

# Long-term Vision: E-Vision 2030 Medium-term Management Plan: E-Plan 2022

**EBARA** (6361)

February 26, 2020

Please find corrections from the presentation material released on February 13: P.33 Looking ahead, going beyond expectations

Ahead > Beyond

**EBARA** CORPORATION



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## 1. Review of Previous Medium-term Management Plan: E-Plan 2019

## **Review of E-Plan 2019 — Basic Policies**



#### Key Message

## "Unlimited Challenge toward Growth"

## Key Management Indicators

ROIC	8.0% or more
Operating Income (OI) to Sales Ratio	9.0% or more

#### Cash Allocation

Growth	105.0 billion yen
Investment	(CAPEX, R&D, M&A)
Shareholder Returns	Consolidated total return ratio of 30% or more
Liquidate	Maintain the debt-to-
Interest-	equity ratio within a
bearing Debt	certain range

#### 5 Basic Policies

<b>Basic Policy 1</b>	Solidify the profit foundation of the Group so that it does not rely on market fluctuations, and aim for further growth
Basic Policy 2	Strengthen product competitiveness and improve profitability by introducing innovative production processes and business processes with the fully-automated plant at the core
<b>Basic Policy 3</b>	Expand the Service & Support (S&S) business to improve and stabilize profitability
Basic Policy 4	Utilize M&As as effective means, in businesses which are expected to generate stable growth and profits, for the purpose of increasing the Group's share in the overseas markets and enhancing product lineup; and in businesses which are highly susceptible to market fluctuations, for the purpose of expanding the domain of the S&S business
Basic Policy 5	In order to shore up the global expansion of each business, reinforce corporate headquarters' strategic functions while at the same time make Groupwide efforts to consolidate ongoing operations and enhance their efficiency

## Review of E-Plan 2019 — Summary



<b>Key Mana</b>	gement
Indicator	<b>Targets</b>



 Targets of the key management indicators of ROIC and operating income to sales ratio was not achieved

transformation to strengthen the revenue base

Growth Investment



- 3-year investment was 95.5 billion yen
- Built an automated plant to improve productivity and invested in systems to improve various processes, but enhanced product competitiveness and improved profitability are expected after 2020

Main reasons why targets were not achieved were our too optimistic market outlook and insufficient business structure

Shareholder Returns



- Significantly above target: total return ratio 30% or more
- In the second year repurchased shares for the first time and continued in the third year





- Promoted environmental management (e.g., TCFD participation)
- Reformed corporate culture (Implemented new HR system and work-style reform)
- Enhanced governance (enhanced oversight function of the Board of Directors)

Issues for Next Medium-term Management Plan

- Transformation of business structures to strengthen revenue base
- Enhance S&S business
- Creation of new businesses

## **Review of E-Plan 2019 — Status of Management Indicators**



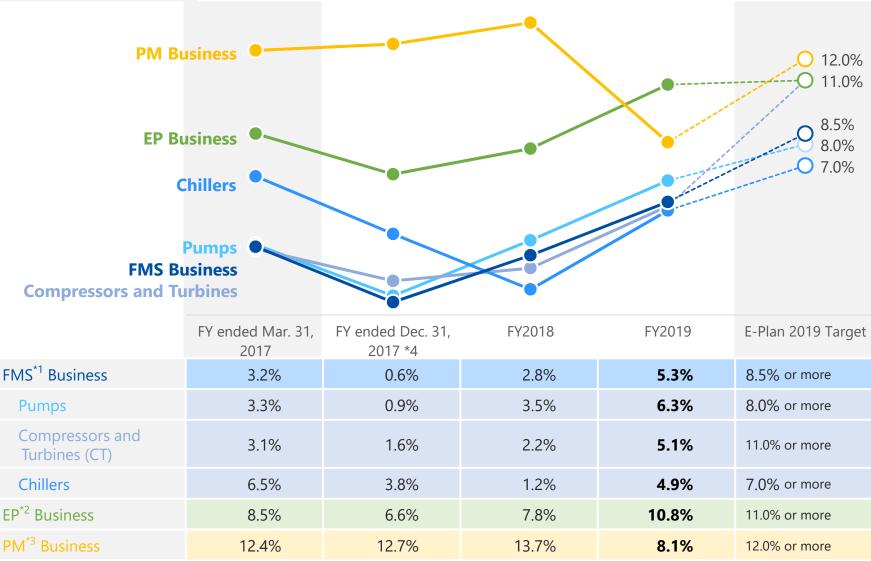
				EBARA		
	FY ended	E-Plan 2019				
Mar. 31, 2		FY ended Dec. 31, 2017	FY2018	FY2019	3-year Total	Target
ROIC	5.6%	2.5%	4.9%	6.5%	-	8.0% or more
OI Ratio	6.3%	4.7%	6.4%	6.8%	-	9.0% or more
ROE	8.0%	3.5%	6.6%	8.3%	-	11.0-13.0%
Debt-to- Equity Ratio (times)	0.36	0.41	0.28	0.29	-	0.4-0.6 times
CAPEX (billions of yen)	22.6	12.3	19.3	34.3	66.1	60.0 billion yen or more
R&D (billions of yen)	8.7	7.2	10.6	11.5	29.4	35.0 billion yen or more
M&A	-	1 a sales company in South Africa	-	-	1	10.0 billion yen
Consolidated Total Return Ratio 28.1% 48.0		48.0%	60.5%	88.8%	-	30% or more
Share Repurchase (billions of yen)	-	-	5.0	15.0	20.0	Agile implementation

<sup>\*</sup> Fiscal year ended December 31, 2017 is an irregular nine-month period.

## Review of E-Plan 2019 — Status of Business Segment Targets







<sup>\*1.</sup> Fluid Machinery & Systems / \*2. Environmental Plants / \*3. Precision Machinery

<sup>\*4.</sup> Fiscal year ended December 31, 2017 is an irregular nine-month period.



## Pumps Business

		Standard Pumps Business	Custom Pumps Business
Goals		Improve profitability through structural reform of domestic business	<ul> <li>Structural reform of domestic production system</li> </ul>
		Expand market share in the global market	■ Increase S&S sales
		<ul><li>Consolidated existing models</li><li>Constructed automated pump assembly line</li></ul>	<ul><li>Consolidated domestic production into Futtsu plant</li></ul>
Main Measures Taken		<ul> <li>Enhanced operational efficiency and optimized human resources in domestic</li> </ul>	<ul><li>Established an industry-specific marketing team</li></ul>
		<ul><li>business</li><li>Developed and launched regional products</li></ul>	Formed a business alliance with TEIKOKU ELECTRIC MFG. CO., LTD.
		<ul> <li>Acquired a sales company in South Africa</li> </ul>	Established a workshop in Saudi Arabia
T	8.0%	Reasons for Underperformance	
	or more	Delay of core global product launch and occurrence of defects in products	Financial loss from production delays, product defects, etc.
Final Year	6.3%	Delay of global distributor network expansion	In spite of increasing resources at overseas
Ol		Delay of expanding target models for the automated assembly line	bases, sales activities were insufficient
Remaining Issues		Implement further operational efficiency and labor saving measures	Improve product profitability
		<ul> <li>Develop and launch products that meet local needs in overseas markets</li> </ul>	Optimize global S&S structure
		Increase number of overseas sales bases	



## Compressors and Turbines (CT) Business

Goals	<ul><li>Improve profitability of product operation</li><li>Increase S&amp;S sales</li></ul>
Main Measures Taken	<ul> <li>Integrated the cryogenic pumps business and increased S&amp;S orders</li> <li>In 2018, established an IPO (International Procurement Office) at India base</li> <li>In 2019, started producing small turbines at India base</li> </ul>

OI Ratio Target	Final Year Ol	
11.0% or more		Reasons for Underperformance
		Delays in oil and gas market recovery and a too-optimistic market outlook
	5.1%	<ul> <li>Product cost reduction efforts were insufficient in response to changes in the external environment</li> </ul>
		The full-fledged effects of enhanced production and procurement functions, as a result of the newly-established India base, are anticipated to occur after 2020, although we have started to see partial benefits

# Remaining Issues

- Improve product profitability
- Utilize IPOs in China and India
- Further increase S&S sales



#### Chillers Business

Goals	<ul><li>Japanese market: Improve profitability</li><li>Chinese market: Expand market share</li></ul>
Main Measures Taken	<ul><li>Launched new products</li><li>Reviewed unprofitable businesses and optimized human resources</li></ul>

Ol Ratio Target	Final Year OI	
7.0% or more	4.9%	<ul> <li>Reasons for Underperformance</li> <li>A temporary loss of opportunity and financial loss occurred due to consolidation of domestic cooling tower bases</li> <li>Delays in new product development for the Chinese market</li> </ul>

Remaining Issues

- Expand S&S sales in Japan
- Enhance product competitiveness in China



#### Environmental Plants (EP) Business

Goals	■ Grow steadily and improve profitability, focusing on domestic O&M business
Main Measures	<ul> <li>Strengthened sales activities for comprehensive, long-term service contracts aimed at the 50-year-model</li> </ul>
Taken	<ul> <li>Started operation of a remote support center and an automatic crane system that utilizes Al and ICT</li> </ul>

OI Ratio Target	Final Year OI	
11.0% or more	10.8%	Reasons for Underperformance  An order of a targeted EPC* project was delayed

\* Engineering, procurement, and construction



- Make sure to receive targeted orders
- Stabilize and streamline plant operation utilizing AI and ICT



## Precision Machinery (PM) Business

Goals	■ Secure 12.0% or more operating income ratio
	■ Create the third pillar of operations
	Built dry vacuum pump automated plant and Technology Development Center
<b>Main Measures</b>	Built overhaul plants at Kyushu and Chubu bases
Taken	Started full-scale operation of new CMP mass-production plant at Kumamoto District
	■ Promoted parts procurement and production mainly at overseas bases

OI Ratio Target	Final Year OI	
12.0% or more	8.1%	<ul> <li>Reasons for Underperformance</li> <li>First and second years exceeded the target due to customers' rapid investment expansion and increasing production, but in the third year, the market slowed and as such, we did not reach the target</li> <li>Sales targets for plating and bevel polishing systems (new businesses) were not achieved</li> </ul>

## Remaining Issues

- Optimize production systems, including advancing automated plant capacity/scale
- Expand market share in the growing Chinese market
- Start up new businesses quickly



## 2. Long-term Vision: E-Vision 2030

#### E-Vision 2030 — Context of E-Vision 2030: Origin of EBARA





Factory in Ebara-town, Tokyo, founding place

Founder Issey Hatakeyama



Dr. Ariya Inokuty

## **Beginning of EBARA's Challenge**

EBARA was established in 1912 as a universitylaunched venture company to manufacture "Inokuty type volute pump"

# Founding Spirit "Passion and Dedication"

Our founder Issey Hatakeyama expanded EBARA with the spirit of "Passion and Dedication"

"Passion and Dedication"

We shall strive for growth with passion and dedication to bring forth originality and ingenuity. When working with passion and dedication there is nothing that cannot be communicated to others.

#### E-Vision 2030 — Context of E-Vision 2030: EBARA's History



We have supported society through our over 108 year-history because customers have chosen us for our reliability, technological capabilities, and continuing spirit of "Passion and Dedication." We will continue to challenge ourselves to meet the needs of the age with innovative products and services.

1912~
Modernization of
Japan
Development of social

Development of

infrastructure

Japan's Economic Miracle Increase in construction due to urbanization/development of industrial infrastructure

1945~

> Development of wind & water power products and waste incineration equipment

#### 1980~ Post-WWII Reconstruction Development of **Information Society**

Demand & market growth for semiconductors

> Development & release of semiconductor manufacturing equipment and devices

#### 2000~ Search for Path to Sustainability

Growing interest in environmental issues & accelerated innovation in semiconductor technology

> Provision of energy-saving products and reuse technologies

2019 New FRESHER: Industry's

smallest installation area

Toward a More Diverse and **Inclusive Society** 

- Creation of a sustainable society
- Development of dynamic and abundant lifestyles
- Supporting the development of resilient social infrastructure
- Providing eco-friendly products
- Becoming a manufacturer used by people on 5 continents
- Increasing amounts of renewable energy through greater power generation efficiency at incineration plants
- Spreading chemicalrecycling technology
- Providing products and services that support evolving semiconductor technology
  - Reducing environmental load of semiconductor manufacturing processes Ahead Beyond

#### **FMS Business**

water infrastructure

1958 Standard Pumps

**1912 Pumps** 1921 Fans & Blowers

1930 Centrifugal Chillers

1963 Absorption Chiller-Heaters





#### 1938 Compressors/Turbines **EP Business**

1931 Rapid Filtration System 🌉

1961 Grate-type Incineration System 1971 Municipal Solid Waste

Fluidized-bed Incineration System 1989 ICFB

2002 Fluidized-bed Gasification and Ash Melting System

2003 EUP



2019 Automatic crane system with waste identification Al





#### **PM Business**



1986 Roots-type Dry Vacuum Pumps 1998 Electron Beam Inspection Systems **Bevel Polishing Equipment** 

1990 Bump Plating Systems

2018 New Dry Vacuum Pump



1992 CMP Systems **Gas Abatement Systems** 





We aim to further our contributions toward the SDGs and improve ESG-focused management to contribute to the creation of a sustainable society, while simultaneously increasing the social/environmental and economic value we generate. We believe this will earn us greater corporate value and recognition as an excellent global company.



Technology. Passion. Support our globe.

E-Plan 2028

E-Plan 2025

**E-Plan 2022** 

Reconstruct the foundations of growth

2020-2022

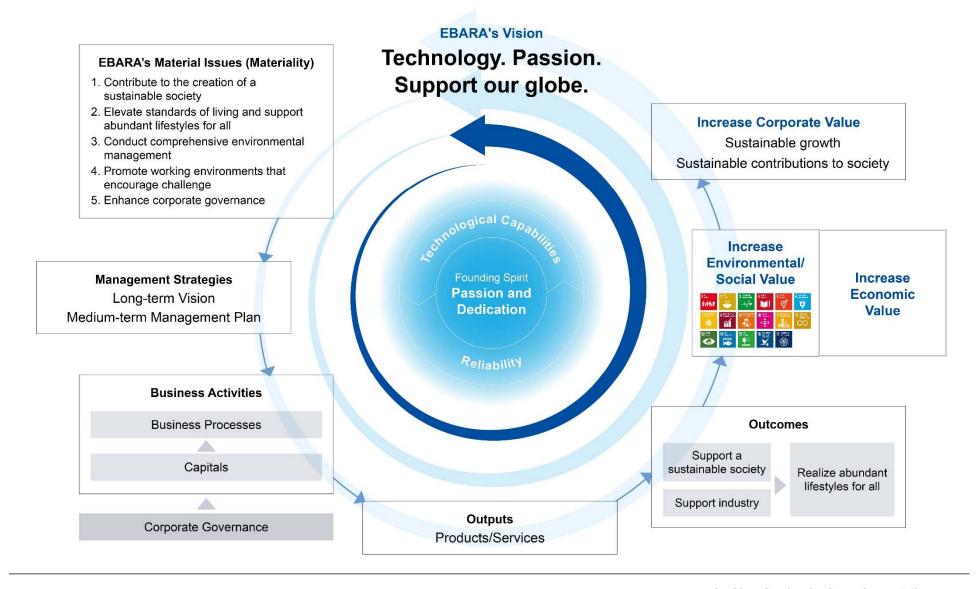
2023-2025

2026-2028

2029-

#### **E-Vision 2030 — EBARA's Value Creation Process**





### E-Vision 2030 — 5 Material Issues (Materiality)





1.Contribute to the creation of a sustainable society

We will utilize our technologies to passionately support the creation of a sustainable, environmentally-friendly world with ample food and water, and safe and reliable social infrastructure









2. Elevate standards of living and support abundant lifestyles for all We will utilize our technologies to passionately support economic development that enables the world to end poverty and realize ever-evolving and abundant lifestyles













3. Conduct comprehensive environmental management

We will promote the reduction of CO<sub>2</sub> emissions from our business operations and maximizing our use of renewable energy to move toward a carbon-neutral world











4. Promote working environments that encourage challenge We will promote a corporate group culture of competition and challenge, and provide diverse employees with meaningful work and comfortable working environments







5.Enhance corporate governance

We will lay out a vision for and pursue growth through offensive and defensive governance that supports high-level management capabilities

#### E-Vision 2030 — Outcomes of and Approaches to Solving Material Issues





Reduce greenhouse gas (GHG) emissions of business operations

- Reduce amount of energy used in production
- Develop more energy-efficient products
- Improve the power generation efficiency of municipal solid waste treatment facilities



Support and provide resilient infrastructure that helps solve environmental problems associated with urbanization and deliver water all over the world



Contribute to the development of high spec semiconductors necessary to answer the increasing demand for IoT, Cloud, AI, automated driving (self-driving cars), and 5G (ICAC5) through the provision of cutting-edge semiconductor manufacturing equipment

#### **E-Vision 2030** — Basic Policy and Management Strategies



#### **Basic Policy**

#### Maximize corporate value through the optimization of business portfolio

- Recognize issues based on realistic future forecasts
- Integrate a global market-in approach

## 1 New/Existing Business Strategies

#### **New Business**

Contribute to solving material issues by starting up new types of business

#### **Existing Businesses**

Enhance S&S and execute aggressive business segment-specific strategies

## 3 Resource Strategies

Achieve optimal resource allocation through focus on the following three strategies:

- Financial/Investment Strategy
- Manufacturing/Technology/Information Strategy
- Human Resource Strategy

## 2 Regional Strategies

#### **Global Market**

Actively develop business in areas where problems associated with economic development are arising (i.e., increasing energy consumption, population growth, environmental issues, etc.)

#### **Japanese Market**

In the midst of a maturing market, expand S&S services and implement creative, flexible business reforms untethered to conventional manufacturing

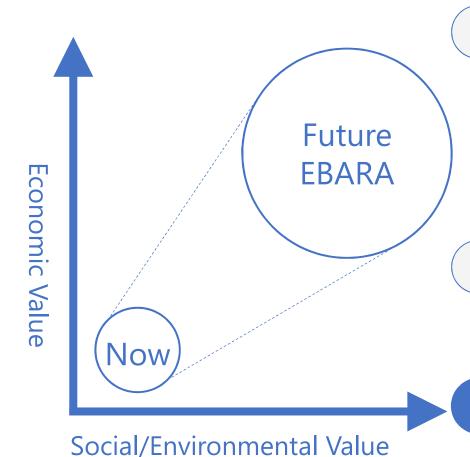
## 4 ESG Strategies

Further refine ESG-focused management to facilitate the creation of a sustainable society

- E Take aim at environmental issues
- **S** Foster bonds with society
- **G** Enhance governance



Enhance EBARA's corporate value through the improvement of social, environmental, and economic value



#### Social/Environmental Value

Solve social issues through our business:

- Reduce GHG emissions equivalent to around
   100 million tons of CO<sub>2</sub>
- Deliver water to 600 million people
- Contribute to development of ICAC5...Challenge 14 Å

#### **Economic Value**

- ROIC over 10.0%
- Roughly 1 trillion yen in sales

### Indicator of Corporate Value

1 trillion yen in market capitalization

## **E-Vision 2030** — 10-Year Vision: Social/Environmental Value Reference Figures



Reduce GHG emissions by the equivalent of about 100 million tons of CO<sub>2</sub>

Calculated using a sales projection of current products from 2020 to 2030 and the average CO<sub>2</sub> emissions of those products over their lifecycle. The following data points were then utilized to calculate our approximate target.









- Amount of energy-savings (converted to CO<sub>2</sub> emission equivalents) anticipated from each business segment's product development plans, as we strive to provide more energy efficient products
- Amount of PFCs (converted to CO<sub>2</sub> emission equivalents) treated by our Gas Abatement Systems that would be emitted if not treated

[For your reference – Visualizing 100 million tons of CO<sub>2</sub>] Japan's total energy consumption in 2018 generated around 500 million tons of CO<sub>2</sub> (excluding PFC to CO<sub>2</sub> calculated emissions)

#### ■ Deliver water to 600 million people

Calculated based on population forecasts for 2030 and our current market share of standard pumps







- Global market: Anticipated growth of about 5% during the period of E-Vision 2030
- Contribute to ICAC5...Challenge 14 Å

The development of ICAC5\* is boosting demand for semiconductors and in turn, performance capabilities are growing at an astonishing rate. Around 2030, state-of-the-art semiconductor devices are expected to enter the 14Å (angstrom, 1/10 billionth) generation.

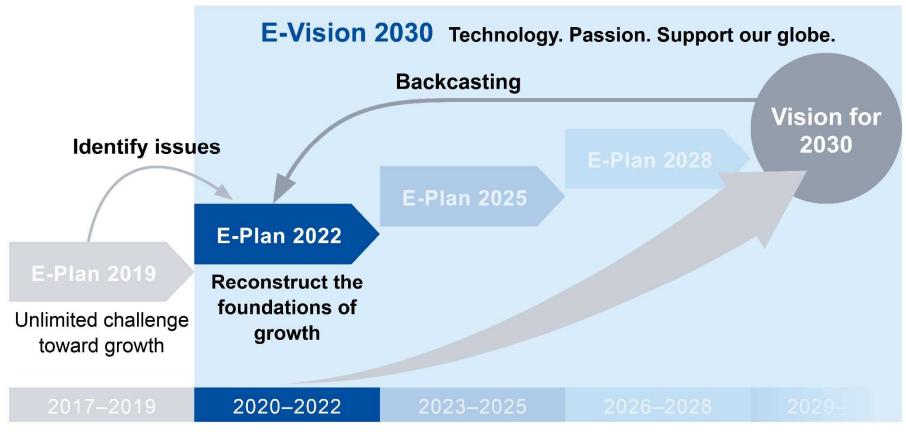
\*IoT, Cloud, AI, Cars (autonomous driving), 5G technologies



# 3. New Medium-term Management Plan: E-Plan 2022

#### E-Plan 2022 — Position of E-Plan 2022





Tasks for the next three years:

- Increase profits by continuously reevaluating and optimizing our business portfolio
- Identify and match both internal and external technologies/know-how with market needs to create new businesses
- Improve management efficiency and speed by taking measures to improve global operations
- Conduct business operations in line with the ideals of stakeholder capitalism

#### E-Plan 2022 — Basic Policies



1 Strive for growth

Create and cultivate new businesses and expand existing businesses further into the global market

2 Improve profitability of existing businesses

Transform business structures to strengthen revenue base and increase S&S sales in all businesses

3 Refine management and business infrastructure

Proactively implement digital transformation (DX) technologies to facilitate swifter management and further emphasize ROIC management

4 Enhance ESG-focused management

Address evolving environmental issues, foster bonds with society, and enhance governance practices



## **Business Strategies**

- 1 New business
- Identify and match both internal and external technologies/knowhow with market needs to create new businesses
- Be flexible regarding external partnerships/investments/acquisitions, etc.

- 2 Existing businesses
- Enhance S&S
- Execute aggressive business segment-specific strategies
- Strengthen development capabilities to create competitive advantages
- Expand global procurement system

- 3 Regional strategies
- Global market
- Japanese market





- 4 Strengthen capitals (resources)
- Strengthen ROIC/portfolio management
- Manufacturing/Technology/Information Strategy
- Human Resource Strategy



- 5 Refine ESG-focused management
- Take aim at environmental issues
- Foster bonds with society
- Enhance governance



#### **E-Vision 2030: New/Existing Business Strategies**

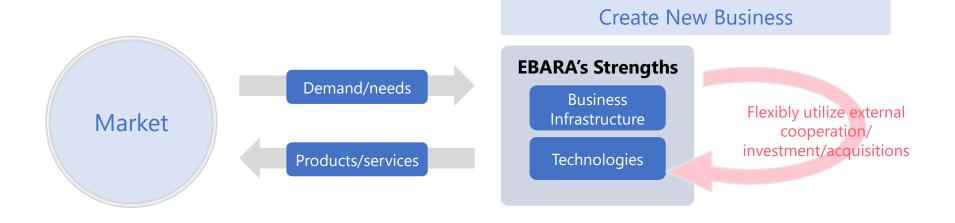
- New Business: Contribute to solving material issues by starting up new types of business
- Existing Businesses: Enhance S&S and execute aggressive business segment-specific strategies



Aim to identify global needs from a market-in approach, and match internal and external technologies/know-how with market needs to provide customers with new solutions



- Business alliance with Spiber
- Promotion of waste plastic chemical recycling technology





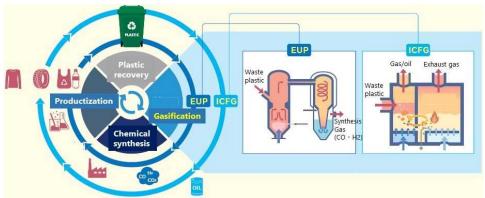
- Examples of recent investments and business alliances
- Business alliance with Spiber (1.0 billion yen)

We are working with Spiber to challenge the transformation of the materials industry through the pursuit of breakthrough functional improvements that expand the applications of industrial machinery. Through the alliance we will:

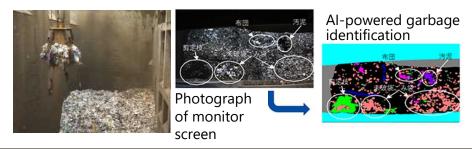
- 1. Implement more efficient manufacturing processes for mass production of synthetic protein materials
- 2. Improve functions of EBARA Group products by adding/substituting synthetic protein materials



 Business alliance working to commercialize waste plastic chemical recycling technology



 Business tie-up with 100 million yen investment in Ridge-i





#### **E-Vision 2030: New/Existing Business Strategies**

- New Business: Contribute to solving material issues by starting up new types of business
- Existing Businesses: Enhance S&S and execute aggressive business segment-specific strategies

# **Strategy 2 Existing Businesses**

Search for markets and areas where our products and services provide added value and that leverage our strengths from a market-in perspective. Then consider and implement business models appropriate to that market

1 Enhance S&S

#### **Plan**

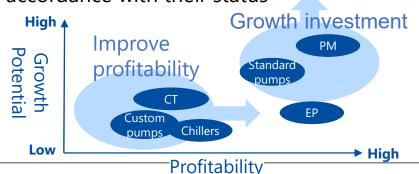
■ Improve synergy among business segments to facilitate the provision of optimal services to each market, country, region, and customer

Custom Pumps CT
Integration/coordination of S&S organizations

2 Execute aggressive business segmentspecific strategies

#### Plan

■ Divide business segments into two groups: "Growth investment" and "Improve profitability," and set strategies in accordance with their status





#### **E-Vision 2030: New/Existing Business Strategies**

- New Business: Contribute to solving material issues by starting up new types of business
- Existing Businesses: Enhance S&S and execute aggressive business segment-specific strategies

# Strategy 2 **Existing Businesses**

Search for markets and areas where our products and services provide added value and that leverage our strengths from a marketin perspective. Then consider and implement business models appropriate to that market

3 Strengthen development capabilities to create competitive advantages

## 4

Expand global procurement system

#### Plan

■ Continue to develop products and services with competitive advantages and sell them at a price that maximizes profit



#### Plan

- Reduce production and fixed costs by lowering procurement costs
- Conduct optimal region-based procurement

Example: Standard Pump: FRESHER 3100NEO

Customer needs	Competitive Advantages		
More utilization of building space Miniaturization (~		Achieved industry's smallest area necessary for installation and use	
Easier installation	Reduce mass (~44kg*)	Achieved lighter product	
Less power consumption	Energy saving (~19%*)	High efficiency motor, energy saving mode	
More efficient inspections		Can check operating status with smartphone	

\*All data calculated by EBARA, in comparison to previous models



#### **E-Vision 2030: Regional Strategies**

#### Global

Actively develop business in areas where problems associated with economic development are arising (i.e., increasing energy consumption, population growth, environmental issues, etc.)

#### Japan

In the midst of a maturing market, enhance S&S services and implement creative, flexible business reforms untethered to conventional manufacturing

# **Strategy 3 Regional Strategy**

Maximize revenue through initiatives tailored to regional markets

#### Global

Allocate investment and resources to regions of anticipated growth

#### **Standard Pumps**

- Increase coverage of business by establishing 10+ bases (in Africa, Central/South America, etc.)
- Reinforce existing bases

#### **Precision Machinery**

Expand business in the growing Chinese market

#### Compressor/Turbine

**Custom Pumps** 

• Utilize IPO, and expand sales in the Indian market

#### Japan

- Improve operational efficiency in all businesses
- Contribute to building resilient social infrastructure

#### All business segments

- Receive more S&S orders
- Promote DX

#### **Custom Pumps**

#### **Environmental Plants**

 Fortify the technological capabilities necessary to provide social infrastructure resilient to natural disasters



#### **E-Vision 2030: Resource Strategies**

Achieve optimal resource allocation based on three strategies:

→ Financial/Investment Strategy → Manufacturing/Technology/Information Strategy → Human Resource Strategy



# **Strategy 4 Strengthen Capitals (resources)**

Evolve and strengthen the six capitals\* required for business growth to better invest in adaptions to the changing business environment and global business expansion

\*6 capitals: Human, Manufacturing, Financial, Intellectual, Social & Relationship, Natural

#### Strengthen ROIC/ Portfolio Management

 Conduct capital allocation based on corporate portfolio assessments

#### **Performance indicators:**

- ROIC/WACC spread
- Net sales growth rate
- Improve capital efficiency for each business

### Manufacturing/Technology/ Information Strategy

 Transform products, services, and business models through the promotion of DX

#### **Examples:**

- Introduce ERP companywide and consolidate business infrastructure
- Advance automated production capabilities

#### **Human Resource Strategy**

- Improve internal talent pipelines on a global scale and facilitate greater mobility of human resources
- Promote diversity through increasing mid-career hires



#### **E-Vision 2030: ESG Strategies**

Further refine ESG-focused management to facilitate the creation of a sustainable society

→ Take aim at environmental issues (E) → Foster bonds with society (S) → Enhance governance (G)

# Strategy 5 Refine ESG-focused Management



- Reduce greenhouse gas emissions by providing highly energy efficient products
- Minimize the environmental impacts of business operations

In the interest of our sustainable growth we will take aim at environmental issues, foster bonds with society, and enhance corporate governance

## SOCIAL



- Create social value through the provision of safe and reliable products
- Contribute to the advancement of local communities and respect human rights throughout our business operations
- We will make a clear distinction between the social value of our products/services and our philanthropy activities and continue to support various cultural facilities, etc.

## Governance



- Improve the feedback-loop between the outcome goals and execution status of our management policy, and implement a more effective system
- Enhance group governance and risk management in line with the globalization of our operations



## SOCIAL



#### Donations to the Ebara Hatakeyama Memorial Foundation

- The Company agrees with the purpose and mission of the Foundation, which aims to promote the broad development of academia, culture, art, Sado (tea ceremony), and sports
- Hatakeyama Memorial Museum of Fine Art has many valuable collections of fine arts and crafts, including some national treasures. The museum is currently closed for seismic retrofitting (from March 2019)
- In commemoration of the Company's 100<sup>th</sup> anniversary and the Ebara Hatakeyama Memorial Foundation's 60<sup>th</sup>, and as an extension of the Company's philanthropic activities, the Company has decided to donate expenses necessary for the renovation of the museum. We hope to contribute to the conservation of important parts of Japan's cultural history as well as invest in improved exhibitions that will appeal to a wider audience

#### **About Hatakeyama Memorial Museum of Fine Arts**

- Established in 1964 by Issey Hatakeyama, EBARA's founder, for the purpose of preserving and promoting the appreciation of Chinese, Korean, and Japanese art objects, particularly tea ceremony goods
- Managing entity: EBARA HATAKEYAMA MEMORIAL FOUNDATION
- Collection: approx.1,300 pieces, 6 of which are designated as National Treasures of Japan, 33 of which are designated Important Cultural Property







## E-Plan 2022 — Numerical Targets



<b>Key Performance Indicators (KPI)</b>	FY19 Results	FY22 Targets
ROIC (Return on Invested Capital)	6.5%	8.0% or more
Operating Income to Sales Ratio	6.8%	8.5% or more
Target Achievement Indicators		
ROE (Return on Equity)	8.3%	11.0% or more
Debt-to-Equity Ratio	0.29 times	0.3-0.5 times
<b>Operating Income Ratio by Busine</b>	SS	
FMS Business	5.3%	7.0% or more
Pumps Business	6.3%	6.5% or more
CT Business	5.1%	8.0% or more
Chillers Business	4.9%	5.0% or more
EP Business	10.8%	9.5% or more
PM Business	8.1%	13.0% or more

## E-Plan 2022 — Financial Strategy



The top priority is growth investment. We will enhance shareholder returns including dividends, and improve working capital to improve the capital efficiency of each business.

Financial Policy	
Growth Investment	<ul> <li>CAPEX about 100.0 billion yen</li> <li>R&amp;D about 40.0 billion yean</li> <li>Proactive M&amp;A</li> </ul>
Shareholder Returns	<ul> <li>Consolidated dividend payout ratio 35% or more *Lower limit: Based on shareholders' equity, consolidated dividend on equity ratio (DOE) 2.0% or more</li> <li>Agile share repurchase</li> </ul>
Capital Efficiency	<ul> <li>Debt-to-equity ratio about 0.3-0.5 times</li> <li>Shrink trade receivables and inventories</li> </ul>

#### **E-Plan 2022** — Business Environment



Our plans were created with consideration given to the business environment and downside risks

> We will establish a system for monitoring risks in addition to a system that facilitates quick recovery in the face of realized risks

		Market/Regional Trend *Main market only			Market Fluctuation Factors
Gro	wth Investment				
	Standard Dumps	Puilding aguinment	Japan	•	Building equipment demand
	Standard Pumps	Building equipment	Overseas		GDP growth
	PM Business	Semiconductor	Japan/Overseas	<b>A</b>	CAPEX trends
lmp	rove Profitability				
		Public works	Japan	<b>→</b>	National and local government finances
	<b>Custom Pumps</b>	Oil and gas, water use, electric power	Japan/Overseas	<b>→</b>	Oil price, CAPEX trend, decarbonization
		Emerging country	·	<b>A</b>	GDP growth
	CT Business	Oil and gas (Downstream)	Japan/Overseas	<b>→</b>	Oil price, CAPEX trend
	Chillers Business	Building equipment	Japan	<b>1</b>	Building equipment demand
	<b>Chillers Business</b>	China	Overseas	-	GDP growth
	EP Business	Waste incineration facilities	Japan	•	National and local government finances



1 Standard F	Pumps	Ol Ratio Target of Pumps Business 6.3% ⇒ 6.5% or n	
	Japan: Improve Profitability	Overseas: Expand Sales	
	<ul><li>Cultivate new markets</li><li>Develop energy efficient, miniatushift to a solution-provider busin</li></ul>	rized, lighter, and smarter products and systems, and	
Basic Policies	<ul> <li>Build a business structure that fur advances operational efficiency a labor saving</li> <li>Bring high value-added products market</li> <li>Strengthen S&amp;S structures</li> </ul>	Bring products that meet local needs to market by expanding sales bases and	
Main Measures	<ul> <li>Promote digital transformation (sales and production operations)</li> <li>Secure update demand by increased S&amp;S sales staff and increasing maintenance efficiency with IoT technology</li> </ul>	uction operations demand by increasing and increasing and increasing	



2 Custom Pumps

Ol Ratio Target of Pumps Business

6.3% **→** 6.5% or more

	Japan: Overseas: Improve Profitability Improve Profitability	
Basic Policies	<ul> <li>Build a business structure focused on profitability</li> <li>Improve product profitability</li> <li>Capture different regional demands</li> <li>Develop products for new markets</li> </ul>	
	<ul> <li>Contribute to infrastructure construction and maintenance responding to the intensification of natural disasters</li> <li>Improve production capabilities and supply chain management at overseas bases</li> </ul>	
Main Measures	Focus on the areas where we can leverage our competitive advantages  Optimize global production system  Reduce lead time and financial loss by improving business efficiency with DX  Increase the regional coverage of each site to expand S&S (collaboration with CT business)  Develop new products	
	Develop lifespan extension technology for aging domestic infrastructure equipment	



3 Compressors and Turbines (CT) Business

**OI Ratio Target** 

5.1% **⇒** 8.0% or more

	Products: Improve Profitability	S&S: Increase Sales
Basic Policies	<ul> <li>Give first priority to achieving acceptable levels of profit</li> <li>Optimize scale of sales and production systems</li> </ul>	<ul><li>Expand business scale</li><li>Strengthen lifecycle management</li></ul>
Main Measures	<ul> <li>Optimize US-Japan production system according to sales volume</li> <li>Reduce procurement cost by utilizing IPO</li> <li>Promote digital engineering with DX and improve profitability</li> <li>Bring new products to market</li> <li>Build a new test stand for cryogenic pumps</li> </ul>	<ul> <li>Increase staffing</li> <li>Optimize the service network by restructuring existing service shops</li> <li>Consider M&amp;A</li> </ul>



4 Chillers Business

**OI Ratio Target** 

4.9% **→ 5.0%** or more

	Japan: Improve Profitability	Overseas: Expand Sales & Improve Profitability	
Basic Policies	<ul><li>Improve product profitability</li><li>Expand S&amp;S</li></ul>	<ul> <li>Cultivate new markets</li> <li>Increase market share of existing business by improving price competitiveness of products and broadening sales channels</li> </ul>	
Main	<ul> <li>Develop new products and improve existing products</li> </ul>		
Measures	<ul><li>Promote production transfer to China</li><li>Increase S&amp;S of cooling towers</li></ul>	<ul> <li>Cultivate sales channel of cooling towers in China</li> <li>Promote regional production and consumption in South East Asia</li> </ul>	



Environmental Plants (EP) Business

**OI Ratio Target** 

10.8% **→** 9.5% or more

	Japan: Improve Profitability	Overseas: Expand Sales
Basic Policies	<ul> <li>Increase the number of facilities operated by EP</li> <li>Spread the 50-year model</li> <li>Improve non-price valuation of proposals by shortening the preparation time for DBO projects</li> <li>Develop new businesses to become a total waste resource recycling solution provider</li> </ul>	<ul><li>Promote strategies for Asia based on existing Chinese base</li></ul>
Main Measures	<ul> <li>Improve order accuracy of new EPC/DBO projects by improving non-price related elements of proposals</li> <li>Incorporate peripheral operations of the comprehensive, long-term service projects and propose lifespan extensions</li> <li>Reduce O&amp;M cost by making full use of AI/ICT and improve plant performance</li> <li>Build a business model for chemical recycling</li> </ul>	<ul> <li>Increase production capacity in Chinese production base and expand sales beyond Japan and China</li> </ul>



Precision Machinery (PM) Business		Ol Ratio Target	8.1% <b>⇒ 13.0</b> % or more
	Expand Sales and Improve Profitability		
Basic Policies	<ul> <li>Change from a single hardware manufacturer to a solutions provider that also provides related products and services, and expand share in existing markets</li> <li>Promote production efficiency including an automated plant and strengthen global supply chain management</li> <li>Create new businesses</li> </ul>		
	<ul> <li>Components Business</li> <li>Bring a new dry vacuum pump model to market</li> <li>Reduce number of models and promote production efficiency (through automated plants, etc.)</li> <li>Optimize global S&amp;S structures</li> <li>Strengthen sales capabilities, especially in the Chinese market</li> </ul>		
Main Measures	<ul> <li>CMP Business</li> <li>Propose process solutions and build early development systems</li> <li>Deploy models in response to various customer needs</li> <li>Enhance S&amp;S at sites by strengthening alliances with consumables manufacturers and sharing parts information, expanding support menu, and proactively making proposals to customers</li> <li>Strengthen sales capabilities, especially in the Chinese market</li> </ul>		
	New Business  Bring new models for next-generation applications to market and establish a new department specialized in development		



# Technology. Passion. Support our Globe.



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