## Sumitomo Realty & Development



## **Environment**

Updated on August 30, 2024

Page 2 — Climate Change Page 10 — Conservation of Water Resources

Page 11 — Biodiversity

Page 14 — Curbing Environmental Pollution, Reducing Waste, and Making Effective Use of Resources

Page 17 — Environmentally Responsible Supply Chain

#### **Issue Awareness and Action Plans**

In recent years, countries around the world have been working together to reduce greenhouse gas (GHG) emissions based on the recognition that climate change is a global issue. In Japan, since the declaration of "2050 Carbon Neutrality" in 2020, various measures have been promoted to reduce GHG emissions and to lead reformation and growth of the industrial structure, economy and society through decarbonization.

The Sumitomo Realty Group recognizes that climate change has the potential to have a significant impact on its business activities not only as a risk but also as an opportunity. With this in mind, we are working to address climate change issues in conjunction with our respective stakeholders including suppliers, business partners, tenants and industry organizations.

#### **Management Structure**

In order to manage status of progress towards the targets regarding sustainability, the Sumitomo Realty Group has established the Sustainability Committee chaired by the Company's President. In addition, its subordinate organization, the Sustainability Promotion Council chaired by the Head of Corporate Planning Division as a responsible official, works to

identify and solve issues related to climate change measures. Important issues are conferred with the Sustainability Committee, and reported to the Board of Directors as necessary, thereby establishing a supervisory system by the Board of Directors.

#### **Initiatives**

#### **Initiatives for a Low Carbon Society**

#### Participation in Industry Organizations, Support for Public Policies, and Initiatives to Achieve Climate Change Mitigation

The Sumitomo Realty Group recognizes the importance of and supports the Paris Agreement and other agreements related to global warming countermeasures. We are working to significantly reduce GHG emissions through a range of

measures, including installation of high-efficiency equipment to existing buildings through renovation. In addition to our own efforts, we also participate in the following frameworks aimed at mitigating climate change.

#### The Sumitomo Realty Group's participation and support for frameworks to mitigate climate change

Organizing body	Name of committee, etc.	Position of Sumitomo Realty	Overview and initiatives
The Real Estate Companies Association of Japan	Environmental Committee	<ul> <li>Participate as a committee member</li> <li>Participate in related working groups and study sessions (the Environmental Condominium Working Group, the Environmental Office Working Group, the 2050 Long-Term Vision for Global Warming Countermeasures Working Group, and the Global Environmental Countermeasures Study Session)</li> </ul>	Share case studies for the reduction of the environmental load with member companies in the real estate industry     Formulate and promote the Real Estate Industry     Environmental Action Plan, an environmental master plan for the real estate industry     Provide recommendations and support for environmental policies and regulations related to the real estate industry
Society of Hyper- Enhanced insulation and Advanced Technology houses for the next 20 years	HEAT 20	Participate as a regular member	The purpose of this project is to conduct research and development regarding design and technology such as envelope technology, and to promote the spread and adoption of such technology. This is mainly from the perspective of the thermal environment and energy performance of living spaces and building durability with the aim of realizing homes and buildings with a low environmental load while offering safety, security, and high quality.
· UN Global Compa · Global Compact N		<ul> <li>Signed the "UN Global Compact" in October 2020</li> <li>A member of Global Compact Network Japan</li> </ul>	It is a global framework that encourages voluntary initiatives of companies and organizations to realize sustainable growth by acting as good member of society through taking responsible and creative leadership.
TCFD (Task Force Related Financial     TCFD Consortium	Disclosures)	Announced our endorsement of the recommendations of the TCFD     A member of the TCFD Consortium	The Task Force on Climate-Related Financial Disclosures was established by the Financial Stability Board at the request of G20 with Michael Bloomberg as its chairman, to examine how climate-related information should be disclosed, and how financial institutions should respond.

#### **Initiatives**

Sumitomo Realty Group has established following decarbonization targets.

50% reduction in CO<sub>2</sub> emissions (Scope 1, 2 and 3) by fiscal 2030 compared with fiscal 2014 (approximately 5,940 thousand tons of CO<sub>2</sub>), immediately prior to the Paris Agreement Expressed support for 2050 carbon neutrality

Aim to achieve the target by linking decarbonization initiatives with business expansion

In order to achieve these targets, we implement following measures.

- (1) Promote energy saving in leasing business centered on office buildings and facility management businesses
  - Further pursue the introduction of highly efficient facilities for new constructions and renovations, and reduce the Company's CO<sub>2</sub> emissions from energy consumption, etc., by 50% per unit of floor area
  - · Continue awareness-raising activities for energy saving towards tenants
- (2) Promote measures to reduce emissions in both upstream and downstream parts of main businesses
  - · Support tenant companies to introduce green power for their office spaces in a building
  - · Support to curb energy consumption during construction
  - Enhance high-performance designs (adopting ZEH\*-M Oriented as the standard specification for condominiums) \*ZEH = Net Zero Energy House
  - Promote the provision of the new solar power generation service, "SUMIFU × ENEKARI," which will contribute to decarbonization for detached houses
  - · Promote the provision of Shinchiku Sokkurisan high thermal insulation remodeling products
  - · Support the spread of automobile charging stations
- (3) Aim to reduce total emissions by 10% in the Ninth Management Plan
  - Reductions in the condominium business, which accounts for approximately 60% of total emissions, will
    contribute from the Tenth Management Plan onward, when the construction of properties with new design
    standards will be completed
  - · Aim to reduce emissions by 25% except for condominiums

< CO<sub>2</sub> emissions reduction targets for the Ninth Management Plan >

(Reference)

(Thousand tons of CO <sub>2</sub> )	FY 2014 emissions	Proportion	9th Plan reduction target	FY 2023 emissions
Condominiums	3,605	61%	-	2,079
Custom homes and Shinchiku Sokkurisan remodeling	1,591	27%		1,595
Office buildings	689	12%		968
Other (head office and Group companies)	55	1%		63
Non-condominium	2,336	39%	(25%)	2,626
Total	5,940	100%	(10%)	4,705

#### Main numerical targets in each business

- (1) 30% of energy consumption in tenant office spaces to be green
- (2) 100% of condominiums to be ZEH-M Oriented designs
- (3) 60% of custom home orders to be ZEH homes (already standardized)
- (4) 20% of Shinchiku Sokkurisan remodeling orders to be high thermal insulation remodeling products (already introduced)
- (5) All of electric power used in the Group's own offices to be green by obtaining environmental value generated by solar power through "SUMIFU × ENEKARI"

## **Initiatives**

The  ${\rm CO_2}$  emissions of the Sumitomo Realty Group are as follows.

#### **GHG** emissions under the GHG Protocol

#### < Emissions by the Group >

		FY2014		FY2021			FY2022			FY2023		
	Total emissions (Thousand t-CO <sub>2</sub> )	Covered area (Thousand m²)	Per-unit emissions (t-CO <sub>2</sub> /m²)	Total emissions (Thousand t-CO <sub>2</sub> )	Covered area (Thousand m²)	Per-unit emissions (t-CO <sub>2</sub> /m²)	Total emissions (Thousand t-CO <sub>2</sub> )	Covered area (Thousand m²)	Per-unit emissions (t-CO <sub>2</sub> /m²)	Total emissions (Thousand t-CO <sub>2</sub> )	Covered area (Thousand m²)	Per-unit emissions (t-CO <sub>2</sub> /m²)
Scope 1 & 2	153	3,808	0.040	164	5,514	0.030	167	5,700	0.029	162	5,841	0.028
Scope 1 (from fuel)	33	3,808	0.009	44	5,514	0.008	44	5,700	0.008	45	5,841	0.008
Scope 2 (from heat and electricity)	120	3,808	0.032	120	5,514	0.022	124	5,700	0.022	117	5,841	0.020

#### < Total emissions including the supply chain >

	FY2014	FY2021	FY2022	FY2023
	Total emissions (Thousand t-CO <sub>2</sub> )	Total emissions (Thousand t-CO <sub>2</sub> )	Total emissions (Thousand t-CO <sub>2</sub> )	Total emissions (Thousand t-CO <sub>2</sub> )
Scope 1, 2 & 3	5,940	4,851	4,937	4,673
Scope 1 & 2	153	164	167	162
Scope 3 (Other indirect emissions)	5,788	4,687	4,770	4,511
1. Purchased goods and services	966	1,130	1,067	851
2. Capital goods	118	289	752	376
3. Fuel and energy-related activities (not included in Scope 1 or Scope 2)	22	28	28	30
Upstream transportation and distribution	Not applic	cable (some are	e included in Ca	ategory 1)
5. Waste generated in operations	21	24	20	20
6. Business travel	2	2	2	2
7. Employee commuting	3	3	3	3
8. Upstream leased assets	31	19	19	16
Downstream transportation and distribution	71	107	111	366
10. Processing of sold products			-	
11. Use of sold products	4,279	2,832	2,525	2,640
12. End-of-life treatment of sold products	44	33	28	32
13. Downstream leased assets	231	221	214	177
14. Franchises				
15. Investments			-	

#### **Initiatives**

#### **Initiatives for a Low Carbon Society**

#### Reducing Greenhouse Gas (GHG) Emissions and Energy Consumption

Sumitomo Realty has been constructing new buildings featuring substantial environmental performance and continuously improving environmental performance by renovating existing buildings after they reach a certain age. Since fiscal 2009, we have reported our data in accordance with the Act on Rationalizing Energy Use and Shifting to Nonfossil Energy. For the five-year period from fiscal 2017 to 2021, Sumitomo Realty on a non-consolidated basis maintained the highest rank of "S class business operator" under the

aforementioned act. From fiscal 2022 onwards, the Sumitomo Realty Group, which includes its consolidated subsidiaries subject to reporting, has been certified as an "S class business operator."

In order to contribute to curbing global warming, we will keep striving to reduce its energy consumption going forward as a "S class business operator," with the target of reducing per-unit energy consumption and per-unit GHG emissions by 1% annually.

## Energy consumption and GHG emissions volumes pursuant to the Act on Rationalizing Energy Use and Shifting to Non-fossil Energy

#### ◆ Non-consolidated data

	Unit	FY2009	FY2021	FY2022	FY2023
Target area (standardized coefficient – per-unit denominator)	Thousand m <sup>2</sup>	2,283	3,902	4,169	3,908
Energy consumption	Thousand GJ	4,562	4,877	4,861	4,950
Energy consumption	Thousand kL	118	126	125	128
Per-unit energy consumption	kL/m <sup>2</sup>	0.05156	0.03224	0.03008	0.03268

	Unit	FY2009 FY2021 FY2022 FY2023
GHG emissions (Scope 1&2)	t-CO <sub>2</sub>	160,114 226,529 224,944 237,343
Per-unit GHG emissions (Scope 1&2)	t-CO <sub>2</sub> /m <sup>2</sup>	0.07014 0.05805 0.05396 0.060733

#### **♦** Consolidated data

	Unit	FY2009	FY2021	FY2022	FY2023
Target area (standardized coefficient – per-unit denominator)	Thousand m <sup>2</sup>			4,491	4,265
Energy consumption	Thousand GJ			5,430	5,641
Energy consumption	Thousand kL			140	146
Per-unit energy consumption	kL/m²			0.03119	0.03413

#### Reduction target

	Five-year average
Reduction rate	1%
Base year	2018-22
Target year	2019-23
Per-unit target for FY2023*	0.03559

<sup>\*</sup> S class business operator certification level

	Unit	FY2009 FY2021	FY2022 FY2023
GHG emissions (Scope 1&2)	t-CO <sub>2</sub>		251,437 269,004
Per-unit GHG emissions (Scope 1&2)	t-CO <sub>2</sub> /m <sup>2</sup>		0.05599 0.06307

<sup>\*</sup> The scope of data collected for calculating energy consumption and GHG emissions encompasses all the properties owned, managed, used, by the Sumitomo Realty or leased to it as office, etc. for which report is required under the Act on Rationalizing Energy Use and Shifting to Non-fossil Energy. In addition, all GHG emissions are calculated using adjusted GHG emission coefficients.

<sup>\*</sup> S class business operator: Certified as having reduced the five-year average for per-unit energy consumption by 1% or more annually or otherwise achieve specified benchmark levels.

<sup>\*</sup> By applying the certification standards for S class business operators, we have aimed to reduce the five-year average per-unit GHG emissions by 1% or more annually. Since we have switched to consolidated reporting, the target values for the consolidated data will be disclosed once the data for the fifth year has been collected.

#### **Initiatives**

#### Initiatives for a Low Carbon Society

#### > Addressing Climate Change Risks and Opportunities

The Sumitomo Realty Group has established the Sustainability Committee chaired by the President, and its subordinate organization, the Sustainability Promotion Council monitors risks and opportunities related to climate change.

With regard to climate change risks, in addition to examining the impact of related systems and regulations on our business activities, we have identified specific risks that may affect our business based on the 1.5 to 2°C and 4°C scenarios.

According to each scenario, we are currently examining

business strategies we have developed that incorporate the magnitude of the financial impact along with measures for mitigation and adaptation.

With respect to important matters among the identified risks, a system has been established in which such matters are discussed at important meetings, including the Board of Directors and Executive Committee meetings, and supervised by the Board of Directors.

#### < Risks and opportunities associated with climate change >

Classifications	Scenarios	Impact	Period	Details	Correspondence (mitigation and adaptation) / Strategies
Transition risks	Increasing demand for Net Zero Energy Building (ZEB), Net Zero Energy House (ZEH), etc.	Medium to Large	Short	If ZEB and ZEH specifications are standardized, it will be necessary to further enhance the environmental performance of building equipment, and the cost of installing such equipment is expected to increase. As we plan to continue developing office buildings, condominiums, etc. in future, there are concerns that the burden of construction costs may increase.	We consider installing equipment with high environmental performance at a timely manner. In addition, with regard to ZEH, we have standardized following features: 1) "ZEH-M Oriented" energy-saving standard for all* the new condominiums designed and developed from October 2021, 2) thermal insulation and energy-saving performance exceeding the latest ZEH standard for our custom homes from May 2022. *Except for joint venture properties, etc.
Transition risks	Introduction of a carbon tax	Medium to Large	Medium	The introduction of a carbon tax is expected to increase the procurement costs of various building materials through shifting of price by the suppliers. As we plan to continue developing office buildings, condominiums, etc. in future, there are concerns that the burden of construction costs may increase.	We closely monitor related systems and regulations and prepare ourselves to respond promptly. We also assume the offset price per t- CO <sub>2</sub> as the internal carbon price, and apply it to various considerations.  * Offset price used as a reference (yen/t-CO <sub>2</sub> , as of August 2024)  J-credit scheme certificates from renewable power: 3,246 yen  Non-fossil fuel energy certificates: 2,331 yen  Green power certificates: 8,158 to 9,324 yen
Physical risks	Increasing occurrence of natural disasters due to extreme weather	Medium	Medium	A significant increase in frequency and severity of damages caused by extreme winds, floods, etc. is expected. As we own a large number of office buildings, etc., there are concerns that damage to assets and the burden of repair costs may increase.	In preparation for major weather hazards such as large typhoons, we set each property's estimated flooding depth when we develop a property, based on hazard maps and actual flooding records. We have also installed tide boards of sufficient height to prevent water inflow where necessary.
Opportunities	Lower prices of high environmental performance products due to their spread	Small	Long	If ZEB and ZEH specifications are standardized, equipment with high environmental performance will be widespread and available with lower price. As we already introduce equipment with excellent environmental performance at a high level, the procurement costs for such equipment is expected to decrease.	We decide on the equipment to be installed each time we develop a property after considering the costs and performance. This ensures that we are ready to respond to fluctuations in costs.
Opportunities	Increasing interest in disaster prevention features	Medium	Medium	With significant increase in frequency and severe damages caused by extreme winds, floods, etc., the demand for high disaster prevention features is expected to rise in the market. As our buildings are highly evaluated for their disaster-prevention performances, the opportunities to acquire customers is expected to increase.	We are working to further improve the disaster prevention features of our portfolio by realizing high disaster-prevention features in new properties as well as renovating existing properties.
Opportunities	Increasing interest in environmental performance	Medium	Short		We are continuously working to improve the environmental performance of our entire portfolio by developing and owning new properties with high environmental performance and improving the performance of existing properties through renovation. In addition, we are actively acquiring various green building certifications as objective indicators of high environmental performance. For existing detached houses, we offer high thermal insulation remodeling plan, etc. to improve performance to meet the latest energy-saving standard.

<sup>\*</sup> Transition risks were assumed based on the 1.5 to 2°C scenario (the Sustainable Development Scenario (SDS) in the IEA World Energy Outlook and other scenarios). Physical risks were assumed based on the 4°C scenario (IPCC Fifth Assessment Report RCP8.5 and other scenarios).

#### Contribution of CO<sub>2</sub> Emission Credits

Sumitomo Realty has generated CO<sub>2</sub> credits upon having reduced its CO<sub>2</sub> emissions by more than the required volume under the Tokyo Cap-and-Trade Program. We support the efforts of the Tokyo Metropolitan Government to realize a zero-

emission advanced environmental city, "Zero Emission Tokyo". In November 2019, we donated 111,979 tons worth of aforementioned credits to the Tokyo Metropolitan Government.

#### **Initiatives**

#### Initiatives Involving Office Buildings

#### Heat Island Countermeasures

Sumitomo Realty's development business extend beyond energy-saving performance of buildings and contribute to improving environments in the vicinity. In recent years, increasing urbanization of central Tokyo has given rise to a heat island phenomenon whereby temperatures of Tokyo remain several degrees higher than those of surrounding areas. This has given rise to concerns that this could adversely affect the city, causing health hazards such as heat stroke or changes to ecosystems. Moreover, higher temperatures lead to excessive use of air conditioning systems, particularly during the summer when massive volumes of energy are consumed, thereby giving rise to concerns of increasing GHG emissions.

As such, Sumitomo Realty has been taking steps to address the heat island phenomenon by increasing green coverage of communities, which involves planting greenery on rooftops of

buildings and condominiums and creating green areas within open spaces and other such sites. For instance, at Sumitomo Fudosan Osaki Garden Tower, completed in 2018, we have converted an area that was previously occupied by factories into a space featuring abundant greenery, resulting in an increase of green coverage ratio within the project site from 0.01% to approximately 35%.

Meanwhile, Sumitomo Fudosan Shiodome Hamarikyu Building features greenery on the lower floors. An air vent layer is also installed between the second and third floor at a height of four meters to alleviate wind currents between buildings and channel ocean breezes from Hamarikyu side to Ginza and Shimbashi districts. This has enabled us to help curb the heat island phenomenon in the Shiodome area where many offices are concentrated.

#### Development of Energy-saving Technology for Office Buildings: Patented for a Multi-story Building Air Conditioning System

Sumitomo Realty has developed an air conditioning system for multi-story buildings that promotes energy conservation in office buildings. The system is patented since 2014.

In this system, an atrium space is created on each floor between the outdoor air conditioning unit and the office rooms so that a mixture of exhaust air from the office rooms and

outside air is channeled to the outdoor unit as intake air. As the indoor air is cooler than the outside air in summer and warmer in winter, less heat is required for heat exchange in the outdoor unit. This significantly reduces the energy consumption of the air conditioning system, regardless of the season.

#### Energy-efficient Office Buildings

#### < Low-e double glazing glass >

To heighten air-conditioning efficiency for energy savings, we enhance thermal insulation performance of external walls, and also install low-e double glazing glass which reduces transmission of solar radiation heat indoors in the summer and decreases outflow of heat from indoors during the winter.

#### < Decentralized HVAC system >

In Sumitomo Realty's office buildings, we install decentralized HVAC systems as standard equipment, thereby enhancing tenants' convenience and energy savings. Moreover, the use of natural vents installed at window frames, as a standard specification, minimizes unnecessary use of air conditioning and enables energy savings.

#### < Smart meter >

All of the properties we develop in our portfolio are equipped with pulse meters (smart meters) to make it easier to monitor electricity consumption and other data.

#### < Adoption of gas co-generation systems >

Sumitomo Realty has introduced a power-sharing, energy-saving system centering on Izumi Garden Tower. In addition to electricity supply from a utility, this system employs private power generation using a gas co-generation system to supply electricity to Izumi Garden Annex adjacent to Izumi Garden Tower and uses waste heat for highly efficient district heating and cooling on a daily basis, thus contributing to the reduction of CO<sub>2</sub> emissions.

We have also equipped Tokyo Nihombashi Tower with a gas cogeneration system.

#### < Other key aspects of energy-efficient design >

- District heating and cooling systems
- Visual monitoring of energy consumption through adoption of Building Energy Management Systems (BEMS)
- Use of natural energy through installation of solar panels

\*BEMS is the system for controlling and monitoring equipment of a building.

#### Sumitomo Fudosan Osaki Garden Tower



#### Measures to reduce thermal loads

We apply thermal insulation to walls using an internal wall insulation method and install low-e double glazing glass windows to



#### Heat island countermeasures

We contribute to heat island countermeasures by achieving green coverage of approximately 35% across entire sites and arrange for ample greenery on-site.



#### LED lighting & LED brightness sensors

We install LED lighting with brightness sensors as standard equipment in all office spaces to save energy and help reduce CO2



#### Use of natural energy

We design this building as an environmentally-sound building, incorporating features such as drawing on solar power and using recycled rainwater for flushing toilets.



## Investment to improve environmental performance of the portfolio

In addition to developing new building with high environmental efficiency, Sumitomo Realty successively invests on upgrading facilities of buildings whose carbon efficiency have relatively lowered over time. Through replacing air conditioning units with

high-efficiency models, switching to LED lighting, etc., we have been continuously striving to improve the carbon efficiency of our overall portfolio.

#### **Initiatives**

#### **Initiatives Involving Condominium Sales**

#### > Adopting "ZEH-M Oriented" Energy-Saving Performance as the Standard for All New Condominiums

Sumitomo Realty has decided to adopt "ZEH-M Oriented" energy-saving performance as the standard for all the condominiums\* we design and develop from October 2021.

As one of its targets for 2030, the Ministry of Land, Infrastructure, Transport and Tourism is aiming for all new residential housing to offer energy-savings that meet ZEH standards. In line with such target, we have adopted the design standard that satisfy ZEH standards ahead of the industry,

without reducing quality and living comfort of our condominiums.

ZEH-M Oriented, which we have adopted as the standard for our condominiums, is an energy-saving standard that requires compliance with reinforced exterior standards (for thermal insulation performance) and reduces primary energy consumption by 20% in comparison to the current standards. \* Except for joint venture properties, etc.

#### < Reference: Definition of ZEH for housing complexes >

	Re	sidential bu	ilding evaluatio	n	Detached house evaluation			uation	
	Exterior thermal insulation performance Spaces Spaces Target  Energy-saving rate (Must be achieved by the entire residential building including shared spaces)  Target			Exterior thermal insulation	Energy saving rate (Must be achieved by the relevant detached house				
	performance (Must be achieved by all units)	Excluding renewable energy	uding Including wable renewable			performance (Must be achieved by the relevant detached house)	Excluding renewable energy	Including renewable energy	
"ZEH – M"			100% or more	Buildings with	"ZEH"			100% or more	
Nearly ZEH-M		Reinforced		75% or more	3 or fewer stories	Nearly ZEH	Reinforced exterior		75% or more
ZEH-M Ready		20% or more	50% or more	Buildings with 4 or 5 stories	ZEH Ready	standards (ZEH standards)	20% or more	50% or more	
ZEH-M Oriented			(Renewable energy not required)	Buildings with 6 or more stories	ZEH Oriented			(Renewable energy not required)	

<sup>\*</sup> Quoted from "ZEH Design Guidelines for Housing Complexes" by the ZEH Roadmap Follow-up Committee for Housing Complexes.

#### > Energy-efficient Equipment in Condominiums

In its condominium sales business, Sumitomo Realty helps curb global warming by improving the energy-saving performance of its buildings through the following types of equipment and practices.

- · Low-e double glazing glass
- Latent-heat-recovery-type gas-powered hot water supply system
- · Thermo Bath bathtub
- · Total heat exchange system

- · Heat pump system
- · Solar power generation facility
- · Charging station for electric vehicles
- · Roof greening
- · Smart meter



Garden Hills Yotsuya Geihin-no-mori





#### **Initiatives**

#### **Initiatives Involving Detached Houses**

#### "SUMIFU x ENEKARI" - Residential Solar Power Generation Service

The "SUMIFU x ENEKARI" service is an industry-first service that installs solar power generation equipment and storage batteries at "zero initial cost" to detached houses newly constructed and existing detached houses fully renovated by Sumitomo Realty, and provides support including equipment repairs and upgrades for the entire period of residency.

In conventional services, the customers need to maintain equipment by themselves after the end of a certain service

period, which posed a burden for the customer.

By supporting equipment repairs and upgrades throughout the duration of a customer's residence, in addition to "zero initial cost," our service removes a barrier to introduction of solar power generation for customers, and aim to maximize the potential for energy creation from residential solar power generation in Japan.



Sumitomo **Realty Group** 

- Constructs custom homes and promotes the introduction of "SUMIFU x ENEKARI"
- Provides customers with "continuous peace of mind" even in the event of a power outage or interruption of the water supply in a large-scale disaster

**TEPCO EP** Group

- Installs solar power generation equipment and storage batteries, and provides repair and upgrading support
- Aggregates and utilizes the environmental value of the portion of electricity generated by solar power and consumed by households

#### Energy-efficient Equipment in Custom Homes

In its custom home business, Sumitomo Realty promotes greater prevalence of residences that have a minimal environmental load. We have made the Net Zero Energy House (ZEH)\*1 concept a reality by curbing energy consumption with stringent specifications for thermal insulation and airtight design and installing equipment that creates energy such as Eco-Cute systems, solar power generation facilities and storage batteries. We also install Home Energy Management systems (HEMS)\*2 that enable residents to visually monitor their power consumption.

Moreover, in May 2022, we launched "SUMICA" detached

house which has high environmental performance as a standard specification, exceeding the latest ZEH level of "thermal insulation performance grade 5" and "primary-energy consumption grade 6," which has been well-received by our

Sumitomo Realty will keep working to achieve more sophisticated technologies going forward, in part through its participation as a member of the Investigation committee of HEAT 20<sup>★5</sup> which was established in 2009 with the aim of developing energy-efficient houses even more advanced than those built under ZEH standards.

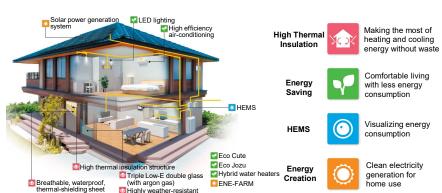
\*1. ZEH refers to a house that consumes virtually zero energy by combining energy saving and energy creation.
\*2. HEMS is a management system that helps save energy used in \*2. HEMS is a management system that helps save energy used in the home. Linking home appliances and electrical equipment to a HEMS enables users to visually observe such devices using a video monitor that tracks consumption of electricity, gas and other energy sources, and also enables users to automatically control home appliances.
\*3. A "UA value" is the rate of average meant of hoat that escapes.

envelope. It constitutes the average amount of heat that escapes from the inside of a house through its floor, outer walls, ceiling and roof, gaps, and elsewhere, to the outside across the entire

building envelope.
The ZEH standard of 0.6 W/m²K (watts per square meter per degree Kelvin) is used as a standard value in Japan's Kanto region, which is the main geographic area where Sumitomo Realty

region, which is the main geographic area where sumitorio Rearly supplies custom homes.

HEAT 20 refers to the Investigation committee of Hyper Enhanced insulation and Advanced Technique for 2020 houses. The HEAT 20 aims at the followings: developing advanced technologies for achieving high-performance thermal shelters for housing while maintaining health and improving comfort of residents, and raising awareness of assessment methods and thermally insulated housing. To such ends, it takes a long-term perspective to focusing on thermal insulation and other architectural technologies geared to achieving further energy savings in homes.



#### **Conservation of Water Resources**

#### **Issue Awareness and Action Plans**

Shortages of water resources have become a major problem throughout the world due to increasing demand for water as the population grows, coupled with droughts caused by climate change. We deem that problems stemming from the shortage of water pose business risk, given that water resources are an indispensable resource for the entire business of the

Sumitomo Realty Group.

As such, the Sumitomo Realty Group, fully aware of the value of water resources, will take action to conserve water resources, working in conjunction with our respective stakeholders including suppliers, other business partners, and tenants.

#### **Initiatives**

#### Installing Water-saving Equipment and Facilities

Sumitomo Realty is reducing unnecessary water flow at all office buildings it develops by equipping washbasin faucets with water-saving devices or adopting water-efficient faucets. Furthermore, in order to promote installation of water-saving equipment at all properties it develops, it adopts design standards that specify the use of ultra-water-saving toilets, which significantly reduce the flush volume to 6 liters or less

compared with 13 liters used by previous model. We install these toilets in new buildings as well as existing properties through renovation.

In addition, we have been substantially reducing water consumption by setting up sewage and rainwater reclamation facilities that purify the water, and using the greywater to flush toilets and water plants, mainly in large office buildings.

#### Business Activities in Water-Stressed Areas

The Sumitomo Realty Group has not earned any revenue from its business activities in areas where water stress is a concern\* as of July 2024, based on the Aqueduct Survey conducted by the World Resource Institute (WRI).

Japan, where our business activities are mainly based, has

been certified as a "Low-Medium" water risk area, which means that it is identified as a region with relatively low water stress.

\* Defined as areas falling under "High" and "Extremely High" with a risk score exceeding 3.

#### > Initiatives to Reduce Water Consumption in Collaboration with External Parties

In addition to its own initiatives, the Sumitomo Realty Group is also committed to working more broadly with the Japanese real estate industry to promote environmental conservation measures, such as reducing water consumption. We are a regular member of the Environmental Committee of The Real Estate Companies Association of Japan.

The Committee formulated the Real Estate Industry Environmental Action Plan in 2013, which includes the introduction of high-efficiency, water-saving fixtures, automatic faucets and automatic flushing devices as specific action goals, and the entire industry is working together to reduce water consumption.

FY2021

3.797

1.720

0.4529

FY2022

3 725

1.904

0.5110

FY2023

3 828

2.246

0.5866

#### Data related to Water

Volume of water withdrawal and wastewater by Sumitomo Realty are shown below.

Water w	Water withdrawal		FY2022	FY2023	Waste	ewater
Target area (standardized coefficient)	Thousand m <sup>2</sup>	3,797	3,725	3,828	Target area (standardized coefficient)	Thousand r
Water withdrawal	Thousand m <sup>3</sup>	1,841	2,009	2,261	Wastewater	Thousand r
Per-unit water withdrawal	m³/m²	0.4849	0.5394	0.5907	Per-unit wastewater	m³/m²

\* All of the abovementioned wastewater is discharged through the sewer system to an external water treatment plant. No wastewater is discharged to marine waters, surface water, or groundwater.

 $m^2$ 

 $m^3$ 

\* The scope of data collected for calculating wastewater encompasses all the office buildings owned and managed by Sumitomo Realty for which report is required under the Act on Rationalizing Energy Use and Shifting to Non-fossil Energy.

<sup>\*</sup> All of the abovementioned withdrawals are from tap water. No withdrawals are from surface water, groundwater, external wastewater, or seawater.

\* The scope of data collected for calculating water withdrawal encompasses all the office buildings owned and managed by Sumitomo Realty for which report is required under the control of th

The scope of data collected for calculating water windrawar elromipasses an the office buildings owned and managed by Sumitomo Realty for which report is required under the Act on Rationalizing Energy Use and Shifting to Non-fossil Energy.



## **Biodiversity**

#### **Issue Awareness and Action Plans**

The Sumitomo Realty Group maintains significant influence on biodiversity rooted in land, particularly given the nature of development business involving office buildings, condominiums and other such properties. Biodiversity is intimately relevant to all environmental issues, including climate change, conservation of water resources and environmental pollution.

Based on this awareness, we make it our principle to

consider not only the comfort of our customers and community members, but also our surrounding environments and ecosystems. We conduct an impact assessment on the surrounding environment in accordance with the Environmental Impact Assessment Law, and work to preserve biodiversity in conjunction with our respective stakeholders including suppliers, other business partners, and community members.

#### Initiatives

#### Preserving Biodiversity

Sumitomo Realty is committed to preserving biodiversity across its real estate portfolio. We select local native species for the trees we plant, and implement greening in accordance with the scale in all the office buildings we develop and surrounding public open spaces. By using local native species in all of our development properties and formulating a manual of countermeasures against designated invasive alien species, we contribute to maintaining ecosystems that are unique to each region. The open green spaces that we develop provide habitats for plants and animals as well as places for local communities to enjoy nature.

Sumitomo Fudosan Shinjuku Garden Tower realized large scale greening with a total green area of 5,684 m² (34% green coverage). The area forms a "green network" connecting the adjacent Toyama Park and Nishi-Toyama Park, and ensures habitats for diverse plants and animals in central urban location.



#### Roof and wall greening

Sumitomo Realty has been actively engaged in roof and wall greening. In October 2021, Sumitomo Fudosan Shopping City Ariake Garden received the Nikkei Award in Wall and Special Greening Technology Category at the 20th Roof and Wall Greening Technology Contest, organized by the Organization for Landscape and Urban Green Infrastructure. This contest aims to improve urban environments and realize a nature-rich urban life by recognizing private companies, local governments, and individuals, who have actively worked on greening special spaces such as roofs and walls—areas traditionally considered difficult to green—and have attained outstanding outcomes.

Since July 2023, the Tokyo Metropolitan Government has been promoting the "Tokyo Green Biz" project, which looks 100 years into the future, aiming to transform Tokyo into a sustainable city that exists in harmony with nature. They have launched the "Tokyo Green Biz Map," a digital map that provides information on green spots and events, and our aforementioned commercial facility is also listed.



Sumitomo Fudosan Shopping City Ariake Garden

#### Environmentally Friendly Development

Sumitomo Realty promotes the development of environmentally friendly property through efforts such as selecting local native species for the trees we plant, developing green areas in accordance with the size of the property, and installing high-efficiency equipment. This applies to our development of office buildings and other properties in all

regions including greenfield land that has not yet been developed. In developing environmentally friendly property, we refer to the evaluation indicators of Green Building Certification, whose certification we have acquired for all our office buildings with a gross floor area of over 50,000 m<sup>2</sup>.



## **Biodiversity**

#### **Initiatives**

#### > Redevelopment Business and Biodiversity

Sumitomo Realty's redevelopment business contributes to preserving biodiversity. One such example is Osaki Garden City, which involved redevelopment of a former driving school site and a densely built-up district with wooden housing on the west side. The area occupied by densely-built wooden houses had contained little greenery and narrow streets which posed challenges with respect to disaster response. By the completion of Osaki Garden City, the overall location's green coverage increased from 0.01% to 35% including its roof greening, and it also helped revitalize the community, utilizing the vast open space on the site to hold various events.

The Osaki Garden City Cherry Blossom Festival was held for the first time in March 2019, and helped the local community take shape as residents gathered amongst the cherry trees. During the festival, additional cherry trees related to the area were planted as one of the events.

The trees have a historical connection to the location and to a man called Harutaro Kawase, who owned the former Myokaen botanical garden situated in the vicinity of Myoko-ji Temple adjacent to the site. He selected the Washington DC cherry trees that were sent to Washington DC by a former mayor of Tokyo, Yukio Ozaki, as symbol of goodwill between Japan and the United States. Since then, the cherry trees he selected have remained free of disease and continue to blossom beautifully on the banks of the Potomac River in Washington DC.

With the aim of passing down the historic achievements of Harutaro Kawase, two *satogaeri* (homecoming) cherry trees

from Washington DC, donated by his grandson, Kenichi Kawase, and the Yukio Ozaki Nationwide Promotion Association, were planted, in addition to the eleven *satogaeri* cherry tree saplings previously planted upon completion of Osaki Garden City at the behest of the president of the redevelopment association and local community members.

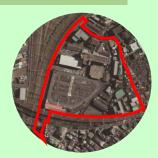
The trees planted by Sumitomo Realty in conjunction with the redevelopment association will play a role in passing down the local history to future generations, while also helping to revitalize the community and hasten its biodiversity.

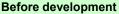
Through Osaki Garden City and other redevelopment projects, Sumitomo Realty aims to create green areas in numerous areas, thereby providing spaces for community members to encounter natural surroundings and for nurturing rich biodiversity.



Ceremony of planting cherry trees from Washington DC

#### Osaki Garden City









#### Development that Protects and Makes the Most of Natural Forests

Urban development projects tend to involve the removal of mature trees that are already on sites earmarked for development. In contrast, Sumitomo Realty seeks to preserve such trees so that they can be utilized as greenery to accomplish attractive urban development in harmony with nature.

La Tour Sapporo Ito Garden was developed on the former site of Kairakuen, one of the first municipal parks in Japan. The site includes a tract of virgin forest conserved since the time of Kairakuen and remains notable as a place where nature flourishes in an urban setting.





View of virgin forest from the entrance lobby of La Tour Sapporo Ito Garden

## **Biodiversity**

#### **Initiatives**

#### > Endorsement of "Declaration of Biodiversity by Keidanren"

The Sumitomo Realty Group endorses the Declaration of Biodiversity by Keidanren (Japan Business Federation) and promotes business activities in consideration of biodiversity.

#### Declaration of Biodiversity by Keidanren (Revised edition)

Keidanren (Japan Business Federation) Introduced March 17, 2009 Revised October 16, 2018

- Responsibility of management
   Commit to corporate management aiming at corporate activities in harmony with nature towards realizing a sustainable society
- Global perspective Act from a global perspective on the biodiversity crisis
- Voluntary actions Act voluntarily and steadily to contribute to biodiversity
- Integrated Environmental Corporate Management Promote Integrated Environmental Corporate Management
- Revitalization of regions making full use of natural capital Contribute to regional revitalization utilizing natural capital, holding nature in awe
- 6. Partnership
  - Collaborate with relevant international and national organizations
- Environmental Education / Human Resource Development Spearhead initiatives on environmental education and human resource development to create a society that will nurture biodiversity

(Website for the Declaration of Biodiversity by Keidanren: https://www.keidanren.or.jp/en/policy/2020/055.pdf)

#### Promotion of Sustainable Forest Management

Sumitomo Realty has a company-owned forest of 185 ha, "Sumitomo Realty Forest," in Susono City, Shizuoka, and promotes sustainable forest management. In May 2022, we signed a comprehensive collaboration agreement with Susono City on forest cultivation with the aims of promoting sustainable and wide-area forest development and multifunctional enhancement of forests in Susono City.

Under the slogan of "Forest cultivation starts here as we work together for the next generations," we actively promote the regeneration and conservation of the forest, which has diverse value indispensable to the area, such as biodiversity, watershed conservation, prevention of landslides, and CO<sub>2</sub> absorption.

Surveys conducted on biodiversity preservation have shown that more than 400 animal species and nearly 1,500 plant species inhabit the area, and analysis was performed in accordance with the Act on Protection of Cultural Properties, the Red List of the Ministry of the Environment, and the Red Data Book of Shizuoka Prefecture, etc.



70-year-old cypress trees in Sumitomo Realty Forest

We promote multifaceted initiatives, including: formulating a forest management plan to help secure wildlife habitats; promoting forest regeneration through final cutting and reforestation; and utilizing the forest, which is located close to urban cities, by producing construction materials for our housing businesses and providing wood education for children.

#### > "Nature Coexistence Sites" Certification by the Ministry of the Environment

In 2023, Sumitomo Realty Forest has been certified as one of the "Nature Coexistence Sites" by the Ministry of the Environment.

This "Nature Coexistence Sites" certification system recognizes areas where efforts are being made to conserve biodiversity through private initiatives and other efforts. This system has been promoted as a key measure towards achieving the goal of effectively conserving more than 30% of land and sea with healthy ecosystems by 2030 (the 30by30 target). Sumitomo Realty Forest has been awarded certification for its valuable efforts in balancing between utilizing the forest as a sustainable source of timber and preserving an ecosystem that includes rare species.



#### Use of Rainforest Alliance Certified Products

The Sumitomo Realty Group company, Izumi Restaurant Co., Ltd., operates Rieven House convenience stores catering to building tenants. The Rieven House uses environmentally certified coffee beans grown in Rainforest Alliance Certified plantations. "Rainforest Alliance Certified" refers to certification granted exclusively to plantations that exceed stringent environmental standards, issued by the international nonprofit organization Rainforest Alliance which carries out region-wide projects to protect forests.



# **Curbing Environmental Pollution, Reducing Waste and Making Effective Use of Resources**

#### **Issue Awareness and Action Plans**

The Sumitomo Realty Group recognizes that environmental pollution, high-volume discharge of waste material and squandering of resources constitute substantial social issues that must be given due consideration when conducting business activities.

As such, we strive to take action geared toward curbing environmental pollution, reducing waste and making effective use of resources, working in conjunction with our respective stakeholders including suppliers, other business partners, and tenants.

#### **Initiatives**

#### **Curbing Environmental Pollution**

#### Process-based Targets for Curbing Environmental Pollution

The Sumitomo Realty Group aims to curb environmental pollution associated with its business activities as much as possible by implementing measures related to environmental pollution in accordance with the relevant laws and regulations. In addition to complying with laws and regulations, we enhance the effectiveness of our measures by regularly checking the control status from a third-party perspective, mainly through the Internal Audit Department.

#### Measures regarding Asbestos and Formaldehyde

When renovating buildings, we engage in such work upon having checked to ensure that our contractors comply with asbestosrelated laws and regulations. In addition, with respect to its condominiums and detached houses, Sumitomo Realty pursues creation of healthy dwellings using building materials and interior components that meet JIS and JAS standards for low formaldehyde emissions, which give rise to sick house issues.

#### > Appropriate Management and Disposal of CFCs

We properly manage and dispose of CFCs used as air conditioning refrigerants in accordance with laws and regulations.

#### > Soil Contamination Countermeasures

Sumitomo Realty conducts thorough geological surveys for all office buildings, condominiums and other developments. In addition to complying with the Soil Contamination Countermeasures Act, we conduct contamination investigation according to the geological history and the results of the geological survey even for small-scale developments where legal survey is not required.

For land that has been confirmed to be contaminated by hazardous substances (brownfield), we ask a designated contaminated soil treatment company, based on the Soil Contamination Countermeasures Act, to carry out the appropriate purification and diffusion prevention treatment prior to development.

Soil survey requirements for development sites under the Soil Contamination Countermeasures Act

When, upon submitting notice of a change in the form or nature of land <u>above a specific size</u>, the prefectural governor deems there to be a risk of soil contamination

\* Specific size: 3,000 m² or more (900 m² or more for land where a specified facility for the use of hazardous substances is currently installed)



#### **Sumitomo Realty**

Implement for all planned development sites regardless of area size

#### Measures regarding Nitrogen Oxide and Sulfur Oxide

Sumitomo Realty regularly measures and analyzes soot and smoke emitted by the relevant facilities to ensure that they comply with environmental standards stipulated by the Air Pollution Control Act. The investigation is conducted by third parties, and we conduct operations after confirming the absence of abnormalities in the concentrations of air pollutants, such as particulate matter, nitrogen oxide (NOX) and sulfur oxide (SOX).

#### Tokyo Nihombashi Tower NOX and SOX emissions

		FY2021	FY2022	FY2023
NOX emissions	t	0.081	0.062	0.098
SOX emissions	t	0	0	0

<sup>\*</sup> The annual emissions from four hot-cold water generators in Tokyo Nihombashi Tower, calculated based on the concentrations of soot and smoke measured and the operating hours of the equipment.

#### > VOC Emissions

The Sumitomo Realty Group does not own or manage any facilities (such as drying facilities for the manufacture of chemical products) that are subject to legal restrictions due to their high VOC emissions under the VOC emission control system stipulated by the Air Pollution Control Act.



# **Curbing Environmental Pollution, Reducing Waste and Making Effective Use of Resources**

#### **Initiatives**

#### **Reducing Waste and Making Effective Use of Resources**

#### Process-based Targets for Reducing Waste and Making Effective Use of Resources

The Sumitomo Realty Group aims to reduce waste and promote the effective use of resources in its business activities. In addition to fulfilling the responsibilities of a business operator as stipulated in the Tokyo Metropolitan Waste Management

Ordinance and other regulations, we promote various activities, such as raising awareness among tenants of our office buildings, to further reduce waste and use resources effectively.

#### Waste Discharge

Volumes of waste discharged by Sumitomo Realty are shown below.

		FY2021	FY2022	FY2023
Target area (standardized coefficient – per-unit denominator)	Thousand m <sup>2</sup>	4,208	4,142	4,215
Total waste volume	t	18,549	16,052	18,377
Industrial waste	t	14,759	12,260	13,780
General waste	t	3,790	3,792	4,597
Units	t/m²	0.0044	0.0039	0.0044

<sup>\*</sup> The scope of data collected for calculating waste discharge volumes encompasses the leasing assets owned and managed by Sumitomo Realty Group.

#### Volume of Recycled Waste

Volume of recycled waste discharged by Sumitomo Realty is shown below.

		FY2021	FY2022	FY2023
Volume of recycled waste	t	12,458	11,104	12,623
Total waste volume	t	18,549	16,052	18,377
Percentage of waste recycled	%	67.2%	69.2%	68.6%

<sup>\*</sup> Figures for volume of recycled waste include thermal recycling only if they are noncombustible materials.

### > Reducing Resource Used and Waste in Shinchiku Sokkurisan Remodeling Business

In Japan, the lifespan of houses tends to be short compared to world standards, so does the cycle of home rebuilding. Meanwhile, a high proportion of the industrial waste generated by the construction industry is attributed to home demolition. This situation suggests the need to extend the lifespan of houses in Japan, and to bring about a transition to a "stocktype society" where they are used over the long-term.

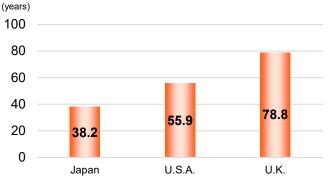
The short rebuilding cycle generates large volumes of industrial waste and squanders resources that could still be put to use. It leads to a situation where robust and usable pillars and beams end up getting discarded even though timber tends to become stronger and more rigid over the course of a century or so. Even in remodeling, it conventionally repeats piecemeal projects, resulting in generation of industrial waste each time.

Sumitomo Realty's Shinchiku Sokkurisan remodeling business is a revolutionary system that involves extending the life of existing houses through earthquake-reinforcement work while retaining the main structural elements, thereby reducing the waste of resources and curb the generation of industrial waste in comparison with rebuilding.



Interior stripped down to its main structural elements

<International comparison of the average age of houses >



Source: Housing Economics Data: International Comparison of Average Age of Houses Deregistered (2021), Ministry of Land, Infrastructure, Transport and Tourism.



<sup>\*</sup> The scope of data collected for calculating volume of recycled waste encompasses the leasing assets owned and managed by Sumitomo Realty Group.



# **Curbing Environmental Pollution, Reducing Waste and Making Effective Use of Resources**

#### **Initiatives**

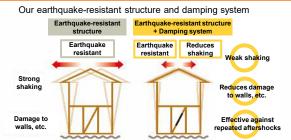
#### Reducing Waste and Making Effective Use of Resources

#### Reducing Waste in Custom Home Business

In Sumitomo Realty's custom home business, we use specification standards under the "long-life quality housing"\* certification standard (measures against deterioration grade 3, thermal insulation performance grade 5, upkeep grade 3, and earthquake resistance grade 3).

We will help reduce industrial waste by extending the rebuilding cycle as a result of supplying this highly durable housing.

\* Long-life quality housing refers to a certification system operated by Japan's Ministry of Land, Infrastructure, Transport and Tourism pursuant to the Act on the Promotion of Popularization of Long-life Quality Housing which aims at a transition to a stock-type society.



\* The effectiveness in mitigating deformation is based on the results of earthquake response analysis in our model plans and may vary depending on building specifications, layout plans, seismic waves and other factors.

#### Reducing Waste in the Office Building Development Business

Extending the life of buildings through architectural design that ensures long-term use with minimal deterioration will contribute greatly to reduction of environmental load by minimizing resources wasted and industrial waste generated through rebuilding.

In conjunction with superior earthquake resistance and fire resistance, Sumitomo Realty's office buildings are designed to respond to various changes in work styles, office layouts and IT evolution, in terms of both function and space.

For example, the "grid-system ceiling" incorporates ceiling equipment into lighting panels to make relocation of the equipment easy, enabling it to respond flexibly to a change in office layout and minimize waste generation from demolition.



"Grid-system ceiling" to respond flexibly to a change in office layout

#### > Proper Disposal of Waste Material Subject to Specified Controls

Sumitomo Realty properly disposes of PCB waste, which is deemed as a hazardous waste substance, by complying with legal requirements and using qualified contractors.

PCB disposal volume ar	nd costs	FY2021	FY2022	FY2023
PCB disposal volume	kg	2,257	107	696
Disposal costs	Thousand yen	3,203	1,923	20,556

<sup>\*</sup> The scope of data collected for calculation encompasses all the office buildings owned and managed by Sumitomo Realty.

#### > Implementation of Measures against Marine Plastics

At Rieven House convenience stores, operated by the Sumitomo Realty Group company, Izumi Restaurant Co., Ltd., we work to reduce the use of plastic bags by encouraging customers to use their own reusable bags.

In addition, some of the restaurants the company operates have switched to using paper straws instead of plastic straws for the beverages.

Through these efforts, we are reducing the amount of plastic waste that adversely affects the marine environment.



#### Penalties and Fines

In fiscal 2023, Sumitomo Realty incurred neither penalties nor fines under laws and regulations related to waste material and environmental pollution.

#### Issue Awareness and Action Plans

Suppliers in the real estate industry consist of a wide range of businesses that include not only construction companies, manufacturers and other businesses involved in building construction but also cleaning companies, maintenance and inspection companies, and many others. Contributing to environmental conservation through our business requires not only our own efforts but also cooperation across the entire supply chain.

The Sumitomo Realty Group aims to contribute to environmental conservation throughout its entire supply chain. From development through to the management and operation of our real estate portfolio, we are focusing on the realization of a sustainable society in conjunction with our respective stakeholders with the aim of resolving various environmental issues, such as climate change, conservation of water resources, preserving biodiversity and reduction of waste.

#### **Initiatives**

#### Seeking Cooperation from Suppliers

#### > Dissemination and Training of Environmental Policies to Suppliers

The Sumitomo Realty Group has established the Sustainable Procurement Guidelines, which we disseminate to our business partners to request their cooperation. As part of the efforts to implement "Consideration for the Environment" under the guidelines, we ask our suppliers to cooperate in the following areas: reducing the risk of climate change, promoting the efficient use of water resources and energy, reducing the burden on biodiversity, preventing environmental pollution,

promoting the effective use of resources and reducing waste.

The guidelines are publicly available on our website at all times and are explained to each supplier when necessary, such as at the start of a business transaction. In addition, we provide individual training opportunities for businesses that we assess as having a particularly large impact on environmental quality to further promote the dissemination of our environmental policies.

#### Supplier Monitoring and Environmental Quality Reporting

In the Office Leasing Business Division of Sumitomo Realty, we have established a system for monitoring the environmental quality of suppliers at all the properties we manage with regular reports provided by service staff and cleaning staff. Based on the results of this monitoring, we take specific corrective measures as necessary, enabling us to maintain a high level of environmental quality.

In order to reduce waste and promote recycling, our employees regularly receive direct reports on the status of waste separation at the site. If the separation status is not satisfactory, we re-sort the waste at the garbage depot and alert tenants. This helps to reduce the amount of waste generated and improve the recycling rate.

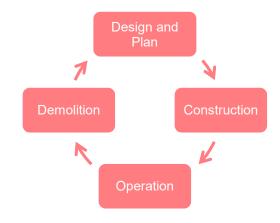
#### > Requesting Green Power Usage at the Construction Site of New Condominiums

Since September 2021, we have decided to actively request our partner construction companies to use green power at their construction sites of our new condominiums. For construction companies without measures to do so, we request their collaboration by providing a framework that enables the introduction of green power.

#### > Participation in Initiatives Related to Environmental Impacts in the Supply Chain

Sumitomo Realty is a regular member of the Long-Term Vision for Global Warming Countermeasures Working Group formed within the Environmental Committee of The Real Estate Companies Association of Japan. The committee has been discussing and promoting how to quantify contributions to reducing emissions throughout the value chain as well as policies for initiatives.

The committee also studies and analyzes how the real estate industry can contribute to reducing emissions through a building's life cycle in four phases: design and plan, construction, operation, and demolition. For example, we have worked to visualize the CO<sub>2</sub> emissions from each supplier in the supply chain and are striving to incorporate the finding into the plans for new constructions by adopting measures such as energy-efficient construction materials and heavy construction equipment.





#### **Initiatives**

#### **Collaborations with Tenants and Suppliers in Our Real Estate Portfolio**

#### Environmental Management System (EMS)

Sumitomo Realty has introduced its own EMS to monitor the environmental impact from its office building business and is

working to continuously improve conditions using the PDCA cycle.

\* We have not introduced EMS international standards such as ISO 14001.

#### < PLAN >

Consider the actual data, social conditions, governmental systems and other factors when designing outlines for property development and setting reduction targets for energy consumption and GHG emissions for each property of the portfolio.

#### < ACTION >

Based on the results of the analysis, make new plans which include improvement to operating policies and installation of high-efficiency equipment by renovations, and carry them out toward achieving the targets for the next fiscal year.



#### < DO >

Implement energy-saving measures in conjunction with tenants and upgrade to high-efficiency equipment to achieve the targets.

#### < CHECK >

Share actual energy consumption and GHG emissions with the on-site building manager, service staff and secretariat, and check the achievement status of annual targets set in advance for each property. If the achievement status is not satisfactory, then analyze the reasons.

#### Energy Conservation Initiatives in Conjunction with Tenants, and Changes in Consumption and Emissions

Sumitomo Realty not only develops office buildings featuring substantial environmental performance, but also strives to save energy with respect to management and operation of such buildings even after their completion. It is crucial that we coordinate efforts with our tenants in that regard, given that the major part of a building's energy consumption is attributable to the tenant-leased areas of buildings. In addition to seeking cooperation from tenants in energy-saving activities in accordance with management bylaws and other requirements, we have established a system that incentivizes energy

conservation by adopting a pay-as-you-go electricity rate, and we disclose energy consumption as necessary. In this manner, we are implementing green leases for operational improvement at all of our properties. We furthermore strive to curb power consumption by raising awareness of energy conservation among users of our buildings through initiatives that include notifying tenants of their monthly volumes of energy consumed in the tenant-leased areas when necessary, and displaying posters inside buildings encouraging energy conservation.

#### < Energy consumption and GHG emissions of Sumitomo Realty's real estate portfolio >

#### ◆ Data

	Unit	FY2021	FY2022	FY2023
Target area (standardized coefficient – per-unit denominator)	Thousand m <sup>2</sup>	3,797	4,090	3,828
Energy consumption	Thousand GJ	4,759	4,783	4,879
Energy consumption	Thousand kL	123	123	126
Per-unit energy consumption	kL/m²	0.03234	0.03017	0.03288

Reduction targ	ge	t
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	Five-year average
Reduction rate	1%
Base year	2018-23
Target year	2019-23
Per-unit target for FY2023	0.03495

	Unit	FY2021	FY2022	FY2023
GHG emissions (Scope 1&2)	t-CO <sub>2</sub>	221,502	221,614	234,260
Per-unit GHG emissions (Scope 1&2)	t-CO <sub>2</sub> /m <sup>2</sup>	0.05834	0.05418	0.06120

<sup>\*</sup> The scope of data collected for calculating energy consumption and GHG emissions encompasses all the properties owned, managed, or used by the Sumitomo Realty for which report is required under the Act on Rationalizing Energy Use and Shifting to Non-fossil Energy.

<sup>\*</sup> All GHG emissions are calculated using adjusted GHG emission coefficients.

<sup>\*</sup> By applying the certification standards for S class business operators, we have aimed to reduce the five-year average per-unit GHG emissions by 1% or more annually. Since we have switched to consolidated reporting, the target values for the consolidated data will be disclosed once the data for the fifth year has been collected.

#### **Initiatives**

#### **Collaborations with Tenants and Suppliers in Our Real Estate Portfolio**

#### Decarbonization Lead Project Agreement

Sumitomo Realty and TEPCO Energy Partner, Inc. concluded the "Decarbonization Lead Project Agreement," an agreement to jointly plan and implement projects to lead decarbonization.

As companies underpinning the social infrastructure, Sumitomo Realty and TEPCO EP aspire to jointly design the scenario for social transformation toward carbon neutrality by 2050 and lead Japan and the world in the effort. To this end, we have been implementing not only the following project for office buildings, but also projects to promote decarbonization for residences.

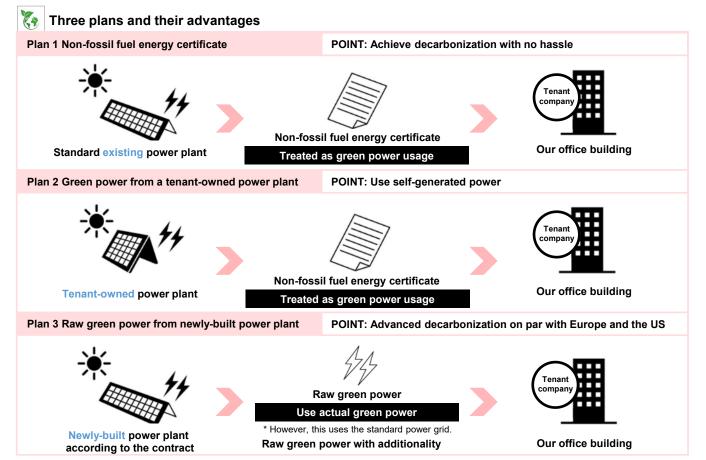
Going forward, the two companies will continue to collaboratively promote projects to lead decarbonization.

Sep 2021	Concluded the "Decarbonization Lead Project Agreement"
Sep 2021	Launched "SUMIFU x ENEKARI" - Residential solar power generation service
Oct 2021	Developed and started offering the scheme to introduce raw green power*1 with additionality*2 to tenant-lease areas
Apr 2022	Shinchiku Sokkurisan full remodeling business started offering "SUMIFU × ENEKARI"

#### Sumitomo Realty's Green Power Plan

In November 2021, Sumitomo Realty has established and began offering the Sumitomo Realty's Green Power Plan, a system in which the tenants of our office buildings can select the best plan from multiple green power introduction methods. Previously, green power for office buildings was generally

introduced to a building as a whole. However, as companies are accelerating their decarbonization efforts, we now offer green power plans that enable introduction of green power for each tenant's area in a building with multiple tenant companies, in order to meet their individual needs.



<sup>\*1.</sup> Raw green power refers to green power considered as being directly supplied from the power plant via standard power grid; the generation and consumption of raw green power are matched in 30-minute units.

<sup>\*2.</sup> Green power with additionality refers to green power obtained by developing new renewable power sources such as new solar power plants, and therefore directly contributing to raising Japan's total renewable power generation capacity. In recent years, additionality has been considered a requirement for high-value renewable electricity and used by environmentally advanced companies in Europe and the US as a standard for selecting green power.



#### **Initiatives**

#### **Collaborations with Tenants and Suppliers in Our Real Estate Portfolio**

#### Securing Water Resources, and Changes in Water Withdrawal and Wastewater

Sumitomo Realty also takes steps to reduce water consumption in office buildings by working in conjunction with our tenants. For instance, we encourage our tenants to

minimize water waste by notifying each company, when necessary, of their monthly water consumption volumes in tenant-leased areas.

#### ♦ Water withdrawal and wastewater of Sumitomo Realty's real estate portfolio

Water with	drawal	FY2020	FY2021	FY2022	Wastewater		FY2020	FY2021	FY2022
Target area (standardized coefficient)	Thousand m <sup>2</sup>	3,851	3,797	3,725	Target area (standardized coefficient)	Thousand m <sup>2</sup>	3,851	3,797	3,725
Water withdrawal	Thousand m <sup>3</sup>	1,983	1,841	2,009	Wastewater	Thousand m <sup>3</sup>	1,843	1,720	1,904
Per-unit water withdrawal	m³/m²	0.5151	0.4849	0.5394	Per-unit wastewater	m³/m²	0.4787	0.4529	0.5110

<sup>\*</sup> All of the abovementioned withdrawals are from tap water. No withdrawals are from surface water, groundwater, external wastewater, or seawater.

#### > Initiatives to Reduce Waste and Promote Recycling

At Sumitomo Realty's office buildings, we carry out activities to reduce waste discharge and promote recycling across our entire portfolio. In addition to displaying posters to raise awareness of waste reduction and recycling among tenants, we promote waste separation by providing waste separation bins to tenants at our own expense when they move in. In addition, we have concluded contracts with waste disposal companies for each building to ensure the appropriate

recycling of recyclable waste, such as dry cell batteries, fluorescent lamps, styrofoam, metal, PET bottles, cans, jars and used paper.

Used paper from the garbage depots at our properties is recycled into toilet paper and other materials following the appropriate processing. Toilet paper made from recycled paper is used in the common restrooms at our properties, contributing to the recycling of resources.

#### > Collaborative Initiatives for PET Bottle Horizontal Recycling

From March 2022, Sumitomo Realty has been promoting horizontal recycling of PET bottles in collaboration with the Suntory Group.

In this initiative, used PET bottles collected at some of Sumitomo Realty's office buildings are recycled into PET bottle containers as a new resource through advanced recycling processes. In this way, we are contributing to realization of sound material-cycle society. In addition, we are promoting awareness-raising activities of garbage separation for our tenants' employees through selling Suntory beverage products with recycled PET bottles at "Rieven House," convenience stores within office buildings operated by the Sumitomo Realty Group.





#### > Established a Supply Chain for Aluminum Can Horizontal Recycling

In collaboration with UACJ Corporation and Toyo Seikan Group Holdings, Sumitomo Realty has established a supply chain for "horizontal recycling," which involves turning used aluminum cans into raw materials for the production of new aluminum cans.

The aluminum cans collected at Sumitomo Realty's office buildings are processed and delivered as recycled raw

materials to UACJ's plants, where they are turned into aluminum sheet products. These products are then utilized by Toyo Seikan Group to manufacture aluminum cans and beverage aluminum cups, "Lumisus®." Additionally, we aim to enhance recycling awareness in a bottom-up manner by informing office users about this initiative and using these beverage cups at outdoor events held at our offices.

<sup>\*</sup> The scope of data collected for calculating water withdrawal encompasses all the office buildings owned and managed by Sumitomo Realty for which report is required under the Act on Rationalizing Energy Use and Shifting to Non-fossil Energy.

<sup>\*</sup> All of the abovementioned wastewater is discharged through the sewer system to an external water treatment plant. No wastewater is discharged to marine waters, surface water, or groundwater.

<sup>\*</sup> The scope of data collected for calculating wastewater encompasses all the office buildings owned and managed by Sumitomo Realty for which report is required under the Act on Rationalizing Energy Use and Shifting to Non-fossil Energy.



#### **Initiatives**

#### **Certifications / Awards from Third Parties**

#### > Acquisition of Green Building Certification

Sumitomo Realty owns many properties with high environmental performance. Including the 25 buildings certified with the highest rank of five stars in the DBJ Green Building Certification, the total number of certified buildings, including office buildings, condominiums, and commercial facilities, is 87, with a gross floor area of approximately 1.30 million tsubo (\* 1 tsubo ≈ 3.3m²). As for the office buildings, we own **the largest number of buildings among the building owners in the Office Building Category of DBJ Green Building Certification** (as of July 2024). We will continue to achieve a high level of environmental performance by setting the continuous annual target that 100% of our new large buildings will acquire Green Building Certification.

\* The certification is granted in five grades: among the properties meeting the certification standard, which is approximately the top 20% of all domestic commercial properties, the highest ranking of five stars awarded to the top 10% and four stars awarded to the top 30%.



DBJ Green Building Certification is a certification system established by the Development Bank of Japan to evaluate real estate for its performance and initiatives regarding "environmental and social awareness" beyond its "profitability."

< Acquisition status >

\*1 tsubo ≈ 3.3 m<sup>2</sup>

Certified properties as a percentage of all properties and their area (based on gross floor area): 81% and 1,303,345 tsubo

< Progress toward targets >

Large-scale new buildings completed in fiscal 2024: 100% Green Building Certification

#### \*\*\*\* | Properties with five-star certification

Properties with the best class environment & social awareness



Sumitomo Fudosan Roppongi Grand Tower



Sumitomo Fudosan Tokyo Mita Garden Tower

La Tour Osaka UmedaShiodome Sumitomo Building

Sumitomo Fudosan Shinjuku Central Park Building
 Sumitomo Fudosan Shinjuku Garden Tower

Sumitomo Fudosan Shinjuku Grand Tower
 Sumitomo Fudosan Osaki Garden Tower

- · Sumitomo Fudosan Shinjuku First Tower
- · Shopping mall building of Ariake Garden complex
- · Chiyoda First Building West

· Tokvo Nihombashi Tower

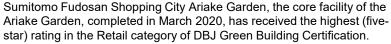
· Izumi Garden Tower

- · Sumitomo Fudosan Shinjuku Central Park Tower
- · Sumitomo Fudosan Shibuya Garden Tower etc.

: A total of 25 buildings

(Reference) Three- or four-star buildings: A total of 62 buildings





The certification not only takes into account energy saving performance, but also facility performance aspects such as providing EV charging spaces, contributions to the local community, disaster preparedness including the stockpiling of adequate emergency provisions, and considerations for user diversity such as the installation of a prayer room and multi-lingual (Japanese, English and Chinese) facility announcements.





#### **Initiatives**

#### **Certifications / Awards from Third Parties**

#### > Example of Environment-related Awards and Certification from Third Parties

# The achievement award of Japan Association for Real Estate Sciences, "Award of Minister of Land, Infrastructure, Transport and Tourism"

Our renovation of Shinjuku Sumitomo Building and its "Sankaku Hiroba (triangular plaza)" won the achievement award of Japan Association for Real Estate Sciences, "Award of Minister of Land, Infrastructure, Transport and Tourism."

This award is presented in recognition of exceptional business achievements in innovative real estate projects that contribute to the advancement of real estate policies. The renovation of this building was highly evaluated for improving the performance



of the aging high-rise building as well as creating liveliness in the community through large-scale renovation with lower social and environmental costs than rebuilding.

## Minato Model Carbon Dioxide Fixation Certification System Awards from Minato Ward

Sumitomo Fudosan Tokyo Mita Garden Tower, operated by Sumitomo Realty, has won a Special Award in the "Minato Model Carbon Dioxide Fixation Certification System Awards," which recognizes buildings in Minato Ward that utilize domestic timber.

This award system was established in April 2022 with the aim of contributing to forest management and decarbonization through the use of domestic timber. This time, among the buildings certified in the fiscal 2022, those that demonstrated excellent use of wooden construction and wood materials were selected for the awards.





Shared lounge

Exterior of Sumitomo Fudosan Tokyo Mita Garden Tower

#### CTBUH Awards | Renovation Award

The Shinjuku Sumitomo Building Renovation Project, which Sumitomo Realty created the basic concept and supervised the whole project, has become the first project in Japan to win the Award of Excellence at the Council on Tall Buildings and Urban Habitat (CTBUH) Awards 2021 / Renovation Award.

The renovation category, which was created in 2019, recognizes projects that have made extraordinary contributions to the advancement of tall building renovation, and that take the technical solutions and possibilities for such renovations to the next level, thereby innovatively extending the life cycle of the building. The property was highly evaluated for revitalizing the area through not only repairing but also making large-scale

spaces free of pillars, while minimizing the cost of construction and the impact on tenants by maximizing the use of existing structures in its repair.



## New Energy Award | New Energy Foundation Chairman's Award

The "Sumitomo Realty's Green Power Plan," which we have been promoting since November 2021 (refer to page 18), has won the "New Energy Foundation Chairman's Award" at New Energy Award 2023, hosted by the New Energy Foundation, a general incorporated foundation.

The New Energy Award is aimed at further promoting the introduction and broader adoption of new energy by widely soliciting entries and recognizing outstanding cases of new energy introduction or awareness-raising activities. We were granted this award in recognition of the service that caters to the diversifying needs of tenant companies for adopting green power. Specifically, we were commended for being the first in the country to offer a selection of green power introduction plans, including raw green power, and for the progress in its widespread adoption.

<sup>令和5年度</sup> 新エネ大賞



(受賞件名) 企業初のテナントニーズに 応じた最適な再エネ電力提 供「住友不動産のグリーン 電力プラン」

(商品・サービス部門) 主催:一般財団法人新エネルギー財団

New Energy Award emblem