

SUSTAINABILITY

Environment



The Tokyu Fudosan Holdings Group, based on its Environmental Vision, is implementing measures to address **five environmental issues** (climate change, Biodiversity, pollution and resources, water usage, and supply chain) from **three viewpoints**.

Environmental Vision

Basic Philosophy formulated in 1998.

Revised into the Environmental Vision in 2011 and 2015.

Environmental Philosophy

We will create value that connects cities and nature, and people with the future.

Environmental Policy

We will make efforts to realize harmony between the environment and the economy through our business activities.

Environmental Action

We will tackle five environmental issues through three approaches.



three viewpoints

- Publicize goals and implement action.
- Endeavor to implement progressive activities.
- Conduct community-based activities in collaboration with local people.



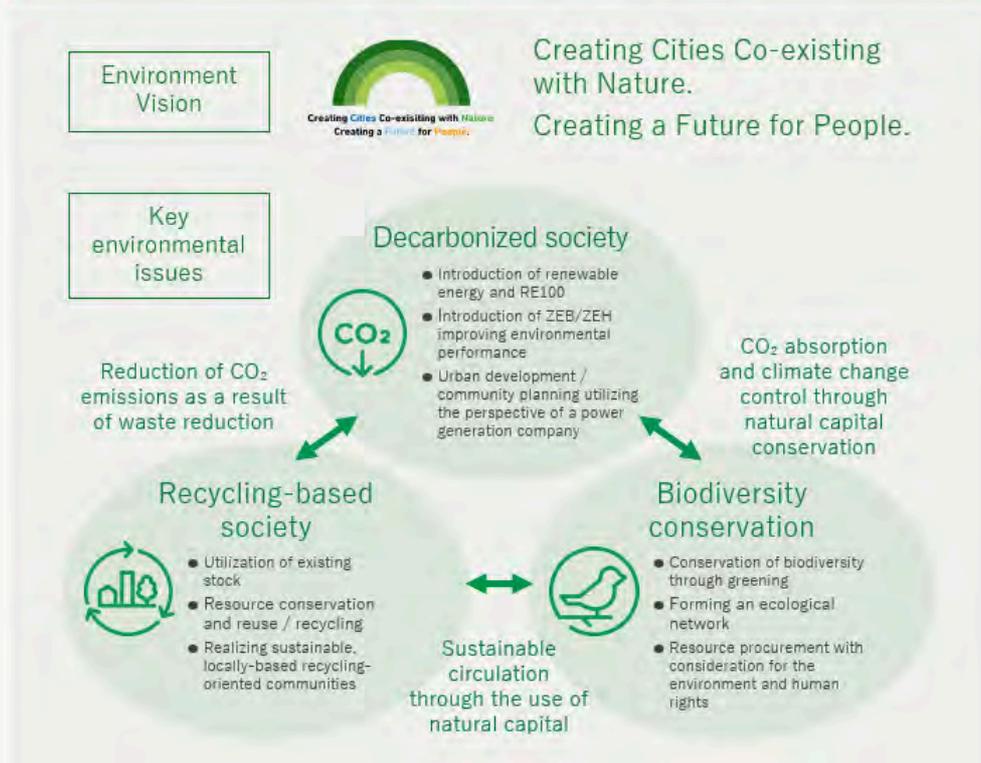
five environmental issues

- Climate Change
- Biodiversity
- Pollution and Resources
- Water Use
- Supply Chain

Environmental Management

Based on the above environmental vision, our company has established "Environmental Management" as a crucial company-wide policy in the long-term vision "GROUP VISION 203," and is addressing environmental issues with a focus on three key challenges as an environmentally advanced company.

Comprehensive initiatives to address environmental issues as an environmentally advanced company



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Policy

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Policy

The Tokyu Fudosan Holdings Group recognizes that climate change is an important environmental issue that greatly impacts its business activities. The Group formulated our Sustainable Procurement Policy in January 2020. We promote the efficient use of energy and the use of renewable energy not only in our business activities but also throughout the life cycle of our products and services, and limit the impact of greenhouse gas emissions on climate variability. (5. Environmental measures, Tokyu Fudosan Holdings Group Sustainable Procurement Policy)

In 2014, the Intergovernmental Panel on Climate Change (IPCC) released the Fifth Assessment Report (AR5). This report found that warming of the climate system is unequivocal and it is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century. Climate change caused by global warming not only causes rising sea levels, but also abnormal weather such as an increase in heavy rains and flooding as well as droughts. The businesses of the Group are not only directly affected by weather conditions, such as snowfall amounts required to operate ski areas, but also indirectly affected as well such as the fact that the worldwide procurement of various supplies required for our businesses may become difficult.

In response to this background, in May 2021, we have set “Environmental Management” as one of The Group policies and included the goal of Reduction of environmental impact through all our businesses (dissemination of clean energy, etc.) toward the realization of a decarbonized society in “Group Vision 2030”. Specifically, we have set the goal of Net Zero Emissions in 2050 and certified for the 2030 target at the SBT 1.5°C level. Furthermore, we have committed to the SBT net-zero target (2050) and also endorsed the Business Ambition for 1.5°C.

Commitments

It is based on this awareness that the Group monitors environmental performance and is promoting the more efficient use of energy and the utilization of renewable energy to reduce greenhouse gases at its business offices as well as the office buildings, commercial facilities and resorts that it owns in an effort to mitigate the impacts that its business activities have on climate change. The development and operation of energy efficient office buildings, commercial facilities and resorts will create business opportunities and enhance the competitiveness of the Group.

We will continue to work with design firms, construction companies, end users and other stakeholders in an effort to realize a low-carbon society, create environmental awareness, and address the issues of climate change and energy consumption.

Management Structure

The Tokyu Fudosan Holdings Group has in place the Tokyu Fudosan Holdings Sustainability Committee, which is chaired by the President & Representative Director of Tokyu Fudosan Holdings and co-chaired by the Operating Officer of Tokyu Fudosan Holdings. The committee meets regularly 2 times a year to discuss, plan and confirm results pertaining to material issues, such as compliance, climate change, social contributions, and diversity. In turn, the results of committee deliberations are reported to the Board of Directors, which is led by the President & Representative Director of Tokyu Fudosan Holdings.

Additionally, the Sustainability Council, established as a subcommittee to the Tokyu Fudosan Holdings Group Sustainability Committee, leads relevant management activities across the entire Group.

The Sustainability Council, comprised of environmental and sustainability managers from each group company, sets group-wide fiscal year targets for greenhouse gas emissions, a major cause of climate change, monitors results and shares information based on a shared policy. This ensures proper reporting under relevant laws and regulations and environmental impacts are reduced through business activities.

Environment approved by the board of directors, Named position responsible at Board level

Recognizing that environmental issues including climate change and global social issues such as human rights and labor are deeply related to the business activities of our group, Tokyu Fudosan Holdings have decided to formulate and address policies for each sustainability issue in FY2015. In 2011, we established our environmental vision, including our environmental policy, based on the basic philosophy established in 1998, and our long-term management policy for FY2021 includes environmental management, with the goal of achieving zero emissions by 2050 and a SBT target of 1.5°C by 2030. All of these environmental policies are approved by the board of directors through the Company's Sustainability Committee and the Group Management Committee under the direct control of the President.

Goals, Initiatives, and Achievements

Quantified CO₂ reduction targets

Medium- to long-term quantified target

Achievement status on quantified reduction targets

- The Tokyu Fudosan Holdings Group aims achieve net zero CO₂ emissions by FY2050.
- As a mid-term goal, we aim to reduce total CO₂ emissions by 46.2% by FY2030 compared to FY2019.

Total CO₂ Emissions (Year-on-Year Comparison, Fiscal Year 2019) ↻

Unquantified, Process CO₂ reduction targets

Tokyu Land Corporation has established process targets for the development projects it is involved in based on the format of these projects. For example, development projects involving new build condominiums must comply with Insulation Performance Level 4 within the Evaluation Methods and Standards based on the Housing Quality Assurance Act. Also, Tokyu Plaza Ginza, a large-scale commercial facility, will be developed with the same level of performance as quasi-top level place of business recognized for outstanding countermeasures taken against global warming by the Tokyo Metropolitan Government.

(1) Targets in the investment process

- ① Electrical facility: Introduction of LED lamps, renewals of elevator control equipment or power incoming unit
- ② Water supply and sanitation facility: Introduction of water-saving type faucets, renewal of boiler
- ③ Air conditioning equipment : Update, Installation of inverter control device

(2) Targets in the management process

- ①Electrical facility
 - Review of lighting time
 - Unnecessary lights go out
 - Review illuminance
- ②Water supply and sanitation facility
 - Revision of temperature setting of cold / hot water
 - Review operating hours
 - Review temperature setting and capacity of hot water tank, bath tub or pool etc.
- ③Air conditioning equipment
 - Operation at proper temperature
 - Stop unnecessary air conditioning and introduce outside air and efficient operation of total heat exchanger
 - Clean filter or fin of air conditioner, ventilator and kitchen exhaust hood

GHG(CO₂) emissions (Achievements, Goals)

GHG(CO₂) emissions 

Energy usage

Energy usage 

Company position on public policy for mitigating climate change

Tokyu Land Corporation approves the Tokyo Cap-and Trade program.

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Support for mitigating climate change through Membership of business associations that are consistent with climate change policies

The Real Estate Association (General Incorporated Association) announced the "Long-term Vision for Realizing a Decarbonized Society in the Real Estate Industry" to promote global warming countermeasures and provide policy recommendations, surveys and research to the Japanese government regarding real estate-related systems. is being carried out. Our climate change policy is consistent with the position of the real estate association, so in addition to the chairman of our company participating as the association's vice chair, we have also dispatched one of our employees to the association to take action on climate change. We are actively working to consider and formulate policies. In addition, the head of the sustainability promotion department participates in the environmental committee that is held about twice a year at the real estate association, and the person in charge of the relevant department also participates in the two lower working groups (office buildings and housing) that are held about six times a year. As an industry organization, we participate in the formulation of climate change strategies that reflect national policies, and we also make policy requests to the national government and the Tokyo metropolitan government, either directly or through our upper organization, Keidanren.

Furthermore, in order to achieve the 46.2% reduction in GHG emissions by FY2030 as set forth in our long-term vision, we are working to reduce the environmental impact of our supplier chain by creating a GHG manual and rules for requesting general contractors to submit GHG emissions and other data through our "Environmental Committee.

In addition, Tokyu Land Corporation serves as the representative director of the Renewable Energy Long-Term Stable Power Supply Promotion Association (REASP), as our climate change policy is consistent with the real estate association's position. In order to reduce greenhouse gases, we are actively working on identifying issues and proposing solutions to expand the introduction of renewable energy and realize long-term stable supply.

Efforts, Supports and Involvement for activities to avoid climate change

Tokyu Fudosan Holdings Group recognizes that climate change is an important environmental issue that greatly impacts its business activities.

It is based on this awareness that the Group is promoting the more efficient use of energy and the utilization of renewable energy to reduce greenhouse gases at its business offices as well as the office buildings, commercial facilities and resorts that it owns in an effort to mitigate the impacts that its business activities have on climate change.

Risk management process

Tokyu Land Corporation implements the following management process as a countermeasure against natural disasters such as typhoons and earthquakes.

- BCP manual maintenance
- BCP duty, BCP standby personnel system
- Operation and improvement of BCP system such as property damage totaling system
- Installed a private power generator as a disaster countermeasure.

Renewable Energy Business

Promotion of Renewable Energy Business

Tokyu Fudosan Holdings has developed a wide range of businesses while always confronting social issues. In the field of renewable energy, we have been working on the brand "ReENE" since we entered the solar power business in Kagawa in 2014. We are steadily expanding our business with the keywords "contribution to decarbonization," "energy self-sufficiency rate improvement," and "regional contribution," and became a member of "RE100" in April 2019. In addition, we have positioned this business as one of the new investment targets in the "Expansion of the area of the recycling-based reinvestment business," which is one of the growth strategies of the medium-term management plan. The number of solar power plants owned and operated, including those under development, has increased to 50 locations throughout Japan, and the rated capacity has grown to over 1 GW (= 1,000 MW). We started a capital and business alliance with Renewable Japan Co., Ltd., a renewable energy company in 2017, and have continuing to strength our partnership. We currently are also a sponsor of Renewable Japan Energy Infrastructure Fund, Inc.

SDGs in the Renewable Energy Business



ReENE Matsumae Wind Power Plant, (Matsumae-gun, Hokkaido) the first wind power station with a storage battery in Hokkaido, started operation in April 2019. And, Suzuran Kushiro cho Solar power plant, (Kushiro-gun, Hokkaido) which is one of the largest power stations in Japan with a storage battery, has been in operation since February 2020. We plan to expand our assets to include not only the solar and wind power generation business, but also the biomass power generation business and the next-generation renewable energy business in the future.

Renewable energy is positioned as the main power source in Japan, and as the needs and social importance of clean energy increase, power generation companies and related businesses are required to have various functions and specialties. Therefore, Tokyu Land Corporation established the "Renewable Energy Association for Sustainable Power supply (REASP)" in December 2019 jointly with five companies including Renewable Japan Co., Ltd. We will continue to expand our business by creating a system for stable supply over the long term while discussing with related ministries and agencies.

[> Renewable Energy Business Map](#)

Use of renewable energy

The Group uses photovoltaic energy, wind power and other forms of natural energy to power various businesses. Solar power generation systems have been introduced to resort facilities, specifically to the Palau Pacific Resort and Tokyu Harvest Club Atami Izusan & VIALA. In addition, at the commercial facility Tokyu Plaza Omotesando Harajuku, two wind turbines have been installed on the rooftop to foster the use of natural energy.



Photovoltaic energy
(Palau Pacific Resort and Tokyu Harvest Club Atami Izusan & VIALA)



Wind power
(Tokyu Plaza Omotesando Harajuku)

Support with equipment and systems

Building Management Systems in place measuring energy efficiency of properties:

Tokyu Fudosan Holdings measures the energy efficiency of all real estate properties using an energy management system and uses it for future improvement measures. Specifically, first of all, we measure the energy such as electricity and gas used in the facilities that are continuously operated and managed, and periodically total them. Furthermore, using a simulation program, we estimate the energy-saving effect of renovation work and operational improvement of buildings and commercial facilities, and are promoting concrete measures.

Phase out investments in carbon intensive assets

In office buildings and commercial facilities operated and managed by Tokyu Land Corporation, we will gradually decarbonize by replacing energy-efficient and carbon-intensive equipment with energy-efficient equipment at the time of renewal.

Reduction of CO₂ Emissions

Reduction in CO₂ emissions in office buildings

The Group works to reduce CO₂ emissions in the office buildings it manages through the installation of energy-saving equipment and in cooperation with its tenants. By implementing these initiatives, the Group aims to serve a pioneering role in achieving the numerical energy conservation targets for new office buildings stipulated in the environmental action plan formulated by the Real Estate Companies Association of Japan.

At the Shin-Meguro Tokyu Building developed by Tokyu Land Corporation, we have achieved visualization through the installation of BEMS (building energy management system) monitors on each floor that allow tenants to confirm their energy consumption and also reduced energy use for the entire building through means such as the installation of natural ventilation systems and automatic dimming equipment.



Shin-Meguro Tokyu Building



Energy management monitor for each floor

Reduction in CO₂ emissions in condominiums

The 356-unit Branz City Shinagawa Katsushima is a large condominium building in which the collective strengths of the Tokyu Group, including Tokyu Land Corporation and Tokyu Community Corporation, are being used to make it more energy efficient. As a result of efforts including the adoption of the world's first home use fuel cell for condominiums called Enefarm in all housing units and the installation of HEMS as a system that enables the visualization of home power consumption, it has been estimated that CO₂ emissions have been reduced by at least 60% and the highest S Rank (self-evaluation) has been acquired using CASBEE (Comprehensive Assessment System for Built Environment Efficiency).

We will verify CO₂ reduction results and provide feedback to residents as we aim for even further energy efficiency. In recognition of these efforts, the project was selected as a Low-CO₂ Residence and Building Leadership Project by the Ministry of Land, Infrastructure and Transport.



Branz City Shinagawa Katsushima



Enefarm for condominiums

Program to promote corporate value improvement through decarbon management

Tokyu Fudosan Holdings Co., Ltd. participated in the “Corporate Value Improvement Promotion Program by Decarbonizing Management” sponsored by the Ministry of the Environment in fiscal 2018, and studied internal carbon prices. Reference : [Ministry of Environment HP \(Japanese\)](#) [↗](#)

Third-party Independent Verification

The Tokyu Fudosan Holdings Group receives independent verification of its environmental data from a third-party in order to ensure the reliability of this information.

For fiscal 2022, the scope of this verification includes data for our greenhouse gas emissions (Scope 1, Scope 2, Scope 3 (Category 1-8 and 11-13) and energy usage).

Third-party Independent Verification Report on Environmental Data



[Independent Verification Report by a third party](#) [↪](#)

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Tokyu Fudosan Holdings Group makes a commitment to environmental issues an integral part of our true corporate value. To this end, we have rolled out a Group-wide environmental management policy in Group Vision 2030, our long-term vision. Climate change is a foremost issue in the vision, and we strive to create decarbonized society and better lifestyle for consumers that contributes to the environment.

While climate change poses business risks, it also brings new business opportunities. Recognizing the importance of climate-related financial disclosures we have declared support for the TCFD in March, 2019, and joined Japan TCFD Consortium to effectively implement TCFD recommendations to advance our approaches in 4 categories, Governance, Strategy, Risk management and Metrics and Targets. Regarding risk management related to climate change, such as regulatory, reputational, and market risks, we will set CO₂ reduction targets, etc., and monitor progress toward these goals.



Governance



Corporate governance around climate related risks and opportunities

Strategy



Actual and potential impacts of climate-related risks and opportunities on our businesses, strategy, and financial planning

Risk Management



Process to identify, assess and manage climate related risks

Metrics and Targets



Metrics and targets used to assess and manage relevant climate-related risks

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Governance

Sustainability Committee to assess and manage climate-related risks and opportunities

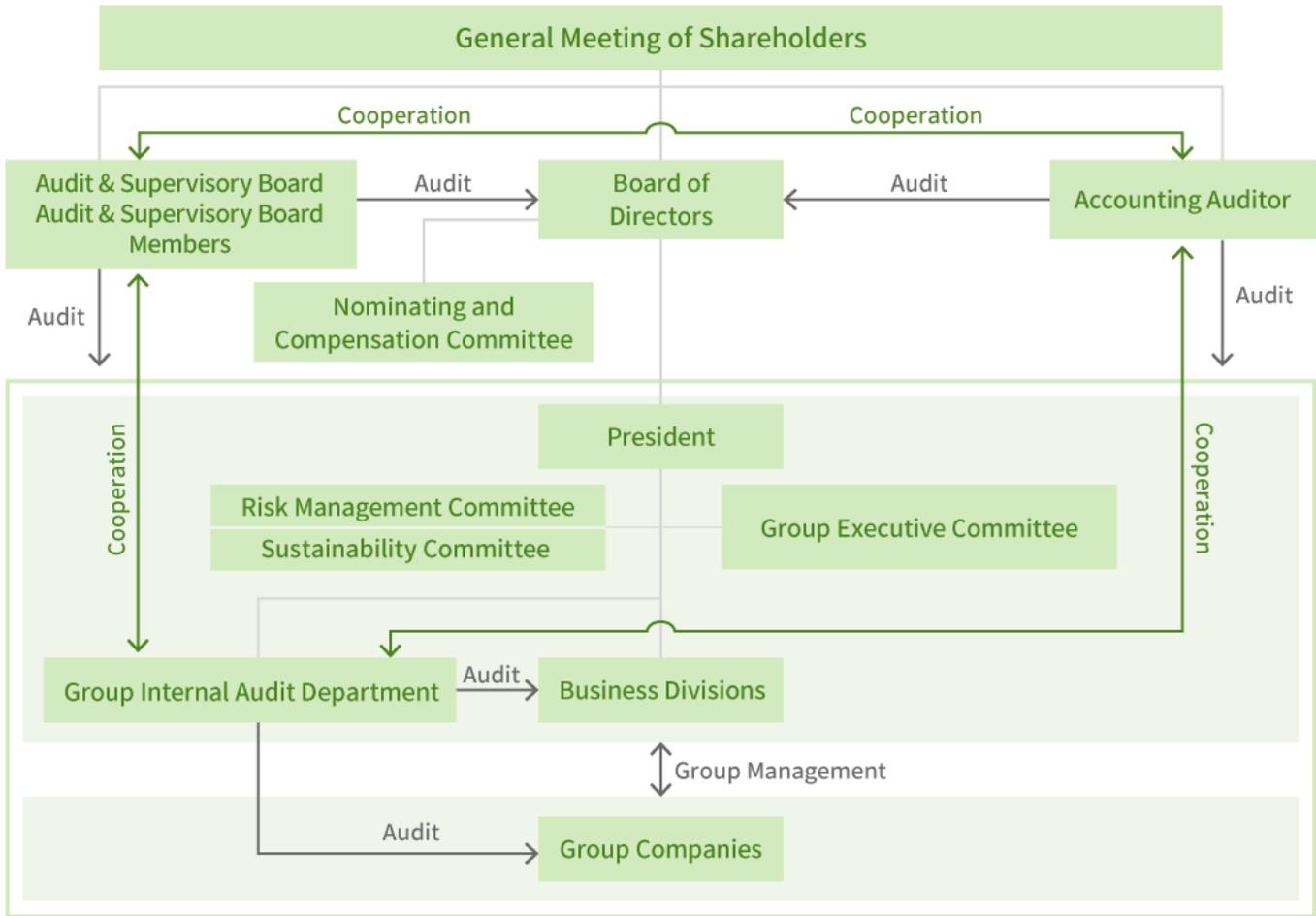
Tokyu Fudosan Holdings has in place the Sustainability Committee, comprising executive directors and chaired by the company president, which meets twice a year in conjunction with the Risk Management Committee to address, develop action plans and oversees performance against the targets, and other important issues including compliance, climate change, social contribution and diversity. The outcomes of these joint meetings are reported to Board of Directors.

Board's oversight of climate-related risks and opportunities

Based on reporting from the Sustainability Committee on prominent climate-related issues including those that influence management strategy, financial planning and goal setting, Tokyu Fudosan Holdings Board of Directors oversees climate-related risks and opportunities.

Sustainability Committee structure

Organization Structure



Strategy

Faced with mounting threats of climate change and environmental challenges, it has become imperative to find solutions to these issues, and we are aware that our business operation's contribution to the environment is crucial in gaining market acceptance. In our long-term GROUP VISION 2030, we have set "Creating sustainable environment" as a materiality for our value creation efforts, and included environmental management in our company-wide policies. The key environmental opportunities and risks have been identified as follows and KPI targets set accordingly.

Create a sustainable environment.

As an environmentally advanced company, we will create a carbon-free society and a recycle-oriented society by addressing global issues such as climate change.

Themes to work on (Materialities)

Create the sustainable environment.

Main opportunities

- Growing needs to respond to the decarbonized and recycling-oriented society
- Expanding procurement of funds from ESG investors

Main risks

- Escalation of climate change and natural disasters
- Increasing costs due to environmental restrictions, etc.

With our robust Group-wide effort in environment management, we are implementing climate change initiatives based on TCFD recommendations and reducing environmental impact through our supply chain, aiming to achieve our quantitative targets. At the same time, viewing global-scale environmental challenges as business opportunities, we endeavor to build cutting edge businesses that lead the industry in the pathway to decarbonized society.

Time horizons for climate-related strategy

We define following short, medium and long-term time horizons for our climate-related strategies:

【Short-term】 1- 2 fiscal year(s)

【Medium-term】 3- 9 years. Medium-term management plan falls in this time horizon. Our medium-term scenario analysis assumes SBT of 1.5°C in year 2030.

【Long-term】 10- 30 years. Long-term management policy falls in this time horizon. Our long-term scenario analysis assumes zero-emission in year 2050.

Financial impacts of climate-related risks and opportunities

In setting climate-related strategies, we define magnitude of impacts on our business portfolio

【High】 10% or more (of consolidated operating revenue)

【Medium-high】 10% or more of the operating revenue for the respective business portfolio

【Medium】 5-10% of the operating revenue for the respective business portfolio

【Medium-low】 2-5% of the operating revenue for the respective business portfolio

【Low】 Less than 2% of the operating revenue for the respective business portfolio

Businesses subject to climate change scenario analysis

The Group uses scenario analysis to assess impacts including on upstream and downstream value chain of our different business operations. Scenario analysis has been applied to, and expanded to include, following businesses in accordance with their relevance to climate change risks/opportunities.

【In 2018】 Urban development business(medium-term), Resort business(long-term)

【In 2020】 Urban development, Resort, Residential, Renewable energy businesses(all medium/long-term)

【Yet to be analyzed】 Logistics, Overseas, Human capital-utilizing business

Year	Overview	Analysis Scenario	Target Business	
			Medium Term	Long Term
2018	Conducting Scenario Analysis as part of the Environmental Ministry Support Project.	2°C、 4°C	City	Leisure
2020	Expansion of the Target Areas Review of Scenario Analysis	1.5°C、 3°C、 4°C	Urban Housing Leisure Renewable Energy	
2023	The latest scenario from the IEA Incorporating NZE2050	1.5°C、 (3°C、 4°C)		

Climate change scenario analysis process

Serving as the secretariat for the scenario analysis, the Group Sustainability Promotion Department identified, in consultation with the relevant departments, risks and opportunities that may have significant impacts on the business strategy and financial plan. With the help of external consultants, Sustainability Promotion Department conducted quantitative evaluation of the impacts and shared the information within the organization. Furthermore, strategies for likely scenarios are formulated in consultation with the relevant departments, approved by the Sustainability Committee, and reported to the Board of Directors.

Material climate-related issues

We have identified following material climate-related risks and opportunities that have potential impact on the Group :

Real estate business, due to significant greenhouse gas emissions during development and operation stages, is perceived by our group as a transition risk in response to the intensification of climate change, regulatory strengthening in society, rising energy costs, and changes in customer and investor awareness. Furthermore, we recognize the increasing physical risks of climate change in real estate operations.

Particularly, we acknowledge the significant challenges posed by new regulations and the increase in construction and renovation costs associated with the transition to a decarbonized society.

On the other hand, we see the expansion of demand for renewable energy and the growth of the ESG financial market as significant opportunities. Additionally, we perceive the changing awareness of customers as an opportunity, leading to an expanded selection of companies committed to environmental initiatives.

Category	Type	Material issues	Significant Impact
Current regulation	Current regulation	Energy conservation reporting requirement Energy Efficient Building Codes	
	Emerging regulation	More stringent GHG emission reduction regulations Carbon taxation	○
	Technology	Increase in cost for ZEB/ZEH construction/renovation	○
	Legal cost	Credit purchase under Tokyo Cap-and-Trade Program	
	Market	Delayed response to price trend reflecting environmental value Increasing energy cost	○
	Reputation	Changing customer/investor behavior	
Physical risks	Acute	Intensified extreme weather events	
	Chronic	Rising temperature / sea level	
Opportunities	Resource efficiency	Transition to high-efficiency buildings, Recycling	
	Energy source	Wider use of renewable energy source, government subsidies	○
	Products /services	Expanding low carbon products/services	
	Market	Utilizing ESG finance	○
	Resilience	Energy efficiency renovations of operating assets BCP compliance	

Scenario Analysis ① 1.5°C

[Selected scenario]

This scenario assumes steady shifts in policies/technologies/market toward decarbonized society in line with Paris Agreement, and expects to limit average global temperature rise to well below 2°C above pre-industrial level at the end of the 21st century.

- SDS developed by IEA World Energy Outlook, consistent with limiting the global temperature rise to 1.65°C with a 50% probability.
- B2DS developed by IEA Energy Technology Perspectives, consistent with limiting the global temperature rise to 1.75°C.
- The roadmap presented in IEA's NZE2050 scenario outlines a path to achieve net-zero globally by 2050.
- RCP2.6 scenario developed by IPCC, consistent with global temperature rise of 0.9~2.3°C (average of 1.6°C) above pre-industrial level at the end of 21st century(2081~2100), referenced for gauging physical risks.

◆IEA(International Energy Agency), SDS(Sustainable Development Scenario), B2DS(Beyond 2 Degrees Scenario), NZE2050(Net Zero by 2050 Roadmap for the Global Energy Sector), IPCC(Intergovernmental Panel on Climate Change), RCP(Representative Concentration Pathways)

[Summary of scenario analysis assessment]

In the medium term (2030), we expect carbon pricing and ZEB construction cost to have substantial financial impact on our urban development business. For the long term (2050), however, we will complete ZEB conversion, which improves our buildings' market competitiveness, leading to higher rental revenue. We also expect the renewable energy business to expand.

As for physical risks, natural disasters due to extreme weather conditions will increase moderately, but the magnitude of impact is expected to be low thanks to improved BCP and LCP.

Results of Scenario Analysis ① 1.5°C Scenario

Category	Content of Risks and Opportunities				Our Group's Strategy
[Transition Risks] Policy/Regulatory / Market/Reputation Technology	Risk	Increased costs for new construction and renovations due to the strengthening of energy conservation laws and the mandatory			Promoting the ZEB and ZEH conversion of new buildings, updating facilities in existing operational facilities, and achieving differentiation through the early adoption of renewable energy.
		Introduction of a carbon pricing system leading to an increase in construction and operational costs.			Collaborating with general contractors to reduce CO ₂ emissions during the construction phase and mitigate the impact of carbon pricing.
	Risk / Opportunities	Growing demand from tenants for ZEB (Zero Energy Building) properties, impacting rent and vacancy rates.			Promoting the decarbonization of each business through the introduction of internal carbon pricing and mitigating the impact of carbon pricing.
		Growing demand for Zero Emission Houses (ZEH) from homebuyers, intensifying competition among			Expanding the business in response to increased demand.
Opportunities	Significant increase in demand for renewable energy			Utilizing local renewable energy sources.	
[Opportunities] Energy / Products and Services / Market	Financial Impact		Medium Term	Long Term	Impact Overview
		Urban	High	Somewhat Low	In the medium term, the impact is "high" due to the increase in building investment. However, in the long term, the impact is "somewhat low" as the increase in rental income after the completion of ZEB conversion offsets it.
		Housing	Somewhat Low	Low	By responding effectively to market needs, the impact is "somewhat low."
		Leisure	Somewhat Low	Low	The impact is "somewhat low" due to the introduction of renewable energy.
		Renewable Energy	High	Low	As needs gradually increase, the positive impact is "high."
Category	Content of Risks and Opportunities				Our Group's Strategy
[Physical Risks] Acute / Chronic	Risk	Gradual Increase in Facility Damage Due to Natural Disasters			Ensuring revenue through the off-season utilization of facilities.
		Shortening of Ski Resort Operating Period Due to Rising Temperatures			
	Risk / Opportunities	The demand for Business Continuity Plans (BCP) for facilities by tenants has increased, impacting rent and vacancy rates.			Differentiation is achieved through enhanced BCP and LCP through strategic location selection and collaboration with tenants and residents.
The demand for Life Continuity Plans (LCP) by homebuyers is increasing, intensifying competition between regions and products.					
[Opportunities] Resilience	Financial Impact		Medium Term	Long Term	Impact Overview
		Urban	Low	Somewhat Low	While the amount of investment in building repairs and renovations is increasing, the impact is considered "somewhat low" due to revenue assurance through differentiation.
		Housing	Low	Somewhat Low	
		Leisure	Low	Somewhat Low	
		Renewable Energy	Low	Somewhat Low	

Scenario Analysis ② 3°C Scenario

【Selected scenario】

This scenario assumes that all nations adhere to their NDCs, and the average global warming will be about 3°C above pre-industrial level at the end of the 21st century.

- STEP developed by IEA World Energy Outlook, reflecting policies declared by each nation.
- RTS developed by IEA Energy Technology Perspectives, consistent with each nation's existing energy and climate-related commitments including the NDCs of the Paris Agreement.
- RCP6.0 scenario developed by IPCC, consistent with global temperature rise of 2.0~3.7°C (average of 2.8°C) above pre-industrial level at the end of the 21st century(2081~2100).
 - ◆NDC(Nationally Determined Contribution), STEPS(Stated Policies Scenario), RTS(Reference Technology Scenario)

【Summary of scenario analysis assessment】

Compared to 1.5°C scenario, we expect financial impact over medium term(- 2030) to be lower due to slower ZEB conversion in our urban development business, but the impact from ZEB conversion is likely to persist into long-term (-2050). On the other hand, we expect to see some growth in our renewable energy business.

As for physical risk, although our resort business will experience bigger impact from faster increase in natural disasters and global warming compared to 1.5°C scenario, its financial impact can be limited given successful differentiation strategies including selecting right building locations and utilizing resort facilities during off season.

Results of Scenario analysis ② 3°C Scenario

Category	Content of Risks and Opportunities				Our Group's Strategy
【Transition Risks】 Policy / Regulatory / Market / Reputation / Technology 【Opportunities】 Energy / Products and Services / Market	Risk	Increased costs for new construction and renovations due to the strengthening of energy conservation laws and the mandatory implementation of ZEB and ZEH.			Promoting the ZEB and ZEH conversion of new buildings, updating facilities in existing operational facilities, and achieving differentiation through the early adoption of renewable energy.
		Increased costs for new construction and renovations due to the strengthening of energy conservation laws and the mandatory implementation of ZEB and ZEH.			
	Risk / Opportunities	Growing demand from tenants for ZEB (Zero Energy Building) properties, impacting rent and vacancy rates.			Promoting the decarbonization of each business through the introduction of internal carbon pricing and mitigating the impact of carbon pricing.
		Growing demand for Zero Emission Houses (ZEH) from homebuyers, intensifying competition among products.			
	Opportunities	Significant increase in demand for renewable energy.			Utilizing local renewable energy sources.
		The demand for tenant office space is shrinking due to the widespread adoption of telecommuting, impacting rent and vacancy rates. There is an increase in demand for satellite offices.			Deployment of satellite offices anticipating widespread adoption.
	Financial Impact		Medium Term	Long Term	Impact Overview
		Urban	Somewhat High	Somewhat High	The slow pace of ZEB conversion and the moderate to high impact of increased building investment costs in the medium to long term.
		Housing	Somewhat Low	Somewhat Low	The impact is "somewhat low" due to accurate responses to market needs.
		Leisure	Somewhat Low	Somewhat Low	The impact is "somewhat low" due to the introduction of renewable energy.
Renewable Energy		Somewhat High	Somewhat High	As needs gradually increase, the positive impact is "somewhat high."	
Category	Content of Risks and Opportunities				Our Group's Strategy
【Physical Risks】 Acute / Chronic 【Opportunities】 Resilience	Risk	Gradual Increase in Facility Damage Due to Natural Disasters			Differentiating through off-season facility utilization, concentrated investment in ski resorts in high-latitude areas with heavy snowfall, and golf course management using heat-resistant turf.
		Shortening of Ski Resort Operating Period Due to Rising Temperatures			
	Risk / Opportunities	The demand for Business Continuity Plans (BCP) for facilities by tenants has increased, impacting rent and			
		The demand for Life Continuity Plans (LCP) by homebuyers is increasing, intensifying competition			
	Financial Impact		Medium Term	Long Term	Impact Overview
Urban		Low	Somewhat Low	The increase in building repair and renovation investment leads to a "somewhat low" impact, as revenue is secured through differentiation. Although there is significant revenue reduction due to shortened operating periods and area reduction, strategic location selection and differentiation from competing facilities result in a "moderate" impact (Leisure).	
Housing		Low	Somewhat Low		
Leisure		Low	Moderate		
Renewable Energy		Low	Somewhat Low		

Scenario Analysis ③ 4°C Scenario

【 Selected scenario】

This scenario assumes that policies, technologies and markets advance on the current trend and rate, allowing average global warming to exceed 4°C above pre-industrial levels at the end of the 21st century and expects greater risk of climate change-induced natural disasters.

- RCP8.5 scenario developed by IPCC, consistent with global temperature rise of 3.2~5.4°C (average of 4.3°C) above pre-industrial level at the end of 21st century(2081~2100).

【Summary of scenario analysis assessment】

There will be limited impact of climate change for medium term(-2030) and transition risk will not emerge as significant financial impact during this period. For long-term(-2050), however, we will experience more severe natural disasters and rising temperature which likely aggravates financial impact. We expect to be able to alleviate the risk to some degree with successful differentiation through developing satellite office spaces(urban development business), selecting right building locations and off-season use of resort facilities. As for our renewable energy business, we look to expand in response to market trend.

Results of Scenario analysis ③ 4°C Scenario

Category	Content of Risks and Opportunities			Our Group's Strategy	
【Transition Risks】 Policy / Regulatory / Market / Reputation Technology	Risk	Rising temperatures lead to increased construction costs for general contractors and higher air conditioning expenses during operations.		Actively promoting the enhancement of new buildings' performance and the update of facilities in existing operational facilities, differentiating through the early adoption of renewable energy.	
	Risk / Opportunities	In response to rising temperatures, there is an increasing demand from homebuyers for high-performance homes.		Expanding the business in response to increased demand.	
		Renewable energy faces weak policy support, and the market trends are unclear.		Proposing new leisure lifestyles, such as "workation."	
	Opportunities	With the widespread adoption of telecommuting, there is a shrinking demand for tenant office space, impacting rent and vacancy rates. There is an increase in demand for satellite offices.		Deployment of satellite offices in anticipation of widespread adoption.	
【Opportunities】 Energy / Products and Services / Market	Financial Impact		Medium Term	Long Term	Impact Overview
		Urban	Low	Low	By covering the reduction in tenant office needs with satellite offices, there is a "low" positive impact.
		Housing	Low	Somewhat Low	The impact is "somewhat low" due to accurate responses to market needs.
		Leisure	Low	Moderate	The introduction of renewable energy results in a "moderate" level of impact.
		Renewable Energy	Low	Low	Due to the uncertainty in the trend of needs, there is a possibility of a "low" positive impact.
Category	Content of Risks and Opportunities			Our Group's Strategy	
【Physical Risks】 Acute / Chronic	Risk	The impact of rising sea levels is increasing, leading to a sharp increase in facility damage due to natural disasters.		Differentiating through off-season facility utilization, concentrated investment in ski resorts in high-latitude areas with heavy snowfall, and golf course management using heat-resistant turf to distinguish from competing facilities.	
		Rising temperatures result in a shortened operating period			
	Risk / Opportunities	Increasing demand from tenants for Business Continuity Plans (BCP) for facilities, impacting rent and vacancy rates.		Differentiating through enhanced BCP and LCP through strategic location selection and collaboration with tenants and residents.	
The demand from homebuyers for Life Continuity Plans (LCP) is increasing, leading to intensified competition between products and selective choices in regions.		Differentiating through infrastructure enhancement measures for the local community, including the introduction of energy storage systems.			
【Opportunities】 Resilience	Financial Impact		Medium Term	Long Term	Impact Overview
		Urban	Low	Moderate	The increase in investment for building repairs and renovations is mitigated by revenue assurance through differentiation, resulting in a "moderate" level of impact. The shortening of operating periods and the reduction in the area lead to a "somewhat high" impact (leisure).
		Housing	Low	Moderate	
		Leisure	Low	Somewhat High	
		Renewable Energy	Low	Moderate	

Impact of climate change risks/opportunities on business strategy

The Group's business strategy has addressed climate change risks/opportunities in following areas:

Area	Impact and our response
Products/services	In addition to our ongoing effort to mitigate risks by energy efficient remodeling and adapt to risks by strengthening BCP for facilities the Group operates, the Group's long-term vision formulated in 2021 aims to further advance ZEB/ZEH. Moreover, Tokyu Land Co. strives to expand and advance ReENE, its renewable energy business.
Supply chain/value chain	For upstream, we have addressed climate change issues in the Sustainable Procurement Policy formulated in 2020, and begun exploring how we can cooperate with general contractors to decarbonize construction process. As for downstream, we are expanding ZEH and renewable energy uses into condominiums and rental housings.
Research/development investment	Tokyu Community Co., a building management company, has built and acquired Nearly ZEB Certificate on NOTIA, a technical training center to improve its technical proposal capability. Additionally, in the fiscal year 2022, Tokyu Fudosan Co., Ltd. is conducting verification for the implementation of Zero Energy Building (ZEB) conversion in newly constructed small-scale office buildings and existing office buildings.
Facility operation	Tokyu Land Co. operating urban/resort facilities, is set to expand use of its own renewable energy, and joined RE100 in 2019, a global environmental initiative which brings together companies committed to 100% renewable energy by 2050. As of December 2022, the company has successfully switched the power supply for all 244 domestic facilities it owns to 100% renewable energy.

Impact of climate change risk/opportunity on business strategy and financial planning

The Group's financial plan integrates the following in response to climate change risks/opportunities:

Area	Impact and Response
Indirect cost	Based on scenario analysis and simulation on marginal CO ₂ emission reduction effect of energy efficient renovations and operational improvements at their existing facilities over the medium-/long-term, it was inevitable that Tokyu Land Co. must start purchasing renewable energy and reduce the emission even further if they are to meet the SBT. Intending to offset the emission with electricity from its own renewable energy business, the Company estimated the increase in overhead costs associated with renewable energy purchases. Given the estimate, the Company decided to expedite the introduction of renewable energy at their operating facilities while assessing the budget impact for each fiscal year, aiming to achieve RE100 early.
Capital allocation	Aligned with the government's renewable energy promotion measures, Tokyu Land Co. expanded into the large-scale solar business in 2014, in which they have been stepping up investment as the scenario analysis since fiscal 2018 helped them envision the business as a climate-related opportunity. The company operates 66 renewable energy facilities as of the end of March 2022 and has 7 solar power plants, 6 wind power plants, and 2 biomass power plants under development.
Liabilities	Based on the scenario analysis, we issued 10 billion yen in Green Bonds in fiscal 2019 to underscore its commitment to environmental issues and to win good reception from investors. In the fiscal year 2021, we formulated the policy "WE ARE GREEN Bond Policy" regarding the long-term issuance of ESG bonds, marking the first of its kind in Japan. We aim to increase the ESG bond ratio to 50% or more by the end of the fiscal year 2025 and 70% or more by the end of the fiscal year 2030.
Assets	We have made environmental impacts one of the evaluation indicators for our long-term business portfolio management.

[Click here for specific examples](#) →

Risk management

Identifying / assessing climate-related risks/opportunities



“Creating a sustainable environment” is one of our 6 priority themes(materiality) on the path to Tokyu Fudosan Holding's long-term GROUP VISION 2030, and environmental management has been the company-wide policy. We reflect on risks and opportunities associated with each materiality in the entire value chain and set KPI targets.

Materialities	Opportunities and risks ■ Opportunities ■ Risks	Ideal vision for 2030	Non-Financial KPI (FY2030)	SDGs Targets 
 Environment	Growing needs to respond to decarbonization and recycling	A carbon-free society and a recycle-oriented society	- RE100 ³ to be achieved by 2025*	7.2
	Intensification of disasters and increase in response costs		- Percentage of renewable energy power usage 60% or more	7.2
			- CO ₂ emissions (compared with FY2019) (46.2)% (SBT certification)	13.1
			- Reduce water usage (compared with the previous fiscal year)	6.4 12.2
			- Waste volume (compared with FY2019) (11)%	12.5
			- Environment certification acquisition* (e.g. CASBEE, DBJ) 100%	9.4 15.5
			- Sustainable procurement (wood materials for molds) 100%	15.2
			- <i>Midori wa Tsunagu</i> Project (area of forest protected) 3,000ha	15.2
			- Environmental efforts through business 100 cases or more	11.6 11.7

Climate-related risk management process

Under the direct oversight of the company president, Tokyu Fudosan Holdings Sustainability Committee develops action plans and oversees performance against the targets on climate change and other important issues.

To ensure reporting compliant with relevant mandates and operate our business in a way that reduces environmental impact including GHG emission, waste, and water consumption, Group Sustainability Promotion Department, serving as a secretariat for the Sustainability Committee, sets targets for GHG emission reduction and other climate-related issues for each fiscal year, monitors performances and communicates information across the Group.

In January 2020, we laid out a Sustainable Procurement Policy to mitigate the impact of GHG emissions on climate change. To achieve this, we work with our stakeholders not only in our business operations but also upstream and downstream value chain and promote better energy efficiency and greater use of renewable energy throughout the lifecycle of products and services.

Integrating climate-related risk identification/assessment/management into organization's overall risk management

Tokyu Fudosan Holdings Co. identified 7 risks that possibly hinder the Group's management objectives, and recognized climate change risk as another highly significant emerging risk. To manage these risks, we formulated a Basic Risk Management Policy on which we developed and run a risk management framework.

Basic risk management policy

The Company makes every effort to clearly identify all major risks as they apply to the Group as a whole and takes systematic and continuous steps to implement all necessary measures on a priority basis in order to comprehensively manage all risks that have the potential to hinder the Group from achieving its objectives or to create a loss.

<p>Highly significant risks</p> <ul style="list-style-type: none"> ● Investment risks ● Financial and capital risks ● Personnel and labor risks ● Climate change risks 	<p>Other risks</p> <ul style="list-style-type: none"> ● Legal and compliance risks ● IT strategy risks/ digital strategy risks ● Information security risks ● Crisis management response
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Metrics and targets

Climate change-related targets in our long-term GROUP VISION 2030

Tokyu Fudosan Holdings Group has set forth medium- and long-term targets linked to climate change in line with our long-term GROUP VISION 2030 developed in 2021, and is committed to materializing decarbonized society through our business.

- With our strength in the renewable energy business, we expect the reduction of scope 1 and 2 CO₂ emissions to exceed the Group's overall CO₂ emissions, essentially achieving net negative in 2025. Additionally, Tokyu Land Co. plans to expedite achieving RE100.
- We aim to reduce emissions from our own and controlled facilities and supply chain (scope 1, 2 and 3) and achieve SBT (Science Based Targets) to limit global warming to 1.5 °C by 2030, and net zero emission by 2050.



Tokyu Fudosan Holdings Group's ESG Management

Based on our identified social materiality, the Group's long-term vision "GROUP VISION 2030" has been organized into six themes with KPI targets in terms of ESG aspects. We established KPI goals for fiscal 2030 for each of these themes, and we are progressing across the Group with initiatives aimed at achieving these goals, while following the PDCA cycle.

Themes of our efforts to create value (Materialities) and KPI target for FY2030

Our company group has set indicators and goals for the expansion of renewable energy projects and utilization, in addition to reducing CO₂ emissions, as a mitigation strategy for the transition to a decarbonized society.

Additionally, as adaptive measures to address significant risks and opportunities identified through scenario analysis, we have established the following items listed in the table below as indicators and goals. In addition to mitigation measures outlined in Key Performance Indicators (KPIs), we are also addressing Business Continuity Planning (BCP) measures from the perspective of adaptation to climate change, such as installing watertight boards and elevating electrical rooms to higher floors. We are committed to addressing climate change from both mitigation and adaptation perspectives.

As of January 31, 2025

Materiality

E  Create a sustainable environment.



KPI	Fiscal 2030 Targets	Fiscal 2025 Targets	Fiscal 2023 results
RE100 to be achieved by 2025 ^{*2}	Achieved	Achieved	Achieved ^{*3}
Percentage of renewable energy power usage	60% or more ^{*4}	65% ^{*5}	84.1%
CO ₂ emissions ^{*1} (compared with FY2019)			
Scope1 + 2	(46.2)% (SBT certification)	Year 2023(46.2)%	(70.3)%
Scope3	(46.2)% (SBT certification)	Qualitative goal : Collaborative efforts with business partners such as construction companies	(11.9)%
Water usage	Reduction compared to the previous year	Reduction compared to the previous year	+9.1%
Waste volume (compared with FY2019)	(11)%	(6)%	(16.6)%
Environment certification acquisition (e.g. CASBEE, DBJ) ^{*6}	100%	70%	65.0%
Sustainable procurement (wood materials for molds)	100%	30%	9.7%
Midori wo Tsunagu Project (Area of Forest Protected)	3,000ha	2,400ha	2,145ha
Environmental efforts through business	100 cases or more	50 cases or more	70 cases

*1 CO₂ equivalent emissions, including fluorocarbons (freons)

*2 Tokyu Land Corporation

*3 Excludes electricity generated through cogeneration involving private power generation (0.2% of overall electricity consumption), as there are no gases on the Japanese market that are recognized as green gases under the RE100 technical criteria

*4 Formulated during the long-term business policy phase in 2021

*5 The mid-term management plan announced in 2022

*6 Applies to large non-residential properties (with floor space of 10,000 m² or greater) that are owned Excluding some joint projects

[Click here for detailed environmental data](#) 

Transition Plan toward Decarbonized Society

[< Environment](#)
[Climate Change](#)
[TCFD disclosure](#)
[Transition Plan toward Decarbonized Society](#)
[Biodiversity](#)
[TNFD disclosure](#)
[Pollution and Resources](#)
[Water Use](#)
[Supply Chain \(Environment\)](#)
[Roadmap Towards Realization of Decarbonized Society](#) ✓ [Metrics and targets - CO₂ Emission-related](#) - ✓

Tokyu Fudosan Holdings Group makes a commitment to environmental issues an integral part of our true corporate value. To this end, we have rolled out a Group-wide environmental management policy in Group Vision 2030, our long-term vision. In our long-term vision and our Medium-Term Management Plan 2025, we will strive to expand business opportunities with the environment as the starting point through our efforts in tackling areas such as a decarbonized society, a recycling-based society, and biodiversity.

Where a decarbonized society in particular is concerned, we have adopted reduction targets for CO₂ emissions and are striving to reduce our environmental footprint through our businesses.

In recent years, global concern about climate change and the importance of countermeasures have been further heightened by the Paris Agreement, an international framework for preventing global warming, and the Japanese government's "2050 Carbon Neutral Declaration".

In response to this trend, we have reaffirmed that our business and financial strategies are aligned with our roadmap to reduce emissions, and we have developed a "Transition Plan toward Decarbonized Society" as a specific strategy, using the TCFD and four other guidelines as reference.

Roadmap Towards Realization of Decarbonized Society

- The group formulated GROUP VISION 2030, the Group's long-term vision with the aim of realizing net zero emissions by the year 2050. We are already reducing CO₂ emissions through efforts such as switching power used at offices of and facilities held by Tokyu Land Corporation, our core company, to 100% renewable energy, setting ZEB standards for new buildings in principle, and promoting ZEH as a standard specification at BRANZ condominiums.
- Going forward, we will continue to pursue reductions of CO₂ emissions through our businesses and target decarbonization as a business opportunity as we aim to further reduce environmental impact through the growth of the group.

Concrete reduction measures with a view to 2025

Achieve RE100

Promote ZEB/ZEH at buildings

Acquire environmental certifications

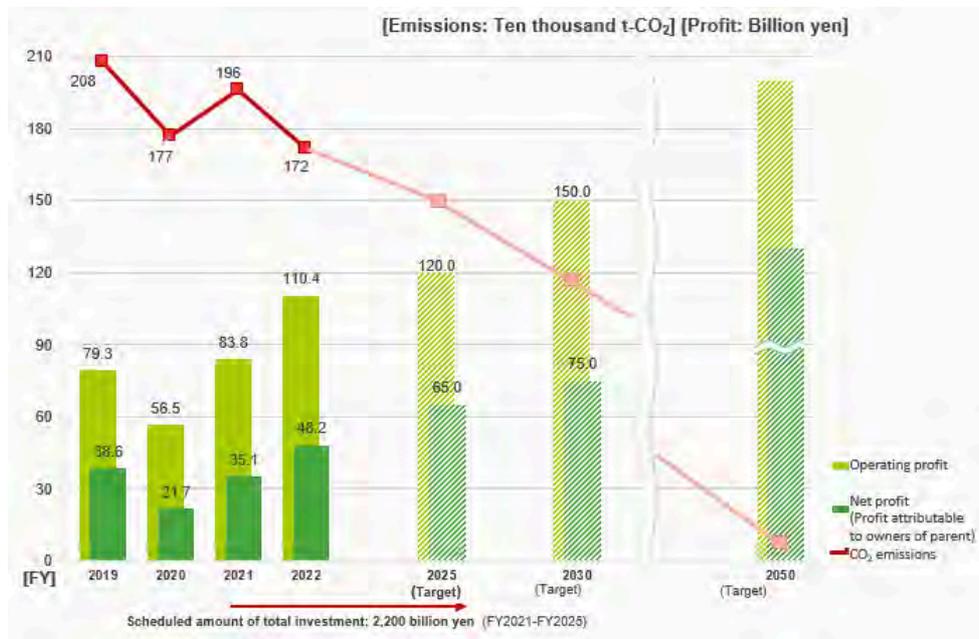
Apply internal carbon pricing (ICP)

Concrete reduction measures with a view to 2030

Reinforce environment-related business

- Expand renewable energy business

- Engage in people- and environment-friendly urban development



Metrics and targets - CO₂ Emission-related -

Commitments

- The group is endeavoring to simultaneously achieve net zero emissions by the year 2050 and corporate growth.
- With a view to the above, in order to manage the climate change risk assessed in the scenario analysis, we set a target of 46.2% reduction of CO₂ emissions in Scope 1 and 2 (in-house) and Scope 3 (supply chain (reduction targets: Category 1, 2, and 11)) in FY2030 based on FY2019, and (SBT approved), and we are managing actual CO₂ emissions.
- In addition, the Medium-Term Management Plan called for a 50% reduction in Scope 1 and 2 CO₂ emissions in FY2023, and we achieved this goal one year ahead of schedule with a 50.6% reduction in FY2022 (preliminary figures).
- Our real emission figures undergo a third-party guarantee by an environmental certification agency.

Emission results and targets



For more information on the Transition Plan toward Decarbonized Society, please click here.

[> Transition Plan toward Decarbonized Society \(PDF\)](#) [PDF](#)

ENVIRONMENT

Biodiversity



< Environment

Climate Change

| TCFD disclosure

| Transition Plan toward Decarbonized Society

Biodiversity

TNFD disclosure

| Pollution and Resources

| Water Use

| Supply Chain (Environment)

Policy

Management Structure

Goals, Initiatives, and Achievements

Policy

Tokyu Fudosan Holdings Group's business activities rely heavily on ecosystem services for land development and materials procurement. Given this, we are strongly aware that biodiversity conservation represents an important environmental issue. The loss of biodiversity would make it difficult for us to reap the benefits of ecosystem services that until now have benefited our businesses in terms of land use and construction materials procurement, which carries with it the risk of much higher costs. Furthermore, the loss of biodiversity is an extremely critical issue that could threaten the very existence of society and human life. The development and operation of housing, office buildings, commercial facilities and resorts that help to conserve biodiversity will create business opportunities and enhance the competitiveness of the Group. At Tokyo Port City Takeshiba, the largest office building in which Tokyu Land Corporation is involved, we are working on biodiversity conservation as Takeshiba Shinpachikei.

> <https://tokyo-portcity-takeshiba.jp/skip-terrace/>  

commitment

Our group respects the international goal of becoming "nature positive" as set out in the "Kunming Montreal Biodiversity Framework (GBF)," and works with stakeholders such as business partners, customers, and local communities to improve biodiversity. We will promote initiatives to avoid and minimize negative impacts on diversity and expand positive impacts.

- (1) We aim to understand the dependence and impact on biodiversity in our group's business throughout the value chain, reduce and prevent negative impacts, and aim to have a positive impact on nature.
- (2) In the development, operation, and management of real estate, we understand the local ecosystem, avoid and minimize the loss of ecosystems due to business activities, and strive to create ecological networks in cities and conduct conservation initiatives tailored to local characteristics. We aim to use land in harmony with preserving and regenerating biodiversity and improving the comfort of visitors and facility users.
- (3) We will respect the GBF target of conserving 30% of land/sea areas and promote forest conservation.
- (4) We work with stakeholders to procure sustainable resources that are considerate of the environment and human rights, and strive to improve resource use efficiency based on the idea of a circular economy.
- (5) We will actively engage with diverse stakeholders regarding biodiversity, including business partners, local communities, governments, customers, and employees, and reflect this in our initiatives.
- (6) In order to integrate the perspective of biodiversity into business decision-making, we will strive to educate and enlighten our diverse stakeholders, including employees, to improve their literacy regarding biodiversity and ecosystem services.

Management Structure

The Group has established the Sustainability Committee headed by the President & Representative Director, and to address climate change issues, the Sustainability Council, established as a subcommittee, leads relevant management activities across the entire Group.

The Sustainability Council, comprised of environmental and sustainability managers from each group company, manages the results of group-wide efforts on biodiversity issues and shares information based on a shared policy. This ensures biodiversity conservation is addressed throughout all business activities.

Goals, Initiatives, and Achievements

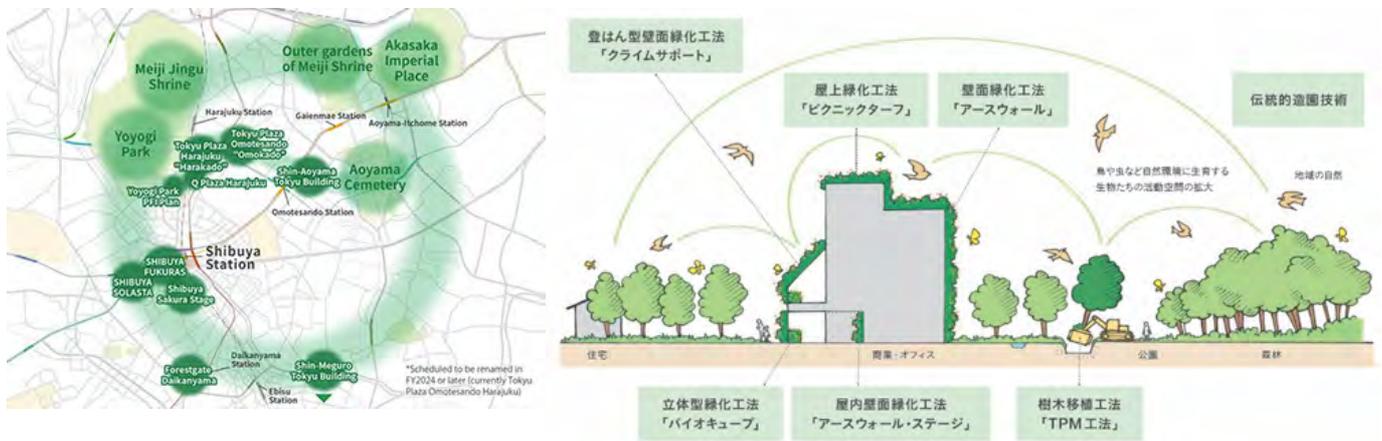
Quantified time-specific targets to address biodiversity impact ~ KPI Targets for Fiscal 2030

Quantity targets in urban areas

We believe that urban greening is important for addressing biodiversity issues. Therefore, in the wide-area Shibuya area, which the Group has designated as a priority development area, we are actively greening our business bases in order to conserve the ecosystem. We are working to form an ecological network in the wide-area Shibuya area by connecting the surrounding greenery and acting as a relay base for the creatures that live there.

Green buildings(roofs,walls,etc)* Fiscal 2023 Results 100% , Fiscal 2030 Targets 100%

*Tokyu Land Corporation new large office buildings and commercial facilities.



Quantity targets in resort areas, etc.

Tokyu Land Holdings Group will conserve 40% of the land and sea area in its wellness business areas, including hotels and resorts and healthcare business, in order to achieve the goal of halting and restoring biodiversity loss by 2030 (Nature Positive), exceeding the 30by30 target of effectively conserving at least 30% of the land and sea as healthy ecosystems by 2030. The "conserved" area refers to (1) the area of land subject to OECM certification and other environmental certifications for biodiversity and green space conservation systems, (2) the area falling within the area of national parks, national parks, and natural parks, and (3) forests subject to the preparation of forest management plans under the Forest Law.

Planning and management at the project site

Biodiversity Action Plan (BAP)

The Group formulates a Biodiversity Action Plan (BAP) by identifying areas in all of our business regions that have sites, species, and functions of particular importance for conservation. In the relevant areas, biodiversity monitoring by experts is conducted on a regular basis, and the results are reflected in the management plan in an effort to conserve biodiversity.

Resort Town Tateshina plans to establish a monitoring plan to survey the habitat and growth environment of plants and animals in the villa area and surrounding wooded areas, etc., and if there are any rare plant or animal species or threats to the habitat or growth environment, countermeasures will be considered and utilized in the green space management plan.

Creation of “Invasive Alien Species Response Manual”

According to the Invasive Alien Species Act (Ministry of the Environment), an invasive alien species is a species of fauna or flora that did not originally reside in Japan and was brought to Japan intentionally or unintentionally by human actions and that may cause damages to local ecosystems. The Group has created a manual that outlines ways to deal with an invasive alien species if it is found in order to protect the community's ecosystem.



(Non-native fauna)
Nettle caterpillar



(Non-native flora)
Annual fleabane

Biodiversity risk assessment(Disclosure of biodiversity habitat) ~ Conducting ecosystem studies and conserving biodiversity using greenery in the project

《New project》 The Group is actively greening condominiums, office buildings, commercial facilities, and other buildings to connect the surrounding greenery and preserve local biodiversity by working to create an ecological network that takes biodiversity into consideration.

《Existing project》 For example, at the roof terrace garden named Omohara Forest at Tokyu Plaza Omotesando Harajuku, we conduct regular studies on living organisms throughout the year with Regional Environmental Planning, Inc., a specialist in natural environment conservation in order to gain an understanding of the ecosystem created there,.



Ecosystem study in progress
at Tokyu Plaza Omotesando Harajuku



Seven-spot ladybug



Japanese white-eye

At "Tokyo Port City Takeshiba Office Tower", we are working on environmental education and reduction of environmental load through contact with living things and farming experience. We will improve people's awareness and understanding of biodiversity by developing the "Takeshiba Shinhakkei", which consists of eight views of "rain, water, islands, paddy fields, incense, vegetable gardens, bees, and the sky." In addition, in order to contribute to the creation of a habitat for birds of prey such as peregrine falcons, we have set up nest boxes for nesting and are working to maintain and improve biodiversity and ecosystems.



Rice planting



Pre-harvest strawberries



Bee hive

"Tambara Ski Park" has been working to protect 'forest green tree frogs', which are registered as near-threatened and mild concerns on the Red List of Gunma Prefecture and the International Union for Conservation of Nature IUCN. During development, we preserved the pond inhabited to protect the forest green tree frogs. After that, every year, we carry out conservation activities in collaboration with local volunteer groups (Nature Lovers Association), such as cleaning the pond and replenishing water in the summer when the water level drops.



Newborn forest green frogs



Swimming forest green frog



Cleaning the pond

The coast in front of the resort hotel "Palau Pacific Resort" in the Republic of Palau was a sea where coral did not easily inhabit due to the outflow of mud. In 2002, the sea across the hotel was designated as a marine life reserve by state ordinance and is now a great snorkeling area where you can see many species of fish and corals. In April 2010, we transplanted 30 giant clams to the beach of the hotel with more than 30 guests. We are also co-sponsoring the holding of an educational event "Dugong Week" for all elementary and junior high school students in Palau to protect the endangered dugong that lives in the waters near Palau.



Seventy Island in Palau, designated as a Wildlife Sanctuary



"Dugong" inhabiting the Palauan waters

Participation in biodiversity certification systems

Systematic application

30 by 30 (30 by 30) refers to the goal of halting and restoring biodiversity loss (nature positive) by 2030, as promised at the G7 Summit held in England in June 2021. The goal is to effectively conserve at least 30% of land and sea as healthy ecosystems by 2030. Tokyu Fudosan Holdings Co., Ltd. and Tokyu Resorts & Stays Co., Ltd. support this purpose and participate in the 30by30 Alliance. For example, Tokyu Resort Town Tateshina has created a forest management plan for its vast 660ha forest, and has been thinning it for conservation since 2018.

ABINC acquisition

Tokyu Land Corporation encourages acquisition of ABINC and other certifications in order to support biodiversity conservation, particularly for properties with abundant natural environments in the surrounding area and where many green spaces can be secured on the premises, and will continue to systematically introduce these bases.

Achievement in obtaining ABINC certification →

Obtained the highest rank (AAA) of "JHEP Certification

The FUTAKO TAMAGAWA Rise integrated commercial and residential complex that is a joint venture between Tokyu Land Corporation and Tokyu Corporation acquired the top rank (AAA) for JHEP Certification, which is Ecosystem Conservation Society - Japan's system for certification of biodiversity assessments. We developed the building's roof garden into an open space containing water and greenery as a large-scale roof garden with features such as a vegetable garden and a killifish pond in an aim to create a community that is in harmony with the abundant natural environment in the surroundings.



FUTAKO TAMAGAWA Rise



Killifish pond created as part of the roof garden



Disclosure of engagement on efforts to reduce loss of biodiversity

Governments

Tokyu Fudosan Holdings is participating in the 30 by 30 initiative organized by the Ministry of Environment to achieve the goal of halting and restoring biodiversity loss by 2030 (Nature Positive) and to achieve the conservation and protection of at least 30% of our terrestrial and marine areas by 2030.

NGO

Tokyu Fudosan Holdings is a member of the Keidanren Nature Conservation Council and aims to realize a sustainable society through the construction of a society that coexists with nature through exchanges with local companies and NPOs. In February 2022, the Nature Conservation Council held an online dialogue with the Mangrove Tree Planting Operation Liaison Council in the "Large-scale Mangrove Tree Planting Project in Sabua Tasara District, Nakhon Si Thammarat Province, Thailand".

In November 2024, we held a dialogue with World Wide Fund for Nature Japan (WWF Japan) on forest conservation in the revision of our sustainable procurement policy.

We received opinions on the Group's environmental initiatives and received advice on our future promotion activities in sustainable procurement. We also shared information on our approach to sustainable timber procurement.

Local Organisations

Dialogues conducted to mitigate biodiversity loss Tokyu Resort Town Tateshina is an integrated resort developed by concluding a nature conservation agreement with Nagano Prefecture. Currently, we have concluded a comprehensive cooperation agreement with local governments, etc., and are strengthening our efforts for biodiversity by introducing biomass boilers using thinned wood generated in forest conservation.

ENVIRONMENT

TNFD disclosure



< Environment

Climate Change

TCFD disclosure

Transition Plan toward Decarbonized Society

Biodiversity

TNFD disclosure

Pollution and Resources

Water Use

Supply Chain (Environment)

The Tokyu Fudosan Holdings Group has established environmental management as one of its group polices in its long-term vision and its Medium-Term Management Plan 2025. Through initiatives aimed at the priority challenges of Decarbonized society, Recycling-oriented society and Biodiversity, the Group is aiming to expand business opportunities with the environment as their starting point.

With respect to biodiversity as the Group's businesses are founded on the premise of depending on and impacting nature in a variety of aspects that include the utilization of land and a myriad of resources, nature-based recreation and the enhancement of relaxation/comfort and productivity, the Group recognizes biodiversity as a priority challenge, and has continuously implemented initiatives to coexist with nature from an early stage. One of those initiatives is the formulation of its Biodiversity Policy in 2011, and with the growing awareness of the importance of preventing and recovering from natural losses, the Group has been participating in the TNFD Forum since June 2023.

Using the recommendations of the TNFD, the Group will promote each measure within the framework of "Governance," "Strategy," "Risk and Impact Management," and "Measured metrics / targets" in order to achieve Nature Positive.

This time, we have revised the "TNFD Report v0.4", which was released in August 2023, to the "TNFD Report (2nd edition)", which refers to the "TNFD Final Recommendations v1.0", which was announced in September 2023. This time, we have revised the report to the "TNFD Report (3rd Edition)," which includes an analysis of resort areas.

> [TNFD Report \(3rd edition\) \(PDF:8.66MB\)](#) [PDF](#)

> [TNFD Report \(2nd edition\) \(PDF:4.83MB\)](#) [PDF](#)

> [TNFD Report \(1st edition\) \(PDF:4.02MB\)](#) [PDF](#)



The following is the content of the "TNFD Report (3rd edition)".

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Governance >

Governance structure for nature-related dependencies, impacts, risks and opportunities that includes oversight structure for Board of Directors, and roles of management

Strategy >

- Identified nature-related dependencies/impacts and risks/opportunities
- Effects of risks and opportunities on businesses, strategy and financial plans
- Resilience of strategy with scenarios taken into consideration
- Priority locations in organization

Risk and Impact Management >

- Process for identifying, evaluating and managing nature-related dependencies, impacts, risks and opportunities and actions taken in light of management process
- Integration of above process with group risk management process
Involvement of affected stakeholders

Metrics and targets >

Measured metrics and targets for evaluating and managing nature-related dependencies, impacts, risks and opportunities and performance relative to targets

ENVIRONMENT

TNFD disclosure



- < Environment
- Climate Change
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INTRODUCTION

Introduction -Nature Positive as a Global Goal-

Amid increasing international recognition of how important it is to halt and recover natural loss (See *1), at the 15th Meeting of the Conference of the Parties to the UN Convention on Biological Diversity (COP15) that convened in December 2022, the “Kunming-Montreal Global Biodiversity Framework” (GBF) was adopted as the first international targets for biodiversity since the Aichi Biodiversity Targets of 2010.

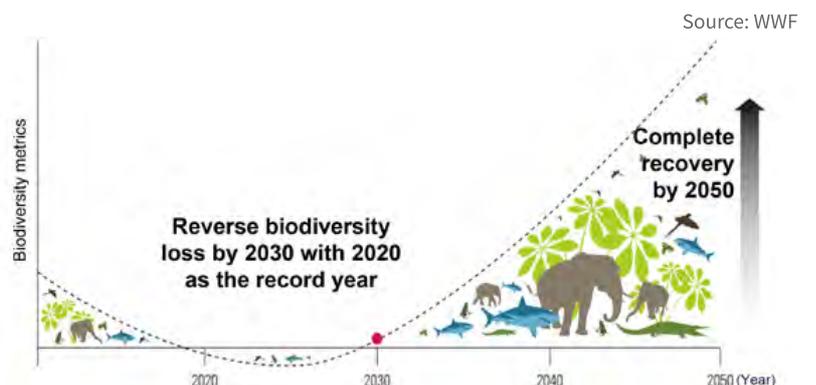
Under the GBF, based on the 2050 vision of “Living in harmony with nature,” the mission of striving for “nature positive”^{*2} as defined by “taking urgent action to halt and reverse biodiversity loss to put nature on a path to recovery” by the year 2030 was set forth along with 23 concrete targets. Those targets include the assessment and disclosure of risks, dependencies and impacts on biodiversity by corporations in their operations in order to reduce negative impact on biodiversity and expand positive impact. Based on this, we identify nature-related issues related to our business and our contribution to nature positive.

***1: Excerpt from World Economic Forum (References 1)**

***2: Measurable global goals for nature with a view to nature positive by the year 2030**

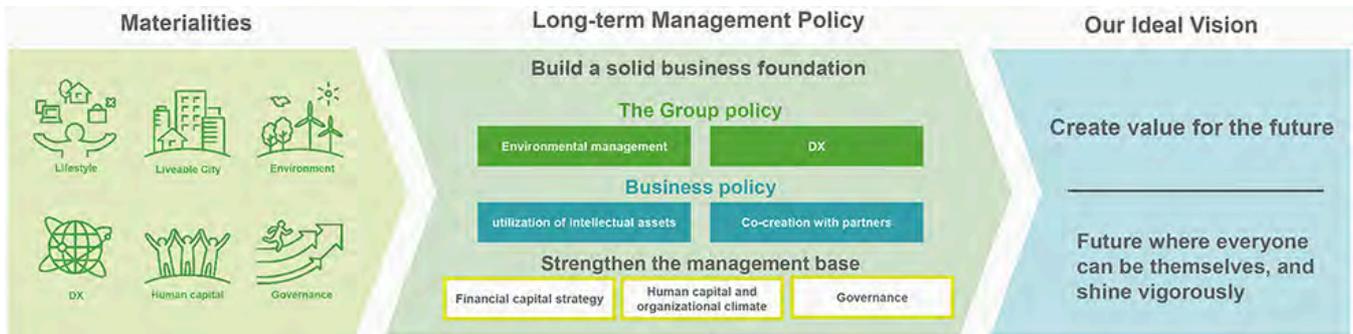
Ranking of severity of risks in the next decade

1	Extreme weather events
2	Critical change to Earth systems
3	Biodiversity loss and ecosystem collapse
4	Natural resource shortages
5	Misinformation and disinformation
6	Adverse outcomes of AI technologies
7	Involuntary migration
8	Cyber insecurity
9	Societal polarization
10	Pollution



Environmental Management at Tokyu Fudosan Holdings and Positioning of TNFD Report

- The group has established materialities based on social challenges and has set forth a long-term management policy with environmental management as one of its group policies. We will promote this long-term management policy and realize our ideal vision.



- In our long-term vision and our Medium-Term Management Plan 2025, having positioned environmental management as a group policy, we will strive to expand business opportunities with the environment as the starting point through our efforts in tackling the priority challenges of a **Decarbonized society, Recycling-based society, and Biodiversity**. With regard to biodiversity in particular, having adopted the goal of contributing to nature positive based on regional characteristics, we currently developing, operating and managing real estate with the objectives of promoting people-and nature-conscious greening that connects the green dotting the cities in urban areas and coexisting with ecosystem services in countryside areas.
- This TNFD Report (“Report” below) discloses dependencies, impacts, risks and opportunities pertaining to the natural capital of the Group using the “Recommendations of the Taskforce on Nature-related Financial Disclosures” by the Taskforce on Nature-related Financial Disclosures (“TNFD” below) as a reference. Note that the Company, working with **MS&AD InterRisk Research & Consulting, Inc.** and **Think Nature Inc.**, has examined, analyzed and organized nature-related information within the Group’s businesses.

Architecture of the TNFD Disclosure Framework

The TNFD Framework consists of **14 disclosure recommendations organized into four pillars** and six "general requirements," which are basic concepts that apply across the four pillars, and recommends disclosure on these items.

Overview of TNFD Disclosure Framework

General requirements			
1. Application of materiality 2. Scope of disclosures 3. Location of nature-related issues 4. Integration with other sustainability-related disclosures 5. The time horizons considered 6. Engagement with Indigenous Peoples, Local Communities and affected stakeholders			
Governance	Strategy	Risk & impact management	Metrics & targets
Disclose the organisation's governance of nature-related dependencies, impacts, risks and opportunities.	Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organisation's business model, strategy and financial planning where such information is material.	Describe the processes used by the organisation to identify, assess, prioritise and monitor nature-related dependencies, impacts, risks and opportunities.	Disclose the metrics and targets used to assess and manage material nature-related dependencies, impacts, risks and opportunities.
A) Board Oversight of Nature-Related Dependencies, Impacts, Risks, and Opportunities B) Management's role in assessing and managing nature-related dependencies/impacts, risks, and opportunities C) Stakeholder engagement in assessing and responding to nature-related dependencies/impacts, risks, and opportunities	A) Identified nature-related dependencies/impacts, risks, and opportunities B) Effects of dependencies/impacts, risks/opportunities on strategy and financial planning C) Resilience of the strategy to risks/opportunities based on scenarios D) Locations of assets and activities that meet criteria for priority areas	A) Processes for identifying, assessing, and prioritizing dependencies, impacts, risks, and opportunities in the direct operations/upstream and downstream value chains B) Process for managing dependencies, impacts, risks, and opportunities C) Processes for identifying, assessing, and managing nature-related risks integrated into enterprise-wide risk management	A) Metrics used to assess and manage material nature-related risks/opportunities B) Metrics used to assess and manage dependencies/impacts C) Targets used to manage nature-related dependencies/impacts and risks/opportunities and the performance against these.

TNFD Framework and LEAP Approach

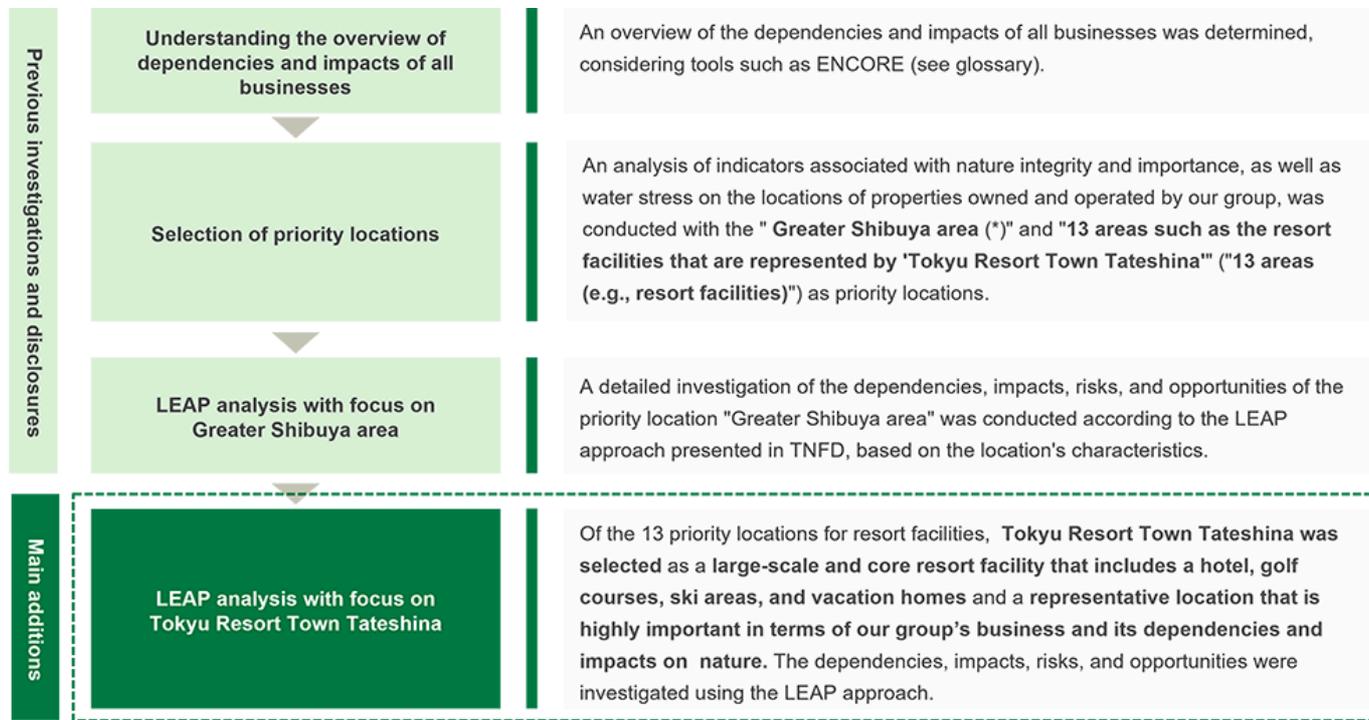
The table below summarizes which of the 14 disclosure recommendations shown on the previous page corresponds to each of the LEAP phases of the TNFD. In this report, the results of our review with reference to the LEAP approach are disclosed in accordance with the General Requirements and the TNFD Disclosure Recommendations. **The corresponding disclosure pillar and each phase of the LEAP are indicated by icons in the upper right-hand corner of each slide.**

Overview of the LEAP Approach and its relationship to disclosure recommendations

Locate The interface with nature	Evaluate Dependencies & impacts	Assess Risks & opportunities	Prepare To respond & report
L1: Span of the business model and value chain L2: Dependency and impact screening L3: Interface with nature L4: Interface with sensitive locations	E1: Identification of environmental assets, ecosystem services and impact drivers E2: Identification of dependencies and impacts E3: Dependency and impact measurement E4: Impact materiality assessment	A1: Risk and opportunity identification A2: Adjustment of existing risk mitigation and risk and opportunity management A3: Risk and opportunity measurement and prioritisation A4: Risk and opportunity materiality assessment	P1: Strategy and resource allocation plans P2: Target setting and performance management P3: Reporting P4: Presentation
<ul style="list-style-type: none"> Screening of areas in the value chain where dependencies and impacts on nature are important Identification of ecosystems with which the company's sites and other locations in the value chain with significant dependencies/impacts have contact Identification of ecologically sensitive areas 	<ul style="list-style-type: none"> Identification of the ecosystem services on which the business depends and the impacts it is having at each location in the value chain Assessment of the degree of significant dependencies/impacts using a variety of indicators 	<ul style="list-style-type: none"> Identification and materiality assessment of nature-related risks/opportunities based on dependencies/impacts Identification of high priority risks/opportunities Review of risk and opportunity management processes 	<ul style="list-style-type: none"> Consideration of response strategies to be taken based on what has been evaluated Consideration of targets Consideration of content of disclosure
Disclosure recommendations corresponding to LEAP			
<ul style="list-style-type: none"> Strategy D) 	<ul style="list-style-type: none"> Strategy A) D) Risk & Impact management A) B) Metrics & targets B) 	<ul style="list-style-type: none"> Strategy A) C) D) Risk & Impact management A) B) C) Metrics & targets A) B) 	<ul style="list-style-type: none"> Governance A) B) C) Strategy B) C) Metrics & targets C)

[Summary] Changes and Additions in This Report: Disclosure Concerning Resort Facilities, Among Others.

In this report, a **detailed evaluation of dependencies and impacts** was conducted on the “Tokyu Resort Town Tateshina,” which represents 13 areas, including resort facilities, among previously specified priority locations, using a LEAP analysis that considers location characteristics.



* Greater Shibuya area refers to the area within a 2.5-km radius of Shibuya Station, as defined in the Tokyu Group's Shibuya Urban Development Strategy.

[Summary] TNFD Framework and Main Information Disclosed

As the Group's businesses are founded on the premise of depending on and impacting nature in a variety of aspects, over time, the Group has continuously implemented initiatives to limit its negative impact on and exert a positive impact on nature.

In preparing this report, we followed the four pillars of the TNFD Recommended Disclosure as well as conducted examinations for each pillar in line with the **LEAP** approach provided by the TNFD,

TNFD Recommended Disclosure	TNFD Recommended Items for Disclosure	Information disclosed recently (TNFD disclosure at the Company)
Governance	<ul style="list-style-type: none"> ● Governance structure for nature-related dependencies, impacts, risks and opportunities that includes oversight structure for Board of Directors, and roles of management ● Stakeholder Engagement 	<ul style="list-style-type: none"> ● Governance structure for the Company's nature-related issues ● Human rights policy and stakeholder engagement
Strategy	<ul style="list-style-type: none"> ● Identified nature-related dependencies/impacts and risks/opportunities ● Effects of risks and opportunities on businesses, strategy and financial plans ● Resilience of strategy with scenarios taken into consideration ● Priority locations in organization 	<ul style="list-style-type: none"> ● Overview of nature-related dependencies and impacts in Group overall ● Priority locations at sites directly operated by the Company ● Nature-related dependencies/impacts and risks/opportunities with focus on priority locations below : <ul style="list-style-type: none"> (1) "Greater Shibuya area" (2) "Tokyu Resort Town Tateshina," which represents 13 areas, including resort facilities (hereinafter called "Tokyu Resort Town Tateshina,") ● Nature-related risks and opportunities envisioned at current point in time, including those in other businesses
Risk & Impact Management	<ul style="list-style-type: none"> ● Process for identifying, evaluating and managing nature-related dependencies, impacts, risks and opportunities and actions taken in light of management process ● Integration of above process with group risk management process 	<ul style="list-style-type: none"> ● Relationship between process of Group identifying, evaluating and managing nature-related dependencies, impacts, risks and opportunities and group-wide risk management ● Concrete initiatives for responding to dependencies/impacts and risks/opportunities
Metrics & targets	<p>Measured metrics and targets for evaluating and managing nature-related dependencies, impacts, risks and opportunities and performance relative to targets</p>	<ul style="list-style-type: none"> ● Metrics and targets of Group

[Summary] Contributed to Nature Positive in our Urban Development Business in the Greater Shibuya Area

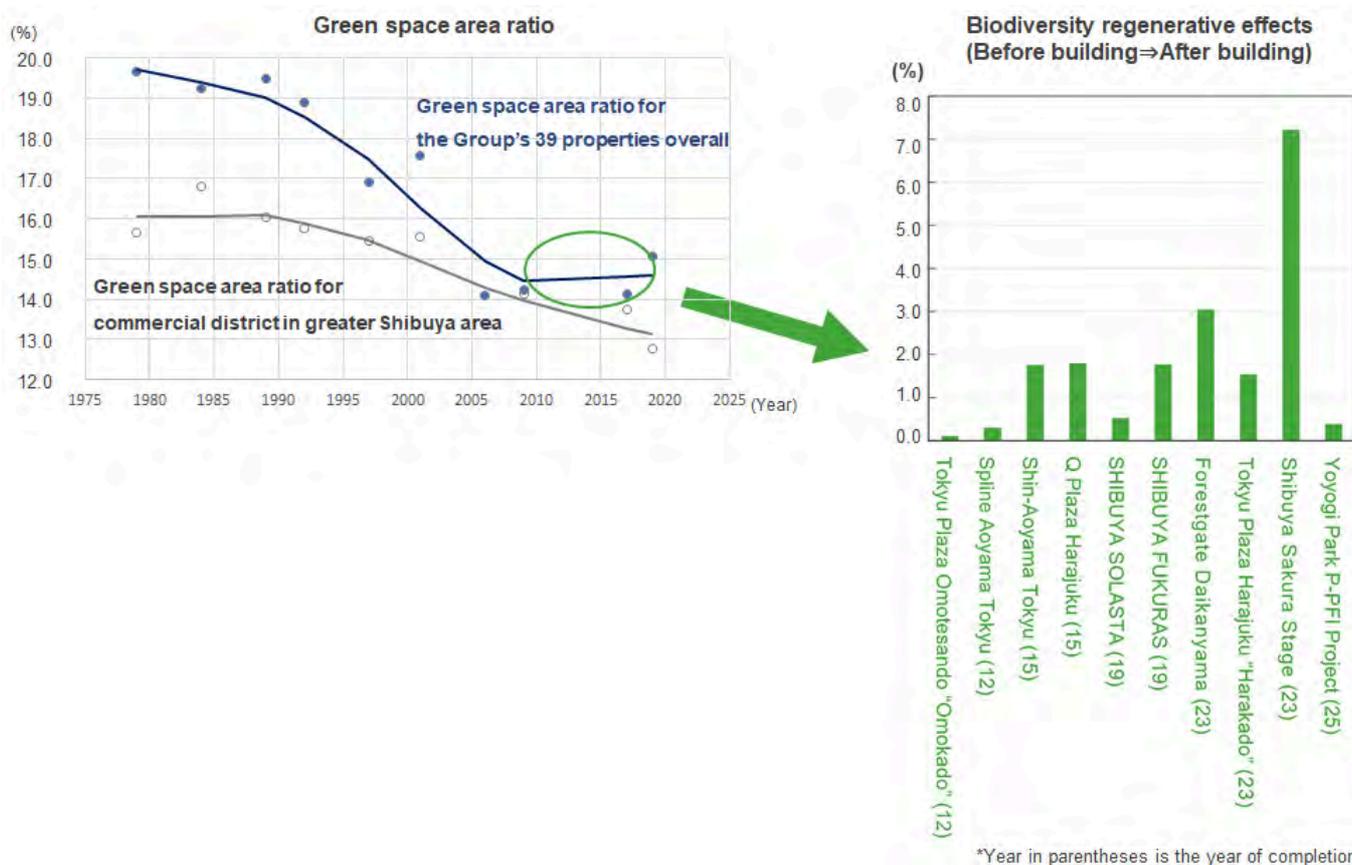
Dependencies and impacts of Greater Shibuya area

Our businesses in "Greater Shibuya area", one of the priority locations, has various impacts, such as land alteration and occupation, as well as dependencies on nature, such as mitigation of flooding and heat island effects, and the healing and aesthetic aspects of nature.

Of these, the impacts of land use and building greening on nature were quantitatively analyzed using the analysis tools of Think Nature Inc.

As a result of performing quantitative analysis using Think Nature's analysis tools, we found that **biodiversity regenerative effects before and after the building of Group properties in the greater Shibuya area turned positive starting with properties from FY2012 and beyond**. At properties completed in recent years, initiatives aimed at ensuring the quantity and quality of greening, such as securing green space area largely through urban redevelopment systems and selecting native species of trees for planting, have shown positive effects, and the community planning efforts of the Group have been recognized as **contributing to nature positive**.

In particular, the quantity and quality of greening at target properties under our Redevelopment Business have been trending highly relative to facilities up to this point. Going forward, we will continue to promote the planning of communities that coexist with nature.



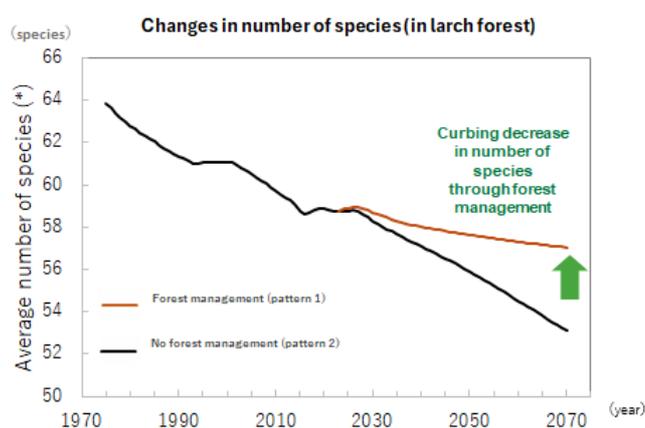
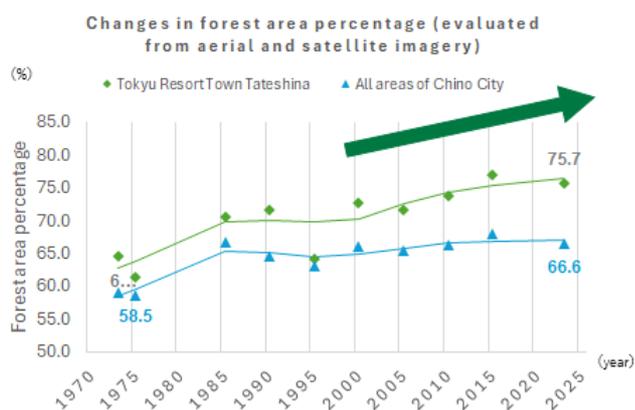
[Summary] Contributions to Nature Positive in Tokyu Resort Town Tateshina

Dependencies and impacts in Tokyu Resort Town Tateshina

Our businesses at “Tokyu Resort Town Tateshina”, analyzed as a priority location, has various dependencies on nature, such as tourism resources, recreational functions, climate control, and disaster mitigation. Despite the potential negative impacts, such as land alteration and occupation, through the value chain, there are positive impacts through initiatives such as forest management. Focusing on one of these important impacts, that is, land alteration and occupation through facility development and operation, this impact was measured as an indicator via **quantitative evaluation of the changes in forest area percentage since development initiation in collaboration with Think Nature Inc.**

Analysis of forest area from aerial and satellite images showed that, although the forest area has declined due to the construction of golf courses and vacation homes, **the overall trend is toward recovery**, and that the **current status is that the area is in its most recovered state**, as well as the fact that the business operations, which have simultaneously maintained and recovered forests, are **contributing to nature positive as a result of our group's resort development and operations** (upper right figure).

Additionally, "Tokyu Resort Town Tateshina" is engaged in **forest management, such as thinning based on a forest management plan**. Currently, given the advanced age of the trees that constitute the forests, going forward, thinning will be continued while considering forest management that includes a partial clear-cutting of aged larch forests and replanting. Even when conducting a quantitative evaluation on the potential impacts of forest management on biodiversity and conducting a "management method of clear-cutting and reforesting two hectares a year," **the decline in the number of species in the forest was greatly suppressed** compared with the case of not conducting forest management and leaving the process to natural transitions (lower right figure). These results will be used as a reference to continue promoting efforts to preserve biodiversity with appropriate forest management.



[Summary] Risks and Opportunities / Joint Endeavors with Supply Chain / Looking towards the Future

Nature-related risks and opportunities based on dependencies and impacts

Based on the dependency/impact analysis, we have summarized the nature-related physical and transition risks and opportunities that we currently consider to be particularly important for our business. We found that while various nature-related risks are expected, we also expect to capture many business opportunities.

Initiatives geared towards risks, opportunities and impacts in supply chain

In the business of real estate that the Group is involved in, given the process between development and operation spans a long period of time and that numerous parties have involvement in that process, we believe that it is necessary to work together with our stakeholders to tackle nature-related issues in our entire supply chain.

● Sustainable Procurement Policy

To complement “combatting climate change,” “biodiversity protection” as well as “compliance with and respect for international human rights and labor standards,” the Company has also set forth at “Sustainable Procurement Policy” that covers consideration towards the environment, and is promoting initiatives across its entire supply chain.

● Initiatives for zero forest destruction

With respect to plywood panels for concrete formwork used upon building, it may be pointed out that environmental destruction in the forest of origination, the usurping of land from indigenous people or something similar may be involved. In cooperation with construction companies, the Group has set a usage ratio of sustainability-minded lumber (FSC- or PEFC-certified lumber as well as domestically produced lumber, etc.) of 100% by FY2030.

Concrete initiatives by the Company aimed at nature-related impacts, etc.

Item	Initiatives
Urban Development Business	Community planning, greening technology, planting management, etc.
Hotel and Leisure Business	Forest management, protection of rare species, etc.
Other	Invasive alien species countermeasures, contamination and waste reduction, resource circulation, water usage reduction, etc.

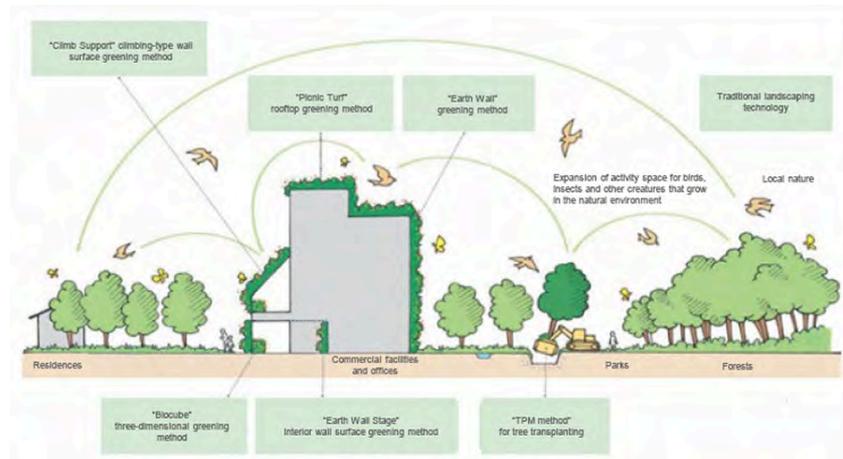


Image representation of building greening

Looking towards the future

We intend on performing more detailed analysis of dependencies, impacts, risks and opportunities. Especially, based on a scenario analysis approach, we will further deepen analysis of the importance of risks and opportunities and the impacts on the businesses and finances of the Group as well as examine the ideal form of nature-related metrics and targets based on international trends as we move forward.

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Nature-Related Information Disclosure in line with TNFD

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 - › Governance
 - › Strategy
 - › Appearance of dependencies and impacts on nature in Group overall
 - › Evaluation of priority locations based on address of Group properties
 - › LEAP Approach in greater Shibuya area
 - › LEAP Approach in Tokyu Resort Town Tateshina
 - › Risk and impact management
 - › Metrics and targets
 - › Initiatives regarding risks and opportunities, dependencies and impacts
 - › Terms and explanations
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-

General Requirement

The TNFD presents six "general requirements" that should be applied across the disclosure, and recommends that companies clarify their position on these items and apply them across the disclosure. Our basic position on each of the General Requirements is described below.

1. Application of materiality

To formulate the **Long-term Management Policy**, the Group identified materialities based on their **importance to the Group's management and to its stakeholders**. One of these is "Create a Sustainable Environment," which includes nature-related themes, and this report discloses information focusing on nature-related issues.

Regarding dependencies and impacts on nature, we explain what is considered material from the perspective of the Group's management and stakeholders. Risks and opportunities are described in terms of what is considered important from the perspective of the impact on the Group's management.

2. Scope of disclosures

In this disclosure, we provide an overview of dependencies and impacts on nature, risks and opportunities for **all business areas and major value chain stages**, as well as a review of priority locations for all locations where we directly own and operate properties. In the priority locations, the Greater Shibuya area and "Tokyu Resort Town Tateshina," which represents 13 areas including resort facilities, we provide a more detailed explanation of dependencies, impacts, risks and opportunities based on our analysis of the area.

Among the items recommended for disclosure, scenario analysis is not included in this disclosure. We plan to deepen our consideration of risks and opportunities based on scenarios in the future.

3. Location of nature-related issues

We recognize that **nature-related issues vary from region to region**. Therefore, for the Greater Shibuya area and Tokyu Resort Town Tateshina, which we have identified as a region of particular priority in terms of nature-related issues for the Group, **we have examined dependencies, impacts, risks and opportunities based on the characteristics of the region and the nature involved**.

4. Integration with other sustainability-related disclosures

We recognize that **nature-related issues are closely related to various other sustainability issues such as climate change, human rights, and relationships with local communities**. For example, preservation of forests and urban greenery can lead to adaptation to the effects of climate change, such as the severity of disasters and the heat island effect, and to climate change mitigation through the absorption of greenhouse gases. Recognizing the relevance of these nature-related issues to other sustainability issues, we will consider how to understand nature-related issues and how to disclose them in an integrated manner.

5. The time horizons considered

In this disclosure, we examine dependencies, impacts, risks, and opportunities **over short- and medium- to long-term time horizons**. As we continue to expand and deepen our region-based analysis, we will further consider what time horizon should be set to appropriately capture the Group's nature-related issues.

6. Engagement with Indigenous Peoples, Local Communities and affected stakeholders

As explained in the "Governance" pillar, we have developed a human rights policy and have identified key human rights issues, including the rights of local communities, including indigenous peoples, and are working to prevent or mitigate human rights impacts by promoting the "Sustainable Procurement Policy" to suppliers. In addition, we strive to respect the human rights of stakeholders related to our business activities in new project candidates and existing operations, and **we engage with local stakeholders in our nature-related initiatives**.

Governance

Governance

Under "governance" by the TNFD, it is recommended that corporations explain oversight by the Board of Directors and the roles of management as they pertain to nature-related dependencies, impacts, risks and opportunities.

The nature-related governance framework at the Company is as follows.

Main roles of Organization

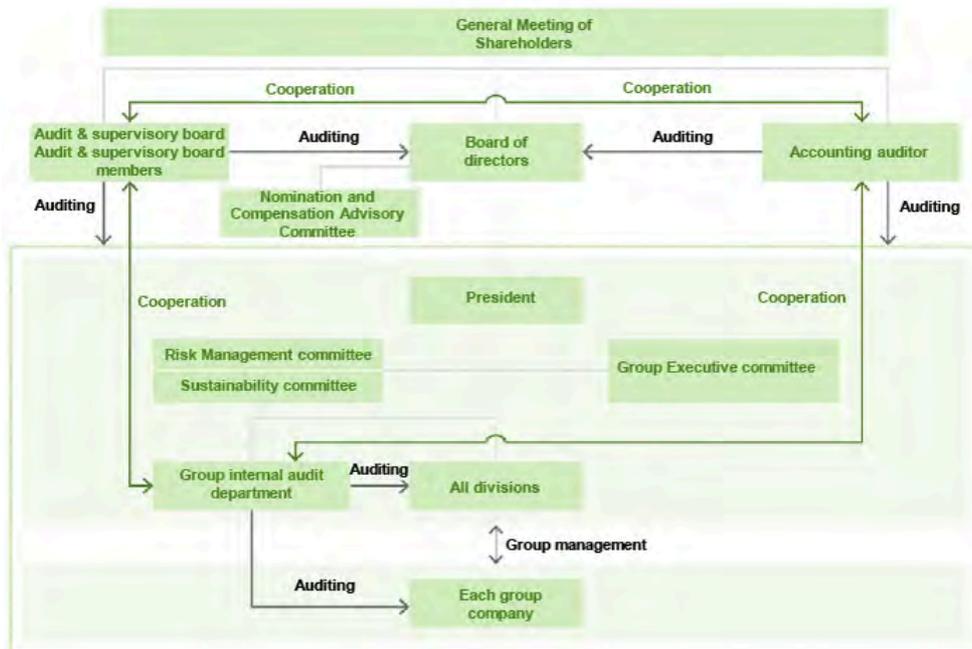
- The group established the Sustainability Committee with the president & CEO (Chair) and operating officers as its members. This committee devises plans and verified results with respect to climate change and other material sustainability issues.
- The board of directors receives reports from the Sustainability Committee on material climate-related issues and the results of deliberations and oversees progress as well as conducts regular reviews.

Having espoused "environmental management" as a group policy as part of its long-term management policy the Company is carrying out environmental initiatives through its businesses with a "decarbonized society," a "recycling-based society," and "biodiversity" under its Medium-Term Management Plan.



Organizational Chart

- The group executive committee and the Sustainability Committee work in tandem to formulate policies, targets (KPI) and action plans related to environmental management, with oversight provided by the board of directors.
- The monitoring of KPI progress and the management of results is conducted by the sustainability committee.



Governance

Human Rights and Stakeholder Engagement

TNFD emphasizes the importance of effective and meaningful engagement with indigenous peoples, local communities, and affected stakeholders with a high connection to nature in assessing and managing nature-related dependencies, impacts, risks, and opportunities, and recommends that this be disclosed in the "Governance" aspect of our work. Below we present our engagement with local communities as it relates to our relationship with nature through our operations including the supply chain.

Respect of Human Rights

The Group recognizes that respecting the human rights of employees and all stakeholders involved in its businesses is an essential requirement of a company with global operations and an expectation placed in all companies. Then, we formulated the "Tokyu Fudosan Holdings Group Human Rights Policy". It is based on this belief that we support the Universal Declaration of Human Rights and other international human rights doctrines and conduct with our suppliers to carry out business activities that fully respect human rights.

We have identified several key human rights issues, including the rights of local communities and indigenous peoples, and forced labor and child labor, including in the supply chain, and are working to establish a human rights due diligence mechanism and to prevent and mitigate human rights risks.

For potential new projects or existing operations, we continuously assess risks related to respect for human rights in accordance with our risk management process to ensure that we respect the human rights of stakeholders involved in the project itself or in our business activities in the community. In procurement, we have established a "Sustainable Procurement Policy" and require our suppliers to respect human rights, as well as promote the procurement of sustainable timber formwork.

Stakeholder Engagement

Because of the significant impact on local communities and stakeholders through its wide-ranging business operations, the Group believes it is necessary to work closely with a variety of stakeholders and promotes dialogue with its employees, local communities, business partners, customers, and other stakeholders. Specific examples of engagement are presented on the next page.

Engagement in urban area

In the Greater Shibuya area, Tokyu Land Corporation, as the secretariat of the Shibuya Area Management Council consisting of the public and private sectors, is engaged in rule-making and community development activities related to community development, including the formulation of local rules for outdoor advertising, disaster and crime prevention measures, information dissemination, and the creation of a lively atmosphere.

In particular, in terms of natural disasters, taking into account the unique characteristics of Shibuya Station, public and private sector stakeholders regularly conduct flooding drills at the underground plaza to guide customers to evacuate and confirm flood countermeasures in case of an emergency. In this way, we are creating a system and rules for peace of mind in the event of a natural disaster. The company has also concluded a “Comprehensive Collaborative Agreement on Local Disaster Prevention in Shibuya Ward” with Shibuya Ward, and is working to improve the local disaster preparedness in Shibuya Ward. Shibuya Ward, which aims to create a disaster-resistant Shibuya community, and the company, which aims to create a sustainable and diverse community, are working together in a public-private partnership to realize their mutual goals and enhance the value of the Shibuya community.



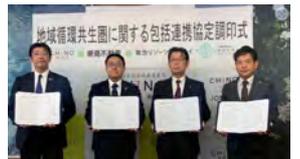
Flooding drills as a countermeasure against heavy rain disasters



Rule-making in case of disaster (measures to help those who have difficulty going home)



“Comprehensive Collaborative Agreement on Local Disaster Prevention in Shibuya Ward (Shibuya Ward,Tokyo)



“Comprehensive Collaborative Agreement on Regional Circular and Ecological Sphere(Chino City, Nagano)

Engagement in countryside area

Tokyu Land Corporation, Tokyu Resorts & Stays Co., Ltd., Chino City, Nagano and the Suwa Regional Decarbonization Innovation Association entered into a comprehensive cooperation agreement intended to contribute to carbon-neutral community planning through the creation of a sustainable, circular and ecological decarbonized society (Regional Circular and Ecological Sphere), and are implementing associated efforts alongside location communities.

To build long-term relationships with local communities and work together to address local issues, Tokyu Land Corporation serves as the Representative Director and Chairman of The Association for Reciprocal Revitalization of Renewable Energy and Region (FOURE) and actively engages in dialogue by giving lectures at municipal councils, prefectural government-sponsored workshops, and other events.

Sustainable Procurement Policy

In the business of real estate that the Group is involved in, given the process between development and operation for residences, office buildings, commercial facilities, hotel and leisure facilities and so forth spans a long period of time and that numerous parties have involvement in that process, we believe that it is necessary to work together with our stakeholders (design and construction companies, customers, etc.) to tackle nature-related issues in our entire supply chain.

The Company has **set forth at “Sustainable Procurement Policy”** that covers consideration towards the environment in the form of “compliance with and respect for international human rights and labor standards,” as well as “combatting climate change,” “biodiversity protection,” “effective use of resources,” “proper water use” and “ensure appropriate use of forest resources,” and is promoting **initiatives for biodiversity conservation across its entire supply chain.**

The following initiatives are cited in the “Sustainable Procurement Policy” with respect to the preservation of the natural environment.

- In material procurement and other business activities, reduce the impact on the surrounding natural environment, biodiversity, and ecosystems.
- Do not use raw materials derived from endangered species of animals and plants for which measures have not been taken to conserve resources and ensure reproduction.
- Work to use resources in business activities effectively.
- Support the conservation of forests with high biodiversity and preservation value, while also respecting the cultures, traditions and economies of communities that coexist with forests. Comply with relevant laws and regulations in logging countries and territories and strive to procure forest products produced in a sustainable manner, including recycled and certified wood.

Supply chain due diligence

For the building companies that constitute our suppliers, we set forth compliance with our Sustainable Procurement Policy as a condition upon placing orders for building work, and regularly carry out due diligence questionnaires to verify the situation at each of those companies. We aim to establish a responsible supply chain by cooperating with building companies to respond to issues when they are present. In FY2023, in addition to obtaining responses from 97 companies through our regular questionnaire survey, **we held individual meetings for two of those companies to remedy problematic areas, share leading cases,** and so forth.



Performance of due diligence on suppliers

Initiatives toward eliminating forest destruction

Many of the concrete formwork plywood panels used in construction are made from tropical timber, which may be produced due to the environmental destruction of native forests and land confiscation from indigenous peoples. Our group has collaborated with construction companies that are the primary suppliers and set the target of achieving a **use rate of sustainable timber (FSC and PEFC-certified timber, domestic timber)** among **raw materials for concrete formwork plywood used in building construction of 100% by 2030**. The following types of initiatives were advanced to that end:

Examples in residences

- In FY2022, PEFC-certified materials were used for formwork plywood in the construction project of one condominium building (Brands Chiyoda Fujimi). The origin and legality are also confirmed to the extent possible for non-certified wood products used in interior materials and other parts. Additionally, in June 2023, construction began on "COMFORIA Shibaura 4-chome (tentative name)". This was planned as a wooden hybrid structure building that incorporates formwork wood and sustainable wood (domestic or PEFC-certified material) in the RC structure.
- Tokyu Re-Design is participating in the Carbon Neutral Solid Wood Group and collecting information on wood products used in residences.

Examples in office buildings and commercial facilities

- COERU SHIBUYA (completed June 2022), located in Greater Shibuya area, used SGEC-certified Nagano Prefecture-based larch wood as a wood hybrid fire-resistant laminated lumber; legal wood from Finland was used for wood-steel kumiko panels (earthquake-resistance braces).
- The TENOHA building in Forestgate Daikanyama is an activity hub that collaborates with businesses and governments engaged in circular economy activities and connect regions and cities. Consistent with its status as an activity hub, the building uses structural materials made from thinned wood from Nishiawakura Village, Okayama Prefecture, which is a forest under the Group's conservation program. (see "Other initiatives: Resource circulation" for details).



BRANZ Chiyoda Fujimi



COMFORIA Shibaura 4-chome
(tentative name)



COERU SHIBUYA



TENOHA DAIKANYAMA

Revisions to Biodiversity Policy

In 2011, the year after the COP10 in 2010, the Group **formulated its Biodiversity Policy**.

In addition to promoting the planning of communities that coexist with nature, we endorsed the 30 by 30 initiative by the Ministry of the Environment in March 2022, joined the TNFD Forum in June 2023, and otherwise set our sights on **domestic and international social and policy trends and frameworks** that include the “Kunming-Montreal Global Biodiversity Framework” (GBF); the National Biodiversity Strategy, the Machizukuri (Urban Development) GX Strategy and guidelines by the Japanese government, and so forth. Based on **the Group’s history of environmental consideration and coexistence with nature up to this point**, we took this examination based on TNFD disclosure as an opportunity to revise the Group’s Biodiversity Policy in the following manner. Based on this, we will promote initiatives aimed at biodiversity going forward.



BIODIVERSITY POLICY (SUMMARY)

Commitment

While respecting international goals that seek to realize “Living in harmony with nature” and “nature positive” as set forth in the “Kunming-Montreal Global Biodiversity Framework” (GBF), working together with our stakeholders, we will promote initiatives to circumvent and minimize our negative impact on biodiversity and expand our positive impact on biodiversity.

- Assessing the dependencies and impacts on biodiversity through our businesses, reducing/preventing negative impact on nature and extracting positive impact on nature
- Assessing ecosystems in local communities under the development, operation and management of real estate, circumventing and minimizing loss, and promoting land utilization that achieves harmony with the conservation and regeneration of biodiversity and the improvement of people’s comfort and resilience
- Promoting the preservation of ecosystems based on the GBF target of preserving 30% of land and sea areas
- Improving resource utilization efficiency based on sustainable resource procurement conscious of the environment and human rights and a circular economy approach
- Proactive engagement with stakeholders
- Education and enlightenment activities aimed at improving literacy regarding biodiversity and ecosystem services for various stakeholders as a whole

Strategy Framework

Under “strategy” by the TNFD, it is recommended that corporations explain the nature-related dependencies, impacts, risks and opportunities that they identified, the effects those exert on companies’ businesses, strategies and financial plans, the resilience of strategies based on scenarios, and priority locations for business activities and value chain.

In the Report, the below information is examined as it pertains to the Group’s business, with an accompanying explanation given between [Strategy Framework ~ Important Risks and Opportunities in Business Areas Other Than Those Listed Earlier](#).

The impact of nature-related risks and opportunities on the Group’s business and finances will be further examined, taking into account the concept of scenario analysis.

Recommended disclosures for “Strategy”	Information examined for this report
Explanation of dependencies and impacts on nature	Group overall: Overview of dependencies and impacts on nature
	Quantitative and qualitative examination of dependencies and impacts in line with LEAP Approach
	Greater Shibuya area (priority location)
	Tokyu Resort Town Tateshina (priority location)
Explanation of nature-related risks and opportunities and their impacts on businesses, strategy, etc.	Group overall: Identification of envisioned risks and opportunities based on dependencies and impacts on nature
	Identification of risks and opportunities based on examination of dependencies and impacts
	Greater Shibuya area (priority location)
	Tokyu Resort Town Tateshina (priority location)
Explanation of priority locations	Examination of priority locations from standpoint of nature at addresses of properties held and operated

Appearance of Dependencies and Impacts on Nature in Group Overall

Using TNFD classification as a reference, we examined a summary of the nature of dependencies and impacts according to business and value chain steps and their qualitative importance. Additionally, using the sector-specific ratings in the tools ENCORE, which was developed by the UN Environment Programme (UNEP), and SBTs for Nature as a reference^{*1}, we sorted out the importance of dependencies and impacts according to four steps between Very High and Low. The results of that analysis are as follows.^{*2}

- Impacts**
 - “Terrestrial ecosystem utilization” was especially high from aspects such as land modification/occupation, etc. upon real estate development and operation.
 - The likes of water use and the introduction of alien species was also high at the stages of GHG emissions, waste emissions and operation.
- Dependencies**
 - In addition to supply services for the likes of water resources and building materials upon operation, cultural services such as landscape improvement and comfort were also high.
 - At hotel and leisure facilities, the likes of water supply, pollinator and climate regulation were high at the production stage for ingredients, etc. at the upstream of the value chain.

Segment	Business activities	Sales volume	Value chain	Impacts on nature										Dependencies on nature				
				Terrestrial ecosystem use	Freshwater/marine ecosystem use	Resource use		GHG emissions	Contamination	Waste	Other	Provisioning services		Regulating and maintenance services		Cultural services		
						Water	Other resources					Water resources	Other resources	Alleviation of impacts	Climate regulation		Other	
Urban development	Offices and commercial facilities/condominiums and rental housing, etc.	High	Building and development	VH			M	H	M	H	H		M	L				
			Operation	VH		H		H		H		H		L	L		H	
Strategic investment	Renewable energy facilities (Solar power/wind power/ biomass)	High	Building and development	VH			M	H	M	H	H		M	L				
			Fuel production	H				H	H			VH						
	Logistics facilities	High	Building and development	VH			M	H	M	H	H		M	L				
			Operation	VH				H		H	H			L	L		M	
Property management and operation	Condominium management/ Environment and greening management	High	Management, renovation and construction	VH							H							
	Hotel, golf course, ski resort, etc.	High	Building and development	VH	VH		M	H	M	H	H		M	L				
			Production of ingredients, etc.	VH	VH	VH		H	H			VH	VH	VH	VH	VH		
	Healthcare, etc.	High	Building and development	VH			M	H			H	H		M	L			
			Operation and use	VH				H		H		H		L	L		H	

Click on image to enlarge

*1: For ratings at the stage of building and development under all businesses and at the stage of operation for properties other than the Renewable Energy and Hotel and Leisure Businesses, we examined importance while making supplements and adjustments as necessary based on “real estate” in each tool.

For ratings at the stage of operation under the Renewable Energy Business, we used “renewable energy” in each tool as the basis. For ratings at the stage of operation of leisure facilities, we used “hotels, resorts and cruises” in each tool as the basis. For ratings at the stage of production of biomass fuel, ingredients, etc., we used subindustries under “forest products” and “agriculture” in each tool as the basis.

*2: With regards to the segment “Real Estate Agents,” given that the importance of dependence and impacts at the stage of direct operation is not high and that indirect dependencies and impacts are similar to other real estate businesses, said segment has been omitted from this table.

Evaluation of Priority Locations based on Address of Group Properties

As the importance of the relationship with nature at the development to operation stages at Group properties is believed to particularly high within the value chain, we evaluated priority locations for properties at 267 main sites under the Urban Development business and Property Management & Operation Business (offices/commercial facilities, hotels, leisure facilities, renewable energy facilities, etc./March 2024) based on the address of the properties. The priority locations were selected based on the indicators in the table below, which refer to the TNFD's perspective of ecologically sensitive locations, as well as the importance of the company in terms of dependency, impact, risk and opportunity.



Metrics and information used for location prioritization

Evaluation perspectives In the TNFD Framework	Metrics referred to
Ecosystem integrity ^{*1}	Evaluated according to how high the Biodiversity Intactness Index ^{*2} is
Biodiversity importance	Evaluated with the below metrics taken into total consideration <ul style="list-style-type: none"> ● Status of proximity of protected regions with Key Biodiversity Area (KBA)^{*3} ● STAR Index^{*4} ● Conservation priority level^{*5}
Water stress	Evaluated according to how high Baseline Water Stress ^{*6} is

*1: Established as the degree to which the composition, structure and functions of the ecosystem are within the scope of natural fluctuation.

*2: Metric denoted as a percentage (%) that indicates the extent to which species are remaining relative to cases where the ecosystem has only been subject to the minimum disturbance. (Source: References²⁾
 (For the Biodiversity Intactness Index, 100% is assigned to so-called “untouched nature.” Otherwise, this index indicates the degree to which biological species are remaining after the ecosystem of the land in question has been “touched”)

*3: Significant regions serving as a key to the conservation of biodiversity as selected according to international standards.

*4: Metric representing a quantification of the possibility that activities to reduce threats to species in that area contribute to the reduction of extinction risk around the world as a whole.

*5: Metric indicating priority level based on the prevention of the extinction of biological species and the conservation of biodiversity in light of information on the distribution of biological species. (Source: References³⁾)

*6: Metric indicating level of stress on water at basins based on percentage of water consumption relative to water supply volumes at the basins. (Source: References⁴⁾)

Ecosystem integrity: The sites of urban offices, commercial facilities, and urban hotels have low ecosystem integrity, while those of rural resort hotels, leisure facilities, and renewable energy facilities have moderate to high integrity.

Biodiversity importance: Of all sites, 114 (March 2024) were in proximity to protected areas. Many areas with high preservation priority regardless of urban or rural area classification. Scoring is conducted based on indicators, with relative importance within our group being mapped.

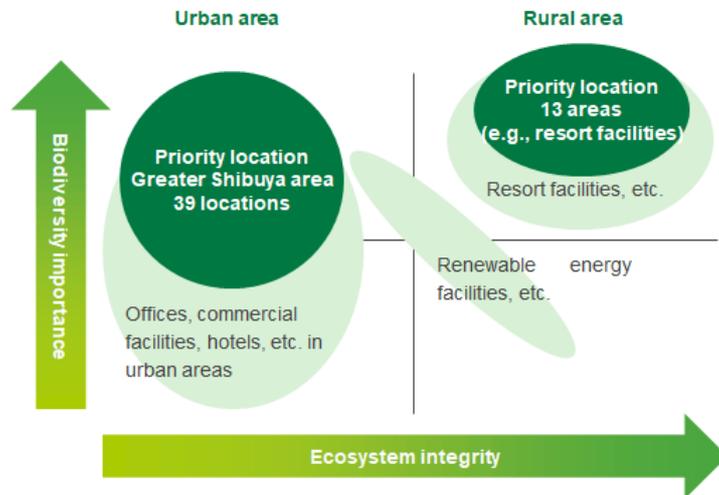
We assigned scores based on metrics and mapped relative importance within the Company.

Water stress: There are no properties in areas with very high (or high) water stress.

The areas that should be given special priority investigation (priority locations) in terms of our group's nature-related risks and opportunities were summarized together with the analysis results of each indicator in the figure below after considering the results in [Appearance of Dependencies and Impacts on Nature in Group Overall](#) of investigating the all-nature dependencies and impacts of our group.

A detailed investigation on the nature dependencies, impacts, risks, and opportunities was conducted on the **urban development business in "Greater Shibuya area" and hotel and leisure business in "Tokyu Resort Town Tateshina"** using LEAP, an approach that provides TNFD ([LEAP Approach in Greater Shibuya Area ~ Important Risks and Opportunities in the Hotel and Leisure Business \(Including Tokyu Resort Town Tateshina\)](#)).

<p>Priority location (1): Greater Shibuya area (39 properties)</p> <p><i>*Area within 2.5 km radius of Shibuya Station</i></p>	<p>Based on the dependencies and impacts analysis in Appearance of Dependencies and Impacts on Nature in Group Overall, when considering business scale (sales volume), it is thought that the urban development business has a particularly large nature impact. Among these, "Greater Shibuya area" was selected as the priority location due to its importance in terms of nature-related risks and opportunities after considering that it is an area of focus where a large number of our group's properties are accumulated. Biodiversity importance here is particularly high among urban areas (see State and Importance of Nature in Greater Shibuya Area), and surveys and research on ecosystems have been continuously conducted here in the past.</p>
<p>Priority location (2): 13 areas (e.g., resort facilities)</p>	<p>Although the relative importance impact after considering business scale is not as large as the urban development business, "13 areas (e.g., resort facilities)," which have high importance in terms of ecosystem integrity and biodiversity importance, were selected as a priority location. Of those areas, Tokyu Resort Town Tateshina was selected for its status as a large-scale and core resort facility that includes a hotel, golf courses, ski areas, and vacation homes, and as a representative location that is highly important in terms of its dependencies and impacts on our group's business and nature. A detailed evaluation was then conducted.</p>

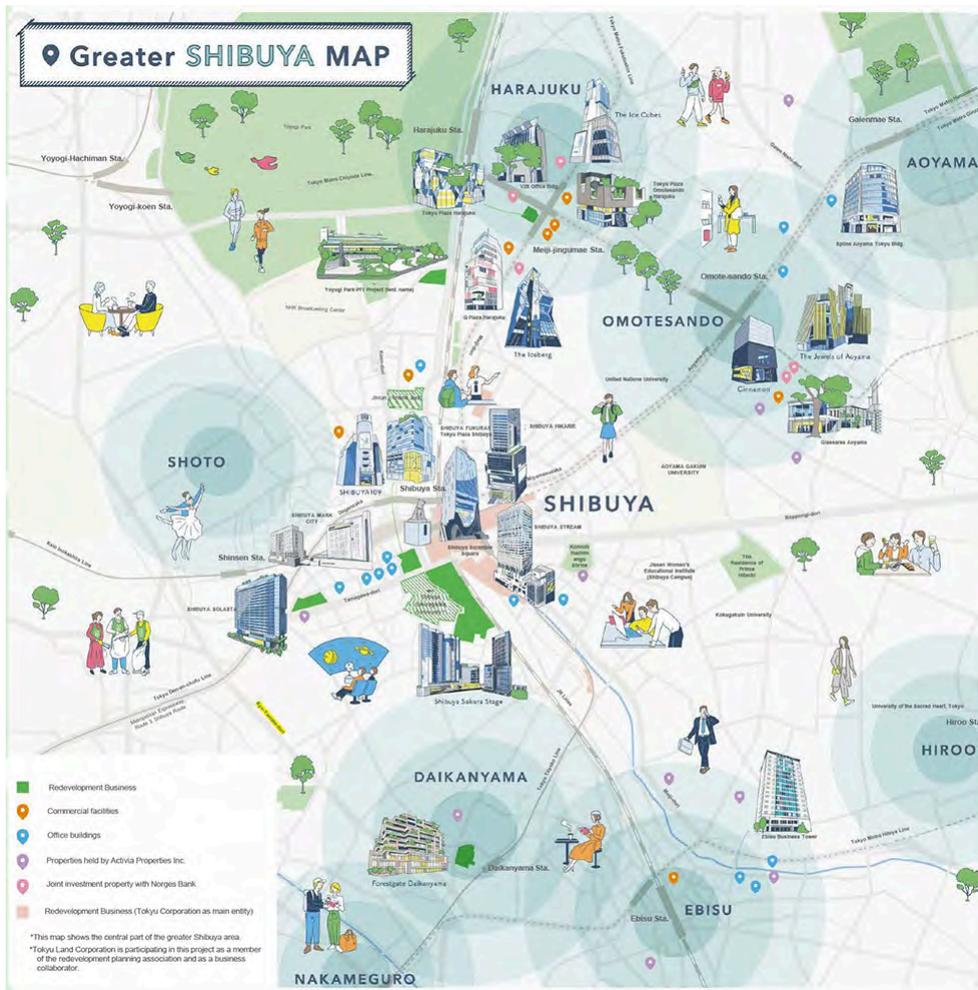


LEAP Approach in Greater Shibuya Area and Tokyu Resort Town Tateshina

Based on the LEAP Approach presented by the TNFD, we performed a more detailed examination of dependencies and impacts on nature and accompanying nature-related risks and opportunities as they pertain to the greater Shibuya area and Tokyu Resort Town Tateshina, which we established as a priority location. More specifically, we examined the below information.

<p>Locate Discovery of the interface with nature</p>	<ul style="list-style-type: none"> ● Priority locations (Group overall: Overview of dependencies and impacts on nature ~ Examination of priority locations from standpoint of nature at addresses of properties held and operated) ● Assessment of state and importance of nature with which businesses in the Greater Shibuya area and Hotel and leisure business have points of contact
<p>Evaluate Evaluation of dependencies and impacts</p>	<ul style="list-style-type: none"> ● Qualitative organization of dependencies and impacts through the value chain in urban development in the Greater Shibuya area and Tokyu Resort Town Tateshina ● Quantitative evaluations in cooperation with Think Nature Inc.
<p>Assess Assessment of risks and opportunities</p>	<ul style="list-style-type: none"> ● Organization of external environmental factors ● Examination of risks and opportunities in Urban Development Business centered in the greater Shibuya area and hotel and leisure business
<p>Prepare Preparation for response and reporting</p>	<ul style="list-style-type: none"> ● Examination and organization of existing initiatives for risks and opportunities

■ Map of Greater Shibuya Area



■ Tokyu Resort Town Tateshina (Chino City, Nagano)

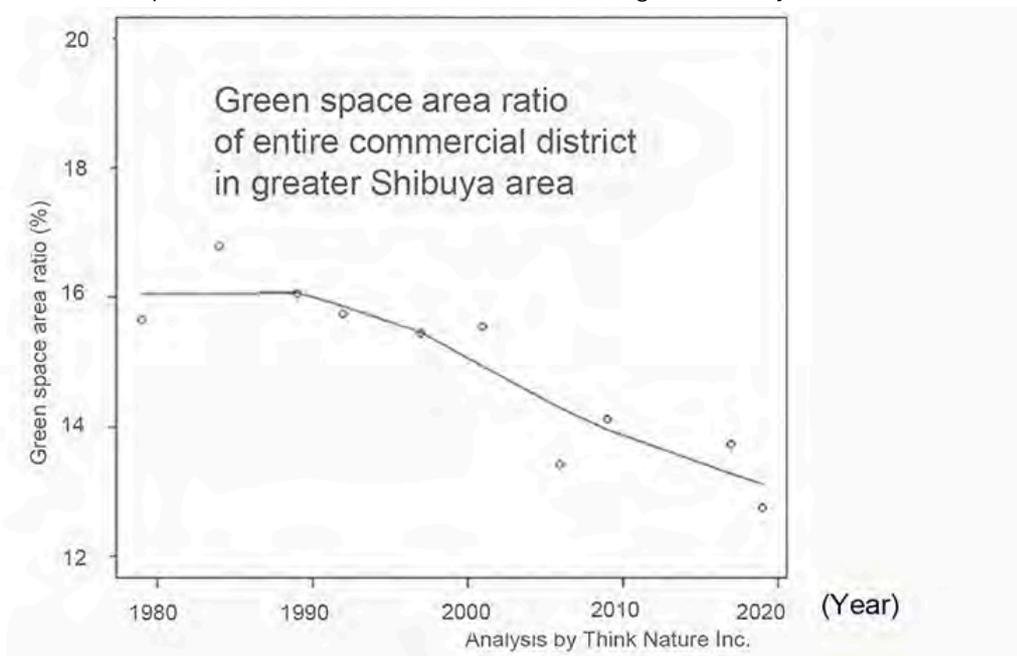


State and Importance of Nature in Greater Shibuya Area

Ecosystem integrity

The greater Shibuya area is an ecosystem type centered on “the city and industries.” It is not a region with high ecosystem integrity. At the same time, since the 1980s, the green space area ratio of the entire commercial district in the greater Shibuya area has continued to decrease (as calculated according to aerial photographs). It is likely that the region’s **ecosystem integrity is trending further downwards**.

Green space area ratio of entire commercial district in greater Shibuya area

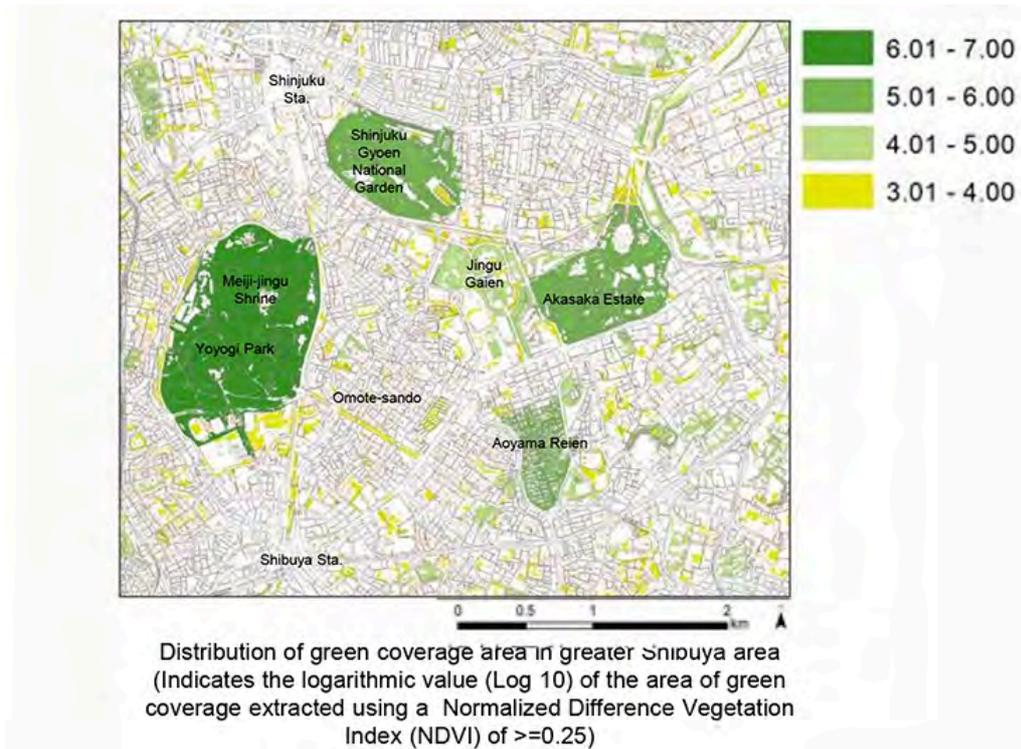


Analysis by Think Nature Inc.

Biodiversity Importance

Between FY2016 and FY2018, three parties, TOKYO CITY UNIVERSITY and Group members ISHIKATSU EXTERIOR INC. and Tokyu Fudosan R&D Center Inc., performed a collaborative investigation and research⁶⁾ on the ecosystem in the greater Shibuya area. The greater Shibuya area is surrounded by large-scale green spaces that include **Meiji-jingu Shrine/Yoyogi Park, Shinjuku Gyoen National Garden and the Akasaka Estate**. Meanwhile, the downtown area that has large-scale green spaces surrounding it is widely dotted with smaller pockets of green. This and other characteristics make it an area that **coexists with nature, a rarity for a city center**.

It is believed that new and endangered species as well as plant and animal species not commonly found in urban areas inhabit those large-scale green spaces. The greater Shibuya area is therefore believed to be a **key region in forming an ecological network that links together such large-scale green spaces**.



ECOLOGICAL NETWORK

An organic network of regions centered on those that host superior natural conditions. An ecological network yields the following effects: By making it possible to conduct foraging, nesting, breeding and other inhabiting stages within the region, this network contributes to preventing the extinction of populations and drops in genetic diversity. The establishment of relationships among various species also links to a recovery in the diversity of species in the region as a whole.

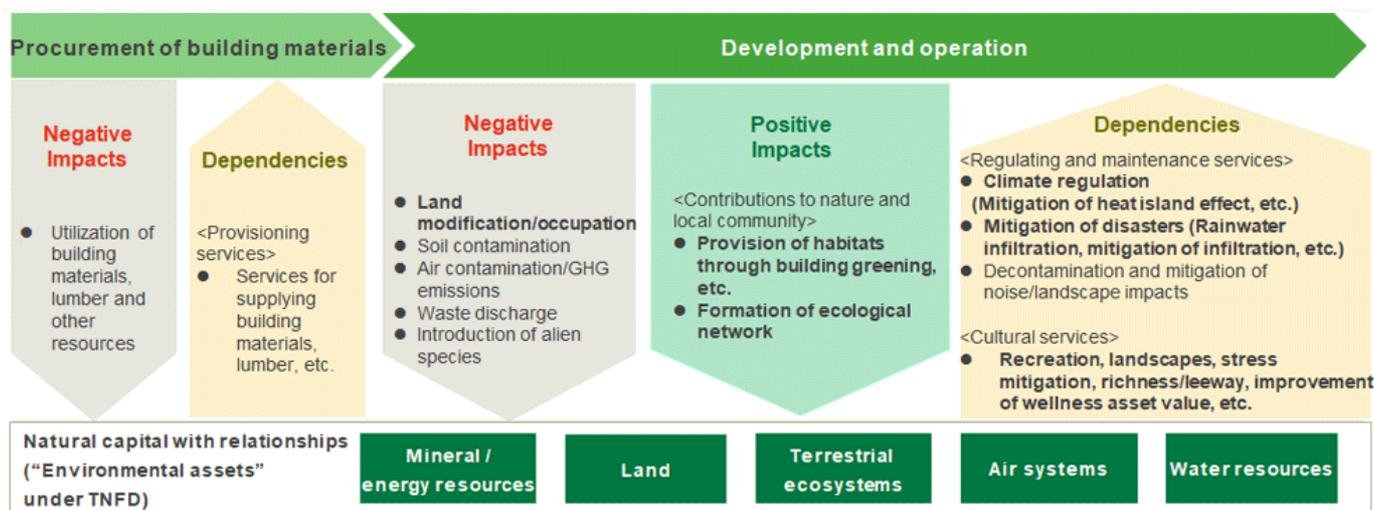
Dependencies and Impacts (Overall Picture)

An overall picture of dependencies and impacts through the value chain in the Urban Development Business in the greater Shibuya area is shown in the below diagram.

At the procurement stage for building materials, that business exerts dependencies and impacts on **building materials, lumber and other resources**. At the development and operation stage for real estate, while there is a possibility that the business will exert negative impact such as land modification and occupation, the business is dependent on nature from the standpoint of **regulating services**^{*1} such as the **mitigation of the heat island effect and disasters** and **cultural services**^{*2} such as **comfort, stress mitigation and recreation**. Also, aside from negative impact, the business, largely through its building greening initiatives, is also believed to exert a positive impact on ecosystems, such as by providing habitats for living things. Dependencies and impacts that are believed to carry especially high importance are explained in detail starting on the next page.

Dependencies and impacts on nature in value chain

*Bolted items are dependencies and impacts that are believed to carry especially high importance



*1: Regulating and maintenance services: Services that control the environment through biodiversity. Examples are the effects gained through climate regulation, the mitigation of localized disasters, the inhibition of soil erosion, and the containment of pests and sickness within the ecosystem.

*2: Cultural services: Cultural services that people can obtain by coming into contact with nature and that impact them from aesthetic, spiritual, physiological and other aspects.

Positive Impact Through Provision of Habitats

Investigation of growth/habitat services in greater Shibuya area

As part of the collaborative research⁷⁾ conducted by TOKYO CITY UNIVERSITY, ISHIKATSU EXTERIOR INC. and Tokyu Fudosan R&D Center Inc., an investigation of butterfly species was conducted in the greater Shibuya area that targeted three biodiversity-considerate properties with rooftop gardens placed and their peripheral area. As a result, the presence of butterfly species was verified in the rooftop green spaces of each of those properties. **Of particular note is how it became clear that building greening by the Group may be functioning as part of an ecosystem network connecting Meiji-jingu Shrine to Harajuku and Omote-sando to exert a positive impact on peripheral ecosystems through providing habitats.**

Areas where the presence of butterfly species has been verified



Ongoing implementation of biological monitoring in greater Shibuya

Method of investigation

- Bird species study (Observational study/fixed-point photography and filming study)
 - For a total a three times in June, September and January, the “Omohara Forest “was arbitrarily surveyed, and the species names, population, behavior, etc. of bird species whose presence was verified based on visual observation, bird calls, etc. were recorded.
 - Using birdbaths use frequently by birds as the focus, birds were automatically photographed and filmed in flight with sensing cameras and video cameras.
- Insect species survey (Arbitrary observational study)
 - For a total a three times in June, August and September, the “Omohara Forest” was arbitrarily surveyed, and the species names, population, behavior, etc. of insect species whose presence was verified based on visual observation, insect calls, etc. were recorded.

At “Tokyu Plaza Omotesando “Omokado;” which is located in the greater Shibuya area, **monitoring studies of bird and insect studies at the “Omohara Forest” rooftop garden** have been conducted yearly since FY2012 (except for certain periods such as the COVID-19 pandemic) to assess changes in the inhabiting and flying situation of living creatures there⁸⁾.

Ongoing implementation of biological monitoring in greater Shibuya area

Regarding bird species, between FY2012 and FY2019, the presence of 10 to 16 species was verified every year, or 22 species cumulatively.

For example, *Parus minor*, pairs of *Passer montanus* and the like were verified to nest in next boxes, and various species of bird such as *Turdus naumanni* were verified to drink in birdbaths, feed/forage through planting, rest, and so forth. This made it clear that a number of bird species use “Omohara Forest” as a habitat on a constant basis.

Regarding insect species, between FY2012 and FY2019, the presence of 40 to 64 species was verified every year, or 151 species cumulatively.

In particular, the presence of 9 species that include *Papilio xuthus*, which has superior mobility; *Hyalessa maculaticollis*, whose source of food lies inside rooftop green spaces; and *Graphium sarpedon*, was continuously verified over that 8-year period.

Based on monitoring results as well, it is inferred that **building greening efforts, particularly those in “Omohara Forest,” are exerting a positive impact on the ecosystem through the provision of habitats for living creatures in the greater Shibuya area.**

The Company intends to keep on assessing the condition of nature by continuing monitoring going forward.



Omohara Forest

■ List of bird species over time and observation photographs (verification survey)

No.	Order Name	Family Name	Species Name	
			Japanese Name	Scientific Name
1	Columbidae	Columbidae	Kijibato	<i>Streptopelia orientalis</i>
2	Suliformes	Phalacrocoracidae	Kawau	<i>Phalacrocorax carbo</i>
3	Ardeidae	Pelecaniformes	Aosagi	<i>Ardea cinerea</i>
4	Accipitridae	Accipitridae	Ohtaka	<i>Accipiter gentilis</i>
5	Picidae	Picidae	Kogera	<i>Dendrocopos kizuki</i>
6	Passeriformes	Corvidae	Onaga	<i>Cyanopica cyanus</i>
7			Hashibosogarasu	<i>Corvus corone</i>
8			Hashibutogarasu	<i>Corvus macrorhynchos</i>
9		Shjukara	Shjukara	<i>Parus minor</i>
10		Tsubame	Tsubame	<i>Hirundo rustica</i>
11		Hiyodori	Hiyodori	<i>Hypsipetes amaurotis</i>
12		Mejro	Mejro	<i>Zosterops japonicus</i>
13		Mukudori	Mukudori	<i>Spodiopsar cineraceus</i>
14			Komukudori	<i>Agropsar philippensis</i>
15		Turdidae	Tsugumi	<i>Turdus naumanni</i>
16	Jobitaki		<i>Phoenicurus auroreus</i>	
17	Ezobitaki		<i>Muscicapa griseisticta</i>	
18	Passeriformes	Passeriformes		<i>Passer montanus</i>
19	Motacillidae	Hakusekirei		<i>Motacilla alba</i>
20	Fringillidae	Kawarahiwa		<i>Chloris sinica</i>
21	(Columbidae)	(Columbidae)	Kawarabato (Dobato)	<i>Columba livia</i>
22	Psittaculidae	Psittaculidae	Wakakehonseiinko	<i>Psittacula krameri manillensis</i>

7 Orders/ 16 Families/ 22 Species

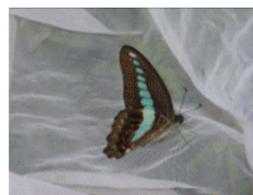
Note 1: Species names and classifications are in accordance with the "Check-List of Japanese Birds (7th Ed.)" (Ornithological Society of Japan, 2012).



Passer montanus (Nesting in pairs)



Hakusekirei



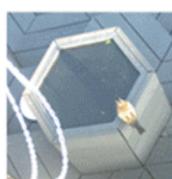
Graphium sarpedon



Shjukara



Turdus naumanni (Birdbath)



Coccinella septempunctata

Quantitative Evaluation of Impacts Based on Building Greening (Methods)

Among the impacts on nature with a high degree of importance that were examined on [Dependencies and Impacts in Greater Shibuya Area \(Overall Picture\)](#), the impacts on the ecosystem based on land occupation and building greening of Group properties were quantitatively analyzed with the cooperation of Think Nature Inc.

Overview of quantitative analysis

- Target: 39 Group office and commercial facility properties in the greater Shibuya area
- Method: Quantitatively analyzed biodiversity regenerative effects based on planting before and after the building of the properties based on Think Nature Inc.'s big data on biodiversity while factoring in the quantified planting situation before building (tree species and number) and the current planting situation at each property (tree species and number) based on aerial photographs.

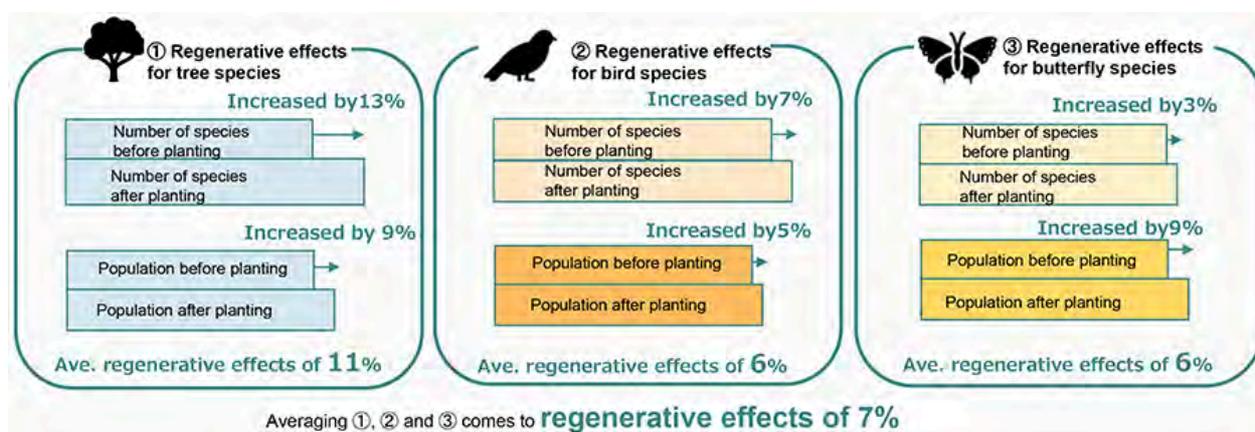


SHIBUYA SOLASTA

Biodiversity regenerative effects

Based on the **relationship between planted tree species and the birds/butterflies that use them**, the percentage by which living creatures that inhabit the inside of a 1-km grid at the construction site increased or decreased before and after building was calculated for each number of species and populations across three classification groups, with the average of all six percentages used in results.

* The below diagram indicates the approach behind Think Nature Inc.'s analysis methods.



Source: Think Nature Inc.

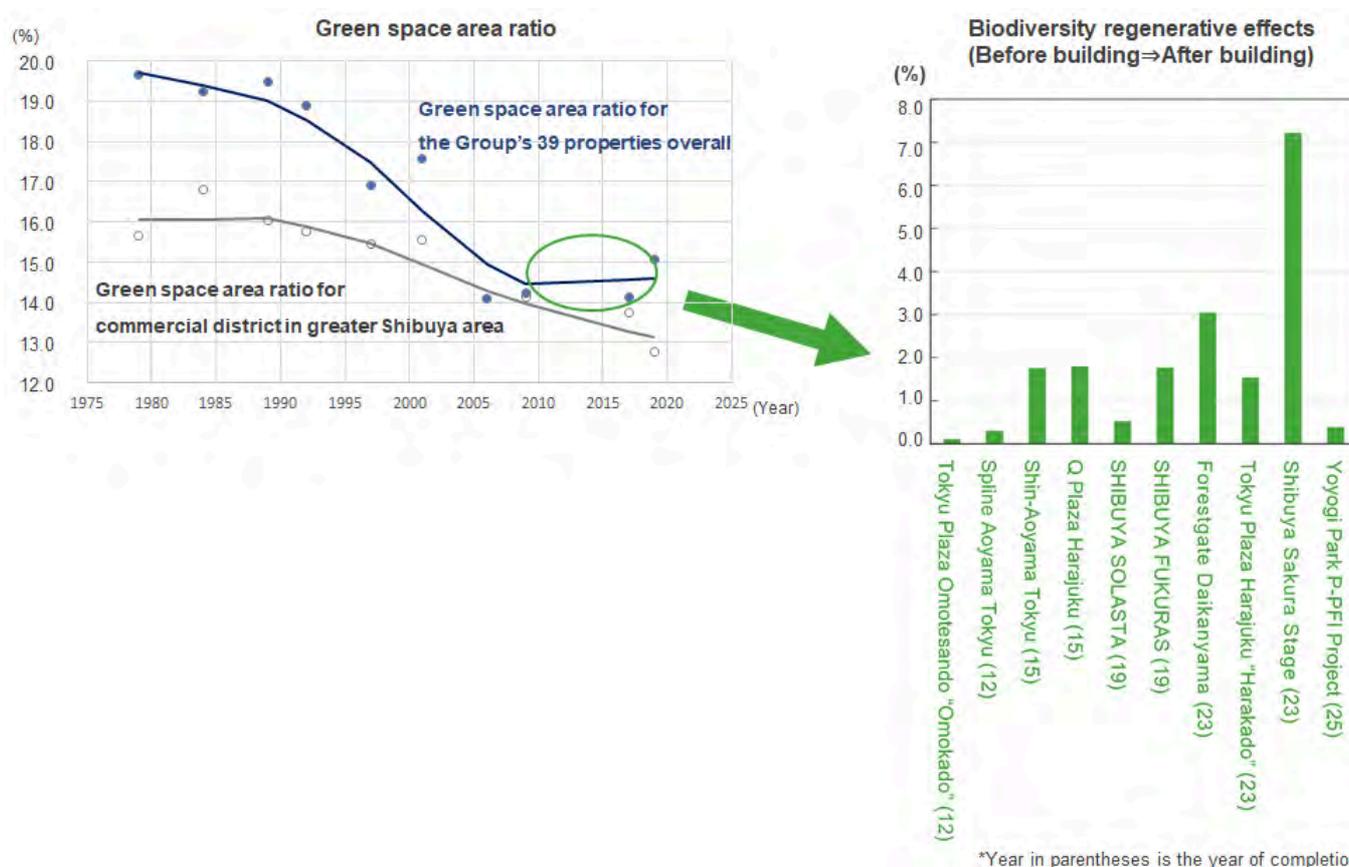
Quantitative Evaluation of Impacts Based on Building Greening (Results)

Contributions to nature positive in greater Shibuya area

Since the 1980s and particularly from 1990 up through the 2000s, the green space area ratio had been trending downwards before and after building. However, for the Group's 39 properties overall, the ratio has been **trending above the average for the entire commercial district**. Furthermore, since 2010, which represents a global turning point that included the holding of the 10th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP10), **biodiversity loss was reversed to put nature on a path to recovery (nature positive)**.

Regarding biodiversity regenerative effects, said effects before and after building were positive at 15 properties out of all 39. In particular, biodiversity regenerative effects at properties completed in FY2012 and beyond are high. We believe these are **contributing to the recovery of biodiversity in the greater Shibuya area as a whole**.

In the Group's forte of planning communities that coexist with local communities, particularly those focused on target facilities under our Urban Development Business, we believe that engaging in development and operation that achieve a harmony between the securing of the quality and quantity of green space and the comfort of community visitors and facility users have linked to the high biodiversity regenerative effects shown in recent years.



Quantitative Evaluation of Impacts Based on Land Utilization/Greening

Evaluation of ecological network formation

With the help of Regional Environmental Planning, Inc., an environmental consulting company that assists with biodiversity initiatives, we analyzed the current situation of the formation of an ecological network in the greater Shibuya area and the direction of that formation .

Based on analysis of the current situation surrounding topography and green space, it was verified that the topography of the greater Shibuya area has the lowlands of the valleys of the Shibuya River and Meguro River intertwining with the Musashino Plateau, and that much green space remains on slopes facing the valley formation and valley areas.

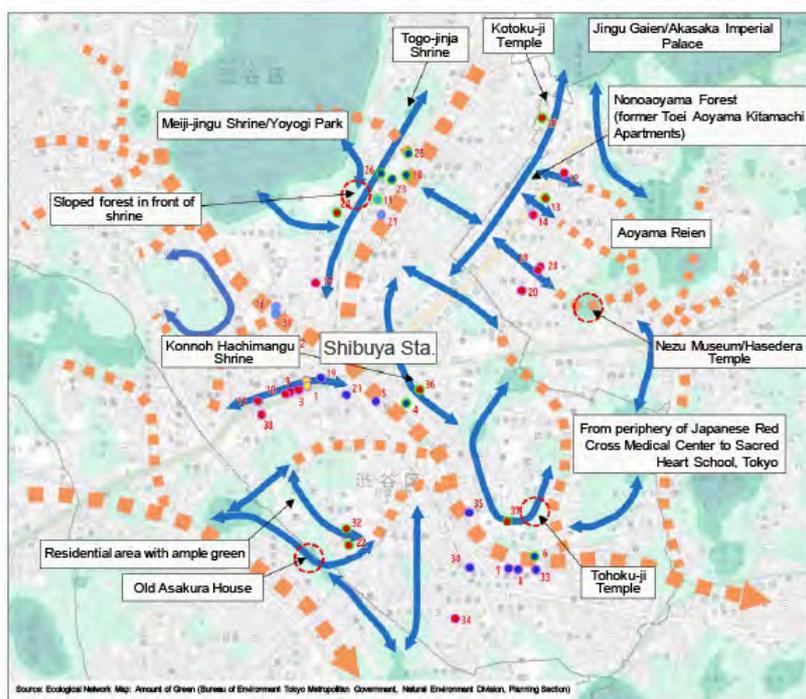
Additionally, the Company’s properties are located at the red circles on the map to the right, which also constitute locations where fellow properties of ours are in proximity to each other or are concentrated.

We have found that focusing on the following three areas will likely prove beneficial for the purpose of further enhancing our future ecological network,

- ① Locations with large amounts of green are in proximity to each other
- ② Valleys, slopes along the valleys, etc. are topographically connected
- ③ Target properties are in proximity to each other/concentrated together

We plan to give consideration to the maintenance of green space according to the characteristics of the site, and will continue to conduct biological monitoring.

■ Connection of valley configuration in greater Shibuya area and direction of ecological network formation



- : Main peripheral green spaces located in valley areas and on slopes
- : Axis of connection of valley configuration
- : Axis of reinforcement/enhancement of ecological network

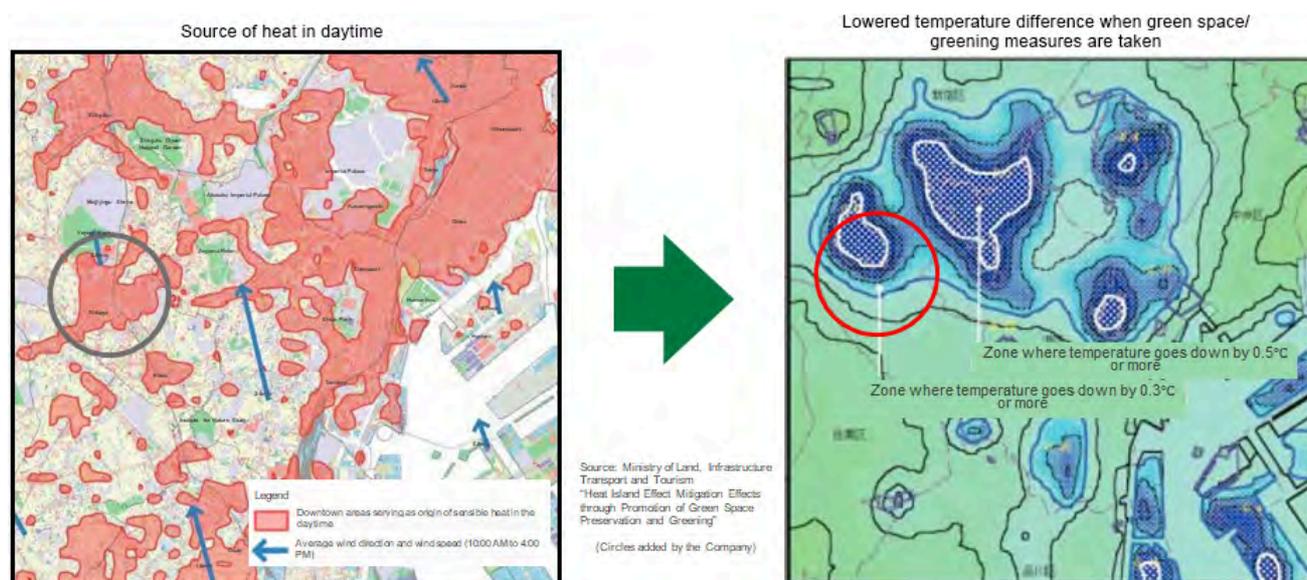
(Source: Regional Environmental Planning, Inc. (2023)
 "Survey on Ecological Networks
 that Contribute to Biodiversity in Greater Shibuya Area")

Dependencies on Regulating and Maintenance Services

Importance of climate regulation, disaster mitigation, etc. (regulating and maintenance services in cities)

In the National Biodiversity Strategy and Machizukuri (Urban Development) GX Strategy by the Japanese government and the Regional Biodiversity Strategy by the Tokyo Metropolitan Government, functions such as **the mitigation of the heat island effect through nature and the reduction of flood damage** are emphasized as key ecosystem services in cities. From the standpoint of dependencies, these ecosystem services for disaster mitigation and climate regulation are believed to be crucial. According to the Ministry of Land, Infrastructure Transport and Tourism, while the area surrounding the greater Shibuya area (the area circled on the map) is an origin of heat, it is believed to be a region that can be expected to drop in temperature should green space preservation and greening measures be comprehensively taken.

Additionally, under Shibuya City's "Green Development Policy," it is established that forming connections with large-scale green areas through building greening and other means contributes to the **creation of cool spots** that serve to mitigate the heat island effect in cities. This is believed to be important from the aspect of exerting a positive aspect on such regulation services as well as the aspect of dependencies.



Dependencies on Cultural Services

Functions for nature-based stress mitigation and comfort (cultural services)

As part of the new “GREEN WORK STYLE” that it is promoting at its office buildings, the Group performed scientific verifications of **the impacts and effects that green (vegetation and nature) have on people**. For example, following a verification of the effects of breaks taken in rooftop spaces containing green, we found that stress levels after taking breaks where green was present were 6.0 points lower than those for indoor locations with no green present, and that levels of concentration rose considerably as well. Based on these results, we can also conclude that in cities, the greater Shibuya area included, the importance of cultural services is high from the aspects of the effects on wellness in the form of **better landscapes, stress mitigation and comfort; improved productivity** coming from the likes of inspiration, invigorated communication and boosts in motivation for working individuals; and the appeal and higher asset value of office, commercial and other facilities.

Overview of demonstration experiment

Purpose: To verify the impacts that taking breaks in spaces with vegetation have on stress and intellectual productivity following breaks

Subjects: 14 individuals (4 males in their 30s/3 males in their 40s; 4 females in their 30s/3 females in their 40s)/Date and time: Saturday, June 2, 2018

Location of implementation: Hibiya Park Front (Conference Room/Rooftop Terrace)

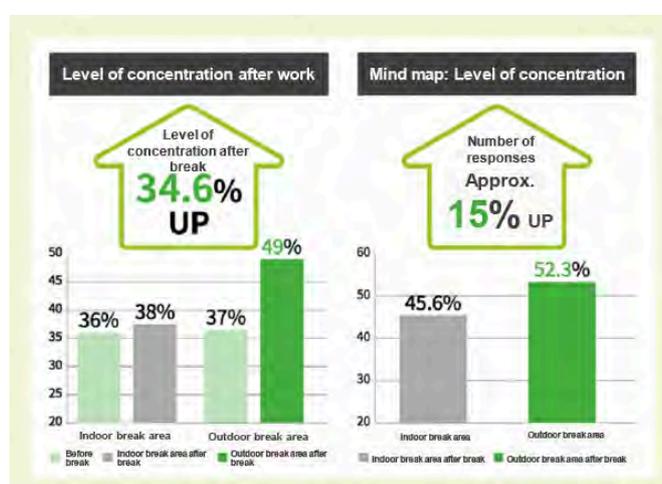
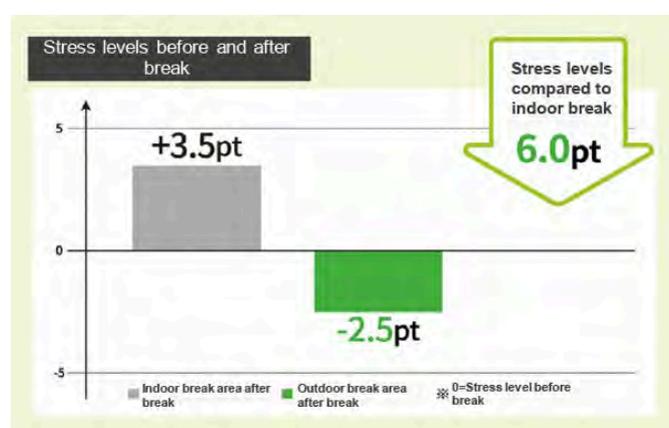
Data gathered: Brain waves, EEG, number of responses and correct answer rate for tasks for work purposes, and subjective evaluations

Equipment used: KANSEI Analyzer (© Dentsu Science Jam)

Details: After performing tasks for work purposes, subjects were asked to take a break in

- ① <Space with vegetation> or ② <Space with no vegetation> .

After taking a break, subjects were asked to perform tasks for work purposes once more, and a verification was performed to see if there were visible differences in the stress values obtained from the KANSEI Analyzer and the impacts of work on task efficiency between ① and ②.





Hibiya Park Front

Important Risks and Opportunities in Urban Development Business Centerd on the Greater Shibuya Area

Based on dependencies/impacts on nature at the Group, after referring to information on the external environment such as related social trends and the direction of national government policy as well, we examined risks and opportunities envisioned in our Urban Development Business. Risks and opportunities believed to be important following a qualitative examination are as follows.

While physical risks due to the degradation of ecosystem services that we are dependent on, transition risks due to changes in regulations and the market environment and other risks are envisioned, we found that as shown on the next page, there is potential for numerous nature-related opportunities to arise.

Risk classification		Main dependencies and impacts	Description of risks in Urban Development Business
Physical risks	Acute/Chronic	Mitigation of heat island effects (Dependencies on regulation services)	<ul style="list-style-type: none"> ● Increase in A/C costs, etc. and deterioration of living/stay environment in cities due to worsening of heat island effect in line with land development by the Company and its stakeholders
		Recreation; visual amenities (Dependencies on cultural services)	<ul style="list-style-type: none"> ● Deterioration of landscapes and other drop in appeal of community and fall in its asset value due to natural degradation in line with land development by the Company and its stakeholders.
Transition risks	National policies/laws	Procurement of building materials, lumber and other resources (Impacts on nature)	<ul style="list-style-type: none"> ● Shortage in building materials, lumber, etc. and increase in procurement costs due to stronger regulations related to land modification and resource extraction for the sake of protecting nature
		Land modification and occupation due to development and operation of offices, commercial facilities, and other properties (Impacts on terrestrial ecosystem)	<ul style="list-style-type: none"> ● Increase in costs to accommodate regulations due to stronger regulations calling for improved greening ratios at properties
	<ul style="list-style-type: none"> ● Increase in handling costs due to introduction and/or reinforcement of regulations/national policies calling for enhancement of green quality, such as through consideration towards ecological network formation or planting of native species 		
	Market		<ul style="list-style-type: none"> ● Growth in preferences of customers and tenants towards properties that exert positive impact on nature through limited negative impact on nature/enhanced quantity and quality of green, ecological network formation, etc. (risk)
	Technology	Utilization of water, building materials, etc. (Impacts from resource utilization)	<ul style="list-style-type: none"> ● Increase in costs for introducing building technology with high resource/energy efficiency and low environmental footprint
Reputation	Negative impact from land modification/occupation, contamination, waste discharge, introduction of alien species, etc.	<ul style="list-style-type: none"> ● Criticism and/or litigation addressing development and/or operation that exerts negative impact on the community's ecosystem or landscape or on its cultural services involving nature 	

Classification of opportunities			Main dependencies and impacts	Description of opportunities in Urban Development Business
Opportunities	Market	Customers/tenants	<p>Lowering of negative impact such as land modification/occupation, contamination and waste discharge</p> <p>Positive impact on ecosystems (and ecosystem services) such as provision of habitats through greening and ecological network formation</p>	<ul style="list-style-type: none"> Growth in preferences of customers and tenants towards properties that exert positive impact on nature through limited negative impact on nature/enhanced quantity and quality of green, developments in greening technology, ecological network formation, etc.
		National policies/laws		<ul style="list-style-type: none"> Gaining of national policy-based support and incentives for quality and quantity of green spaces under Urban Development Business
		Capital flow/finance		<ul style="list-style-type: none"> Increase in investments in real estate that exert positive impact on nature through limited negative impact on nature/enhanced quantity and quality of green, developments in greening technology, ecological network formation, etc.
	Reputational Capital	Corporate value		<ul style="list-style-type: none"> Improvement in Company's reputation and corporate value through businesses activities that reduce negative impact on nature and exert positive impact through ecosystem-conscious real estate development, sustainable resource procurement, the reduction of contamination, etc.
		Engagement/community value		<ul style="list-style-type: none"> Improvement in relationships with local community through development and operation efforts that exert positive impact on nature through development/operation with limited negative impact on nature/enhanced quantity and quality of green, developments in greening technology, ecological network formation, etc.
				<ul style="list-style-type: none"> Increase in appeal of entire community and improvement in its brand value and asset value through business operation that draws out the appeal of the nature in the community

About Tokyu Resort Town Tateshina

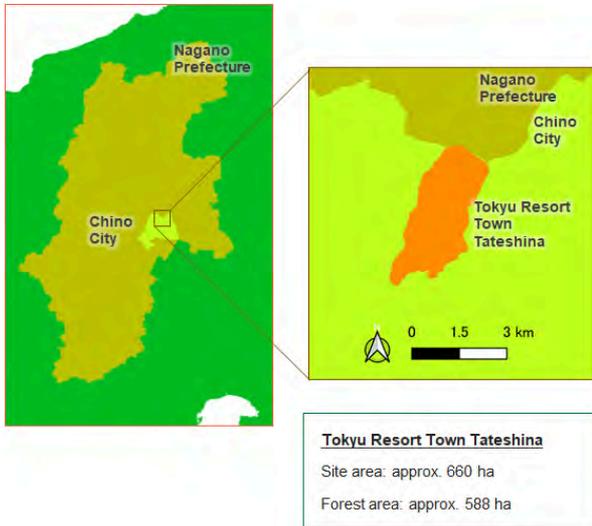
"Tokyu Resort Town Tateshina" is a large-scale resort complex located almost in the center of Tateshina Plateau in the northeastern part of Chino City, Nagano Prefecture, at an elevation of 1,100–1,800 m and a total site area of approximately 660 ha (approximately 140 Tokyo Domes' worth). The complex includes Tokyu Harvest Club Tateshina, a members-only resort hotel, as well as a hotel with 250 rooms, golf courses (18 holes), ski areas, vacation homes (detached houses, resorts, villas), approximately 2,300 plots, a hot springs facility, restaurants, and shops. It was constructed in 1974, with the opening of the Tateshina Tokyu golf course and the first phase of sales of vacation homes starting in 1978, after which the ski area, tennis courts, and hotels were opened. There are several facilities and services where customers can enjoy abundant nature, including a diverse array of activity, healing, and workcation options.

Visitors can see the Yatsugatake mountain range from within the town. Summers are comfortable, with minimum temperatures sometimes even dipping below 10 °C from July to August. The refreshing, low-humidity climate provides a natural environment suited to avoiding the heat.

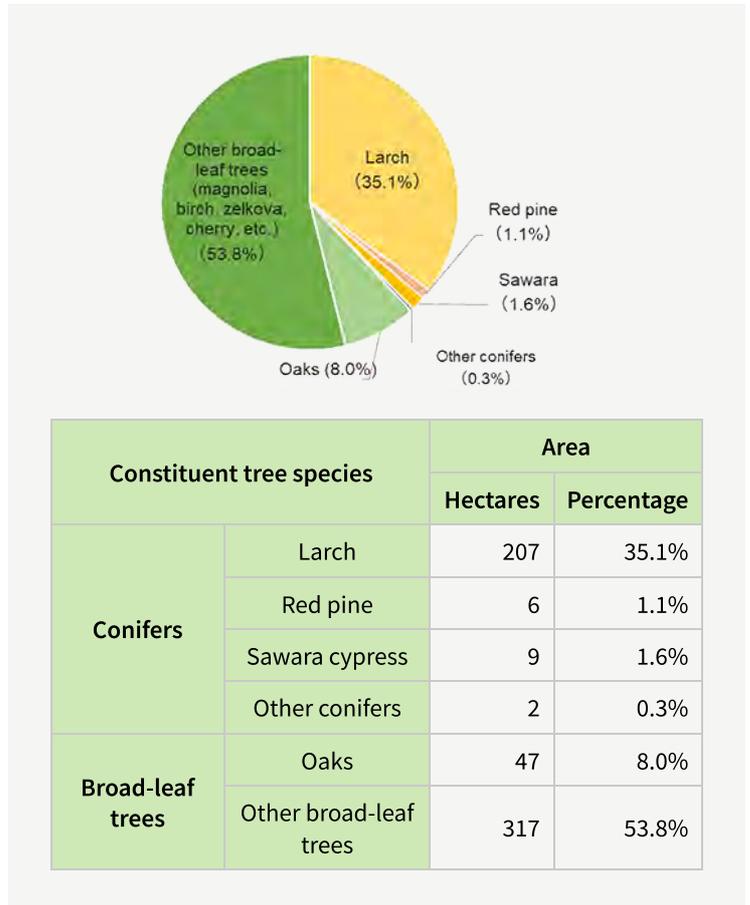


Characteristics of the Nature in Tokyu Resort Town Tateshina

"Tokyu Resort Town Tateshina" is a large-scale resort complex that includes a hotel, golf courses, ski areas, and vacation homes. This site also includes a vast forest spanning approximately 588 ha, of which over 30% are larch forests planted for lumber in the post-war period. The large presence of oaks, such as water oak, is a characteristic of the forest.



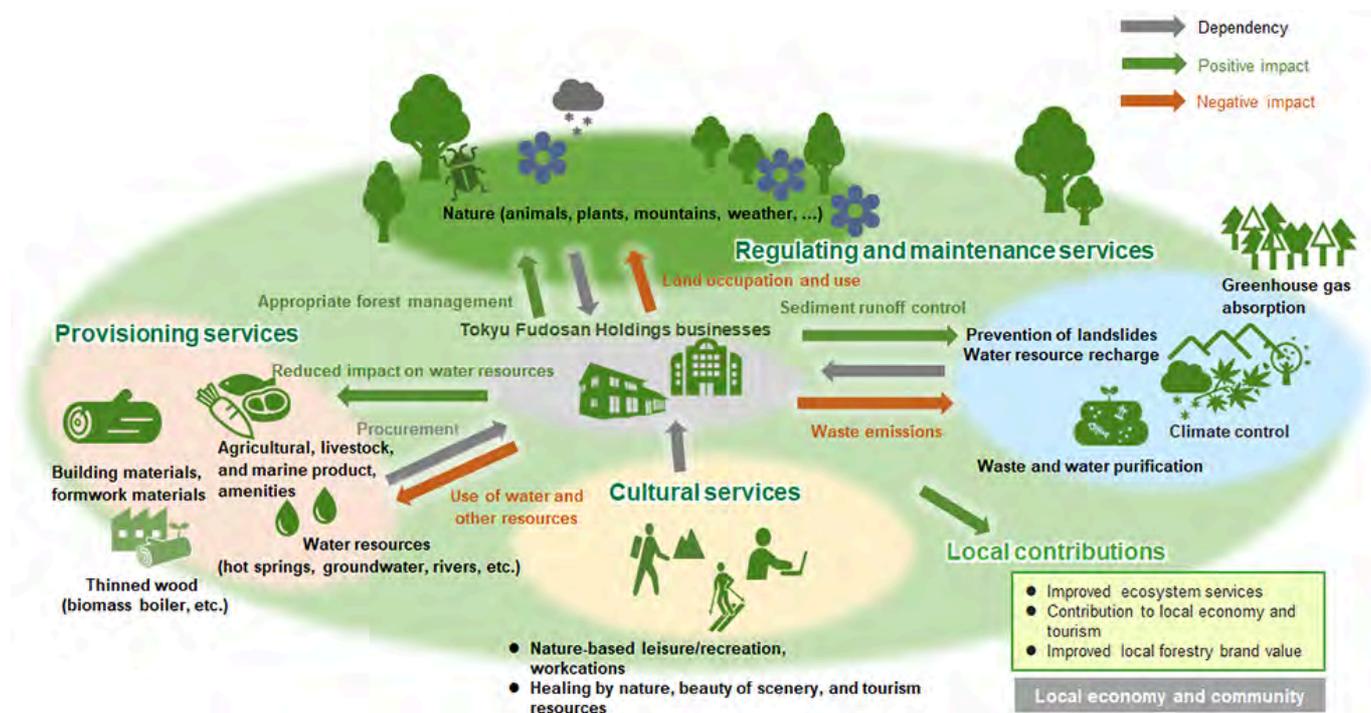
“Tokyu Resort Town Tateshina” forest composition



* Forest area and composition tabulated from forest registers owned by our company or published by Nagano Prefecture.

Overall Picture of Nature Dependencies and Impacts Through Business

As shown in the figure below, business at “Tokyu Resort Town Tateshina” has various nature and ecosystem service dependencies. Nature and its bounties are particularly important in terms of operation. Both negative and positive nature impacts are given.

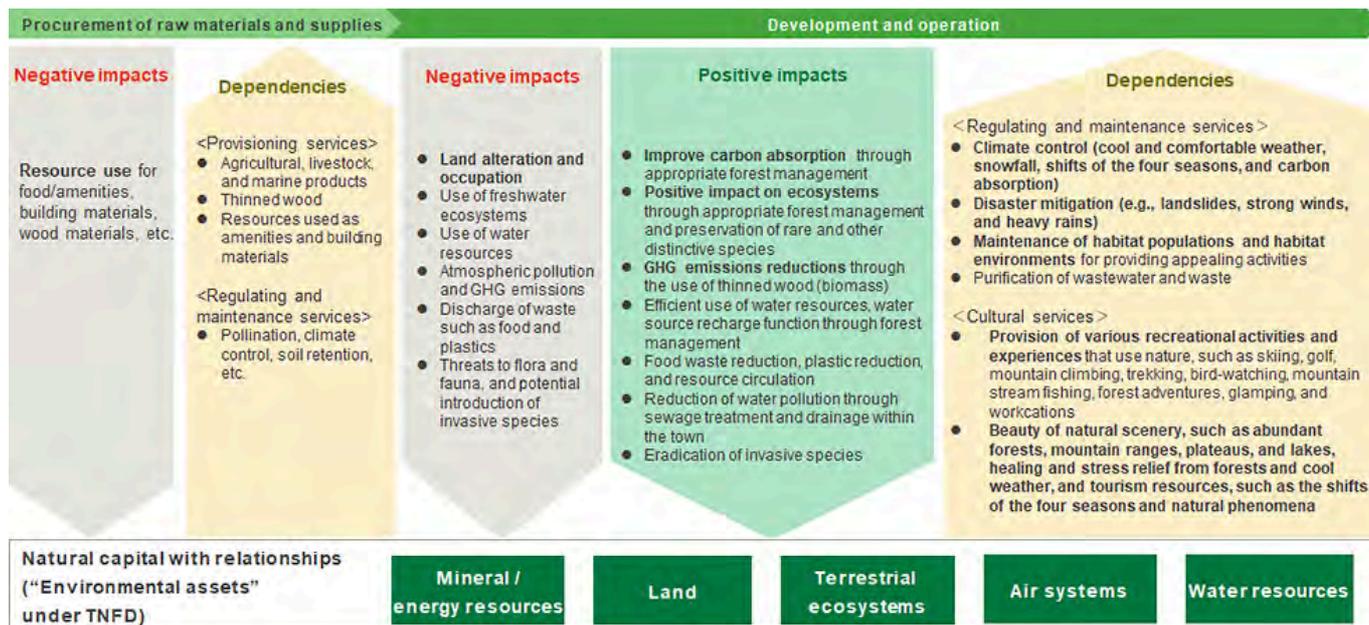


The overall picture of dependencies and impacts through value chains in the business at “Tokyu Resort Town Tateshina” is as shown in outlined below.

At the procurement stage, there are various resource dependencies through food, building materials, and wood materials, and there are also impacts. At the development and operation stage, there is the possibility of **negative impacts, such as land alteration and occupation, and positive impacts due to initiatives such as forest management**. There are also **dependencies on cultural services such as tourism resources and recreational activities, and regulating and maintenance services, such as climate control and disaster mitigation**. Details on particularly important dependencies and impacts are explained in the following page.

Nature dependencies and impacts in value chain

*Bold text refers to particularly important dependencies and impacts



Evaluation of Nature Dependencies as Tourism Resource (Methods)

“Tokyu Resort Town Tateshina”, which is surrounded by abundant nature, **has various natural resource dependencies as a tourism attraction.**

Therefore, a detailed analysis on the nature dependencies of “Tokyu Resort Town Tateshina” as a tourism resource was conducted **in collaboration with Think nature Inc. and centering on an analysis of species.**

Overview of analysis

Source: Think Nature Inc.

- **Characteristics as tourism resources:**
 - Many visitors who enjoy the **fall foliage, which represents the golden fall foliage of the larch species**, that are abundant in the forest in the town, as well as **fresh greenery** in the spring and early summer.
 - Many visitors year-round with the aim to **mountain climb or trek**, taking advantage of the site location at the foot of the Yasugatake mountain range.
- **Distinctive vegetation**
 - **Larch forest:** Distinctive vegetation in the area, and is highly regarded as “Larch Gold” for its beautiful fall foliage
 - **Water oak community:** Common vegetation in the area and includes many species with excellent fall foliage.
 - **Lingonberry-Pumila pine community:** Common alpine vegetation in the area and meets the needs of mountain climbers.
- **Quantitative evaluation of dependencies**
 - Whether this distinctive vegetation is abundant even at a national scale is quantitatively determined by analyzing the **characteristic (i.e., abundant) species**, mainly the above vegetation, in and around Tokyu Resort Town Tateshina, based on the organism distribution big data of Think Nature Inc.. Specifically, the "lift values" on the right were calculated.

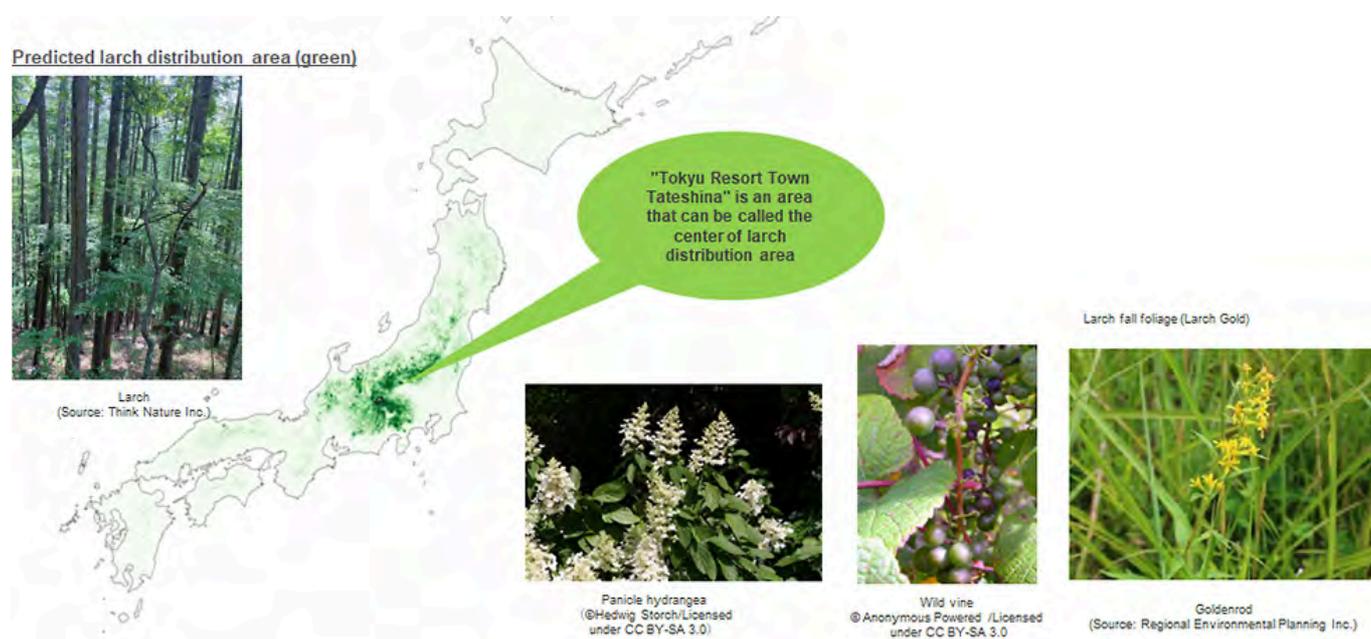
- **Determination of characteristic species due to lift value**
 - Value that shows how many times the population of the species in the analyzed area (“Tokyu Resort Town Tateshina” and Chino City) is larger than the population of the species in all of Japan.
 - **A Value > 1 indicates many areas that are suited as habitats compared to all of Japan.**

Name	Tokyu Resort Town Tateshina	Chino City
Larch	14.2	11.2
Panicle hydrangea	4.1	4.0
Wild vine	3.7	3.0
Goldenrod	3.4	3.2
Water oak	1.5	0.8
Redvein maple	4.2	3.8
Pumila pine	10.2	9.7
Lingonberry	9.8	10.1
Rowan	12.6	11.8
Erman's birch	5.7	4.6

Evaluation of Nature Dependencies as Tourism Resource (Results)

Analysis result (1): Larch forests

“Tokyu Resort Town Tateshina” has **abundant larch**, even at a national level, **to the extent that the site could be called the center of the larch distribution area**. Larch is an **endemic species in Japan** and is the only deciduous conifer; hence, fresh greenery can be enjoyed in the spring, and fall foliage can be enjoyed in the autumn. Characteristic vegetation in larch forests also included plants that bring color to the foothills, such as panicle hydrangea, wild vine, and the beautiful flowering goldenrod. These **abundant vegetation** and their resulting **beautiful scenery increase the appeal of “Tokyu Resort Town Tateshina” as a tourist site** and support the business in terms of the **maintenance and increase of the exchange population of visitors and related populations**.



Source: Think Nature Inc.

Analysis result (2): Water oak

Results for water oak showed that, although not necessarily a predominant species in Chino City, it was the predominant species in “Tokyu Resort Town Tateshina”. Water oak communities have an **abundance of vegetation with colorful foliage**, including maples such as redvein maple as well as oaks. As with the larch in the previous page, the **abundant vegetation** and resulting **beautiful scenery** are one of the appeals that support the business at “Tokyu Resort Town Tateshina” as a tourist site.

Predicted water oak distribution area (green)



Water oak
(Source: Think Nature Inc.)



Redvein maple



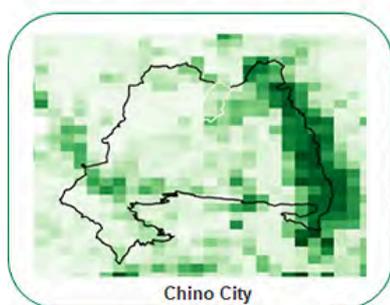
Fall foliage at Tokyu Resort Town Tateshina

Source: Think Nature Inc.

Analysis result (3) Pumila pine

Areas with high Pumila pine habitat suitability were distributed in sync with the ridgeline of the Yasugatake mountain range, and the habitats of the alpine vegetation Pumila pine were abundant even at a national level in Chino City (near Tokyu Resort Town). Furthermore, there were abundant habitats of not only vegetation related to the lingonberry-Pumila pine community, but also vegetation with fall foliage properties, such as Erman's birch. This alpine vegetation is thought to be one of the appeals for hikers.

Predicted Pumila pine distribution area (green)



Chino City



Pumila pine
(©S24/Licensed under CC BY-SA 3.0)



Lingonberry
(Source: Regional Environmental Planning Inc.)



Erman's birch
(©Agnes Monkelbaan/Licensed under CC BY-SA 4.0)



Fall foliage of Erman's birch
(©Sten Pores/Licensed under CC BY-SA 3.0)

Source: Think Nature Inc.

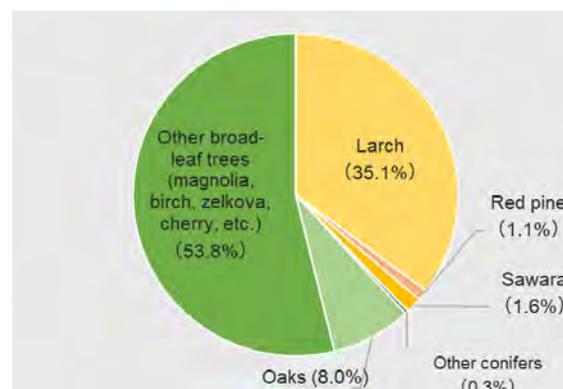
Quantitative Evaluation of Dependencies on Carbon Absorption Function (Methods)

The amount of CO₂ absorption through the forest in “Tokyu Resort Town Tateshina” was calculated to determine the “forest carbon absorption function”, one of the dependent nature functions.

Overview of analysis

- **Target:** “Tokyu Resort Town Tateshina” forests (forest area: approx. 588 hectares)
- **Method:** Use of Forestry Agency’s “Carbon dioxide absorption and fixation amount ‘visualization’ calculation sheet”
- **Data sources:** Forest registers and forest plans owned by our company or disclosed by Nagano Prefecture

Forest composition



Overview of visualization sheet

Item	Details
Creation and disclosure	Forestry Agency
Characteristics	<ul style="list-style-type: none"> • Calculate and display CO₂ absorption amount through forest preservation, such as J-Credit system or prefectural certification • Calculate CO₂ absorption amount by inputting site location, tree species, age class (forest age: 5-year units), area, etc.
Formula	Annual CO ₂ absorption amount per hectare = ①Annual trunk growth per hectare × ②Expansion factor × (1 + ③Underground ratio) × ④Bulk density × ⑤Carbon content × ⑥44/12
Definitions of factors	<ul style="list-style-type: none"> ①Annual trunk growth per hectare: the volume that tree trunks in one hectare grows per year (m³/ha) ②Expansion factor: factor for adding volume of tree branches ③Underground ratio: ratio of tree root volume to aboveground volume (trunk + branches) ④Bulk density: factor for converting the volume of wood to weight (t/m³) ⑤Carbon content: percentage indicating the amount of carbon per ton of wood weight ⑥44/12: factor for converting carbon amount to carbon dioxide amount

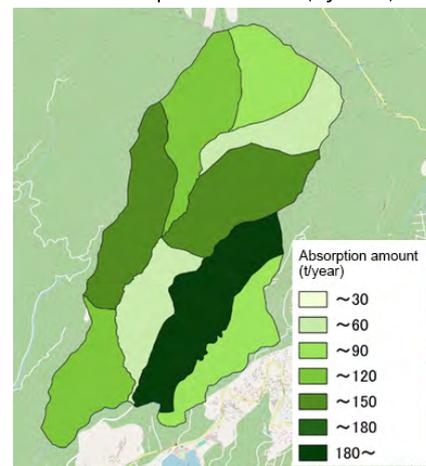
Quantitative Evaluation of Dependencies on Carbon Absorption Function (Results)

CO₂ absorption amount by forests (single year)

Analysis results showed that, per year, the entire forest of “Tokyu Resort Town Tateshina” absorbs 892 t of CO₂, equivalent to the annual household emissions of approximately 240 general households (*).

CO ₂ absorption amount	Absorption amount by species		Total
	Larch	Other species	
Annual estimated value (t-CO ₂ /yr)	340	552	892
Annual estimated value per hectare (t-CO ₂ /ha/yr)	1.6	1.4	1.5

CO₂ absorption amount (by area)



Absorption amount varies even within each location due to different tree species and age compositions in each area.

* Calculated from amount of CO₂ emissions per household from “Japan Greenhouse Gas Inventory (FY2021)”

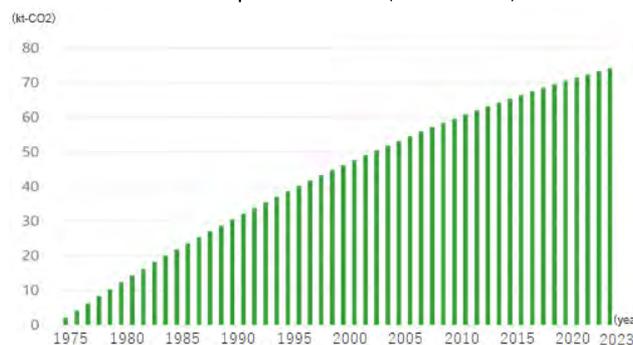
Forest CO₂ absorption amount (cumulative)

Based on the assumption that the forest area and species composition remain unchanged, with the tree age changing over time, the previous status of the forest was estimated, and the cumulative CO₂ absorption amount from development (around 1974) to 2023 was calculated.

Calculation results showed that a cumulative total of approximately 74,000 t of CO₂ was absorbed in the entire forest of “Tokyu Resort Town Tateshina.” This is equivalent to an annual average of approximately 1,480 t of CO₂, which is equivalent to the annual emissions of approximately 400 households.

Cumulative CO ₂ absorption amount	Absorption amount by species		Cumulative total
	Larch	Other species	
Estimated cumulative amount from 1974 to 2023 (t-CO ₂)	31 k	43 k	7.4 k

CO₂ absorption amount (cumulative)



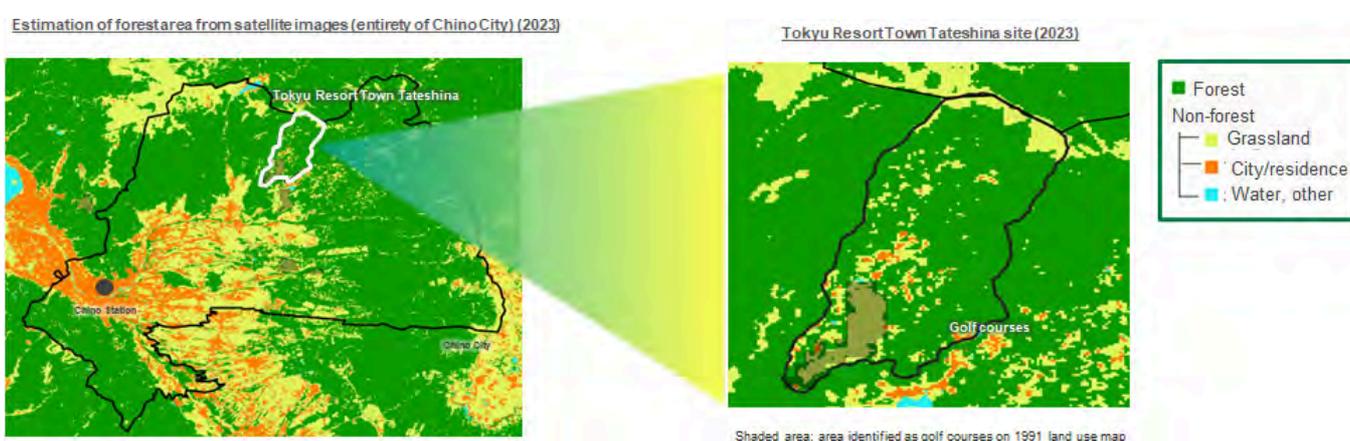
Quantitative Evaluation of Impacts Due to Land Use (Methods)

Among the impacts due to the business summarized on “[Characteristics of the Nature in Tokyu Resort Town Tateshina](#)” ~ “[Overall Picture of Nature Dependencies and Impacts Through Business](#)”, the impact of land alteration and occupation from facility development and operations was evaluated as an important impact that may influence ecosystem services and change forest ecosystems and scenery. Specifically, a quantitative analysis of the change in forest areas since the start of development by our company was conducted in collaboration with Think Nature Inc.

Overview of quantitative analysis

- Target: Tokyu Resort Town Tateshina
- Method: High-accuracy aerial images from 1973 and 1975 and satellite images from 1985 onwards were used alongside machine learning* with AI to provide an estimated classification of forests and non-forests and the trends in forest area change were quantitatively analyzed.

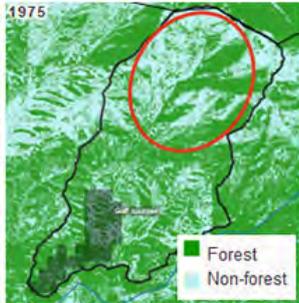
Source: Think Nature Inc.



* Machine learning: Method of data analysis where a computer uses a large quantity of data to learn rules and make predictions and decisions based on those results.

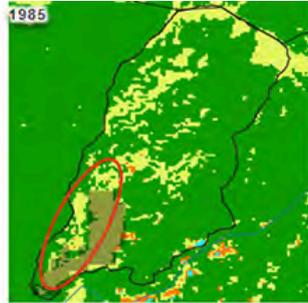
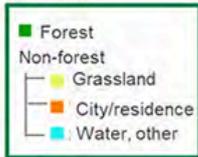
Quantitative Evaluation of Impacts Due to Land Use (Results)

The change in forests over time is as shown in the figures below. Around 1975, at approximately the time of land acquisition, there were many non-forest areas centered in the north of the site. The state of the forest changed due to forest recovery, as well as the development of facilities and vacation homes.

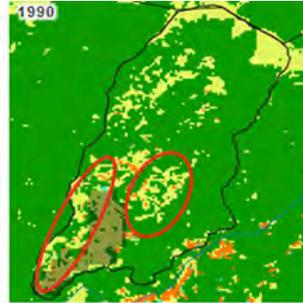


The area was used as a grass-cutting field in the pre-WWII and WWII periods and as a reforestation and afforestation site for timber in the post-WWII period*. Around 1975, at approximately the time of development, non-forest areas were noticeable due to the impact of felling for firewood and charcoal (in the circled area).

*From references 9) and 10)



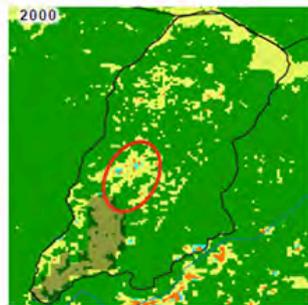
Construction of vacation homes and development around golf courses proceed in the circle, while forest recovery proceeds in the north.



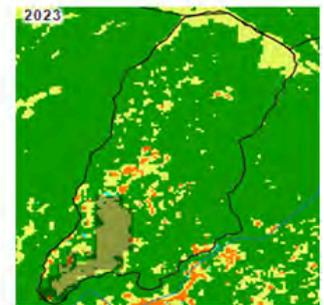
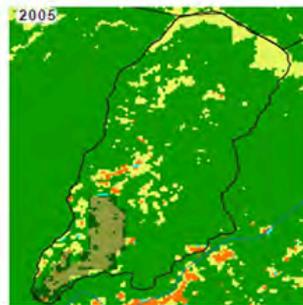
Construction of vacation homes and villa proceeds in the circles, as well as forest recovery in the northwest area and golf courses.



The construction of vacation homes and villas in the circles led to road construction as well as forest decline.



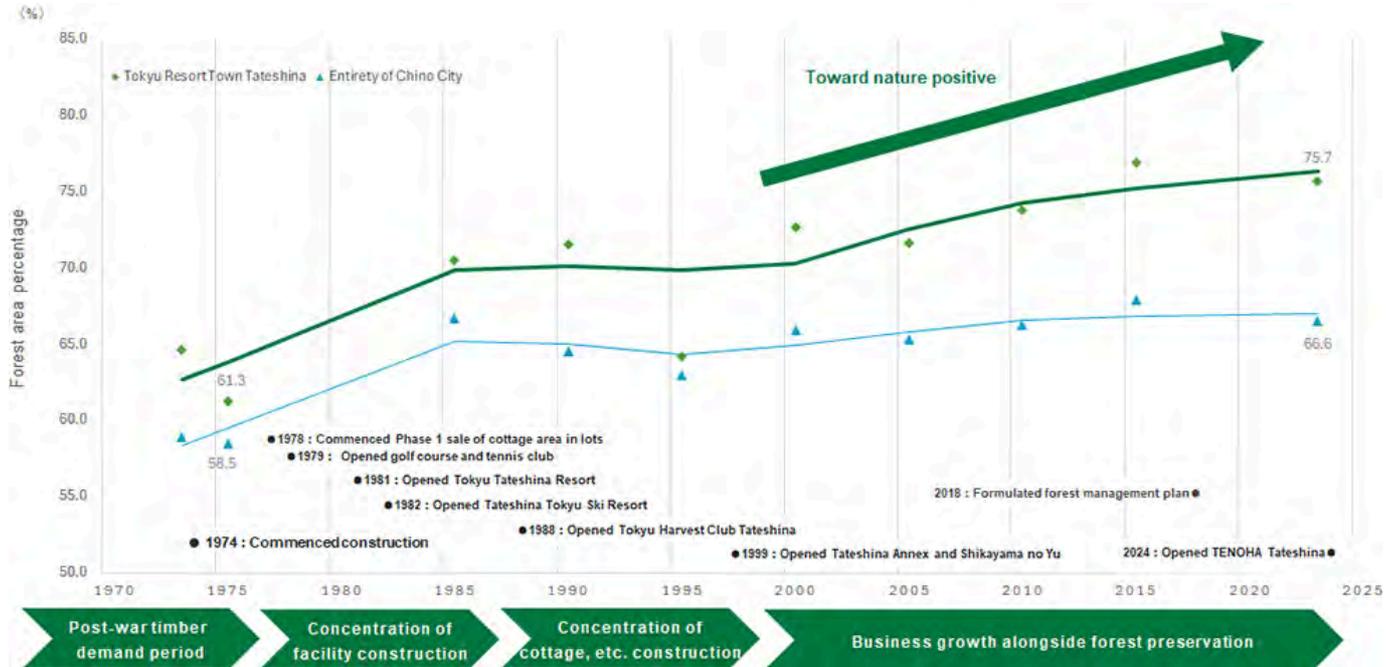
Construction of hotels and other structures continued within the circle in the 2000 image, but a subsequent tendency toward forest area recovery was confirmed.



Source: Think Nature Inc.

Results of analyzing the forest state showed that the **change in forest area percentage in Tokyu Resort Town Tateshina** was as follows: although the forest area has declined due to the construction of golf courses and vacation homes, **the overall trend is toward recovery**, and the current status is that the area is in its most recovered state, as well as the fact that the business operations, which have simultaneously maintained and recovered forests, are **contributing to nature positive as a result of our company's resort development and operations**.

Changes in forest area percentage
(Evaluated from aerial and satellite images)



Source: Think Nature Inc.

Quantitative Evaluation of Positive Impacts Due to Forest Management (Methods)

Our group has **formulated a forest management plan at Tokyu Resort Town Tateshina in 2018** based on the forest management plan of Chino City and is engaged in **thinning- and reforestation-based forest management**. Meanwhile, given the increasing age of the trees that constitute the forests, our group is considering forest management that incorporates not only thinning and reforestation, but also partial clear-cutting of old-growth larch forests and their reforestation. Therefore, a quantitative evaluation was conducted on the impact of future forest management on biodiversity.

Specifically, a quantitative analysis was conducted in collaboration with Think Nature Inc. of the “number of species”, which is an indicator of the state of forest biodiversity, while considering the forest vegetation and management state to examine shifts from the past and the **impact of forest management on the number of species**.

A comparative analysis was conducted on a pattern of forest preservation activities where 2 ha of old-growth forest is clear-cut every year and reforested, and a pattern of no thinning or clear-cutting and leaving the process to natural transitions, for a larch forest.

Overview of quantitative analysis

- An analysis was conducted on how the number of species changes in the future due to the following two management method patterns in a larch forest based on biodiversity big data of Think Nature Inc. :

Pattern	Assumed future management	What will be learned
1. Forest management: Clear-cutting of some old-growth forests and reforestation, forming a mixed broadleaf forest	Clear-cutting of 2 ha of old-growth forest (at least 80 years old) every year and planting broadleaf trees to slowly transition to mixed forest	Impact of small-scale clear-cutting and reforestation over long-term on biodiversity
2. No forest management: Left to natural transition (left alone)	No forest management (no thinning or clear-cutting) and leaving to natural transition	Impact of absence of human influence and leaving forest as is on biodiversity

*Felling: cutting down unnecessary trees.

*Thinning: felling some trees depending on crowding extent to reduce competition between trees being grown.

*Clear-cutting: felling a certain group of trees that constitute a forest all at once.

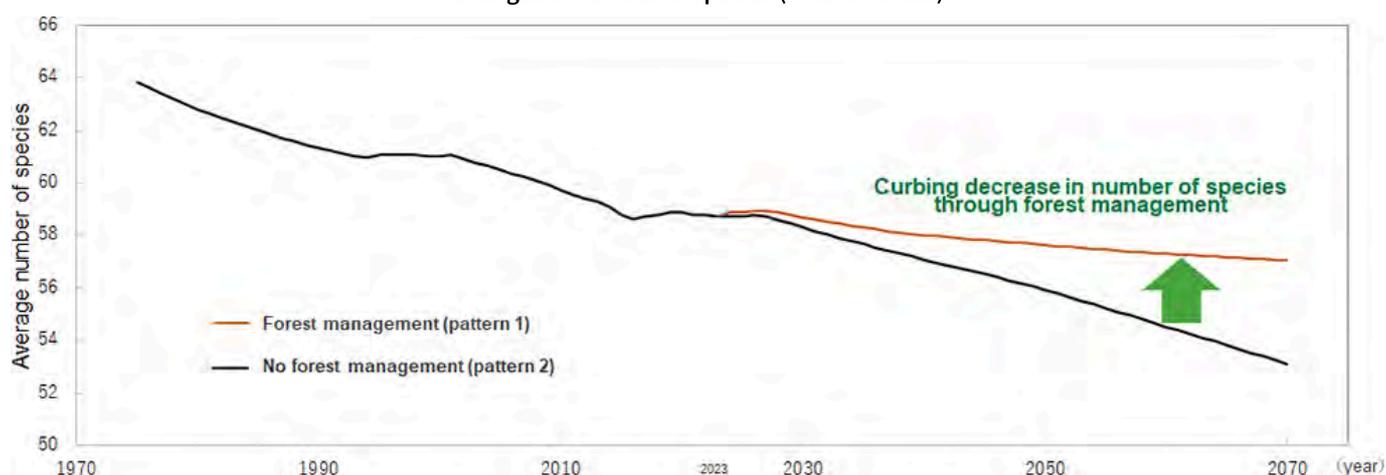
Quantitative Evaluation of Positive Impacts Due to Forest Management (Results)

Evaluation of biodiversity impacts through forest management

Normally, the aging of forest trees over time decreases the number of species in a forest. Although **forests have been created with abundant fall foliage and excellent scenery due to our company's development that limits deforestation and our planting and preservation of larch forests since the start of development**, there has been progressive aging of forests, with an average age of at least 80 years, entering a **phase of declining number of species** (figure below, until 2023).

Meanwhile, as shown in the figure below, in the larch forest, the management method of **clear-cutting and reforesting some old-growth trees to form a mixed broadleaf forest (pattern 1)** could **suppress the decline in the number of species** more than the method of not conducting forest management and leaving the process to natural transitions (pattern 2) (figure below, from 2023 onwards). These results will also be used as a reference to strive toward the preservation of biodiversity in the future through appropriate forest management, such as the continuation of thinning, but also partial clear-cutting and reforestation.

Changes in number of species (in larch forest)



Source: Think Nature Inc.

* Average number of species: value determined by dividing the larch forest into 30 m square grids (frames), analyzing the number of species contained within each grid, and calculating a simple average for all grids.

Important Risks and Opportunities in the Hotel and Leisure Business (Including Tokyu Resort Town Tateshina)

The expected risks and opportunities in the hotel and leisure business were considered based on the considerations at the “Tokyu Resort Town Tateshina”. The results of qualitatively examining the importance of risks and opportunities to our group’s business are as follows:

Risks, such as as **physical risks due to the degradation of dependent ecosystem services and transition risks due to changes in regulations and market environments**, are expected; however, as shown on the next page, **many nature-related opportunities** may also emerge.

Risk classification		Main dependencies and impacts	Risk content
Physical risk	Acute / chronic	Dependencies on water resources	<ul style="list-style-type: none"> Shortages in water resources due to contamination of rivers caused by development by other entities or decreased water recharge abilities of forests that serve as water sources
		Dependencies on water supply, pollination, and climate control	<ul style="list-style-type: none"> Price hikes in food at hotels and restaurants due to the occurrence of water shortages, poor or abnormal weather, or disasters at the agricultural and livestock production sites or livestock feed production sites Fish shortages and price hikes due to decreased catches resulting from degradation of marine and river ecosystems
		Dependencies on soil and sediment retention, storm mitigation, and climate control	<ul style="list-style-type: none"> Increased landslide and flood risk due to degradation of forests accompanying development by other companies in the surrounding area Landslide and flood risks due to degradation of forests in the area caused by insufficient forest maintenance and management Increase in damage to facilities, visitors, and users due to a climate change-induced increase in wind and flood disasters
		Dependencies on climate control, maintenance of habitat populations and environments, and cultural services	<ul style="list-style-type: none"> Impacts on our group’s net-zero transition plan due to decreased CO₂ absorption capacity of forests Loss of important natural phenomena that are important for scenery of the four seasons and tourism resources and decreased appeal as resort areas due to climate change-induced increases in temperature Impacts on ski area operations due to climate change-induced decline in snowfall and shortened snowfall season Decreased biodiversity of birds, fish, and plants, among others, due to climate change, human impacts such as development, and insufficient forest maintenance and management, resulting in decreased appeal of activities that involve nature (e.g., hiking and bird watching) Worsened scenery due to the increase of invasive species and animal damage in the area and within facilities, and the resulting decrease in appeal of tourism, various activities, and healing Decreased tourism appeal due to decreased river and lake water quality caused by human activity, such as corporate development

Risk classification		Main dependencies and impacts	Risk content
Transition risks	Policies and laws	Other resource use and waste	<ul style="list-style-type: none"> Increased costs for measures such as substituting plastics and reducing food loss due to plastic resource circulation and further strengthened regulations against food waste
		Water resource use	<ul style="list-style-type: none"> Restrictions on water use rights for conserving river water resources
		Water contamination	<ul style="list-style-type: none"> Enforced regulations relating to wastewater
		Terrestrial ecosystem use, other resource use	<ul style="list-style-type: none"> Price hikes in agricultural, livestock, and fishery products served at resort facilities and restaurants due to regulations for nature conservation (e.g., restricted fishing catches), regulations on land conversion both in and outside of Japan, and increased demands for sustainable agriculture
	Technologies	CO ₂ emissions and water resource use	<ul style="list-style-type: none"> Increases costs due to the introduction of technologies that increase energy efficiency and new equipment and technologies that increase efficient water resource use and water conservation, such as small-scale decentralized water circulation systems
	Markets	Resource use	<ul style="list-style-type: none"> Increases in procurement costs due to increased demand for the use of sustainable certified products in hotels and restaurants, and sustainably produced foods (agricultural, livestock, and fishery products) and amenities Price hikes due to increased demand from certified products or sustainable alternatives (e.g., biomass plastics)
	Reputation	Terrestrial ecosystem use, alteration, and water resource use	<ul style="list-style-type: none"> Worsened reputation due to land development and occupation, as well as large-scale water resource use by facilities
		Introduction of foreign species and ecosystem disturbance	<ul style="list-style-type: none"> Worsened reputation due to the introduction and spread of invasive plants and animals, as well as negative impacts on plants and animals

Opportunity classification		Main dependencies and impacts	Opportunity content
Opportunities	Markets	Resource efficiency	<ul style="list-style-type: none"> CO₂ reduction and energy cost reduction through use of biomass boiler that uses thinned wood, and cost reductions through introduction of technologies that increase water use efficiency
		Capital and funding	<ul style="list-style-type: none"> Acquisition of J-Credits through carbon absorption from appropriate forest management
		Products and services	<ul style="list-style-type: none"> Sales of wood products and original aroma goods that use larch wood resulting from thinning
	Reputation capital	Corporate value	<ul style="list-style-type: none"> Positive impacts, such as maintenance and increase in flora and fauna due to appropriate forest maintenance and management, certification as a nature-friendly site, and improved reputation due to biodiversity conservation initiatives Improved resource circulation and reputation regarding sustainable resource use, such as the introduction of composting and utilization of plant-based materials for amenities
		Local engagement, local appeal, and economic value	<ul style="list-style-type: none"> Improved relationships with local communities and reputation due to consideration toward reduction in impacts to surrounding natural environment during facility development Improved relationship with local governments due to contributing to circular and ecological sphere Improved revenue and reputation through business activities that utilize the unique appeal of nature in the area (including increased awareness of the area, increased appeal as a tourist site, and increased number of tourists) Improved reputation due to contributing to the regional forestry industry's brand value and revenue stemming from the expanded application of thinned larch wood
Nature conservation, recovery, and regeneration		<ul style="list-style-type: none"> Contribution to improved ecosystem services, such as water recharge function and landslide prevention functions resulting from appropriate forest maintenance and management Conservation of nature through the eradication of invasive plants and animals Indirect positive impacts on nature due to facility users' public awareness of 	

Opportunity classification		Main dependencies and impacts	Opportunity content
			nature and the environment through various activities at the facility (e.g., staying in the forest, glamping, walks, and birdwatching)

Important Risks and Opportunities in Business Areas Other Than Those Listed Earlier

There are also expected nature-related risks and opportunities, including those shown below, for businesses other than the urban development business and hotel and leisure business after considering an overview of dependencies and impacts. Although there are various risks, there are also potential business opportunities.

Risk and opportunity classification		Business risk and opportunity content
Physical risks	Acute and chronic	<ul style="list-style-type: none"> Increased disaster risk of wind and flood damage, landslides, etc., due to degradation of nature accompanying development by our company and other stakeholders [strategic investment business, management and operation business] Shortages of water resources due to degradation of ecosystems in water sources [strategic investment business, management and operation business] Decreased power generation efficiency due to a decrease in natural climate control, biomass fuel shortages, and price hikes due to the degradation of ecosystems at production sites [strategic investment business]
	Policies and laws	<ul style="list-style-type: none"> Strengthening of regulations related to land alteration for nature conservation and building greening [strategic investment business, management and operation business] Biomass fuel shortages and price hikes due to regulations for forest conservation [strategic investment business] Shortages of building materials, lumber, etc., and increased procurement costs due to land alteration for nature conservation and strengthening of resource extraction-related regulations [strategic investment business, management and operation business]
Transition risks	Reputation	<ul style="list-style-type: none"> Lawsuits and criticism against development activities that may have negative impacts on local ecosystems and ecosystem services [strategic investment business, management, and operation business] Criticism of negative impacts on ecosystems due to power plants [strategic investment business]
Opportunities		<ul style="list-style-type: none"> Increased customer preference for properties that have less impact on nature and have a positive impact on nature and ecosystems [strategic investment business, management and operation business] Improved relationships with local communities, positive impact on consensus building during project promotion, and improved corporate reputation and brand value through business operations with less impact on nature and a positive impact on nature and ecosystems [strategic investment business, management and operation business]

Identification and Evaluation Process

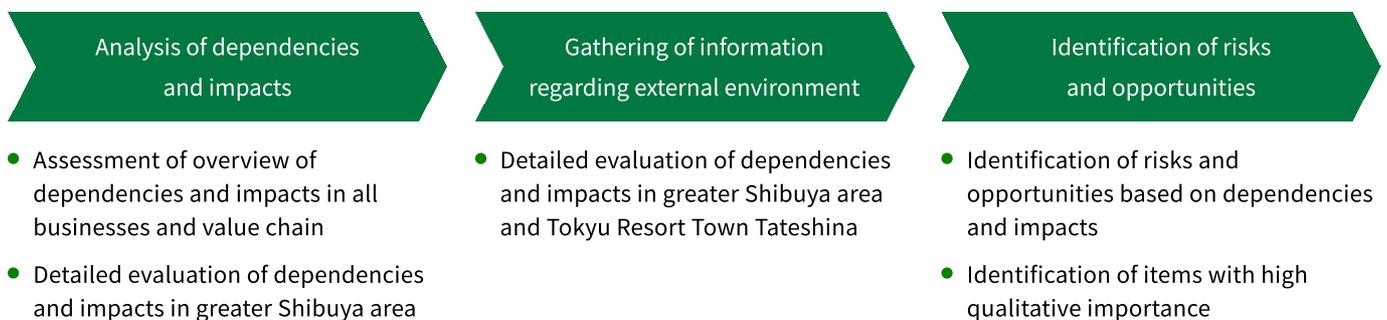
Under “risk and impact management” by TNFD, it is recommended that corporations integrate processes for identifying, evaluating and managing nature-related dependencies, impacts, risks and opportunities with companywide risk management processes, take concrete action in light of those management processes, and explain the involvement of stakeholders who are impacted. An explanation of processes, specific initiatives and stakeholder engagement is provided below based on that.

Identification and evaluation process for dependencies, impacts, risks and opportunities

Regarding dependencies and impacts, after sorting out an overview of dependencies and impacts for each group business and value chain and their quantitative importance, in our Urban Development Business in the greater Shibuya area and Hotel and Leisure Business including “Tokyu Resort Town Tateshina”, we performed evaluations of quantitative and qualitative dependencies and impacts based on information unique to the local community.

Based on those dependencies and impacts as well as information on our external environment such as the National Biodiversity Strategy by the Japanese government and the Regional Biodiversity Strategy by the Tokyo Metropolitan Government, we identified nature-related risks and opportunities in our Urban Development Business in the greater Shibuya area and Hotel and Leisure Business including “Tokyu Resort Town Tateshina”. We disclose these risks and opportunities as those which are believed to bear a particularly high level of importance for the Group from a qualitative standpoint.

Going forward, we will continue to examine the ideal nature of scenario analysis and evaluations of the importance of risks and opportunities based on that analysis.



Management Process

Management process for dependencies, impacts, risks and opportunities

Tokyu Fudosan Holdings established a “Tokyu Fudosan Holdings Sustainability Committee” directly under the President & CEO that devises plans for nature- and biodiversity-related challenges and other material issues, verifies the results of those plans, and reports those results to the Board of Directors.

The Group Sustainability Promotion Department acting as the secretariat for the Tokyu Fudosan Holdings Sustainability Committee and each business department set targets for nature- and biodiversity-related issues, manage their results, share associated information and, in doing so, conduct proper reporting based on related laws and regulations. Simultaneously, they endeavor to reduce negative impact and expand the positive impact on nature and biodiversity through business activities.

Additionally, having formulated the “Sustainable Procurement Policy” in January 2021, outside of our business activities, we also work together with upstream and downstream shareholders in our value chain to address the reduction of the negative impact on nature and biodiversity.

Integration of nature-related risks into group risks

Tokyu Fudosan Holdings manages risks using the below individual risk units with risks that materially impact management set forth as particularly “main risks.”

Main risks

① Investment risks ② Financial capital risks ③ Personnel affairs and labor risks ④ Legal affairs and compliance risks ⑤ IT strategy risks ⑥ Information leakage risks ⑦ Crisis management response ⑧ Climate change risks

The Company centrally manages ESG risks that include nature- and biodiversity-related issues as a subcategory of “main risks.”

Examples of ESG risks

Climate change, biodiversity conservation, environmental contamination, reduction and appropriate disposal of waste, resource utilization, water resource conservation, protection of human rights and prevention of child labor

Contributions to local communities and society, employee health, safety and human rights, corruption and bribery, corporate governance, etc.

Metrics and Targets

The Group has **formulated the below targets** with respect to nature-related dependencies and impacts.

Going forward, we will continue to examine the ideal nature of metrics and targets for managing nature-related dependencies, impacts, risks and opportunities in the Group based on TNFD's final recommendations.

KPI (GROUP VISION 2030)

Targets related to land use	Building greenery (rooftop, wall surfaces, etc.)* 100% by FY2030 * Newly-built large-scale office building/commercial facility properties of Tokyu Land Corporation
Targets related to waste emissions	Reduce waste emissions at our business sites and in the real estate portfolio in our possession by 11% over FY2019 by FY2030
Targets related to water resources	Reduce water resource utilization per floor area at business sites and in real estate portfolio on year-on-year basis until FY2030
Targets related to resource procurement	Formwork wood materials containing 100% certified timber by FY2030
Targets related to forest preservation	3,000 ha by FY2030

Trends in main environmental metrics

	(Unit)	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
CO2 emissions (Scopes 1 & 2)	Thousand t-CO ₂	228.3	234.8	210.7	233.0	227.5	230.5	283.3	256.1	257.0	139.9
Basic unit	kg-CO ₂ /m ²	98.6	101.9	98.4	106.7	101.0	96.1	86.8	75.1	74.6	47.6
CO2 emissions (Scope 3)	Thousand t-CO ₂	—	—	821.9	682.1	585.9	1,295.5	1,913.0	1,618.8	1,801.7	1,705.7
(Categories 1/2/11)	Thousand t-CO ₂	—	—	—	—	—	—	1,792.5	1,511.2	1,700.9	1,597.1
Water use	Thousand m ³	3,042	3,141	2,811	2,650	2,548	2,612	5,751	4,582	4,867	5,087
Basic unit	m ³ /m ²	1.33	1.39	1.32	1.23	1.14	1.10	1.8	1.3	1.4	1.7
Waste emissions	t	14,189	18,796	18,908	25,127	25,569	22,932	29,251	27,637	27,827	21,181
Basic unit	kg/m ²	10.3	10.2	10.1	12.5	12.6	10.2	9.6	8.3	8.5	7.4

(Excerpt from page 95 of the 2023 Integrated Report) (as of March 31, 2023)

Click on image to enlarge

For more information, visit [ESG data](#) 

Initiatives Regarding Nature-related Risks and Opportunities, Dependencies and Impacts

Specific initiatives in our group to date regarding risks, opportunities, and impact are presented below. The following are some of the major initiatives we have undertaken.

Urban development:Community planning, greening technology and planting management

Hotel and leisure business:Forest management and marine conservation, nature coexistence in Tateshina

Other:Invasive alien species countermeasures, contamination reduction, waste reduction, resource circulation and water utilization reduction, extending lifespan of buildings

(1) Urban development: Community planning

Community planning in greater Shibuya area

In the greater Shibuya area, which has Shibuya Station at its center, we further evolved upon and deepened our “Greater SHIBUYA 1.0” concept for the area to formulate our new community planning strategy “Greater SHIBUYA 2.0.” In addition to bringing together the three elements of workplaces, residences and entertainment, we will promote initiatives for “digital” and “sustainable” as the foundation of that strategy. Regarding “sustainable,” through efforts such as **developing richly-green environments**, promoting decarbonization and reinforcing resilience, we are engaging in the planning of a community in which anyone can spend time in safety, security and comfort, one that has cutting-edge environmental measures in place and will grow on a continuous basis.

GREEN WORK STYLE (previously described)

At our office buildings, we are currently expanding “GREEN WORK STYLE,” through which we seek to realize improved corporate value and the realization of worker well-being from the dual aspects of “the workplace” and “office solutions” through diverse green power while being mindful of health, safety, the environment, and sustainability. By realizing a work style through which workers interact with green, we will alleviate their day-to-day stress and draw out the productivity of each individual member to the fullest while also contributing to the smooth formation of a community.

SHIBUYA SOLASTA :

A green terrace for tenants has been placed on every office floor of this facility. By having workers feel green and fresh air, which is normally lacking in an office environment, in their immediate surroundings, we will contribute to reducing their stress and improving their productivity. Additionally, at the top floor of the facility, we have set up a sky terrace and lounge (shown in photo to the right) that takes advantage of the rooftop space to provide “a place to work under the refreshing sky.”



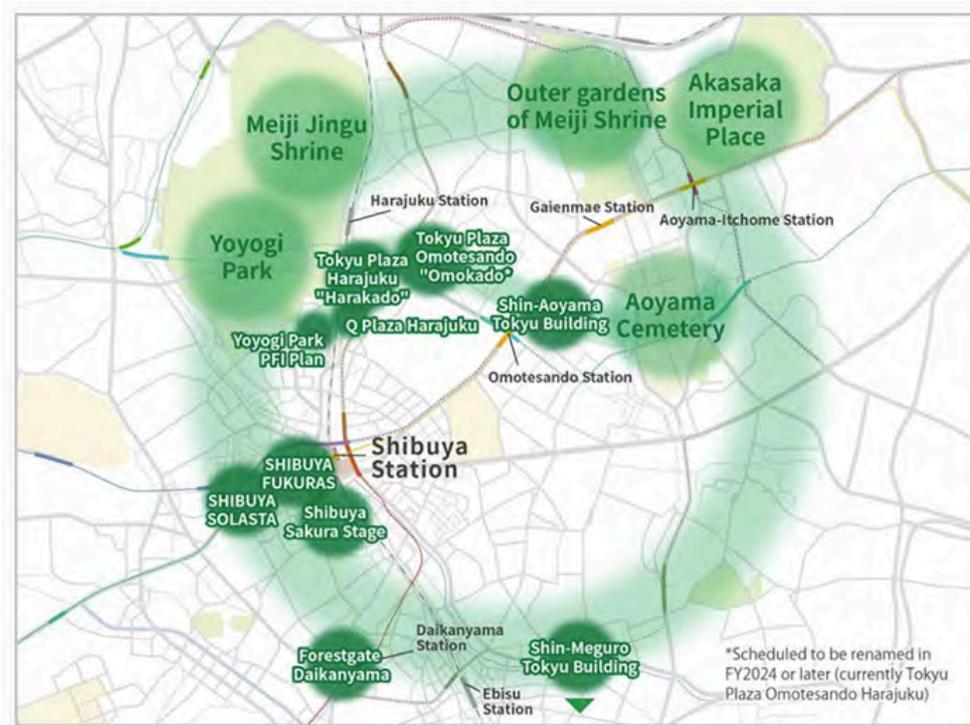
Rooftop sky terrace

Initiatives in Urban Development: Community Planning

Formation of ecological network in greater Shibuya area and configuration of KPI for FY2030

Given the importance of biodiversity-conscious urban greening, in the greater Shibuya area, we are actively promoting the greening of areas such as rooftops and wall surfaces at our business sites in order to preserve the ecosystem. By connecting the green in the vicinity and acting as a relay point for the living creatures that inhabit those areas, we are tackling the formation of an ecological network in the greater Shibuya area.

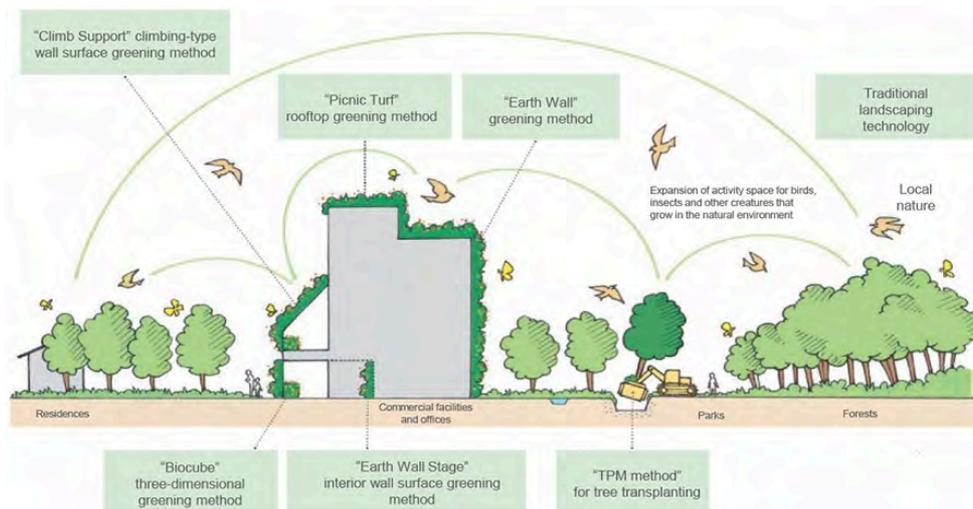
In particular, when we develop large-scale properties with considerable impact on the local community, we carry out ecosystem studies in the peripheral area at the planning stage, perform greening using vegetation that takes the bird and insect species that inhabit the area into consideration, and pursue biodiversity conservation in that community.



Targets

Building greenery (rooftop, wall surfaces, etc.)* 100% by FY2030

* Newly-built large-scale office building/commercial facility properties



The name of each process is the technique name at ISHIKATSU EXTERIOR INC.

Biological monitoring

At the “Omohara Forest” rooftop terrace at the “Tokyu Plaza Omotesando “Omokado”” commercial facility, with the help of natural environment conservation specialist Regional Environmental Planning, Inc., we perform regular living creature studies throughout the year in order to assess trends in the ecosystem of the green space there. (Previously described)



Scene from living creature study

Participation in biodiversity certification systems

For properties that are especially surrounded by numerous natural environments and also have ample green space secured on site, we encourage the acquisition of certifications such as ABINC to back the securing of biodiversity.



SHIBUYA SOLASTA (ABINC-certified)

Planning of community that coexists with nature at TOKYO PORTCITY TAKESHIBA

In the Takeshiba area located in Tokyo’s Minato City, which constitutes a national strategic economic growth area, we are pursuing community planning that takes advantage of industry-academia cooperation and technology and are moving forward with **long-term continuous initiatives to enhance the appeal and vitality of the area of the whole**, including its environment (sustainability).

The office town serving as the core piece of the project is a large-scale complex with a total floor area of approx. 180,000m², 40 floors above ground, and two floors below ground. The higher floors consist of an office area, with the lower floors hosting a commercial area. The office lobby on the sixth floor provides a space that incorporates water and green and is in harmony with the local community.

On the southeast side of the second through sixth floors, the spacious “SKIP TERRACE” has been erected in a staircase pattern. There, the “**Eight New Views of Takeshiba**” made up of eight scenes represented by the sky, bees, a rice paddy, a vegetable garden, aromas, water, an island and rain are presented as a “**Satoyama**”-like landscape. By forming an ecological network linked to the Hamarikyu Gardens, the Kyu-Shiba Imperial Gardens and the rich green of the surrounding area, we aim to contribute to the biodiversity of the local community.

At the “Rice Paddy Scene” containing a 145m²-wide rice paddy and the “Vegetable Garden Scene” where vegetables and fruits are grown, students at the nearby preschool, tenant-related individuals and people who reside in the residence tower can take part in rice-planting or harvesting events, which will be tied into **environmental education for stakeholders**.

Additionally, at the “Bees Scene” where beehives are placed and the “Sky Scene” with of nest boxes placed on wall surfaces that are hard for people on the fifth, eighth, tenth and twelfth floors to catch sight of, **habitats for honeybees and raptor species such as falcons and kestrels will be supplied**. Through these, we will contribute to biodiversity in the city center.



TOKYO PORTCITY
TAKESHIBA Office
Tower



Office lobby



Takeshiba Shin Hakkei
(SKIP TERRACE)



Rice-planting featuring resident
participation
(Rice Paddy Scene)

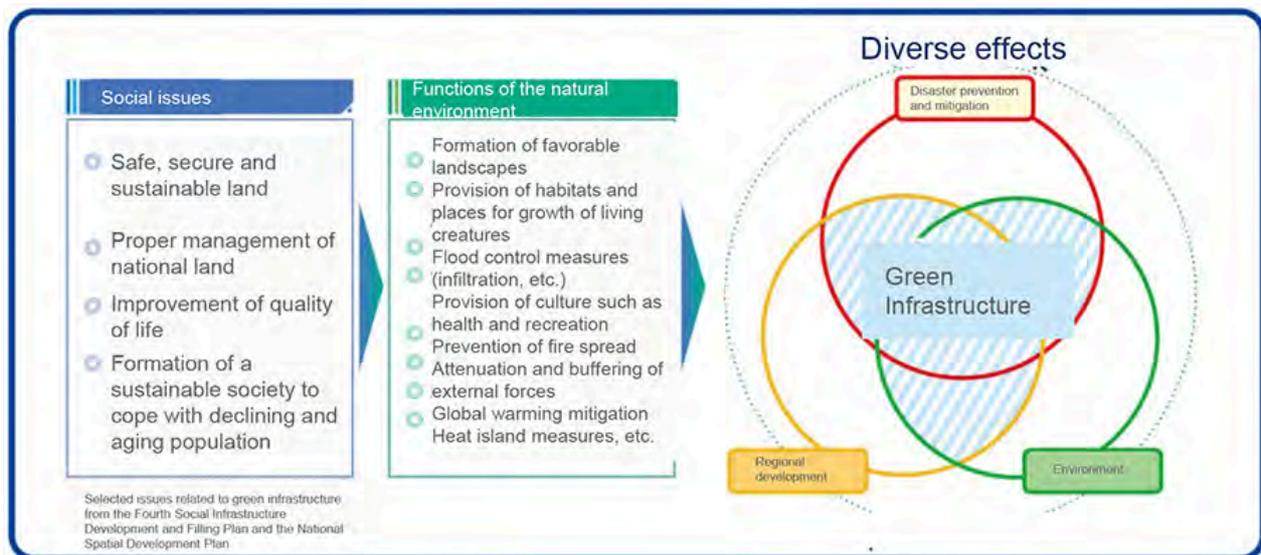
Initiatives in Urban Development: Greening Technology, Planting Management, Green Infrastructure

Greening and planting management by diverse technologies based on the concept of green infrastructure

Based on the concept of **green infrastructure** (see note), ISHIKATSU EXTERIOR INC., which handles the group's Environmental and Greening Management Business, has been engaged in **disaster prevention and mitigation**, protection and preservation of nature and biodiversity, sustainable urban development, and contracted management of various green spaces by utilizing various technologies, including urban greening technologies such as rooftop greening and wall greening.

Note : What is Green Infrastructure?

Green infrastructure is a concept that aims to utilize the various benefits of the natural environment, such as disaster prevention, disaster mitigation, and environmental preservation, to solve various social issues, through its functions of mitigating global warming, providing places for organisms to grow, shaping landscapes, and providing cultural services. The Ministry of Land, Infrastructure, Transport and Tourism's GX Strategy for Urban Development includes a call for public-private partnerships to further promote the quality and quantity of urban green spaces with diverse functions as green infrastructure, and the importance and attention to this issue is increasing.



* Excerpt from the MLIT website

About the technology of ISHIKATSU EXTERIOR INC.

The company will reorganize the environmental greening technology and know-how it has promoted in its landscaping and greening business based on the concept of green infrastructure, formulate a green infrastructure menu that can be deployed to customers and various stakeholders, and apply it to all its businesses as "Greentect," a system to promote initiatives to realize green infrastructure. The menu visualized by the system lists a wide range of technologies and know-how in landscaping and greening-related fields, and is classified into eight major categories. The system is designed to use the menu at the sales stage of each project to determine the technological items to be adopted and incorporate them into the design, construction, management, and operation of the project.

Ex.: Trans Planting Machine method

Short for “Trans Planting Machine,” TPM is a technique that involves the use of specialized proprietary equipment by ISHIKATSU EXTERIOR, of which only two machines exist in the world, to enable the transplanting of large-diameter trees, which was considered difficult in the past. TPM enhances the degree of freedom of greening plans while protecting large trees as assets of the local community.



Transplanting work using a TPM machine

Ex.: Three-dimensional greening method (Biocube)

This technique is used to perform planting on multiple surfaces in a three-dimensional shape. Involving a box-shaped configuration that makes it easy to handle, Biocube realizes multisided greening while also saving space.



Biocube

Eight major categories of green infrastructure menu

<p>1 Planned Land Preservation <i>Disaster prevention, etc.</i> Conserve and incorporate into the planning of the development site's favorable greenery and environment.</p>	<p>Transplanting in the field (trees) Use of relocated in-situ planting bases Utilization of existing objects (landscaping), etc.</p>	<p>2 Disaster Prevention and Mitigation <i>Protecting Lives</i> We propose measures to reduce rising temperatures and flood damage, disaster prevention and disaster preparedness</p>	<p>Permeable pavement Rain gardens (reservoirs, streams), disaster prevention stoves, etc.</p>
<p>3 Plants and Animals <i>Enriching and Comfortable Living Environments</i> We propose greenery and environments that contribute to biodiversity in the project site space</p>	<p>Biotope Utilization of native species (compensatory vegetation) Rooftop greening, etc.</p>	<p>4 Earth retaining and other structures We propose gaps of various shapes to provide shelter for animals.</p>	<p>Natural material earth retaining walls, etc.</p>
<p>5 Environmentally friendly materials <i>Environmental preservation, reduction of CO2</i> We propose the use of environmentally friendly materials (products).</p>	<p>Recycled materials Low-carbon materials, etc.</p>	<p>6 Wellness <i>Proposals for healthy maintenance and promotion</i> We propose facilities for comfortable spaces in contact with the natural environment that contribute to good health.</p>	<p>Indoor greening Farms, herb gardens, etc. Pergolas, awnings, etc.</p>
<p>7 Management and operation We propose maintenance, cultivation, management, and operation plans to make green spaces pleasant and comfortable.</p>	<p>Biodiversity Improvement Plan Tree and soil diagnosis Management and operation of parks, etc.</p>	<p>8 Other environmental technologies We actively adopt and propose environmentally friendly technologies.</p>	<p>Sheet Pipe Method Re bunker Thermal imaging cameras, etc.</p>

Example of menu



1.Planned land preservation
Transplanting in field



2.Disaster prevention and mitigation
Rain garden



3.Plants and animals Utilization of native species
(compensatory vegetation)



4.Earth retaining Natural material earth retaining



6.Wellness Pergolas, awnings



7.Management and operation
Tree and soil diagnosis

GREEN AGENDA : Planting management for planning and cultivating green landscapes

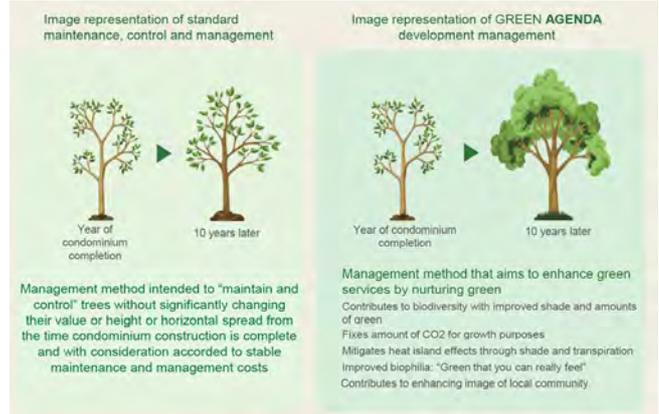
In condominiums, ISHIKATSU EXTERIOR INC. plans and constructs **greenery to realize a living environment that nurtures life**, create planting management plans (agendas) to connect them to the future, and promote "GREEN AGENDA," which integrates **planning and management based on management plans and visualization technology**.

In order to realize greenery for homes that meets the demands of the environmental age, it is committed to "visualizing" planting over the medium to long term, and to promoting its customers' "interest" and "sympathy" toward green.

It aim to provide sustainable landscaping support services that contribute to the conservation and restoration of biodiversity in urban development by developing its existing landscaping technologies.



BRANZ JIYUGAOKA mage of future goal



Initiatives in Hotel and Leisure Business –Policy Formulation–

FY2030 goals for wellness business

To promote environmental management in our group, the wellness business, which includes hotels and leisure, is **formulating target values in the wellness business area, which includes the hotel and resort business and healthcare business, by FY2030** while considering three key environmental issues.

Biodiversity: conserve 40% of project site area in wellness business by F2030*¹

Circular society: reduce waste in wellness business by 11% relative to FY2030 levels*²

Decarbonized society: reduce CO₂ in wellness business by 46.2% relative to FY2030 levels*²

*1 Conservation areas refer to the following: ① area of land that is subject to OECM certification or other environmental certification for biodiversity and green space conservation, ② areas that fall within the boundaries of national parks, quasi-national parks, and natural parks, and ③ areas of forests that are subject to the creation of a forest management plan based on the Forest Act.

*2 Based on target figures of the Tokyu Fudosan Holdings Group.



Thinning



Thinned forest in town

Converting the resort facility to an “experience-based sustainable resort”



To achieve the above-mentioned vision, it is important for visitors to the resort facility and stakeholders to **experience the importance of coexisting with the community and nature and provide opportunities to increase awareness of the environment in daily life**, which are unique to the resort facility, **not only during facility development but also during sales and operation.**

Tokyu Resorts & Stay, which operates the resort facility, has devised the concept of “Morigurashi®,” which incorporates harmony with forests, which are a locally shared resource, and sustainability through forest activities and glamping workcations, and promoted community problem-solving and nature conservation where local residents and employees work in an integrated manner. Furthermore, **in 2024, the new slogan of “Happy ‘encounters’ in the community through the power of resorts”** was devised. The aim is to provide an **“experience-based sustainable resort”** based on the three themes of “fostering biodiversity,” “creating a local future,” and “utilizing local energy” to provide facility visitors with a sustainable space, experience, and activities that are enjoyable and kind to the earth and community.

Event information and value for each resort facility are also sent out with the **“[ENJOY GREEN GUIDE](#)”** website.

Initiatives in Hotel and Leisure Business: Monitoring and OECM Certification

Support for 30 by 30 and Other Effective area-based Conservation Measures (OECM)

Our group **supports 30 by 30**, an international goal with the aim to effectively conserve at least 30% of terrestrial and marine areas as healthy ecosystems by 2030.

At the “Tokyu Resort Town Tateshina”, as part of our efforts to achieve 30 by 30, we have participated in the MoE-certified “Other Effective area-based Conservation Measures” (a system that certifies areas where biodiversity conservation is being implemented through private initiatives) research project in FY2022, **and in February 2024, the resort facility, including the ski area and golf course, received its first “Other Effective area-based Conservation Measures” certification.**

Forest management and **biological monitoring surveys** are being conducted to protect the abundant biodiversity. As of 2023, 1,699 floral and faunal species have been confirmed, with 32 **rare species that are included in the Red Lists** of MoE and Nagano Prefecture being confirmed. There were 605 floral species confirmed, of which 10 were rare species such as *Corydalis decumbens*. There were 65 bird species, including 4 rare species, such as *Emberiza fucata*, and 1,018 insect, reptile, and amphibian species, including 18 rare species, such as *Ochodaeus maculatus*. The area has been highly regarded for its characteristic and diverse habitats, including those for grassland flora and fauna.



Corydalis decumbens (Red List)



Emberiza fucata (Red List)



Ochodaeus maculatus (Red List)

Biodiversity Action Plan (BAP)

Our group has formulated a BAP for areas of particular conservation importance within our project areas, where biodiversity conservation efforts are being conducted. At “Tokyu Resort Town Tateshina”, **monitoring surveys of floral and faunal habitats and growth environments have been conducted in the vacation home sites and its surrounding forests.** Measures are being considered if threats to the habitats and growth environments of the rare floral and faunal species are present, and there are plans to utilize such measures for green space management plans.

Initiatives in Hotel and Leisure Business: Nature Coexistence in Tateshina

Forest management initiatives

In “Tokyu Resort Town Tateshina,” a **forest management plan has been established since 2018**, where **conservation thinning** has been conducted. These actions promote forest growth, such as by encouraging undergrowth and strengthening tree roots, and prevent natural disasters, such as landslides, by strengthening the ground. Efforts such as **processing thinned wood into wood chips and utilizing them as fuel for biomass boilers** have also been conducted as efforts to contribute to nature and biodiversity conservation as well as local production and consumption of energy. A **CO₂ absorption/fixation device has been introduced** in the biomass boiler, and golf tees, as well as bottles and sleeves, are made from the CO₂ contained in the flue gas, which is then provided to guests.

Appropriate thinning also promotes tree growth and increases CO₂ absorption amount. In 2022, our group became **the first general developer to receive J-Credit certification based on forest management activities** under the J-Credit system, in which the Japanese government certifies the CO₂ reductions made by companies as credits.



Biomass boiler



CO₂ absorption / fixation device

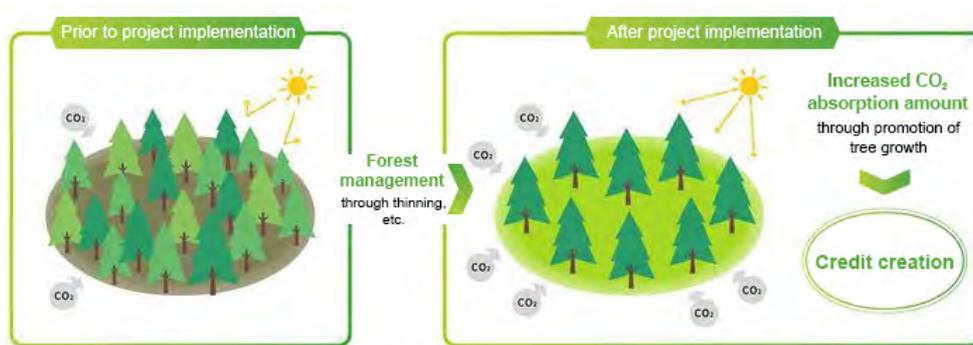


Illustration of credit creation based on forest management activities

Utilization of thinned larch wood

Our group has collaborated with Forest Mori no Kobo Akanesha, a welfare service provider in Suwa City, Nagano Prefecture, and Araki Sewing Co., Ltd. in Shimo-Suwa to sell larch sachets that can be used as a shoe dryer and desiccant, forest candles and wood diffusers that utilize larch scents, and larch outdoor sprays that serve as a naturally-scented insect repellent, which were sold as part of the “ordinary” series. A special craft beer, Larch HAZY IPA, was also sold as part of the “special” series. Additionally, in the Tokyu Fudosan BRANZ Gallery Omotesando, an integrated condominium gallery of BRANZ, which is our group’s new condominium brand that opened in September 2023, **the thinned wood that was generated as a result of forest conservation activities in Tokyu Resort Town Tateshina has been used as flooring and designer furniture.**



Original aroma



Flooring that utilizes thinned wood

Clean-up and walking activities: “Morikomichi”

“Tokyu Resort Town Tateshina” has a large number of visitors year-round, and invasive plants have naturally infiltrated the area. Morikomichi, which has been held regularly since FY2021, involves people **picking up trash** while enjoying walks along the five “Komichi (trails)” in “Tokyu Resort Town Tateshina,” **weeding invasive species that may damage the ecosystem** of Tateshina, and removing branches and fallen leaves.



Weeding invasive species

Hosting of “Morigurashi Event” through “bushcraft”

This event was held to utilize the Nagano Prefecture subsidized project “Prefectural Citizen Collaboration-based Satoyama Development and Utilization Project,” deepening understanding of forests and the natural environment among locals and bringing forward a beautiful and healthy forest into the future. Under the theme of “bushcraft and tree planting experience,” local children experienced making fires and planting trees, while vacation homeowners and local residents experienced “tree management courses,” where they mainly learned the proper way to use a chainsaw and make firewood.

(Sponsor: Chino City Shikayama District Morigurashi Promotion Regional Council, in collaboration with Yaso Co., Ltd., and Konoha Co., Ltd.)



Children carrying firewood

Working in the forest: “Work Lab Morigurashi”

The “Seseragikan,” which used to be a vacation homeowner’s lounge, was renovated and re-opened as a working facility under the brand name “Work Lab,” which is being developed in Chino City. The town is equipped with a variety of accommodations and outdoor facilities, and users can conduct **workcations while enjoying the resort**, whether they stay overnight or just on a day trip. The furniture in the free space is semi-private sofas and modular sofas so that each user can work while relaxing, and there are also conference rooms and private booths for online meetings, allowing for a variety of working styles.



Workcation free space

Planning Tateshina Darwin Tour, a customer-participation biological survey event

“Tokyu Resort Town Tateshina” is home to many flora and fauna, including rare species. Our group has **planned Tateshina Darwin Tours, a customer-participation biological survey event**, in collaboration with Biome Co., Ltd., where participants use Biome, an organism collection app developed by the eponymous company that can identify the name of organisms by taking a photograph with a smartphone camera and feel closer to biodiversity initiatives. The use of Biome by customers will allow them to connect to the abundant nature in the area, while the collected data can simultaneously be utilized as town monitoring data, and they will be utilized for promoting initiatives toward nature restoration in Tateshina.



Participants searching for organisms

Turning abandoned farmland into wine vineyards! Grape seedling planting experience event

A wine grape seedling planting experience event was held in the fields of the winery “Oreilles de Chat,” which was opened in 2023 in Chino City, Nagano Prefecture. **This was an initiative to convert abandoned farmland**, which has increased in area across Japan **and is becoming a social issue**, to vineyards, and the utilization of abandoned farmland allows for the addressing of environmental and local issues. Approximately 720 grape seedlings were planted while imagining a bountiful harvest three years from now.

District disaster prevention plan-based drills

The town has previously experienced landslides due to heavy rain, and in March 2015, the town was designated as a “landslide hazard zone and special hazard zone” under the Landslide Disaster Prevention Act. Given these circumstances, our group has prioritized the safety of users above all else and sought to raise awareness of district disaster prevention plans and confirm group-based actions by **conducting drills on information transmission and instructions, patrols and reports, and evacuation guidance in collaboration** with the town center, as well as facilities in the town such as the hotel and golf course.



Disaster prevention drills

“Edible garden,” where users can learn and experience the food and forest cycle

at “Tokyu Resort Town Tateshina,” had its grand opening in August 2023, where users can **learn and experience the food and forest cycle through the cultivation and harvesting of vegetables, herbs, fruits, and edible flowers.**

In the town, a “composter” (food waste processor) was introduced in March 2023, where food waste from the hotel restaurant in the town is turned into high-quality compost and provided to local farmers, thereby **achieving environmental conservation, food circulation, and local collaboration.**

The “edible garden” is an experience-based spot where customers can experience the cultivation and harvest of foods, such as vegetables, and eat freshly picked produce to learn and experience food and forest cycles while enjoying coexistence with nature.



Edible garden

Coexistence between local community and environment through “TENOHATAteshina”

In “Tokyu Resort Town Tateshina,” **TENOHA Tateshina** was opened in July 2024 as a base for creating and transmitting the values of “local collaboration” and “consideration of the environment.” Since the first phase of vacation home sales in 1978, this town has long continued to coexist with nature, where conservation thinning has been conducted to suppress the densification of the forest. All the walls, furniture, and fixtures in TENOHA Tateshina are made from thinned wood from within the town, and these furniture and fixtures are produced with the cooperation of local sawmills and workshops that share the concept of TENOHA Tateshina, achieving a form of local collaboration.

Furthermore, the plaza adjacent to TENOHA Tateshina uses an abundance of Nagano Prefecture-based wood to ensure local production and consumption of the lumber. The plaza entrance gate is made from lumber, local stone, and glass blocks made from upcycled glass waste from construction, serving as the representation of the circle of local circulation. The Town Opening Marche, which is the opening event, marked its first step as a hub for local community creation.



TENOHA Tateshina exterior



TENOHA Tateshina interior

Initiatives in Hotel and Leisure Business: Marine Conservation and Respect for Culture

Coexistence with nature and local community at Palau Pacific Resort

The Palau Pacific Resort is a **full-fledged beach resort** opened in the Republic of Palau in 1984, **where visitors can fully experience the nature and culture of Palau.** Users can overlook spectacular sunsets year-round from the approximately 250-m private beach, with the vast grounds including a tropical garden decorated with tropical plants, and in the lush, wooded mountain behind the resort, users can see 89 plant species and 35 bird species, including endemic species of Palau, such as the Biib (Palau fruit dove), which is the national bird and a small, colorful pigeon.

From the start of its development, the resort has been based on the concepts of “balancing environmental conservation and development” and “contributing to the local community and being accepted by the local people.”

Initiatives toward ocean regeneration

The coast in front of the resort, where coral habitats struggled due to mud runoff, was successfully **regenerated to a marine environment with abundant organisms** by conducting beach restoration work involving coral transplantation based on thorough research, and presently, **the resort has been designated as a marine life sanctuary by the state of Koror in the Republic of Palau.** The resort also continues to support environmental protection groups and coral research facilities in the Republic of Palau and has engaged in **initiatives toward marine and community conservation while working with local people.**

Contribution to local society

Approximately 80% of the employees at the Palau Pacific Resort are Palauan, and the resort has contributed to local society by **creating jobs for Palauans** and providing human resource training in hotel and tourism industries.

The development of the resort has also **respected local culture**, with the roof being modeled after a traditional Palauan abai (meeting hall), and the interior incorporating motifs from Palauan culture and legends.



Rock Islands of Palau, designated as wildlife sanctuary



Biib, national bird



Beach in front of hotel



Hotel employees

Other Initiatives: Reducing Water Resource Use

Reducing negative impact of water resource use

Our group has collaborated with stakeholders such as design companies, construction companies, customers, and local communities to engage in water resource conservation initiatives through appropriate management and efficient water resource use according to the unique water resource issues of each region.

Target

To reduce water resource usage per floor area at project locations and real estate portfolios compared with the previous fiscal year by FY2030

Reduction in water usage by the introduction of water-saving equipment

“Tokyu Harvest Club Atami Izuyama & VIALA,” which opened in 2013 as a resort hotel in harmony with nature, has engaged in **water resource conservation initiatives**, such as reducing tap water usage through the adoption of water-saving toilets. “Tokyu Harvest Club Hakone Koshien” and “Tokyu Harvest Club VIALA Hakone Tateshina” have also promoted efficient water use, such as the use of well water within the premises.



Tokyu Harvest Club
VIALA Hakone Tateshina

Water resource conservation at Palau Pacific Resort

Public tap water in the Republic of Palau is not suitable for drinking due to the aging of pipes over the years, and the region also suffers from serious water shortages from January to April. The Palau Pacific Resort has constructed its own water infrastructure system to supply safe water in a stable manner. The resort has installed a **seawater desalination device** as a measure against dry periods as well as other **unique water purification systems** while using **well water and stream water on the premises** as its **main water source to secure drinking water and protect water resources**.



Palau Pacific Resort

Other Initiatives: Invasive Alien Species Countermeasures and Contamination/Waste Reduction

Invasive alien species countermeasures

Under the Invasive Alien Species Act (Ministry of the Environment), invasive alien species refers to species of plant or animal that do not originally inhabit Japan and entered national borders either with or without intention through human activity. These may harm or otherwise impact the ecosystem of local communities. In its endeavors to preserve the ecosystem of those communities, the Group has established a manual and set forth ways of dealing with highly invasive alien species when they are spotted.



(Invasive plant species)
Erigeron annuus



(Invasive plant species)
Coreopsis lanceolata



(Invasive alien species) Parasa
lepida

Reduction of negative impact cause by contamination

Working together with design and construction companies and other stakeholders, the Group endeavors to reduce the effects of contaminants on the environment by preventing their discharge and refraining from using materials that cause that discharge.

Waste reduction

The Group also jointly tackles the reduction of waste discharge in collaboration with design and construction companies, customer users, and other stakeholders.

Targets

Reduce waste emissions at our business sites and in the real estate portfolio in our possession by 11% over FY2019 by FY2030

Other Initiatives: Resource Circulation

Resource circulation

Recognizing the need to effectively utilize the resources that go into its businesses, in collaboration with design and construction companies, customer users and other stakeholders, the Group endeavors to utilize resources properly and effectively.

The Green Connection Project to form a cycle of circulation in wood resource utilization

The Green Connection Project is an **initiative through which the Group preserves forests alongside its various stakeholders**. Linking up with the forest preservation activities conducted by the Village of Nishiawakura in Okayama Prefecture, which is currently pursuing the “100-Year Forest Concept,” we work to preserve forests in accordance with various forms of stakeholder use, such as a condominium purchase, property management, use of office, hotel or leisure facilities, or use of our real-estate sales agents for existing residences. The Group provides forest preservation funds in accordance with the sales results that it posts. An example would be funds to preserve 10m² worth of forest for each sale of a residential unit. In recent years, the Group is simultaneously purchasing J-Credits generated from the management of forests by the Village of Nishiawakura, thereby helping to popularize forest J-Credits. **Up to this point, the Group has successfully preserved over 2,000 hectares of forest**, and manages its progress yearly in this regard in the form of KPI with the goal of preserving 3,000 hectares of forest by FY2030.

The timber produced by the preserved forests is utilized in a number of Group businesses, then provided to customers to form a cycle of circulation. We are also proactively carrying out other initiatives in the form of purchasing thinned wood generated through the Village of Nishiawakura’s forest preservation activities and utilizing it in building work. In FY2022, we purchase 38m³ of thinned wood from FSC CoC-certified vendors who engage in the processing and sale of FSC-certified timber from the applicable local forests, which we used as interior materials for renovation work on residences and three commercial facility buildings.



Shin-Aoyama Tokyu Bldg.



Abeno Q's Mall



COMFORIA Takashimadaira



Tokyu Harvest Club
VIALA Kinugawa Keisui

Locally-produced timber for local consumption

At Tokyu Harvest Club VIALA Kinugawa Keisui, which opened in December 2022, trees cut down in the development site were used in elements such as furniture in the common areas.



Circular economy initiatives at Forestgate Daikanyama

Our Forestgate Daikanyama property will consist of two buildings: the MAIN Building, which will house rental housing, share offices and a commercial facility, and the TENOHA Building, which will provide a sustainable lifestyle experience. This complex is slated to open in late October 2023.

The TENOHA Building, in turn, will be made up of a cafe and event space. **In addition to providing a sustainable lifestyle experience, it will serve as a site of activity that bridges the local community and the city in cooperation with business operators who conduct circular economy activities and the local government.** While supplying points of contact with sustainable endeavors to consumers, we will link up with various stakeholders to realize a circular economy. The building itself is a **wooden construction containing thinned wood from the Village of Nishiwakura in Okayama Prefecture**, which contains one of the forests targeted by Tokyu Fudosan Holdings for preservation, as the building's structural materials.



MAIN Bldg.



TENOHA Bldg.

Promotion of circulatory construction and renovation

Through the implementation of regenerative and conservative construction, reforms and renovations, Tokyu Land Corporation, TOKYU LIVABLE and Tokyu Re · design contribute to the reduction of waste and resource circulation.



Exterior of Kudan-Kaikan Terrace (preserved area)



Banquet room

Other Initiatives: Extending Lifespan of Buildings

Reduced use of resources through lengthened cycles of large-scale renovations

Tokyu Community sells a long-term warranty product called CHOICE, which can extend the cycle of large-scale renovation work on condominiums from the conventional 12 years to up to 18 years.

Improvements in the specifications and construction methods used in large-scale renovation work allow for the warranty period for building exterior-related work, such as waterproofing and painting, to be extended by 1.5 to 2 times compared with the conventional period. This has enabled a reduction in the frequency of large-scale renovation work before reaching the second stage of 60 years of building age. **Reducing the frequency of large-scale renovation work** also contributes to the reduction of resources used through the life cycle of the condominiums as well as a reduction of total life cycle costs.

EM checkup: utilization of buildings through comprehensive building diagnosis

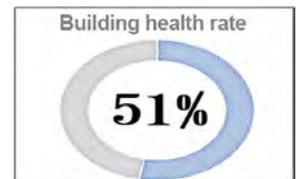
EM checkups are a system that performs analyses and surveys not conducted in normal building and equipment inspections of office buildings, summarizes survey results in an easily visualized and understandable single sheet, and provides these results to customers based on the concept of “Enchanted in 1 minute.”

Diagnosing the energy-saving performance at present through EM checkups allows for the determination of the BELS certification level based on our company’s unique analysis results, and the proposal and support of appropriate management and repair work in the future.

An additional aim is to propose measures to improve building safety and asset value by helping customers understand the multifaceted building management and operation issues and raising their awareness and interest in such topics. The EM checkup will enable the **increased environmental value of building assets without rebuilding, as well as appropriate proposals and support for obtaining ZEB and BELS certification.**



Overview of EM checkup



EM checkup building health rate

Terms and Explanations

TNFD

Abbreviation for “Taskforce on Nature-related Financial Disclosures.” Launched in 2021 by four institutions: the United Nations Development Programme, the World Wildlife Fund, the United Nations Environment Programme - Finance Initiative and Global Canopy. Calls for the adequate assessment and disclosure of nature-related dependencies/impacts and risks/opportunities.

LEAP

Abbreviation for “Locate, Evaluate, Assess, Prepare.” Approach recommended by the TNFD to assist corporations and financial institutions with evaluating their nature-related risks/opportunities. Comprised of the four steps of “Locate” (locate the interface with nature), “Evaluate” (evaluate dependencies and impacts), “Assess” (assess material risks and opportunities) and “Prepare” (prepare to respond and report).

ENCORE

Tool for financial institutions developed by the UNEP Natural Capital Finance Alliance, or NCFE for short. Enables the assessment of the importance of dependencies and impacts on nature according to business category and the analysis of data such as distributions of ecosystem services.

SBTs for Nature

Abbreviation for “Science Based Targets for Nature.” Initiative calling for the setting of targets with time limits that can be measured and executed based on the best available science with respect to the setting of nature capital-related goals by corporations.

Ecosystem integrity

Degree to which the composition, structure and functions of the ecosystem are within the scope of natural fluctuation.

KBA

Abbreviation for “Key Biodiversity Area.” Significant area serving as key to biodiversity conservation as selected according to international standards.

Biodiversity Intactness Index

Metric indicating remaining degree of biodiversity before and after land modification in the natural world when land utilization by humans and the accompanying effects on biodiversity are taken into consideration

Conservation priority level

Metric indicating level of conservation priority from the standpoint of biodiversity.

Water stress

Metric indicating level of stress on water at basins based on percentage of water consumption relative to water supply volumes at the basins.

Ecological network

The concept of positioning areas with excellent natural conditions as biodiversity bases (core areas) and connecting core areas with ecological corridors to allow for the movement and dispersion of wild animals.

Cultural services

Cultural services that are aesthetically, spiritually, and psychologically influential that humans obtain from being in contact with nature.

Control and maintenance services

Services that control and maintain the environment through biodiversity, such as climate control, mitigation of local disasters, suppression of soil erosion, and suppression of harmful organisms and diseases within the ecosystem.

Forest management plan	Plans created by forest owners or entities that are entrusted with forest management regarding forest management and conservation for the managed forests.
Clear-cutting	Felling a certain group of trees that constitute a forest all at once.
BAP	“Biodiversity Action Plan”: an action plan for biodiversity conservation by countries, companies, or other organizations. In the case of countries, contracting parties to the Convention on Biological Diversity (CBD) are required to formulate a BAP under Article 6.
30 by 30	Goal of conserving 30% of Earth’s terrestrial and marine areas by 2030. Listed as Goal 3 of the Kunming-Montreal Global Framework for Biodiversity adopted at the 15th Conference of the Parties to the Convention on Biological Diversity (COP15) held in 2022.
OECM	“Other Effective area-based Conservation Measures”: Areas certified by the Ministry of the Environment as areas where biodiversity conservation is being promoted regardless of the original purpose through various entities, such as businesses, private organizations, individuals, and local governments and their efforts.
Urban redevelopment systems	Tokyo Metropolitan Government system seeks to improve the urban environment by relaxing form restrictions specified in the Building Standards Act, such as floor area ratio and setback restrictions, for building plans that make public contributions, such as securing public open space.

References

- (1) “Global Risk Report 2024,” World Economic Forum (2024)
- (2) Newbold et al. (2016) “Global map of the Biodiversity Intactness Index, from Newbold et al. (2016)”
- (3) Japan Biodiversity Mapping Project, Think Nature Inc.
- (4) WRI Aqueduct (See June 2023)
- (5) Tokyu Fudosan R&D Center Inc., ISHIKATSU EXTERIOR INC. and TOKYO CITY UNIVERSITY, Faculty of Environmental Studies (Yokota/Kitamura/Yoshizaki/Iijima) (2019) “Guide to building greening for ecological network formation in greater Shibuya area”
- (6) Tokyu Fudosan R&D Center Inc., ISHIKATSU EXTERIOR INC. and TOKYO CITY UNIVERSITY, Faculty of Environmental Studies (Yokota/Kitamura/Yoshizaki/Iijima) (2016) “Basic survey for ecological network formation in greater Shibuya area”
- (7) ISHIKATSU EXTERIOR INC. (2020) “Fiscal 2019 Tokyu Plaza Omotesando Harajuku “Omokado:” Report on Biological Survey”
- (8) Regional Environmental Planning, Inc. (2020) “Survey on Ecological Networks that Contribute to Biodiversity in Greater Shibuya Area”
- (9) Serigasawa Topography Editorial Board (1990) ”Serigasawa Topography”
- (10) Chino City (1988) “Chino City history last volume”
- (11) Regional Environmental Planning, Inc.(2024) “Tokyu Resort Town Tateshina basic survey for application for certification as OECM site, conservation and utilization of natural resources”

Revision History

Version	Issue date	Revision content
Ver. 1	8/25/2023	<ul style="list-style-type: none">● First edition issued based on TNFD disclosure recommendations beta version V0.4
Ver. 2	1/19/2024	<ul style="list-style-type: none">● Revision and addition of the following text based on changes in the official version of the TNFD disclosure recommendations announced in September 2023:<ul style="list-style-type: none">● Addition of disclosure regarding “general requirements”● Addition of a detailed explanation of stakeholder engagement as part of “governance”● Improvements in the following texts to promote comprehension:<ul style="list-style-type: none">● Addition of a description of the relationship between the disclosure network and LEAP● Addition of green infrastructure initiatives (Ishikatsu Exterior)
Ver. 3	7/31/2024	<ul style="list-style-type: none">● Addition of the following content regarding Tokyu Resort Town Tateshina:<ul style="list-style-type: none">● Overall picture of nature dependencies and impacts● Quantitative analysis regarding nature dependencies (tourism resources and carbon absorption)● Quantitative analysis regarding nature impacts (land use and forest management)● Important risks and opportunities, as well as initiative examples● Addition of the following initiative examples:<ul style="list-style-type: none">● Initiatives in the hotel and leisure business● Initiatives regarding resource and water source use reduction

Note regarding future prospects

Statements regarding the future, such as business performance forecasts, contained in this document are based on information available to our company as of July 2024 and certain assumptions that our company has deemed reasonable. They are not intended to guarantee that such forecasts will be achieved. Actual business performance may greatly differ based on various factors.

ENVIRONMENT

Pollution and Resources

< Environment

Climate Change

TCFD disclosure

Transition Plan toward Decarbonized Society

Biodiversity

TNFD disclosure

Pollution and Resources

Water Use

Supply Chain (Environment)

[Pollution] Policy Management Structure Goals, Initiatives, and Achievements [Waste] Policy

Management Structure Goals, Initiatives, and Achievements [Use of Resources] Policy Management Structure

Goals, Initiatives, and Achievements

Pollution

Policy

The Tokyu Fudosan Holdings Group believes that one of its duties is to mitigate the release of pollutants from its business activities. This is why we are working with design firms, construction companies and other stakeholders to prevent the release of pollutants and mitigate pollutants by avoiding the use of materials that are a source of pollutants in order to reduce our impacts on the environment.

Tokyu Land Corporation has established specific measures for the development projects it is involved in based on the format of these projects. For example, development projects involving new build condominiums or detached housing must be in compliance with Formaldehyde Abatement Level 3 and the company has created an in-house manual on soil contamination and asbestos abatement to ensure it takes proper measures.

Management Structure

The Group has established the Sustainability Committee headed by the President & Representative Director, and to address the issue of pollutants, the Sustainability Council, established as a subcommittee, leads relevant management activities across the entire Group.

The Sustainability Council, comprised of environmental and sustainability managers from each group company, manages the results of efforts on pollutants and shares information based on a common policy. This ensures pollutants are addressed throughout all business activities.

Goals, Initiatives, and Achievements

Process targets to reduce or avoid pollution:

Tokyu Land Corporation has set the following process-type goals for the facilities it operates and manages and is working to reduce pollution.

- (1) Removal of asbestos in buildings. Periodically inspect some unremoved areas and pay close attention to prevent the situation from deteriorating.
- (2) At golf courses operated by our group, we annually inspect the residual pesticide concentrations in water bodies with respect to the discharge of nitrates, phosphates, pesticides, and other priority hazardous substances, aiming to achieve levels below the detection limits.

Progress in 2022

- (1) Implemented in 1 office buildings (Total 6 buildings)
- (2) For all inspection items, the values detected are below the detection limits.

Setting standards to ensure residential indoor air quality

Tokyu Land Corporation has rigorous performance standards for its newly built condominiums in order to prevent indoor air pollution caused by building materials, some of which are as follows:

- All formaldehyde-emitting building materials are to meet JIS(Japanese Industrial Standards) and F☆☆☆☆ rating under JAS (Japanese Agricultural Standard).
- Aside from formaldehyde, toluene, xylene, ethylbenzene, styrene and other toxic emission from building materials have to be minimal.
- Newly built condominiums are subject to our indoor air quality testing to ensure that indoor chemical substance concentration does not exceed guideline values set forth by the Ministry of Health, Labour and Welfare.

Handling of hazardous substances

The Group's office buildings, commercial facilities and resorts manage and dispose of hazardous substances in a responsible manner in accordance with relevant laws and regulations.

We carry out procedures and dispose of fluorocarbons used in air conditioners and PCBs used in electrical facilities in accordance with the law. These substances are handled with the utmost care to prevent leakage or release. For asbestos and soil pollution, we carry investigative studies in a timely manner and implement proper measures or controls based on the situation.

Measurement of NOx, SOx, emissions

According to the Air Pollution Control Act, the Group measures the concentration of soot and dust at a certain frequency in the operation and management facilities such as office buildings and commercial facilities, and we keep records of the measurement results. We are working to prevent air pollution by ascertaining the status of emissions of soot and NOx into the atmosphere associated with our business activities and confirming that they do not exceed emission standards.

ESG Data : Other pollutant emissions 

Quality and destination of water (effluent) discharge

Most of the facilities operated and managed by our group, mainly in urban areas, take water from the water supply and discharge it to the sewer system in accordance with the discharge standards of each local government. In addition, some of our resort facilities discharge water from water supplies and groundwater into rivers in accordance with laws such as the Water Pollution Control Act and the discharge standards of each local government.

FY2022 results

- Public sewage system: 4,226 million liters per year
- Tertiary treatment: 214 million liters per year
- Secondary treatment: 798 million liters per year

Policy

The Group recognizes that the mitigation and proper disposal of waste is an important environmental issue because increased business activities will result in increased waste.

We also believe that it is important to endeavor to reduce waste emissions based on an approach incorporating the 3Rs (reduce, reuse, recycle); instead of using vast amounts of resources for our businesses.

The development and construction of long-life housing, office buildings, commercial facilities and resorts, and curbing the use of resources by promoting recycling in business activities, will contribute to reduction of pollution through curbing the use of resources in business activities.

It is based on this awareness that we will continue to work with design firms, construction companies, end customers and other stakeholders to manage waste responsibly in accordance with laws and regulations regarding storage methods, disposal procedures, etc. and reduce waste through responsible recycling and achieve a recycling-oriented society.

Management Structure

The Group has established the Sustainability Committee headed by the President & Representative Director, and to address the issue of waste, the Sustainability Council, established as a subcommittee, leads relevant management activities across the entire Group.

The Sustainability Council, comprised of environmental and sustainability managers from each group company, manages the setting of group-wide targets, results of efforts, and shares information about waste based on a common policy. This ensures data on the use and storage of waste by each company is understood and that proper management/disposal is carried out in accordance with relevant laws and regulations. This also ensures that we are making efforts to reduce waste through our business activities.

Goals, Initiatives, and Achievements

Target

We aim to reduce waste emissions per floor area of our business offices and real estate portfolio 11% compared to FY2019 by the FY2030.

Process targets to reduce or avoid waste:

Tokyu Land Corporation has set the following process-type goals for the facilities it operates and manages, and is working to reduce waste.

- (1) Reduction of food waste by recycling by compost, etc. and devising meal provision methods, etc.
- (2) Recycling of waste cooking oil generated from the kitchen of a restaurant
- (3) Reduce the volume of excess sludge in sewage treatment facilities

Data on waste volume

Waste reduction through remodeling

The Tokyu Fudosan Holdings Group is working to reduce waste through home renovations. Tokyu Resort Corporation is conducting the sales of vacation homes that have been seismically diagnosed and guaranteed and also ecologically remodeled under its REWORTH program.

Ratio of establishments receiving environmental management certification

ISO 14001 certification is obtained by 2.5% of the Group's business sites.

Working with others to reduce waste or resource use by Participation in specific local or global Initiatives

The Tokyu Fudosan Holdings Group is continuously working to reduce waste.

Utilizing food waste

At commercial facilities, used cooking oil that is discarded at restaurants is recycled into biofuel in collaboration with oil and fat business companies, and they are used as alternative fuels for light oil in Japan and overseas.

Recycling clear files

Tokyu Land Corporation, in collaboration with Saera Co., Ltd. and ASKUL Corporation, has rented umbrellas made from used clear files collected from tenant companies in our office buildings for workers to use. We implemented a resource recycling project. In one year, 1,014 kg (equivalent to about 50,000 pieces) were collected, of which 250 kg was used as recycled material for umbrella handles, and the remaining 764 kg was recycled as recycled plastic.

Recycling PET bottles

In addition, Tokyu Fudosan Holdings Co., Ltd. participates in efforts to recycle resources with the beverages sold at its head office. This beverage uses 100% recycled PET bottles, which are collected and recycled from used PET bottles, helping to reduce waste. In addition, the use of this PET bottle has led to a reduction in CO₂ emissions of approximately 60% per bottle compared to new petroleum-derived PET bottles.

Compost utilization

Tokyu Resorts & Stays Co., Ltd. and Tokyu Real Estate Co., Ltd. have introduced composting as an initiative to reduce food waste emissions and make effective use of food waste that was previously treated as waste. Food waste is turned into high-quality compost, which is then used to grow crops at the hotel's own harvesting experience facility and at affiliated farms. The compost "Bioclean" can reduce the amount of food waste input by about 85%. Furthermore, by purchasing agricultural products from affiliated farmers and providing them at the hotel, the hotel aims to achieve food circulation and local production and consumption.

Participation in specific local or global Initiatives

Collaboration with partner companies to solve environmental problems - Zero Emission Club

TOKYU LAND CORPORATION and 14 partner companies established the "Zero Emission Club" in order to reduce waste generated during renovation work of office buildings and commercial facilities. In collaboration with various stakeholders, we will promote initiatives to solve environmental problems, such as reducing and reusing waste, converting existing facilities to ZEB, and promoting further greening in the greater Shibuya area, and create business opportunities through co-creation. We are trying to expand our business.

Comprehensive partnership agreement regarding regional circulation and symbiotic zone with Chino City, etc.

TOKYU LAND CORPORATION and Tokyu Resorts & Stays Co., Ltd. have concluded a comprehensive partnership agreement regarding a regional circular and symbiosis zone with Chino City, Nagano Prefecture and the Suwa Regional Decarbonization Innovation Association. With the aim of contributing to carbon-neutral urban development through the creation of a sustainable, circular, and symbiotic decarbonized society (regional circular and symbiotic sphere), we will promote sustainable regional circulation (Morigurashi) centered on forest resources and are working to reduce waste and raw material usage.

Use of LCA (Life Cycle Analysis)

The Tokyu Fudosan Holdings is developing a wide range of businesses related to the development, operation, and management of the real estate, and in that, we analyze and examine the life cycle of buildings and promote the reduction of environmental burden. Tokyu Land Corporation calculates the primary energy usage at the operation stage when designing a condominium, and reports on it based on the Building Energy Conservation Law. For CASBEE-certified properties, life cycle CO₂ is calculated for each category such as construction, repair/renovation/demolition, and operation. We aim to reduce environmental pollution and utilize resources by using the results of comparisons with general buildings (reference values) in our design process.

In addition, Tokyu Community Corp. analyzes the life cycle of the building when entrusting the management of condominiums and formulates a long-term repair plan for building maintenance. As a result of examining these, it was found that the cycle of large-scale renovation work can be extended more than before by adopting highly durable materials. This will reduce the number of large-scale renovations during the entire building life cycle and reduce building materials and waste during construction. This has made it possible for us to extend the cycle of large-scale renovation work at Brands City Hongodai from 12 years to 16 years.

Use of Resources

Policy

The Group recognizes that the responsible use of resources is an important environmental issue because increased business activities will result in increased use of resources, even though these resources are limited in nature.

We also believe that it is important to endeavor to use resources more effectively based on an approach incorporating the 3Rs (reduce, reuse, recycle); instead of using vast amounts of resources for our businesses.

The development and construction of long-life housing, office buildings, commercial facilities and resorts, and curbing the use of resources by promoting the reuse of resources in business activities, will create business opportunities and enhance the competitiveness of the Group.

It is based on this awareness that we will continue to work with design firms, construction companies and other stakeholders to use resources responsibly and more effectively.

Management Structure

The Group has established the Sustainability Committee headed by the President & Representative Director, and to address the issue of use of resources, the Sustainability Council, established as a subcommittee, leads relevant management activities across the entire Group.

The Sustainability Council, comprised of environmental and sustainability managers from each group company, shares information from across the group based on a common policy. This ensures that we are using resources responsibly and efficiently.

Goals, Initiatives, and Achievements

Progress against previously set targets to reduce resource use:

Quantified targets

We have set a target of 80% waste recycling rate at our head office building for FY2030, and are increasing the waste recycling rate to achieve this goal by distributing recycling guides and reducing burnable waste, etc. The actual waste recycling rate in FY2022 was 60.1%.

Unquantified, process targets and Achievement

- Recycling of waste materials
 - Energy generation by recycling waste oil
 - Conversion of food waste into compost
- Education and awareness of tenants
 - Distribution of recycling guides to building tenants

Raw material used

At Tokyu Land Corporation, the amount of wood procured in fiscal 2022 for use as raw materials in development projects was 19,892m³.

Forming a reuse cycle for wood resources

The Green Connection Project is an initiative with customers and other stakeholders of the Group to help preserve forests. This initiative has preserved forests in various uses, from condominium purchases to use of offices and resorts, with more than 1,000 hectares saved to date. Wood produced from forests is utilized in various businesses operated by the Group and also provided to customers, which forms a reuse cycle.



Eave materials for
the Shin Aoyama Tokyu
Building



Morinomiya Q's MALL
BASE playground equipment

Investment in R&D on reducing impacts

The Tokyu Fudosan Holdings Group has invested in a company that promotes the furniture recycling business. They are researching and developing recyclable furniture and distribution methods in order to create a mechanism for repairing furniture returned after renting it for a certain period and distributing it again. In this way, we are actively working to conserve the global environment by realizing a sound material-cycle society that does not throw away things.

ENVIRONMENT

Water Use



< Environment

Climate Change

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Transition Plan toward Decarbonized Society

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Policy

The Tokyu Fudosan Holdings Group recognizes the importance of water conservation in its capacity as a fundamental component of social infrastructure.

Today, water shortages are growing more serious worldwide due to desertification and other factors. Although Japan, where the vast majority of the Group's business offices are located, has yet to experience chronic water shortages, in light of the water resources used to produce the materials we import, so-called "virtual water", the issue of water shortages and water pollution around the world is not irrelevant to our business operations. The development and operation of homes, office buildings, commercial facilities and resorts that excel at water conservation through the use of water saving systems and features will create business opportunities and enhance the competitiveness of the Group.

Commitments ~ Group-wide actions to reduce water usage

It is based on above awareness that we will continue to work with design firms, construction companies, customers, local communities and other stakeholders to carry out responsible management and efficient use of local water resources for our business activities and at the office buildings, commercial facilities, and resorts we own.

Management Structure

The Group has established the Sustainability Committee headed by the President & CEO, and to address the issue of water resource conservation, the Sustainability Council, established as a subcommittee, leads relevant management activities across the entire Group.

The Sustainability Council, comprised of environmental and sustainability managers from each group company, sets group-wide fiscal year targets for water use and shares information based on a common policy. This ensures we are able to understand water use volume for each group company, report proper information in accordance with relevant laws and regulations, and work to reduce water use throughout all business activities.

Goals, Initiatives, and Achievements

Actions to reduce water use

Tokyu Land Corporation handles all property development as follows.

Unquantified targets (corporate level)

We aim to reduce water use per floor area of all our business offices and real estate portfolio by fiscal 2030 compared to the previous fiscal year.

- **We are implementing the following in new construction and existing facility renovation work.**
 - Installation of water-saving shower heads, water-saving toilets, water-saving faucets, etc.
 - Use of rainwater and well water
 - Installation of highly efficient hot water supply equipment, water supply methods, and water-saving appliances
 - Installation of automatic faucets, automatic cleaning devices, etc.
- **As part of our environmental activities related to our work, we engage in water conservation on a daily basis.**

Unquantified, Process type targets (project level)

Tokyu Land Corporation has established process targets for the development projects it is involved in based on the format of these projects.

Quantified targets, performance and progress (corporate level)

In 2022, we achieved a target of 1.4 (m³/m²) of water usage per floor area, and the actual result was 1.7 (m³/m²), making progress towards 1.9 (m³/m²) in 2019. The goal for fiscal 2023 is to be below 1.7 (m³/m²).

ESG Data : Water consumption and wastewater discharge →

Water conservation measures

Water management plan

Tokyu Land Corporation formulates water management plans for all facilities it operates and manages. After assessing the results against the water supply plan for the previous fiscal year, which is the target, we are working to reduce water consumption by introducing water-saving equipment in toilets and showers and encouraging users to save water. We also recycle used tap water whenever possible. There are 24 facilities that use gray water, rainwater, etc. to reduce the amount of clean water used. (As of December 2023)

Tokyo Port City Takeshiba uses gray water for toilet flushing. The gray water is supplied from the facility's kitchen drainage, rainwater, and air conditioning drain water, and can be replenished from the heat storage tank in case of emergency. Kitchen wastewater is purified by a gray water desalination system (membrane treatment + bioreactor system) via a grease removal system installed in a restaurant in the building, while rainwater and air conditioning drain water are purified by a filtration system (pressure type rapid filtration system + activated carbon adsorption system) and used respectively.

Reducing water use with water saving systems and features

The Tokyu Harvest Club Atami Izusan & VIALA was opened as a resort hotel in harmony with nature in 2013. The resort hotel has been making efforts to conserve water resources through the use of water-saving toilets and reducing the use of tap water. At Tokyu Harvest Club Hotel Hakone Koshien and VIALA Hakone Hisui, we are also promoting the effective use of water by using well water on the premises.



Tokyu Harvest Club VIALA Hakone Hisui uses underground spring water

Initiatives Along the Tama River - Environmental Conservation of the River and its Basin

The Tokyu Foundation (formerly known as The Tokyu Foundation for Better Environment) works to improve the environment of the Tama River area by conducting surveys of the Tama River and its basin, supporting environmental activities, and disseminating information.

Initiatives in water-scarce regions

Engagement, water withdrawal, etc.

Tokyu Land Corporation develops and operates hotels, golf courses, villas, etc., but in areas where water resources are scarce, we are discussing water use with local governments. Tokyu Resort Town Tateshina, which was developed in Nagano Prefecture, is engaged in a water supply business for 23.5 km² in consultation with Chino City since 1977. During the operation period, we have continuous discussions, engage in water supply population and water supply amount every 10 years and supply water based on the decided plan.

Business activities in water-scarce regions

The Republic of Palau is chronically suffering from a shortage of water. At Palau Pacific Resort, we have our own water supply facilities from the time of opening, we operate the hotel with our own drinking water, and we strive to conserve water resources in the Republic of Palau by thorough water conservation.

Facilities in Water-Stressed Regions

For our group's operational sites, an annual assessment of global water stress is conducted using the "Overall Risk" and "Baseline Water Stress" indicators from WRI Aqueduct. If an area is classified as "High" or above in both "Overall Risk" and "Baseline Water Stress," we determine it to have high water stress. As a result, as of March 2023, there are no regions classified as "high" or higher. Regarding Palau, one of our operational sites, it is excluded from WRI Aqueduct's scope. Therefore, we evaluate global water stress using the World Wide Fund for Nature (WWF) Water Risk Filter. Additionally, for Indonesia, another operational site, the company operates only in facilities leased as tenants and does not engage in direct water extraction.

Works with others

Works with others to reduce water use

Tokyu Fudosan Holdings is a regular member of the Real Estate Association, and in 2013 we formulated the "Real Estate Business Environment Implementation Plan" at the Environment Committee. Among them, as concrete actions to reduce the amount of water used, we aim to use water-saving appliances such as toilets and showers, automatic faucets, automatic cleaning devices, rainwater, etc. In addition, we are working to further raise environmental awareness by sharing information on excellent initiatives, and we are working to save water in collaboration with not only real estate companies but also construction companies and other industry companies as a whole.

Collaboration with other companies operating at same sites such as making use of water waste streams as inputs (industrial ecology)

Collaboration with other companies

At Tokyo Port City Takeshiba, we are collaborating with companies(tenants) to reuse wastewater. Kitchen wastewater, etc., from tenants in the facility is purified by a gray water generator via the grease removal equipment installed in the store, and reused for flushing toilets.

Collaboration with local governments

At Tokyu Plaza Totsuka, industrial water supplied by Yokohama City is used for cleaning toilets. This will prevent ground subsidence due to excessive pumping of groundwater, and will work in collaboration with local governments, such as energy reduction by subsidence treatment and use of raw water without performing chemical treatment or filtration treatment processes such as water supply. We are promoting industrial ecology.

Costs associated with water-related risks

The cost of water-related risks for TOKYU LAND CORPORATION in fiscal 2022 was 44 million yen.

The number of incidents of non-compliance with water quality/quantity permits, standards and regulations

ESG data : Number of Environmental Incidents 

Third-party Independent Verification

The Tokyu Fudosan Holdings Group receives independent verification of its environmental data from a third-party in order to ensure the reliability of this information.

For fiscal 2022, the scope of this verification includes data for our water consumption (total water intake, water supply, well water and Grey water usage).

Third-party Independent Verification Report on Environmental Data (Water use)



[Independent Verification Report by a third party](#) ↻



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In the real estate business involving the Tokyu Fudosan Holdings Group, since development and operation of houses, office buildings, commercial facilities, resort facilities, etc. are going on for a long time and many stakeholders are involved, we recognize that we need to work on the entire supply chain in cooperation with stakeholders (design companies, construction companies, customers etc.).

Also, since we utilize large amounts of resources from the environment for our business activities, we will work on the entire supply chain for energy use, water resources conservation, biodiversity conservation, saving resources, reduction of pollutants and waste and appropriate treatment.

Supplier policy in the environmental supply chain

—**Energy use**— We will promote the efficient use of energy and the use of renewable energy throughout the entire group and will endeavor to reduce the impact of CO₂ / GHG emissions from business activities on climate change.

—**Water Resource**— In order to properly manage water resources according to region / time and efficiently use water resources , it is necessary to work in cooperation with stakeholders.

Also, Japan, where many of our business sites are concentrated, has yet to experience chronic water shortage, but in our business activities, we recognize that it is necessary to consider the water resources used for the production of imported materials (so-called “virtual water”).

—**Biodiversity Conservation**— Land development and materials procurement in our business activities are highly dependent on ecosystem services. Because damaging the ecosystem makes it difficult to receive such service, the Group will conduct appropriate material procurement and ecosystem surveys in collaboration with our stakeholders and work on biodiversity conservation.

—**Saving Resources**— The Group recognizes that the responsible use of resources is an important environmental issue because global environmental resources are finite. We also believe that it is important to endeavor to use resources more effectively based on an approach incorporating the 3Rs (reduce, reuse, recycle); instead of using vast amounts of resources for our businesses. The Group will work with stakeholders to use resources responsibly and more effectively.

—**Reduction of Pollutants and Waste and Appropriate Treatment**— The Group recognizes that the reducing emissions of pollutants and waste in business activities is one of the corporate social responsibilities. The Group will work to reduce the impact for the environment in cooperation with design firms and construction companies to reduce pollutants and waste discharges, reduce materials causing the pollutants and waste, and apply appropriate treatment when discharging it we will work.

—**Deforestation and Conversion-Free**— In accordance with the Tokyu Fudosan Holdings Group Human Rights Policy and the Tokyu Fudosan Holdings Group Sustainable Procurement Policy (hereinafter referred to as the “Procurement Policy”), the Group promotes sustainable business by respecting human rights and addressing environmental issues throughout its supply chain. We have also established a biodiversity policy in order to achieve the international goal of nature positive as defined in the “Kunming-Montreal Global Biodiversity Framework(GBF)”.

Working together with suppliers, customers, local communities, and other stakeholders, we are working to avoid or minimize negative impacts on biodiversity and increase positive impacts.

We aim to eliminate deforestation and land conversion (DCF: Deforestation and Conversion-Free) and respect the human rights of relevant rights holders, covering all timber and timber products procured and used in our supply chain.

In order to achieve this throughout our supply chain, we will also establish implementation items in our procurement policy and apply them to our suppliers, including direct or indirect business partners, to promote the practice of sustainable procurement activities.

—**Using Sustainably-sourced Wood for Concrete Formwork Plywood**— As a result of our assessment of human rights risks throughout the supply chain, we determined that human rights during building construction at construction companies, which are important suppliers, are of high importance.

As a result, we have determined that the human rights risks associated with building construction at our key supplier construction companies are of high importance.

In response, we have set and are promoting the goal of 100% use of certified or domestic timber for concrete formwork plywood by FY2030.

Sustainable Procurement Policy

Sustainable Procurement Policy →

Management Structure

The Group has established the Sustainability Committee headed by the President & CEO, and to address environmental issues within the supply chain, the Sustainability Council, established as a subcommittee, leads relevant management activities across the entire Group.

The Sustainability Council, comprised of environmental and sustainability managers from each group company, sets group-wide fiscal year targets for water use issues, monitors results and shares information based on a shared policy. This ensures proper reporting under relevant laws and regulations and environmental impacts are reduced through business activities.

Goals, Initiatives, and Achievements

Results on goals of acquisition of environmental performance certification, including LEED and CASBEE

《Quantified target》 100% in FY2022, 100% in FY2023

*Targeting new large-scale construction properties of office buildings and commercial facilities for TOKYU LAND CORPORATION

《Results》 The Group works with stakeholders to obtain environmental performance certification to improve the environmental practices of its entire supply chain.

ESG data : Environmental Property Certification →

《Case study》 In November 2015, the entire Futako Tamagawa Rise development became the first location in the world to receive LEED for Neighborhood Development Gold certification. This neighborhood development project received high marks not only for its verdant surrounding environment next to the Tama River, but also for its excellent access to public transportation, high density, compact development, and its initiatives for biodiversity and the more efficient use of energy.

In fiscal 2020, we received the DBJ Green Building 5 Star as a building with outstanding "environmental and social considerations" that is one of the best in Japan at Tokyo Port City Takeshiba Office Tower.

In addition, we are also actively working to acquire CASBEE and DBJ Green Building certification for our residential, office and commercial facility developments as part of our efforts to display environmental performance.

*LEED

A green building certification program administered by the U.S. Green Building Council.



Futako Tamagawa Rise



Tokyo Port City
Takeshiba Office
Tower

Environmental Certifications

ESG data : Environmental Property Certification 

Targets and performance on water usage from property portfolio

Water Use

We aim to reduce water use per floor area of our business offices and real estate portfolio by fiscal 2030 compared to the previous fiscal year. For the fiscal year 2022, the actual performance for the target of water usage per floor area, set at 1.4 (m³/m²), was 1.7 (m³/m²). The goal for the fiscal year 2023 is to achieve a value below 1.7 (m³/m²).

[> ESG Data : Water consumption](#)

Greenhouse Gas Emissions and Energy Consumption

We aim to achieve a reduction of 46.2% in carbon dioxide (CO₂) emissions from our real estate portfolio by 2030, compared to the 2019 fiscal year.

[> ESG Data : Decarbonization](#)

Property portfolio management policy

Tackling the real estate business in consideration of global environmental issues such as energy use, water resource, biodiversity conservation, resource saving, reduction of pollutants and waste and appropriate treatment will create business opportunities and enhance the competitiveness of the Group. It is based on this awareness that we will work with tenants and other stakeholders to help protect the environment across the entire supply chain of our businesses.

Permeating environmental awareness to stakeholders

Training and providing programs to raise employees' environmental awareness and sustainability awareness

Tokyu Fudosan Holdings Group implements various programs and training to raise awareness of sustainability (including environmental themes) among group employees. In addition, we conduct a survey once every six months to check the progress.

- Tokyu Fudosan Holdings distributes a newsletter on sustainability to group employees once a month. We carry out e-learning once every six months, and we always take up the theme of sustainability.
- Tokyu Land Corporation conducted e-learning on the basics of sustainability in May and November 2022.

Environmental policies integrated with suppliers through Training of relevant supplier staff

Tokyu Land Corporation distributes sustainable procurement policies to the suppliers, construction companies, and confirms the status of suppliers' compliance with environmental policies. If there are issues, we aim to build a responsible supply chain by coordinating and cooperating with each other.

Tokyu Re・design Corporation conducts training every year for the managers and staff of construction companies as suppliers at safety competitions, etc. Among them, we explain the environmental policy and strive to spread it. In fiscal 2021, we held training on handling construction waste and measures to prevent environmental pollution due to hazardous substances generated during work, and in fiscal 2022, we held training on sustainable procurement in accordance with our environmental policy.

Action taken to manage the environmental impact of suppliers through encouraging

Reporting

We believe that GHG gas emissions during building construction and material procurement methods are among the factors that have the greatest impact on the environment for our group. Therefore, Tokyu Fudosan Holdings requests its general contractors, its suppliers, to report on GHG gas emissions and use of formwork timber certification, and receives reports every year.

Impact reduction

TOKYU LAND CORPORATION presents its sustainable procurement policy to general contractors when making estimates. Our procurement policy states, ``In response to climate change, we promote the efficient use of energy and the use of renewable energy not only through our business activities but also throughout the life cycle of our products and services. We request our suppliers to reduce their impact on the environment.

Collaboration with tenants

Green leases offered to tenants of underlying property portfolio:

Tokyu Fudosan Holdings has introduced a green lease clause in some of the lease contracts for office buildings, commercial facilities, and housing that we operate and manage. In collaboration with tenants, we are actively promoting efforts to reduce the environmental load of facilities and compliance with environment-related laws and regulations.

Operating energy management systems together with tenants

Tokyu Land Corporation actively employs energy saving equipment and is constantly working to improve the management and operation of equipment that consume large amounts of energy, such as air conditioners.

At Abeno Q's Mall in the Abeno Ward of Osaka, Tokyu Land Corporation together with business owners and tenants jointly operates the Motto Save system with Osaka Gas Co., Ltd. that makes it possible to mitigate CO₂ emissions. This system aggregates energy usage data for the common space and private space of the mall on a cloud so that business owners and tenants can check, analyze and share findings about the energy usage data of each tenant.

We will continue to work on energy saving measures with the goal of realizing a low-carbon society in the future.

Response to environmental issues

Participation in initiatives on environmental impacts

Tokyu Fudosan Holdings participate in the Environmental Management Committee of the Global Compact Network Japan.

Commitment to Green Field Development

Tokyu Land Corporation is committed to utilizing underutilized and underutilized agricultural land and green spaces in a way that contributes to the local community.

- In December 2022, we started operation of the "Riene Solar Farm Higashimatsuyama Solar Power Plant" as part of our efforts to simultaneously solve the dual problems of energy and agriculture.
- Aiming to eliminate idle farmland, we will develop a highly productive next-generation facility horticultural park, and realize a land improvement project that involves the creation of non-agricultural land that systematically responds to urban land demand. Agricultural land conversion and development permission has been obtained for a non-agricultural land area created in a land improvement business district in Shiraoka City, Saitama Prefecture.

Measures to reduce energy and water consumption

Aggregate energy data at all facilities for efficient energy use

Tokyu Land Corporation has introduced energy data aggregation systems at some 200 office buildings, commercial facilities and resorts that it owns or uses in an effort to reduce CO₂ emissions. The visualization of energy usage enables tenants of office buildings and commercial facilities to check and analyze their energy usage to carry out activities that more efficiently help to reduce CO₂ emissions.

Smart meters used in underlying property portfolio in all properties

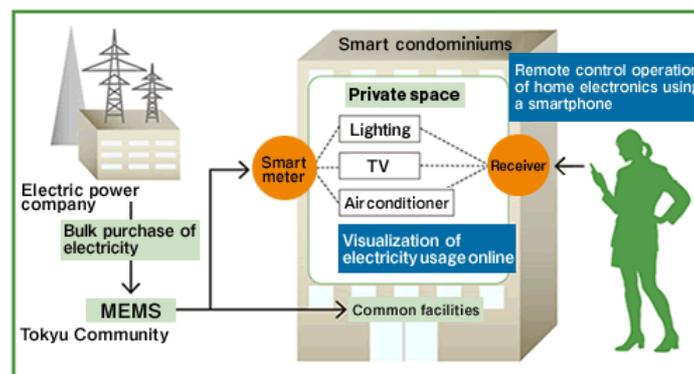
To promote efficient energy use, smart meters are installed at all facilities operated and managed by TOKYU LAND CORPORATION.



Smart meter (sample image)

Managing energy usage of condominiums

Tokyu Community Corporation has been selected to be a MEMS aggregator as an energy management service provider by the Ministry of Economy, Trade and Industry. It is adopting MEMS (condominium energy management systems) and bulk high-voltage electricity receiving services (a type of energy-saving system) in the condominiums that it manages. These systems were introduced for approximately 786 housing units during FY2014 as part of efforts to reduce energy use at existing condominiums.



Conceptual diagram of bulk electricity purchases and MEMS

Reducing water use with water saving systems and features

The Tokyu Harvest Club Atami Izusan & VIALA was opened as a resort hotel in harmony with nature in 2013. The resort hotel has been making efforts to conserve water resources through the use of water-saving toilets and reducing the use of tap water by actively using mountain groundwater.

At Tokyu Harvest Club Hotel Hakone Koshien and VIALA Hakone Hisui, efforts are also being made to use water effectively through the reuse of underground spring water from the premises.



Tokyu Harvest Club VIALA Hakone Hisui uses underground spring water

Reduction of water usage by using rainwater

The office building "Kasumigaseki Tokyu Building" developed by Tokyu Land Corporation has introduced facilities to utilize rainwater falling on the roof.

The collected rainwater is used for miscellaneous water such as toilet wash water to save water usage. Water retention pavement for suppressing the rise in road surface temperature is laid on a part of the outer structure by thermal evaporation of water vapor, and it is expected that the heat island phenomenon will be mitigated.

Initiatives for biodiversity

Dialogue /engagement to mitigate biodiversity loss

As a member of the Keidanren Nature Conservation Council, we engage in dialogue /engagement with related organizations and NGOs.

Applying biodiversity commitments to the supply chain

Tokyu Fudosan Holdings distributes the Sustainable Procurement Policy to its supplier construction companies and at the same time conducts questionnaires to check the status of each company with the goal of achieving a 100% compliance rate with the Environmental Policy by fiscal 2030. If any issues arise during this process, Tokyu Land Corporation and the construction companies will work together to address them, aiming to build a responsible supply chain. In fiscal 2021, 36% of the construction companies surveyed confirmed that their suppliers had a sustainable procurement policy that includes biodiversity.

No-Deforestation Commitment

Much of plywood used for concrete formwork in Japan is made of south-sea timber logged in Malaysia, Indonesia and other nations, and environmental destruction in the native forests and land grabbing from indigenous peoples have become a problem. In light of this situation, Tokyu Land Corporation, in cooperation with its tier-1 suppliers, construction companies, has pledged to procure 100% of its plywood for concrete forms from sustainable sources such as FSC or PEFC certified or domestic timber by fiscal 2030, with emphasis on environmental protection and human rights issues. In fiscal 2021, 48% of construction companies indicated that certified or domestic lumber was available for formwork plywood.

Biodiversity Action Plan (BAP)

The Group formulates a Biodiversity Action Plan (BAP) by identifying areas in all of our real estate portfolio that have sites, species, and functions of particular importance for conservation. In the relevant areas, biodiversity monitoring by experts is conducted on a regular basis, and the results are reflected in the management plan in an effort to conserve biodiversity.

Resort Town Tateshina plans to establish a monitoring plan to survey the habitat and growth environment of plants and animals in the villa area and surrounding wooded areas, etc., and if there are any rare plant or animal species or threats to the habitat or growth environment, countermeasures will be considered and utilized in the green space management plan.