

May 31, 2022

The Fourth Mid-term Management Plan of the Nihon Parkerizing Group

 日本パーカライジング株式会社
NIHON PARKERIZING CO.,LTD.

Contents

Review of the 3rd Consolidated Mid-term Management Plan and the Group's Strengths

- Achievement of key financial targets (numerical targets)
- Review of the 3rd mid-term management plan (key policies)
- Market outlook and business direction
- Strengths of the Nihon Parkerizing Group

the 4th Consolidated Mid-term Management Plan

- Positioning of the Group's the 4th mid-term management plan
- Overall view of the 4th mid-term management plan
- Specifying the key issues (materiality) of the Group
- Six key issues
- Six key issues and its initiatives in the mid-term plan
- Basic policies in the 4th Consolidated mid-term plan
- Growth strategies to achieve our Vision2030
Chemicals/processing/equipment businesses
- Cultivating existing markets and developing new businesses
- Expanding global business
- Enhancing research and development
- Strengthening quality control and quality assurance
- Improving profitability of existing businesses
- Initiatives for corporate innovation
- ESG and SDGs initiatives
- Initiatives for achieving carbon neutrality
- Development and sale of environmentally friendly products
- Capital investment plans
- Basic policy on capital and shareholders returns
- Consolidated numerical targets

Reference materials

- Financial highlights
- List of main affiliated companies

Review of the Consolidated 3rd Mid-term Management Plan and Strengths of the Nihon Parkerizing Group

Achievement of Key Financial Targets (Numerical Targets)

While the results for the period ending March 2022 (the final year of the 3rd mid-term management plan) improved compared to the preceding year, we were not able to achieve the numerical targets due to adverse effects of factors such as the COVID-19 pandemic, the fall in auto output due to the shortage of semi-conductors, the rising prices of raw materials, and Russia's invasion of Ukraine.

	A	B	C	D	C - D
	March 2020	March 2021	March 2022	March 2022	Difference
	Actual	Actual	Actual	Target	
S a l e s	119,028	99,918	117,752	133,500	-15,748
Operating income	12,601	10,681	13,370	19,000	-5,630
Ordinary income	15,723	14,197	17,003	22,000	-4,997



Review of the 3rd Consolidated Mid-term Management Plan (Key Policies)

The business base is halfway to being strengthened. For sustainable growth, it is essential to transform to a leaner corporate structure, develop highly functional, next-generation high-value-added products and services, expand overseas business, and expand the revenue base by developing new fields.

Results

Issues

Growth strategies to win in global competition	<ul style="list-style-type: none">● Group collaboration in Vision2030● Ensured safety and profitability in COVID-19 pandemic● Strengthened business ties in Japan and overseas● Ongoing recruitment of non-Japanese personnel	<ul style="list-style-type: none">● Develop new markets/fields● Develop environmentally friendly products and services● Improve profitability of existing businesses● Enhance quality control system● Improve productivity of administrative and management work
Optimization of Group management	<ul style="list-style-type: none">● Enhanced structure for supporting Group companies in Japan and overseas	<ul style="list-style-type: none">● Build the optimal supply chain● Review global manufacturing structure● Increase personnel exchanges within Group● Further improve Group collaboration
Governance innovation	<ul style="list-style-type: none">● Introduced executive officer system● Strengthened Group governance and compliance	<ul style="list-style-type: none">● Build a system for promoting sustainability-oriented management● Enhance risk management structure on a Group level● Improve capital efficiency

Market Outlook and Business Direction

Economic environment

- In the medium to long term, we will face drastic changes in the business environment surrounding our Group due to a sharp increase in the production of electric vehicles, a fall in vehicles with internal combustion engines, and an increasing number of new materials as alternatives to steel as society aims for carbon neutrality.
- In addition, the impact of the COVID-19 pandemic is waning, and business results are recovering. However, the business outlook remains uncertain due to factors such as the decrease in auto output resulting from a shortage of semiconductors, supply chain disruptions due to the invasion of Ukraine, the rising price of fuel and raw materials, and the depreciation of the yen.

Social issues

- Global warming
- Environmental destruction
- Health and welfare
- Poverty

Changes in the market and technology

- Development of next-generation vehicles
- Development of new materials that are alternatives to steel
- Development of alternative technologies
- More stringent environmental regulations

Business direction for the Group

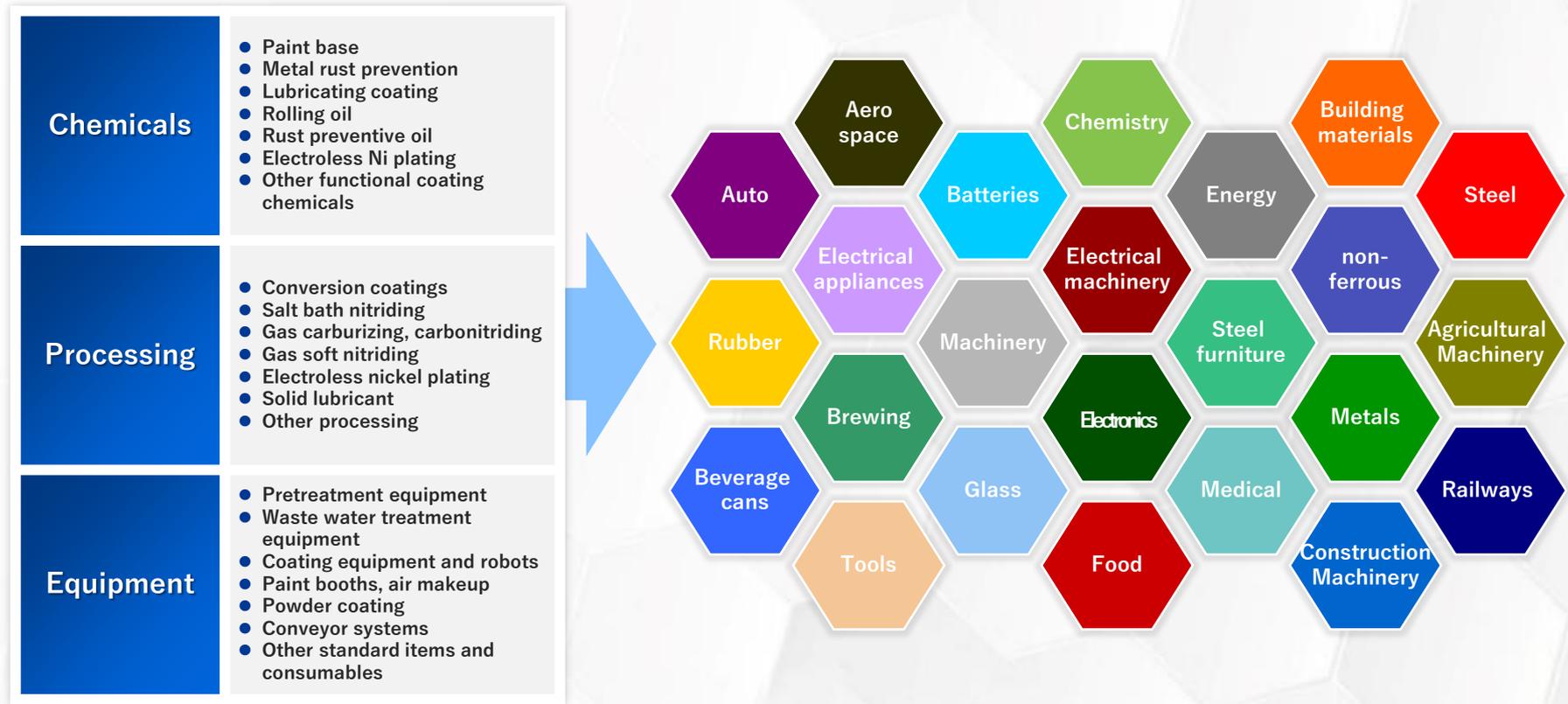
We will strengthen the business fundamentals by cultivating existing fields through horizontal deployment, reactivation of existing business, and improving profitability for now. At the same time, we will develop new markets and fields over the next ten years.

- Develop products and services for growing markets such as electric vehicles, electrical/electronics, and life sciences
- Develop/explore new fields outside the auto and steel industries
- Expand global rollout
- Develop products and services that contribute to reducing the environmental load and SDGs
- Further strengthen the management to improve profitability and the corporate structure

Strengths of the Nihon Parkerizing Group ①

The Group provides a wide range of products and services to diverse industries

The Nihon Parkerizing Group has enhanced its technical capabilities in the field of metal surface treatments over many years. Currently, we develop and provide customers with technology that adds a diverse range of functions to the surface of substrates. For example, they include sliding property, thermal resistance, wear resistance, insulation, conductivity, hydrophilicity, water repellence, heat dissipation, insulation, and joining of dissimilar materials.



Strengths of the Nihon Parkerizing Group ②

Founded in 1928, Nihon Parkerizing expanded into Taiwan in 1965 and has since developed its business globally. It has manufacturing bases in 12 Southeast Asia, China, Europe, and North America. Our network allows us to meet the needs of our customers swiftly and efficiently.

Technical expertise

Wide range of products and services

Working closely with customers

Always on your side

Global rollout

Network spanning 12 countries

Utilizing the Group's capabilities to provide solutions for social issues globally

The 4th Consolidated Mid-term Management Plan

Positioning of the 4th consolidated mid-term management plan

Corporate philosophy

We are contributing to the effective use of limited resources on planet Earth, creating new value of resources through surface modification of all kinds of materials, preserving the global environment, and realizing an affluent society.

Vision 2030

To create new value and contribute to the creation of a sustainable society through surface modification technology

Sustainability-oriented management

Growth strategies

Solving social issues

Corporate innovation

Foundation to March 2022

First growth stage focusing on metal surface treatments

April 2022 to March 2025

Building a foundation for achieving our Vision2030

To March 2031

Ensure the Group's continued growth through solving social issues and gaining the trust of customers and society

Overall View of the 4th Consolidated Mid-term Management Plan

The 4th consolidated mid-term management plan specifies the key issues that are a priority for the Group to tackle and establishes a base for realizing our Vision2030 by focusing on growth strategies, solving social issues and corporate innovation.



Specifying the key issues (materiality) of the Group

We have specified six key issues that are a priority for the Group as we aim to realize a sustainable society. The entire Group will promote sustainability-oriented management, actively seeking solutions for social issues through our business activities.



As a specialist in surface modification, we will actively seek solutions to social issues to create new value and continue to grow and develop together with society.

Key issues (materiality)

1 Creating a richer society through surface modification technology



● Developing new products and technology that is environmentally friendly

We have been developing new products and services such as various chemicals for electric vehicles and lighter materials. These chemicals do not contain harmful chemical substances, equipment that reduces the environmental load and low-temperature treatment technologies. We will reduce the load in our customers' manufacturing processes with the technologies above and contribute to preserving the environment.

● Developing new fields making the most of surface modification technology

By utilizing our technical expertise in surface modification to develop new fields through expanding into non-metal, multi-functional and new markets, we will contribute to resolving a wide range of social issues.

● Promoting open innovation

We will promote joint research with various companies and research institutions, academia and government in Japan and overseas to engage in technical development from a new perspective and create new value.

2 High value-added products and services for customers around the world

We will strengthen our research and development, production and quality control systems, creating a global organization that can swiftly supply high added-value products and services that meet the needs of society and customers, providing solutions that contribute to solving social issues faced by our customers throughout the world.



3 Ensuring a safe and secure workplace

We will continue to work on minimizing dangerous and hazardous operations in manufacturing and processing processes to improve safety and engage in safety education and health promotion initiatives to create safe and secure working environments for all people working in the Group.



4 Creating a corporate culture that respects diverse values and turns them into strengths

● Utilizing diverse human resources

We will realize a workplace that utilizes the talents of all people who work in the Group and creates a workplace where people feel motivated and fulfilled. To achieve the goal above, we will promote diverse working styles, recruit and train global human resources, and promote the recruitment of women, people with disabilities, non-Japanese people, mid-career and senior worker.



● Respect for human rights

We continue to respect human rights, establish rules to prohibit discrimination and harassment and build good industrial relations to create a corporate culture that respects the rights of all people in all countries and regions.

5 Taking responsibility for creating a sustainable society

● Building a sustainable supply chain

We will build cooperative relationships with customers and suppliers, engaging in initiatives to build systems to manage resources, production, and supply to realize a circular society and build a sustainable supply chain.



● Contributing to reducing the environmental load

We will contribute to reducing emissions of CO2 and other greenhouse gases and hazardous chemicals, wastewater and industrial waste reduction, renewable energy utilization, and other initiatives to reduce the environmental load.



6 Initiatives to ensure the continuing integrity of the Group

● Faithful and honest corporate management

To achieve sustainable growth and improve mid to long-term corporate value, we aim to ensure full disclosure of information, including non-financial information, and good communication with all stakeholders, including shareholders, as part of our transparent management.



● Improving risk management

We will conduct appropriate risk assessments to identify various risks anticipated in business and build a system to manage risks according to risk level to reduce the risk of accidents and disasters and respond to changes in the business environment.

Six key issues and key initiatives in the mid-term management plan

Together the Group will tackle the key issues as we aim for a sustainable society

Key issues (materiality)	Main initiatives in the 4 th Group mid-term management plan
1 Creating a richer society through surface modification technology	<ul style="list-style-type: none"> ● Development and sales of products to reduce the environmental load ● Development and sales of products for electric vehicles ● Expanding application of surface modification technology into new markets other than the auto and steel industries
2 High value-added products and services for customers around the world	<ul style="list-style-type: none"> ● Research and development in fields other than metal rust prevention treatments ● Development of products and services that contribute to SDGs ● Strengthening quality control and the quality assurance system to ensure the supply of high-quality products and services
3 Ensuring a safe and secure workplace	<ul style="list-style-type: none"> ● Safety and environmental initiatives on a Group level ● Initiatives to eliminate occupational and traffic accidents ● Eliminating dangerous and hazardous work, and continuously improving the work environment
4 Creating a corporate culture that respects diverse values and turns them into strengths	<ul style="list-style-type: none"> ● Recruitment of women, people with disabilities, non-Japanese, mid-career and senior workers ● Increase ratio of women in management ● Establish a working style and workplace environment that enables a diverse workplace to flourish
5 Taking responsibility for creating a sustainable society	<ul style="list-style-type: none"> ● Thorough management of chemical substances in products ● Ensure 100% compliance by suppliers with the Green Procurement Guidelines, and continuously reduce energy intensity. ● Promotion of initiatives for stable procurement and stable supply through multi-sourcing and business continuity planning (BCP).
6 Initiatives to ensure the continuing integrity of the Group	<ul style="list-style-type: none"> ● Standardization of key Rules at each company to strengthen Group governance ● Continue Group-wide initiatives on education and awareness of compliance ● Building a close relationship and collaboration with all stakeholders

Contributing to the achievement of Sustainable Development Goals (SDGs)



Basic policy in the 4th Consolidated mid-term management plan

To achieve our Vision2030, the Group will cultivate existing business, develop new business and expand global business in all segments, work to find solutions to environmental problems and other social issues, and increase our corporate value.

Growth strategies to achieve our Vision2030

- Cultivate existing business
- Develop new business
- Expand global business
- Strengthen research and development
- Strengthen quality control and quality assurance
- Improve profitability of existing business
- Examine potential M&A

Contributing to solving social issues

- Expanding sales of environmentally friendly products
- Research and development related to SDGs
- Appropriate management of chemical substances
- Initiatives to reduce the environmental load
- Respect for human rights

Corporate Innovation

- Strengthening Group governance
- Promoting diversity
- Developing global human resources
- Digital transformation

Growth strategies to achieve our Vision2030/Chemicals segment

*Achieve the top share of sales globally
in the surface treatment chemicals market!*

Find solutions for environmental issues by improving energy efficiency, developing and commercializing chemicals that contribute to decarbonizing society, and chemicals that reduce the environmental load, such as chromium-free chemicals. Develop new businesses globally in various fields such as electrical/electronics, non-ferrous and life sciences.

- **Product development for electric vehicles**
(Durability, sliding property, improving energy efficiency through insulation, improving functionality)
- **Developing new markets other than the auto and steel industries**
(Electrical/electronics, non-ferrous metals, life sciences, and more)
- **Expanding sales of environmentally friendly products**
(Chromium-free, phosphorous-free, reducing sludge, reducing load of wastewater treatment)
- **Development and sales of diverse functional coatings other than metal surface treatment chemicals**
- **Expanding business in overseas**

~ Providing surface treatment chemicals, the latest knowhow, and technical support in a variety of industrial fields ~



Electronics



Aerospace



Non-Ferrous



Transport
Machinery



Construction
materials



Metal Processing
rust prevention



Steel



Medical

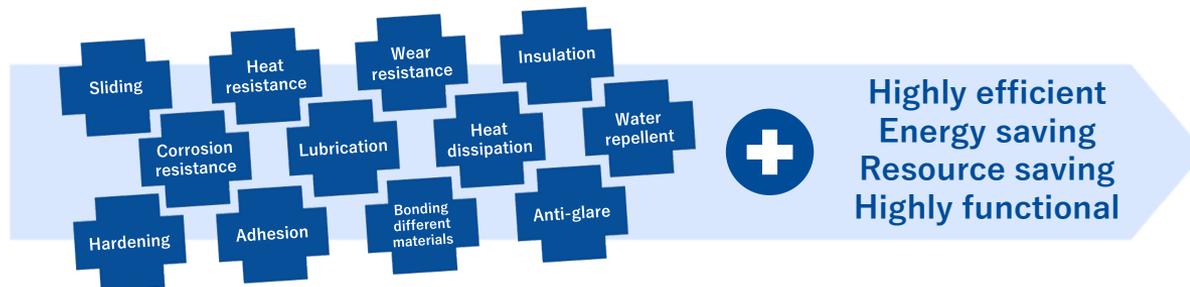
Growth strategies to achieve our Vision2030/ Processing segment

*Gain worldwide recognition
and be the most reliable partner to our customers.*

Strengthen ties with mega-suppliers targeting essential parts for electric vehicles (BEV, HEV, PHEV) as demand will continue to increase in this area, further strengthening business ties in Japan and overseas to reactivate business in existing fields and develop new fields globally to reinforce our business foundation.

- Respond to requirements of next generation automobiles
- Gain orders for key parts for electric vehicles (BEV, HEV and PHEV)
(sliding property, insulation, wear resistance, etc.)
- Develop applications for next generation automotive technology
(Anti-glare, heat dissipation, dissimilar material joint, etc.)
- Develop new business other than automotive
(construction machinery, construction, robots, aerospace, etc.)
- Strengthen sales operations at key overseas bases (Thailand, North America) and gain customers other than Japanese companies
- Expand services that reduce the environmental load (low temperature treatments, etc.)
- Reactivate existing fields through lateral deployment and in-house production

~ Adding diverse functions to contribute to reducing the environmental load ~



Growth strategies to achieve our Vision2030/ Equipment segment

As a general engineering company with our chemicals business, we provide solutions for customers in various industries, from automotive to general industry.

We will expand business in the growing overseas markets and develop IoT equipment control systems and environmentally friendly products to differentiate ourselves from our competitors and increase profits, building a foundation for sustainable growth.

- Increase added value through joint selling of equipment and chemicals (Zirconium conversion coating, CHEMICON)
- Develop and commercialize IoT equipment management systems and environmentally friendly products (PARKER LEAPS, DRYCUBE, etc.)
- Expand sales of high value-added products (Ionics products etc.)
- Enhance equipment maintenance business
- Expand business in growing markets overseas

~ Regardless of equipment scale and industrial field, we provide turnkey solutions required for painting and surface treatments ~



Pretreatment



E-coat



Painting robot



Powder coating equipment



Painting booth
Air makeup unit



Ovens



Conveyor systems



Wastewater treatment



Quality and production control

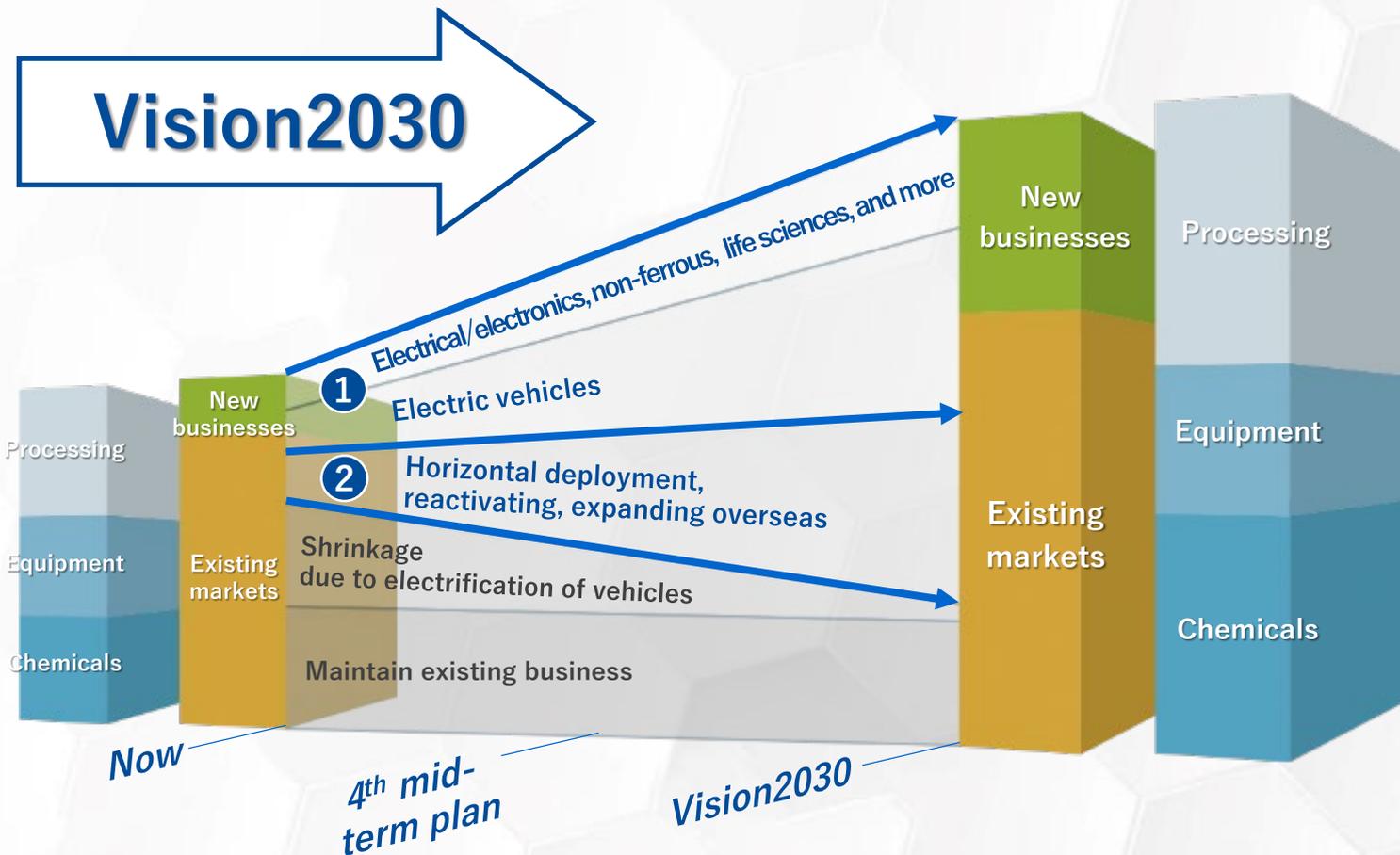


Prefabricated booth
Filters
consumables

Cultivating existing markets and developing new fields

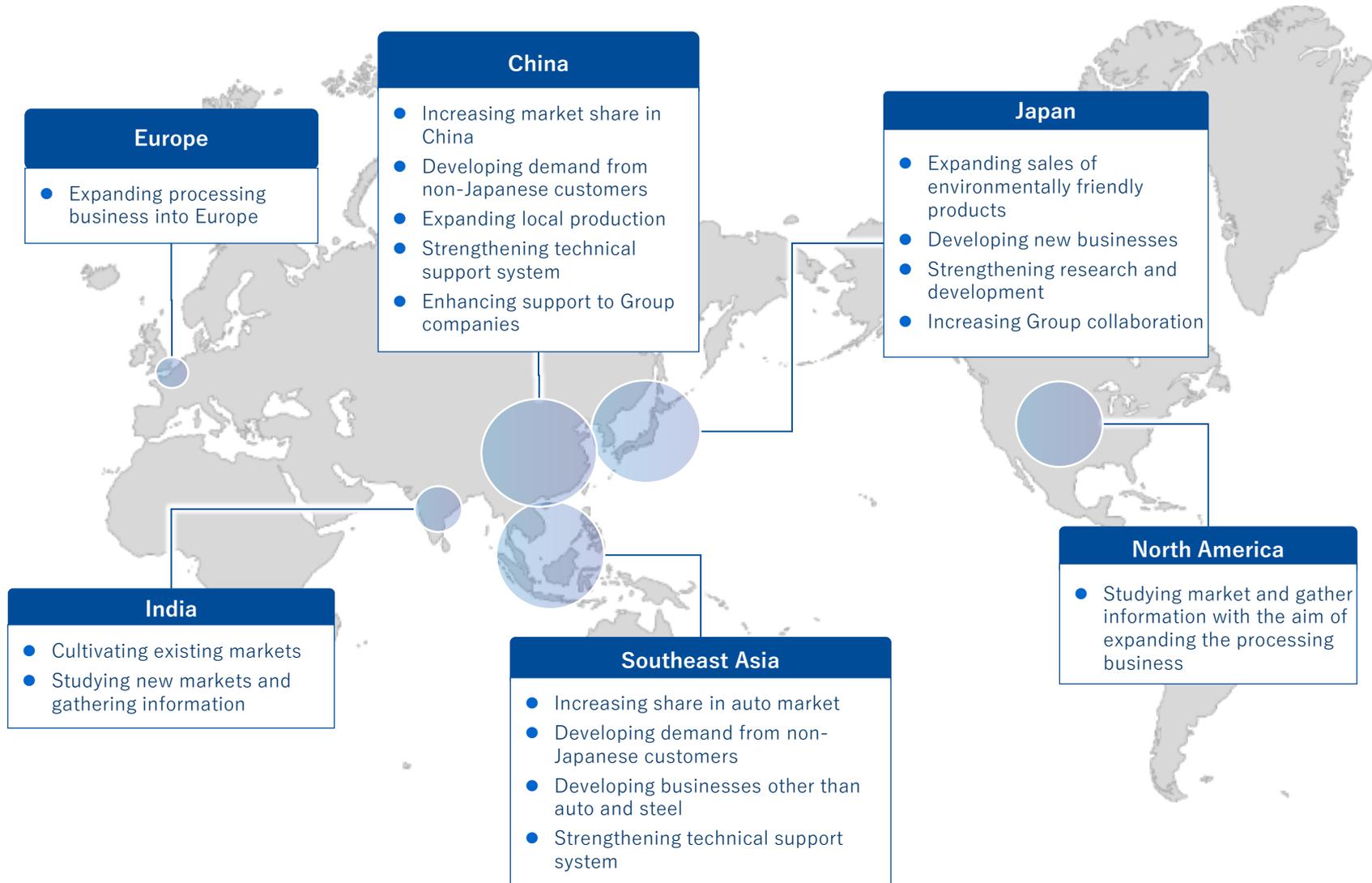
Image

- ① Develop products and services for growing fields such as electric vehicles, electrical/electronics, non-ferrous, and life sciences
- ② Horizontal deployment, reactivating business, expanding overseas



Expanding global business

Expand business in key markets, including Japan, China, Thailand and North America.
Explore markets and share information to expand in overseas markets



Strengthening research and development

Promoting R&D to develop new businesses

- Develop environmentally friendly products (chromium-free, phosphorous-free, reducing sludge, reducing load of wastewater treatment, and more)
- Develop products and services for EV parts (sliding property, durability, wear resistance, and insulation to improve energy efficiency)
- Diversify technical development in fields other than metal corrosion prevention treatments

Function (examples)	Application (examples)
Heat dissipation ⇄ heat shielding	Engine parts, heat sink, roofing materials
Insulation ⇄ conductivity	Motor parts, electromagnetic shielding material, electrical system materials
Adhesion ⇄ detackification	Rubber, resin-metal composite materials, adhesive materials, laminates
Hydrophilicity ⇄ hydrophobic, oil repellent	Heat exchangers, stain resistant wall materials
Low friction ⇄ high friction	Power train, clutch, slide rail
Hardening ⇄ softening	Sliding parts, forging parts
Rust conversion ⇄ Repair and rustproofing	Weathering steel, repair materials for building materials
Other	Anti-fingerprint steel sheet

Adding diverse functions to a variety of substrates



CRL expansion plan (opening scheduled for 2024)



Strengthening quality control and quality assurance

The entire Group will strengthen quality control and quality assurance to provide products and services that have the trust and satisfaction of our customers.

Chemicals business

- Promote quality assurance initiatives through the risk management system
- Standardize processes in our factories on a global level
- Continuously implement quality education such as through Quality Strengthening Months, etc.
- Strengthen internal audits and training of internal auditors
- Study utilization of IT in quality control, such as by using QR codes, etc.

Processing business

- Strengthen global quality control system
- Standardize quality control manuals on a global level
- Further improve quality and eliminate quality risks through change point management and skill management
- Automate of factory equipment and introduce the latest testing equipment
- Improve equipment maintenance and control system using IT

Increasing profitability of existing businesses

We will strengthen the profitability of existing businesses in the mature Japan market.

Chemicals business

- Review global production system
- Optimize global supply chain

Processing business

- Enhance collaboration between Group companies in Japan and overseas
- Automate factories, increase productivity through IoT

Equipment business

- Reduce costs by standardizing work
- Improve R&D efficiency by integrating the R&D center and experiment center

Improving productivity in administration

- Group-wide initiatives to improve administrative efficiency, and shift to high value-added administration
- Improve productivity through work style innovation and digital transformation

Initiatives for Corporate Innovation

Strengthen the management foundation to ensure sustainable growth by promoting corporate innovation throughout the Group, strengthening Group governance, nurturing diverse and global human resources, and increasing productivity.

Strengthening Group governance

- Strengthening compliance and risk management on a Group level
- Further increase collaboration and sharing of information within the Group to increase revenue

Global human resources

- Personnel exchanges between affiliates in Japan and overseas
- Expansion of overseas training

Diversities

- Recruitment of many nationalities, genderless, mid-career and senior worker employment
- Increase ratio of women in management

Digital transformation

- Establishing IT infrastructure, promoting digitalization, unification of Group systems
- Using IoT in sales, production and quality control

As a specialist in the field of surface modifications, we will implement various initiatives to meet society's expectations.

Environment

- Aim for carbon neutrality (cut power consumption, utilize renewable energy sources, install photovoltaic power generation)
- Develop environmentally friendly products (chromium-free, phosphorous-free, reduced sludge, reduced load of wastewater treatment)
- Reduce emission of hazardous substances (consider wastewater treatment and industrial waste disposal)
- Right control of chemical substances
- Green procurement
- Reduce water consumption



Social

- Conflict minerals
- Promote diversity (Recruitment of women, people with disabilities, non-Japanese, mid-career, senior workers)
- Develop new technology through industry-academia collaboration
- Create a comfortable working environment
- Safety and environmental initiatives
- Contribute to local community



Governance

- Management focusing on capital efficiency, with a mid to long term target ROE of 10% or greater
- Build sustainability-oriented systems on a Group level
- Strengthen compliance



Aiming for Carbon Neutrality

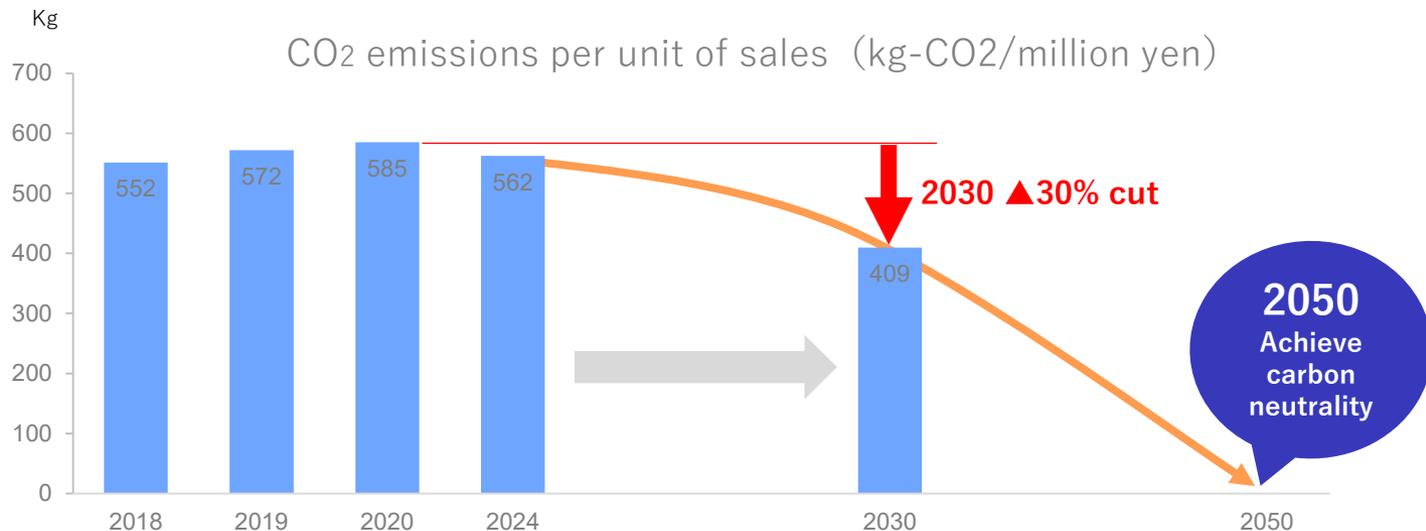
Nihon Parkerizing Group has been working to create a sustainable society since its foundation, under the corporate philosophy of “contributing to preserve the environment and create a richer society.” In the formulation of our 4th mid-term management plan, we have set the following target for cutting CO₂ emissions to accelerate our environmental initiatives. In this mid-term management plan, in addition to cutting CO₂ emissions in the manufacturing and processing stages, we will expand sales of products (PALLUCID, PULS) that contribute to cutting CO₂ on a life-cycle assessment (LCA) base and expand the use of renewable energy sources.

Nihon Parkerizing's target

Aim to **achieve carbon neutrality** by 2050

Cut CO₂ emissions (Scope1+2) by 30% (compared to 2020) by 2030

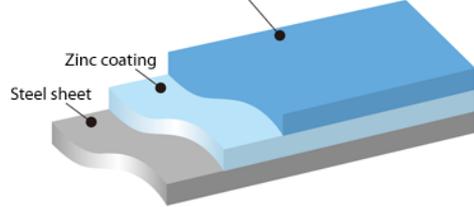
Note: Cut CO₂ emissions by at least 5% (compared to 2020) by the end of the 4th mid-term management plan



Development and sales of environmentally friendly products

Engagement in environmental preservation on a global level is a priority for our management, and we will work hard to develop environmentally friendly products.

Chromium-free chemical conversion coating



● Functional treatment for hot-dip galvanized steel sheet (PALCOAT series)

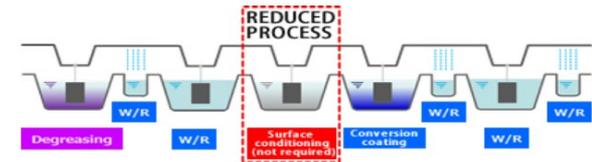
For application on hot-dip galvanized steel sheet used construction and vehicle undercarriages that require high corrosion resistance

● Functional treatment for electrogalvanized steel (PALCOAT series)

For application on galvanized steel used for electrical appliances etc.



- Does not contain phosphorous, nickel and manganese. Reduction in heavy metals compared to zinc phosphating treatment.
- Sludge generated cut to 1/10th or less
- Does not require surface conditioning stage, making the line shorter and cutting wastewater treatment cost, as well as contributing to a reduction in CO2 emissions on an LCA base

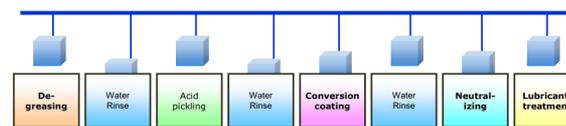


* Comparison to zinc phosphate (100%)

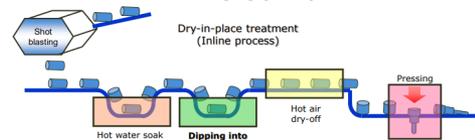
<ul style="list-style-type: none"> ● Nickel ● Manganese Content → 0%	<ul style="list-style-type: none"> ● Phosphoric acid Content → 0%	<ul style="list-style-type: none"> ● Nitrates Reduced content By approx. 60%	<ul style="list-style-type: none"> ● Fluorine Reduced content By approx. 50%
---	---	--	--



Conversion coating for friction control and abrasion resistance



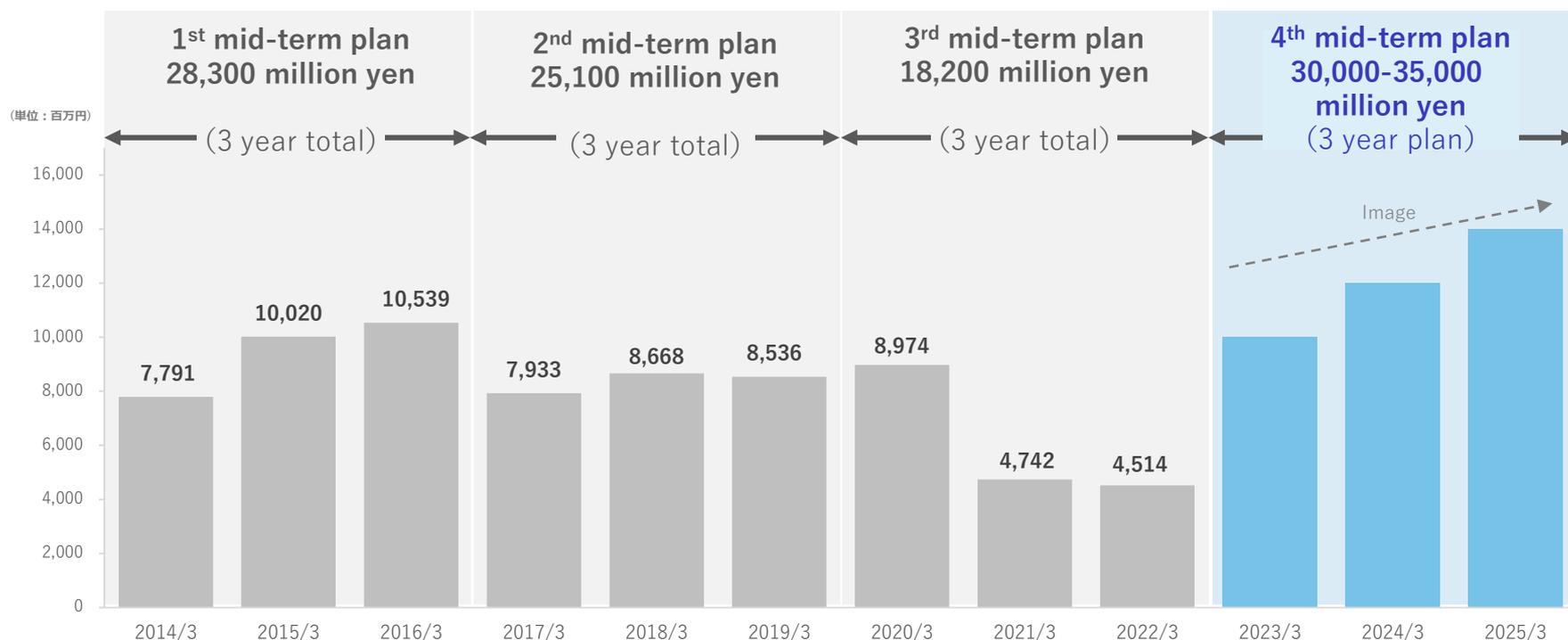
New treatment for cold forging (PULS)



- Zero waste!! Environmentally friendly, single process, roll-on water-based lubricant
- Low treatment temperature contributes to cutting CO2 emissions in our customers' manufacturing processes.
- Cuts CO2 emissions on an LCA base

Capital Investment Plans

In addition to the usual investments (maintenance/renewal), we anticipate investing an additional 8,000 to 15,000 million yen per year in equipment and facilities, including the expansion of the CRL (approx. 6,500 million yen), renewal of aging factories, and updating and integration of IT systems throughout the Group. (M&A separate)



Basic policy on capital and shareholder returns

Capital policy

- Maintain a balanced capital structure, considering capital efficiency and financial soundness
- Set a mid to long term target ROE of 10% or greater, and focus on capital efficiency in management
- Consider capital investment and M&A with own capital as source of funds.

Shareholder returns

- Increasing shareholder value through stable and continuous dividend payments and the effective use of retained earnings
- Aim for a consolidated payout ratio of around 30%. (As it is considered that investment funds for growth and the safety of the financial base have been secured to a certain extent, we will pay dividends exceeding our target ratio for the time being.)
- We will actively buyback shares.



Consolidated numerical targets

(Unit: million yen)

	March 2022	March 2025	Change
	Actual	Plan	
N e t S a l e s	117,752	130,000	+12,248
C h e m i c a l s	46,631	56,000	+9,369
P r o c e s s i n g	44,820	52,000	+7,180
E q u i p m e n t	23,914	20,000	-3,914
O t h e r	2,387	2,000	-387
Operating income	13,370	16,900	+3,530
Ordinary income	17,003	19,500	+2,497
Operating income to sales ratio	11.4%	13% or more	-
Ordinary income to sales ratio	14.4%	15% or more	-
R O E	5.8%	8-10% or more	-

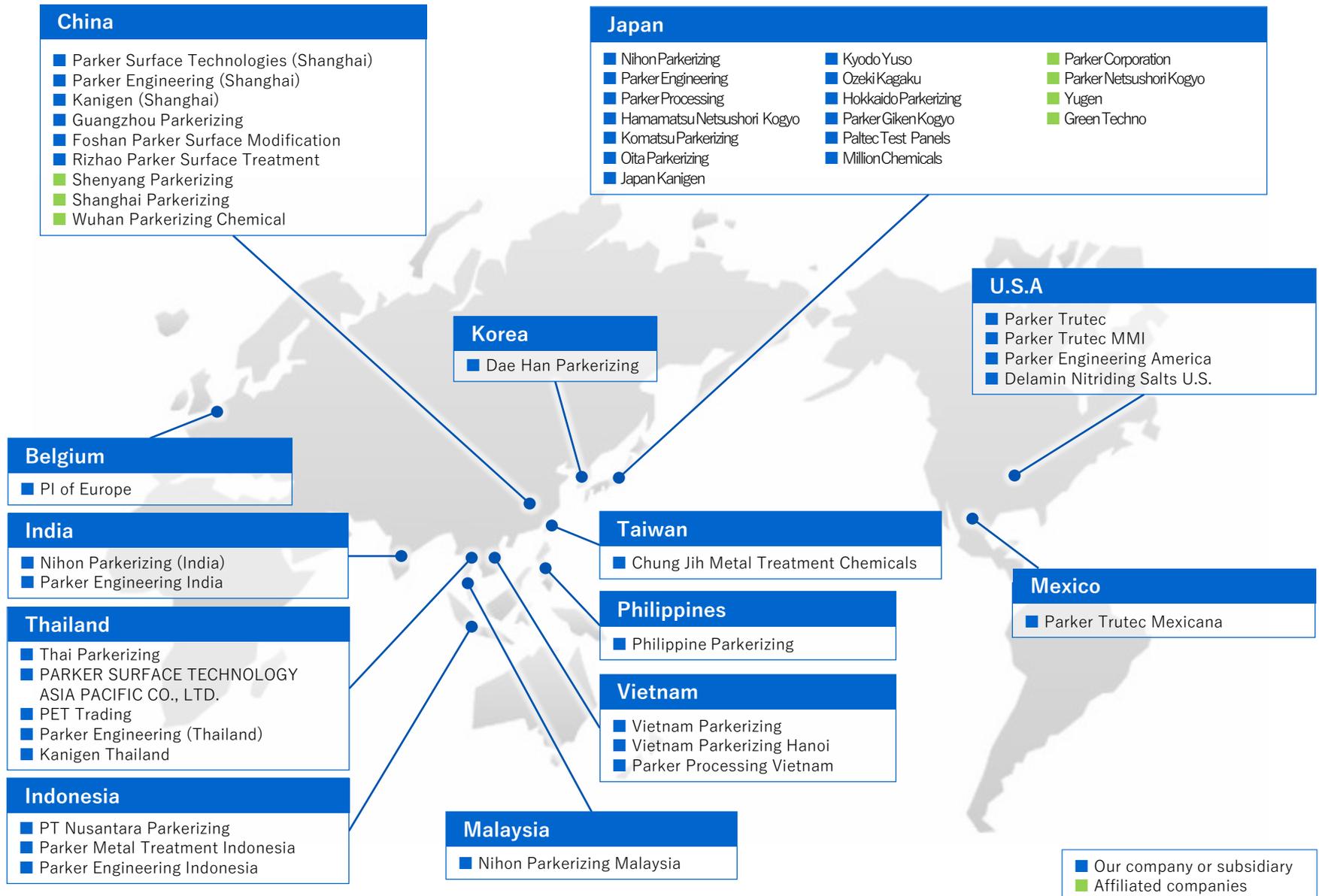
Reference materials

Financial results highlights

(Unit: million yen)

	Mar 2014	Mar 2015	Mar 2016	Mar 2017	Mar 2018	Mar 2019	Mar 2020	Mar 2021	Mar 2022
Net sales	99,793	102,514	109,063	109,569	114,840	129,207	119,028	99,918	117,752
Operating income	15,393	14,850	15,766	16,934	17,984	17,023	12,601	10,681	13,370
Ordinary income	18,046	17,453	17,921	18,779	20,750	20,130	15,723	14,197	17,003
Net income attributable to parent company shareholders	10,142	9,975	10,320	12,228	12,721	11,424	9,449	9,999	9,046
Operating income to net sales ratio	15.4%	14.5%	14.5%	15.5%	15.7%	13.2%	10.6%	10.7%	11.4%
Ordinary income to net sales ratio	18.1%	17.0%	16.4%	17.1%	18.1%	15.6%	13.2%	14.2%	14.4%
Ordinary income to total assets ratio	11.5%	9.9%	9.5%	9.7%	10.0%	9.2%	7.2%	6.5%	7.6%
ROE	11.1%	9.4%	8.9%	10.2%	9.7%	8.2%	6.7%	6.8%	5.8%
Shareholders' equity ratio	59.5%	61.1%	61.5%	62.5%	62.9%	64.2%	66.1%	68.8%	70.0%

Main affiliated companies (As of March 31, 2022)



Vision P 2030

**Transforming a diverse range
of surfaces with chemistry**