

# 10<sup>th</sup> Medium-term Management Plan

May 2023

Nippon Chemi-Con Corporation

TSE Prime Market, Securities code: 6997

- **1. About Our Company**
- 2. 10<sup>th</sup> Medium-term Management Plan  
(Reference Materials)

## Company Profile:

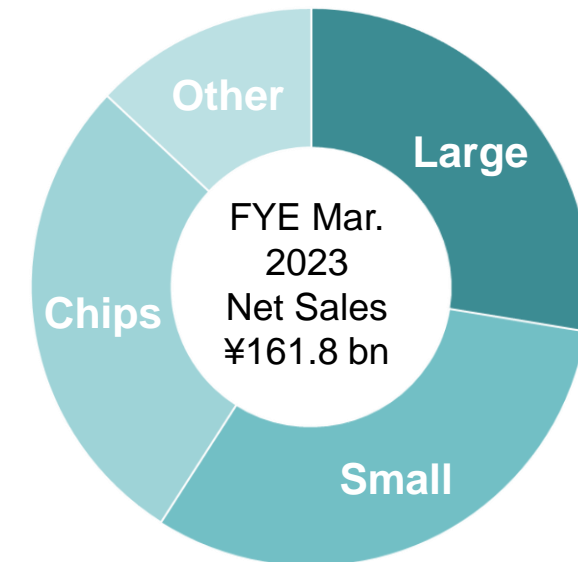
# Global Top Share in Aluminum Electrolytic Capacitors

## 92<sup>nd</sup> anniversary of the company's founding in August 2023

<b>Trade name</b>	NIPPON CHEMI-CON CORPORATION
<b>Head Office</b>	5-6-4, Osaki, Shinagawa-ku, Tokyo, Japan
<b>Established</b>	August 1931
<b>Market Listing</b>	TSE Prime Market (Securities code: 6997)
<b>Business Content</b>	<p>Manufacturing and sale of aluminum electrolytic and other capacitors</p> <p>Manufacturing and sale of various precision mechanical components</p> <p>Manufacturing and sale of various electronics equipment</p>
<b>Operating Results</b>	Net sales: ¥161,881 million, Operating income: ¥12,939 million (fiscal year ended March 31, 2023)
<b>No. of Employees (Consolidated)</b>	6,045 (as of March 31, 2023)



Aluminum electrolytic capacitors account for roughly 90% of net sales



# What are aluminum electrolytic capacitors?

Capacitors using a thin layer of oxidized aluminum foil ( $\text{Al}_2\text{O}_3$ ) that acts as the dielectric (Capacitors are electronic components that regulate and stabilize the flow of electrical current through storage and discharge).

Characteristics: **Inexpensive, high capacitance, and used for wide range of purposes**

The dielectric properties of the oxidized aluminum foil layer are used in a wide range of electrical and electronic devices (in vehicles, industrial equipment, home appliances, and digital home appliances).



## (Competitive advantages of aluminum electrolytic capacitors)

Capacitor type	Aluminum electrolytic			Ceramic	Tantalum	Film	Supercapacitors
	Electrolytic	Conductive polymer	Hybrid				
High capacitance	◎	◎	◎	△	○	×	◎
Cost	◎	○	○	△	△	△	△
ESR (equivalent series resistance)	×	◎	○	◎	○	◎	○
No use of rare metals	◎	◎	◎	△	×	○	◎
Lifespan	×	○	○	◎	○	◎	△
Temperature characteristics	△	◎	◎	△	○	◎	×
Heat resistance	○	○	○	◎	○	△	×

## Corporate Philosophy:

### “Contributing to Environmentally and People Friendly Technology”

“Toward a brighter future, we will keep contributing to technologies that fulfill our dreams.”

Our corporate philosophy contains this idea.

We contribute to society through the development and manufacture of electronic products by supporting manufacturing and providing reliable technology.

## 10<sup>th</sup> Medium-term Management Plan (FY2023 to FY2025)

### Vision

#### High-quality growth through enhancement of adaptability (resilience)

Developing the strength to adapt to the environment and circumstances, no matter how difficult, overcome obstacles, grow the Company, and actively confront future targets with hope.

### Long-term Target

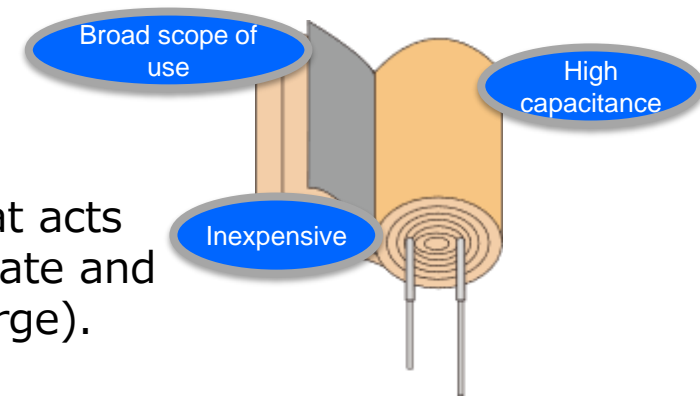
#### “Create New Value”

Create value for the next generation (corporate value, product value, and new businesses)!  
Create human resources who can take on the challenge of crossing borders through organizational and structural reforms!

# Our Strengths

## Aluminum electrolytic capacitors are . . .

Capacitors using a thin layer of oxidized aluminum foil ( $\text{Al}_2\text{O}_3$ ) that acts as the dielectric (Capacitors are electronic components that regulate and stabilize the flow of electrical current through storage and discharge).



### 1. High technological capabilities of aluminum electrode foil

- Surface expansion technology (etching)
- Optimal aluminum electrode foil specifications for each product

### 3. High-performance products and process development technology

- Alliances with universities and government ministries & agencies
- Use of simulation technology

Manufacture of electrolytic capacitors of consistently high quality



Global No. 1 share in aluminum electrolytic capacitors

### 2. In-house manufacturing of core components, materials, and production equipment

### 4. High quality obtained through integrated production system and bringing manufacturing in-house

- Listed as a top-ranked company in Quality Management Level Research by the Union of Japanese Scientists and Engineers (JUSE)

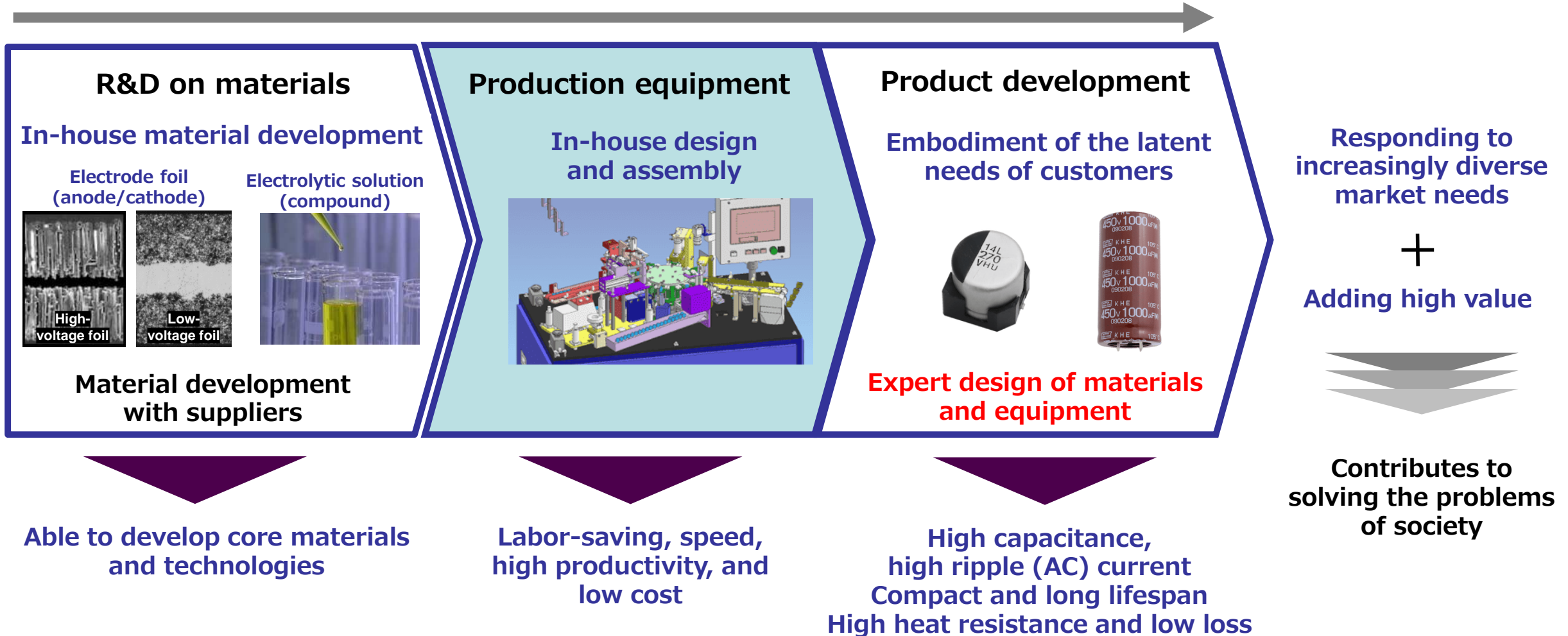
### 5. Worldwide manufacturing and sales structure and production capacity that can provide stable supply



# Our Strengths

In-house manufacturing of core components, materials, and production equipment, and advanced product development

Integrated development/production/quality control system utilizing material and equipment development



# Our Strengths

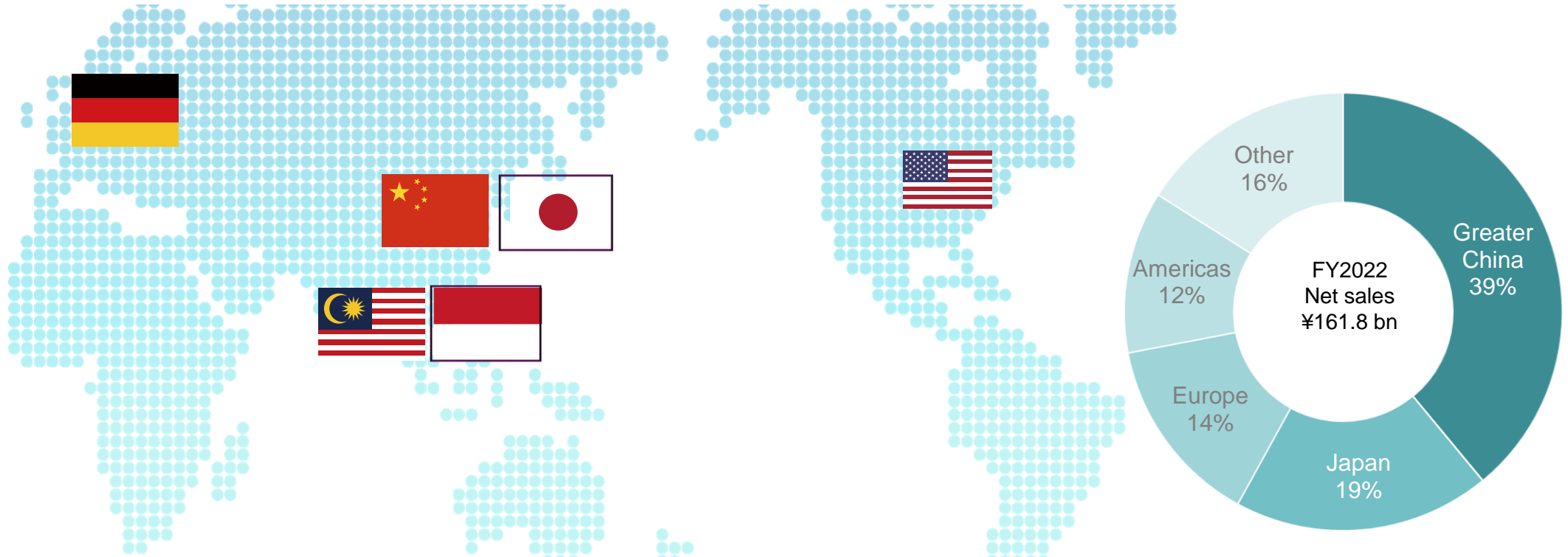
**Manufacturing and sales network in 10 regions in Japan and overseas:**

**Overseas sales ratio: 81%**

**Overseas production ratio: 59%**

Sales locations: Japan (6), U.S., Germany, South Korea, Taiwan, China, Hong Kong, Thailand, Singapore, Malaysia, and Indonesia

Manufacturing locations: Japan (11), U.S. (2), South Korea (1), Taiwan (1), China (2), Malaysia (1), and Indonesia (1)





1. About Our Company
- 2. **10<sup>th</sup> Medium-term Management Plan**  
(Reference Materials)

# Reflecting on the 9<sup>th</sup> Medium-term Management Plan (FY2020 to FY2022)

Shift to a corporate structure capable of responding flexibly to changes in the business environment

Product planning reforms	(1) Increase the percentage of new products by strengthening product planning capabilities and succeed in expanding sales of high value-added products to the most important strategic markets.
Structural reforms	(2) Achieve improvement in labor productivity through productivity reforms across the company and all divisions. (3) Eliminate the high-cost structure by reorganizing production bases and implementing productivity reforms (4) Pursue higher efficiency in logistics-related operations through supply chain management (SCM) reforms.

Steady implementation of measures to achieve the plan for net sales and operating income  
(Billion yen)

	FY2020	FY2021	FY2022	9 <sup>th</sup> Medium-term Management Plan FY 2022 goals	Degree achieved
Net sales	110.7	140.3	161.8	140.0	○
Operating income	2.9	8.7	12.9	10.0	○
Profit/loss attributable to owners of parent	2.0	(12.1)	2.2	6.0	×
ROE	4.5%	(25.3%)	4.8%	10% or higher	×
Total asset turnover ratio	0.8x	0.9x	1.0x	1.0x or higher	○

# 10<sup>th</sup> Medium-term Management Plan (FY2023 to FY2025)

## Background

Increasing environmental awareness is increasing the demand for high capacitance, low-loss capacitors

Demand for solutions to social and environmental issues and growth  
(Reduce CO<sub>2</sub> emissions and pursue SDGs)

Need for stable high capacitance and high power supply  
(Reduce loss accompanying vehicle electrification and distributed electric power networks, etc.)

Increased need for our high quality aluminum electrolytic capacitors and the technology for advancing development  
(hybrid capacitors, etc.)

Use of aluminum electrolytic capacitor technology to provide high value-added products and improve profitability under the new Medium-term Management Plan

## Basic Policy

Target a highly profitable structure by providing product groups that add high value and improving productivity

### Business strategy

- Strengthening highly profitable products**
- (1) Investing in and increasing production of hybrid capacitors
  - (2) Strengthening the coil business

### Improving productivity

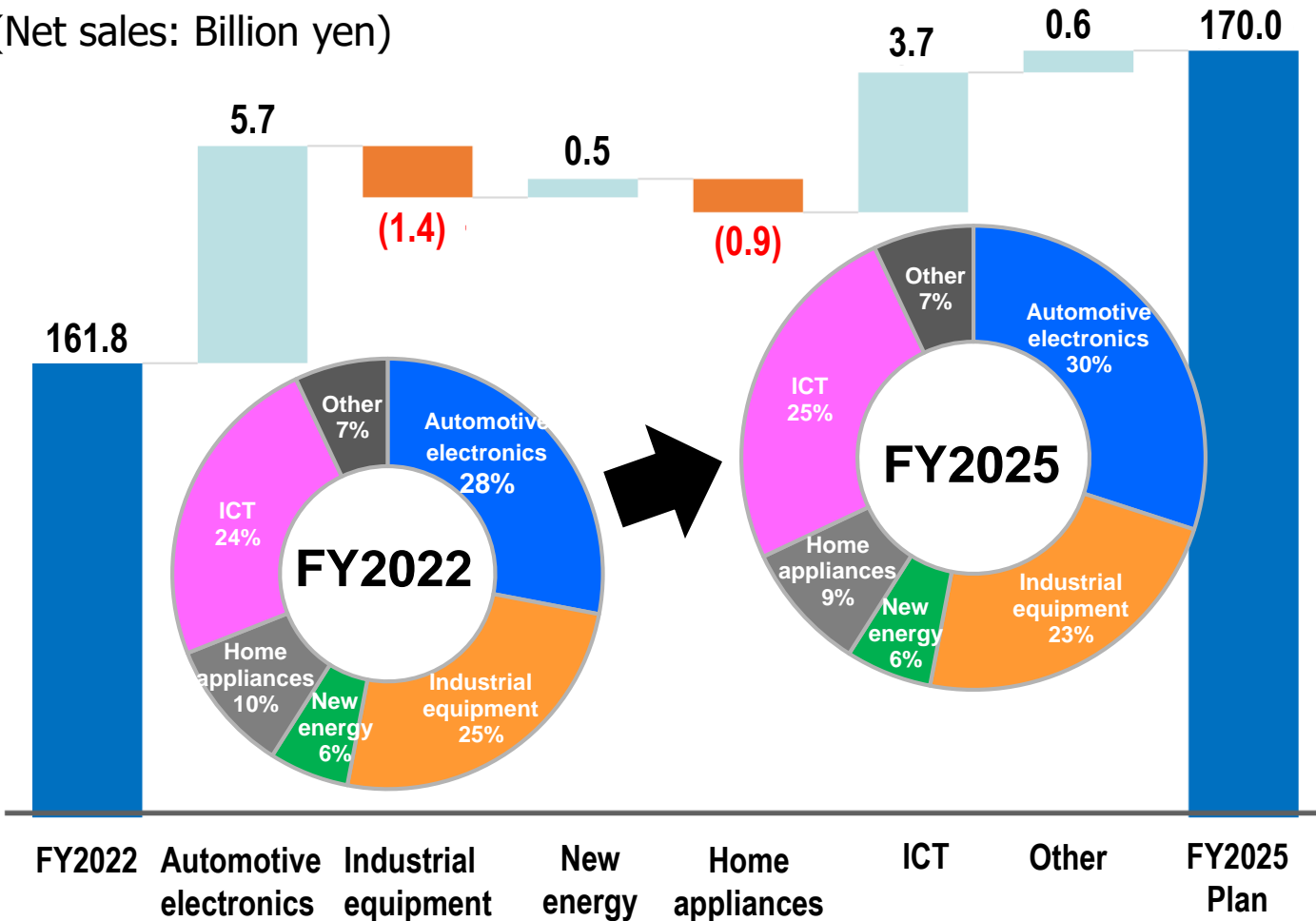
**Production structure reforms through optimal portfolio (rebuilding and standardizing)**

- (1) Smart factories
- (2) Supply chain management (SCM) strategy
- (3) Improvement in staff productivity
  - Pursue (1) through (3), based on the DX strategy

# Sales Strategy

Selling new hybrid capacitor products, inclusion in reference designs for semiconductors, and responding to the market in India

(Net sales: Billion yen)

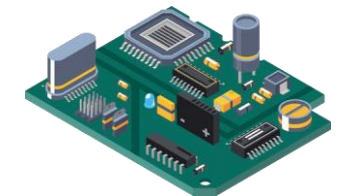


## 1) Most important strategic markets

- (1) Automotive electronics market (response to automated driving/xEV)
- (2) Communications markets (response to clouds)

## 2) Key measures

- (1) Inclusion in reference designs for semiconductors
- (2) Structure to expand overseas sales of solid and functional devices
- (3) Expanding sales to environmental response market (new energy, etc.)
- (4) Reinforcing response in the Indian market
- (5) Sales reforms through digital transformation (DX)
- (6) Selection and concentration through standardization (Switch to high added value at current production bases)



# Strengthening two highly profitable products as core products

Concentrate resources in highly profitable products and areas, expand production capacity, and develop frontier areas

## (1) Increase production of hybrid capacitors



Concentrate production resources in products that add value.

- Invest in expanding production at overseas and domestic plants.
- Shift from small-diameter components to surface mounted components and increase the value added.

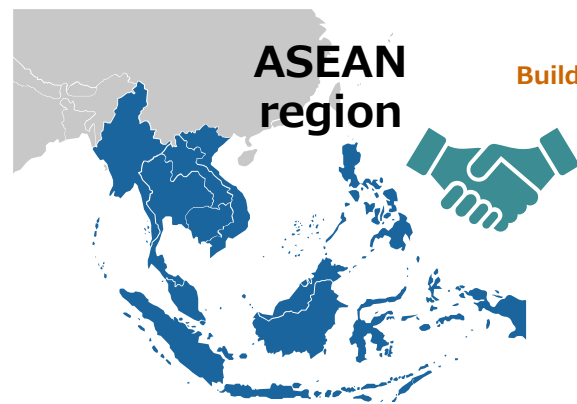
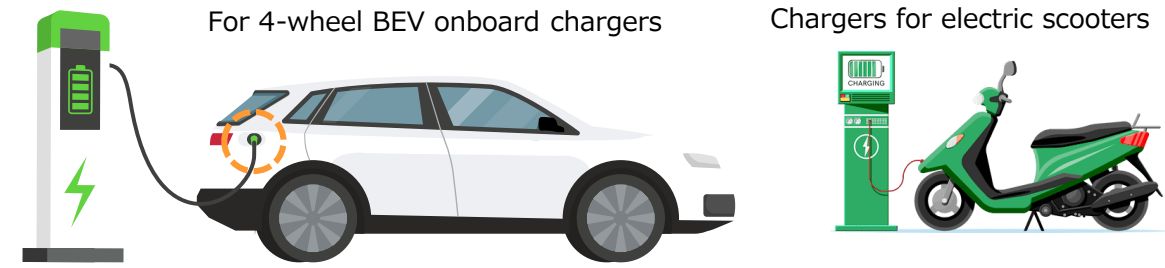
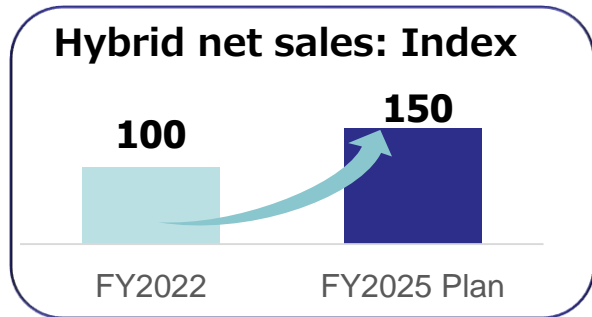
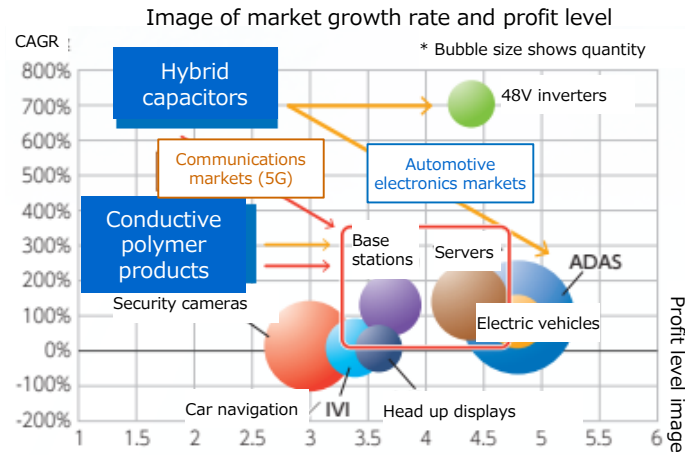
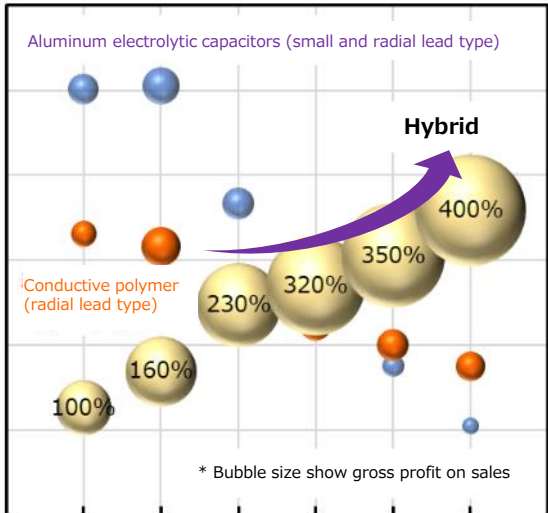
## (2) Strengthen coil business



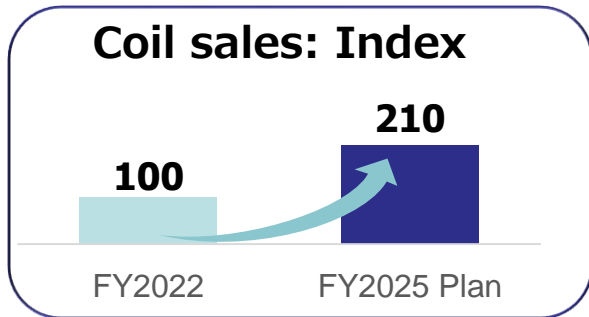
Differentiate with nanocrystalline materials and expand sales to frontier markets overseas.

- Double volume and sales over the three years of the Medium-Term Management Plan.
- Find alliance partners in the ASEAN region.

Large-scale investment in Japanese plants  
Begin overseas production focused on business continuity  
Increase production capacity



Access electric vehicle markets in Europe and South Korea.  
Build business model for overseas production/sales.



# Expand our Horizons: Connecting Product Planning Skills With Product Development

Propose solutions identified by mining market trends and customer desires

## Market demands

- Social/environmental issues
- Vehicle automation/electrification
- Increase in communications volume, sophistication
- High capacitance, compact, light
- Longer, maintenance-free service life

## Individual customer support

- Demand for special characteristics (Cap, ESR)
- Environmental resilience (temperature profile)
- Load conditions (voltage, ripple current)
- Frequency characteristics
- Obtaining reliability data

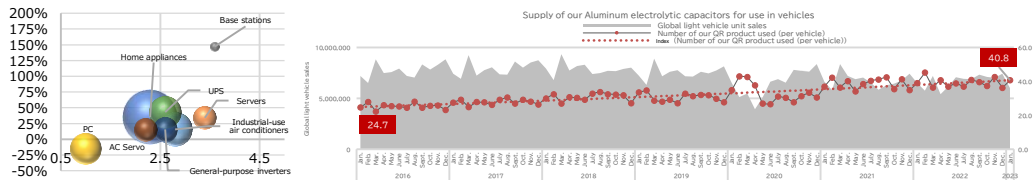
## Production and sales

- High quality, highly efficient production using in-house design and equipment (creation of smart factories/automation)
- Optimization of production locations (BCP/logistics/shortening lead time)
- Using the sales network to expand sales

Profit contribution of ¥4 billion from new products demanded by the market/  
10<sup>th</sup> Medium-term Management Plan

## Product planning

- Market surveys (market size/growth rate, costs)
- Technological trend surveys (academic papers, patents, universities)
- Circuit surveys (semiconductor trends/control algorithms)
- Pursuing solutions to customers' problems (identifying latent needs)



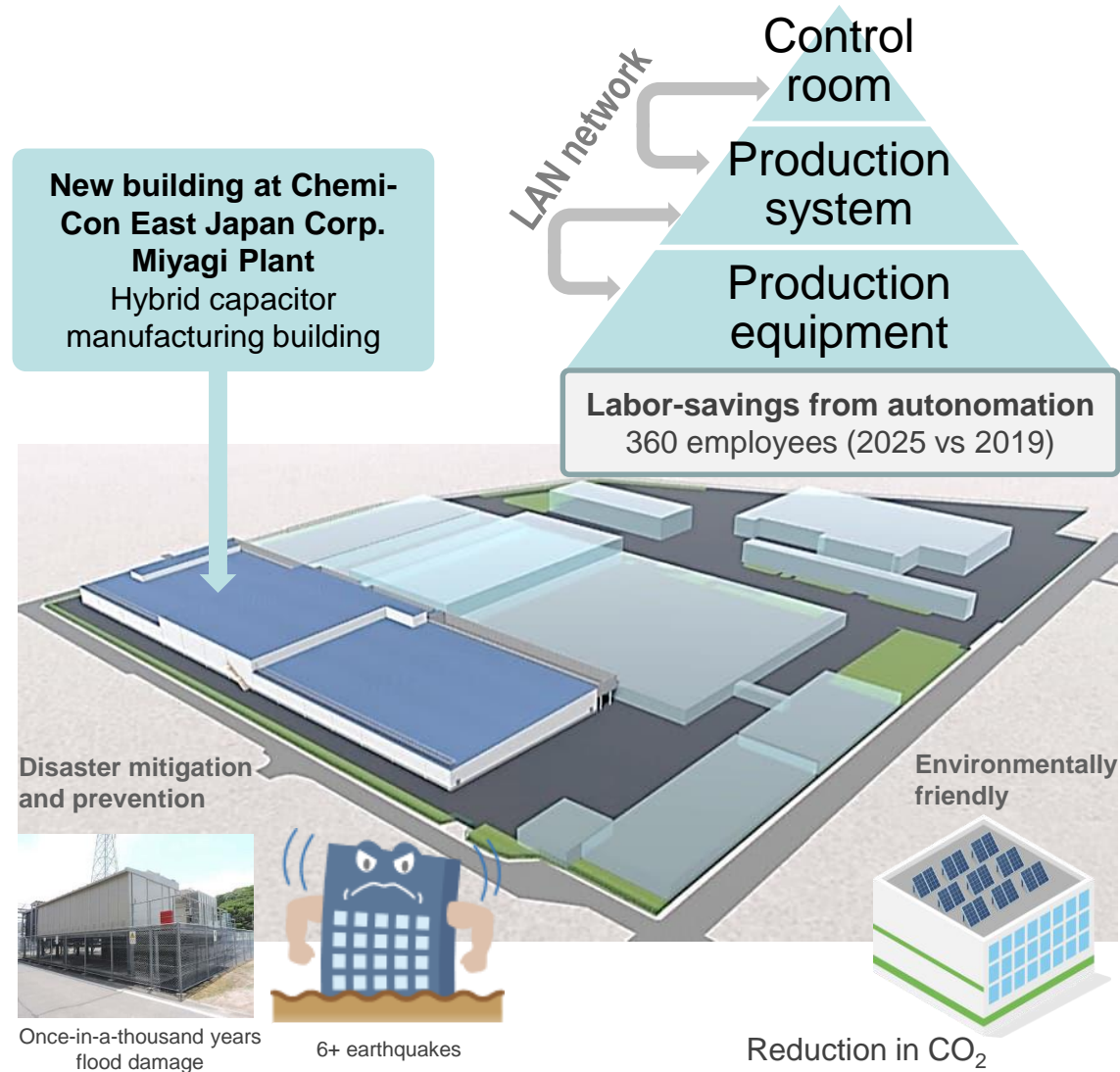
## Product development

- Core materials development (aluminum electrode foil/electrolytes/etc.)
- Mastery of new materials (process/equipment design)
- New technology (structure/construction method/manufacturing requirements)
- Use intellectual property strategy to build barriers to entry by other companies

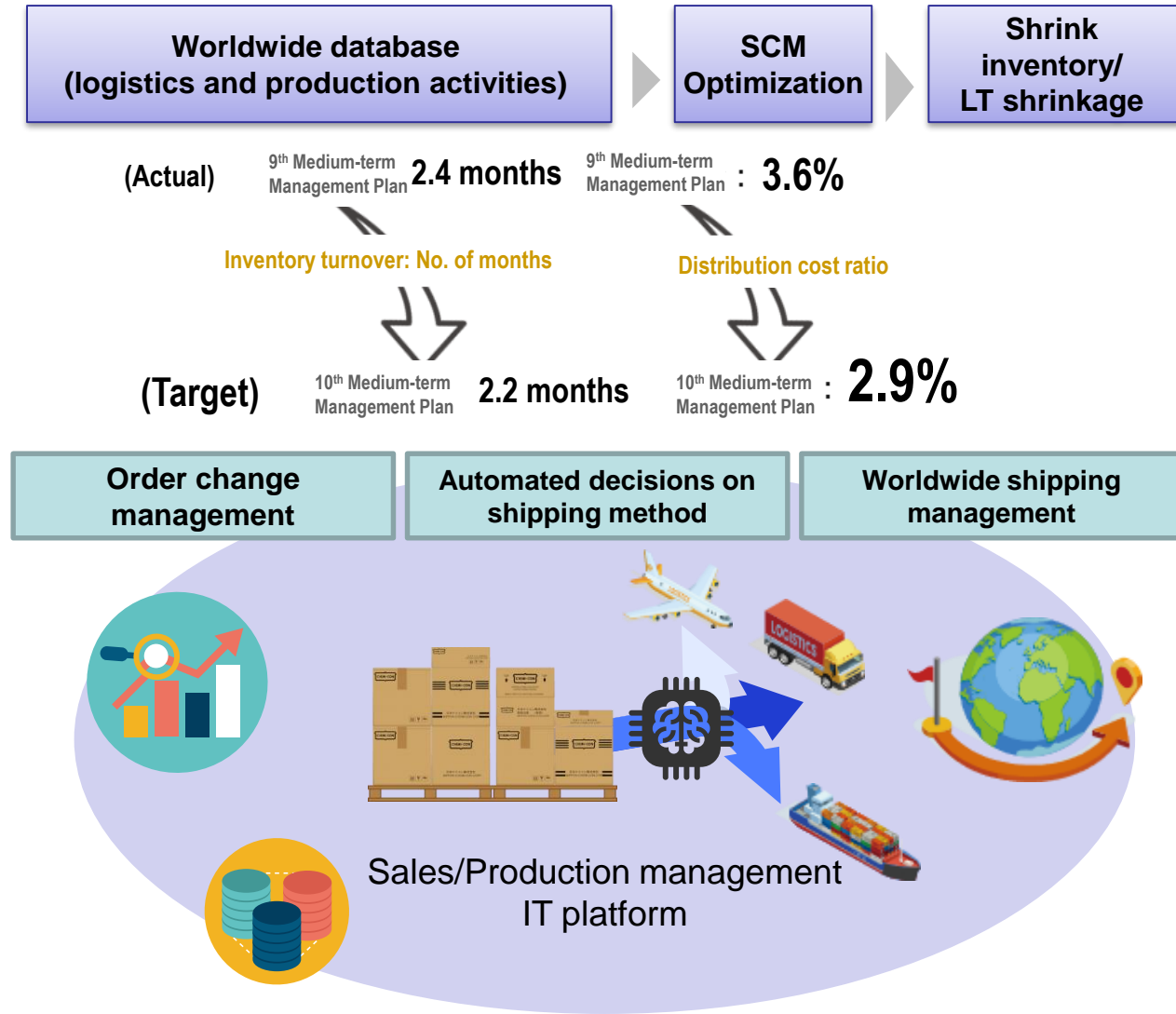
Products that can solve the problems of customers = High value-added  
⇒ Concentration on developing highly profitable products

# Improving Productivity: Use of DX at Plants and in the Supply Chain

## Plant × DX ▶ Smart factory



## Supply chain management (SCM) × DX



# 10<sup>th</sup> Medium-term Management Plan KPI Goals (FY2023 to FY2025)

Final Fiscal Year  
Goals

Net sales: ¥170 billion; Operating income: ¥14 billion (Margin: 8.2%), ROE: 14%

	9 <sup>th</sup> Medium-term Management Plan FY2022 Goal	9 <sup>th</sup> Medium-term Management Plan FY2022	10 <sup>th</sup> Medium-term Management Plan FY2025 Goal
Net sales	¥140.0 bn	¥161.8 bn	¥170.0 bn
Operating income	¥10.0 bn	¥12.9 bn	¥14.0 bn
Ratio to net sales (margin)	7.1%	8.0%	8.2%
Profit attributable to owners of parent	¥6.0 bn	¥2.2 bn	¥10.0 bn
Interest-bearing debt	¥50.0 bn	¥65.7 bn	¥58.0 bn
D/E ratio	1.2x or less	1.6x	1.0x or less
ROE	10% or more	4.8%	14.0%
ROIC	—	2.1%	7.0%

Total asset turnover ratio FY2025 target: 1.0x or more



# Capital Policy and Shareholder Return

- **Conscientious cash flow management**  
Cash flow from operations: Continue to keep capital investment within the scope of depreciation and amortization, in principle.  
Free cash flow: Invest in future growth areas (including a focus on human capital management), reduce interest-bearing debt, and distribute returns to shareholders.
- **Direction of capital policy**  
Make strengthening the financial foundation the top priority and invest in R&D and growth areas for the future to enhance corporate value over the medium to long term.  
Expand business revenues and improve asset efficiency to achieve the optimal capital structure.

## Capital Policy During the 10<sup>th</sup> Medium-term Management Plan Period

- Prioritize internal reserves for investment in strengthening the financial foundation and in growth areas, expand business scale and stabilize the revenue base, and then **strive to restore dividends to shareholders quickly.**
- Accurately determine the cost of capital and add the following indicators as KPI targets to increase capital efficiency and improve profitability.
  - (1) ROE greater than the cost of shareholder capital
  - (2) ROIC greater than the weighted average cost of capital (WACC)
- **Progress on the KPI will be disclosed on our corporate website and we will redouble efforts to engage in dialog with investors and other stakeholders.**

1. About Our Company
2. 10<sup>th</sup> Medium-term Management Plan

➤ **(Reference Materials)**

**History:** Since successfully commercializing the electrolytic capacitor in 1931, Nippon Chemi-Con has focused consistently on the development and sale of electrolytical capacitors. We have also grown our business in supercapacitors and coils, in addition to aluminum electrolytic capacitors from the beginning of this century.

- 1931: Successfully commercialized Japan's first electrolytic capacitors. Established SATOH DENKI KOGYOSHO and began production.
- 1947: Reorganized company and changed company name to NIPPON CHEMICAL CAPACITOR INC.
- 1966: Built plant in Miyagi Prefecture for production of small-size electrolytic capacitors (now CHEMI-CON EAST JAPAN CORP.).
- 1969: Built plant in Iwate Prefecture for mass production of small-size electrolytic capacitors (now CHEMI-CON EAST JAPAN CORP.).
- 1970: Listed on the second section of the Tokyo Stock Exchange.
- 1976: Established FUKUSHIMA CHEMI-CON INC. to support increased production of large-size electrolytic capacitors (now CHEMI-CON EAST JAPAN CORP.).
- 1977: Listed on the first section of the Tokyo Stock Exchange.
- 1981: Changed the company name from NIPPON CHEMICAL CAPACITOR INC. to the current name, NIPPON CHEMI-CON CORPORATION, to strengthen brand power.
- 1995: Acquired shares of MARCON ELECTRONICS CO., LTD. (now CHEMI-CON YAMAGATA CORP.) and entered the business of ceramic capacitors and other solid devices.
- 1997: Acquired the magnetic materials business from Mitsui Petrochemical Industries, Ltd. (now Mitsui Chemicals, Inc.) and entered the coil business.
- 1999: Merged KDK CORP., listed on the second section of the Tokyo Stock exchange, through an absorption-type merger to strengthen competitiveness and technical development capabilities in aluminum electrolytic capacitors by integrating the production structure from the materials for aluminum electrolytic capacitors.
- 2004: Relocated the Head Office from Ome-shi, Tokyo to Shinagawa-ku, Tokyo to improve management efficiency.
- 2020: Merged CHEMI-CON IWATE CORP. and CHEMI-CON FUKUSHIMA CORP. into CHEMI-CON MIYAGI CORP. in an absorption-type merger and renamed the company CHEMI-CON EAST JAPAN CORP. to concentrate business resources in domestic locations and improve efficiency.

# Net Sales by Market: Focus on aluminum electrolytic capacitors in the core areas of automotive electronics, industrial equipment, and new energy

Final fiscal year of current  
Medium-Term Management Plan

## [Core areas]

**Automotive electronics**

In addition to equipment mounted on xEVs such as on-board chargers for EVs and plug-in hybrid vehicles, this category includes products used in vehicle electronics, including the electronic circuits used to control engines, steering, SRS airbags, air conditioners, and headlights. In addition to the supercapacitors used in brake energy regeneration systems and power fault prevention systems, products used in car navigation systems and dashcams are also included in this category.

**Industrial equipment**

This category comprises products used in industrial equipment, including manufacturing equipment installed in semiconductor factories and the industrial robots, lathes, milling machines, and other machine tools operating on vehicle manufacturing lines. This category also includes products used in trains, airplanes, and other forms of public transportation, construction machinery, security equipment, and lifeline and other forms of infrastructure equipment.

**New energy**

This category covers sales to the renewable energy sector, including the power conditioners that are vital to solar power generation and the wind power generation systems.

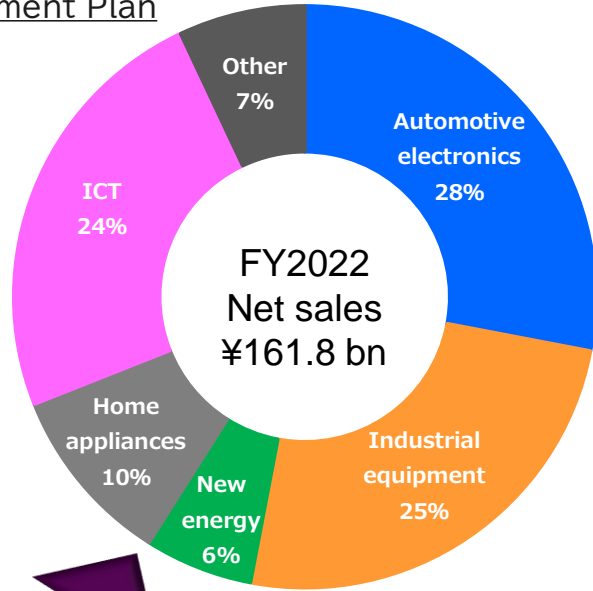
**Home appliances**

This category mainly represents sales of products used in traditional home appliances such as air conditioners, refrigerators, and washing machines, as well as in smart home electronics and IoT home appliances.

**ICT**

This category comprises sales of products for digital AV equipment and information communication equipment such as televisions, computers, and home video game consoles; parts used in data center servers due to the growth in cloud services; and for 5th generation mobile communications system (5G) base stations.

Net sales  
by market

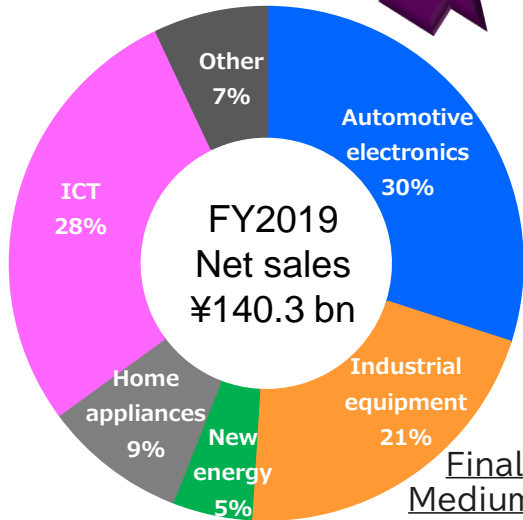


Ratio  
59%

Automotive electronics,  
industrial equipment,  
and new energy areas

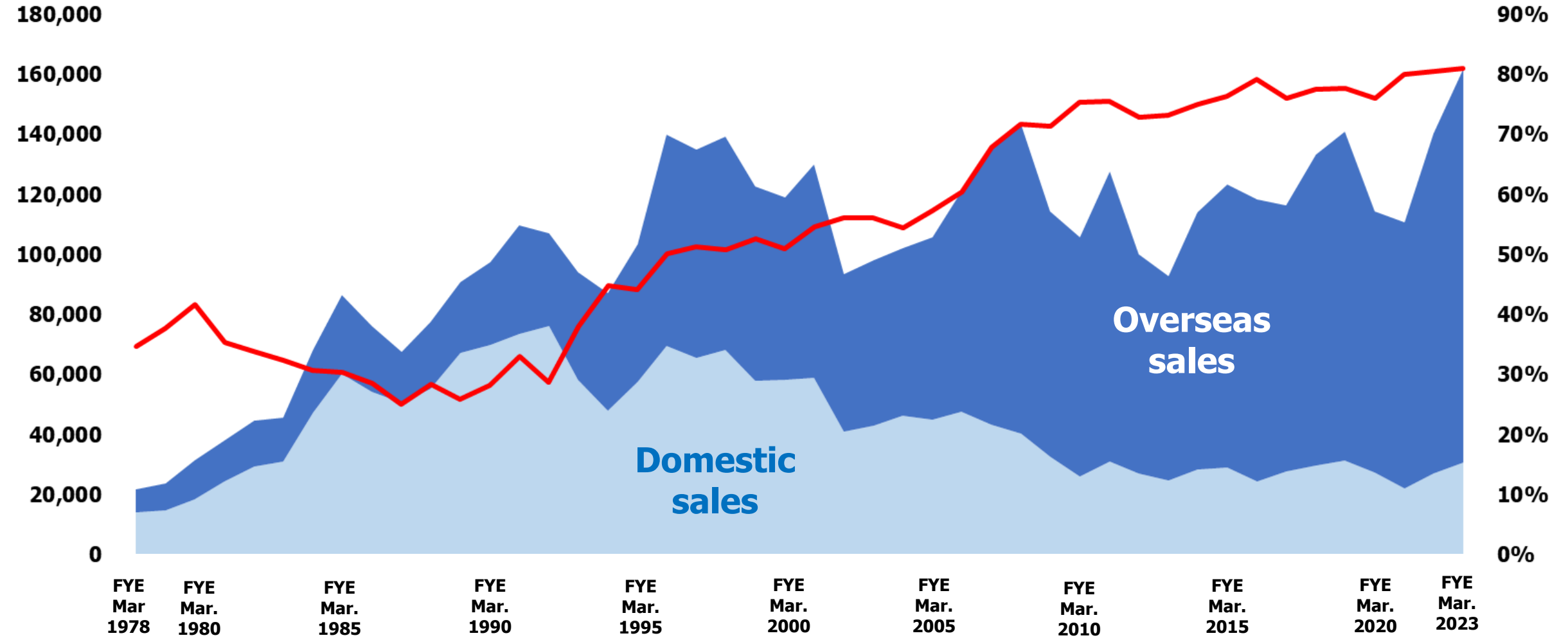
Ratio  
56%

Final fiscal year of previous  
Medium-Term Management Plan



# Trend in Consolidated Net Sales

(Million yen)



Domestic net sales Overseas net sales Overseas net sales ratio

# Domestic Locations

## Japan

### Nippon Chemi-Con Corporation

Head Office (Shinagawa-ku, Tokyo)

Takahagi Plant (Ibaraki Prefecture)

Niigata Plant

Kanagawa Research Center (Kawasaki-shi, Kanagawa Prefecture)

Sales Bases:

Kita-Kanto Sales Office (Utsunomiya-shi, Tochigi Prefecture)

Shizuoka

Nagoya

Osaka

Fukuoka

### Group Companies (Japan)

#### **CHEMI-CON EAST JAPAN CORP.**

Manufacturing and sale of capacitors

Miyagi Plant

Iwate Plant

Fukushima Plant

#### **CHEMI-CON EAST JAPAN MATERIALS CORP.**

Manufacturing and sale of aluminum electrode foil

Kitakata Plant

Iwate Waga Plant

#### **CHEMI-CON YAMAGATA CORP.**

Manufacturing and sale of capacitors

Nagai Plant

Yonezawa Plant

#### **KDK CORP.**

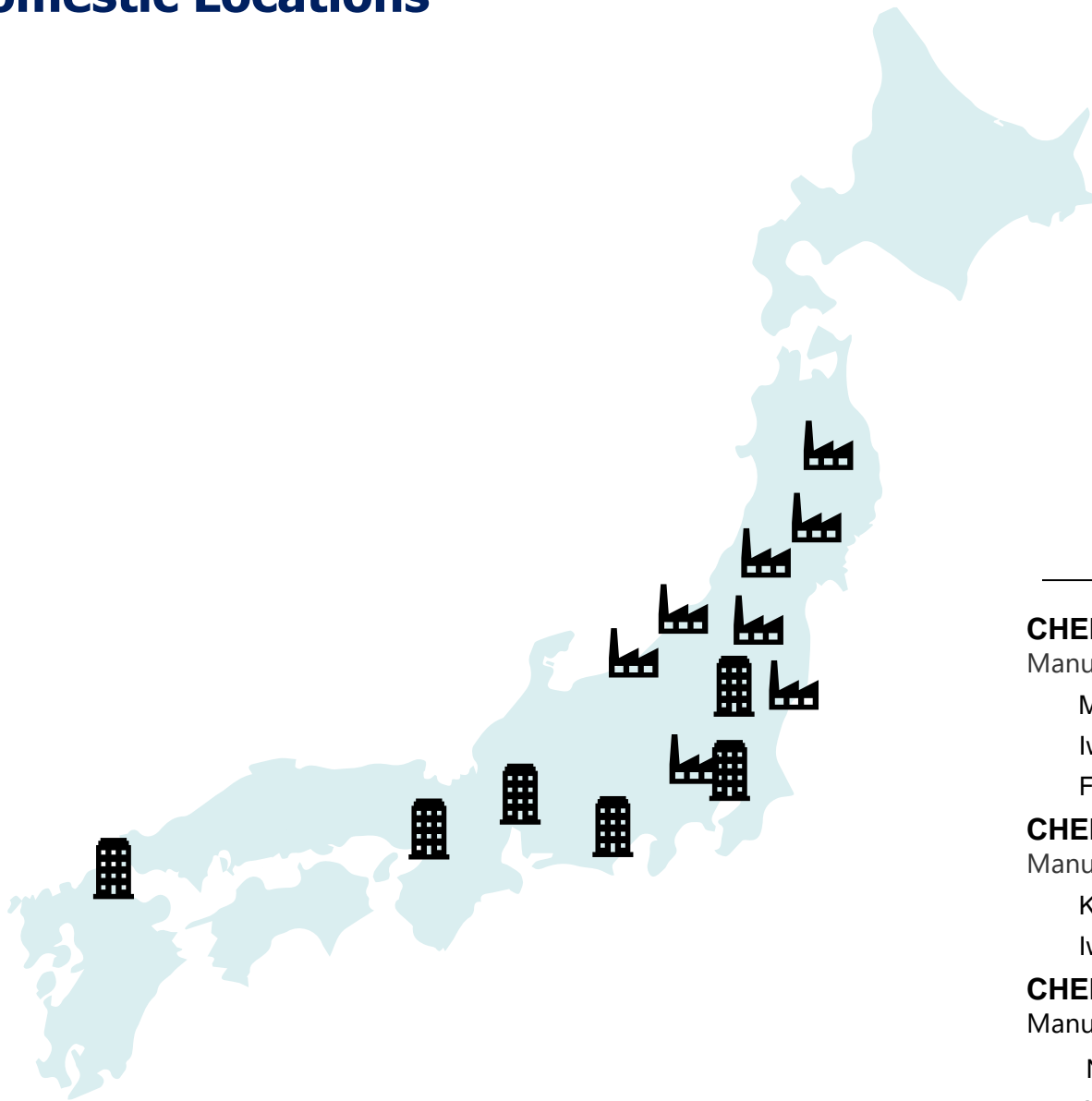
Sale of aluminum electrode foil

#### **CHEMI-CON NAGAOKA CORP.**

Manufacturing and sale of electronic equipment and parts

#### **CHEMI-CON MACHINERY CORP.**

Manufacturing and sale of machinery, equipment, and parts



# Overseas Locations

## Group Company (Europe)

### **EUROPE CHEMI-CON (DEUTSCHLAND) GmbH**

Sale of capacitors

## Group Companies (China)

### **SHANGHAI CHEMI-CON TRADING CO.,LTD.**

Sale of capacitors

### \* **CHEMI-CON (WUXI) CO., LTD.**

Manufacturing and sale of capacitors

### **HONG KONG CHEMI-CON LTD.**

Sale of capacitors

### **CHEMI-CON TRADING (SHENZHEN) CO., LTD.**

Sale of capacitors

### \* **DONG GUANG KDK ALUMINUM FOIL MANUFACTURE LTD.**

Manufacturing and sale of aluminum electrode foil

## Group Company (Taiwan)

### \* **TAIWAN CHEMI-CON CORP.**

Manufacturing and sale of capacitors

## Group Company (Singapore)

### **SINGAPORE CHEMI-CON (PTE.) LTD.**

Sale of capacitors

## Group Company (Thailand)

### **CHEMI-CON ELECTRONICS (THAILAND) CO., LTD.**

Sale of capacitors

## Group Company (Indonesia)

### \* **P.T.INDONESIA CHEMI-CON**

Manufacturing and sale of capacitors

## Group Company (Malaysia)

### \* **CHEMI-CON (MALAYSIA) SDN. BHD.**

Manufacturing and sale of capacitors

## Group Companies (Americas)

### **CHEMI-CON AMERICAS HOLDINGS, INC.**

### \* **UNITED CHEMI-CON, INC.**

Manufacturing and sale of capacitors

### \* **CHEMI-CON MATERIALS CORP.**

Manufacturing and sale of aluminum electrode foil

## Group Companies (South Korea)

### **CHEMI-CON ELECTRONICS (KOREA) CO., LTD.**

Sale of electrical equipment and parts, and precision equipment

### \* **SAMYOUNG ELECTRONICS CO., LTD.**

Manufacturing and sale of aluminum electrolytic capacitors

\* Manufacturing base

# Disclaimer

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The projected performance figures in this material are based on information available to Nippon Chemi-Con's management at the time this material was prepared.

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