# New Cosmos Electric Group Medium-term Management Plan 2025-2027

May 15, 2025





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## **Core Philosophies of the New Cosmos Electric Group**



1

#### Eliminate gas accidents around the world

Globally deploy gas safety technologies developed by New Cosmos Electric.

2

## Create safer, more secure, and more comfortable environments

Become a company that provides new value that meets the needs of changing markets.



Develop an environment where our diverse employees can utilize their wide range of ideas and experiences.

Promote human capital management and sustainability management.

By mastering our sensing technology and applying these three principles, we aim to make a positive impact on the world.

## Core Philosophies of the New Cosmos Electric Group



#### Eliminating the many gas accidents that are occurring around the world

Many gas accidents are occurring all around the world, resulting in numerous injuries and fatalities. We will work faster than ever to utilize our gas sensor technology to eliminate these accidents.

#### Incidents of global gas accidents (since 2023)

November 2023 New York State, USA Residential building complex

**Injuries: 15** 

March 2023 Pennsylvania State, USA Chocolate factory Fatalities: 3 Injuries: 8 December 2024 Firenze, Italy Gas refinery Fatalities: 2 Injuries: 9

lune 2023

Building

Paris, France

Fatality: 1

Injuries: 29

April 2024
Quang Ninh Province,
Vietnam
Coal mine tunnel
Fatalities: 4
Injuries: 7

Punjab State, India Factory Fatalities: 11

March 2023

June 2023 Ningxia Hui Autonomous Region, China Grilled meat shop Fatalities: 31 Injuries: 7

February 2025
Taichung City, Taiwan
Department store
Fatalities: 4
Injuries: 26

## Comparison of overseas fatalities and injuries caused by town gas accidents

	Fatalities	Injuries
France	10	43
Italy	23	385
United Kingdom	10	330
USA	50	210
Japan	1	11

(Source)
Excerpted from reference material 2-1 of the Gas Safety
Working Group, Industrial Safety Subcommittee,
4th Industrial Structure Council, Ministry of Economy,
Trade and Industry (June 9, 2014).
\* Data from 2010 (2011 for France)



# Looking Back on the Medium-term Management Plan 2022-2024

2-1

## Medium-term Management Plan 2022-2024 Objectives and Results



Qualitative objective

This is "the first step toward embracing new challenges and creating new value, aiming to embark on a path of sustainable growth. Our goal is to become a group that is chosen by customers and contributes meaningfully to society."

Quantitative objectives (year ended March 31, 2025)			
	Planned value	Actual result	
Consolidated sales	41.66 billion yen	42.15 billion yen	
Overseas sales ratio	40.0% or more	46.2%	
Operating income	4.1 billion yen	5.15 billion yen	
Operating income to sales ratio	9.8%	12.2%	
ROE	5.3%	7.3%	

In the year ended March 31, 2025, we achieved all quantitative objectives from the plan that was revised and released in May 2024.

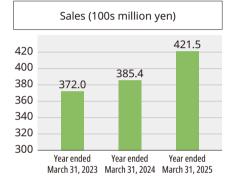
Growing demand in North America for battery-powered natural gas alarms drove a significant increase in our overseas sales and sales ratio.

Price revisions and reductions in production costs and other expenses resulted in our operating income and sales ratio exceeding their planned values.

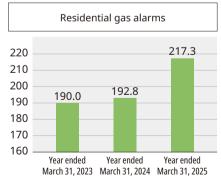
### NEW COSMOS ELECTRIC

## Looking Back on the Medium-term Management Plan 2022-2024

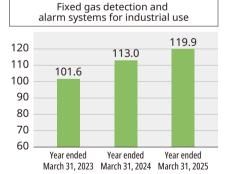


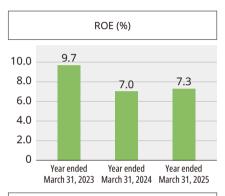


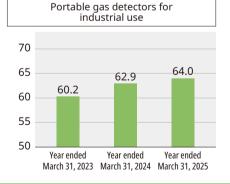














## **Key Achievements during Mid-term Management Plan 2022-2024**

	Expanding into global markets	<ul> <li>Established the Paris Office.</li> <li>Made the Taiwan Office a subsidiary.</li> <li>Enhanced sales of residential gas alarms in North America and China.</li> </ul>
Growth Strategy	Creating new markets through the development of gas sensors	<ul><li>Expanded the in-vehicle hydrogen sensor business in China and Europe.</li><li>Began initiatives in the wellness and healthcare fields.</li></ul>
	Enhancing safety and responding to changing needs	<ul> <li>Established a mass production system for battery-powered natural gas alarms.</li> <li>Developed gas detectors for the semiconductor market.</li> <li>Consolidated subsidiaries in order to strengthen the maintenance business.</li> </ul>
	Revising production systems and supply chains	<ul> <li>Constructed the Yodogawa Factory to produce gas sensors in Osaka.</li> <li>Constructed the Liaoning Factory in Liaoning, China to produce products for the Chinese market.</li> <li>Started operation of the Mexico Factory that manufactures battery-powered natural gas alarms for the North American market.</li> </ul>
Foundational	Productivity improvement	• Established the Digital Transformation division.
Strategy	Improving corporate governance	Strengthened the Internal Audit Division.     Carried out initiatives for strengthening governance in line with international norms.
	Strengthening group management	• Implemented cooperation in development and production between NEW COSMOS ELECTRIC CO., LTD. and FIGARO ENGINEERING INC.
Sustainability	Contributing to reducing carbon emissions	• Completed identification of actual conditions for establishing Scope 1 and 2 objectives.
Strategy	Contributing to the safe use of clean energy	Achieved commercialization of FCEV sensors and other products that contribute to carbon neutrality.



# About the Medium-term Management Plan 2025-2027





## **Qualitative Objective of the Medium-term Management Plan 2025-2027**



## Philosophy of the Medium-term Management Plan 2025-2027



The period of this Medium-term Management Plan is three years with the goal of development and expansion.

"Development" aims to monitize prior investments and is primarily focused on expanding the market for battery-powered natural gas alarms in North America."Expansion" will focus on establishing a foundation in the European hydrogen gas market.

## Medium-term Management Plan 2022-2024

#### Investment

- Opening of the Yodogawa Factory
- Start of operations at the Mexico Factory
- Establishment of the Taiwan Office as a subsidiary
- Development of new gas detectors for the semiconductor market
- Establishment of the Paris Office



Yodogawa Factory



Paris Office

## Medium-term Management Plan 2025-2027

### Generating revenue from investment)

- Expanding the market for battery-powered natural gas alarms in North America
- Expanding sales in the semiconductor market
- Improving the quantity and quality of our MEMS gas sensors



Battery-powered natural gas alarm for the North American market



Gas detector for the semiconductor market

### Expansion —

(Creating a foundation for future new markets and new business)

- Construction of a foundation for the carbon neutrality (hydrogen) market primarily in Europe
- Development and expanding use of battery-powered LP gas and hydrogen alarms



MEMS gas sensor



FCEV hydrogen detector

## **Strategy the Medium-term Management Plan 2025-2027**



Based on our core principles, we will pursue a growth strategy that focuses on monetizing investments and expanding for the future, while executing foundational strategies that support these efforts.

#### **Growth Strategy Foundational Strategy Excecution of area-specific strategies** Strengthen technologies by establishing in the global market an engineering chain Implementation of new product and Strengthen supply chains service strategies Strengthen organizational structure Creation of collaborative frameworkes and through DX implementation and human capital foundations for new market development management **Establishment of next-generation sensing SDG** initiatives technology and increase in the quality (measures to preserve a prosperous earth and quantity of MEMS gas sensors for future generations)

**Core philosophies** 

- Eliminate gas accidents around the world
- Create safer, more secure, and more comfortable environments
- Develop an environment where our diverse employees can utilize their wide range of ideas and experiences

## **Region-specific Strategies in the Global Market**



In order to adapt to changes in the business environment, we will transform our business portfolio to focus on global markets.

The Medium-term Management Plan 2025-2027 is positioned as a period of development and expansion, and shifts our primary focus from Japanese domestic markets to focusing on the three major regions of North America, Asia (including Japan), and Europe. In particular, we aim to grow our business in the North American market.

#### **North America**

- Expand the market for residential battery-powered natural gas alarms
- Increase the installation of refrigerant leakage detector modules

#### **Europe**

 Establish a foundation in the carbon neutrality (hydrogen) market

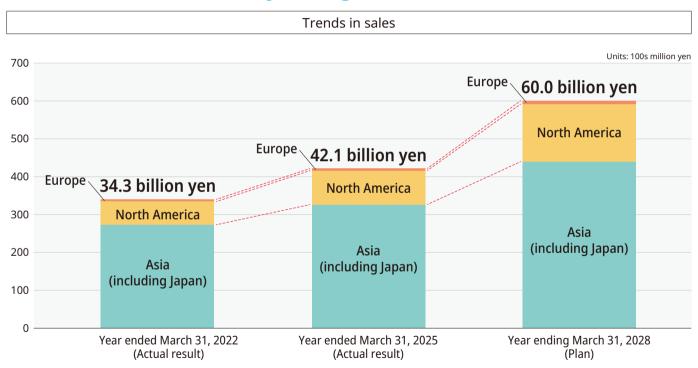
#### Asia (including Japan)

- Increase sales of industrial gas detection and alarm systems
- Expand use of residential battery-powered natural and LP gas alarms

## Growth Strategy

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## **Sales Goals for the 3 Major Regions**



## NEW COSMOS ELECTRIC

#### **Growth Strategy**

## Market Trends for Residential Battery-powered Natural Gas Alarms in North America

- Gas explosion accidents are increasing in North America due to aging infrastructure.
- In 2018, the New York energy supplier Consolidated Edison, Inc. (Con Edison) became the first to install battery-powered natural gas alarms.
- In the state of Maine (January 2022) and New York City (December 2023), installation of residential gas alarms became mandatory.
- At present, a total of six states, including Illinois, have proposed laws requiring the installation of residential gas alarms.
- In 2023, the major home center Lowe's began selling DeNova Detect battery-powered natural gas alarms.



Battery-powered natural gas alarms for the North American market

#### DeNova Detect

\* Battery-powered natural gas alarm brand sold in the North American market

Approx. 3.5 million households

State of Maine and New York City Approx. 20 million households\*

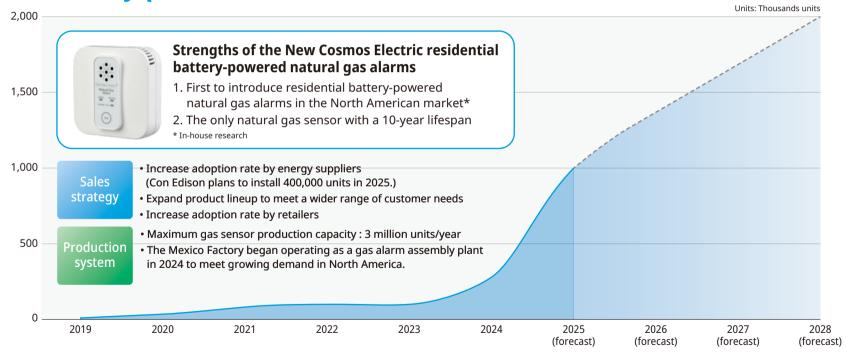
State of Maine, New York City, State of Illinois, others

\* Total of the eight states that have passed or proposed laws. Approximately 28 million town gas customers in Japan (June 2024, from the HP of the Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry)

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#### **Growth Strategy**

## Strategy for Growing North American Residential Battery-powered Natural Gas Alarm Market

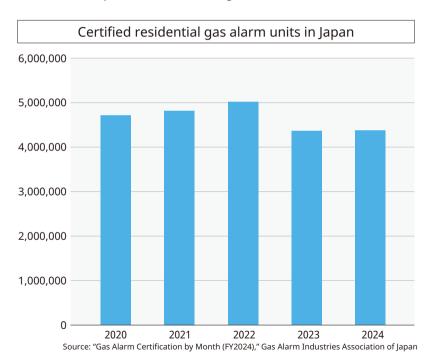


#### **Growth Strategy**



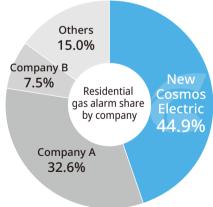
## Market Trends and Strategies for Residential Gas Alarms in Japan

Maintain the top share of residential gas alarm market, and work to further increase market share.



#### Sales strategy

- Transition from traditional wired power units to battery-powered units equipped with MEMS methane sensors (Increase ratio of battery-powered units from current 20% to 50%.)
- Increase the usage rate of all residential gas alarms by pushing easy-to-install battery-powered units.



## Top share of residential gas alarms in Japan



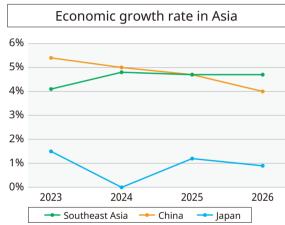
Source: "Security Market Technologies Achieved by DX and Future Market Outlook 2023," FUJI KEIZAI CO., LTD.

#### **Growth Strategy**

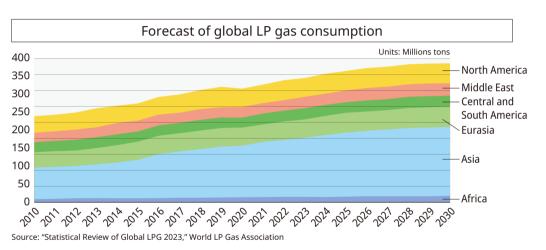


## **Market Trends and Strategies for LP Gas Alarms in Asia**

Increase the usage of LP gas alarms in Asia, where economic growth is strong.



Source: "Global Economic Prospects, JANUARY 2025," WORLD BANK GROUP; "Asian Development Outlook (ADO) April 2025," Asian Development Bank (ADB)



#### Sales strategy

- Establishment of the Thailand Office as a subsidiary
- Expand the use of residential battery-powered LP gas alarms
- Expand sales of industrial LP gas detection and alarm systems



Residential battery-powered LP gas alarm (under development)



Industrial LP gas detection and alarm system



## **3–10** Growth Strategy

## **Strategy for Increasing Maintenance in Japan**

Industrial fixed and portable gas detectors require regular maintenance. We aim to improve the operational efficiency of the maintenance buisness and expand sales.

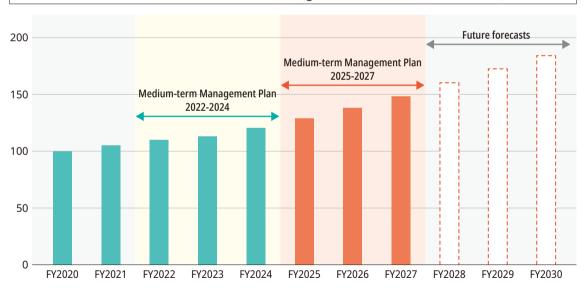
#### **Business strategy**

- Strengthening efforts to improve inspection rates
- Streamlining operations through the digitalization of inspecton information



#### Maintenance business sales trends (growth rate with FY2020 as 100)

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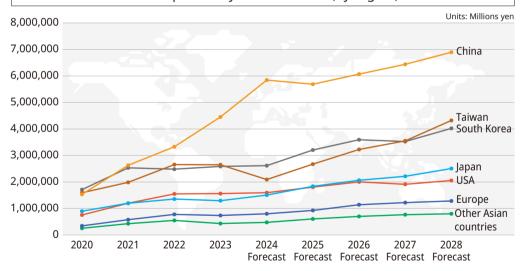


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## Growth Strategy Initiatives for the Semiconductor Market

Strengthen sales of new products and expand sales in the growing global semiconductor market .

Trends in the global semiconductor manufacturing equipment, testing, and inspection systems markets (by region)



Source: Semiconductor Equipment Test/Inspection Worldwide Annual 2024, 2025-04-18



Gas detector for the semiconductor market

#### World's first replaceable sensor cartridge

Easy pre-calibrated sensor replacement eliminates the need for on-site gas galibration, reducing costs.

### World's first high-sensitivity silane gas sensor

Our original hot wire semiconductor sensor is highly sensitive to silane and has a long lifespan.

### Unique pyrolysis-integrated NF3 and COS sensor

We developed a unique pyrolysis-integrated NF3 and COS sensor with improved cost performance.

## 3-12 Growth Strategy



#### NEW COSMOS ELECTRIC

## **Initiatives for the Carbon Neutrality (Hydrogen) Market**







#### Adoption for the TOYOTA MOTOR MIRAI

Adopted for the TOYOTA MOTOR CORPORATION MIRAI starting from March 2021. In recent years, it was also installed in the CINOVA H2 hydrogen energy high-speed train that was unveiled at InnoTrans 2024 in September 2024. In addition to FCEV, needs are growing for other applications such as fuel cells, hydrogen generators, and forklifts.



#### Explosion-proof gas detector head / Hydrogen flame detector







#### More than 80% share of the domestic market for hydrogen station gas detection and alarm systems

We have been engaged in research and development of high-sensitivity gas sensors for selectively detecting hydrogen in industrial fields for more than 40 years. Our technical capability has been recognized, and our products are used in large numbers of hydrogen stations.



#### Residential battery-powered hydrogen alarms





#### Development of the world's first residential battery-powered hydrogen alarm

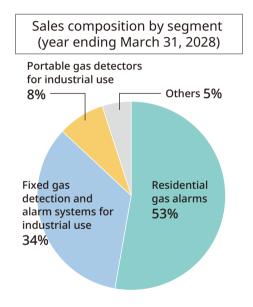
Trial introductions have begun primarily in Europe, where the use of hydrogen for residential energy is being considered.





## 3-13 Quantitative Objectives of the Medium-term **Management Plan 2025-2027**

	Year ended March 31, 2025 (actual result)	Year ending March 31, 2028 (objective)
Consolidated sales	42.15 billion yen	60.0 billion yen or more
Overseas sales ratio	46.2%	50% or more
Operating income to sales ratio	12.2%	12.5% or more
PBR	0.7	1.0
ROE	7.3%	8.5%
ROIC	6.1%	8.0%



#### NEW COSMOS ELECTRIC

## 3-14 Medium-term Management Plan 2025-2027 **Investment Plan and Dividend Plan**

#### Investment plan

We are planning investment of approximately 8.0 billion yen over three years to increase production of residential battery-powered natural gas alarms for North America (approximately 2.0 billion yen), as well as other projects including development of new products to support the Growth Strategy, and maintenance of overseas bases.

- Capital investment to support increased production of gas alarms and gas sensors, and for BCP measures
- Investment for maintaining bases overseas
- Investment for product development supporting MEMS gas sensors and various other sensors; as well as new technologies utilizing light, images, and AI; and investment for utilizing intellectual property
- Investment for improving the employee training system, expanding welfare, AI and other DX infrastructure, supporting diversifying working styles, and improvements for employee working comfort and motivation and for securing human resources

Dividend plan

We will work to return profits to shareholders, aiming for a payout ratio of 30%.





# Reference Materials for the Medium-term Management Plan 2025-2027

4-1

## **Details of the Medium-term Management Plan 2025-2027 Growth Strategy**



#### **Growth Strategy**

#### Execute area-specific strategies in the global market

- North America: Expanding the market for residential battery-powered natural gas alarms, and expanding installation of refrigerant leakage detector modules
- Asia (including Japan): Expanding sales of industrial gas detection and alarm systems, and expanding the use of residential battery-powered natural and LP gas alarms
- Europe: Construction of a foundation for the carbon neutrality (hydrogen) market

#### Implement new product and service strategies

- Expanding the lineup of gas alarms containing MEMS sensors (methane, hydrogen, LP gas, others)
- Product planning for new energy markets
- Development of unique products utilizing CO detection technologies
- Further improving the quality of the maintenance business

#### Create collaborative frameworks and foundations for new market development

- Construction of a foundation focused on the carbon neutrality (hydrogen) market primarily in Europe
- Expanding sales in the semiconductor market
- Global expansion from mutual use of sales channels within the Group
- Cultivating new markets through collaborations with Group companies (fire detection, healthcare)
- Studying and establishing new business in addition to existing domestic business

#### Establish next-generation sensing technology and increase the quality and quantity of MEMS gas sensors

- Strengthening our technological capability for gas detection using light, images, and AI
- Advancing our MEMS and sensing technologies
- Forming alliances to produce synergistic benefits through sensing technologies



## Details of the Medium-term Management Plan 2025-2027 Foundational Strategy

#### Foundational Strategy

#### Strengthen technologies by establishing an engineering chain

• Integrated management system from product development to maintenence

#### Strengthen supply chains

- Expanding and production systems to support growing sales
- Reinforce BCP measures

#### Strengthen our organization through DX implementation and human capital management

- Restructure our human resources department to meet the needs of a new era
- Business optimization and organizational efficiency improvement
- Promote sustainability
- Digitalization of business processes

#### SDG initiatives (measures to preserve a prosperous earth for future generations)

- The New Cosmos Electric Group will carry out unique social contribution initiatives
- Eliminat Scope 1 and 2 CO2 emissions by 2037
- Contribute to achieving carbon neutrality, including Scope 3, by 2050

## **Business of the New Cosmos Electric Group**



New Cosmos Electric handles everything from research and development, manufacturing, and sale of our gas sensors, as well as the development, manufacturing, sale, and maintenance of our gas detectors and alarms that house these sensors.

