

Relationship between Business Activities and the SDGs

# SDGs and the business activities of the SENKO Group, which fosters professional development and supports consumers' lifestyles

The SENKO Group aims to resolve social challenges and create new value through its businesses, based on the core approach that economic activities can be achieved with a healthy global environment and a good relationship with local communities.

**Living Support**  
Nursing and housework services / Fitness / General wholesale and retail / Childcare / Restaurant operations / Agriculture, etc.

**Crefeel Koto**  
Traffic safety / Human resources training / Children's Traffic Park, etc.

**Business Support**  
Logistics consulting / IT solutions / Contact center operations / Temping services / Hotel operations / Real estate, etc.

**Trading & Commerce**  
Trade / Oil sales / Sales of convenience goods, food, and alcoholic beverages, etc.

**Logistics business**  
Shipping / Storage / In-factory operations / Logistics processing / International logistics, etc.

Priority SDG themes of the SENKO Group

- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
- 10 REDUCED INEQUALITIES
- 11 SUSTAINABLE CITIES AND COMMUNITIES
- 13 CLIMATE ACTION
- 17 PARTNERSHIPS FOR THE GOALS

Priority SDG themes of the SENKO Group

- 3 GOOD HEALTH AND WELL-BEING
- 4 QUALITY EDUCATION
- 5 GENDER EQUALITY
- 8 DECENT WORK AND ECONOMIC GROWTH
- 17 PARTNERSHIPS FOR THE GOALS

## Economic level

Providing new value for society through business operations

Businesses that nurture people and support their daily lives



Promoting green logistics in partnership with customers



Providing resilient logistics service that can withstand natural disasters



Developing a Living Support business that offers nursing care, childcare, and health services



Fostering community development through agriculture and revitalizing local industry

Through our business activities, we look to resolve social issues through initiatives that interconnect with sustainability measures and to contribute to the realization of a barrier-free society.

## Society level

We promote dialog and cooperation with the local community and various stakeholders associated with the SENKO Group to build a good relationship with society.

**Human resources and organization as the foundation**

**Sustainability**  
Safety initiatives  
Health initiatives  
Social initiatives



Promoting health management throughout the Group



Fostering the development of people and business through SENKO University

**Cooperation with society**



Traffic safety classes for children at business sites



Offering logistics safety education and professional driver training at Crefeel Koto

## Sustainability of the global environment



Installing solar power and energy-saving equipment at PD centers



Reducing the energy use and carbon dependency of shipping infrastructure (Introducing CNG-powered vehicles and electric trucks)



Using recycled plastic pallets



Cooperating with the Osaka Bay Environment Restoration Project

**Sustainability**  
Environmental measures

## Environmental level

Minimizing the environmental impact of business activities

Recognizing our responsibility for energy consumption and greenhouse gas emissions as a logistics company, we're working to maximize understanding and related reductions.

## A Message from the President



### On the publication of this Integrated Report

We've decided to publish the SENKO Integrated Report 2022 in place of the previous Annual Report and CSR Report.

The report provides a comprehensive picture of management strategies, financial information, and non-financial content such as information about ESG initiatives in order to help shareholders, investors, and other stakeholders understand the SENKO Group's medium- and long-term value creation story. The Group is implementing sustainable management for its flagship Logistics business as well as other businesses. To help readers understand value creation throughout the Group, this report incorporates ample illustrations, photographs, and other visual elements in what we hope is an easy-to-understand introduction to the SENKO Group's medium- and long-term growth strategies and other aspects of its operations. We look forward to

refining the design of the report in the future so that it can serve as a communication tool for fostering constructive dialog with stakeholders by communicating our initiatives for creating value in a sustained manner.

### Operating in the vicinity of lifestyles embraced as a matter of course

Our corporate slogan of "Moving Global" guides an effort to go beyond logistics, make the world go round, and revolutionize business. This approach signals our intention to pursue growth by developing businesses that augment logistics with additional services even as we undertake business activities worldwide and move the world's goods, for example by entering the distribution and manufacturing sectors in addition to logistics, offering services that combine logistics with sales, and transporting products that we've manufactured ourselves.

## Becoming a group that delivers new value to people and society around the theme of connectedness

SENKO Group Holdings Co., Ltd.  
President and Representative Director  
Chairperson, Sustainability Promotion Council

*Y. Fukuda*

The SENKO Group exists to leverage logistics strengths situated at the center of the supply chain to create new value both upstream (in manufacturing) and downstream (in sales), in line with a system of values that focuses on changing society for the better.

The Group Philosophy adopted in 2017 describes our highest mission as "continuously challenging efforts to create services and products as a corporate group supporting people's lives." Our goal is to operate in the vicinity of lifestyles that consumers embrace as a matter of course by supporting not only business and industry, but also people's everyday lives through the development of businesses that support logistics as well as the needs of an aging society, health, food, and daily life.

In this way, we'll work to realize ongoing growth by delivering new value to people and society while resolving social issues through involvement with people's lives and industry.

### The Group's strengths: Green logistics and a diverse array of business platforms that connect it to consumers and society

Although Logistics comprises the SENKO Group's core business platform, our active pursuit over many years of not only truck logistics, but also a modal shift that combines in-house ships and other domestic marine shipping and rail elements and low-environmental-impact green logistics is a key strength of the Group. More than anything else, these environmentally friendly logistics solutions are a major asset that we can bring to bear in our business activities as society makes a concerted effort to realize decarbonization.

In addition to directly addressing issues faced by customers' businesses thanks to our in-house trading functions, we can incorporate elements of operations such as our Living Support business, which integrates closely with consumers' daily lives and local communities. I believe that marshaling all of its resources to treat social issues as business opportunities and embrace the challenge of resolving such issues through its business activities will be the key to the Group's future growth.

### Evaluating materialities based on the characteristics of all the Group's businesses and investors' perspective

To date, we've disclosed information about the importance of key issues for stakeholders and the Company from the perspective of CSR management along with associated initiatives as "key CSR measures." In publishing this new Integrated Report, which incorporates what you might call an integrated mindset, we conducted an analysis of materialities while referring to international standards so that we could understand the characteristics of the Group's diverse portfolio of businesses and assess materialities, including from the perspective of investors.

I believe that the work we've done to identify materialities has served to clarify the entire Group's materialities. In the Logistics business, which among our business segments plays a particularly important role, decarbonization is a major theme. The Logistics business has a direct impact on not only our own efforts to reduce greenhouse gas (GHG) emissions in our corporate activities, but also on our customers' GHG emissions,

## A Message from the President

and moving forward with decarbonization in this domain will have favorable impacts on society as a whole. To that end, the entire Group will redouble its efforts to realize a green transformation. I believe that human capital is the source of the Group's growth. As Japan's population continues to shrink, labor shortages have already become a challenge for the entire country. While it's critical to create a healthy, motivating work environment, we'll also work to boost productivity through such means as developing employee skills and pursuing labor savings, automation, and a digital transformation (DX) strategy in a variety of operations by utilizing ICT and robotics. We're also planning to develop business facilities that contribute to the health of both employees and local residents and to community development, for example through sports and childcare facilities at large logistics centers.

For more information about our materiality analysis, please see page 32.

### Pursuing business activities and growth around the theme of connectedness

The economic environment is expected to recover gradually in the future, despite concerns about issues such as the situation in Ukraine, rising resource prices, and the direction of monetary policy in the U.S.

Against this backdrop, the Group formulated a new Medium-Term Business Plan covering the five-year period starting in FY2023. Under this plan, we'll work to connect supply chains, businesses, the next generation, and the world under the overriding theme of connectedness. To that end, strengthening human capital and ensuring female employees can flourish professionally will be major priorities.

We're planning total investments of 290 billion yen during the plan's five years. The plan also envisions manufacturing as new tentpole capability as we look to tap more multifaceted sources of revenue apart from logistics. We'll work to establish a successful track record

so that we can maintain a dividend payout ratio of 30% while ensuring financial stability.

During FY2027, the final year of the plan, our goal is to achieve revenue of 1 trillion yen and operating profit of 45 billion yen.

### Realizing sustained growth while working to improve corporate value

The COVID-19 pandemic continues to affect supply chains and consumer demand, and there continues to be a sense of uncertainty concerning the future direction of the economy, including geopolitical risk, for example with regard to the situation in Ukraine, as well as exchange rate and financial trends. Nonetheless, the Group will continue to work in a concerted manner to operate its businesses, which comprise key infrastructure, while giving priority to employee health and safety and continued employment.

We will also continue to precisely accommodate the

requirements of international trends like the SDGs and ESG governance, to actively incorporate new technologies and the digital transformation (DX), and to strive to adopt the latest corporate management practices.

We consider returning profits to investors and shareholders to be a key management priority. We pay a performance-linked dividend in addition to a stable, long-running dividend, and we will continue to strive to enhance shareholder returns while working to further improve the payout ratio. The year-end dividend for the fiscal year ended March 31, 2022, was 34 yen, reflecting the Group's solid performance during the year. We will also redouble efforts to improve communication with investors.

The Group will continue to realize sustained growth while treating changes in the business environment as opportunities, embracing the challenge of new fields and techniques, and working to improve corporate value so that it can meet the expectations of investors and shareholders.

### Inputs (capital and strengths of the Group)

#### Six types of capital owned by the Group

##### Capital that can be used to further business activities

- Total assets
- Equity ratio
- 19 consecutive fiscal years of rising revenue, 13 consecutive fiscal years of rising ordinary profit

##### Assets the organization can use to produce products or provide services

- Group companies: 161 (up 19 from the previous fiscal year)
- Number of companies operating Living and Business Support businesses: 21 (down 1 from the previous fiscal year)
- Total storage floor space: 4.06 million m<sup>2</sup> (up 140,000 m<sup>2</sup> from the previous fiscal year)
- Total number of group vehicles (tractor head): 6,727 (up 498 from the previous fiscal year)
- Number of ships under management: 69 (unchanged from the previous fiscal year)

##### All renewable and non-renewable environmental resources and processes for providing the goods and services that serve as the foundation for the organization's past, current, and future success

- Modal shift rate: 76.1% (corresponding quarter of the previous fiscal year: 74.9%)
- Number of solar power installations: 24 (up 2 from the previous fiscal year)
- Solar power generation: 18,990 kWh (up 488 kWh from the previous fiscal year)
- CO<sub>2</sub> emission reductions: 4,306 t-CO<sub>2</sub> (up 1,011 t-CO<sub>2</sub> from the previous fiscal year)

##### Employee skills, experience, and appetite for innovation

- Number of employees: 20,725 (up 1,531 from the previous fiscal year)
- Number of drivers and operators: 12,237 (up 98 from the previous fiscal year)
- Number of employees in the Living and Business Support businesses: 2,217 (up 940 from the previous fiscal year)
- Number of participants in educational and training programs at Crefeel Koto: 637 (down 35 from the previous fiscal year)
- Cumulative number of graduates of SENKO University: 98 (up 13 from the previous fiscal year)

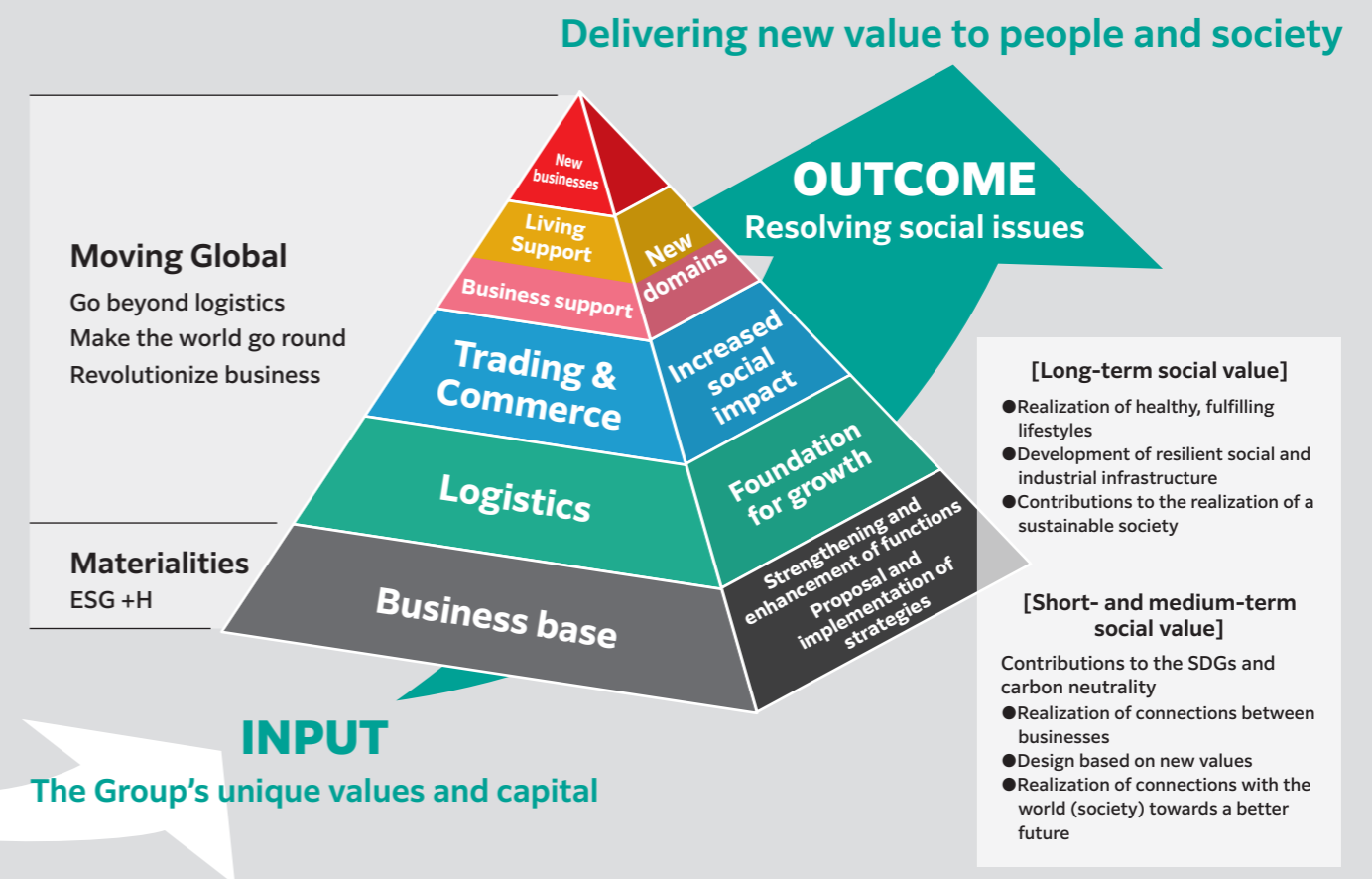
##### Individual communities, stakeholders, groups, and other networks or their internal institutions and relationships, and ability to share information in order to increase individual and collective happiness

- Cumulative number of visitors to Crefeel Koto Children's Traffic Park: 158,613 (up 14,649 from the previous fiscal year)
- Number of annual participants in traffic safety classes: 306 (up 162 from the previous fiscal year)

##### Organizational intellectual-based intangible assets

- Logistics expertise (Crefeel Koto, an in-house training facility)
- Consulting and system proposal capabilities (200 information SEs, 100 logistics SEs)

### Value creation process



## New Medium-Term Business Plan

### Looking back on the previous Medium-Term Business Plan

During the five years covered by the previous Medium-Term Business Plan, revenue rose 167.7 billion yen, or 36.8%, while operating profit rose 7.69 billion yen, or 45.0%. Performance failed to achieve the plan's targets due to factors including the application of revenue recognition accounting standards and the effects of the COVID-19 pandemic.

#### Previous Medium-Term Business Plan: Targets and results

	FY2017 (1) Results	FY2022		Difference	
		(2) Medium-Term Business Plan target	(3) Results	(3)-(1), vs. FY2017	(3)-(2), vs. target
Revenue Hundreds of millions of yen	4,554	7,000	6,231	1,677 36.8%	(769)
Operating profit Hundreds of millions of yen	170.8	280.0	247.7	76.9 45.0%	(32.3)
Operating profit margin	3.8	4.0	4.0	0.2	—
ROE	9.5	10.5	10.8	1.3	0.3
Net D/E ratio	0.58	0.64	0.95	0.37	0.31
Equity ratio	35.1	40.2	30.6	(4.5)	(9.6)

#### Logistics center storage area



FY2017

3.22  
million m<sup>2</sup>

FY2022

4.06  
million m<sup>2</sup>

#### Number of company vehicles [Tractor head]



FY2017

4,426

FY2022

6,727

#### Number of employees



FY2017

13,915

FY2022

20,725

### Overview of the new Medium-Term Business Plan

The Group formulated a new Medium-Term Business Plan covering the five-year period starting in FY2023. Under the basic policy of **“striving to achieve sustained growth by supplying new value to people and society through the deepening and creation of businesses,”** the Group will address five key issues under the plan: (1) expanding and deepening existing businesses, (2) creating and fostering the development of growth businesses, (3) implementing ESG+H (health) management, (4) practicing more sophisticated management, and (5) increasing motivation and realizing personal growth among employees.

#### New Medium-Term Business Plan slogan

#### Connecting supply chains

**Go beyond logistics**  
**Connecting supply chains**  
by moving beyond the framework of conventional logistics businesses



#### Connecting the world

**Make the world go round**  
Becoming an international business that **connects the world** by undertaking business activities worldwide



# Connectedness



#### Connecting all businesses

**Revolutionize business**  
**Connecting all businesses** in the world so that we can provide new value



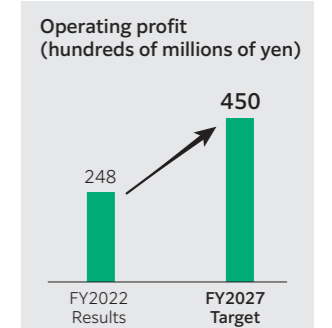
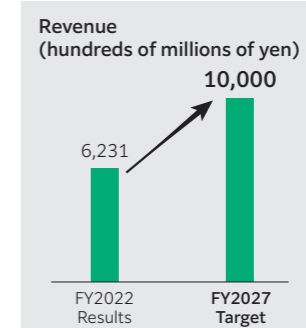
#### Connecting to the next generation

**Passing the baton**  
Becoming a business where the next generation of employees, who will be responsible for the future, **can grow and flourish professionally**

#### Key issues identified by the new Medium-Term Business Plan

- 1 Expanding and deepening existing businesses
- 2 Creating and fostering the development of growth businesses
- 3 Implementing ESG+H (health) management
- 4 Practicing more sophisticated management
- 5 Increasing motivation and realizing personal growth among employees

#### Overall numerical targets under the new Medium-Term Business Plan



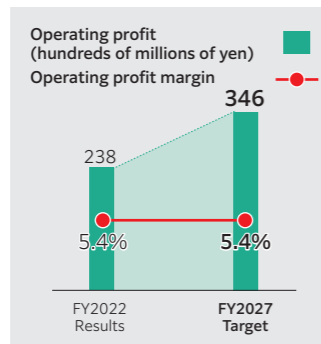
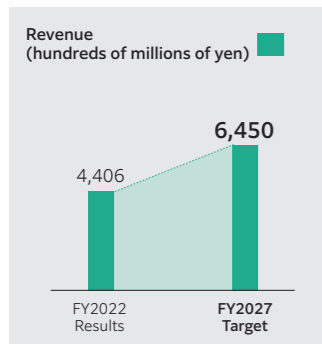
## New Medium-Term Business Plan

### Targets and key measures by business under the new Medium-Term Business Plan

#### Expanding and deepening existing businesses

- Expanding existing business domains
- Further globalizing operations

##### Logistics business



##### Domestic logistics

- Expanding orders based on comprehensive proposal capabilities and the stability of our directly operated approach
- Strengthening logistics facilities and vehicle structures and pursuing M&As

##### Cold logistics

- Accelerating facility development and further expanding our delivery network

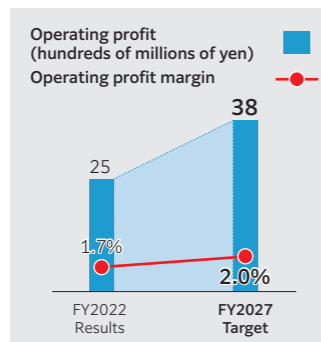
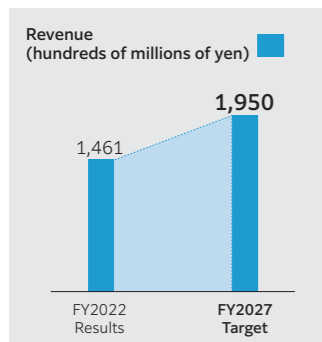
##### International logistics

- Establishing a global network by expanding our facilities

##### Marine shipping

- Increasing our market share by increasing the amount of shipping space

##### Trading & Commerce



##### Product sales

- Strengthening EC sales and expanding the range of unique products we offer

##### Household paper wholesaling

- Streamlining operations at our three wholesale companies and increasing market share

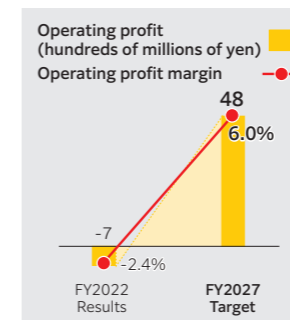
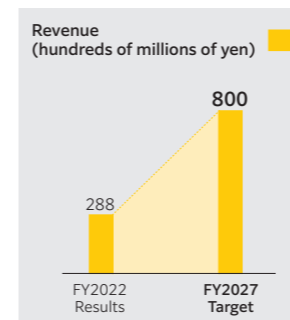
##### Commerce

- Maintaining and increasing trademarks through operation of a joint venture with a Chinese electronics material trading company

#### Creating and fostering the development of growth businesses

- Further expanding the Living Support and Business Support businesses
- Embracing the challenges of new businesses (manufacturing, etc.)

##### Living Support



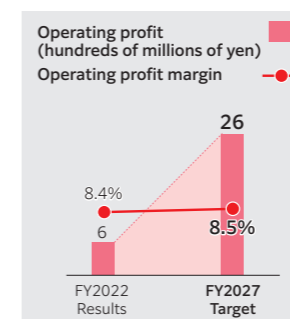
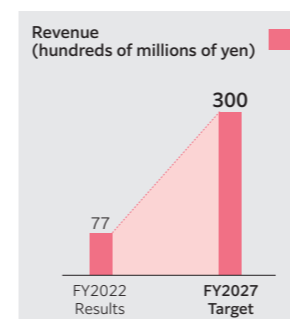
##### Health domain

##### Lifestyle domain

##### Food domain

- Realizing a fast recovery from the downturn caused by the COVID-19 pandemic and expanding the number of outlets we operate
- Pursuing M&As in the health, lifestyle, and food domains

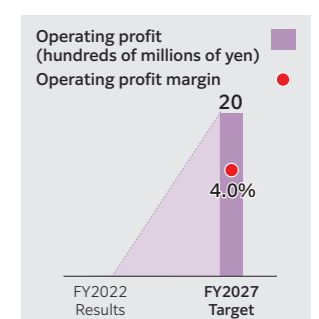
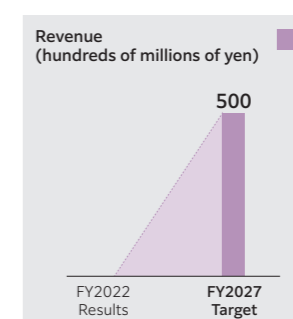
##### Business Support



##### Real estate, information, staffing, etc.

- Realizing a fast recovery from the downturn caused by the COVID-19 pandemic
- Pursuing M&As, for example in the staffing business

##### Other businesses



- Entering new fields

#### Revenue targets by segment

		FY2022	FY2027	Amount of increase	Rate of increase
Logistics business	Food logistics	822	1,150	328	39.9%
	Chain store logistics	837	1,250	413	49.3%
	Fashion logistics (including EC logistics)	495	650	155	31.4%
	Other logistics	398	750	352	88.4%
	Subtotal	2,552	3,800	1,248	48.9%
	Chemical logistics	848	1,300	452	53.2%
	Housing logistics	617	750	133	21.5%
	Other logistics, etc.	388	600	212	54.6%
	Subtotal	4,406	6,450	2,044	46.4%
	Trading & Commerce	1,461	1,950	489	33.4%
Living Support	288	800	512	177.8%	
Business Support	77	300	224	292.2%	
Other businesses		500	500	—	
<b>Total</b>		<b>6,231</b>	<b>10,000</b>	<b>3,769</b>	<b>60.5%</b>
International revenue*	Logistics business	436	770	334	76.8%
	Trading & Commerce	321	430	110	34.2%
	Subtotal	756	1,200	444	58.7%

\*Included in above figures. \*FY2022 figures have been restated to reflect the application of changes in segment accounting standards made in FY2023.

#### Key measures in ESG and group management

Specific CO <sub>2</sub> emissions (land transport business)	Reduce 10% compared to FY2021
Percentage of management positions held by females	At least 15%

- Implementing in-house environmental measures and promoting model shift
- Reforming programs to take advantage of a diverse workforce and expanding employment opportunities
- Introducing advanced technologies to realize automation and labor savings
- Practicing health management through sports and cultural activities

We will pay a performance-linked dividend in addition to a stable dividend, and we will strive to enhance shareholder returns while working to further improve the payout ratio.

# Feature

## The SENKO Group's Decarbonization Strategy



### Approach to decarbonization

Reflecting our commitment to helping achieve the commitment made by Japan to the global community to reduce CO<sub>2</sub> emissions by 35.0% from 2013 levels by 2030, the SENKO Group is working to improve its environmental performance so that it can contribute to customers and local communities.

As a leading environmental business, we will actively work to visualize our environmental measures.

#### Strategy 1

##### Groupwide

###### Energy savings

We're working to realize more efficient and effective use of electrical power as we look to switch to LED lighting and install alternative HVAC systems at multiple large facilities.

###### Renewable energy

Having launched a solar power business designed to promote adoption of renewable energy in FY2014, the Group supplies electricity to multiple power companies. Going forward, we will accelerate use of renewable energy at logistics centers.

###### Clean procurement

The Group is undertaking initiatives to realize a circular economy which reduces new resource use and encourages the recycling and reuse of existing resources.

Although our logistics centers have previously discarded the stretch film used to secure freight as industrial waste, all such film is now used to make recycled garbage bags as part of a joint initiative with a recycling processor, realizing cyclical use.

#### Strategy 2

##### Decarbonization in the Logistics business

###### Greenification of in-house shipping equipment and logistics facilities

We're introducing environmentally friendly trucks with reduced CO<sub>2</sub> and NO<sub>x</sub> emissions, for example electric and hybrid trucks. By leveraging the environmental advantages of these vehicles, specifically their lack of soot and sulfur oxide emissions, we're meeting customers' desire for low-carbon shipping.

###### Promotion of modal shift

The Group began promoting and implementing green logistics, an approach characterized by a reduced environmental footprint, early on. We've won praise for initiatives designed to realize a decarbonized society, including a modal shift combining rail and marine shipping, introduction of larger trucks, and consolidation of logistics facilities.

###### Risk analysis and feedback to businesses

As part of the transition to the Prime Market in FY2023, we've been disclosing information related to climate change in accordance with the Task Force on Climate-Related Financial Disclosures (TCFD). In FY2023, we also launched a Sustainability Promotion Department and disclosed information about materialities.

We're working in a systematic manner towards decarbonization in strategic investments and services in our Logistics segment.



Strategic decarbonization themes in the Logistics business

### Greenification of facilities and equipment

#### Building and making environmental improvements at logistics centers and other facilities through green bond funding

We've been issuing green bonds using a public subscription model in the domestic market. As we streamline logistics and promote green logistics while helping reduce greenhouse gas emissions, we've worked to more clearly demonstrate our commitment to the global environment by issuing green bonds to fund PD center construction.

These green bonds were used to fund the cost of building the Gifu Hashima PD Center and Wangan Yatomi PD Center, which opened in May 2021. In addition to reducing CO<sub>2</sub> emissions associated with shipping by streamlining customers' logistics through operation of these two PD centers, we've reduced our own, in-house CO<sub>2</sub> emissions by realizing energy savings and use of renewable energy at the facilities. Through these initiatives, we're striving to realize even greener logistics.

Strategic decarbonization themes in the Logistics business

### Modal shift

#### Helping streamline shipping and reduce CO<sub>2</sub> emissions

Transporting goods by rail and ship is more energy-efficient than using cargo vehicles, which both helps cut CO<sub>2</sub> emissions and prevent air pollution.

The SENKO Group operates its own fleet of ships, and it's provided more efficient shipping service through a modal shift to rail and marine transport. Similarly, we're working to reduce environmental impacts and shorten driver working hours through a modal shift to rail shipping, which generates significantly less CO<sub>2</sub> emissions—and uses less energy—than shipping by truck.

#### A group leading the way to a modal shift

The SENKO Group, which has actively promoted a modal shift, has earned a variety of awards, including the Logistics Environment Award.

In June 2022, SENKO Co., Ltd.; Runtec Corporation; and Saitama-minami SENKO Lodge Co., Ltd. earned three special prizes at the 23rd Logistics Environment Awards, hosted by the Japan Association for Logistics and Transport. The award program was created in June 2000 to recognize companies that contribute to the development of the logistics industry, for example through exceptional environmental protection activities, environmental awareness-raising, or development of pioneering technologies. Runtec was recognized for helping reduce CO<sub>2</sub> emissions and driver workload associated with small-/mixed-lot transport (refrigerated and frozen food products) by switching from truck to rail for shipments from Miyagi Prefecture to Hyogo

Prefecture and by consolidating two shipping routes (Fukuoka Prefecture to Hiroshima Prefecture, and Fukuoka Prefecture to Hyogo Prefecture) into a single run using larger vehicles by switching from 13.5-ton refrigerated trucks to 20-ton trailers. We've also earned the right to display the "Eco Ship" and the "Eco Rail" marks as a logistics company that uses environmentally friendly marine and rail shipping for a certain percentage of shipments, and we continue to propose environmentally responsible logistics services and shipping channels other than truck transport.



エコシップマーク



エコレールマーク

## Feature The SENKO Group's Decarbonization Strategy

### Case study 1 SENKO Sennan PD Center

#### Launching a logistics facility leasing business

SENKO Sennan PD Center, which was completed in March 2022, was built by SENKO Group Holdings Co., Ltd. and leased to SENKO Co., Ltd. becoming the Group's first leased logistics facility. The facility also began self-consignment of power generated by its solar panels. The center enjoys easy access for deliveries in the Kansai region, particularly downtown Osaka, and it's located ideally for processing imports and exports of international freight. Its location is not part of any danger areas on flooding, landslide, or tsunami hazard maps, and it maintains a business continuity plan (BCP).



Sennan PD Center

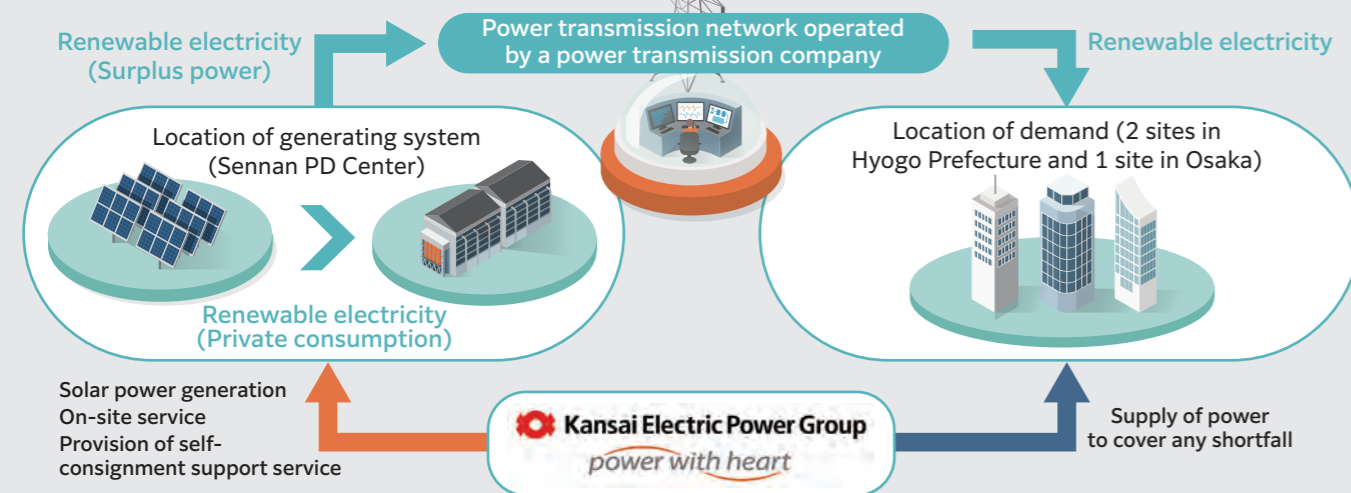
We're using the facility to launch a logistics facility leasing business, with the goal of providing higher-quality, lower-cost leases to the SENKO Group. We plan to build more such facilities in the future while working to ensure they provide an attractive exterior design and an appealing, employee-friendly environment, for example by incorporating break areas where workers can relax.

#### Streamlining operations and contributing to the realization of a decarbonized society

Thanks to the introduction of a solar power purchase agreement model for private consumption<sup>\*1</sup>, the Sennan PD Center began using power from solar panels covering its roof (682.5 kilowatts) as of April 1, 2022, while employing a self-consignment scheme<sup>\*2</sup> to share surplus power with other SENKO Group companies in partnership with Kansai Electric Power Co., Inc. The initiative is the first in Japan<sup>\*3</sup> to use a self-consignment scheme to share power with three facilities in the same group: two logistics facilities operated by SENKO Co., Ltd. in Hyogo Prefecture and a commercial facility operated by Terauchi Co., Ltd. in Osaka.

The SENKO Group plans to streamline operations and contribute to the realization of a decarbonized society by expanding the initiative to the entire group.

#### PPA model for solar power private consumption and self-consignment



\*1 PPA model for private consumption: The supply, for a fee, of power generated by equipment installed by a company that owns and manages generating equipment (the PPA business) in space, for example on a roof, provided free of charge by that facility.

\*2 Self-consignment: An arrangement in which a company uses the power transmission network to send power generated from solar panels it has installed to other facilities it operates.

\*3 Per research by Kansai Electric Power.

### Case study 2 Tandem tractor-trailers

#### Helping reduce both driver working hours and CO<sub>2</sub> emissions

An increasingly serious labor shortage caused by the aging of truck drivers and legal changes to cap driver overtime to 960 hours a year in 2024 are expected to make smooth delivery of freight to destinations difficult using current long-distance transport methods, possibly causing an economic bottleneck.

To address this challenge, SENKO Co., Ltd. began operating tandem tractor-trailers, which allow one driver to transport two trailers' worth of cargo, for long-distance shipments in January 2021. After departing SENKO's facility, tandem tractor-trailers carrying two large trucks' worth of separately collected cargo are driven by a single driver for the long-distance part of their journey on expressways, with driver changes at tandem tractor-trailer docking stations along the route. The new driver drives the trailers to the location at which they're scheduled to be separated, where the assembly is split into a large truck and a semi trailer using a method known as the dolly method\*. The trailers are then driven to their respective destinations, helping reduce both driver working hours and CO<sub>2</sub> emissions.

\*Dolly method: A method for connecting and disconnecting trailers using a dolly. Tandem tractor-trailers consist of a trailer connected behind a 10-ton truck using a dolly.



Tandem tractor-trailers

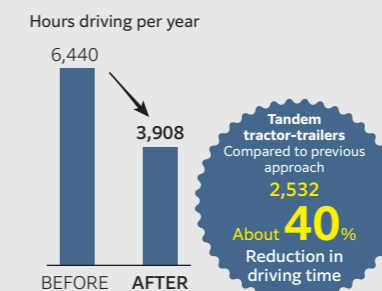
#### Development of next-generation, long-distance shipping on core routes while addressing environmental issues

Enlisting the cooperation of Asahi Kasei Homes Corporation and Fujitec Co., Ltd., we began shipping freight for the two companies using tandem tractor-trailers. The initiative is the first of its kind in Japan to separate tandem tractor-trailers midway along a route so that the trailers can be delivered simultaneously to different customers.

Going forward, SENKO will help address the driver shortage while helping realize a decarbonized society by developing next-generation, long-distance shipping on core routes through increased use of tandem tractor-trailers.

#### Benefits of introducing tandem tractor-trailers

##### Reduction in driving time



##### CO<sub>2</sub> reduction

