

# New Medium-term Management Plan “NCI KIRARI 2025”

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**NIPPON CARBIDE INDUSTRIES CO.,INC.**



## Mission

### Our Mission

Creating new value with our technological capability, we help make society more prosperous.

## Vision

### Our Vision

A Corporate Group of Outstanding Value

## Values

### Our Core Values

Sincerity

Service

One-NCI (Cooperating)

Innovation



**A corporate group of  
outstanding value  
that contributes to a  
sustainable society**



# Review of the Medium-Term Management Plan “NCI-2021”

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(FY2019-FY2021)



## **We are ready for full-fledged growth, once again taking steps toward growth.**



- Financial targets were not met due to delays in the expansion of strategic businesses caused by the U.S.-China trade friction and the COVID-19 pandemic crisis, and so on.
- + Improved financial structure through reduction of interest-bearing debt, increase in equity ratio, and halving of cross-shareholdings.
- + Reinforcement of business foundation through implementation of BCPs including but not limited to withdrawal from unprofitable businesses, review of assets held such as purchase of leased land for business use, development of domestic bases and enhancement of facility.
- + Strengthening of the governance system from a group perspective through a quality management system that oversees all group companies and crisis management response.
- + Establishment of a work style compatible with the new normal by promoting work style reforms including but not limited to introduction of working from home arrangements.
- + Strengthening of the human resource development management system by enhancing existing human resource development programs and introducing new programs.

# Summary of financial targets



Due to various factors including the COVID-19 pandemic crisis, none of the financial targets for the final fiscal year (FY2021) were met.

		NCI-2021	FY 2021 Results	Difference
Net sales	Consolidated	57 billion yen	47 billion yen	▲ 10 billion yen
	Core business units	42 billion yen	36.6 billion yen	▲ 5.4 billion yen
Operating profit	Core business units	4.5 billion yen	3.1 billion yen	▲ 1.4 billion yen
Operating profit/net sales	Core business units	10%	8.5%	▲ 1.5 point
ROA	Consolidated	4%	3.0%	▲ 1.0 point

# Current financial structure



Financial structure has improved significantly over the past three years.  
We are now ready to deploy new growth strategies.

## FY2018 Results

Equity Ratio

39.0%

D/E Ratio

X0.70

Interest-bearing  
liabilities

17.4 billion yen

Dividends per  
share

40 yen

## FY2021 Results

47.0%

X0.48

13.9 billion yen

55 yen



## ● Business Strategy

Among the core businesses, position functional polymers and functional films as strategic areas (businesses) and strengthen initiatives targeting focus areas and growth regions.

Strategy	Results	Review
<p>Expansion of strategic businesses</p> <p>Functional polymers Functional films</p>	<p>Company-wide strategic business sales ratio</p> <p><b>FY2018: 55%</b> <b>FY2021: 56%</b></p>	<ul style="list-style-type: none"> <li>- Significant changes in market conditions due to various factors including the COVID-19 pandemic crisis caused delays in the expansion of strategic businesses.</li> <li>+ Decision was taken to expand facility for retroreflective sheetings and next-generation functional films.</li> <li>+ Launch of decorative film and retroreflective sheetings products with improved functionality.</li> </ul>
<p>Expansion of sales of strategic businesses to focus areas</p> <p>Safety Mobility</p>	<p>Ratio of sales of strategic businesses in focus areas</p> <p><b>FY2018: 35%</b> <b>FY2021: 42%</b></p>	<ul style="list-style-type: none"> <li>+ Aerial display reflectors to non-contact panels were adopted.</li> <li>+ Temperature-sensitive mascara materials were developed and launched jointly with customers.</li> </ul>
<p>Expansion of sales of strategic businesses to growth regions</p> <p>Asian</p>	<p>Ratio of sales of strategic businesses In growth regions</p> <p><b>FY2018: 44%</b> <b>FY2021: 46%</b></p>	<ul style="list-style-type: none"> <li>+ Establishment of a research and sales structure for functional polymer products in China in response to the expansion of LCD products in the Chinese market.</li> <li>+ Development base for globally expanding functional film technology has been established in Vietnam.</li> </ul>



# Strategy review (2)



## ● Process Reform

Strategy	Review
<p>One-NCI and work style reforms to increase productivity and revitalize the organization.</p> <ul style="list-style-type: none"><li>• Establishment of a cooperative system within the group</li><li>• Improved productivity through a complete review of operations</li><li>• Environmental arrangements for diverse working styles and initiatives for health management.</li></ul>	<ul style="list-style-type: none"><li>● New product development traversing the group</li><li>● Complete renewal of core system</li><li>● Promotion of working from home arrangements and introduction of flextime system</li></ul>
<p>Establishment of human resource development management system</p> <ul style="list-style-type: none"><li>• Developing a diverse workforce</li><li>• Strengthening training for management personnel</li></ul>	<ul style="list-style-type: none"><li>● Conducting workshops by young employees (Theme: work style reform/new business creation)</li><li>● Strengthen global human resources development programs</li><li>● Launch of next generation management personnel development program</li></ul>

## ● Strengthening Governance Structure from a Group Perspective

Strategy	Review
<p>Restructuring of a group-wide operation and management system</p>	<ul style="list-style-type: none"><li>● Strengthening the group-wide quality control system</li><li>● Group-wide operation of crisis management</li><li>● Strengthening the compliance adherence system in response to changes in the external environment</li></ul>



# Medium-term Management Plan “NCI KIRARI 2025”

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**What we want to be  
in 2030**

**A group of companies  
with outstanding values  
that contribute to a sustainable society**



New medium-term management plan “NCI KIRARI 2025” has been established with an aim at “Sustainable Growth in the New Normal Era”

\* KIRARI means Outstanding values

**Pursuit of “Outstanding values = One & Only”**

**Contribute to a sustainable society and achieve growth  
by pursuing technologies of outstanding values  
and providing products of outstanding values.**



## “NCI KIRARI 2025” Financial Targets

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# Financial targets



	FY2021 Results		FY2025 Targets
Net sales	47 billion yen		62 billion yen
Operating profit	3.2 billion yen		7 billion yen 1.5 times the record operating profit (4.7 billion yen).
ROE	6.1%		12% or more
D/E Ratio	X0.48		X0.5 or less

# Growth image



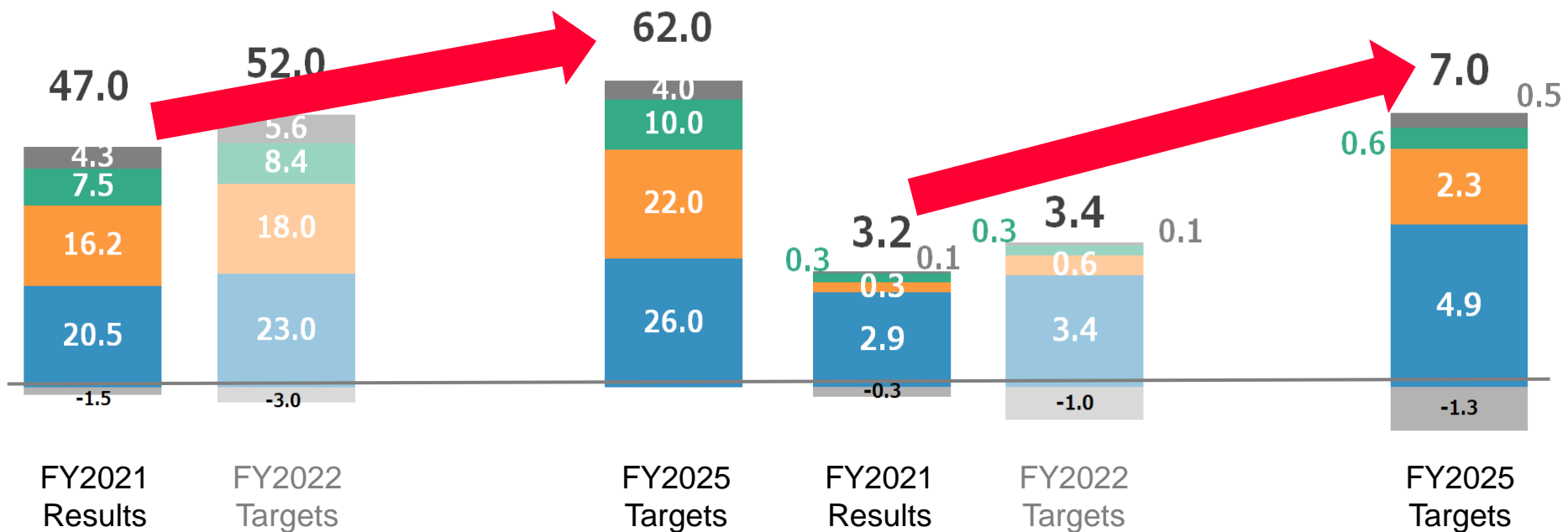
Focus on improving profitability, aiming to increase operating profit by 2.2 times compared to FY2021

## Net Sales

## Operating Profit

■ Electronics & Functional Products ■ Films & Sheetings Products ■ Construction Materials Related ■ Engineering ■ Adjustments

Unit: Billion Yen





## “NCI KIRARI 2025” Growth Strategy

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**Creating new value with our technological capability, we help make society more prosperous.**

**More  
prosperous  
society**

**=**

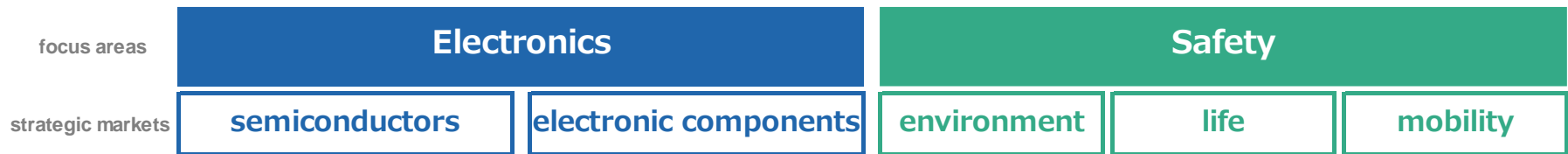
**More convenient society  
Safer and more secure  
society**





## Growth Strategy

- Chemical electronics materials used in the manufacturing process of semiconductors and electronic devices that **make the world more convenient**. Film materials that play an active part in safe mobility markets and the drug substance, both **contribute to the safety and security of the world**. We have designated these products, which are the Group's strengths, as growth drivers, and have set “**Electronics**” and “**Safety**” as our focus areas.
- Identification of semiconductors and electronic components as the strategic markets for “**Electronics**”, and environment, life, and mobility as the strategic markets for “**Safety**”.
- Achieve **business growth** by strengthening our ability to respond to high-value-added products in high-growth markets including semiconductor and electronic device markets, and **improve profitability** by deploying engineering technologies and establishing a solid business foundation in the environment, life, and mobility markets.



## Initiatives to Support Growth Strategies

Reinforcement of  
R&D Structure

Promotion of  
SDGs Management

Promotion of  
DX Measures



## External Environment

- Growing demand for semiconductors and electronic device due to the spread of 5G and IoT and the evolution of ICT technologies.
- Growing demand for car electronics with the development of “CASE” and “ADAS”.
- Growing demand for consumer products represented by PCs, smartphones, game consoles, etc. in the New Normal.



**For chemical electronics materials, which support high functionality in semiconductors and electronic devices, we aim to expand the scale of business by further improving the level of technology and expanding supply capacity.**

## Examples of specific strategies

- **Focus resources on existing growth drivers**  
Chemicals for semiconductor materials / Chemicals for manufacturing of electronic components / Additives for semiconductor photoresists / Semiconductor mold cleaner / Binders for electronic components / Circuit boards substrates for electronic components
- **Promote Commercialization of next-generation growth drivers**  
Next-generation prismatic retroreflective sheetings / Ultra-low metal, high purity products
- **Strengthen R&D capabilities to create new growth drivers**  
Materials for all solid-state batteries / Prism sheetings for aerial displays



## Strategic Markets

### Semiconductors

#### Chemicals for semiconductor materials

(Electronics & Functional Products Business / Functional Chemicals)

#### Additives for semiconductor photoresists

(Electronics & Functional Products Business / Functional Chemicals)

#### Semiconductor mold cleaner

(Electronics & Functional Products Business / Electronic Materials)

#### Ultra-low metal, high-purity products

(Electronics & functional Products Business / Functional Chemicals)



### Electronic Components

#### Binders for electronic components

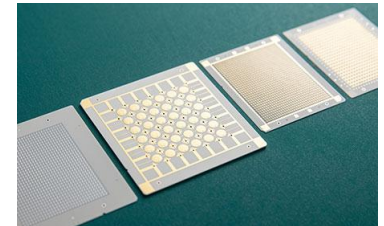
(Electronics & Functional Products Business / Functional Polymers)

#### Chemicals for manufacturing of electronic components

(Electronics & Functional Products Business / Functional Chemicals)

#### Circuit boards substrates for electronic components

(Electronics & Functional Products Business / Electronic Materials)



#### Next-generation prismatic retroreflective sheetings

(Films & Sheetings Products Business / Retroreflective Sheetings)

#### Materials for All-Solid-State Batteries

#### Batteries

(Electronics & Functional Products Business / Electronic Materials)

#### Prismatic sheetings for aerial displays

(Film and Sheetings Products Business / Retroreflective Sheetings)



Examples of Growth Drivers

Existing

Next generation

Subsequent generation



## External Environment

### Environment

Growing interest in and demand for SDGs & carbon neutrality

### Life

Global aging  
Extension of healthy life expectancy

### Mobility

Evolution of automated driving technology  
Development of transportation infrastructure in emerging countries

**Contribute to the development of a safe, secure and sustainable society through high value-added film functions and the application of engineering technology to carbon neutral transitions.**

## Examples of specific strategies

### Deployment of engineering technology

Carbon-neutral transition facility

### Development of new products and technologies to improve quality of life

Drug substances/  
Raw materials for medical and cosmetic products

### Multi-functional and high-functional films and sheetings

Environmentally friendly decorative mold products/Next generation high functional films  
/Retroreflective sheetings for license plates



## Strategic Market

### Environment

**Carbon-neutral transition facility**  
(Engineering Business)



### Life

**Drug substances**  
(Electronics & Functional Products Business / Functional Chemicals)

**Raw materials for medical and cosmetic products**  
(Electronics & Functional Products Business / Functional Polymers)



**High-strength, high-functional handrails**  
(Construction Materials Related Business)



### Mobility

**Retroreflective Sheetings for license plates**  
(Films & Sheetings Products Business / Retroreflective Sheetings)



**Next generation high functional films**  
(Films & Sheetings Products Business / Films)

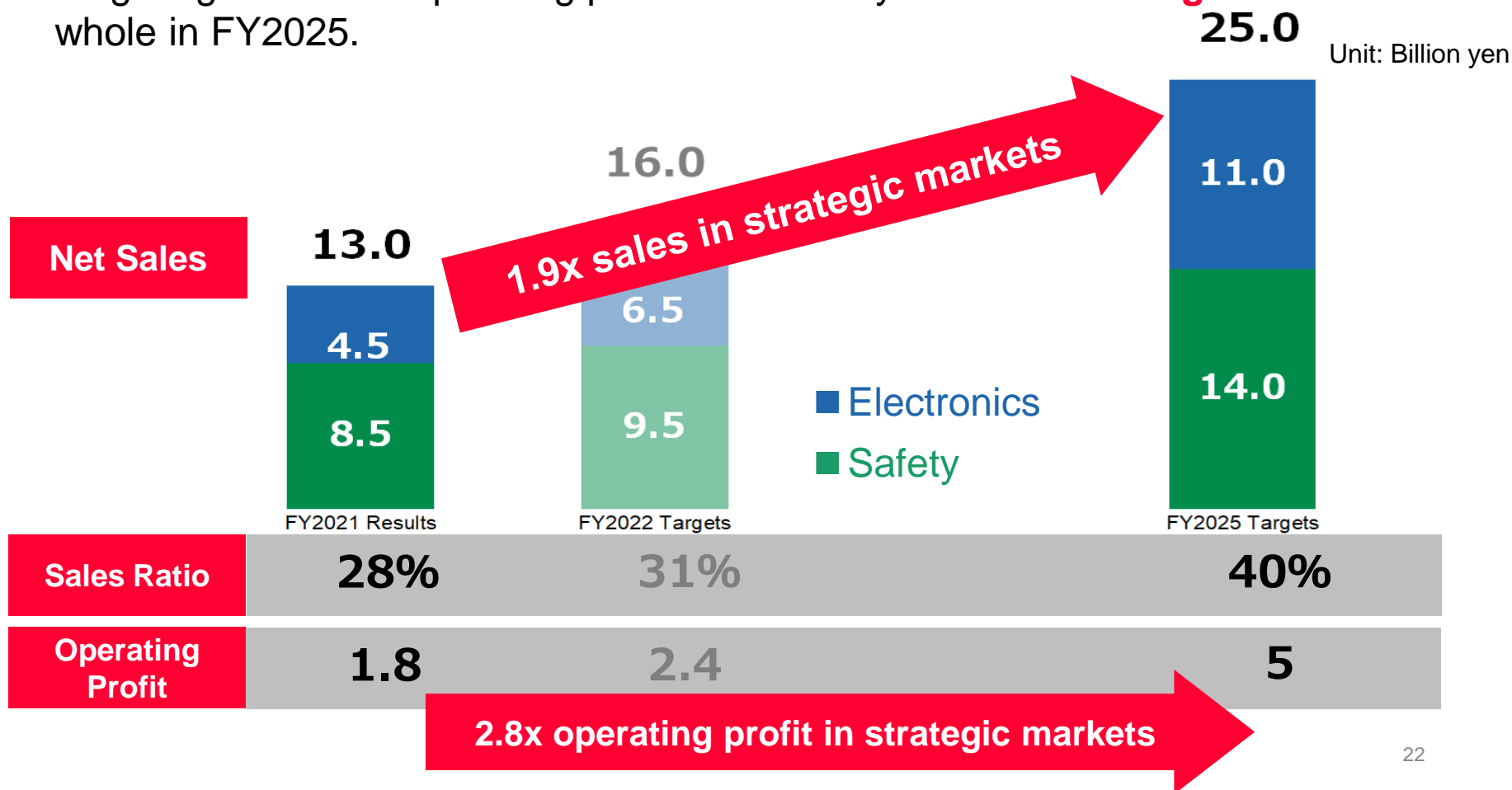
**Environmentally friendly decorative mold products**  
(Films & Sheetings Products Business / Films)



# Strategic markets      Performance image



- Targeting sales of 11 billion yen in the **electronics strategic market**, 14 billion yen in the **safety strategic market**, and combined sales of 25 billion yen for the **strategic markets** as a whole FY2025.
- Targeting combined operating profit of 5 billion yen for the **strategic markets** as a whole in FY2025.



# Segment-specific initiatives outside strategic markets



Aim to further improve profitability by addressing segment-specific key issues

## Electronic & Functional Products

- Adding more value to products by utilizing polymerization and sintering technologies. (Adhesives for optical applications, ceramic substrates for electronic components, etc.)
- Improving profitability by reconfiguring the business portfolio.

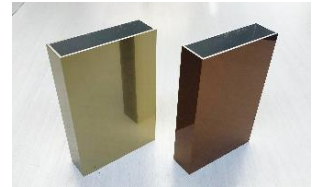
## Films & Sheetings Products

- Adding more value to products by deepening high-functional film manufacturing and printing technologies.
- Developing new markets by utilizing the NCI Group's global sales bases.

## Construction Materials Related

- Adding value to products by exploring customer needs.
- Developing high value-added products by combining the technological capabilities of the NCI Group.

Louvers with metallic luster effect utilizing NCI's film and sticker technologies (sample)



## Engineering

- Providing equipment for higher functionality and enhanced safety through the use of DX.
- Developing new fields such as the pharmaceutical industry.



# Regional strategies



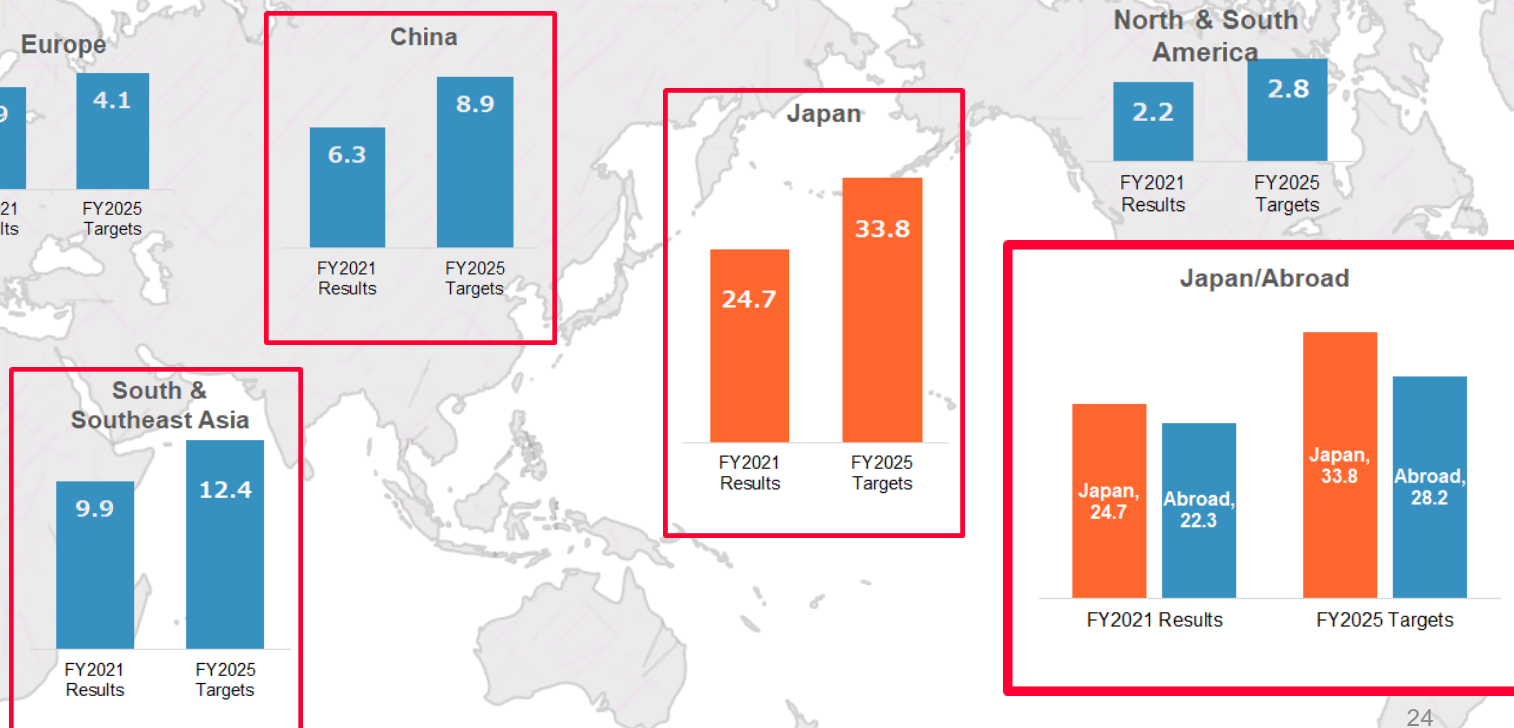
In view of the need to address country and supply chain risks, although overseas sales are expected to increase, the ratio of overseas sales to total sales is expected to fall slightly from 47% to 45%.

## Japan: **Electronics**

Japanese companies with high technology level have large shares in semiconductor material and electronic component markets, and our Group will continue to aim for growth in the electronics field as a partner company.

## China/South Asia & Southeast Asia: **Safety, Electronics**

Mobility-related products will be targeted to the worldwide market due to the development of global motorization. In China, we will fully utilize our local production bases to meet the needs of adhesives and bonding agents for the electronics field.



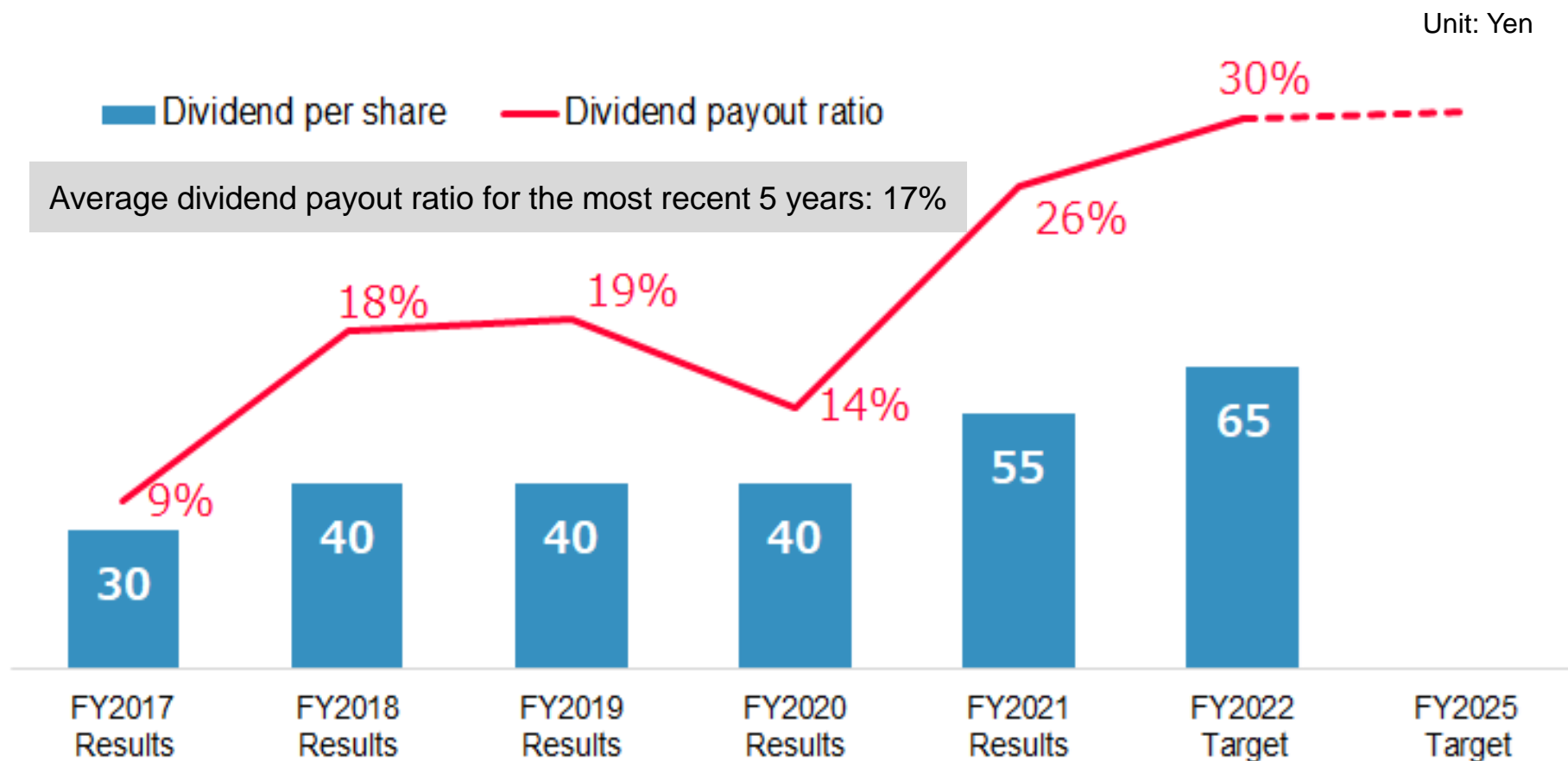
Unit: Billion yen



# Policy on return to shareholders



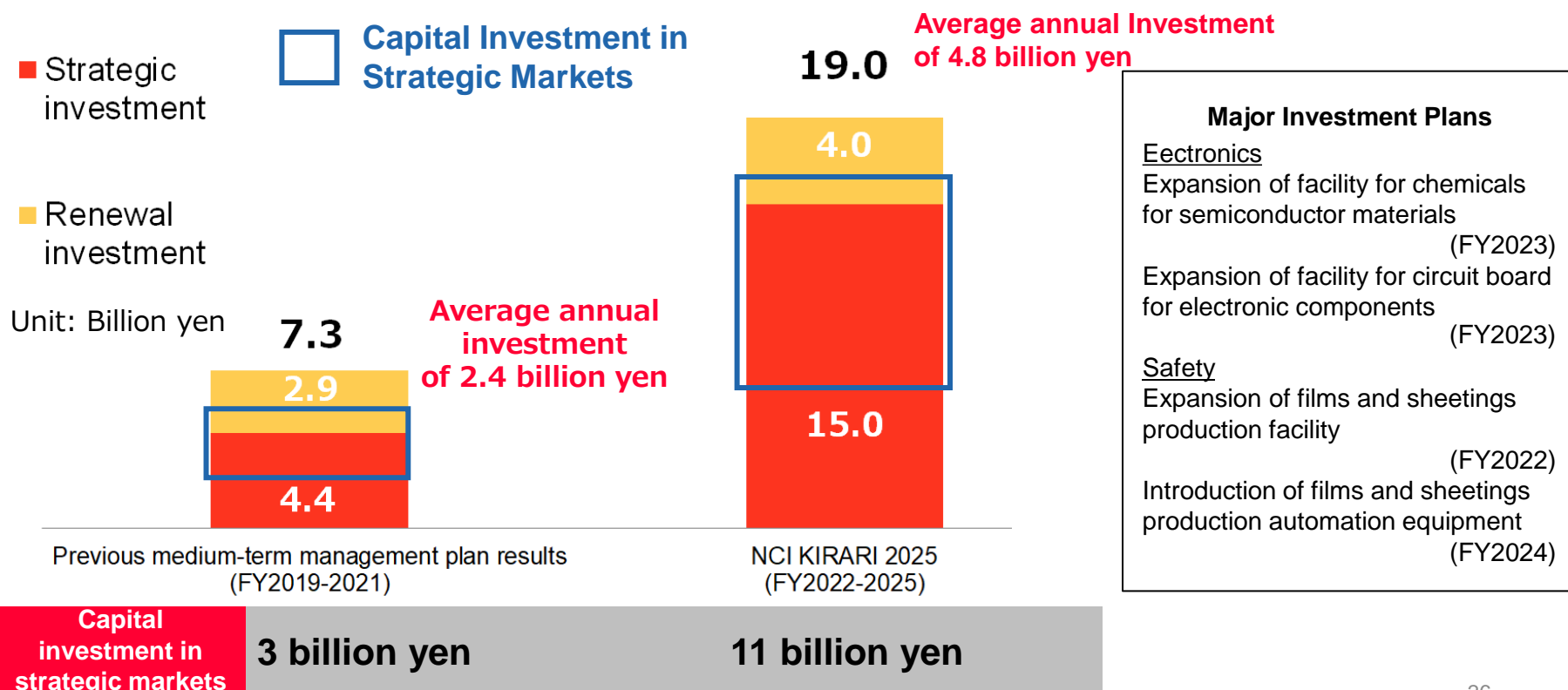
Aim to maintain stable dividend with a payout ratio of at least 30%.





# Capital investment

- Total investment during the period of the medium-term management plan was 19 billion yen, with average annual investment doubling from the previous medium-term management plan period to 4.8 billion yen.
- Aggressive investment of 11 billion yen in strategic markets of electronics and safety.
- Strategic investment includes investment in DX and carbon neutrality, where more than 15% of strategic investment have been invested.





## Reinforcement of R&D Structure

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# Reinforcement of R&D structure



The aim is to achieve a new product sales ratio of at least 15% in 2025 from 7% in 2021 and a new product sales ratio in strategic markets of at least 35% in 2025 from 25% in 2021.

Provide solutions for a sustainable society through the creation and integration of technologies.

## Examples of R&D initiatives that contribute to SDGs

Development of functional polymers whose raw materials have been changed from petrochemical-derived raw materials to biomass raw materials.

Development of film and sheet products with decorative and functional properties as alternatives to paint and plating products.

Development solvent-free high-performance polymers that replace solvent-based polymers that have a large environmental impact.



- Elimination of sources of environmental pollution
- Reduction of environmental impact
- Reduction of energy use



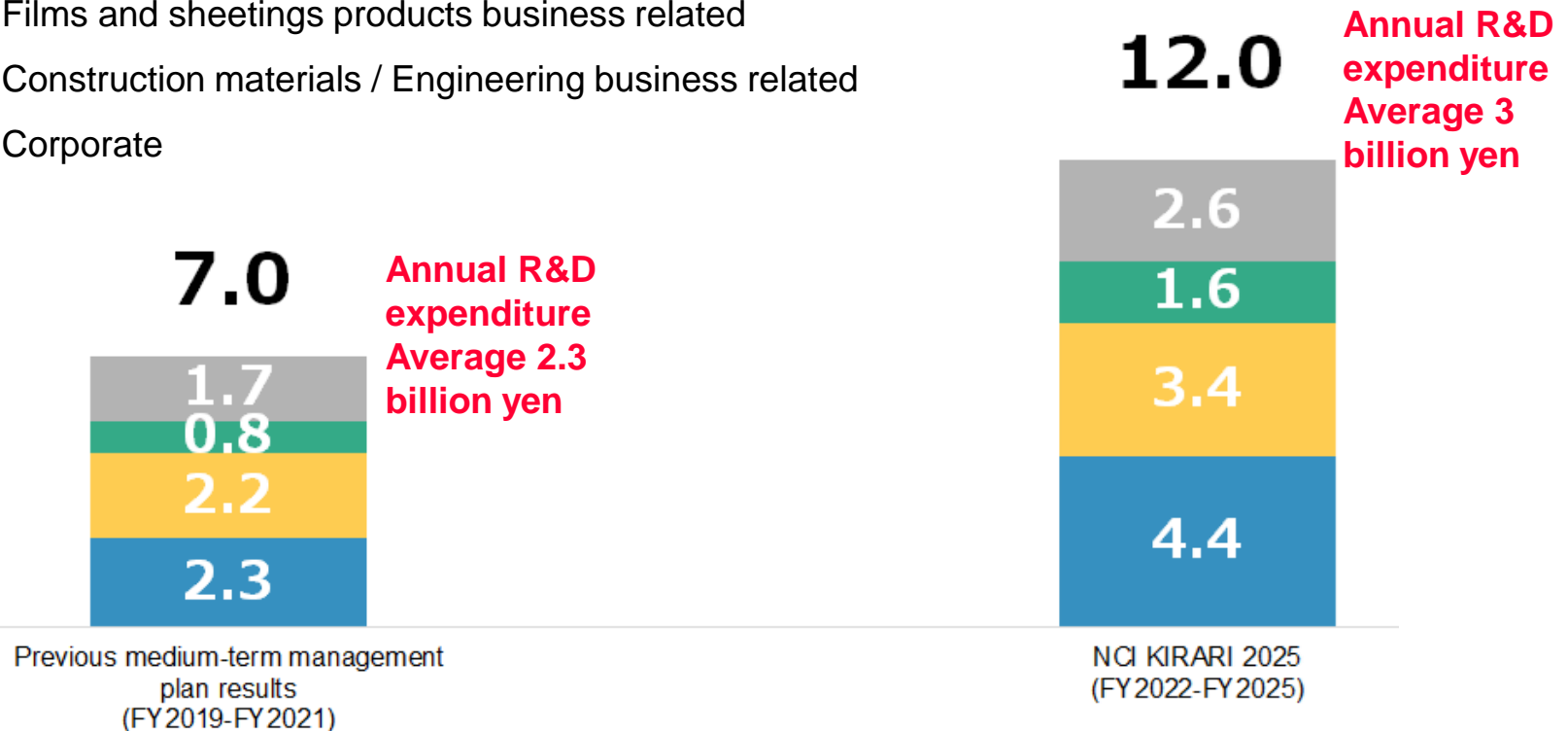
# R&D expenditure



Investment of 8 billion yen in R&D expenditure for strategic markets over 4 years starting in 2022

- Electronics and functional products business related
- Films and sheetings products business related
- Construction materials / Engineering business related
- Corporate

Unit: Billion yen



R&D  
expenditures for  
strategic markets

4.2 billion yen

8 billion yen



## Promotion of SDGs Management

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## Our Mission

**Creating new value with our technological capability,  
we help make society more prosperous.**



In view of the changing interests and needs of society, five materialities (key issues) have been identified that are closely related to the realization of the Group's mission.

## Five Materialities

Development of  
social and  
industrial digital  
infrastructure

Realization of  
healthy living  
and a safe and  
secure society

Achieving  
carbon  
neutrality









Coexistence  
and co-  
prosperity with  
local  
communities

Increased  
feeling of  
satisfaction and  
reward for  
employees

# SDGs compliance measures



## (1) Realization and contribution through business activities









NCI Group Focus Areas	Society's interests and needs	Materiality	NCI Group Business Activities	Related SDGs Targets
Electronics	<ul style="list-style-type: none"> <li>Responding to the New Normal and Promotion of DX.</li> <li>Development of automated driving and control technology</li> <li>Development of ICT society</li> </ul>	<b>Development of social and industrial digital infrastructure</b>	<ul style="list-style-type: none"> <li>Materials for semiconductors</li> <li>Substrates for electronic devices</li> <li>High-intensity retroreflective sheetings</li> </ul>	  
Safety	<ul style="list-style-type: none"> <li>Responding to infectious diseases</li> <li>Extension of healthy life expectancy</li> </ul>	<b>Realization of healthy living and a safe and secure society</b>	<ul style="list-style-type: none"> <li>Drug substances</li> <li>Binders for medical and cosmetic products</li> <li>High-strength, high-functional building materials</li> </ul>	
	<ul style="list-style-type: none"> <li>Use of renewable energy</li> <li>Proliferation of Evs</li> </ul>	<b>Achieving carbon neutrality</b>	<ul style="list-style-type: none"> <li>Carbon-neutral engineering facilities</li> </ul>	   



# SDGs compliance measures



## (2) Realization and contribution through corporate activities

Areas	Society's interests and needs	Materiality	NCI Group Corporate Activities	Related SDGs Targets
Environment	<ul style="list-style-type: none"> <li>• Consideration for the natural environment</li> <li>• Reduction of environmental impact</li> <li>• Disclosure of environmental indices.</li> </ul>	<b>Achieving carbon neutrality</b>	<ul style="list-style-type: none"> <li>• Use of renewable energy</li> <li>• Reduction of greenhouse gas emissions</li> <li>• Compliance with the TCFD</li> </ul>	   
Community	<ul style="list-style-type: none"> <li>• Revitalization of local community</li> <li>• Creation of employment in local community</li> <li>• Addressing environmental issues in local community</li> </ul>	<b>Coexistence and co-prosperity with local communities</b>	<ul style="list-style-type: none"> <li>• Securing employment in local community</li> <li>• Recognition of NCI through community interaction</li> <li>• Elimination of environmental accidents</li> </ul>	
Employee	<ul style="list-style-type: none"> <li>• Human capital management</li> <li>• Achieving work-life balance</li> <li>• Promotion of diversity</li> <li>• Promotion of health management</li> </ul>	<b>Increased feeling of satisfaction and reward for employees</b>	<ul style="list-style-type: none"> <li>• Increasing value through human resources development</li> <li>• Appropriate staffing and work style reform</li> <li>• Use of personnel of diverse nationalities, genders and ages</li> <li>• Development of a safe and secure working environment</li> </ul>	  



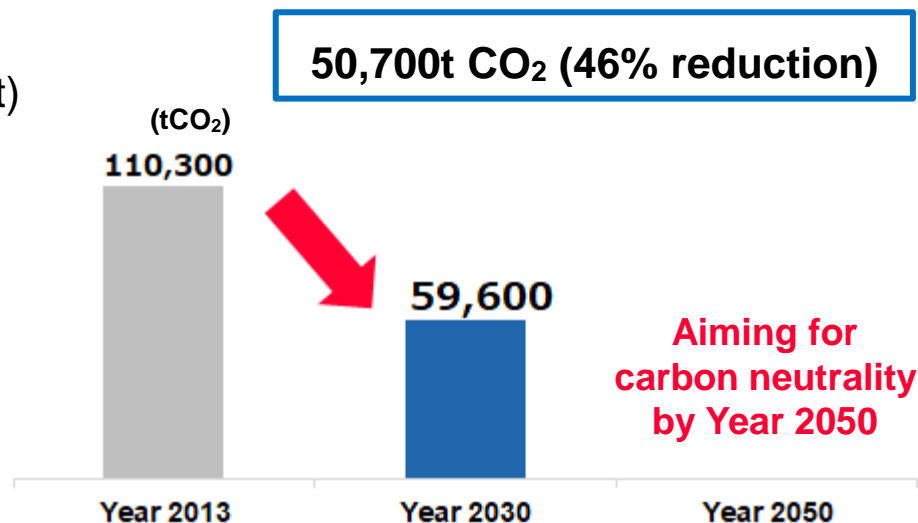
## (1) Examples of Group Initiatives

- Use of renewable energy  
(e.g., solar power generation at Uozu Plant)
- Promote MFCA activities and process efficiency reforms
- Recovery and reuse of waste heat
- Fuel conversion
- Switch to energy-efficient equipment
- Conversion to green power



Solar panels installed at Uozu Plant

## CO<sub>2</sub> Reduction Target in our Group



Solar panels installed at a plant in Thailand (ECT)



## (2) Examples of initiatives toward transition to carbon neutral through the Group's business operations

- **Development of environmentally friendly products**
  - Functional polymers whose raw materials have been changed from petrochemical-derived raw materials to biomass raw materials.
  - Films and sheetings products with decorative and functional properties as alternatives to paint and plating products.
  - Solvent-free high-performance polymers that replace solvent-based polymers that have a large environmental impact.
- **Steelmaking (zero carbon steel)**
  - Powder transport and injection technology for equipment shifting from coal to alternative raw materials.
  - High-temperature, high-pressure equipment fabrication technology for carbon-recycling blast furnaces and hydrogen direct reduction furnace facilities.
- **Electric power (Innovative low-emission coal-fired power generation)**
  - Pulverized coal transport and injection technology to enable oxygen-blown integrated gasification combined cycle (IGCC).
- **Hydrogen production (low-grade coal gasification for hydrogen production)**
  - Pulverized coal transport and injection technology for the production of hydrogen by low-grade coal gasification.



The engineering business unit has a dedicated powder transport test facility in Uozu City, Toyama Prefecture, where new technologies are being developed.

(Photo) Long-distance transport test facility & Waste plastic transport test facility



## DX Promotion

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Achievement of “NCI KIRARI 2025” goals through the use of digital technology

Adapt “quickly” to changing business environment

## DX Grand Design

### Management

Speed-up of management

### Sales

Strengthening of sales capabilities through business intelligence

### Production

Smart factory

### R&D

Speed-up of R&D

### Back Office

Restructuring of operations

- Provide necessary data when it is needed. Transformation to speedy business management.
- Active use of ICT and digital data. Improvement of productivity and quality, and strengthening of product development drive.
- Transition to high-value-added operations and enhanced work-life balance.

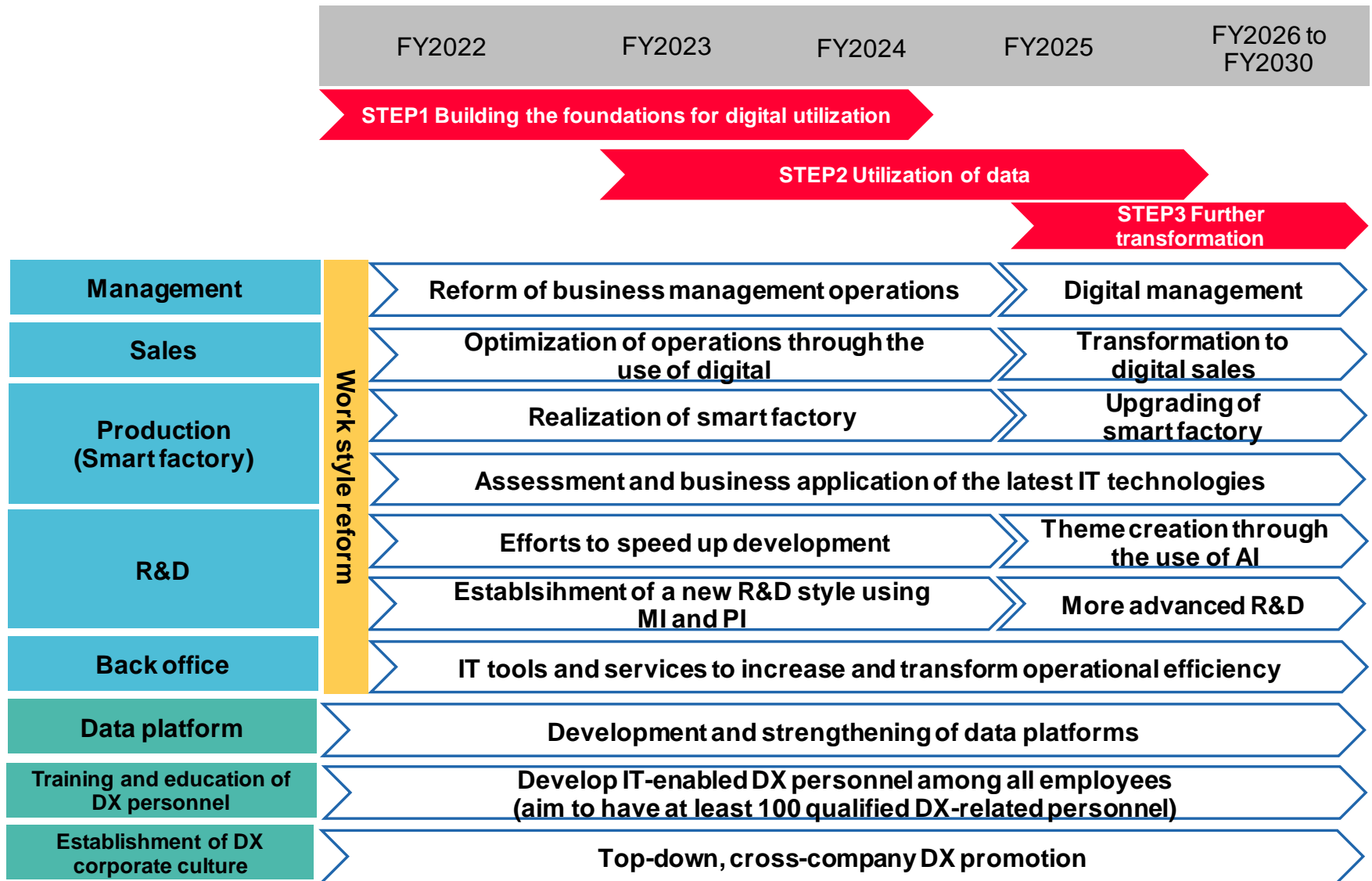
## DX Promotion Structure directly under Management

Data platform development

DX human resource development

Realization of DX corporate culture

# DX promotion roadmap



**For questions and inquiries from analysts/institutional investors,  
please contact**



**NIPPON CARBIDE INDUSTRIES CO.,INC.**

Public Relations & Investor Relations Group  
Corporate Planning Department

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