

SG Holdings Group

# SDGs Communication Book 2022

Special Decarbonization Issue



Grow the new **Story**.

New logistics, nurturing a new society together.

# Smoothing Out Today, for a Smarter Tomorrow



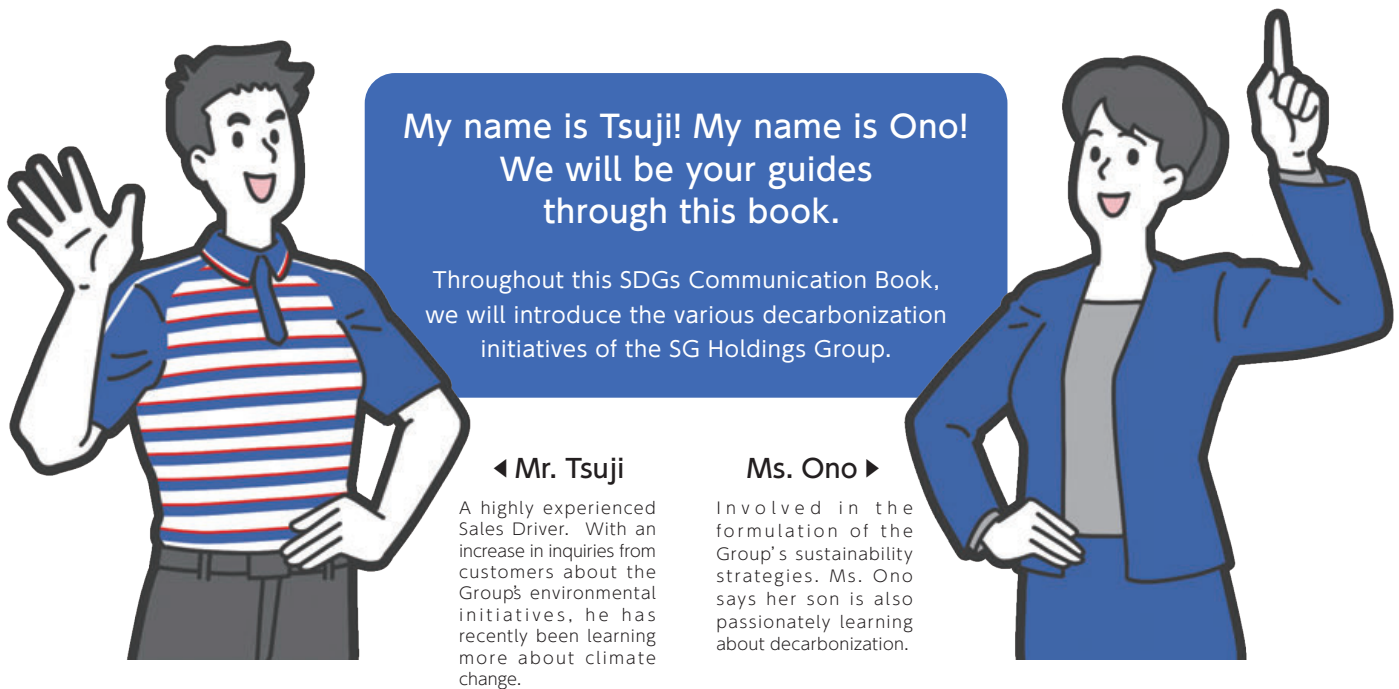
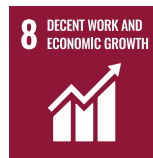
Today,  
the SG Holdings Group is devoting all of our efforts to using  
logistics to provide people with worry-free lives.  
This means offering safe, reliable logistics infrastructure.  
It means living in harmony with the global environment,  
helping to preserve an abundant, happy way of life.  
And by using the power of our comprehensive logistics solutions to  
create new value, we hope to build a smarter tomorrow.  
The SG Holdings Group will continue contributing to society through its business,  
working toward a future in which people connect,  
and smiles bring them together.

## SDGs and Decarbonization

The theme for this year's SDGs Communication Book is decarbonization. Let us begin, however, with a brief explanation of the SDGs. The SDGs are a collection of shared global goals that various countries and corporations are currently working to achieve. At the UN Summit of 2015, 193 countries and regions agreed to adopt these goals. Under the central promise to leave no one behind, the goals are to be achieved by the year

2030 to create a society in which people can live happily into the future. The 17 goals cover an array of themes including health, gender equality, poverty and peace. One of the 17 goals is Climate Action. Climate change refers to the heavy rains, heat waves, sea level rises and other natural phenomena that occur as a result of the increase in average global temperature. And so, to what extent we can contain global warming is a key

factor in preventing climate change. The increase in CO<sub>2</sub> and other greenhouse gases in the atmosphere is a major cause of global warming. Decarbonization describes any activities that prevent the increase of greenhouse gases. At the SG Holdings Group, as the use of trucks and other vehicles that emit CO<sub>2</sub> is key to our business, the reduction of greenhouse gases is a major challenge and a core responsibility.



◀ Mr. Tsuji

A highly experienced Sales Driver. With an increase in inquiries from customers about the Group's environmental initiatives, he has recently been learning more about climate change.

Ms. Ono ▶

Involved in the formulation of the Group's sustainability strategies. Ms. Ono says her son is also passionately learning about decarbonization.

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\*Sales Driver® and X FRONTIER® are registered trademarks of the SG Holdings Group. Trademark notation has been omitted in this book.

# For a Smarter Tomorrow The Keyword Is Decarbonization



Global warming and the ensuing climate change have a serious impact on ecosystems and people's lives. To create a sustainable society in which people can live in safety and with peace of mind, global-scale decarbonization initiatives are underway to ensure the continued reduction of CO<sub>2</sub> emissions.

## Countries and Regions Are Working on Decarbonization Together

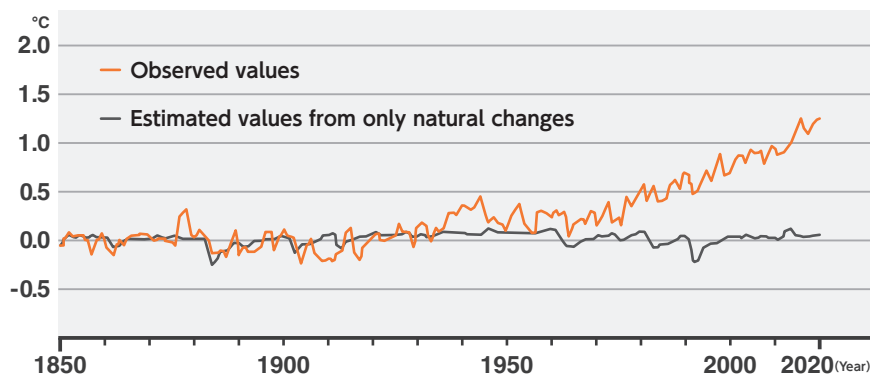
Emissions of CO<sub>2</sub>, which is one of the greenhouse gases that causes climate change, have continued to increase at an astonishing pace since the Industrial Revolution of the 18th century. Global temperatures have risen gradually as a result, and it is said that the average global temperature between 2011 and 2020 was around 1.1°C higher compared to before the Industrial Revolution. If global warming continues at this rate, climate change will cause sea levels to rise and bring about changes in natural ecosystems. Among others, this in turn will lead to an increase in hunger and infectious diseases, causing serious implications for the world as a whole.

To prevent global warming, international discussions have been underway since the second half of the 20th century. At the 21st United Nations Climate Change Conference (COP21) held in 2015, a new set of international rules on climate change, the Paris Agreement, was adopted. Through this agreement, countries and regions everywhere have agreed to work together to "limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels." As a result of the Paris Agreement, countries have been working to achieve net zero emissions of greenhouse gases including CO<sub>2</sub> to achieve carbon neutrality, and decarbonization initiatives have been

gaining momentum. As of April 2021, including Japan, 125 countries and one region have declared their commitment\* to achieving carbon neutrality by 2050 to limit global warming to 1.5 degrees Celsius.



**[Changes in Average Global Temperature]**

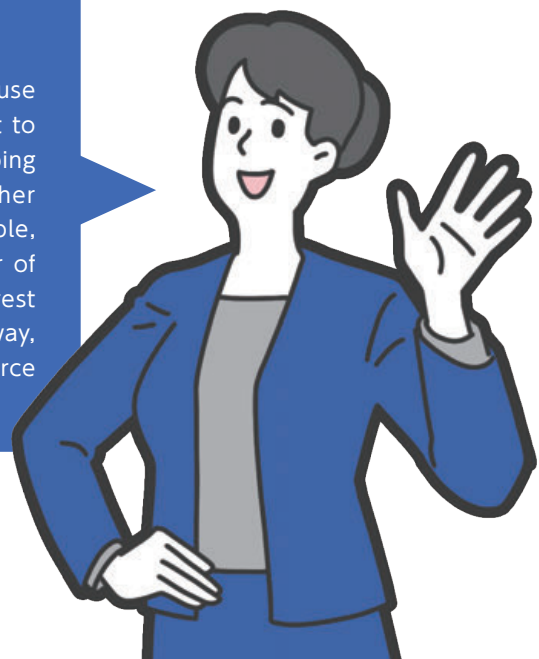


Source: Working Group I Report, IPCC Sixth Assessment Report

Elsewhere, companies are also being called upon to engage in decarbonization initiatives. At the SG Holdings Group, we have announced our target to achieve a 46% reduction in CO<sub>2</sub> emissions by 2030 (compared to FY2013), and to achieve net zero emissions by 2050. We are therefore constantly engaging in the development and provision of businesses and services with even lower CO<sub>2</sub> emissions, and are striving to help achieve a sustainable society where everyone can live in safety and with peace of mind.

### The Key Is to Reduce Emissions and Increase Absorption

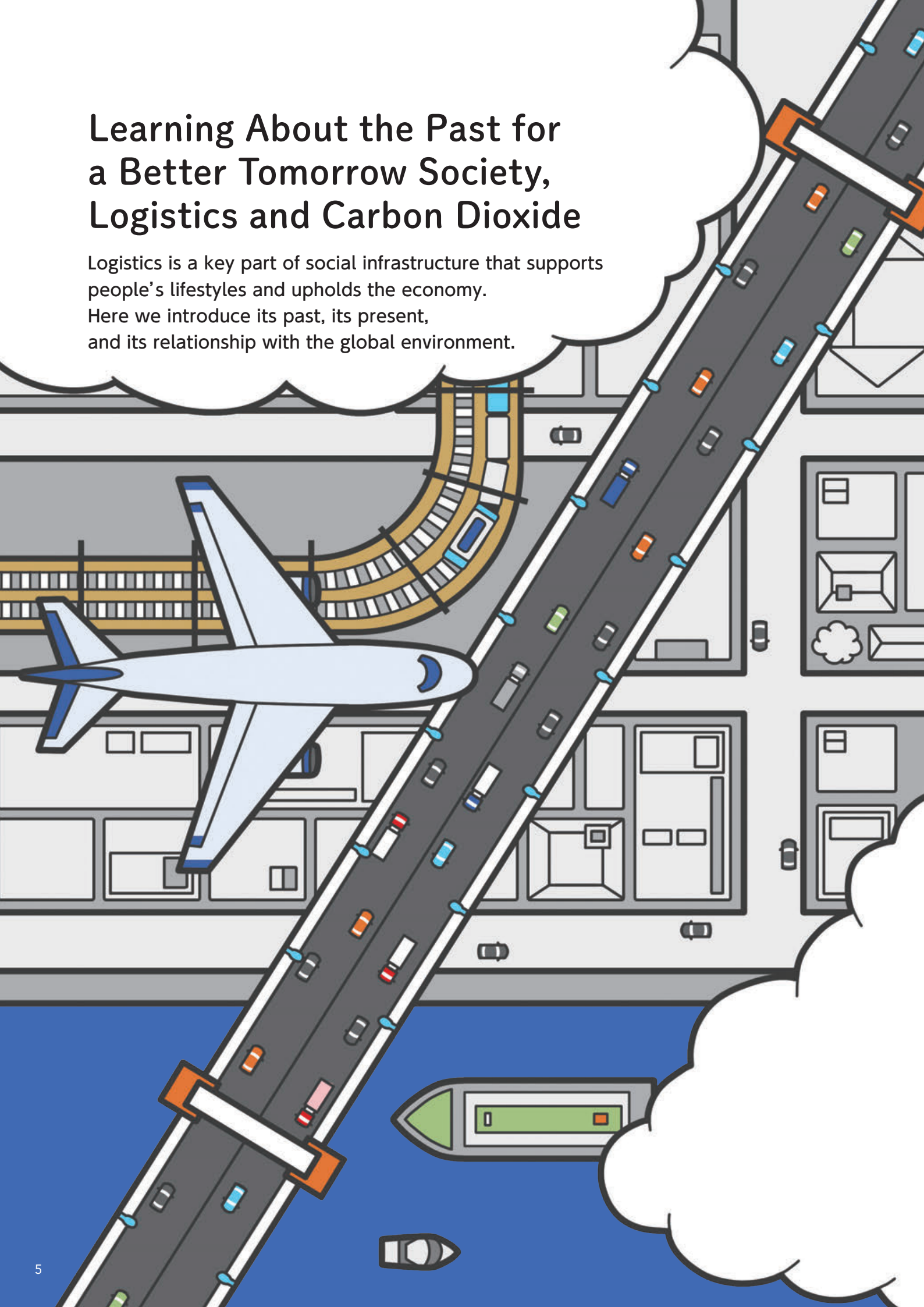
While it is important to cut emissions of CO<sub>2</sub> and other greenhouse gases to zero, for modern-day society, this is extremely difficult to achieve. This is why the "net zero" approach is key. By absorbing the emissions that cannot be completely cut out through other means, it is possible to reach net zero emissions. For example, we can increase tree-planting activities to increase the number of trees that absorb CO<sub>2</sub> through photosynthesis, and protect forest environments to make it easier for the trees to grow. In this way, at the same time as reducing emissions, it is important to reinforce efforts to absorb CO<sub>2</sub>.



\*Global Decarbonization Trends, Agency for Natural Resources and Energy

# Learning About the Past for a Better Tomorrow Society, Logistics and Carbon Dioxide

Logistics is a key part of social infrastructure that supports people's lifestyles and upholds the economy. Here we introduce its past, its present, and its relationship with the global environment.



## Society and Logistics Have Developed Alongside One Another



Logistics refers to the distribution of goods. In Japan, logistics systems underwent huge development during the period of rapid economic growth between the 1950s and 1960s. As the economy developed, Japan entered an era of mass production and mass consumption. To ensure the smooth distribution of this large volume of goods, the reinforcement

of logistics functions was essential. And so, the public and private sectors worked in tandem to streamline and optimize logistics processes, including transport, storage, freight handling and distribution processing. At the same time, the importance of logistics as a form of social infrastructure that linked production and consumption grew significantly. It was at the dawn of this logistics era in Japan that the SG Holdings Group was founded as a courier business connecting Kyoto and Osaka. However, the main goods to be transported at the time were raw materials such as coal and large cargo direct from factories, and the central means of

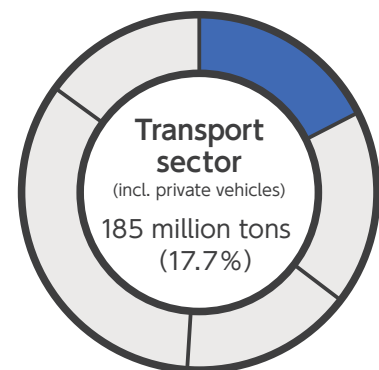
transportation was by rail. While vehicles were beginning to grow in popularity in line with road improvements, there were no established services that could quickly and accurately deliver small quantities of packages from door to door. In response, at the SG Holdings Group we used trucks and other means to build a system that formed the basis of today's express package delivery services. Through our services, we used logistics to achieve more comfortable lifestyles. Today, we are pouring our efforts into the creation of a sustainable logistics network to promote a decarbonized society.

## Balancing the Environment and Logistics — Is It Possible?

In line with the growth of e-commerce and a decrease in opportunities for people to go out, in recent years, logistics has become more important than ever before. At the same time, the Japanese government has declared its intention to achieve carbon neutrality by 2050, and the focus of society as a whole has taken a major turn toward decarbonization. On the other hand, the transport sector—which includes private vehicles, trucks and others—accounts for approximately 20% of Japan's total CO<sub>2</sub> emissions, and so for the

logistics industry, the reduction of vehicle emissions is a major issue. At the SG Holdings Group, as demonstrated by being one of the earliest to adopt environmentally friendly vehicles such as natural gas trucks in the 1990s, and also through the use of rail and maritime transport, methods that are said to generate less CO<sub>2</sub> than vehicles, we have sought to reduce our CO<sub>2</sub> emissions during transport. As a company offering logistics infrastructure, we believe it is our duty to balance both eco-friendliness and enhanced service.

【CO<sub>2</sub> Emissions by Industry】



Source: CO<sub>2</sub> Emissions in the Transport Sector, Ministry of Land, Infrastructure, Transport and Tourism (Figures are from FY2020; 1,044 million tons in total)



### Reducing CO<sub>2</sub> Emissions in the Logistics Industry Today

Although in recent years the CO<sub>2</sub> emissions from trucks and other cargo vehicles have been on a decreasing trend, it is still not enough. Moving forward, in addition to initiatives to reduce vehicle emissions, we will proactively move forward with a modal shift to transport methods that have lower environmental impact, such as trains and ships.

# A Smoother Today Anytime, Anywhere

The SG Holdings Group is predominantly involved in the logistics business. In addition to achieving a smoother, more efficient society, we will also tackle decarbonization.

## Maritime transport

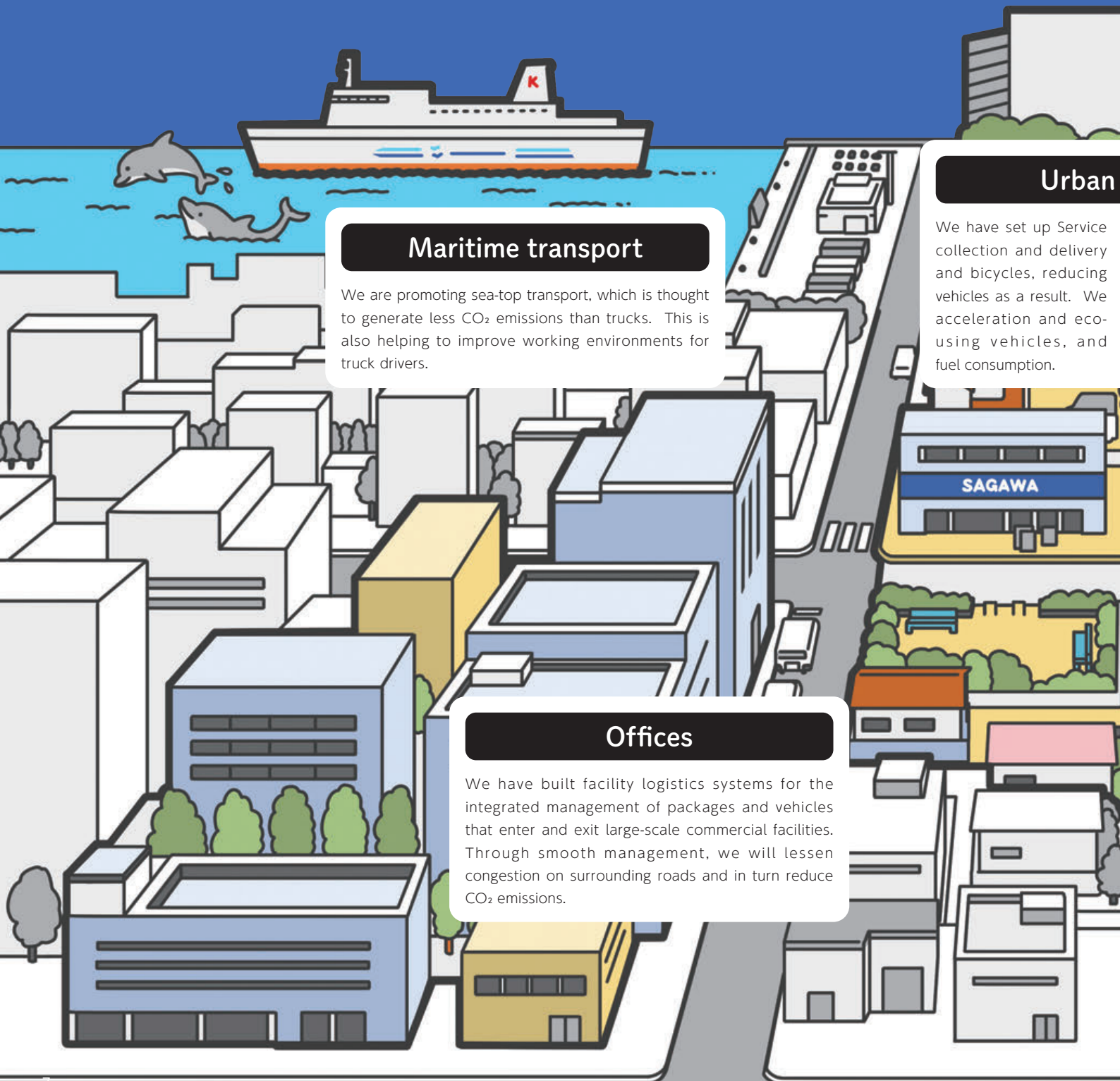
We are promoting sea-top transport, which is thought to generate less CO<sub>2</sub> emissions than trucks. This is also helping to improve working environments for truck drivers.

## Urban

We have set up Service collection and delivery and bicycles, reducing vehicles as a result. We acceleration and eco-using vehicles, and fuel consumption.

## Offices

We have built facility logistics systems for the integrated management of packages and vehicles that enter and exit large-scale commercial facilities. Through smooth management, we will lessen congestion on surrounding roads and in turn reduce CO<sub>2</sub> emissions.





## Transfer centers

By bringing together packages from each region and ensuring more efficient delivery, we are reducing the number of trucks used. In 2021, we opened X FRONTIER, a next-generation large-scale logistics center, in Koto-ku, Tokyo.

## Forests

We own approximately 800 hectares of forest in the Kochi and Tokushima prefectures. In addition to protecting these forests, which function as carbon sinks, we sell the timber we create and utilize it in our facilities.

## areas

Centers nationwide for operations using carts will also promote gentle driving when promote more efficient

## Real estate

Through distribution facilities that use solar power generation facilities, and employee residential facilities that use timber from our forests, we are engaged in environmentally friendly real estate development and management.

## Rail transport

For long-haul transportation, we are making use of rail-based transport, which has a lower environmental impact than truck transport. This is helping to significantly reduce our CO<sub>2</sub> emissions during transport.

## We Are Not Only Involved in Logistics

In addition to logistics, we offer an array of services throughout towns and cities, including temporary staffing, message delivery services, IT system development and management, and office relocation support. As such, it is only natural that we have a strong duty to achieve decarbonization.



# We Have Identified Three Key Themes for Decarbonization Vehicles, Facilities and Supply Chains

Through the transport of goods, logistics helps to link people and support society. Reducing CO<sub>2</sub> emissions in everyday work is essential to achieving decarbonization.

1



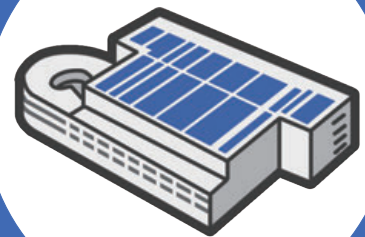
At the SG Holdings Group, we will strive to reduce the CO<sub>2</sub> emissions from the approximately 27,000 trucks that we use.

3



To achieve decarbonization, in addition to in-Group initiatives, we will also work with our stakeholders to reduce CO<sub>2</sub> emissions throughout the supply chain.

2



At some of our Group facilities, we are using electricity from CO<sub>2</sub>-free renewable energy sources such as solar power and wind power.

## SG Holdings Group Decarbonization Vision

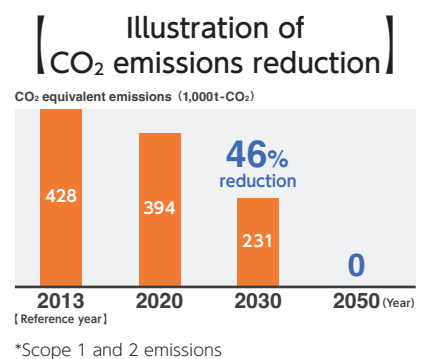
At the SG Holdings Group, we will work with our stakeholders on various initiatives to achieve a decarbonized society.

- 1 Reduction of greenhouse gas emissions from vehicles
- 2 Use of electricity derived from renewable energy
- 3 Reduction of emissions throughout the supply chain

### 1 Reduction of greenhouse gas emissions from vehicles

At the SG Holdings Group, we are aiming for a 46% reduction in CO<sub>2</sub> emissions by 2030 (compared to FY2013), and carbon neutrality by 2050. As such, reducing the greenhouse gases generated from our transport and delivery of packages is paramount. In addition to introducing vehicles with low environmental impact such as EVs and hybrid trucks, we are reducing the number of trucks we use

by building efficient logistics systems, and working to reduce CO<sub>2</sub> emissions throughout our delivery infrastructure. We are also proactively promoting a modal shift to more environmentally friendly means of transport, such as rail and maritime transport instead of trucks.



### 2 Use of electricity derived from renewable energy



SG Realty Wako

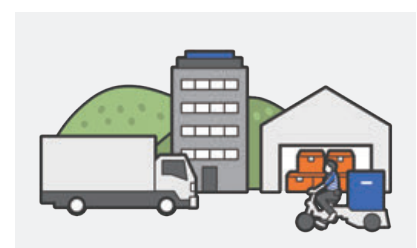
At the SG Holdings Group, we have set up solar panels at around 100 of our facilities nationwide, using and supplying the renewable energy generated from them. At the Group's large-scale distribution facilities SG Realty Wako (Saitama Prefecture) and SG Realty Higashiosaka (Osaka Prefecture), we

have achieved net-zero CO<sub>2</sub> emissions through the use of electricity generated from on-site solar panels and the purchase of renewable energy.

### 3 Reduction of emissions throughout the supply chain

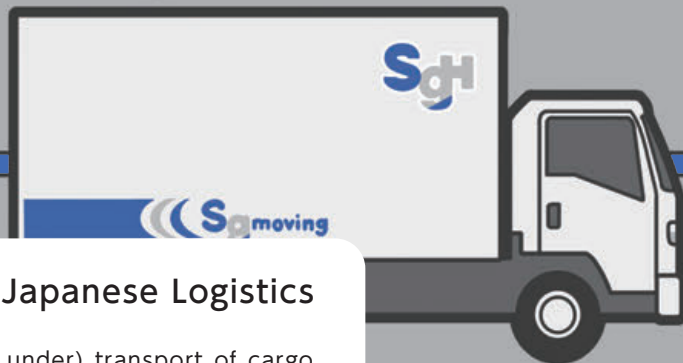
At the SG Holdings Group, our corporate activities are supported by fuel and material suppliers, logistics partner companies and other business partners, and the many customers who entrust their packages to us. To achieve a decarbonized society, we are working with our stakeholders to reduce greenhouse gas emissions across

the supply chain. Specifically, we are accelerating the development of transport and delivery services and businesses with lower CO<sub>2</sub> emissions, and in turn we will strive to create new value for society and our customers.



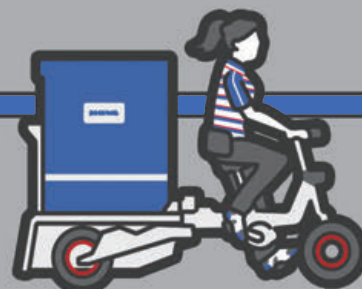
# Vehicle-based Transport and Delivery for Smooth Logistics Starting with the Decarbonization of Vehicles

Approximately 50%<sup>\*1</sup> of transportation of freight in Japan is undertaken by trucks. Vehicles are essential to delivering cargo safely and accurately to every corner of Japan, and this is why decarbonization initiatives for vehicles are paramount.



## Trucks Are Essential to Japanese Logistics

In the short-distance (100 km or under) transport of cargo, for which logistics needs are particularly high, truck-based transport accounts for more than 90%<sup>\*2</sup> of the total. When cargo is transported by ship or train, it is trucks that transport the packages from the terminal to the sales office in town, and then to the customers.



\*1: Based on ton-kilometers, which is the weight of the cargo transported times the distance transported. Trends in Transported Volume of Cargo by Transportation Method, Ministry of Land, Infrastructure, Transport and Tourism

\*2: Conditions Surrounding Logistics in Japan, Ministry of Land, Infrastructure, Transport and Tourism

## Looking at the Decarbonization of Vehicles

At the SG Holdings Group, we focused on the use of eco-friendly vehicles and the development of environmentally friendly means of transport from an early stage. We began using natural gas trucks in 1997, which are said to generate low emissions of air pollutants such as carbon dioxide and nitrogen oxide. We also moved forward with the adoption of hybrid trucks and clean diesel vehicles compliant with exhaust gas regulations. Moreover, since 2019 we have been testing the use of EV trucks that emit zero air pollutants.

As of March 31, 2022, the SG Holdings Group owns 15,956 environmentally friendly vehicles, which account for approximately 59%<sup>\*1</sup> of its fleet. Moving forward, we plan to continue proactively adopting vehicles with low environmental

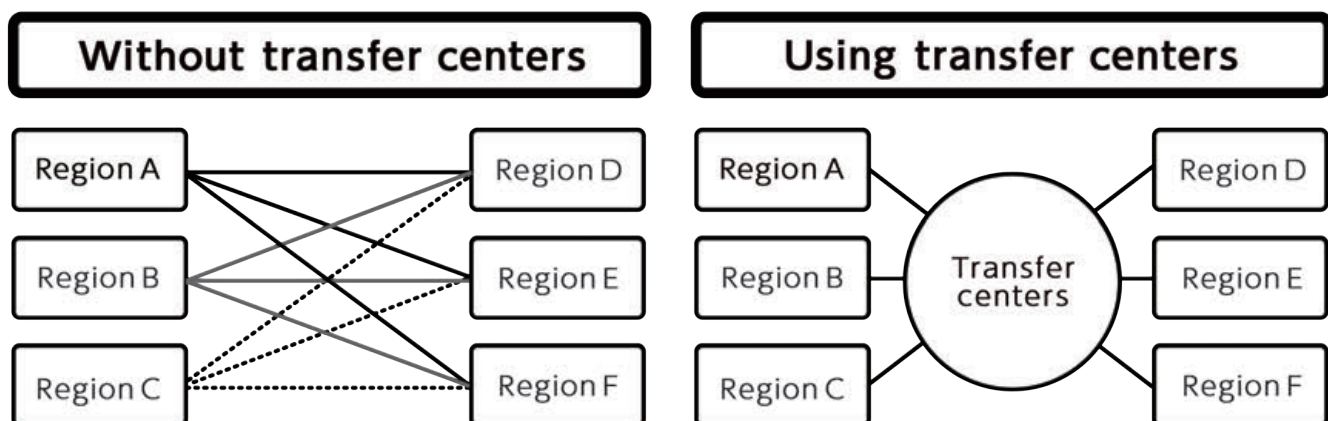
impact. In addition to the decarbonization of vehicles themselves, we are also working to reduce our use of vehicles. Instead of having individual trucks separately transport packages from each sales office to different destinations, we have set up transfer centers where multiple packages are first brought together in a single location before being sent out in bulk to their destination. This process helps to reduce the number of times that vehicles are used (see diagram below). We are also promoting a modal shift to different means of transport, including use of trains and ships, both of which generate less CO<sub>2</sub> than truck transport. In 2004, Sagawa Express worked with Japan Freight Railway Company to develop Super Rail Cargo express railway container cars. One freight train is in operation

in each direction between Tokyo and Osaka. The trains can carry the equivalent of 56 ten-ton trucks, and help to reduce annual CO<sub>2</sub> emissions by 14,700 tons. We are also moving forward with ship-based transport. Working with Tokyo Kyusyu Ferry, since 2021 we have moved some of our long-distance truck transport operations between the Kanto and Kyusyu off land, making use of maritime transport between Yokosuka and Shinmoji. Compared to before this switch, this has enabled us to cut CO<sub>2</sub> emissions by 48%. As a result of these and other measures, the CO<sub>2</sub> emissions from the SG Holdings Group's business activities is consistently decreasing.

Compared to FY2013, in FY2020 we successfully reduced emissions by approximately 8%.<sup>\*2</sup>

\*1: Number and percentage of domestic vehicles owned by Sagawa Express, SG Moving and World Supply

\*2: Scope 1 and 2 emissions



## What We Are Doing Now

As we work to achieve the government's goal of carbon neutrality by 2050, we have begun development of an EV specialized for delivery operations. Sagawa Express has put together a plan to increase its ratio of EVs and other environmentally friendly vehicles\* from

59% in FY2021 to 98% by FY2030.

In introducing these environmentally friendly vehicles, we will aim to reduce the CO<sub>2</sub> emissions from our vehicles.

\*Natural gas trucks, hybrid vehicles, EVs and clean diesel vehicles (vehicles compliant with 2010 and 2016 exhaust gas regulations)



Sagawa Express' light EV (under development)

# We Even Help with Smart Furniture Delivery

Using the transport and delivery expertise we have built up over many years, we are helping to reduce CO<sub>2</sub> emissions for various corporations in their procurement of raw materials and transport and delivery of products.



## Major Ripple Effects of Inter-company Initiatives

The Paris Agreement aims to contain the rise in average temperature “to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.” However, unless countries and companies work together, this target will be incredibly difficult to achieve. Inter-company initiatives must be spread to the stakeholders of each company and bring more individuals into the fold in order to curb climate change.



## Making Delivery Services Sustainable with EV Trucks



Left:Shintaro Kimura, Manager, Setting Section, Sales Department, SG Moving Co., Ltd.  
Right:Eri Hirayama, Country Sustainability Manager, IKEA Japan Co., Ltd.

Global furniture retailer IKEA has set “People & Planet Positive” as its sustainability strategy. One area the company is promoting is climate change countermeasures. To ensure sustainable consumption, IKEA is engaged in a wide range of initiatives for 2030 in each country, including those related to decarbonization.

In full support of IKEA’s initiatives, in 2020, SG Moving worked with IKEA Japan to adopt use of two EV trucks. As a company famous for its proactive environmental protection activities, what expectations does IKEA have for these EV trucks? In this section we hear from Eri

Hirayama, Country Sustainability Manager at IKEA Japan.

According to Hirayama, one target that IKEA is working toward is the provision of zero GHG emission delivery services in all regions by 2025.

“To become carbon neutral, it’s essential to reduce CO<sub>2</sub> emissions across the value chain.<sup>\*1</sup> At IKEA Japan, in 2018 we successfully switched all of the electricity we use within the group to that derived from renewable energy, and our next step is to reduce emissions from delivery and travel.”

Here, delivery refers to the delivery of products to customers, while travel

refers to customers’ travel to IKEA stores. Together, these two account for approximately 9.5% of value chain emissions.<sup>\*2</sup> SG Moving is offering support for the delivery side of the operation.

Hirayama says, “Currently,<sup>\*3</sup> 4% of all deliveries are made using EVs, but we hope to grow this to 25% by the spring of 2023.” Shintaro Kitamura, Sales Department Manager at SG Moving, has great expectations for this joint initiative— “This work with IKEA Japan will help to improve understanding of environmental issues both in-house and among our partner companies.”

Hirayama also adds a word of warning, saying, “Although many companies are working on decarbonization initiatives, GHG emissions continue to increase.” She goes on, “As a Swedish company with an abundance of expertise on environmental issues, as well as an eco-friendly mindset, we will work with various companies to achieve decarbonization, just as we are doing with SG Moving, and fulfil our role in creating better ecosystems.”<sup>\*4</sup>

\*1 :Value chain: The full chain of a business’ value-creating activities, including the procurement of materials for products or services, manufacturing, sales, distribution, use and recycling

\*2:Figures for the Ingka Group, IKEA’s parent company, as of 2020

\*3:As of July 2022

\*4:Ecosystems: Systems in which multiple companies and groups form business partnerships and aim for mutual success and prosperity

## IKEA Japan and SG Moving’s Initiatives



IKEA Japan’s special EV truck

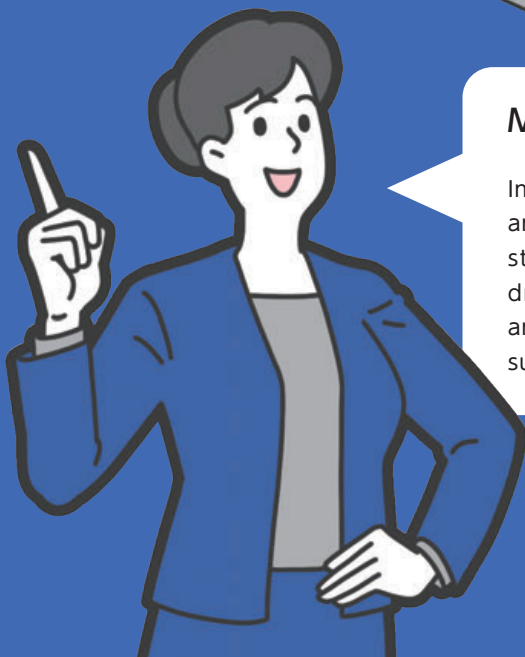
SG Moving is using EV trucks for delivery operations especially for IKEA Japan.

Of the two EVs adopted in 2020, one is dedicated to the delivery of IKEA Japan products, while the other is for the delivery of products from the IKEA Kohoku store to city-center stores.

These vehicles can be charged in as little as one and a half hours. They use six high-voltage lithium-ion batteries, with one single charge lasting approximately 100 km.

# Thinking About Environmentally Friendly Transport Together with Our Stakeholders

Preventing CO<sub>2</sub> emissions in logistics is not easy. To ensure transport operations with low environmental impact, in addition to the use of trucks, we are also promoting a modal shift to different forms of transport, such as the combined use of trains and ships.



## Making Use of Mutual Strengths

In addition to reducing environmental impact, transport using train and ships also avoids any influence from congestion, etc., ensuring stability in long-distance transport. It also helps to eliminate driver shortages. Coordinating use of trucks, trains and ships, and effectively using their respective strengths, will help to ensure sustainable transport operations.



## Tackling Social Challenges Through Modal Combination



Members of JR Freight's Sales Department from left: Takumi Imanaga, Senior Manager; Takashi Nakamura, Deputy General Manager; Soichiro Wake, Executive Officer and Deputy General Director

Sagawa Express and Japan Freight Railway Company (JR Freight) have been using their jointly developed Super Rail Cargo (SRC) express railway container cars, since 2004. Among others, the SRC is helping to reduce CO<sub>2</sub> emissions. Here we speak to Soichiro Wake, Takashi Nakamura and Takumi Imanaga from JR Freight's Sales Department. (Honorifics omitted)

### —Please tell us the backdrop to the development of the SRC.

**Imanaga:** Development of the SRC began as part of the High-speed Freight Transport Development Strategy Project, which JR Freight launched in 1999. In the process of looking for a company to use the train, Sagawa Express accepted our proposal. I think Sagawa Express were attracted

by the fact that they could reduce CO<sub>2</sub> emissions while maintaining a level of service on par with their truck operations.

### —What are the advantages of transport using the SRC?

**Nakamura:** The use of four electric container cars gives the SRC better acceleration than standard freight trains, allowing it to travel between Tokyo and Osaka in around six hours. Moreover, the round-trip loading capacity of the SRC is equivalent to 56 ten-ton trucks. CO<sub>2</sub> emissions from rail transport are said to be just one tenth of that generated by trucks, and so use of the SRC is helping to cut annual CO<sub>2</sub> emissions by approximately 14,700 tons.\*

**Wake:** Rather than having companies in the logistics industry compete over the market using train, truck or ship transport, for example, we believe companies should work together. We call this approach modal combination. Moving forward, I hope we can work together as an industry to tackle environmental problems.

## High-speed Vessels for People - and Environment-friendly Maritime Transport



Keisuke Nakamura, Manager, Sales Section, Tokyo Kyusyu Ferry Co., Ltd.

Working together, Sagawa Express and Tokyo Kyusyu Ferry have achieved a modal shift, moving some of Sagawa Express' long-distance truck transport operations off land, switching to maritime transport between Yokosuka and Shinmoji. Here, we speak to Keisuke Nakamura, Manager of

Tokyo Kyusyu Ferry's Sales Section, to find out more. (Honorifics omitted)

**Nakamura:** While there was previously a maritime transport route between Kanto and Kyusyu, it was slower than the overland route. However, it began to garner attention as an alternative means when overland transport was impossible due to a natural disaster, for example, and so in-house we began examining the idea of introducing high-speed vessels. Sagawa Express supported this plan, and we launched efforts to bring the idea to fruition. Following numerous discussions, in 2021 we opened a 21-hour route linking Yokosuka and Shinmoji. As a result, together with Sagawa Express we received the Decarbonized Logistics Promotion Award at the 23rd Logistics

Environment Awards hosted by the Japan Association for Logistics and Transport. Maritime transport helps to reduce the distance covered by vehicles and in turn reduce CO<sub>2</sub> emissions. The modal shift between Kanto and Kyushu has enabled a 48% annual reduction (1,704 tons) in CO<sub>2</sub> emissions.\* Further, the use of trailers can eliminate the need for drivers to board the cargo ships as the cargo can simply be transferred to the ship. In the transport industry, which faces a range of challenges such as decarbonization and personnel shortages, opportunities are rising for maritime transport to offer a solution. I think our joint initiative was recognized as a successful example, leading to the award. I look forward to maritime transport increasing its presence as a logistics option.

\*Reduction effect calculated based on the environmental impact (theoretical values) of not undertaking a modal shift

# Energy for Facilities Generated In-house

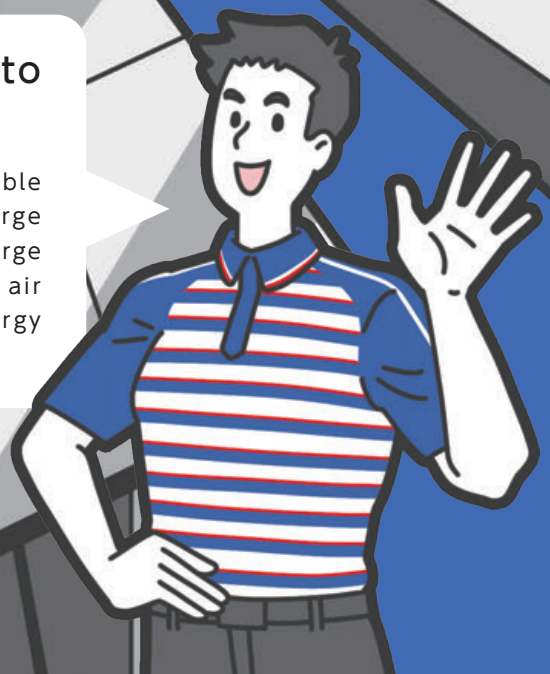
Not only must we find solutions for transport and delivery, it is also important that we make our distribution facilities more environmentally friendly.

By minimizing our power consumption and making use of solar power generation and other means, we will aim to increase the number of zero-energy buildings.



## Environmentally Friendly Worksites to Support Sustainable Logistics

Environmentally Friendly Worksites to Support Sustainable Logistics At our distribution facilities, which are in charge of sorting and storing packages, for example, we use large amounts of electricity for various special equipment, air conditioning and more. Environmentally friendly energy consumption is fundamental to sustainable logistics.



## The First Distribution Facilities to Achieve Net zero Energy Consumption



Engineering Management Section, Engineering Management Department, SG Realty Co., Ltd.  
Left: Mutsuaki Enokido; right: Miharu Kobari

SG Realty, which is in charge of the real estate business within the SG Holdings Group, is moving forward with the development of environmentally friendly, sustainable distribution facilities. SG Realty (SGR) Wako and SGR Higashiosaka, which were completed in 2018 and 2021 respectively, have successfully achieved net zero energy consumption through the procurement of renewable energy, implementation of energy-saving measures, and use of solar power generation systems. Following an inspection by a third-party organization that evaluates energy-saving performance of buildings, both buildings received ZEB (net zero energy building)<sup>\*1</sup> certification, which is the highest possible rating. In this section we speak to Mutsuaki Enokido and Miharu Kobari from the Engineering Management Section at SG Realty about environmentally friendly real estate development and management. (Honorifics omitted)

### —Please tell us about your environmental initiatives.

**Enokido:** To date, we have installed solar power generation equipment at around 100 of our facilities nationwide, and have used the electricity generated for both in-house consumption and external sales. In FY2021, we generated a total of 2,400,800 kWh of electricity, which is equivalent to

the annual energy consumed by around 6,000 homes.<sup>\*2</sup>

SGR Wako and SGR Higashiosaka were designed in a way that the power generated through solar panels and other means offsets the energy consumed on-site. However, in-house power generation alone is not enough to achieve net zero energy consumption, and so drastic energy-saving measures were also required. We installed high-efficiency air conditioning equipment, and used materials with high thermal insulation properties in the external walls. For lighting, not only did we switch everything to LED, but we made use of motion sensors and adjusted the number of lights while paying careful attention to ensure that we maintained the quality of work environments. These and other measures ensured we achieved net zero.

**Kobari:** SGR Wako was the first distribution facility to be recognized with the ZEB rating, which is awarded to buildings that consume net zero energy. SGR Wako was



SGR Higashiosaka

the pioneer, and similar initiatives have since spread throughout the industry.

### —Please describe the sustainable distribution facilities that SG Realty is aiming to create.

**Kobari:** In addition to minimizing the environmental impact caused by our energy consumption, we are preparing for natural disasters by using storage batteries to store the power generated by the on-site solar panels. Moreover, some elements of the interior design make use of the thinnings generated by Sagawa Forestry's forest protection activities. We are working to make these facilities people- and environment-friendly in other ways too, such as by greening external walls, and harmonizing the facilities' surroundings with the landscape through careful arrangement of diverse trees and plants, roadside trees and lamps.

**Enokido:** We are also making the roads around our properties environmentally friendly by introducing Super Polyascon, a construction method that utilizes recycled PET bottles. This modified material made from recycled PET bottles has improved durability, which helps to reduce the frequency of repairs and renovations. Compared to conventional materials, this modified material also generates around 30% less CO<sub>2</sub> during production.

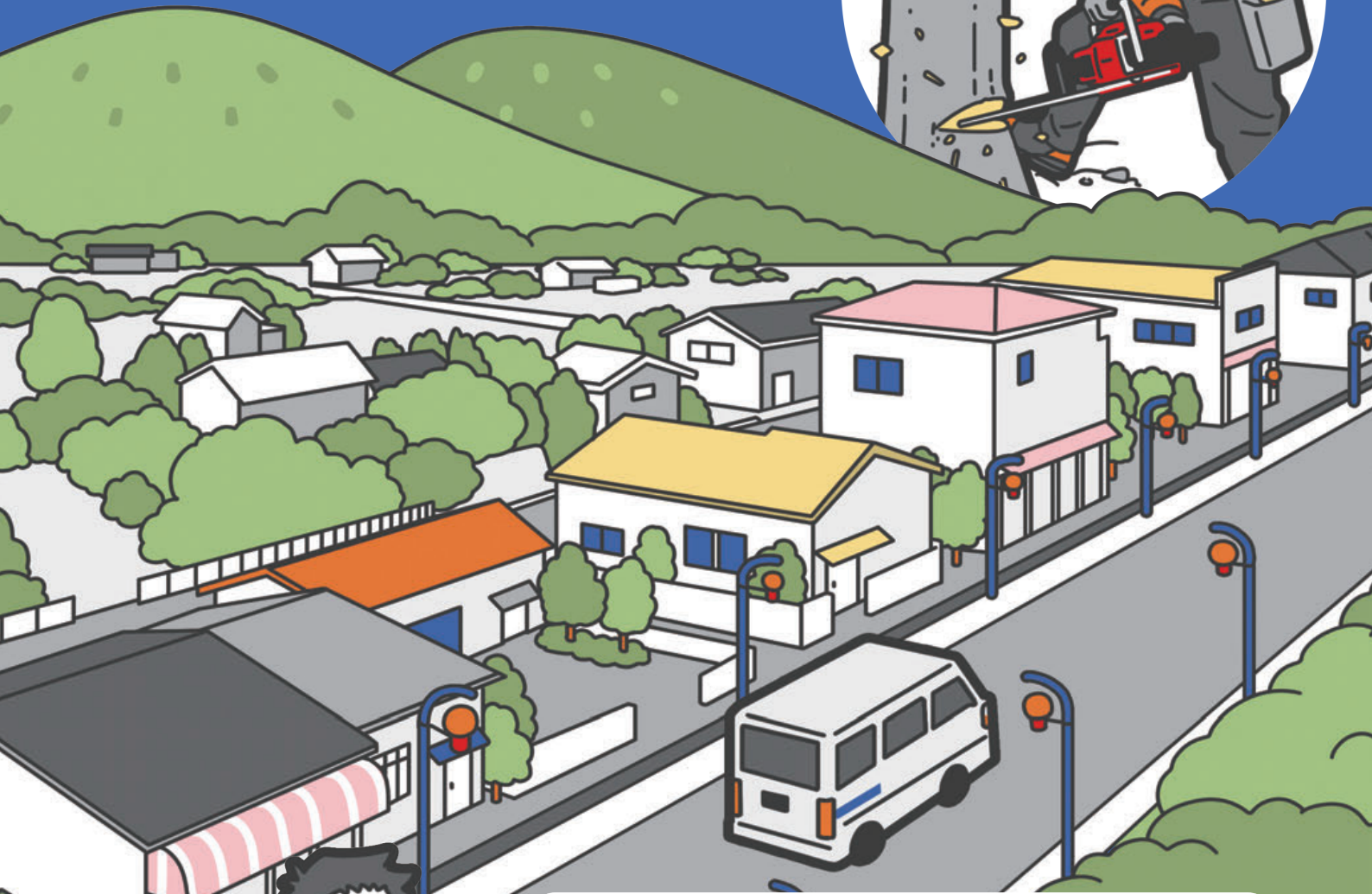
**Kobari:** When proactively engaging in initiatives like these, we have the opportunity to acquire a wide range of expertise from other companies who share the same interest. We believe that sharing information on highly energy efficient facilities and their mechanisms throughout the industry will help to create sustainable distribution facilities.

\*1: Buildings with net zero primary energy consumption through both energy-saving and energy-creating measures

\*2: Calculated based on FY2019 Home Energy Situation, Ministry of the Environment

# Nurturing Forests For a Sustainable Future

Forest protection activities are essential for decarbonization. At the Sagawa Forests we own in the Shikoku region, we are joining forces with local forest associations.



## Working Together to Protect Our Forests

When the forest cycle of tree-planting and thinning is lost and forests fall to ruin, not only does the lack of sunlight within mountain forests have a negative impact on nature, the soil environment can also become damaged and heighten the risk of disaster. As such, together with those in the forestry industry, it is important that society as a whole engages in forest protection activities.

## Bringing Back the Forest Cycle



From left: Sho Imahata of Sagawa Forestry; and from Kami Forestry Association, Director Akihiro Ishikawa, Managing Director Yukihiro Mitani, Manabu Tajiri and Akio Yamazaki

The forestry industry in Japan is facing various challenges, including a slump in domestic lumber prices and personnel shortages. A stagnant forestry industry can in turn stop the forest protection cycle, which is maintained by planting, nurturing, thinning and use. Decaying forests have less ability to absorb CO<sub>2</sub> and retain water, and can even cause natural disasters.

Sagawa Forestry, which owns the Sagawa Forests in Kochi and Tokushima, is currently working with the Kami Forestry Association, an organization mainly involved in forest regeneration projects in Kochi Prefecture. Their collaborative activities are an attempt to tackle the various forest-related social challenges we face today. Here, director of the Kami Forestry Association Akihiro Ishikawa and Sho Imahata from Sagawa Forestry talk about the ideas and background behind their project. (Honorifics omitted)

### —What are your thoughts on the current state of the forestry industry and forest protection activities?

**Ishikawa:** In the past 50 years, the liberalization of wood imports and other social changes have caused a significant drop in the profitability of forestry businesses. Meanwhile, the declining birthrate and aging population have spurred industry personnel shortages, and the number of abandoned forests is increasing.

To improve this situation, we are

introducing high-performance forestry machinery from overseas and opening up routes suited to machinery-based work. In doing so, we are improving the efficiency of the thinning and recycling work that mountain forest owners contract us to undertake. In this way, we are working to return profits to forest owners and create bountiful forests.

**Imahata:** At Sagawa Forestry, our philosophy is to engage in forest protection activities to leave trees for the next generation. We carefully manage the mountain forests we own with help from local forestry associations, and are working to create mechanisms for forestry cycles that include everything from tree-planting to wood utilization.

Wood taken from Sagawa Forests is being used in the interiors of SG Holdings Group distribution facilities and recreational

facilities. Working with these associations, we are promoting use of this wood and using the profits generated to grow our mountain forests and develop new forests.

### —What is the significance of your collaboration?

**Imahata:** It's incredibly reassuring to be able to ask a professional organization like the Kami Forestry Association for help with mountain forest management, as the work requires abundant experience and outstanding techniques. Our role in the partnership is to communicate the appeals of wood and boost demand and value. Bringing our strengths together is the ideal way to ensure that bountiful forest cycles are protected.

**Ishikawa:** In having Sagawa Forestry take ownership of a certain area of mountain forest, forest maintenance has become vastly more efficient, enabling more thorough, widespread management. If we can appropriately maintain abandoned forests, the rate of CO<sub>2</sub> absorption will improve and we will have more access to wood, which is one of the few renewable resources in Japan.

To widely communicate to the next generation the fact that forests provide us with various benefits, I hope we can continue working with Sagawa Forestry to promote projects.

## Takao 100-Year Forest

Sagawa Express owns approximately 50 hectares of forest in Hachioji City in Tokyo, and is engaged in activities to protect its function as a source of absorption of CO<sub>2</sub> emitted from its truck-based business activities.

In tandem with local citizens, universities and other educational institutes, experts and other external parties, restoration of undeveloped woodlands, valuable for mitigating global warming and where people and nature can exist in harmony, is being carried out under a long-term vision symbolized by the phrase "100 years."



# Delivering the Future Working Together for a Better Tomorrow

We believe that logistics has the power to link people, society and ideas.  
We will therefore contribute to the achievement of  
a decarbonized society with pride.



## Below Are Some of the Initiatives Underway at Our Group Companies

### Sagawa Humony

Among others, Sagawa Humony provides the VERY CARD message delivery service. In April 2022, the company launched SUSTAINAGIFT, an ecommerce website bringing together a range of sustainable gift products. The company will continue to propose means of sustainable consumption for both companies and individuals.

### World Supply

World Supply is a comprehensive logistics company involved in delivery operations for commercial and other facilities. For food deliveries, World Supply has adopted use of CNG (natural gas) trucks. The company manages delivery vehicles using a proprietary facility logistics system, easing congestion in surrounding areas and in turn reducing CO<sub>2</sub> emissions.

### Sagawa Global Logistics

At EC Logi Tokyo within X FRONTIER, Sagawa Global Logistics has introduced Carton Wrap, a system that automatically packs shipping boxes in the optimal shape depending on the size of the product. This helps to reduce the volume of packages and in turn increase the amount that can be loaded onto trucks, reducing transport frequency and cutting CO<sub>2</sub> emissions.

### SGH Global Japan

SGH Global Japan has donated bread, water and other items from its emergency stockpiles with only a few months remaining on their consume-by dates to Second Harvest Japan, a non-profit organization engaged in food bank activities. By having these donations contribute to the reduction of food loss, the company is working to achieve a sustainable society.

### EXPOLANKA HOLDINGS PLC

EXPOLANKA HOLDINGS is a Group company with its headquarters in Sri Lanka. The company is currently promoting the use of electricity derived from renewable energy. At its warehouse facility in Orugodawatta, the company has installed more than 2,500 solar panels, which provide approximately 80% of the power it uses.

### SG Assetmax

SG Assetmax is an asset management company that mainly invests in logistics-related real estate. When undertaking repair work on its real estate under management, the company uses environmentally friendly devices and building materials, working with its tenants to reduce CO<sub>2</sub> emissions.

### Sagawa Advance

Sagawa Advance is involved in the procurement of vehicle fuel used by the SG Holdings Group and its partner companies. Further, aiming to make the electricity used by the Group entirely CO<sub>2</sub>-free, the company is in charge of negotiations and contracts with power companies.

### SG Motors

SG Motors is responsible for the maintenance, sale, body customization and more of SG Holdings Group vehicles. By using easily recyclable materials on the roof panels of compact delivery vehicles, the company is contributing to resource circulation. Further, at its sales stores, the company is promoting use of renewable electricity and in turn reducing CO<sub>2</sub> emissions.

### SG Systems

SG Systems has developed Biz-Fleet, a cloud-based operation management system compatible with multiple devices. The system coordinates with various IoT equipment including digital tachographs, drive recorders and smartphones for the integrated management of operational information. The system is also being used to teach drivers safe driving and eco-friendly driving techniques.

### SG Fielder

SG Fielder is a human resources outsourcing company specializing in logistics. The company offers temporary staffing, personnel placement and outsourcing services, and manages more than 200 worksites under contract nationwide. The company has acquired three-star Eruboshi certification, and has also been certified as an Excellent Worker Dispatching Business.

### Nouvelle Golf Club

Nouvelle Golf Club manages a golf course in Oamishirasato City in Chiba Prefecture. The new lakes that have been created on course are used for water management during disasters, helping to prevent floods during heavy rain and supply water to local paddy fields in times of drought.

## See Videos About Our Initiatives for the SDGs!

Take a look at the videos alongside this SDGs Communication Book.  
<https://www.sg-hldgs.co.jp/en/csr/sdgs-video/>  
 Search for "SGH SDGs" or use the two-dimensional barcode on the right.





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