

Medium-Term Management Plan (Mid-Term Plan 2029)

Envipro Holdings Inc.
(TSE Code : 5698)

August 22, 2024

Table of Contents

- 1. Medium-Term Management Plan (Mid-Term Plan 2029)**
2. Management that is Conscious of Cost of Capital and Stock Price
3. Growth Strategies by Business
4. Management Policy · Strategies

Mid-Term Plan 2029 Financial Targets



	Net sales	Ordinary profit	ROE	ROIC
Jun. 2029	¥86 bn	¥4.7 bn	14%	9%
Jun. 2027	¥68.0bn	¥3.1bn	11.5%	-%
Jun. 2025	¥53.5bn	¥2.0bn	8.5%	-%

*ROIC = (Ordinary profit x (1 - Effective tax rate)) / (Equity + Interest-bearing liabilities)
 *Equity and interest-bearing liabilities are averages of the beginning and end of the period.

Prerequisites (After July 2024)

Ferrous scrap price	Electrolytic copper price	Gold price	Silver price	Nickel price	Cobalt price	Exchange rate
¥50,000/t	¥1,500/kg	¥11,000/g	¥140,000/kg	¥2,700/kg	¥4,100/kg	¥140/US\$

- Net sales CAGR at **10.5%** and ordinary profit CAGR at **21.4%** (* For five years from Jun. 2024 to Jun. 2029)
- We set a target ordinary profit of 5.0 billion yen for the fiscal year ending June 2028, the final year of Mid-Term Plan 2028. Now, we have revised the target ordinary profit for the fiscal year ending June 2029 to 4.7 billion yen.
- This time, we began to set targets **excluding the increases in net sales and ordinary profit that are expected to result from M&A activities.**

Financial Targets by Segments

- In the Resource Circulation Business, **strengthening systematic collection capabilities** and **realizing concrete cases of CE** are the keys to the achievement of the profit target.
- In Global Trading Business, the **V-shaped recovery of resource logistics by model change and logistics agency services growing stably at around 10%** are the keys to the achievement of the profit targets.
- In the Lithium-ion Battery Recycling Business, we continue **up-front investments as a strategic business**. Hydrometallurgical demonstration plant is not incorporated into the mid-term plan now.

(¥ million)

Net sales	2025	2027	2029
Consolidated	53,500	68,000	86,000
Resource Circulation Business	25,500	29,500	34,000
Global Trading Business	32,000	42,000	55,500
Lithium-ion Battery Recycling Business	1,250	1,850	2,200
Others	500	700	900
Adjustment	(5,750)	(6,050)	(6,600)
Ordinary profit	2025	2027	2029
Consolidated	2,000	3,100	4,700
Resource Circulation Business	2,000	2,750	3,700
Global Trading Business	540	900	1,350
Lithium-ion Battery Recycling Business	(15)	150	300
Others	100	200	300
Adjustment	(625)	(900)	(950)

【Reference】 Our Rolling Method



The Company is in a period of change, and in order to respond flexibly to the recent rapid changes in the market, the Company intends to reconsider its five-year Medium-Term Management Plan each fiscal year and roll it out.

Jun. 2023

Jun. 2024

Jun. 2025

Jun. 2026

Jun. 2027

Jun. 2028

Jun. 2029

Jun. 2030

Mid-Term Plan 2027

Mid-Term Plan 2028

Mid-Term Plan 2029

Announced this time

Mid-Term Plan 2030

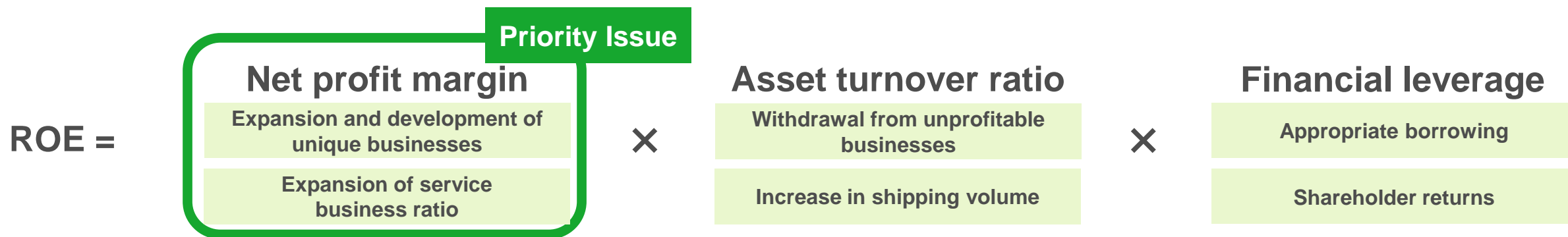
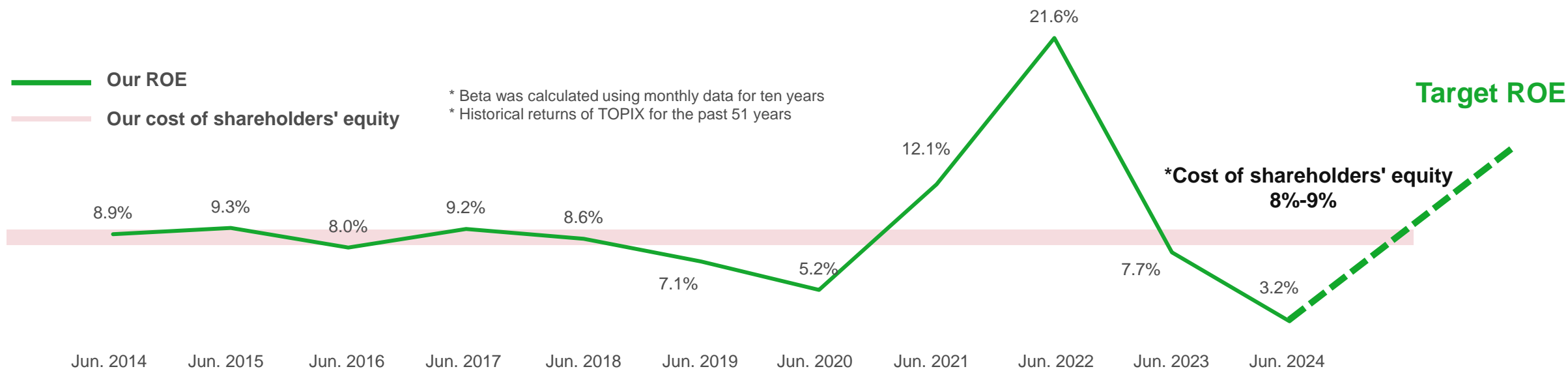
Schedule for next fiscal year

Table of Contents

1. Medium-Term Management Plan (Mid-Term Plan 2029)
- 2. Management that is Conscious of Cost of Capital and Stock Price**
3. Growth Strategies by Business
4. Management Policy · Strategies

ROE and the Cost of Shareholders' Equity

- The Group's ROE is dependent on market conditions. It has been very volatile.
- **The ROE is below** the cost of shareholders' equity.
- We aim to expand and develop highly profitable businesses through **the utilization of unique technologies and know-how** and achieve the growth of EPS and reduce the volatility of ROE by **expanding service business ratio**.



Selection and Concentration of the Business Portfolio

- In 2025 and 2026, we will work to **enhance functions and expand our scale**. (In LIB recycling, we will remain in an investment phase until around 2030.)
- From 2027 to 2029, we will **recover our investments and** expand **the CE business**.
- We aim to achieve targets ahead of schedule through investment activities such as **M&A activities and the establishment of JV**.

¥ million

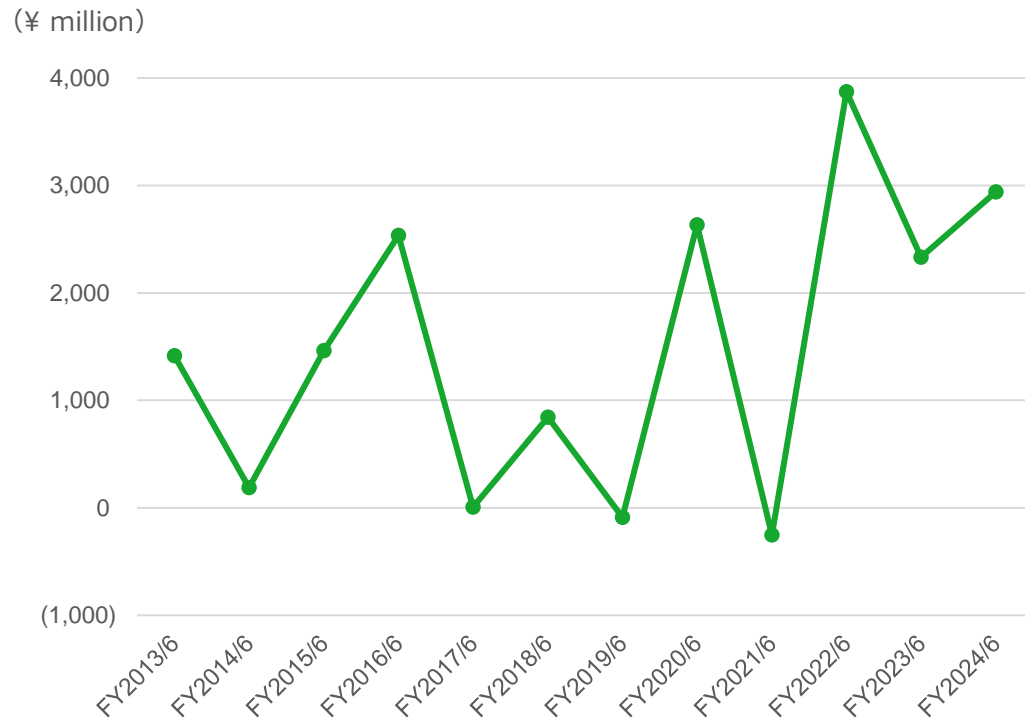
Segment	Business name	2025 - 2026	2027 - 2029	Financial target for June 2029
Resource Circulation	Metallic resources	<ul style="list-style-type: none"> • Developing metal recycling • Investing in the recycled fuel business 	<ul style="list-style-type: none"> • Expanding the product CE business • Expanding recycling bases 	Net Sales: 34,000 Ordinary profit: 3,700 Profit ratio: 10.9% (2024: 7.6%)
	Incineration ash	Expanding collection business of gold, silver & copper sediment sludge* from riddling ash	Focusing on collection business of gold, silver & copper sediment sludge from incinerator bottom ash	
	Dismantling	<ul style="list-style-type: none"> • Increasing the project handling capacity (increasing the number of qualified personnel) • Increasing the number of collaboration partners 	Resource circulation of buildings (circulation of green steel)	
	Polymer	Capital investment and R&D	Supplying recycled resins and rubbers	
Global Trading	Resource trading	Cooperating with domestic furnace manufacturers	Business investments in countries overseas	Net Sales: 55,000 Ordinary profit: 1,300 Profit ratio: 2.5% (2024: 1.2%)
	Logistics agency	Expanding sales areas	Diversifying products	
Lithium-ion Battery Recycling	LIB recycling	<ul style="list-style-type: none"> • Plan for BM plant in Kansai area • BM contract processing business 	<ul style="list-style-type: none"> • Expansion of BM's manufacturing sites • Commencement of operation of plant for the verification of solvent extraction 	Net Sales: 2,200 Ordinary profit: 300 Profit ratio: 13.6% (2024: 13.9%)

*Gold, silver & copper sediment sludge: concentrate sludge of gold, silver, copper, platinum, palladium.

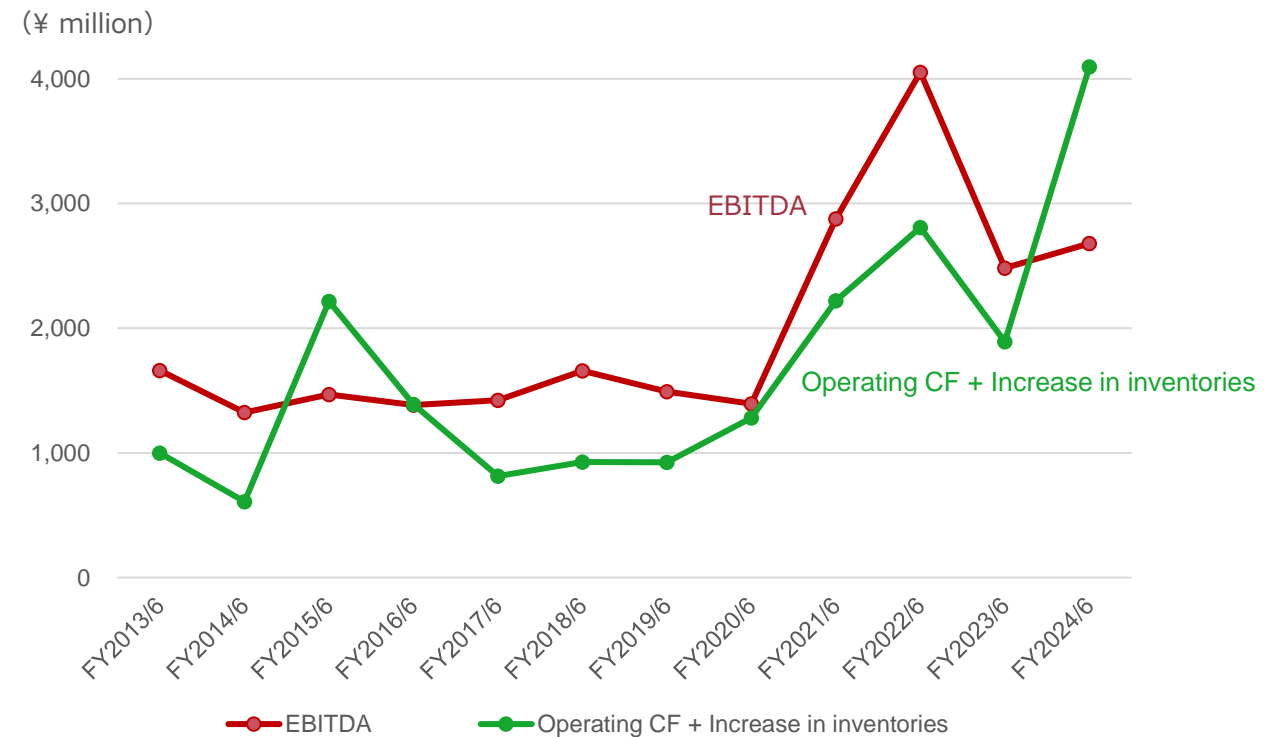
【Reference】 Relationship between Operating Cash Flow and Inventories

- (Operating CF + Increase in inventories) and EBITDA* are correlated
- The volatility of operating CF is dependent on inventories
- Much of our inventory is scrap that is highly liquid

Operating CF



(Operating CF + Increase in inventories) and EBITDA



* EBITDA = Operating profit + Depreciation and amortization + Goodwill

Table of Contents

1. Medium-Term Management Plan (Mid-Term Plan 2029)
2. Management that is Conscious of Cost of Capital and Stock Price
- 3. Growth Strategies by Business**
4. Management Policy · Strategies

Incinerator Bottom Ash + Riddling Ash* Market (Artificial gold veins reproduced annually)

Gold, silver & copper sediment sludge* from incinerator bottom ash + riddling ash

¥ 70 bn

Gold, silver & copper sediment sludge from riddling ash

¥ 7 bn

(According to our research)

Target ratio of the company in FY2029
Sales of Gold, silver & copper sediment sludge from incinerator bottom ash and riddling ash = 1 : 2

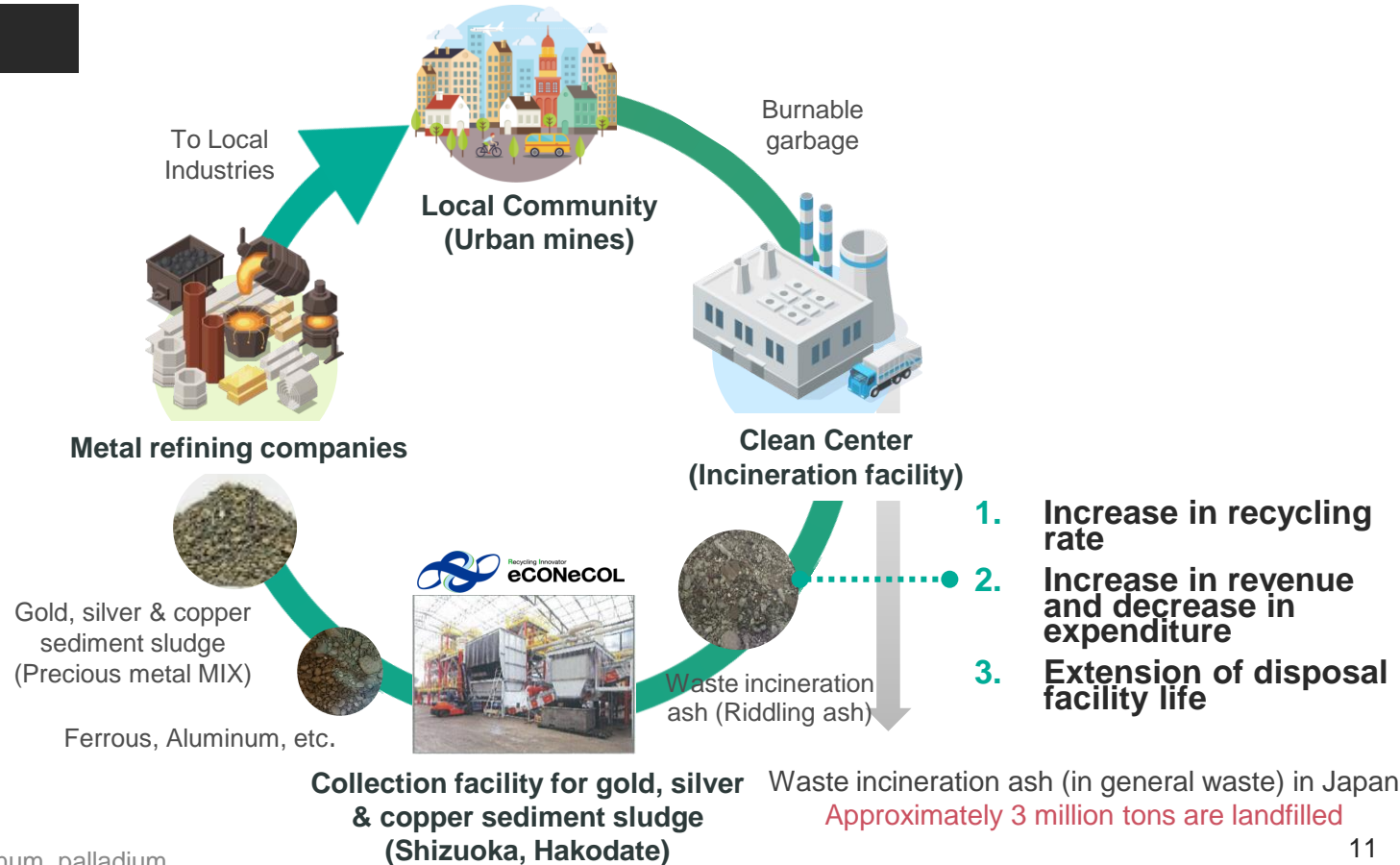
Business Overview and Recent Examples

Example of Fujinomiya City, Shizuoka Prefecture (2024)

Econecol began purchasing approximately 100 tons/year of riddling ash* out of waste incineration ash that had previously been cemented, calcined, etc.

Expected to reduce costs by approximately ¥5.1 million/year

Riddling ash disposal cost reduction of approx. ¥4 million	Gain on sale of riddling ash + approx. ¥1.1 million
--	---



*Riddling ash : ash that falls through the grate of a stoker furnace.

* Gold, silver & copper sediment sludge : concentrate sludge of gold, silver, copper, platinum, palladium

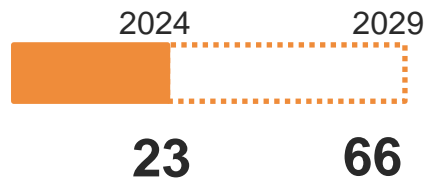
① Collection business of gold, silver & copper sediment sludge from riddling ash

Net sales target: ¥1.2 billion *June/2029

Profit target: ¥0.6 billion *June/2029

At present, we are engaged in business with 23 local governments and plan to engage in business with 20 additional local governments. We are aiming to engage in business with 66 local governments through continued sales activities.

KPI① Number of local governments we do business with



Reference figures

Number of local governments we plan to do business with (Contracts have been signed but operations have yet to begin.) **20** local government

Target market share **17%** (66 facilities/390 local governments)

* 390 stoker furnaces with a processing capacity of 100 tons or more

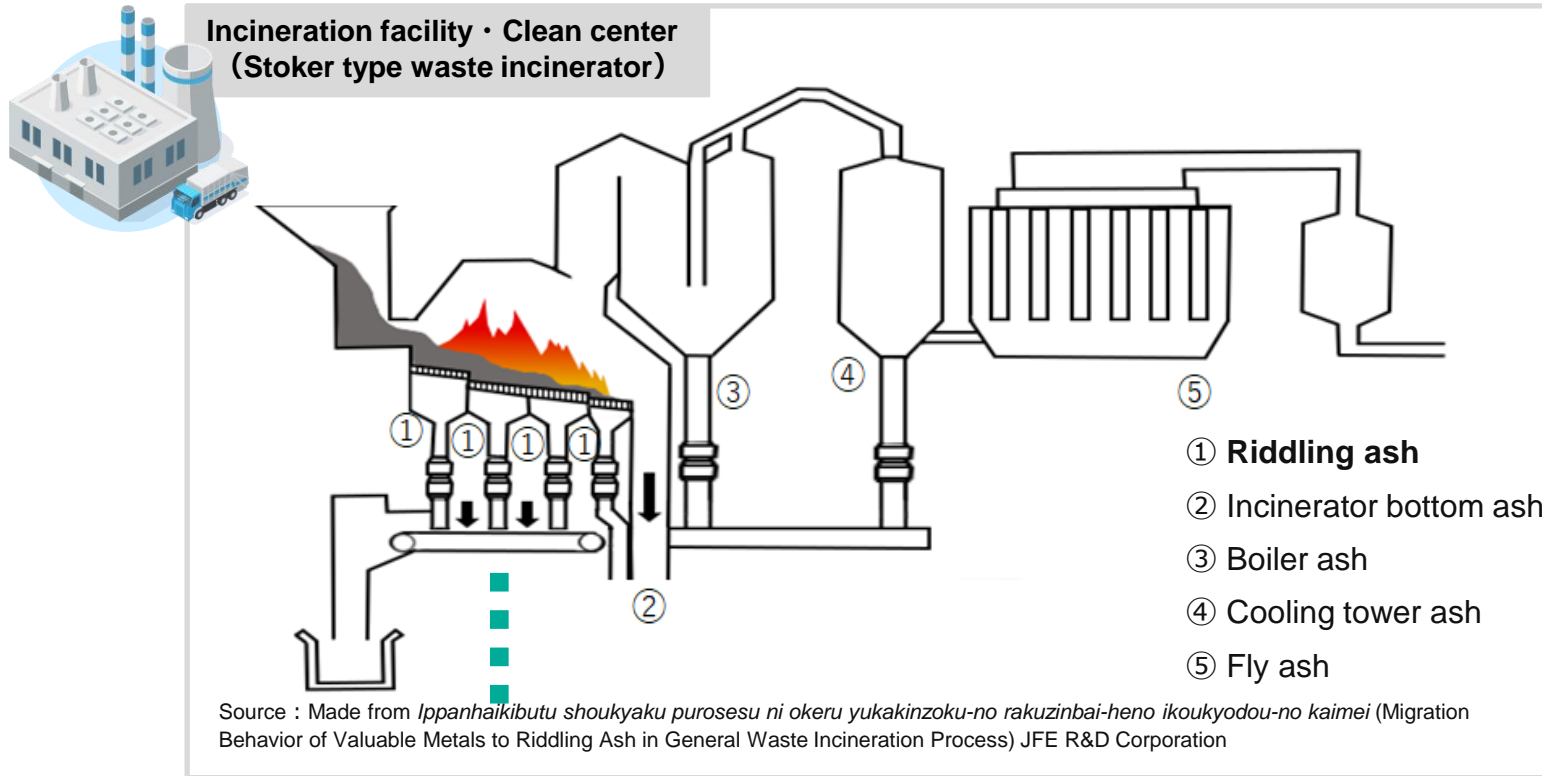
② Collection business of gold, silver & copper sediment sludge from incinerator bottom ash

01 Alliances with companies recycling incinerator bottom ash

02 Alliances with final disposal sites

KPI② Amount of collected gold, silver and copper sediment sludge: **600 t**

【Reference】 What Is Riddling Ash



- Riddling ash is ash that falls through the grate of a stoker furnace
- In a typical stoker-type incineration facility, ① riddling ash and ② incinerator bottom ash are discharged in a combined flow
- Riddling ash can be purchased by sorting out it from the combined ash
- Incinerator bottom ash also contains precious metals, but they are less amount than that can be purchased

Riddling ash
(1~5% out of waste incineration ash)

Contains several grams of precious metals, etc. per ton
(Concentrations vary by region)



Riddling ash →



Collection facility for gold, silver & copper sediment sludge
(Shizuoka, Hakodate)

↓ Residue ash

Landfill or ash melting, etc.

Gold, silver & copper sediment sludge →



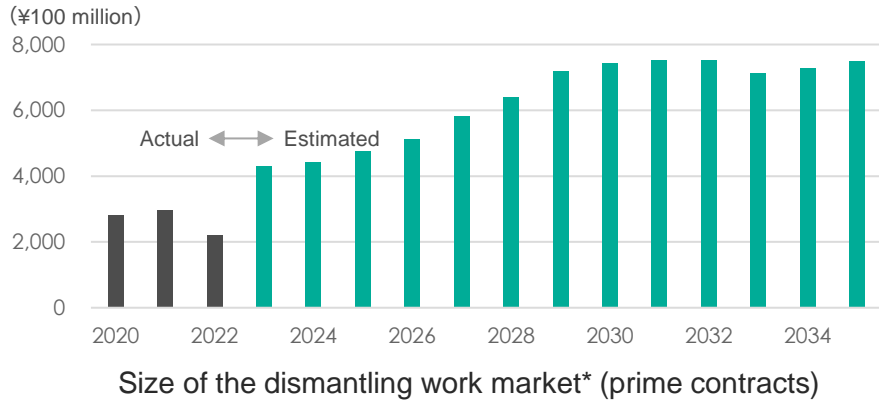
Metal refining companies

↓ Precious metals alone

To manufacturer

* Gold, silver & copper sediment sludge : concentrate sludge of gold, silver, copper, platinum, palladium

The dismantling work market is estimated to grow around **threefold** in the future



- ✓ Buildings constructed in the era of bubble economy have entered the phase of their lifecycle where they are being dismantled.
- ✓ Tapping into **demand for replacement/removal** resulting from the maturation/waning of domestic industries

Establishing a new dismantling company in the Resource Circulation Business



Scheduled to start operation in September-October 2024

Growing demand for the low-carbon recycling of byproducts from dismantling
 → **Providing both resource circulation and dismantling services**

*Actual values from *Kensetsu Koji Sekou Toukei Chosa Hokoku Reiwa 4-nendo zisiseki* (FY 2022 result from report on the Statistical Survey of Construction Work) (Ministry of Land, Infrastructure, Transport and Tourism)
 Estimated values calculated by multiplying the amount of construction investments that were made 50 years ago by 1.5% The amount of investments is from *Reiwa 3-nendo Kensetsu Toshi Mitoshi* (FY2021 Construction Investment Outlook) (Ministry of Land, Infrastructure, Transport and Tourism).

Enhancing functions with the goal of achieving significant topline growth

01 Increasing touchpoints with property information

Expanding the network to the scrap industry, with which we have built relationships, as well as to leasing companies, banks, reuse companies, real estate developers, healthcare consulting firms, etc.

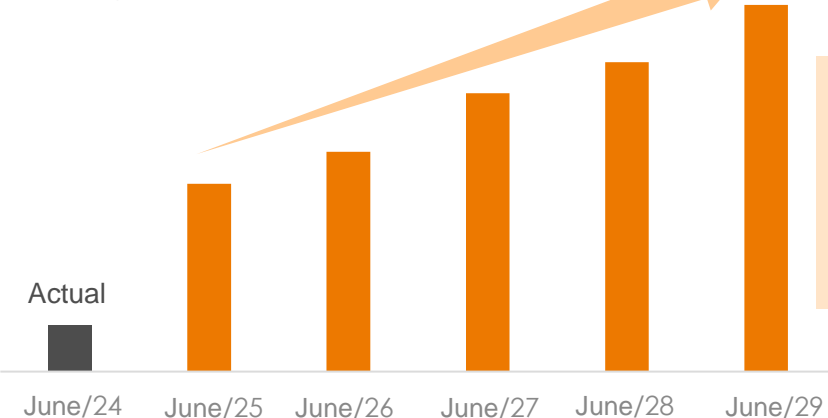
02 Improving construction management capabilities

Increasing qualified personnel to acquire the ability to implement large-scale construction projects

KPI

Number of construction managing engineers:
+28 (June/2024 to June/2029)

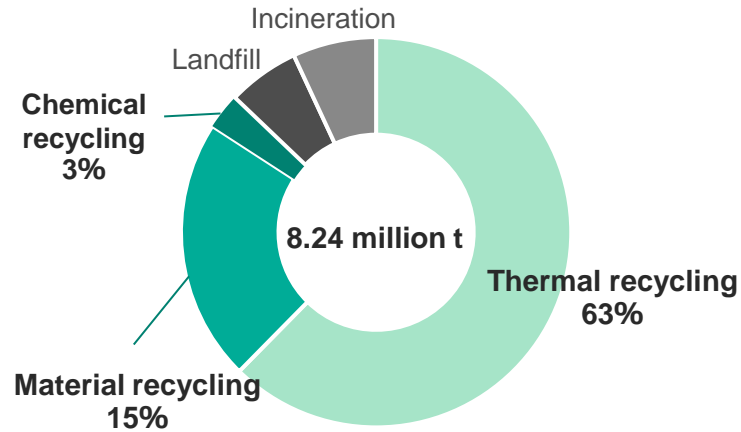
Sales growth projection



Building a track record and increase projects including projects for repeat customers

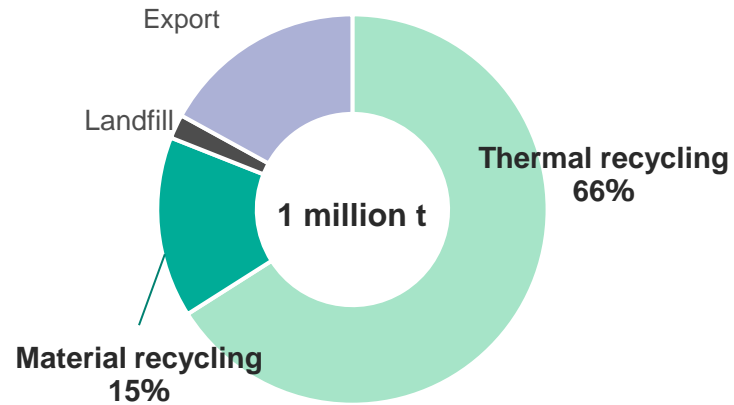
Composition of the current recycling market

Waste plastic



purasutikku risaikuru-no kisotishiki (An Introduction to Plastic Recycling)
Plastic Waste Management Institute

Waste tire



2022-nen hai taiya risaikuru jokyo (Status of waste tires recycling in 2022)
The Japan Automobile Tyre Manufacturers Association, Inc.

Thermal recycling

which currently accounts for over 60%



Shift to

Material recycling
Chemical recycling

Focus points for material recycling

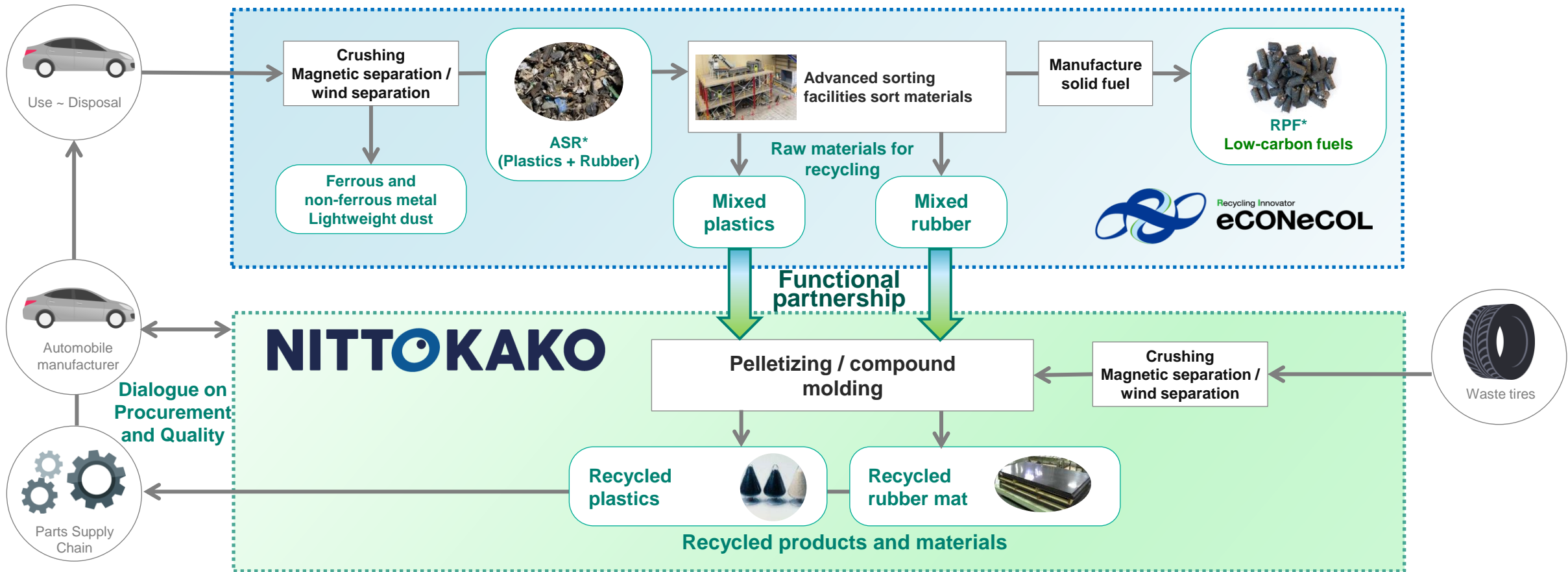
01 Stable procurement of waste materials

02 Advancement of technology to make recycled raw materials

03 Manufacturing and mass production of recycled materials

Resource Circulation ▶ Enhancing the Ability to Meet Market Demand Associated with Regulations Making It Mandatory to Use Recycled Materials

- **The use of recycled materials** is expected to **become mandatory** under the EU End-of-Life Vehicles (ELV) Regulation
- We will fulfill the high level requirements of the arterial supply chain (**stable procurement, quality adjustment and management of substances of concern**) with recycling functions and compounding functions.



* ASR: Automobile shredder residue. Automobile-derived shredder residue that forms after the collection of items to be sorted and processed in advance in accordance with recycling standards for dismantling and crushing companies

* RPF: Refuse derived paper and plastics densified fuel. An eco-friendly fuel that is made by compressing plastic and paper waste as the main ingredients and that can reduce CO2 emissions

【Reference】 Regulation on Circularity Requirements for Vehicle Design and End-of life Vehicle (ELV) Management in Europe (draft)



Key points

- This draft ELV Regulation, which was revised from the ELV (End of Life Vehicles) Directive for four-wheeled vehicles and trucks, has been announced by the European Commission.
- The ELV Regulation mainly requires automakers to ensure the circular design of vehicles, achieve recycling targets and fulfill the extended producer responsibility obligations.
- The regulation **mandates the use of** a certain percentage of **recycled plastics** in new vehicles.

◆ The following is a partial excerpt of the Critical Raw Materials Act.

25%

At least 25% of the plastics used to build a new vehicle must be recycled plastics.



Growing demand for recycled plastics

6.25%

6.25% of recycled plastics shall be from ELVs

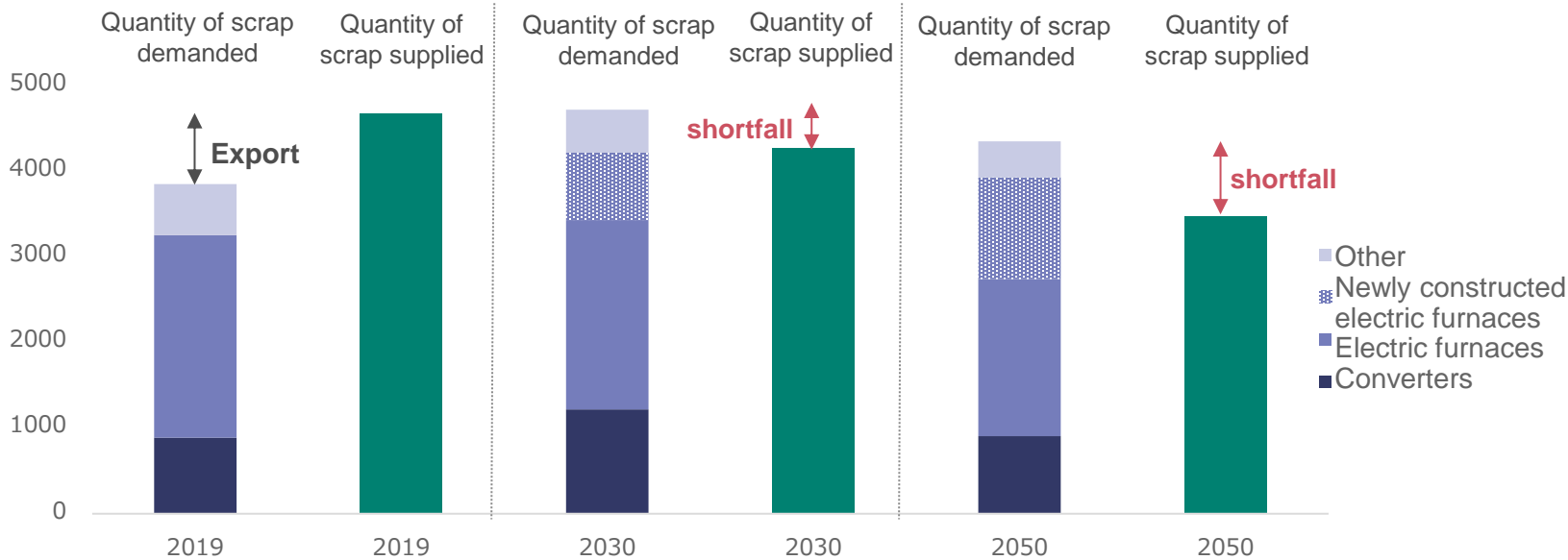


Need to sort and collect plastics from ELVs

【Specific actions to be taken in response to the regulation】

- Automobile manufacturers need to achieve the above 25% and 6.25% targets within 72 months of the regulation coming into force.
- The demand for plastics collected from ELVs will be greater than ever, and there will be a growing need to sort and collect plastics from automobile shredder residue (ASR), which is the final remnant after an ELV is crushed (shredded) and the metals, etc. are sorted and collected.
- There will be demand for compound technologies to improve the quality of the plastics sorted from ASR and to manage the chemicals contained in them.

- While the demand for ferrous scrap is expected to remain brisk in the future amid the trend toward decarbonization, the price of ferrous scrap is expected to remain high in Japan and low overseas for the time being.



The quantity of ferrous scrap demanded in Japan will exceed the amount generated due to **an increase in the electric furnace ratio**

▼

- **Decline in the amount of exported ferrous scrap**
- **Increase in the demand for ferrous scrap in Japan**

* From *Carbon Neutral wo Fumaeta Waga Kuni Kinzoku Sangyo-no Jizokuteki Hatten ni Muketa Chosa* (Survey for the Sustainable Development of Japan's Metal Industry Based on Carbon Neutrality) by Nippon Steel Research Institute Corporation

01

Expansion of commercial distribution in Japan

- Increasing sales volume in Japan by **cooperating with Japanese electric furnace manufacturers** to handle the high price in Japan and low price in other countries
- Establishing a system that will enable the optimal operation of businesses in Japan and overseas in accordance with market conditions

02

Expansion of service businesses

- In **logistics agency services, which are strong**, we will achieve the continued expansion of their scale by increasing personnel and dealing in new products.
- Providing efficient transportation schemes leveraging our ability to stock and ship recycled raw materials at ports

03

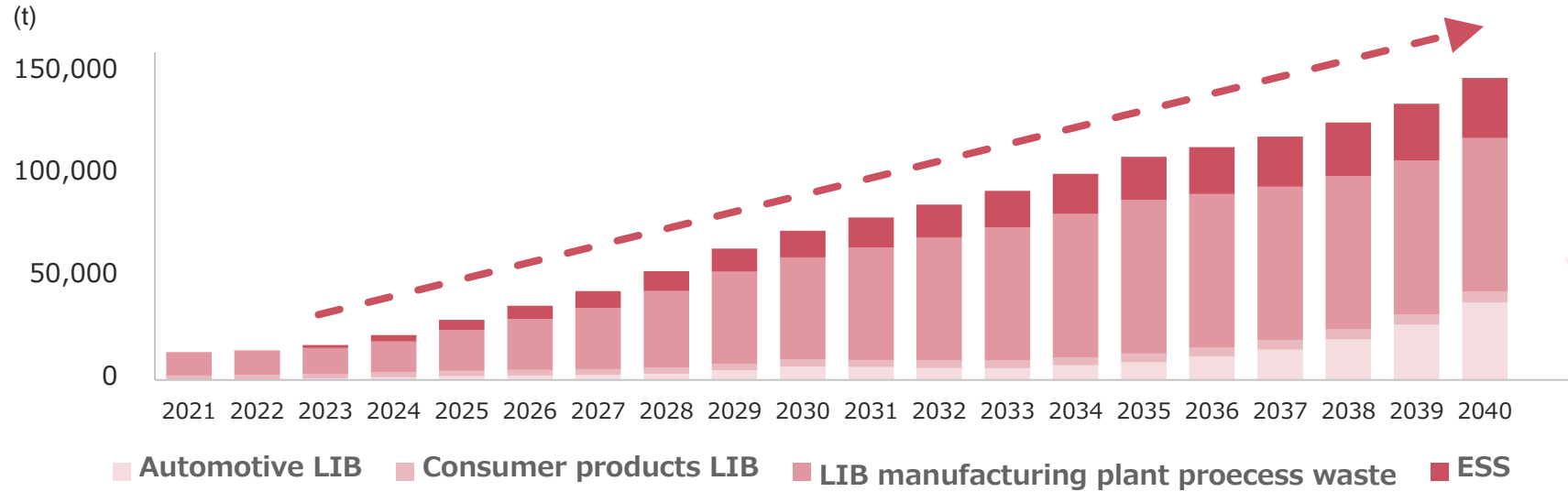
Business investment in overseas countries

- Preparing a business of a certain size in the **Southeast Asian market**, which is expected to grow in the future

LIB Recycling Business ▶ Market Size and Plant Expansion Plans



- Process waste + Waste portable LIB + LIB collected from local government + waste ESS (Energy Storage System) + LIB from waste EVs
→ Respond flexibly to market growth



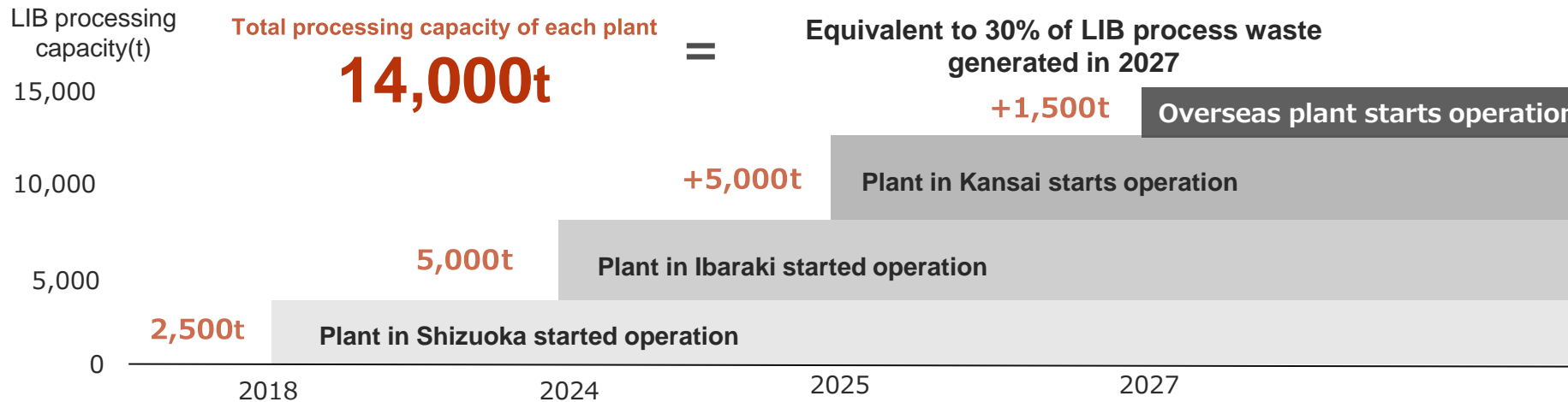
2023→2040
Domestic
market growth

8.6 times

Focus on LIB collection from process waste and consumer products such as used portable LIB until the quantity of LIB generated from waste EVs and ESS increases after 2035.

*Market forecast prepared by our company

Expand production capacity to achieve the top share in a growing market



Future Initiatives

- ① Expansion of procurement capacity of process waste and waste LIB
- ② Expansion of BM production base
- ③ Hydrometallurgical demonstration plant starts operation

Table of Contents

1. Medium-Term Management Plan (Mid-Term Plan 2029)
2. Management that is Conscious of Cost of Capital and Stock Price
3. Growth Strategies by Business
4. **Management Policy · Strategies**

CORPORATE IDENTITY
Corporate Philosophy

**「Creative Company」 「Circular Company」
「Company Pursuing Virtue」**

The key values of the Envipro group, and its corporate DNA

No timeline



**Contribute to create
a sustainable society**

The Envipro group's significance in the world, and its purpose and aspirations on a defined timeline

Limited time until 2050

MISSION




Lead a circular economy

CONCEPT
Strategy Concept

IMAGE
Organizational Image

A disciplined group of autonomous individuals with emergent abilities



Identifying Materiality to realize the mission

Long-term trend

GX

Green Transformation

DX

Digital Transformation

Medium and Short-Term Trends



Demand for the establishment of a green value chain



Growing international competition for resources



Surfacing social issues related to waste plastics



Data utilization in non-IT businesses



Increase in utilization of IoT, AI, Robotics



Increasing competition for human resources

Identifying Materiality

- Increasing demand for green materials in the supply chain

① Increasing demand for ferrous scrap due to building of additional electric furnaces

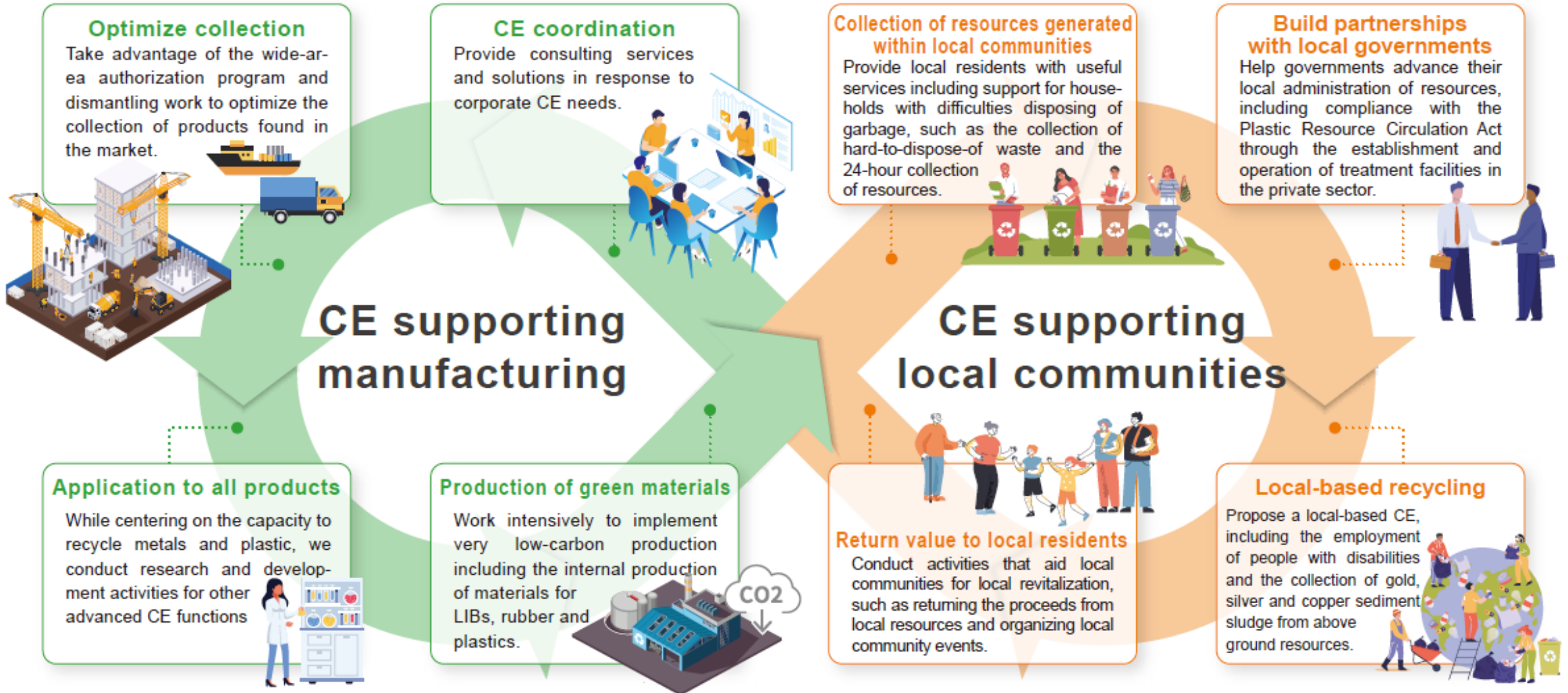
② Increasing demand for nonferrous metals and minor metals due to electrification

③ Promotion of advanced resource circulation of waste plastics

- Reducing labor required in the production process, promotion of data utilization in business activities
- Investment in human resources to promote business activities

Strategy Concept **Lead a circular economy**

Achieve a number of specific examples of “CE supporting manufacturing” and “CE supporting local communities” ahead of competitors. Take the initiative to increase the momentum of the circular economy across the country and contribute to a sustainable society.

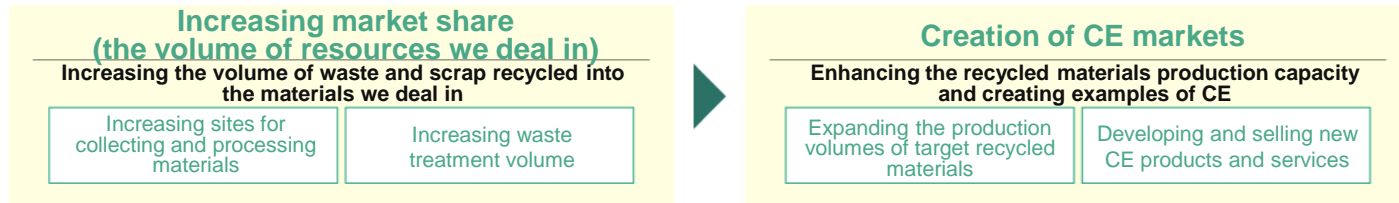


Overview of the Strategies for Leading CE

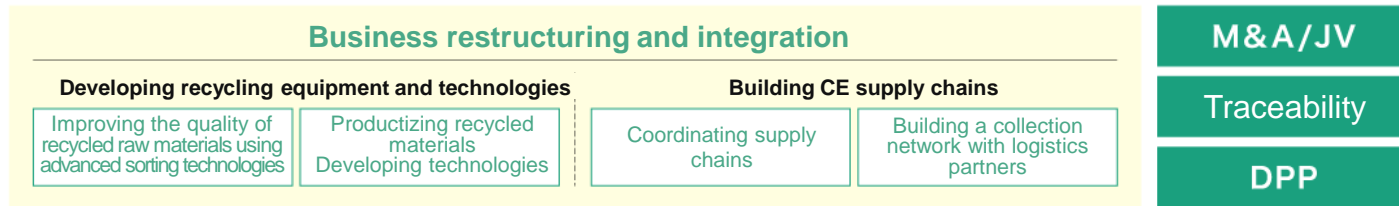
Increasing market share in Japan, creating and expanding businesses in new CE markets, and taking on challenges in overseas growth markets

Domestic CE business strategy

Direction of the market and goals



Actions for achieving the goals



Overseas CE business strategy

01 | Outbound

Deploying the same business models used in Japan in growth markets including Southeast Asia

02 | Inbound

Expanding the business in Japan using leading-edge information from Europe and other regions that are leaders in environmental businesses

DX Strategy

- Developing a traceability management system to drive CE
- Introducing robots/AI for cost reduction, etc.

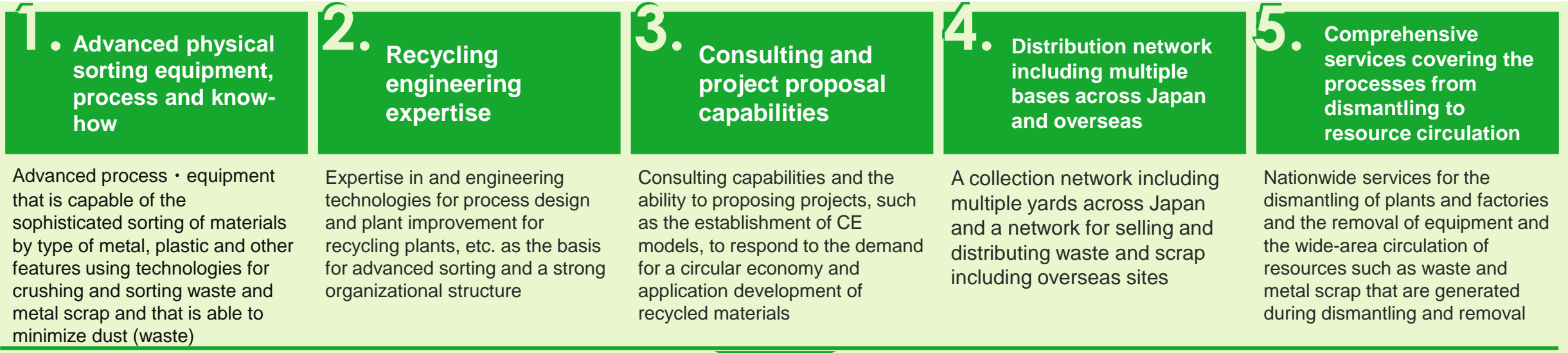
Improving fixed cost productivity
Creating new sources of sales

Human Resources Strategy

- Recruiting and developing human resources capable of proposing solutions for the realization of CE
- Securing human resources to accelerate DX and overseas business

Enabling the corporate culture and Corporate Philosophy to become entrenched
100 business promoters

Our Strengths and advantages



Direction of focus strategies

Technologies for manufacturing recycled materials and analysis and quality control

Manufacturing technologies and quality control know-how which improves the quality of materials sorted from waste to make them into recycled materials that can be used as raw materials

Systematic collection capabilities

Building a stable wide-area system for collecting raw materials to be recycled by building partnerships with other companies, establishing CE schemes including reverse logistics systems and other activities.

Creating a CE market and securing a position in the market

Envipro's Target Materials

Produce recycled materials of the quality required by manufacturers, etc. for the following target materials



Base Metal

Fe Al Cu

Ferrous, Aluminum, Copper

Our Business

- Ferrous and nonferrous metals CE
- Small home appliances and home appliances CE
- Dismantling CE



Precious Metal

Au Ag Pt Pd

Gold, silver, platinum group (platinum, palladium)

Our Business

- Collection of gold, silver and copper sediment sludge from incineration ash
- Electrical and electronic equipment CE



Minor metal

Li Ni Co

Lithium, Nickel, Cobalt

Our Business

- LIB to LIB (Lithium-ion battery CE)



Rare Earth

Nd Dy

(Heavy rare earth) Neodymium, Dysprosium

Our Business

- Wind power generation motors CE
- High magnetic motors CE



Polymer

C

Plastics, Rubber

Our Business

- Tire to Tire (Tire CE)
- Rubber CE
- Plastics CE

Home appliances market	●	●	●	●	●
Automobiles market	●	●	●	●	●
Waste incineration ash market	●	●	●	●	●
Semiconductors market	●	●	●	●	●
Packaging materials market	●	●	●	●	●
Building materials market	●	●	●	●	●

【Reference】 Revisions to the Critical Raw Materials Act in Europe



Key points

- Benchmarks for enhancing the domestic production capacity in Europe (extraction, processing and recycling) and benchmarks for each critical raw material were set.
- **The use of secondary critical raw materials was considered in the public procurement and selection criteria, and it was recommended that manufacturers also use secondary critical raw materials as well.**
- Suppliers were diversified, based on the assumption that the region will remain reliant on imports.

◆ The following is a partial excerpt of the Critical Raw Materials Act.

25%

Strategic raw materials recycling capacity compared to the EU's annual consumption of these raw materials



Acceleration of the development of recycled materials

65% or less

Supplied from a single country outside the EU (by 2030)



Continued promotion of closed resource loops

List of critical raw materials

Copper, nickel, cobalt, lithium, platinum group metals, heavy rare earth elements, manganese, phosphorus, natural graphite

Antimony, arsenic, bauxite, pearlite, beryllium, bismuth, boron, coking coal, feldspar, fluorspar, gallium, germanium, hafnium, helium, light rare earth elements, magnesium, niobium, phosphate rock, scandium, silicon metal, strontium, tantalum, titanium metal, tungsten, vanadium

List of critical and strategic raw materials

Copper, nickel, cobalt, lithium, platinum group metals, rare earth elements for magnets, manganese, natural graphite

Bismuth, boron, gallium, germanium, magnesium metal, silicon metal, titanium metal, tungsten

Raw materials highlighted in red are dealt in by the Envipro Group

* **List of critical raw materials:** Materials whose supply risk and importance to the EU economy were found to exceed threshold levels as calculated based on data for the past five years

* **List of critical and strategic raw materials:** The minerals among the critical raw materials which are related to important technologies (the twin transition, aerospace and defense) and ones whose production volumes are difficult to increase are positioned as critical and strategic raw materials.

Organizational Mission

Create a Good Organizational Culture

Form a Strong Corporate Culture

Organizational Image

A disciplined group of autonomous individuals with emergent abilities

KGI		KPI	Progress (Jun.2024)	Target (Jun.2028)	
Creating 100 business promoters	Recruitment	Mid-career employment and new graduate recruitment	Recruitment of business promoters	18 people*	30 people
			New graduate recruitment	14 people*	40 people
		Diversification of recruitment methods	Recruitment of referred and retired personnel	10.3% of all employees	20% of all employees
	Development	Personnel development	Development of business promoters	28 people*	40 people
			Level of satisfaction with business schools	95.3%	100%
		Sharing of knowledge within the Group	Joy of development	69.4% (Jun.2023)	90%
	Retention	Employee satisfaction	Retention rate	89.4%	95%
			Annual wage increase and increase of base pay	5.62%	Over 3%/year
		Active roles for diverse human resources	Ratio of females in managerial positions	8.7%	20%

* Total number of people in FY2023 and FY2024 is stated

Important notes about this material

This material is intended to provide investors with information to understand the current status of ENVIPRO HOLDINGS Inc.

Although the contents in this material are described based on generally recognized socio-economic situations, etc., and certain assumptions that our company regarded as reasonable, they may change without prior notice of any kind because of the change in the business environment.



Inquiry desk about this material and IR

Corporate Management Department,
ENVIPRO HOLDINGS Inc.

TEL +81-544-21-3160

URL <https://envipro.jp/en/>