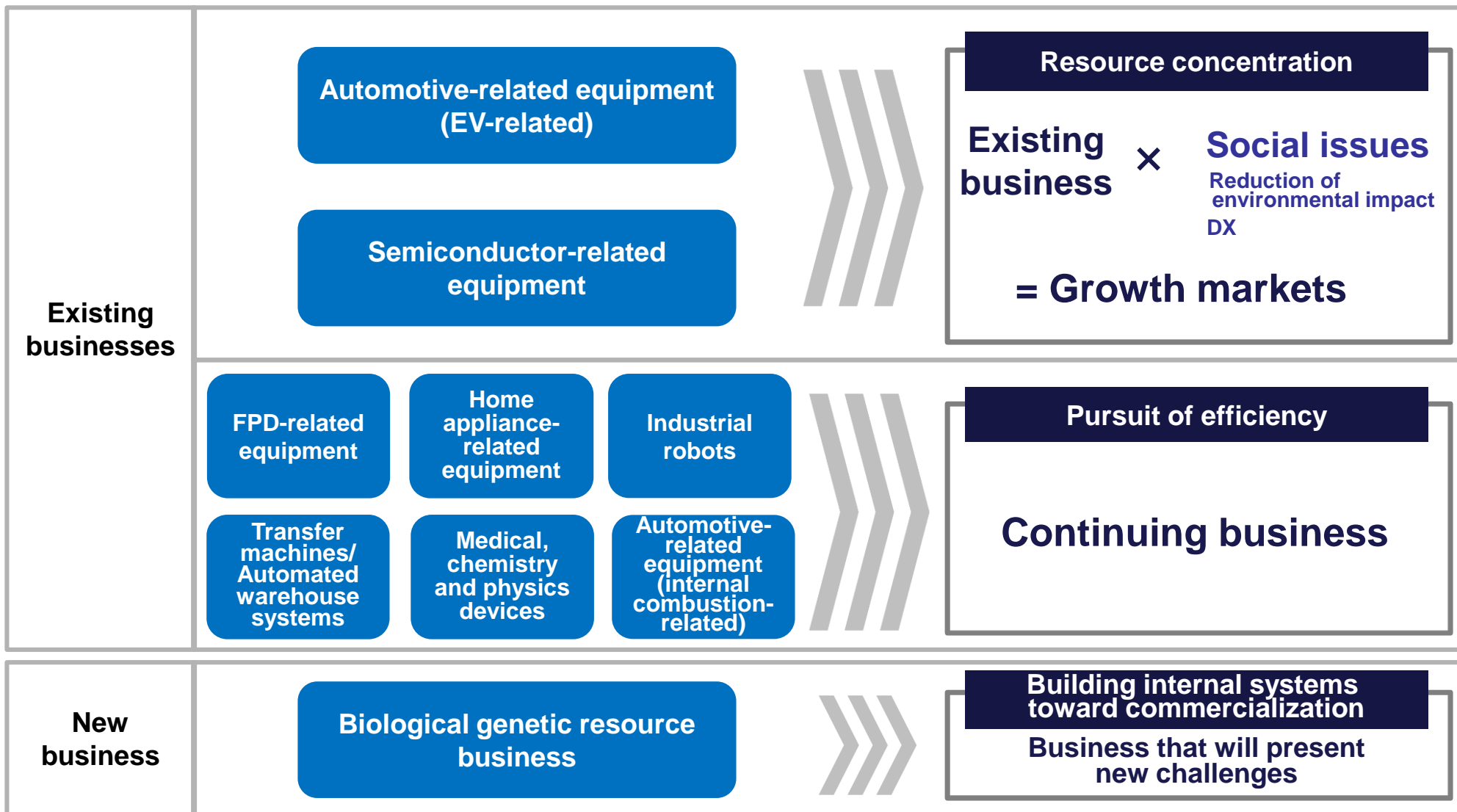
Initiatives for DX

- Virtual commissioning utilizing an emulator
- Utilization of new technologies (XR, AI, etc.)*
- Remote meetings/maintenance

- (1) Business expansion in growth markets**
- (2) Strengthening competitiveness as a global company
- (3) Strengthening of ESG management initiatives
- (4) Realization of management in line with new normal era

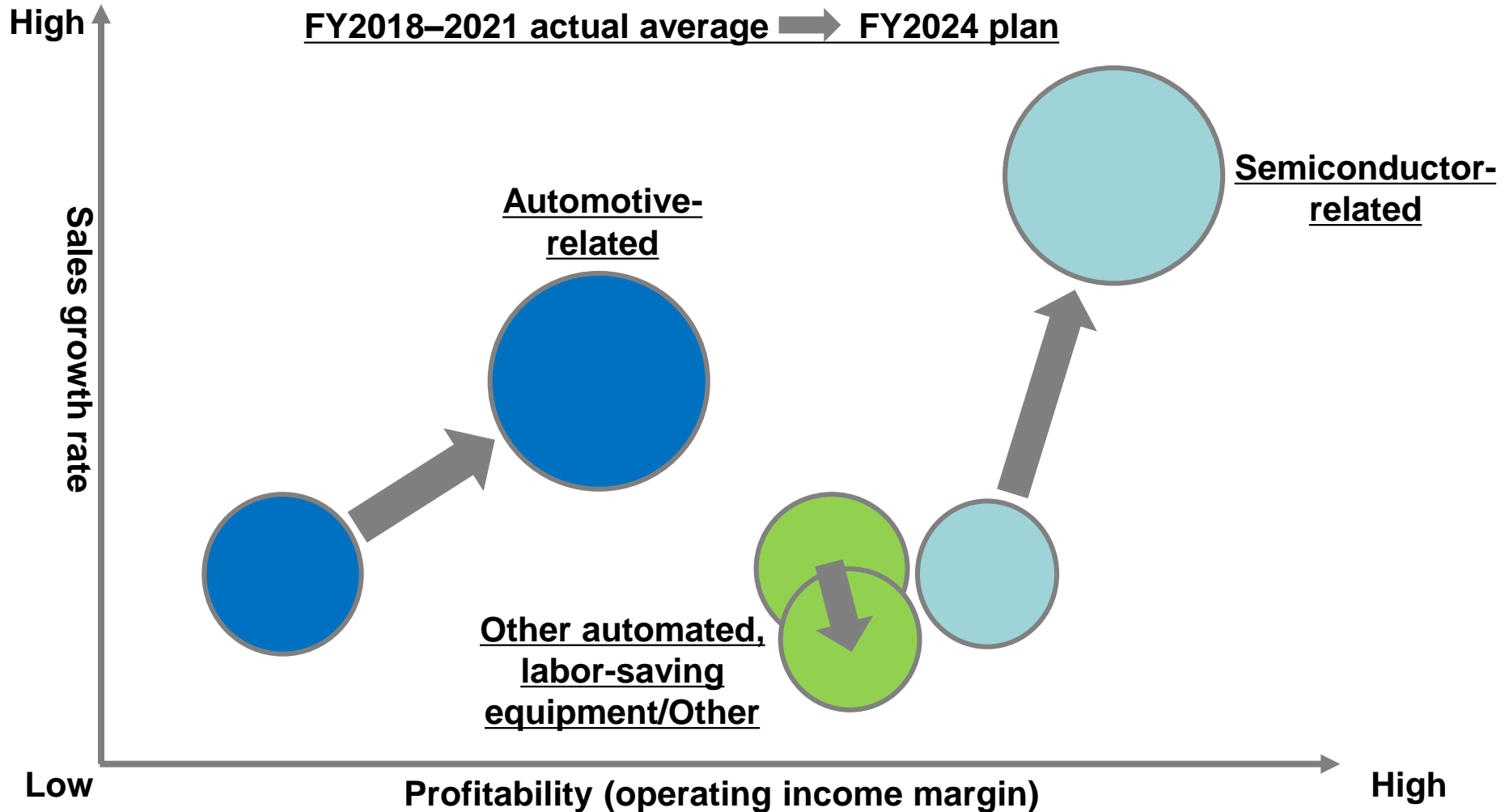
Positioning of Medium-Term Management Period for Each Business

Thorough selection and concentration of existing businesses, positioning new biological genetic resource business as one that will present new challenges



Growth Plan by Business Segment

Expand profitability and sales growth rate of automotive- and semiconductor-related business segments to drive Group profits



Note: The bubble on the starting point side of the arrows represents the average value for the past four business years (FY2018-2021), and the bubble on the ending point side represents the FY2024 plan.

The size of the bubble indicates the scale of sales. This business growth plan is based on the product categories of the new disclosure segments, which have changed from FY2022.

Background to Positioning as Growth Markets

To concentrate resources on EV- and semiconductor-related equipment businesses, business areas in which market growth potential is high and Hirata's strengths can be leveraged

EV market

- Worldwide number of EV unit sales
CAGR: 24% (2021–2030)
- Car manufacturers
Increase in capital investment

Semiconductor market

- Forecast size of global semiconductor-related market
CAGR: 8.6% (2020–2030)
- Increase in volume of semiconductors for installation in EVs

**Market
growth
potential**



**Hirata's
strengths**

Values

- Willingness to achieve the well-being of everyone involved in the Hirata Group

Technical know-how and achievements

- Ability to realize the needs of our customers
Automobile assembly lines
Semiconductor transfer equipment
Home appliance lines, etc.
- Information power through global bases/engineers/business partner relationships, etc.

EV-related equipment business

Strengthening of the battery field

- (1) Selection of specialized process
- (2) Development and improvement of key devices
- (3) Strengthening of product appeal through standardization
- (4) Clarification of target customers
- (5) Active collaboration with outside companies
that does not limit us to in-house resources
- (6) Review of human resource allocations

Semiconductor-related equipment business

Realization of optimal production system

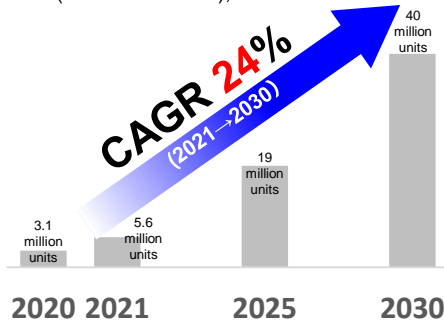
- (1) Clarification of target areas
- (2) Introduction of new production control system
- (3) Increased production capacity
Increased number of manufacturing staff
Expansion of production area
- (4) Efforts to adopt EFEM standardization

Strategies and Measures in Battery Field of EV-related Equipment Business (1)

Market potential

EV global unit sales forecast

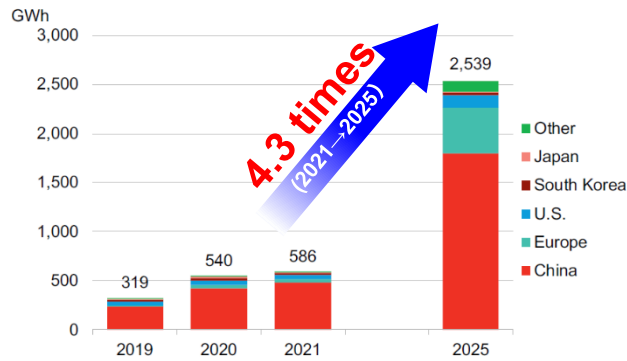
Note: ZEVs (BEVs and FCVs), PHEVs



In 2030, EV vehicles expected to account for approximately 30% of new vehicle sales on a global basis

Source: BloombergNEF

Lithium-ion battery manufacturing capacity forecast



Source: BloombergNEF

Strengths

Global base

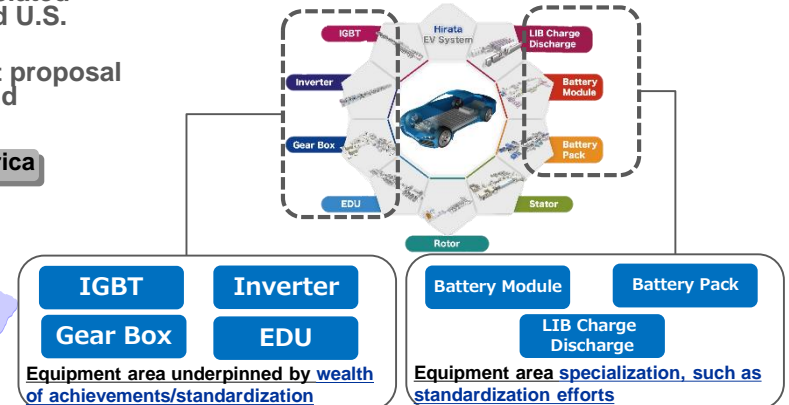
- ✓ Abundant delivery record of EV-related equipment to major European and U.S. automobile manufacturers
- ✓ One-stop solutions, from concept proposal to design, production start-up, and maintenance services



Note: The national flags mark the locations of our bases

EV-related equipment-compatible category

- ✓ Covers major areas, such as batteries, gearboxes and rotors



Specific initiatives

Strengthening of the battery field

- (1) Selection of specialized process
Charging/discharging systems (cell manufacturing processes), module manufacturing processes, battery pack manufacturing processes
- (2) Development/improvement of key devices
Development of solution products by engaging in customer development projects
Promotion of addressing by establishment of internal rules for development projects
- (3) Strengthening of product appeal through standardization
Assembly system for module manufacturing processes and battery pack manufacturing processes
- (4) Clarification of target customers
- (5) Active collaboration with outside companies that does not limit us to in-house resources
- (6) Review of human resource allocations

Strategies and Measures in Battery Field of EV-related Equipment Business (2)

Aiming to expand business by developing and improving key devices in various battery manufacturing processes, incorporating them into the production systems of each process, and adding them as standard products.

Specialized processes

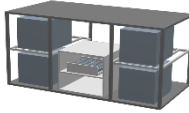
Charging/discharging systems in cell manufacturing processes

All processes of module manufacturing processes

All battery pack manufacturing processes

Development and improvement of key devices

Chargers/Dischargers



Improvement of Automated Warehouses



Dual Head Wire Bonding Machine



AGV Improvements



Plant Simulation (Software)

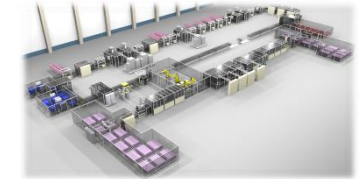


Strengthening product appeal through standardization

Standardize charge/discharge system in cell manufacturing process and provide as a product



Standardize entire module manufacturing process system and provide as a product



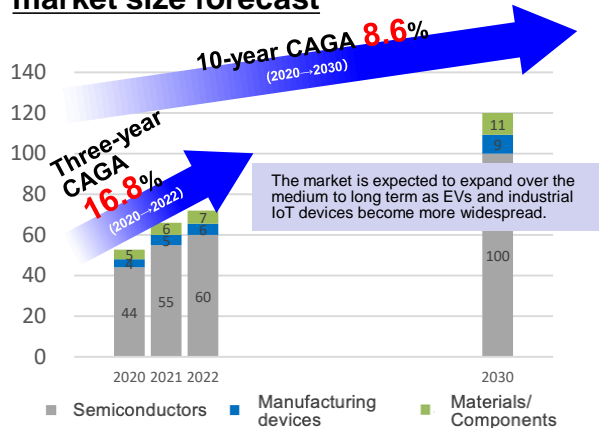
Standardize entire battery pack manufacturing process system and provide as a product



Strategies/Measures for Semiconductor-related Equipment Business

Market potential

Global semiconductor-related market size forecast

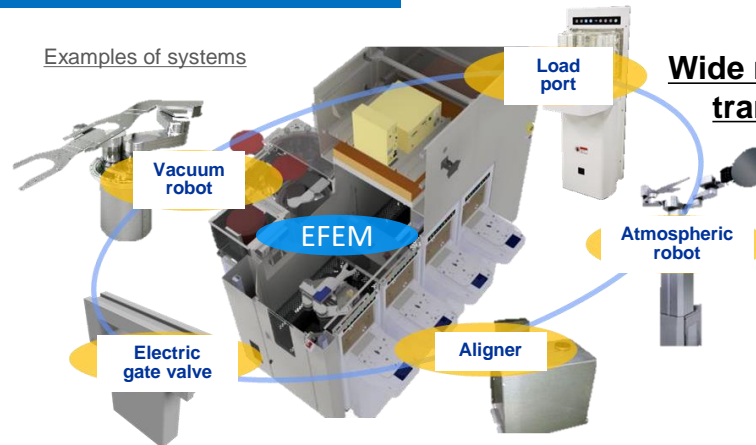


Unit: US\$10 billion, Source: Based on various data, including JEITA, Ministry of Economy, Trade and Industry (The composition ratio of semiconductors, manufacturing equipment, and material parts is assumed to be the same until 2030, based on the Ministry of Economy, Trade and Industry's Strategy for Semiconductors and the Digital Industry [Outline], dated June 2021.)

- Miniaturization requirements:**
 The low-cost miniaturization needs of the semiconductor industry, which aims to reduce the size and improve efficiency of chips, are driving the growth of the industry. Advanced mounting (3D packaging) is progressing even in post-processes.
- Carbon neutrality requirements:**
 As a supplier selection criterion, TSMC requires semiconductor device manufacturers to save 20% by 2030 (20% reduction in the amount of chemical materials, such as electricity, water, and gas, used per semiconductor chip)
- Capital investment trends:**
 -Response to US-China trade dispute
 TSMC's Chinese customer HiSilicon (a subsidiary of Huawei) has been subject to tightened U.S. export restrictions, and while sales to China have declined, a new 5nm process semiconductor production plant has been newly established in Arizona, USA. Announced the establishment of a new semiconductor production plant with Sony Semiconductor Manufacturing Corporation in Kumamoto
 -Semiconductor manufacturer trends
 TSMC, Intel, Samsung, SMIC and other companies are planning record-high capital investment in response to increased demand, and production capacity is expected to expand further.

Strengths

Examples of systems



Wide range of capabilities, from wafer transfer to PLP process transfer

- ✓ Extensive lineup of components
- ✓ Technical capabilities to realize ideal transfer systems (concept, design, processing, instrumentation, assembly, inspection, maintenance)

Glossary of Terms

- EFEM:** Located in front of process equipment that processes wafers and panels, transfers wafers and panels between containers and process equipment in a clean environment.
- Vacuum robot:** Vacuum-compatible wafer transfer robot
- Atmospheric robot:** Atmospheric wafer transfer robot
- Load port:** A device that delivers wafers into various processing devices.
- Electric gate valve:** An electric device that maintains a vacuum state
- Aligner:** Wafer positioning device
- PLP process:** A process in which a large number of chips are placed on a square substrate that is larger than a wafer. PLP stands for Panel Level Packaging.

Specific initiatives

Realization of optimal production system

- Clarification of target areas**
 Review of organizational structure of related departments in line with clarification
- Introduction of new production control system**
- Increased production capacity**
 Approximately 25% increase in manufacturing personnel in semiconductor-related business
 Expansion of production area, approximately double in size
- Efforts toward adoption of EFEM standard products**

Efforts toward Creation of New Businesses and Business Area Expansion

Aiming to create new businesses and expand existing businesses



Efforts toward commercialization related to biological genetic resource research



Accelerate entry into new areas in existing businesses by utilizing open innovation



Conducting thorough analysis of synergistic effects and full-scale examination of M&A with an awareness of the integration process to maximize post-acquisition integration effects

Efforts in Biological Genetic Resource Research (1)

Continue to work on R&D utilizing biological genetic resources (mainly plant genetic resources)

Effective use of biological genetic resources



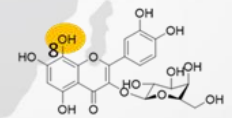
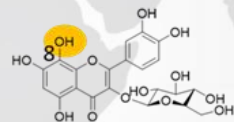
Provision of added value through proprietary analysis technology



Proposals for healthcare industry and other applications

Started joint R&D with Argentina's National Institute of Agricultural Technology (INTA) in search for and utilization of plant genetic resources (2019)

Started joint R&D with Indonesian Agency for Agricultural Research and Development (IAARD) in search for and utilization of plant genetic resources (2020)



Functional foods/Supplements

Declining birthrate and aging population
= Improvement of infertility

Diet/anemia

Osteoporosis

Eye strain

Cold sensitivity

Improvement of large intestine function

Drug development field

1. Improvement of memory/cognitive ability
2. Improvement of neurological symptoms (easing of pain)
3. Improvement of kidney function
4. Improvement of liver function



General food field

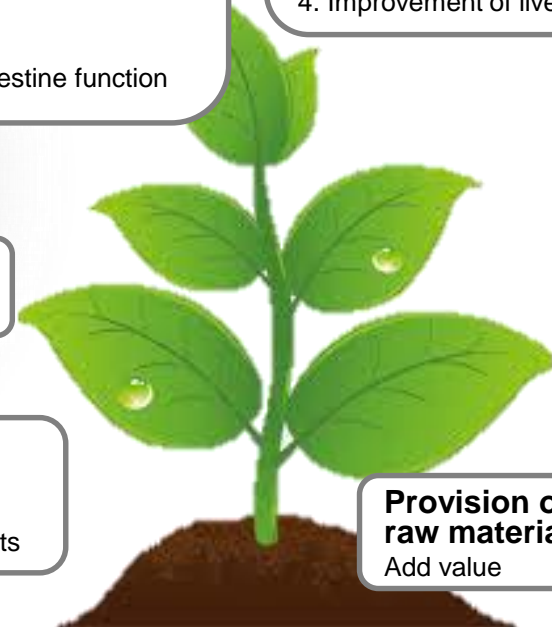
Add value

Dairy/Marine aquaculture fields

Improved quality of compound feed ingredients

Provision of feed/raw materials

Add value



Prediction of biosynthetic pathway of glycoside at position 3 of gossypetin (flavonol) and isolation of flavonoid 8-hydroxylase with gossypetin synthase activity from model Legume plant (*Lotus japonicus*).

Efforts in Biological Genetic Resource Research (2)

Completion of world's most advanced laboratory in biological genetic resource research with a view to business developments that utilize algae and plants

Potential possessed by algae and plants

Contribution to a sustainable society

- Features as CO₂ absorbers
Absorb CO₂ and perform photosynthesis
CO₂ absorption efficiency is tens of times higher than that of gramineous plants
- Water purification ability
Can recover nitrogen and phosphorus



Versatility as a resource

- Jet fuel
- Animal fish feed
- Food
- Supplements
- Cosmetics
- Pharmaceuticals



Strengthening R&D system

Around 2023, R&D laboratory will commence full-scale operations

- ✓ Construction of biogenetic resource R&D labs at headquarters/ Kumamoto plant
Complete with R&D area of approx. 1,500 m²
- ✓ Accelerate R&D by strengthening R&D system within the Company
- ✓ Build a promotion system for commercialization



Conceptual image of biogenetic resource research lab

- (1) Business expansion in growth markets
- (2) Strengthening competitiveness as a global company**
- (3) Strengthening of ESG management initiatives
- (4) Realization of management in line with new normal era

Efforts to Strengthen Hirata's Competitiveness as a Global Company

Implementing Group management, such as strengthening cooperation within the Group, to create synergistic effects for each business. In each business, we will work on profitability management by utilizing DX and thereby enhance our competitiveness.

Global response

Optimization of development/production systems within the Group

- Consideration of local procurement in China, North America and Europe
- Optimization of development/production systems (development in Japan, local production for local consumption system by local procurement and production)
- Examination of global procurement

Strengthening of cooperation within the Group

- Optimization of cooperation by clarifying the cooperation system between each business division and each affiliated company
- Building a system for sharing sales information, etc. as a group
- Redefining the positioning and functions of affiliated companies
- Efforts to develop global human resources

Business Initiatives

Thorough DX-based profitability management system

- Promotion of front-loading activities
 - Cooperation between departments at inquiry/sales stages and implementation of resource management
 - Implementation of 3D design, implementation of pre-verification by emulator

Strengthening of product competitiveness

- Development to ascertain needs
 - Implementation of solution sales and product development by participating in customer development projects
 - Utilization of external resources through collaboration
- Standardization to earn income
 - Strengthening of product appeal by product standardization

- (1) Business expansion in growth markets
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Relationship between Hirata Group Philosophy and Corporate Value

Implementing initiatives to achieve both business growth and the resolution of social issues, putting ESG management into practice while bringing about improvements in corporate value

Emphasis on three value areas to improve corporate value

Improvement of environmental value

Increased economic value

Improvement of social value

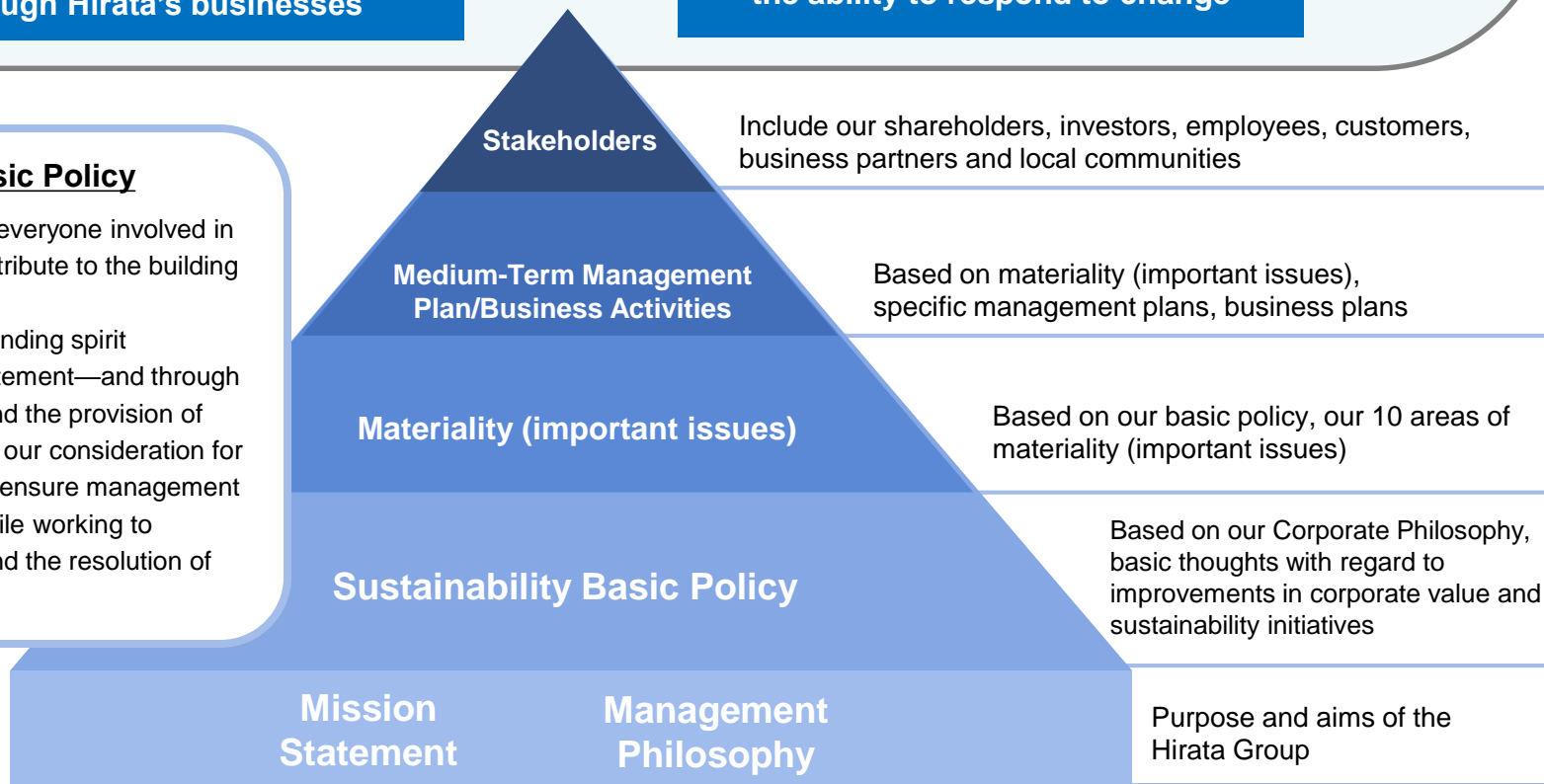
Contributing to the spread of sustainable social infrastructure through Hirata's businesses

Aiming to remain a global company with diversity of human resources and the ability to respond to change

Sustainability Basic Policy

The Hirata Group aims to make everyone involved in our company content and to contribute to the building of a sustainable society.

To that end, based on the founding spirit encapsulated in our Mission Statement—and through the spirit of respect for people and the provision of products and services that show our consideration for the global environment—we will ensure management transparency and soundness while working to achieve both business growth and the resolution of social issues.



Hirata Group Materiality (Important Issues)

Concerning the Hirata Group's materiality, we will implement specific action plans during this Medium-Term Management Plan and contribute to solving social issues.

Category	Theme	10 areas of materiality (important issues)
E	I. Response to climate change	1. Reduction of environmental impact by our company and in the supply chain
		2. Contribution to carbon neutrality through products and services
S	II. Building of a sustainable society	3. Creation of new customer needs in accordance with social changes
		4. Response to progress of digitalization
	III. Making the best use of people	5. Securing and training human resources
		6. Creating diverse, safe and secure workplaces
	IV. Strengthening of our management foundation	7. Improvement of product safety and quality
		8. Supply chain management
G		9. Enhancement of corporate governance
		10. Risk management

Contributing to the spread of sustainable social infrastructure through Hirata's business

Relevant SDGs



Keywords

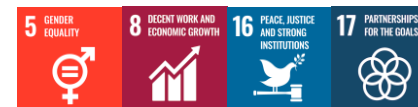
Green Market

Green Product

Green Factory

Aiming to remain a global company with diversity of human resources and the ability to respond to change

Relevant SDGs



Keywords

Diversity

Well-being

Contribution to Carbon Neutrality by Means of Our Products

Hirata's all-electric transfer system brings about contributions to carbon neutrality by reducing the environmental impact of customer plants

Features of all-electric transfer system

Focus on high power consumption of air compressors in customer plants

By introducing the all-electric transfer system equipped with our in-house developed DC brushless motor, pneumatic equipment is no longer required and leads to significant reductions in electricity usage, CO₂ emissions, and running costs



Green Market

Green Product

Green Factory

Product lineup



Effects of reduction



No need for air compressors

75% reduction*

Reduced power consumption

75% reduction*

CO₂ emissions

*Compared with our previous products

- (1) Business expansion in growth markets
- (2) Strengthening competitiveness as a global company
- (3) Strengthening of ESG management initiatives
- (4) Realization of management in line with new normal era**

Efforts to Realize Management Adapted to New-Normal Era

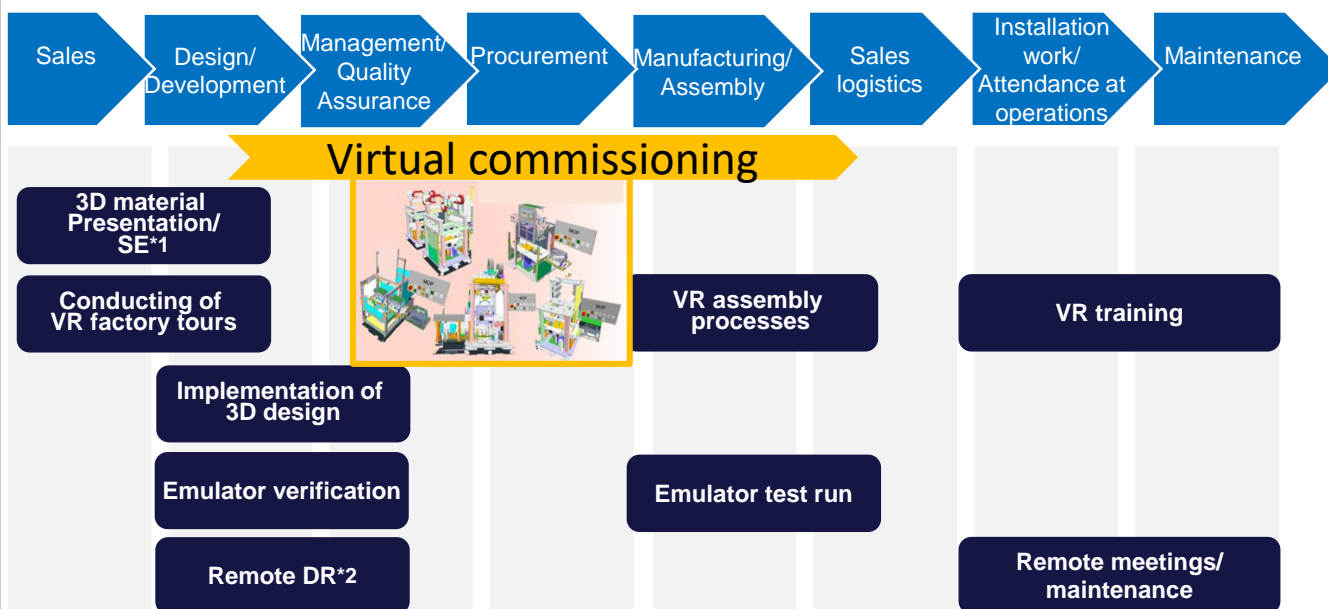
Leveraging digital technologies to transform entire business

Business DX

- Virtual commissioning using an emulator
- Utilization of new technologies (XR/AI)
- Remote meeting/remote maintenance
- Digitization of forms/use of cloud computing
- Visualization of plant operational status



Examples of initiatives in business activities



Effects of initiatives

Expand value provided by promoting DX



Management Targets

Management Targets (1)

In final year, aiming for net sales of 100 billion yen and operating income of 10 billion yen, neither of which was achieved in previous Medium-Term Management Plan

	FY2021 Results	Final year of Medium-Term Management Plan (FY2024)
Net sales	67.0 billion yen	100 billion yen
Operating profit	3.8 billion yen	10.0 billion yen
Operating profit ratio	5.7%	10.0%
ROE*	5.1%	11.0%
Secured ROIC that exceeded the cost of capital (WACC) and improved capital efficiency		

* ROE assumed as (Increase in retained earnings for each fiscal year) = (Profit attributable to owners of parent) - (Dividend payment [Note] dividend payout ratio 20%)

Management Targets (2)

Aiming for the numerical values given in the table below, centered on automotive EV-related equipment and semiconductor-related equipment businesses, which are regarded as growth markets.

(Numerical Plan by Segment)

FY2024 plan	Automotive-related	Semiconductor-related	Other automatic labor-saving equipment/Other	Total
Net sales	40 billion yen	40 billion yen	20 billion yen	100 billion yen
Operating profit	2 billion yen	6 billion yen	2 billion yen	10 billion yen
Operating profit ratio	5%	15%	10%	10%

(Capital Investment Plan)

Investment plan	Investment to strengthen production/development capacity	Capital investment in biogenetic resource R&D	IT system-related investment	Total
Total over three years of Medium-Term Management Plan	6 billion yen	4 billion yen	1 billion yen	11 billion yen



Hirata

The Global Production Engineering Company

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