

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.

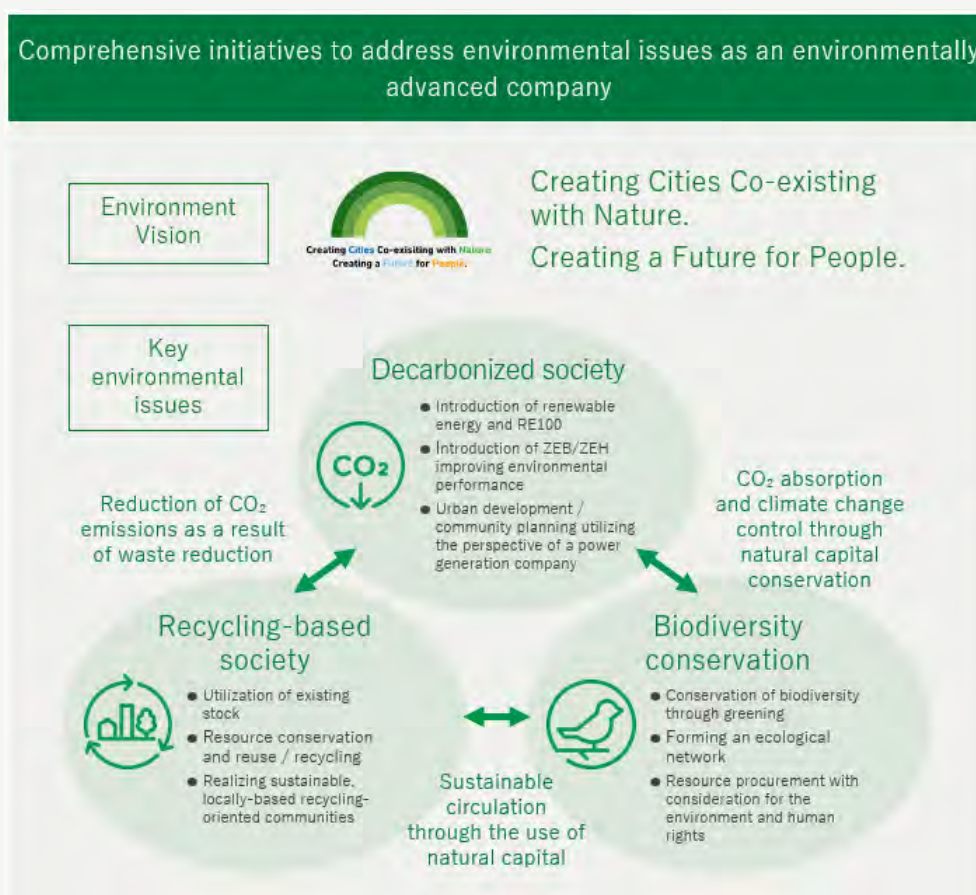


five environmental issues

- 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.



Climate Change



TCFD / TNFD disclosure



TCFD disclosure



Transition Plan toward Decarbonized Society



Biodiversity



TNFD disclosure



Pollution and Resources



Water Use



Supply Chain (Environment)



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Climate Change

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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.

＞ 都民の健康と安全を確保する環境に関する条例（環境確保条例）・施行規則 | 東京都環境局 

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

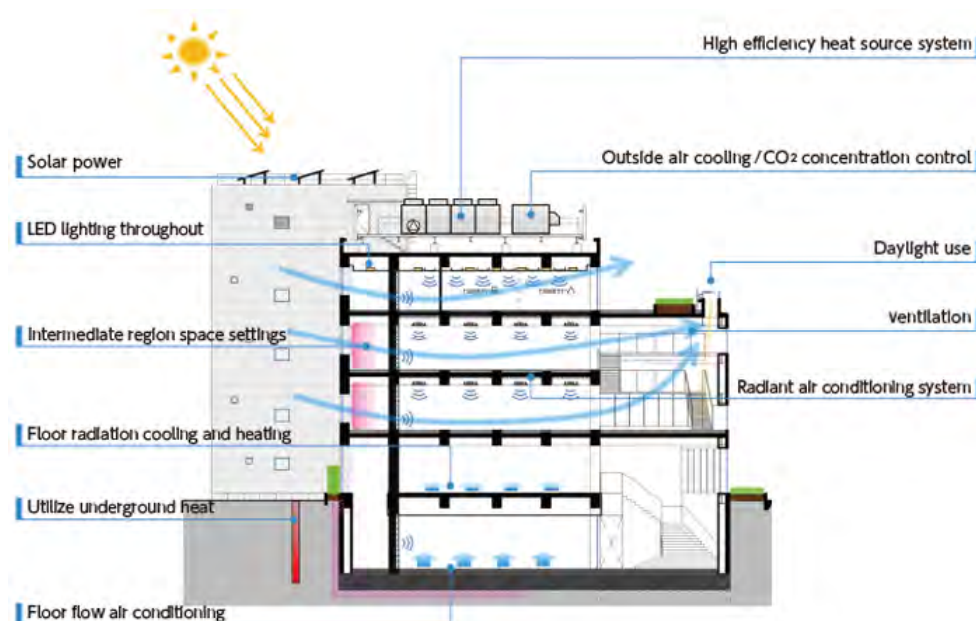
Initiatives towards ZEB and ZEH

TOKYU COMMUNITY Technology Training Center NOTIA acquired Nearly ZEB

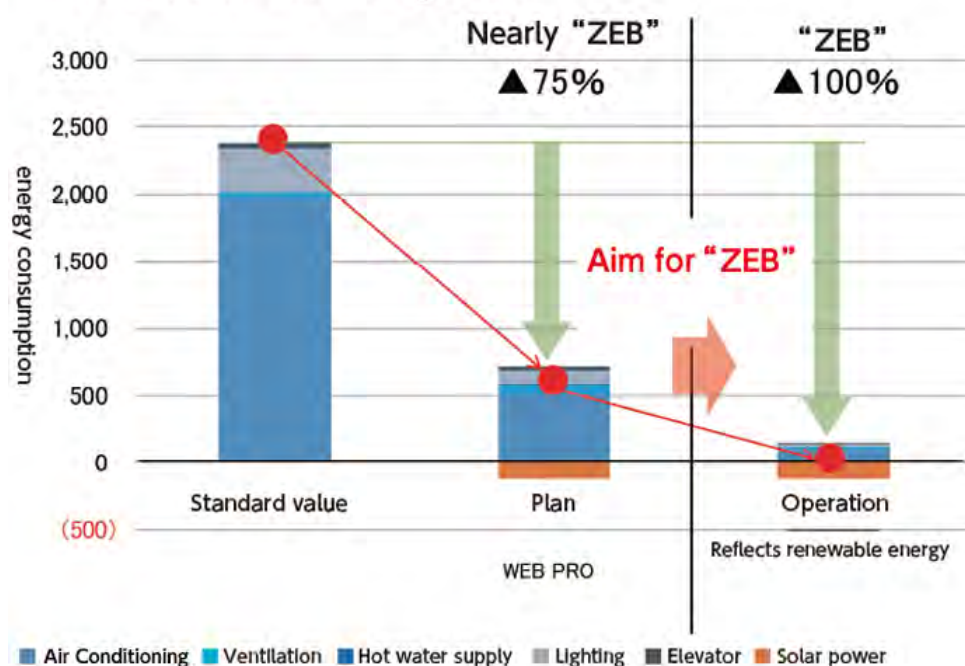
TOKYU COMMUNITY CORP. has acquired “Nearly ZEB” certification of Building-Housing Energy-efficiency Labeling System (BELS) led by the Ministry of Land, Infrastructure, Transport and Tourism at TOKYU COMMUNITY Technology Training Center NOTIA. Zero Energy Building (ZEB) refers to a building that aims to reduce total energy usage by self-sufficient energy through solar power generation while minimizing energy consumption through energy-saving technologies on construction or equipment. NOTIA became the first office building in Tokyo to acquire “Nearly ZEB” with 75% energy reduction.

TOKYU COMMUNITY CORP., as a comprehensive real estate management company, aims to achieve an energy conservation effect of 75% or higher through further energy conservation operations of Nearly ZEB properties, and accumulate know-how regarding energy-saving operation of buildings and expand it into our sales and proposal activities.

> https://www.tokyu-com.co.jp/service/mansion_m/notia/



Process of realizing ZEB



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 \(Japanese\)](#) [I](#) [Z](#)

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 climate change, data on greenhouse gas emissions (Scope 1, Scope 2, Scope 3 (Categories 1-8 and 11-13) and energy usage) are included in the scope of verification.

Third-party Independent Verification Report on Environmental Data



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

TCFD / TNFD disclosure

[< Environment](#)[Climate Change](#)[TCFD / TNFD disclosure](#)[TCFD disclosure](#)[Transition Plan toward Decarbonized Society](#)[Biodiversity](#)[TNFD disclosure](#)[Pollution and Resources](#)[Water Use](#)[Supply Chain \(Environment\)](#)

Tokyu Fudosan Holdings Corporation has developed and disclosed a “TCFD/TNFD Report” that integrates the three disclosures previously made based on the Task Force on Climate-related Financial Disclosures (TCFD) and the Taskforce on Nature-related Financial Disclosures (TNFD): the TCFD disclosure, the transition plan to a decarbonized society, and the TNFD report.

(Background)

Our group views climate change as both a risk to business activities and a new business opportunity. We endorsed the TCFD recommendations in March 2019 and made TCFD disclosures. Subsequently, we expanded the scope of our scenario analysis and disclosed it in March 2022. Furthermore, in July 2023, we proactively issued Japan's first “Transition Plan to a Decarbonized Society” report for the domestic real estate industry, prepared in accordance with guidance such as the TCFD.

Regarding nature, recognizing that our Group's business is closely linked to nature, we participated in the TNFD Forum in June 2023. In August of the same year, we developed Japan's first TNFD report (Version 1) for urban development, referencing the TNFD Beta v.0.4. Subsequently, in January 2024, we formulated and disclosed the “TNFD Report (Second Edition)” referencing the “TNFD Final Recommendations.” In July of the same year, we released the “TNFD Report (Third Edition),” which added forests from our resort operations. Finally, in December 2025, we formulated and disclosed the “TCFD/TNFD Report (Integrated Edition, Second Edition),” which added oceans.

- Integrated Edition, Second Edition
 - [TCFD / TNFD Report \(PDF:12.9MB\)](#) [PDF](#)
 - [TCFD / TNFD Report Ocean Page Excerpt Edition \(PDF:3.61MB\)](#) [PDF](#)
- Integrated Edition, First Edition
 - [TCFD / TNFD Report \(PDF:10.7MB\)](#) [PDF](#)



Governance

Corporate governance around climate- and nature-related risks and opportunities

Strategy

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

Risk and Impact Management

Process to identify, assess and manage climate- and nature-related risks

Metrics and Targets

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

Transition Plan toward Decarbonized Society

A business strategy created with reference to TCFD and other guidelines, and Transition Plan toward Decarbonized Society aligned with financial strategies

Climate- and nature-related initiatives

Our Group’s Initiatives for Decarbonization and Nature Positive



TCFD / TNFD disclosure

[< Environment](#)[Climate Change](#)[TCFD / TNFD disclosure](#)[TCFD disclosure](#)[Transition Plan toward Decarbonized Society](#)[Biodiversity](#)[TNFD disclosure](#)[Pollution and Resources](#)[Water Use](#)[Supply Chain \(Environment\)](#)[Introduction, summary, Index](#) [Governance](#) [Strategy](#) [Risk and impact management](#) [Metrics and targets](#) [Transition plan for a decarbonized society](#) [Climate- and nature-related initiatives](#) [References, terms, and explanations](#) 

INTRODUCTION

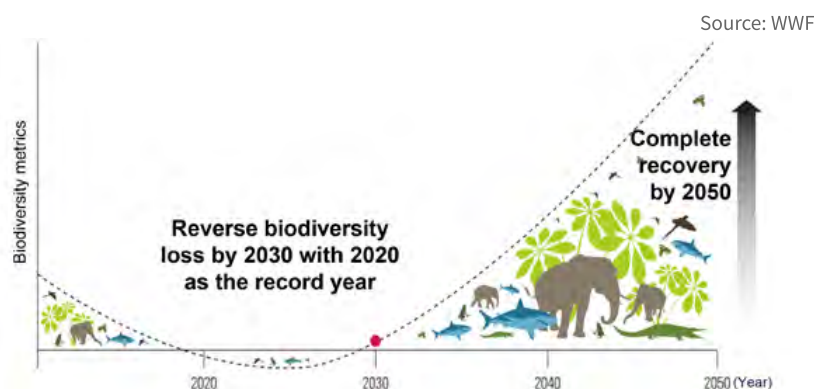
Introduction -Nature Positive as a Global Goal-

Global environmental issues, such as climate change and biodiversity loss, are becoming more serious every year and are recognized as major risks to society and the economy^{*1}. Various measures have been adopted to address climate change including the 2015 Paris Agreement, and international initiatives are underway to develop a **net zero decarbonized society**. Measures addressing biodiversity loss include the 2022 Kunming-Montreal Global Biodiversity Framework (GBF); under the **2050 vision of “Living in harmony with nature”**, the GBF has set a goal of **becoming “nature positive”^{*2} by 2030**, which prescribes taking urgent action to halt and reverse biodiversity loss and promote environmental recovery under 23 specific targets. Accordingly, our Group is steadily adopting business initiatives to meet the global “net zero” and “nature positive” goals, while proactively identifying and disclosing important climate- and nature-related concerns.

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

Ranking of risks according to severity over next decade	
1	Extreme weather events
2	Biodiversity loss and ecosystem collapse
3	Critical changes to Earth systems
4	Natural resource shortages
5	Misinformation and disinformation
6	Adverse outcomes of AI technologies
7	Inequality
8	Societal polarization
9	Cyber espionage and warfare
10	Pollution

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



Environmental Management at Tokyu Fudosan Holdings and Positioning of TNFD Report

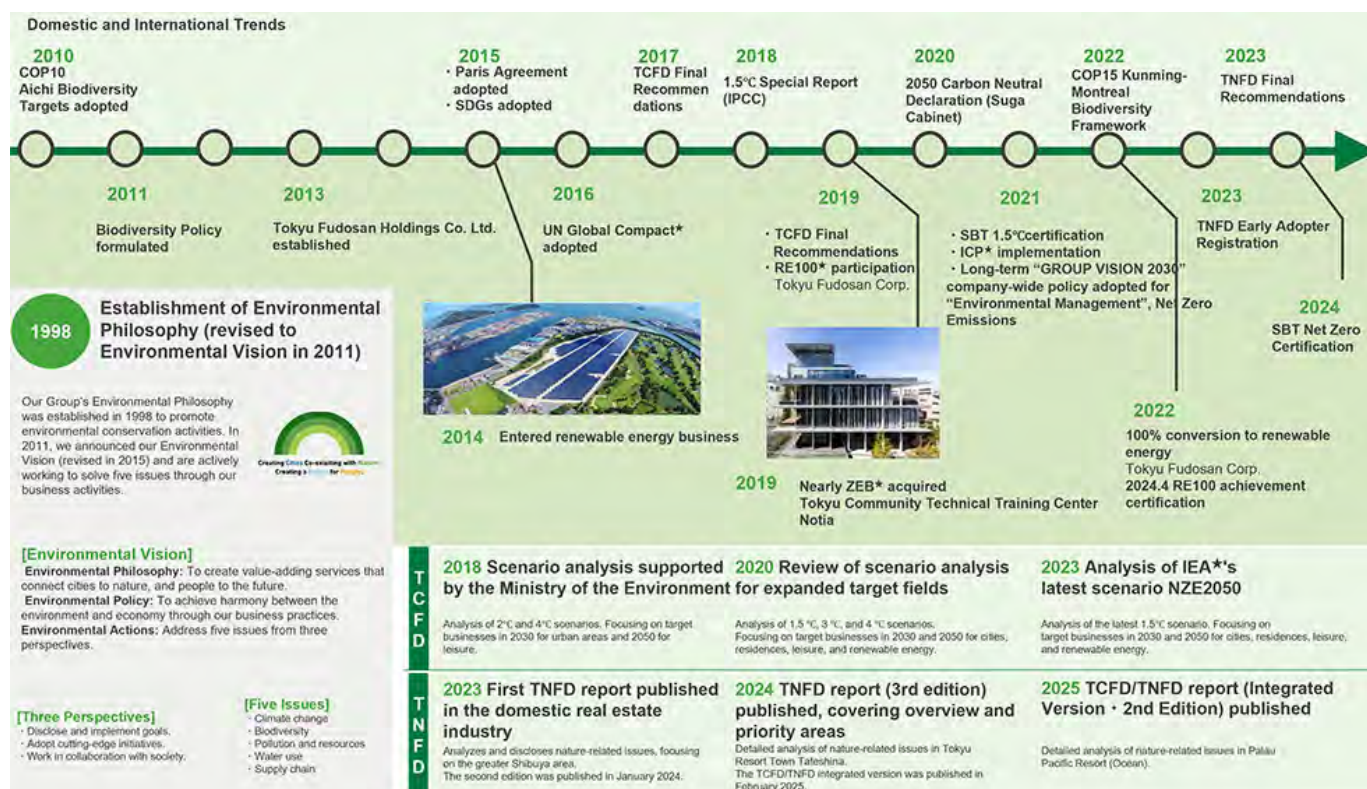
- Our Group has adopted materiality based on social issues and established a long-term “environmental management” policy, which will be key to achieving our vision.



- Since its founding, we have been working to develop a sustainable society and address environmental issues through various business activities. In May 2021, we formulated the long-term materiality-based “GROUP VISION 2030” that endeavors to create lifestyles that protect the environment.
- Our long-term vision places environmental management as a major pillar, and we aim to expand environment-friendly business opportunities through the **decarbonized society, circular economy, and biodiversity** initiatives.
- This report discusses climate- and nature-related issues and our Group’s responses to them, with reference to the **Task Force on Climate-related Financial Disclosures (TCFD★)** and **Task Force on Nature-related Financial Disclosures (TNFD★)** frameworks, as well as various guidance on transition plans. To this end, we collaborate with MS&AD InterRisk Research Institute & Consulting Inc. to analyze climate- and nature-related issues, and with Think Nature Inc. to analyze nature-related issues.

★ :See “Terms and Explanations”

Our Group's environmental management history



★ :See "Terms and Explanations" →

Highlights in numbers for decarbonization and nature positive



*1 Confirmed value after third-party certification

*2 Excluding some joint ventures, etc.

*3 Applies to large non-residential properties (total floor area $\geq 10,000$ m²). Excluding some joint ventures

*4 Percentage of condominiums, offices, and other facilities owned by Tokyu Fudosan Corp. with building performance equivalent to or higher than ZEB/ZEH Oriented (at commencement of construction)

*5 Before equity conversion (including businesses under development)

*6 New large-scale office buildings and commercial facilities developed by Tokyu Fudosan Corp.

★ :See “Terms and Explanations” 

Executive summary

Climate Nature

[Summary] Integrated disclosure of climate- and nature-related issues

We are working toward solving climate- and nature-related issues through our business practices. To mitigate and adapt to climate change, the conservation of natural vegetation is essential for absorbing greenhouse gas (GHG) and reducing the risk of extreme weather events. Climate change is also a major cause of biodiversity loss and needs to be addressed to achieve nature positive goals.

Nature- and climate-related issues are closely related to each other, as recommended by the TNFD; thus, we have adopted **integrated examination policies and initiatives on climate and nature, and disclose information in accordance with the framework**.

This report seeks to provide an overview of how we address climate- and nature-related issues through disclosure based on the TCFD recommendations, transitioning to a decarbonized society, and disclosure based on the TNFD recommendations.

	Disclosure based on TCFD recommendations	Transition plan for a decarbonized society	Disclosure based on TNFD recommendations (TNFD report)
Revision history	2019.3 Support for TCFD recommendations TCFD disclosure 2023.3 Expansion of scenario analysis scope	2023.7 Report issued	2023.8 1st edition: Overview and analysis of Greater Shibuya Area 2024.1 2nd edition: Updates in response to final TNFD recommendations 2024.7 3rd edition: Addition of analysis for Tokyu Resort Town Tateshina
Disclosure contents	● Climate-related governance ● Strategy implementation (climate-related risks and opportunities, scenario analysis, etc.) ● Climate-related risk management ● Climate change targets, KPIs	● Governance ● Roadmap for realizing a decarbonized society ● Key measures and initiatives ● Funding policy ● Stakeholder engagement ● Skills and human resources development	● General requirements ● Nature-related governance ● Strategy implementation (nature-related dependencies, impacts, risks, and opportunities; priority areas) ● Nature-related risk and impact management ● Nature-related metrics and targets ● Nature-related initiatives

↓ Integration

- February 2025: TCFD/TNFD Report Edition 1 published
- December 2025: TCFD/TNFD Report Edition 2 published (Addition of analysis results for Palau Pacific Resort)

Climate- and nature-related governance/strategy/risk and impact management/metrics and targets/transition plan for a decarbonized society

For your benefit, this report uses **icons in the upper right corner of each page** to indicate the theme (“climate” and “nature”) and items “governance,” “strategy,” “risk and impact management,” and “metrics and targets” being covered. In addition, **the “NEW” icon** is displayed in the upper left corner for **content that has been newly added** to this report.

[Summary] Overall disclosure

Please [refer to the Appendix](#) for the TNFD Recommendations for disclosures.

Pillars of disclosure	Main recommendations for disclosure	Climate-related disclosure	Nature-related disclosure
Governance	- Board oversight system for climate- and nature-related issues (dependencies and impacts, risks and opportunities), governance system determining the role of management - Nature-related stakeholder engagement	The Sustainability Committee was established, consisting of the president and CEO (chairman) and executive officers. The Sustainability Committee was established, consisting of the president and CEO (chairman) and executive officers. Meetings are held twice a year with the Risk Management Committee to plan for important environmental management and sustainability issues, including climate- and nature-related issues. - The Board of Directors receives reports from the Sustainability Committee and regularly reviews the progress. - We formulated a human rights policy and are engaging with local communities.	
Strategy	Identify climate- and nature-related issues - Determine impacts of risks and opportunities on business, strategy, and financial plans - Scenario-based strategies for promoting resilience Nature-related priority regions	Medium- and long-term scenario analysis for four businesses (cities, leisure, residences, and renewable energy) under the 1.5, 3, and 4°C scenarios, considering risks and opportunities, assessing financial impacts, and incorporating them in our strategies. - We formulated our long-term “GROUP VISION 2030” for achieving net zero emissions by 2050 and set long-term targets for reducing GHG emissions. We received the SBT Net Zero certification in July 2024. - The transition plan for achieving the above target is explained in this report.	Based on the TNFD's LEAP[★] approach, we identified nature-related issues (dependencies, impacts, risks, and opportunities) as follows: - Considering the dependencies and impacts by business - Based on the metrics assessment, the priority areas are set: “Greater Shibuya Area[★]” and “13 areas including resort facilities” centered around “Tokyu Resort Town Tatehina” and “Palau Pacific Resort” - Considering material nature-related issues in the “Greater Shibuya Area” and “Tokyu Resort Town Tatehina” and “Palau Pacific Resort”
Risk and impact management	Identifying, assessing, and managing climate- and nature-related issues - Integration into the company-wide risk management initiative	- Climate-related risks are identified and assessed based on scenario analysis. - Nature-related dependencies, impacts, risks, and opportunities are identified and assessed in terms of the entire business and value chain, with detailed assessment of priority areas. - The identified issues are managed through a system informed by the Sustainability Committee and are also integrated into company-wide risk management.	
Metrics and targets	Metrics, targets, and performance in the assessment and management of climate- and nature-related issues	Management performance for each item. For details, please refer to the “Metrics and Targets” section.	

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

[Summary] Climate-related scenario analysis

We conducted a scenario analysis for our four businesses (urban development, leisure, residential, and renewable energy) and incorporated it in our strategy.

Scenario assumptions		Overview of results	Financial impact	Medium term	Long term	
1.5°C scenario	Policies, technologies, markets, etc. steadily transition toward a decarbonized society and limit increases in global average temperatures at the end of the 21st century to 1.5° C compared to pre-industrial levels.	- In the medium term, carbon pricing and ZEB implementation costs will have a significant financial impact on urban development businesses; however, in the long term, ZEB conversion will be completed, and rental income is expected to increase by securing a market advantage. In addition, the renewable energy business is expected to expand. - Regarding physical risks, natural disasters due to abnormal weather will gradually increase, but with little impact due to strengthened BCP* and LCP* responses.	Transition	Urban development	High	Somewhat low
				Residential	Somewhat low	Low
				Leisure	Somewhat low	Low
				Renewable energy	High	Low
			Physical	Urban development	Low	Somewhat low
				Residential	Low	Somewhat low
				Leisure	Low	Somewhat low
				Renewable energy	Low	Somewhat low
3°C scenario	- In the medium term, the shift to ZEB in urban development businesses has relatively mild effects, and the financial impact is lower than in the 1.5° C scenario, though the impact is expected to continue in the long term. A certain degree of expansion is expected in the renewable energy business. - In terms of physical risks, natural disasters will become more severe, and temperatures will rise faster than in the 1.5° C scenario, and the impact on resort businesses will be greater. However, a certain degree of financial impact can be reduced by differentiation from competing facilities, such as by selecting locations and using facilities during the off-season.	Transition	Urban development	Somewhat high	Somewhat high	
			Residential	Somewhat low	Somewhat low	
			Leisure	Somewhat low	Somewhat low	
			Renewable energy	Somewhat high	Somewhat high	
		Physical	Urban development	Low	Somewhat low	
			Residential	Low	Somewhat low	
			Leisure	Low	Moderate	
			Renewable energy	Low	Somewhat low	
4°C scenario	- In the medium term, the impact of climate change is expected to be small and the financial impact will be low; however, in the long term, the financial impact of intensifying natural disasters and rising temperatures is expected to increase. Meanwhile, the financial impact may be limited to a certain extent by differentiating from competing facilities through developing satellite offices in urban development businesses, selecting locations in resort businesses, and using facilities during the off-season. - The renewable energy business is required to expand in line with market trends.	Transition	Urban development	Low	Low	
			Residential	Low	Somewhat low	
			Leisure	Low	Moderate	
			Renewable energy	Low	Low	
		Physical	Urban development	Low	Moderate	
			Residential	Low	Moderate	
			Leisure	Low	Somewhat high	
			Renewable energy	Low	Moderate	

High: ≥10% of consolidated operating revenue Somewhat high: ≥10% of the operating revenue of the business portfolio

Medium: 5-10% of the operating revenue of the business portfolio Somewhat low: 2-5% of the operating revenue of the business portfolio

Low: >2% of the operating revenue of the business portfolio

★ :See “Terms and Explanations” 

[Summary] Overview of dependencies and impact on nature and setting of priority locations

STEP 1)

Assess dependencies/impacts on nature for Group overall

Based on tools such as ENCORE (see Glossary), we reviewed an overview of dependencies and impacts in our entire business.

Segment	Business activities	Sales volume	Value chain	Impacts on nature										Dependencies on nature						
				Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use
Urban development	Office and commercial facilities (condominium, etc.) and rental housing, etc.		Building and development	VH																
				VH																
Strategic investment	Renewable energy facilities (data power plant, etc.)		Building and development	VH																
			Full production	VH																
			Operation	VH																
			Operation	VH																
Strategic investment	Logistics facilities		Building and development	VH																
			Operation	VH																
Strategic investment	Condominium management, environmental and property management		Building and development	VH																
			Operation	VH																
Property management and operation	Hotel, golf courses, etc.		Building and development	VH																
			Operation	VH																
Healthcare, etc.	Healthcare, etc.		Building and development	VH																
			Operation	VH																

Impacts

Land modification/occupation, etc. upon real estate development and operation
Terrestrial ecosystem use

Dependencies

Supply services for resources, etc. and **cultural services**★ for nature-based comfort, landscapes, etc.



Business scale (Sales volume)

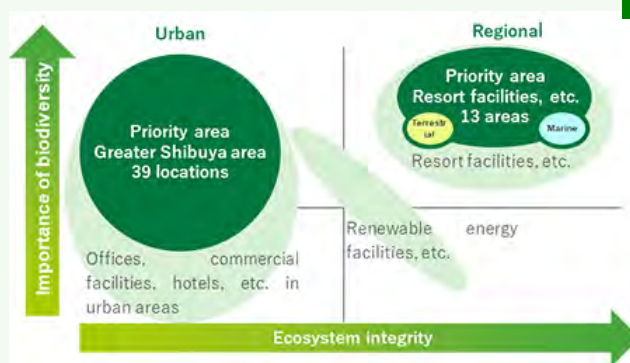
Conduct detailed analysis at the locations below:

- (1) **Greater Shibuya area**
(Disclosed in FY2023)
- (2) **Tokyu Resort Town Tateshina**
(Disclosed in FY2024)
- (3) **Palau Pacific Resort**
(Disclosed in FY2025)

STEP 2)

Analyze importance at addresses of each property

We analyzed various metrics regarding the ecological integrity★ and biodiversity importance and water stress as they pertain to the addresses of properties held and operated by the Group. Then we selected the "Greater Shibuya area" and "13 areas including resort facilities" as our priority locations.



★ :See "Terms and Explanations" →

[Summary] Contributed to nature positive in our urban development business in the Greater Shibuya Area

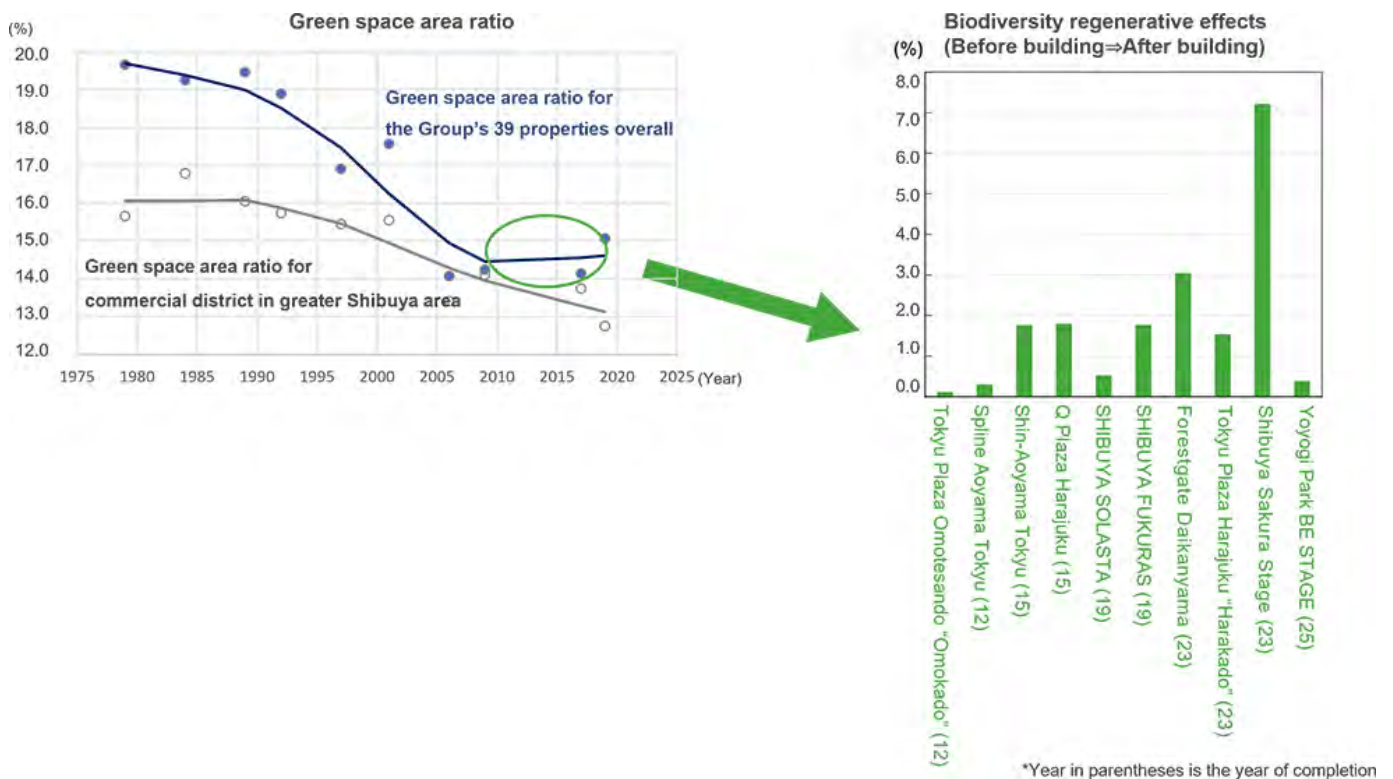
Dependencies and impacts of Greater Shibuya area

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.



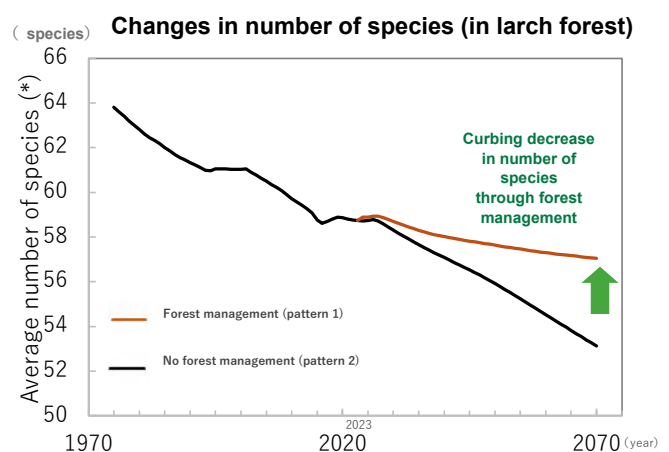
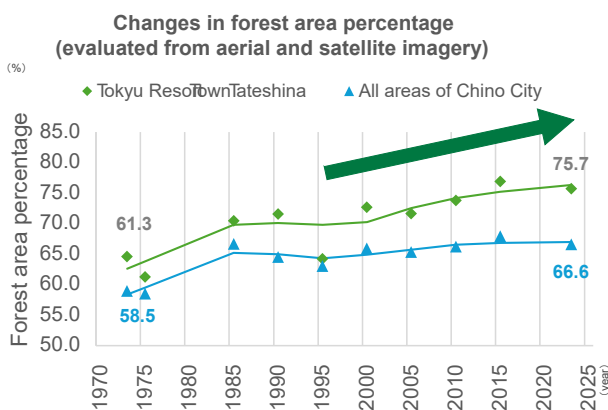
[Summary] Contributions to nature positive in Tokyu Resort Town Tateshina

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** (Bottom Left 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.



Coral reef assessments indicated that measures, such as establishing a marine protected area, have **steadily increased coral coverage** in the seas in front of the resort. Despite recent environmental pressures from typhoons and predation by marine organisms, **new coral growth continues to expand** [Figure 2]. Furthermore, there has been an **increase in populations of large invertebrates**, including the endangered *Tridacna gigas*, confirming the effectiveness of PPR's conservation and restoration efforts [Figure 3].

* See text for sources and detailed terminology.

[Summary] Understanding risks and opportunities, supply chain collaboration, initiatives/future policy

Climate- and nature-related risks and opportunities

Based on the scenario and dependency/impact analyses, we characterized climate- and nature-related transition risks, physical risks, and opportunities that are particularly important for our business.

Although various **climate- and nature-related risks are expected, many business opportunities can also be expected.**

Initiatives to address risks, opportunities, dependencies, and impacts in the supply chain

Real estate development requires a long time and involves many parties; thus, it is necessary to collaborate with stakeholders to address climate- and nature-related issues throughout the entire supply chain.

● Sustainable Procurement Policy

We established not only “Compliance with and respect for international standards on human rights and labor” but also a Sustainable Procurement Policy, such as “Responding to climate change” and “Preserving biodiversity,” which includes environmental considerations and promotes efforts throughout the supply chain.

● Zero Deforestation Initiatives

The use of plywood panels for concrete formwork in construction may lead to environmental destruction in native forests and land confiscation from indigenous inhabitants. Our Group is cooperating with construction companies to increase the use of sustainable wood (FSC- and PEFC-certified, domestic, etc.) for concrete formwork in condominiums and other structures to 100% by FY2030.

Company-specific climate- and nature-related initiatives

Item		Major initiative
Climate-related		Establishing a business that provides renewable energy
		ZEB/ZEH, environmental certification acquisition
Nature-related	Urban development	Urban development, urban greening, greening technology, planting management, etc.
	Hotel and leisure	Forest management, protection of rare species, Marine Conservation, etc.
	Other	Invasive species removal, pollution and waste reduction, resource circulation, water use reduction

Toward the future

We plan to increase our efforts toward addressing climate- and nature-related dependencies and impacts, as well as risks and opportunities. In particular, we plan to elaborate on the scenario analysis, including the roles of nature, and examine nature-related metrics and goals based on international trends.

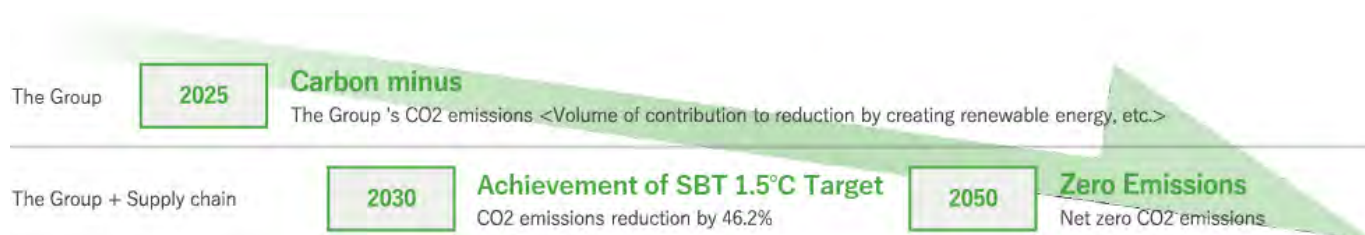
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[Summary] Transition plan for a decarbonized society

Transition plan for a decarbonized society

We formulated the long-term “GROUP VISION 2030” and set a long-term goal of reducing GHG emissions to **net zero by 2050**, for which we received **SBT Net Zero certification in July 2024**.

This report describes our **transition plan, in line with the TCFD and other guidelines**, which forms the basis for promoting decarbonization initiatives, such as **renewable energy businesses and ZEB/ZEH building conversions**.



Components of transition plan	Disclosure
Governance structure	● Roles of the Board of Directors and committees regarding the transition plan, management structure
	● Remuneration and incentives
	● Skills, abilities, and training
Roadmap and measures	● Roadmap, measures, and financing policy
Risks and opportunities	● Scenario analysis, risks and opportunities
Metrics and targets	● Climate-related metrics and targets
Stakeholder engagement	● Stakeholder engagement regarding the transition plan

Disclosure policy (general requirements)

General Requirements	Our Group Policy
Application of Materiality	This report considers the impacts on stakeholders and society, as well as the Group's management.
Scope of disclosure/areas with nature-related issues	- For climate-related issues, we conducted a scenario analysis for our four main businesses (cities, residences, leisure, and renewable energy). - For nature-related issues, we characterized the issues in all business fields/major value chain stages and determined dependencies, impacts, risks, and opportunities based on priority areas in the “Greater Shibuya Area” and “Tokyu Resort Town Tateshina” and “Palau Pacific Resort”. - Of the recommended items for nature-related disclosures, the “scenario analysis” is not included.
Integration with other sustainability-related disclosures	This report provides integrated disclosures accounting for the close relationship between climate- and nature-related issues, which are also related to other sustainability issues, such as human rights.
Target period	We examined risks and opportunities in the short, medium, and long term. [Short term] 1–2 years based on the fiscal year. [Medium term] 3–9 years including the medium-term management plan. The climate change scenario analysis considers 2030, where the SBT 1.5 °C target is set. [Long term] 10–30 years including the long-term management policy. The climate change scenario analysis considers 2050, where the net zero emissions target is set.
Engagement with indigenous and local communities and affected stakeholders	- We formulated a human rights policy identifying important issues, including those in our supply chain, such as the rights of local and indigenous communities, to prevent and reduce impacts on humans and promote our Sustainable Procurement Policy with our suppliers. - In new projects and existing businesses, we strive to respect the rights of stakeholders and engage with local stakeholders in nature- and climate-related initiatives.

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Disclosure of climate- and nature-related information

- › Governance
- › Strategy
 - › Major risks and opportunities
 - › Climate-related scenario analysis
 - › Nature-related analysis based on LEAP approach
- › Risk and impact management
- › Metrics and targets
- › Transition plan for a decarbonized society
- › Climate- and nature-related initiatives
- › References, terms, and explanations

Governance

Here, we explain the board's oversight and management roles in relation to climate- and nature-related dependencies and impacts, risks and opportunities, and stakeholder engagement in nature-related issues.

Our climate- and nature-related governance structure incorporates targets that are approved and reviewed by the Board of Directors.

- Members of the Board of Directors require expertise in “environment and sustainability.”
- We have clarified the roles and responsibilities of management and are working responsibly on addressing important climate- and nature-related issues.

Roles of the main organization

- We established a Sustainability Committee, whose members are the President and CEO (chairman) and executive officers. We hold meetings twice a year with the Risk Management Committee to plan for important environmental management and sustainability issues, including climate change and nature-related issues.
- The Board of Directors receives reports from the Sustainability Committee on the important issues and monitors the progress through regular reviews.

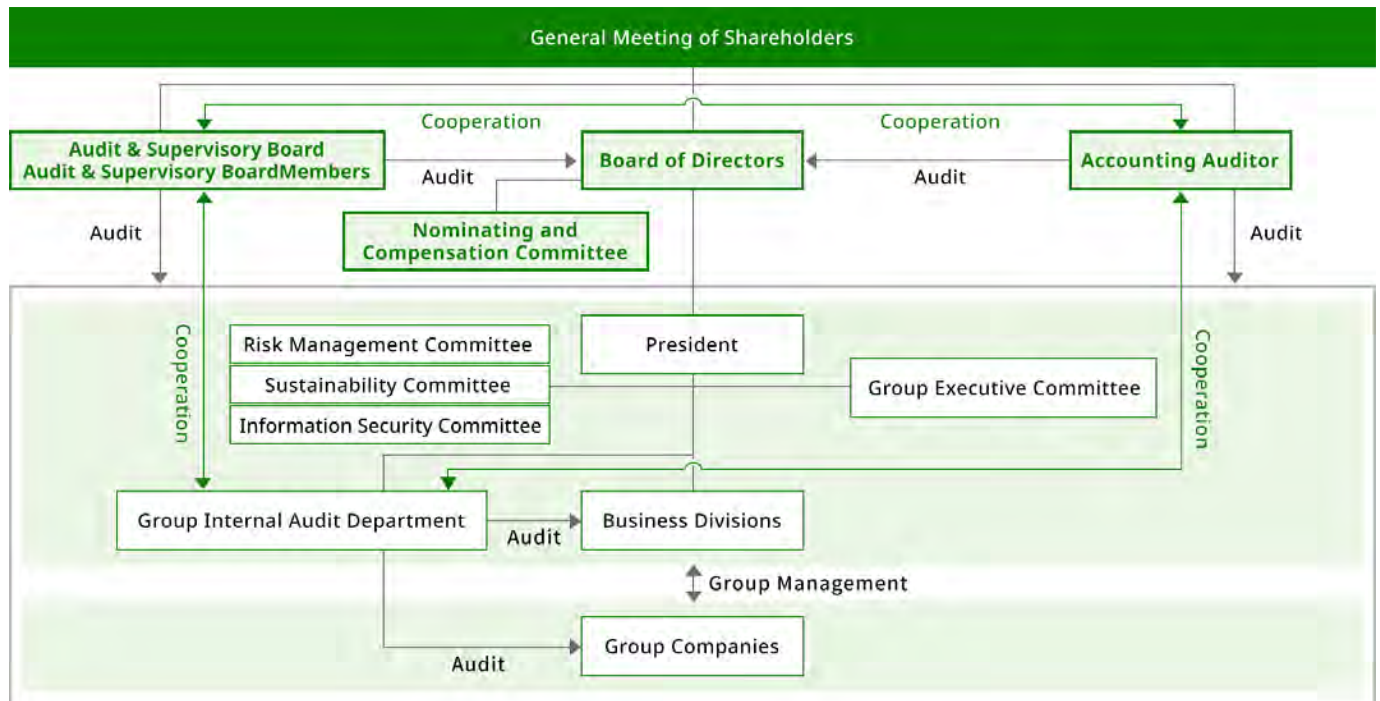
- We have made “environmental management” a company-wide long-term management policy and have set three medium-term priorities to address in our businesses.



- For climate change, in FY2020, we set the goal of “Net Zero Emissions by 2050” based on the instructions of the president and CEO. For the FY2030 goal, we obtained SBT (1.5 °C level) certification in FY2021. For the long-term goal up to 2050, we obtained SBT Net Zero certification in 2024.
- For nature-related issues, we considered international trends and revised the “[Biodiversity Policy](#)” in FY2023 to minimize negative impacts on biodiversity and expand positive impacts.
- ESG initiatives, including climate- and nature-related issues, was considered in executive compensation from FY2021.

Structure

- The Group Executive Committee and Sustainability Committee collaborate to formulate policies, goals (KPIs), and action plans for environmental management, overseen by the Board of Directors.
- The Sustainability Committee monitors progress against KPIs and manages performance.



Climate Nature Governance

Human Rights and Stakeholder Engagement

The TNFD prioritizes effective and meaningful engagement with indigenous/local communities and affected stakeholders in assessing and managing nature-related dependencies, impacts, risks, and opportunities, and recommends disclosure under “governance.”

The development of real estate including housing, office buildings, commercial facilities, and leisure facilities requires a long time and involves many stakeholders. Therefore, appropriate decarbonization and nature positive measures must incorporate the concerns of stakeholders (design companies, construction companies, customers, etc.) and be implemented throughout the supply chain.

Below, we introduce key topics on human rights and stakeholder engagement related to our business and supply chain.

Respect for human rights

- We formulated the “**Tokyu Fudosan Holdings Group Human Rights Policy**” based on our belief that respecting the rights of stakeholders is essential for a successful business. We support international human rights standards, such as the Universal Declaration of Human Rights, and apply these when conducting business with our suppliers.
- We identified several important issues related to the rights of local and indigenous communities, as well as forced and child labor in our supply chain, and are working to establish a **human rights due diligence** system to mitigate the associated risks.
- For new projects and existing businesses, we strive to respect the rights of stakeholders and the local community by through continuous risk assessment and management.

Stakeholder Engagement

- Our Group has a wide-ranging impact on local communities and shareholders through its business development. Therefore, we believe that close cooperation with various stakeholders is necessary and promote active **dialogue with stakeholders**, such as employees, local communities, business partners, and customers.
- Specific engagement initiatives and examples are introduced on the next page.

Responses in procurement and supply chain

- We established not only “Compliance with and respect for international standards on human rights and labor” but also a **Sustainable Procurement Policy** covering various environmental considerations, including “Responding to climate change,” “Preserving biodiversity,” “Effective use of resources,” “Appropriate water use,” and “Appropriate forest resource use.” and are promoting **initiatives to respond to climate change and conserve the natural environment throughout the supply chain**.

Sustainable Procurement Policy

- In terms of decarbonization initiatives, the [Sustainable Procurement Policy](#)  promotes the efficient use of fossil energy and adoption of renewable energy to reduce the impact of GHG emissions on climate change. Owing to these initiatives, we have been selected as a CDP Supplier Engagement Leader for the fifth consecutive year (see [Supply Chain \(Environment\)](#) for details).
- We have also adopted the following initiatives regarding nature conservation:

- Reducing the burden on the surrounding environment, biodiversity, and ecosystems when procuring materials and conducting business activities
- Avoiding the use of raw materials derived from endangered species without taking measures to preserve population resources
- Making effective use of resources
- Respecting the conservation of forests with high biodiversity and conservation values; the culture, traditions, and economies of forested regions; complying with the laws and regulations of the countries and regions where forests are harvested; and using sustainably produced forest resources, such as recycled and certified materials



Supply chain due diligence

When planning construction, we require our construction companies to comply with our Sustainable Procurement Policy, and we regularly conduct due diligence surveys to check the status of each company. We aim to build a responsible supply chain by working with construction companies to address any issues. In FY2024, we assessed 112 companies through self-assessment surveys, which is conducted annually primarily among construction companies. Of these, we **held individual engagement meetings with three companies to improve on the issues and share advanced case studies** (see [Supply Chain \(Society\)](#) for details).



Engagement with suppliers

Initiatives toward eliminating deforestation

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 (BRANZ 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.



BRANZ Chiyoda Fujimi



COMFORIA Shibaura 4-chome
(tentative name)



COERU SHIBUYA



TENOHA DAIKANYAMA

Stakeholder engagement in local community

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



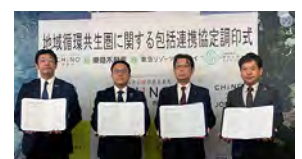
Rule-making in case of disaster (measures to help those who have difficulty going home)



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

Engagement in rural areas

- 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.
- Tokyu Fudosan Corp. signed the “Agreement on Cooperation between Offshore Wind Power and Fisheries” with Matsumae Town, Hokkaido, where the seas have been designated as a preparatory areas for wind power generation, and the Matsumae Sakura Fisheries Cooperative (“Cooperative”). We developed and operated wind power plants in Matsumae Town. Based on local expertise, we supported the town’s vision for the fishing industry and assisted with the implementation of selected measures.
- As one specific measure, through joint research with Matsumae Town and the Cooperative on sea cucumber aquaculture, we supported improvements to sea cucumber habitats by installing fishing reefs and transplanting seaweed.



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



Fishing reef installation

Overseas engagement

- Palau Pacific Resort (PPR), operated in the Republic of Palau by Tokyu Fudosan Corp. and its subsidiary Pacific Islands Development Corporation, celebrated its 40th anniversary in December 2024 with a commemorative reception.
- The reception was attended by Palau's Vice President Raynold Oilouch and other officials, who commended the resort for its long-term contributions to the Palauan economy, efforts in employment and human resource development, and its leadership in the country's tourism industry through environmentally balanced development and operations, thereby promoting national awareness.



Certificate of appreciation presented by
Palau Senate and House of Delegates

Major risks and opportunities

Climate Nature Strategy

Important climate- and nature-related risks and opportunities (transition risks)

The main transition risks considered in the climate-related scenario and nature-related dependency and impact analyses are described below.

Classification			Risk/opportunity components	Climate scenario			Nature	Countermeasures
				1.5°C	3°C	4°C		
Transition	Risk	Policy Legal regulations Technology	Increased costs for new construction and renovation due to the strengthening of the Energy Conservation Act and the mandatory use of ZEB and ZEH	●	●	—	—	● ZEB/ZEH conversion of new buildings, renewing equipment of existing facilities, and early introduction of renewable energy ● Reducing CO₂ emissions up to the construction stage in collaboration with general contractors to mitigate the impact of carbon prices ● Introduction of internal carbon pricing
			Increased construction and operation costs due to the introduction of a carbon pricing system	●	●	—	—	● Business expansion in response to demand
			Policy support for renewable energy is weakened, and market trends are unclear	—	—	●	—	● Reduced resource use during construction
			Shortage of building materials and increased procurement costs due to tighter regulations on land-use modification and resource extraction	—	—	—	●	● Urban greening that considers biodiversity and formation of ecological networks in the Greater Shibuya Area, among others
			Impact on business development due to tighter regulations on land-use modification	—	—	—	●	● Alternative materials for hotel amenities
			Increased response costs due to the introduction and strengthening of regulations promoting high-quality green space development, increasing the greening rate, forming ecological networks★, and planting native species	—	—	—	●	● Management and efficient use of water resources in response to local issues
			Increased costs due to tighter regulations on plastic and food waste	—	—	—	●	
			Increased costs for equipment installation, etc. due to tighter regulations on water resource use and wastewater disposal	—	—	—	●	

Classification			Risk/opportunity components	Climate scenario			Nature	Countermeasures
				1.5°C	3°C	4°C		
	Market	Increased demand for ZEBs by tenants, impact on rent and vacancy rates	●	●	—	—	—	Business expansion in response to increased demand
		Increased demand for ZEHs by home buyers, intensifying competition between products	●	●	—	—	—	ZEB/ZEH conversion of new buildings, renewing equipment of existing facilities, and early introduction of renewable energy
		Increased customer and tenant demand for properties with reduced negative impacts and increased benefits for nature	—	—	—	●	●	Urban greening initiatives that promote biodiversity, ecological networks, etc.
		Increased procurement costs due to increased demand for certified sustainable products and alternatives	—	—	—	●	●	More efficient resource use
	Reputation	Criticism when development, business operations, and procurement activities have a negative impact (land alteration, introduction of invasive species, ecosystem disruption, etc.) on local ecosystem structure and services, including landscape composition and cultural services	—	—	—	●	●	Active engagement during development

★ :See “Terms and Explanations” 

Important climate- and nature-related risks and opportunities (transition opportunities)

The main opportunities considered through the climate-related scenario and nature-related dependency and impact analyses are described below.

Classification			Risk / opportunity components	Climate scenario			Nature	Countermeasures
				1.5°C	3°C	4°C		
Transition	Opportunity	Market Products / services	Increasing demand for ZEBs by tenants	●	●	—	—	● ZEB/ZEH conversion of new buildings, renewing equipment of existing facilities, and early introduction of renewable energy
			Increasing demand for ZEHs by home buyers	●	●	—	—	
			Major increase in demand for renewable energy	●	●	—	—	● Business expansion in response to increased demand ● Utilization of local natural energy
			Demand for tenant offices shrinks due to the trends in telework, while demand for satellite offices increases	—	●	●	—	● Promotion of new leisure lifestyles such as workcations, and development of satellite offices in anticipation of their spread
			Energy costs reduced through the use of thinned wood, development of new products				●	● Effective use of thinned wood
			Increasing customer and tenant demands for real estate with reduced negative impacts and increased benefits for nature	—	—	—	●	● Measures that consider biodiversity, such as urban greening and ecological network development in the Greater Shibuya Area, among others ● Various nature-related initiatives
		Capital / fundraising	Increased policy support and incentives for high-quality green spaces in urban development	—	—	—	●	
			Increasing investment in real estate with reduced negative impacts and increased benefits for nature (greening, ecological connectivity, etc.)	—	—	—	●	

Classification			Risk / opportunity components	Climate scenario			Nature	Countermeasures
				1.5°C	3°C	4°C		
		Reputation	Improve reputation and corporate value/improved relationships with the community through business activities with reduced negative impacts and increased benefits for local nature and communities (e.g., forest management, conservation of terrestrial and marine biodiversity, reducing development impacts, sustainable resource use, contribute to local economies and community development)	—	—	—	●	● Various nature-related initiatives
			Improve appeal and brand value for the town/region through business operations that promote the value of nature, use its services responsibly, and increase native populations	—	—	—	●	

Important climate- and nature-related risks and opportunities (physical risks)

The main physical risks considered through the climate-related scenario and nature-related dependency and impact analyses are described below.

Classification			Risk / opportunity components	Climate scenario			Nature	Countermeasures
				1.5°C	3°C	4°C		
Physical	Risk	Acute Chronic	Gradual increase (1.5°C / 3°C)/sudden increase (4°C) in damage to facilities due to natural disasters (increased typhoons and floods) and rising sea levels	●	●	●	●	- Strengthening BCP/LCP through building location selection and collaboration with tenants and residents - Strengthening local infrastructure, including the introduction of storage batteries
			Increased demand for BCP for facilities by tenants, impact on rent and vacancy rate	●	●	●	—	
			Increased demand for LCP by home buyers, regional selection and intensified competition between products	●	●	●	—	
			Shortening of ski resort operating period and increased impact of heat on golf courses due to rising temperatures	●	●	●	●	Using facilities during the off-season, focusing investment on areas with high snowfall, introducing measures to prevent heatstroke on golf courses, and adopting heat-resistant grass
			Increased construction costs for general contractors due to rising temperatures, and extension of required construction periods	—	—	●	—	- Improving heat performance of new buildings, renewing equipment of existing facilities, and early introduction of renewable energy - Business expansion in response to demand - Setting construction schedules that consider the effects of heat and reduce heatstroke risk
			Increased air conditioning costs due to rising temperatures	—	—	●	—	
			Increased air conditioning costs due to worsening heat island effect caused by urban development, including other entities, and deterioration of living and shared urban environments	—	—	●	●	
			Increased demand for high-performance homes by home buyers to handle rising temperatures	—	—	●	—	
			Deterioration of natural scenery, etc., reducing the attractiveness and asset value of towns	—	—	—	●	Urban development that considers biodiversity

Classification			Risk / opportunity components	Climate scenario			Nature	Countermeasures
				1.5°C	3°C	4°C		
			Water resource shortages due to river pollution and reduced recharge capacity of water resources	—	—	—	●	● Forest conservation
			Increased risk of landslides and floods due to deterioration of surrounding natural environment though urban development and insufficient forest management	—	—	—	●	● Forest conservation, BCP response, disaster prevention training
			Decreased CO ₂ absorption capacity of forests leads to increased carbon dioxide emissions, Impacting the zero-carbon transition plan	—	—	—	●	● Appropriate forest management such as thinning★
			Deterioration of natural tourism resources and ecosystems (terrestrial flora and fauna, marine ecosystems such as coral reefs), reducing the attractiveness of resort destinations and nature-based activities such as trekking and diving.	—	—	—	●	● Implementation of initiatives to conserve the natural environment around resort facilities

★ :See “Terms and Explanations” 

Important climate- and nature-related risks and opportunities (physical opportunities)

The main opportunities considered through the climate-related scenario analysis are described below.

Classification			Risk / opportunity components	Climate scenario			Nature	Countermeasures
				1.5°C	3°C	4°C		
Physical	Opportunity	Market Products / services	Increased demand for high-performance housing by home buyers due to rising temperatures	—	—	●	—	● Business expansion in response to increased demand
			Increased demand for BCP for facilities by tenants	●	●	●	—	● Building location selection and strengthening BCP/LCP in cooperation with tenants and residents
			Increased demand for LCP by home buyers	●	●	●	—	● Strengthening local infrastructure, including the introduction of storage batteries

Climate-related scenario analysis

Climate

Strategy

Climate-related strategy

- Various global environmental issues, including climate change, are becoming more serious every year. Accordingly, our Group recognizes the importance of businesses in environmental conservation.
- In our long-term “GROUP VISION 2030,” we adopted materiality based on “Creating a sustainable environment” to promote ecosystem and biodiversity values and have incorporated environmental management in company-wide policies. The main opportunities and risks for the “environment” are identified below, according to which KPI targets were set.



- We will promote climate change initiatives based on the TCFD recommendations and reduce environmental impacts throughout the supply chain, aiming to achieve quantifiable targets while promoting the efficacy of the unified environmental management system. Simultaneously, we view global environmental issues as business opportunities and strive to create industry-leading businesses for a decarbonized society.

Timeline of climate-related strategies

We divided the climate change strategy into short-term, medium-term, and long-term targets as follows:

[Short-term] 1-2 years based on the fiscal year.

[Medium-term] 3-9 years including the medium-term management plan. In the scenario analysis, the medium term considers 2030, with a SBT of 1.5°C.

[Long-term] 10-30 years, including long-term management policies. In the scenario analysis, the long-term plan considers 2050, with a net zero emissions target.

Businesses subject to climate-related scenario analysis

The scenario analysis considered the impacts upstream and downstream of the value chain, while gradually expanding the target businesses according to climate change risks and opportunities.

Year	Overview	Analysis Scenario	Target Business	
			Medium-term	Long-term
2018	Scenario analysis conducted in support by the Ministry of the Environment	2°C, 4°C	Cities	Leisure
2020	Expansion of target fields Review of scenario analysis	1.5°C, 3°C, 4°C	Cities / Residences Leisure / Renewable energy	
2023	Analyzing Latest IEA scenario NZE2050	1.5°C,(3°C, 4°C)		

Climate-related scenario analysis

Scenario analysis implementation

- The Group Sustainability Promotion Department acted as the secretariat for the scenario analysis and, in consultation with the relevant departments, identified risks and opportunities that would impact business and financial strategies. The secretariat utilized the knowledge of external consultants to quantitatively assess the degree of the impacts and shared it within the company. Strategies for anticipated scenarios were also discussed and formulated with the relevant departments, approved by the Sustainability Committee, and reported to the Board of Directors.

Important climate-related issues

- We recognize various important issues relating to climate-related risks and opportunities that may affect our Group.
- The real estate industry emits large amounts of GHGs at the development and operation stages. Therefore, we recognize the tightening of social regulations in response to intensifying climate change, rising energy costs, and changes in customer and investor awareness as transition risks. We also recognize the increasing physical risks of climate change in real estate operations.
- In particular, new regulations and rising construction and renovation costs are expected with the transition to a decarbonized society.
- Meanwhile, we expect increased demand for renewable energy and the expansion of the ESG financial market, which we see as important opportunities. We also believe that changes in customer awareness will lead to increased opportunities for conservation and environmentally friendly companies.

Classification	Type	Major issues	Major impacts
Transition risks	Current regulations	Energy-conserving reporting system and building standards	
	New regulations	Tightening GHG emission regulations, introduction of carbon tax	○
	Technologies	Increased construction and renovation costs for ZEB and ZEH	○
	Legal costs	Credit purchase through Tokyo's cap-and-trade system	
	Market	Price differentiation based on environmental value, increased energy costs	○
	Reputation	Changes in customer and investor awareness	
Physical risks	Acute	Increased severity of extreme weather	
	Chronic	Rising temperatures, rising sea levels	
Opportunities	Resource efficiency	Transition to highly efficient buildings, recycling	
	Energy sources	Adoption of renewable energy, utilization of government support measures	○
	Products and services	Expansion of low-carbon products and services	
	Market	Utilization of ESG finance	○
	Resilience	Energy-conserving renovation of operating assets, BCP response	

- The following scenarios were considered in the scenario analysis

Scenario	Overview	Reference scenario
1.5°C scenario	Policies, technologies, markets, etc. steadily transition toward a decarbonized society and limit the rise in global average temperatures at the end of the 21st century to 1.5°C compared to pre-industrial levels.	● Sustainable Development Scenario (SDS) adopted in the World Energy Outlook of the IEA, which assumes that there is a 50% chance that the rise in global average temperatures will be kept within 1.65°C. ● Beyond 2 Degrees Scenario (B2DS) adopted in the IEA's Energy Technology Perspectives, which assumes that the rise in global average temperatures will be limited to 1.75°C. ● The IEA's Net Zero by 2050 Roadmap for the Global Energy Sector (NZE2050), which assumes that the world achieves net zero by 2050. ● Intergovernmental Panel on Climate Change (IPCC★) Representative Concentration Pathways (RCP) 2.6 scenario, which assumes that, at the end of the 21st century (2081-2100), global average temperatures will rise by 0.9-2.3°C (average 1.6°C) compared to pre-industrial levels. Referenced when considering physical risks.
3°C scenario	Each country complies with its NDCs, and the rise in the average global temperature by the end of the 21st century is about 3°C higher than pre-industrial levels.	● Stated Policies Scenario (STEPS) adopted in the IEA's World Energy Outlook, which reflects the policies declared by each country. ● Reference Technology Scenario (RTS) adopted in the IEA's Energy Technology Perspectives, which considers each country's existing energy and climate-related commitments, including the NDCs of the Paris Agreement. ● IPCC's RCP6.0 scenario, which assumes that global average temperatures will rise by 2.0-3.7°C (average 2.8°C) compared to pre-industrial levels by the end of the 21st century (2081-2100).
4°C scenario	Policies, technologies, markets, etc. continue to expand at the current rate and the average global temperature rises by >4°C by the end of the 21st century compared to pre-industrial levels, increasing the risk of natural disasters due to climate change.	● IPCC's RCP8.5 scenario, which assumes that, at the end of the 21st century (2081-2100), global average temperatures will rise by 3.2-5.4°C (average 4.3°C) compared to pre-industrial levels.

★ :See “Terms and Explanations” 

Climate-related scenario analysis (1.5°C scenario)

- In the medium term, **carbon pricing and ZEB costs will have important financial impacts on urban development businesses**; however, **in the long term (2050)**, ZEB conversion will be completed and **rental income is expected to increase by securing a market advantage**. The **renewable energy business is also expected to expand**. For **physical risks**, natural disasters due to abnormal weather will increase gradually, but the **impact is expected to be low due to strengthened BCP and LCP responses**.

Classification			Risk/opportunity components	Our strategy	Financial impact of risks and opportunities		
Transition	Risks	Policy Legal regulations Technology	- Increased costs for new construction and renovation due to the strengthening of the Energy Conservation Act and mandatory adoption of ZEB and ZEH - Increased construction and operation costs due to the introduction of a carbon pricing system	ZEB/ZEH conversion of new buildings, renewal of existing facilities, and early introduction of renewable energy 	Urban development	Mid term High	Long term Somewhat low
				Reducing CO₂ emissions up to the construction stage and reducing the impact of carbon pricing by working with general contractors 	Residential	Somewhat low	Low
	Risks and opportunities	Market	- Increased demand for ZEBs by tenants, impacting rent and vacancy rates - Increased demand for ZEHs by home buyers, intensifying competition between products	Introduction of internal carbon pricing to promote low-carbon development and reduce the impact of carbon pricing 	Leisure	Somewhat low	Low
				Business expansion in response to increased demand 	Renewable energy	High	Low
Opportunities	Market	Greatly increased demand for renewable electricity			Demand gradually increases, and the positive impacts are "high"		
Physical	Risks	Acute Chronic	- Gradually increasing damage to facilities due to natural disasters - Shortened ski resort operating periods due to rising temperatures	Utilization of local natural energy 	Urban development	Mid term Low	Long term Somewhat low
				Selecting the building location and strengthening BCP/LCP in cooperation with tenants and residents 	Residential	Low	Somewhat low
	Risks and opportunities	Acute Chronic Market	- Increased demand for business continuity plan (BCP) for facilities by tenants, affecting rent and vacancy rates - Increased demand for life continuity plan (LCP) by home buyers, leading to regional selection and intensifying competition between products	Increasing profits for facilities in the off-season 	Leisure	Low	Somewhat low
					Renewable energy	Low	Somewhat low
					Investment in building repairs and renovations increases, but the impact is "somewhat low" by securing profits through differentiation (all businesses)		

High: ≥10% of consolidated operating revenue Somewhat high: ≥10% of the operating revenue of the business portfolio

Medium: 5-10% of the operating revenue of the business portfolio Somewhat low: 2-5% of the operating revenue of the business portfolio

Low: <2% of the operating revenue of the business portfolio

Climate-related scenario analysis (3°C scenario)

- In the medium term, the shift to ZEB in urban development businesses will be relatively mild, and the financial impact will be lower than in the 1.5°C scenario, but the impact is expected to continue in the long term. A certain degree of expansion is expected in the renewable energy business.
- For physical risks, natural disasters will become more severe and temperatures will rise more rapidly than in the 1.5°C scenario, and the impact on leisure businesses will be greater. However, certain degree of financial impact may be mitigated by differentiation from competing facilities, such as by selecting locations and using facilities during the off-season.

Classification			Risk/opportunity components	Our strategy	Financial impact of risks and opportunities		
Transition	Risks	Policy Legal regulations Technology	- Increased costs for new construction and renovation due to the strengthening of the Energy Conservation Act and mandatory adoption of ZEB and ZEH - Increased construction and operation costs due to the introduction of a carbon pricing system	ZEB/ZEH conversion of new buildings, equipment renewal in existing facilities, and early introduction of renewable energy	Urban development	Mid term	Long term
						Somewhat high	Somewhat high
					Slow pace of ZEB conversion and impact of increased building investment in both the medium and long term is "somewhat high"		
	Risks and opportunities	Market	- Increased demand for ZEBs by tenants, impacting rent and vacancy rates - Increased demand for ZEHs by home buyers, intensifying competition between products	Reduction of CO ₂ emissions up to the construction stage and reducing the impact of carbon pricing by working with general contractors	Residential	Somewhat low	Somewhat low
					Due to accurate response to market needs, the impact is "somewhat low"		
	Opportunities	Market	- Greatly increased demand for renewable energy - Shrinking demand for tenant offices with the spread of teleworking, affecting rent and vacancy rates, but increasing demand for satellite offices	Introduction of internal carbon pricing to promote low-carbonization of each business and reduce the impact of carbon pricing	Leisure	Somewhat low	Somewhat low
Physical	Risks	Acute Chronic	- Gradually increasing damage to facilities due to natural disasters - Shortened ski resort operating periods due to rising temperatures	Business expansion in response to increased demand	Renewable energy	Somewhat high	Somewhat high
						Somewhat high	Somewhat high
					Demand will increase gradually, and the positive impact is "somewhat high"		
	Risks and opportunities	Acute Chronic Market	- Increased demand for business continuity plan (BCP) for facilities by tenants, affecting rent and vacancy rates - Increased demand for life continuity plan (LCP) by home buyers, leading to regional selection and intensifying competition between products	Utilization of local natural energy	Urban development	Mid term	Long term
						Low	Somewhat low
					Business development in anticipation of widespread use		
Physical	Risks	Acute Chronic	- Gradually increasing damage to facilities due to natural disasters - Shortened ski resort operating periods due to rising temperatures	Selecting the building location and strengthening BCP/LCP in cooperation with tenants and residents	Residential	Low	Somewhat low
					Leisure	Low	Moderate
					Renewable energy	Low	Somewhat low
	Risks and opportunities	Acute Chronic Market	- Increased demand for business continuity plan (BCP) for facilities by tenants, affecting rent and vacancy rates - Increased demand for life continuity plan (LCP) by home buyers, leading to regional selection and intensifying competition between products	Using facilities during the off-season, focusing of investment on ski resorts in high-latitude areas with heavy snowfall, and planting of golf courses with heat-resistant grass	Increased investment in building repairs and renovations, but the impact is "somewhat low" by securing profits through differentiation. Revenues will decrease significantly due to shortened operating periods and reduced areas, but the impact is "moderate" due to location selection and differentiation from competitors (leisure)		

High: ≥10% of consolidated operating revenue Somewhat high: ≥10% of the operating revenue of the business portfolio

Medium: 5-10% of the operating revenue of the business portfolio Somewhat low: 2-5% of the operating revenue of the business portfolio

Low: <2% of the operating revenue of the business portfolio

Climate-related scenario analysis (4°C scenario)

- In the medium term, the impact of climate change will be small and the financial impact will be low, but in the long term, the financial impact of intensifying natural disasters and rising temperatures is expected to increase. Meanwhile, the financial impact may be reduced to a certain extent by differentiating from competing facilities, such as by developing satellite offices in urban development businesses, selecting locations in leisure businesses, and using facilities during the off-season. The renewable energy business is also required to expand in line with market trends.

Classification			Risk/opportunity components	Our strategy	Financial impact of risks and opportunities																											
Transition	Risks and opportunities	Policy Legal regulations Market	Weak policy support for renewable energy and unclear market trends	Improving performance of new buildings, renewing equipment of existing facilities, and early introduction of renewable energy 	<table><tr><td></td><th>Mid term</th><th>Long term</th></tr><tr><td>Urban development</td><td>Low</td><td>Low</td></tr><tr><td colspan="3">Impact is "low" due to appropriate response to market needs</td></tr><tr><td>Residential</td><td>Low</td><td>Somewhat low</td></tr><tr><td colspan="3">Impact is "somewhat low" due to accurate response to market needs</td></tr><tr><td>Leisure</td><td>Low</td><td>Moderate</td></tr><tr><td colspan="3">Impact is "moderate" due to the introduction of renewable energy</td></tr><tr><td>Renewable energy</td><td>Low</td><td>Low</td></tr><tr><td colspan="3">Trend in needs is unclear, thus the positive impact is likely "low"</td></tr></table>		Mid term	Long term	Urban development	Low	Low	Impact is "low" due to appropriate response to market needs			Residential	Low	Somewhat low	Impact is "somewhat low" due to accurate response to market needs			Leisure	Low	Moderate	Impact is "moderate" due to the introduction of renewable energy			Renewable energy	Low	Low	Trend in needs is unclear, thus the positive impact is likely "low"		
		Mid term	Long term																													
Urban development	Low	Low																														
Impact is "low" due to appropriate response to market needs																																
Residential	Low	Somewhat low																														
Impact is "somewhat low" due to accurate response to market needs																																
Leisure	Low	Moderate																														
Impact is "moderate" due to the introduction of renewable energy																																
Renewable energy	Low	Low																														
Trend in needs is unclear, thus the positive impact is likely "low"																																
Physical	Opportunities	Market	Shrinking demand for tenant offices with the spread of telework, affecting rent and vacancy rates, but increasing demand for satellite offices	Business expansion in response to increased demand  Promotion of new leisure lifestyles such as workations 																												
	Risks	Acute Chronic	- Increased impact of sea level rise, and dramatically increased damage to facilities from natural disasters - Shortened ski resort operating periods due to rising temperatures - Increased construction costs of general contractors and air conditioning due to rising temperatures	Development of satellite offices in anticipation of their spread  Selecting building locations and strengthening BCP/LCP in cooperation with tenants and residents  Strengthen local infrastructure, including the introduction of storage batteries 																												
Physical	Risks and opportunities	Acute Chronic Market	- Increased demand for high-performance homes by home buyers to handle rising temperatures - Increased demand for business continuity plan (BCP) for facilities by tenants, affecting rent and vacancy rates - Increased demand for life continuity plan (LCP) by home buyers, leading to regional selection and intensifying competition between products	Using facilities during the off-season, focusing investment on ski resorts in high-latitude areas with heavy snowfall and planting golf courses with heat-resistant grass 																												

High: $\geq 10\%$ of consolidated operating revenue Somewhat high: $\geq 10\%$ of the operating revenue of the business portfolio

Medium: 5-10% of the operating revenue of the business portfolio Somewhat low: 2-5% of the operating revenue of the business portfolio

Low: $< 2\%$ of the operating revenue of the business portfolio

Impact of climate change risks and opportunities on business strategy

In response to climate change risks and opportunities, we have incorporated the below considerations in our **business strategy**.

Classification	Impact and response
Products and services	We have responded to climate change risks and opportunities by working to improve the energy-conserving performance of buildings as a mitigation measure and strengthen the BCP of facilities as an adaptation measure. In the long-term vision formulated in 2021, we aimed to further promote ZEB / ZEH , and set the KPI of the adoption rate (considering the percentage of Tokyu Fudosan Corp.'s condominiums, offices, etc. that have ZEB/ZEH Oriented certification or higher, based on the start of construction) to 100% by FY2030 and approximately 50% by FY2025. We also aimed to expand and promote the renewable energy business, "ReENE" .
Supply chain Value chain	Upstream, the Sustainable Procurement Policy formulated in 2020 addresses climate change issues, and we have begun researching ways to reduce carbon emissions during building construction in collaboration with general contractors . Downstream, the company is promoting the conversion of condominiums and rental housing to ZEH and introducing renewable energy .
R&D investment	Tokyu Community Corp., which is engaged in building management, has built the technical training center "NOTIA" to improve its technical capabilities and has obtained Nearly ZEB certification. Tokyu Fudosan Corp. also aims to standardize ZEB in new construction and has verified the implementation of ZEB in existing office buildings in FY2022.
Facility operation	In 2019, Tokyu Fudosan Corp., which operates various facilities in its city and leisure businesses, set an aim to achieve "RE100★," that is, to use 100% renewable energy, by 2050 by adopting renewable energy in its business practices . By December 2022, the company completed converting all 244 domestic facilities to 100% renewable energy and, in April 2024, it was the first domestic company to be RE100 certified .

★ :See "Terms and Explanations" 

Impact of climate change risks and opportunities on financial planning

We considered the below climate change risks and opportunities in our **financial plan**.

Classification	Impact and response
Indirect costs	Tokyu Fudosan Corp. used the scenario analysis to simulate the limit by which CO ₂ emissions can be reduced through medium- and long-term energy-conserving renovations and operational improvements at existing facilities, promptly began purchasing renewable energy infrastructure, and gradually decreased energy use to achieve the SBT CO ₂ emission reduction. Therefore, we considered purchasing power generated by our company's renewable energy business and estimated the associated increase in overhead costs. Based on the results, we quickly promoted the adoption of renewable energy at our facilities while assessing the impact on the budget for each fiscal year, finally achieving RE100 in FY2023.
Capital allocation	Tokyu Fudosan Corp. responded to the government's renewable energy promotion policy through active participation in the mega solar power business since 2014 and, based on the scenario analyses conducted since FY2018, has been actively investing in the expansion of renewable energy businesses as part of climate change-related opportunities . We developed and operate solar, wind, and biomass power generation facilities, among others, and our business scale is among the largest in Japan.
Liabilities	Based on the scenario analysis, we issued 10 billion yen in green bonds in FY2019 to urge investors to participate in our environmental initiatives. In FY2021, we formulated the “WE ARE GREEN” Bond Policy, the first policy for long-term issuance of ESG bonds in Japan , and aim to increase the ESG bond ratio to $\geq 50\%$ by the end of FY2025 and $\geq 70\%$ by the end of FY2030.
Assets	Environmental impact was adopted as a key metric in our long-term vision-based management of the business portfolio.

Nature-related analysis based on the LEAP approach

Nature Strategy L E A P

Overview of nature-related “Strategy”

The “Strategy” of the TNFD recommends characterizing the nature-related dependencies, impacts, risks, and opportunities; their impacts on the company's business, strategy, and financial plan; the resilience of the strategy based on relevant scenarios; and priority areas in business activities and value chains.

We further examined the impact of nature-related risks and opportunities on our business and financial plans, while considering the scenario analysis.

Components of this report		Recommended disclosure
Understanding the dependencies and impacts of all businesses	● Our Group: Overview of the value chain's dependencies and impacts on nature Using tools such as ENCORE,* we have characterized the overall dependencies and impacts of all businesses.	Nature-related dependencies and impacts
Identifying priority areas	● Priority areas for properties owned and operated by our Group We analyzed the natural integrity, value, and water stress -related metrics of properties owned and operated by our group, and identified the “Greater Shibuya Area” and 13 resort facilities, including “Tokyu Resort Town Tateshina” and “Palau Pacific Resort” (hereinafter referred to as the “13 areas including resort facilities”) as priority areas.	Priority areas
LEAP analysis focusing on the “Greater Shibuya Area”	● Dependencies, impacts, risks, and opportunities in urban development projects in the “Greater Shibuya Area” For this priority area, we conducted a detailed study of dependencies, impacts, risks, and opportunities in line with the TNFD LEAP approach, accounting for the characteristics of the location.	Nature-related dependencies, impacts, risks, and opportunities
LEAP analysis focusing on “Tokyu Resort Town Tateshina” and “Palau Pacific Resort”	● Dependencies, impacts, risks and opportunities in the hotel and leisure businesses in “Tokyu Resort Town Tateshina” and “Palau Pacific Resort” Of the 13 areas including resort facilities, which are priority areas, we selected Tokyu Resort Town Tateshina and Palau Pacific Resort as a representative large-scale core resort facility, including hotels, golf courses, ski resorts, and villas. This location is important in terms of our business dependencies and impacts on nature. We then examined the dependencies, impacts, risks, and opportunities in line with the LEAP approach.	
Other	● Important risks and opportunities in business areas other than those mentioned above	

Overview of the value chain's dependencies and impacts on nature

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.

Impacts on nature																	Dependencies on nature						
Segment	Business activities	Sales volume	Value chain	Terrestrial ecosystem use	Freshwater/marine ecosystem use	Resource use		GHG emissions	Contamination	Waste	Other	Provisioning services		Regulating and maintenanceservices			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											
			Operation	VH	H	H	H	H	H	M	M	VH	L	VH									
			Building and development	VH			M	H	M	H	H		M	L									
			Logistics facilities																				
			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												
			Building and development	VH	VH		M	H	M	H	H		M	L									
	Hotel, golf course, ski resort, etc.	High	Production of ingredients, etc.	VH	VH	VH		H	H			VH	VH	VH	VH	VH							
			Operation	VH	VH	H	M	H		H	H	H	M	L	M	H	VH						
			Building and development	VH			M	H	M	H	H		M	L									
	Healthcare, etc.	High	Operation and use	VH		H		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.

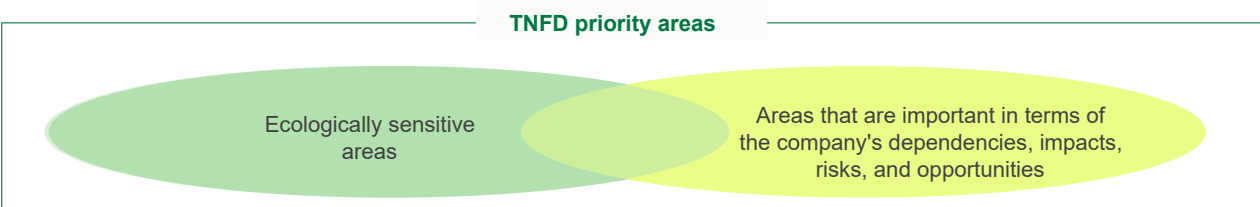
For ratings at the stage of operation under the Renewable Energy Business, we used “renewable energy” in each tool as the basis. For ratings at the stage of operation of leisure facilities, we used “hotels, resorts and cruises” in each tool as the basis. For ratings at the stage of production of biomass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

★ :See “Terms and Explanations” 

Priority areas for properties owned and operated by our Group

We believe that the importance of nature from the development to operation stages is particularly high within the value chain. Accordingly, we considered priority areas based on the 267 major locations owned and operated by our company (offices and commercial facilities, hotels, leisure facilities, renewable energy facilities, etc.; March 2024). We considered priority areas based on their ecological sensitivity (see the metrics in the table below), as presented by the TNFD, as well as their importance in terms of our dependencies, impacts, and risks and opportunities.



Metrics used in assessment and overview of results

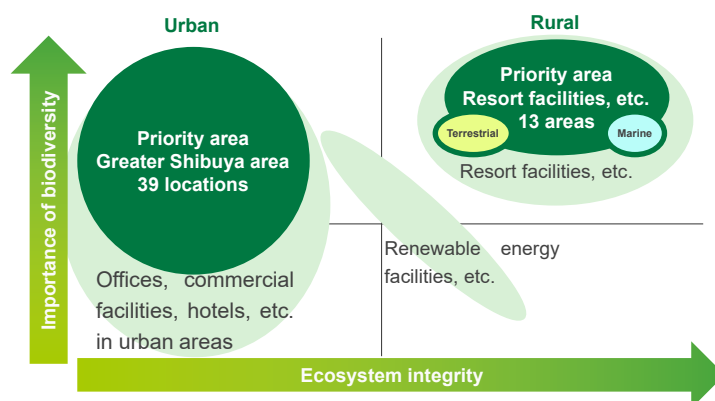
TNFD assessment perspective	Referenced metrics	Overview of results
Ecosystem integrity★	Assessed according to the Biodiversity Intactness Index★	Locations of offices, commercial facilities, and urban hotels in urban areas have low ecosystem integrity, whereas locations of resort hotels, leisure facilities, and renewable energy facilities in rural areas have medium to high ecosystem integrity.
Importance of biodiversity	Assessed based on the following metrics - Proximity to protected areas and key biodiversity areas (KBA)★ - STAR metric★ - Conservation priority★	114 of our total locations (as of March 2024) are adjacent to protected areas. There are many areas with high conservation priority, both in urban and rural areas. Because we have many locations, we scored each based on the metrics and consider their relative priority within our company. (Next page)
Water Stress	Assessed based on baseline water stress★	No properties were located in areas with very high/high water stress.

★ :See “Terms and Explanations” ↻

The assessment scores for “Biodiversity importance” and “Ecosystem integrity” are represented by the figure on the right.

Considering these results and the Group's overall nature-related dependencies and impacts, we selected priority areas in terms of nature-related risks and opportunities for the Group, as seen in the below table.

We conducted a detailed examination of nature-related dependencies, impacts, risks, and opportunities for the “Greater Shibuya Area,” an urban development business; “Tokyu Resort Town Tateshina” regarding terrestrial aspects and which represents the hotel and leisure businesses; and “Palau Pacific Resort” regarding marine aspects, in line with the LEAP approach provided by TNFD. In particular, we regard PPR as representing both the origin and a model for our real estate development and operations in coexistence with nature.



Priority area (1): Greater Shibuya area (number of properties: 39)	- Based on the dependency and impact analysis, urban development businesses have a particularly large impact on nature, after considering the scale (sales) Focus area where many of our company's properties are concentrated - High biodiversity importance even in urban areas - Selected as an important area in terms of nature-related risks and opportunities due to ongoing surveys and ecosystem research	Greater Shibuya area This area is within a 2.5-km radius of Shibuya Station, and our Group develops and operates various commercial facilities and office buildings, as well as redevelopment businesses to increase mobility around the station.
Priority area (2): 13 areas including resort facilities	- Relative impact of the businesses is not as high as that of urban development businesses, but 13 areas including resort facilities have been selected as priority areas due to the importance of ecosystem integrity and biodiversity Following businesses were chosen as representative terrestrial and marine businesses for detailed assessment - Tokyu Resort Town Tateshina is a large-scale core resort facility encompassing hotels, golf courses, ski resorts, and vacation homes, and serves as a representative site with high importance to the Group's business as well as its dependency on and impact on nature - Palau Pacific Resort is characterized by an exceptionally high level of biodiversity and represents our Group's origin in the harmonization of environmental conservation and development, shaping subsequent business activities.	Tokyu Resort Town Tateshina A large resort complex located in the northeast of Chino City, Nagano Prefecture, almost in the center of the Tateshina Plateau. The complex includes Tokyu Harvest Club Tateshina, approximately 250 hotel rooms, a golf course, ski resort, approximately 2,300 villa plots, hot spring facilities, restaurants, shops, and community coexistence facilities. Palau Pacific Resort This is a comprehensive resort hotel developed in the Republic of Palau with an emphasis on harmony with environmental conservation. The high-end resort features 172 guest rooms, the largest number in Palau, along with a picturesque private beach of white sand.

LEAP approach in Priority areas

For the priority areas of the Greater Shibuya Area, Tokyu Resort Town Tatehina, and Palau Pacific Resort, we performed a more detailed examination of dependencies and impacts on nature and accompanying nature-related risks and opportunities based on the LEAP Approach presented by the TNFD. More specifically, we examined the below information.

Locate Discovery of the interface with nature	- Priority locations (Priority areas for properties owned and operated by our Group) - Assessment of state and importance of nature with which businesses in the Greater Shibuya area and Hotel and leisure business have points of contact
Evaluate Evaluation of dependencies and impacts	- Qualitative organization of dependencies and impacts through the value chain in urban development in the Greater Shibuya area and Tokyu Resort Town Tatehina and Palau Pacific Resort Quantitative evaluations in cooperation with Think Nature Inc.
Assess Assessment of risks and opportunities	- 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 in Tokyu Resort Town Tatehina and Palau Pacific Resort
Prepare Preparation for response and reporting	Examination and organization of existing initiatives for risks and opportunities

Greater Shibuya Area (Shibuya Ward, Tokyo)



Tokyu Resort Town Tateshina (Chino City, Nagano)



Palau Pacific Resort

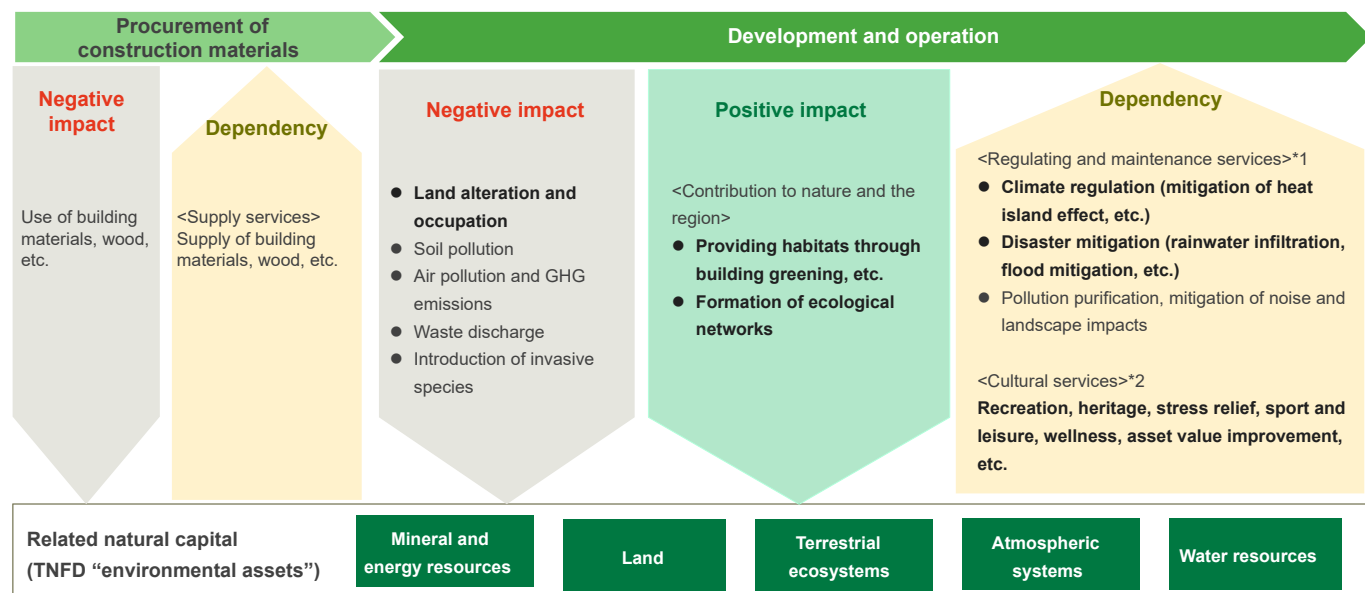


Major dependencies and impacts associated with urban development business in the Greater Shibuya Area

We performed a detailed examination of the natural state of the Greater Shibuya Area (described below) to identify the major dependencies and impacts throughout the value chain in urban development businesses, as shown in the figure below. Nature may experience both negative and positive impacts, and we also depend on it in various ways.

Dependencies and impacts of nature in the value chain

*Dependencies and impacts in bold are considered particularly important



*1 Regulating and maintenance services: Services that maintain the environment by promoting biodiversity through initiatives focused on climate adjustment, mitigating local disasters, controlling soil runoff, and controlling harmful organisms and diseases within the ecosystem.

*2 Cultural services: Services associated with culture that humans obtain through contact with nature and that are influenced by aesthetic, spiritual, and psychological aspects.

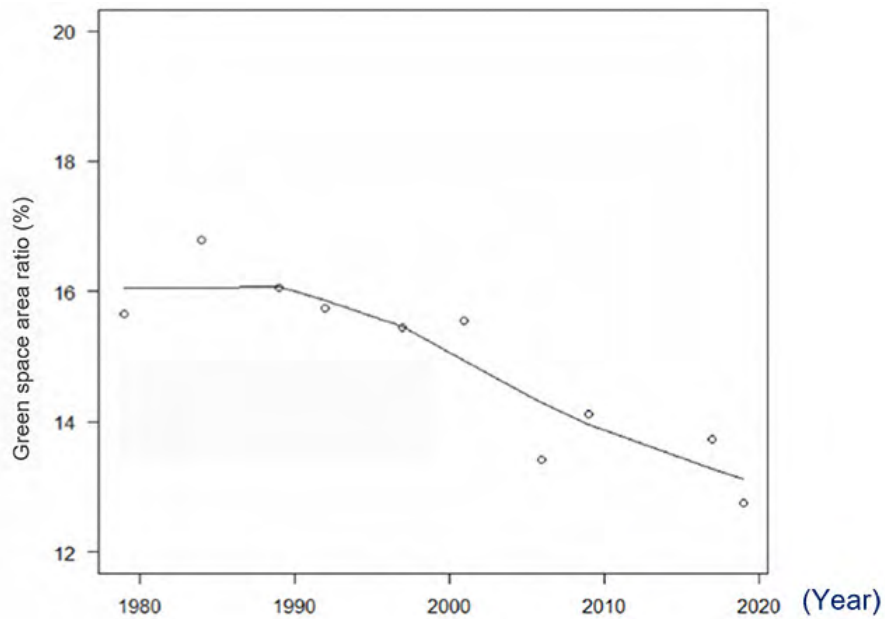
State and importance of nature in Greater Shibuya Area

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

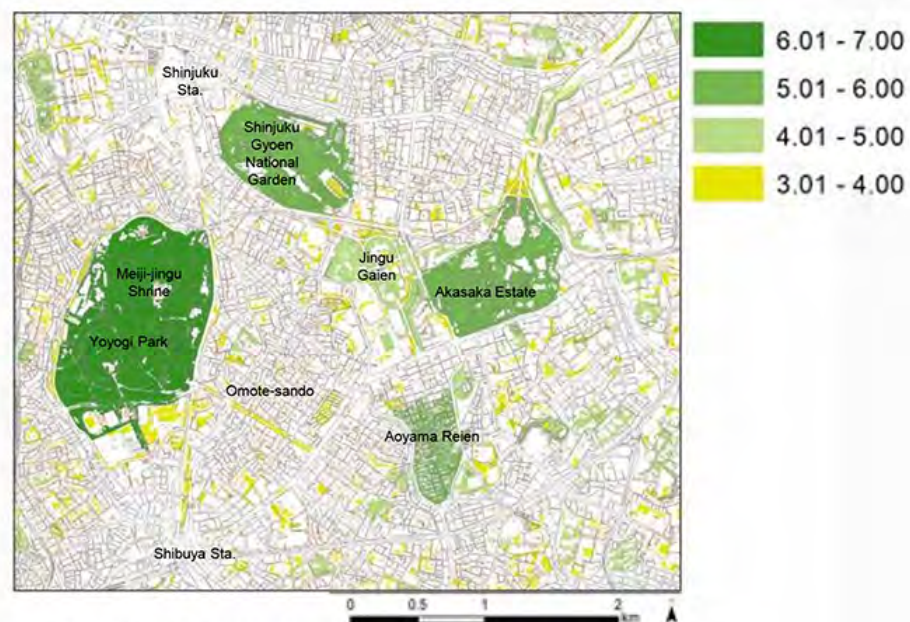


Analysis by Think Nature Inc.

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 research²⁾ 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**.



Distribution of green coverage area in greater Shibuya area
(Indicates the logarithmic value (Log 10) of the area of green coverage extracted using a Normalized Difference Vegetation Index (NDVI) of ≥ 0.25)

ECOLOGICAL NETWORK

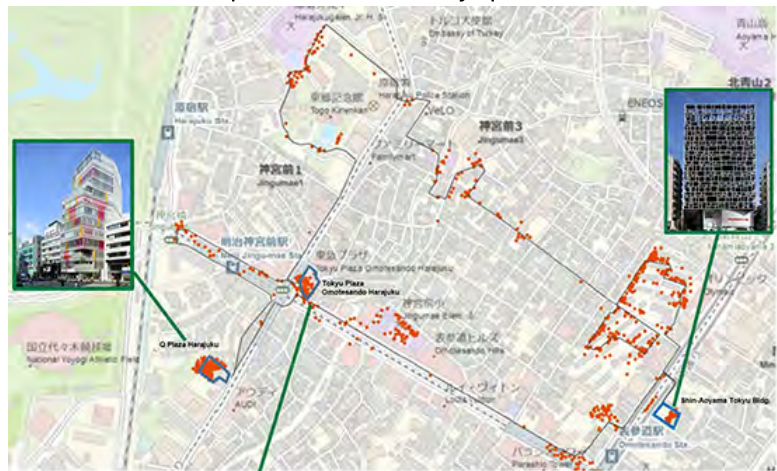
An organic network of regions centered on those that host superior natural conditions. An ecological network yields the following effects: By making it possible to conduct foraging, nesting, breeding and other inhabiting stages within the region, this network contributes to preventing the extinction 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.

Positive impact through provision of habitats

Investigation of growth / habitat services in greater Shibuya area

As part of the collaborative research³⁾ 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



Tokyu Plaza Omotesando "Omohara"



Observational study



Fixed-point photography and filming study of bird species

Ongoing implementation of biological monitoring in “Omohara Forest”

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 there⁴⁾.

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		Shijukara	Shijukara	<i>Parus minor</i>
10		Tsubame	Tsubame	<i>Hirundo rustica</i>
11		Hiyodori	Hiyodori	<i>Hypsipetes amaurotis</i>
12		Mejiro	Mejiro	<i>Zosterops japonicus</i>
13		Mukudori	Mukudori	<i>Spodiopsar cineraceus</i>
14		Komukudori	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

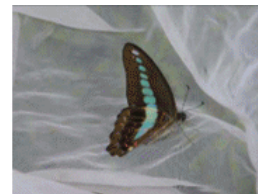
Note 1: Species names and classifications are in accordance with the "Check-List of Japanese Birds (7th Ed.)" (Ornithological Society of Japan, 2012).



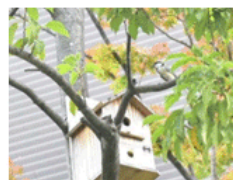
Passer montanus (Nesting in pairs)



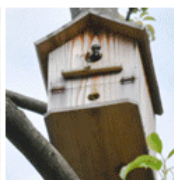
Hakusekirei



Graphium sarpedon



Shijukara



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, 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.

- 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.

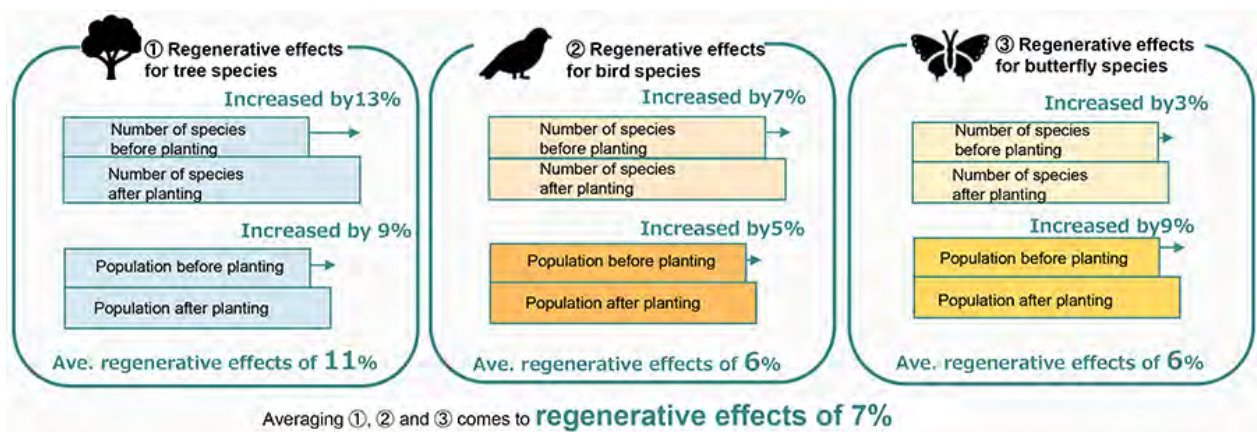


SHIBUYA SOLASTA

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.

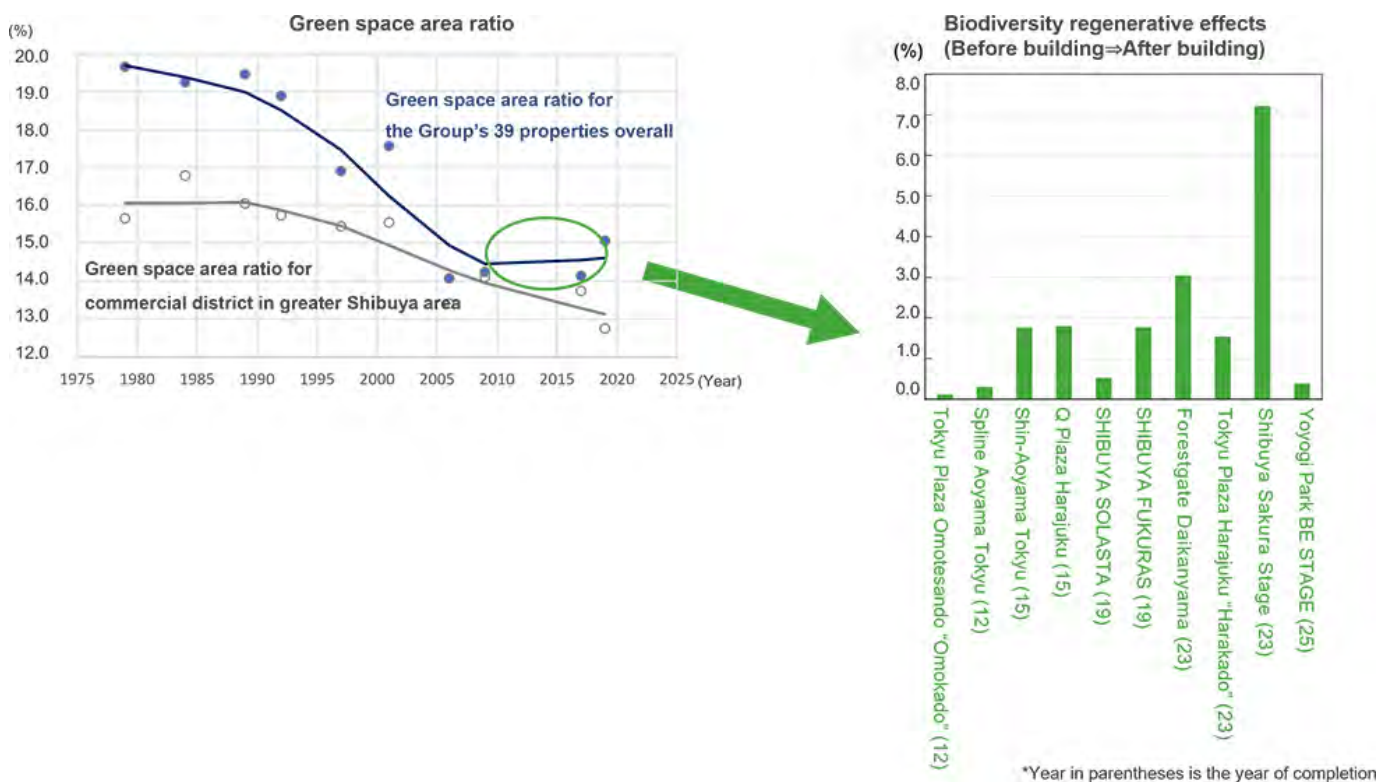
Quantitative evaluation of impacts based on building greening (results)

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.



Making the greater Shibuya area an environmentally advanced city from the aspect of biodiversity as well

The results of analysis performed by Think Nature Inc. on the species capture rate through planting at all 39 properties (the percentage of species inhabiting the entire greater Shibuya area that can be called to green spaces at Group properties) showed that planting efforts by those properties were capable of calling approx. 60% of bird species and approx. 90% of butterfly species. In particular, **properties where we conduct planting based on native trees** indicated a high capture rate, **The quality of green there is also contributing to higher biodiversity regenerative effects.** For example, at “**Shibuya Sakura Stage**,” the planting of numerous tree species in large number, including species native to Tokyo, make it possible to call a large number of bird and butterfly species. This has led to a high species capture rate and **high regenerative effects (7.2%).**

As it is now clear that greening that includes the likes of the planting of native species, particularly that conducted at properties built in recent years, contributes to the regeneration of biodiversity, we believe that it is crucial for us to continue tackling greening that is conscious of the quality of green space as we move forward.

List of species analyzed by Think Nature Inc.

[illegible]

Shibuya Sakura Stage (Completed in Nov. 2023)

At Sakuragaoka located adjacent to Shibuya Station, we are pushing forward with the development of “Shibuya Sakura Stage,” a large-scale complex to serve as a new landmark for Shibuya.

At this property, we have established “HAGUKUMI STAGE” as a richly-green relaxation sport to **promote three-dimensional greening that utilizes the ground, roof, wall surfaces and other elements** and also contributes to heat island countermeasures. In addition, we are also tackling the reduction of our environmental footprint through means such as using solar power generation and other forms of renewable energy and introducing next-generation technology.



Distant view of Shibuya Sakura Stage



Hagukumi STAGE

Positive impact through the formation of ecological networks

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.

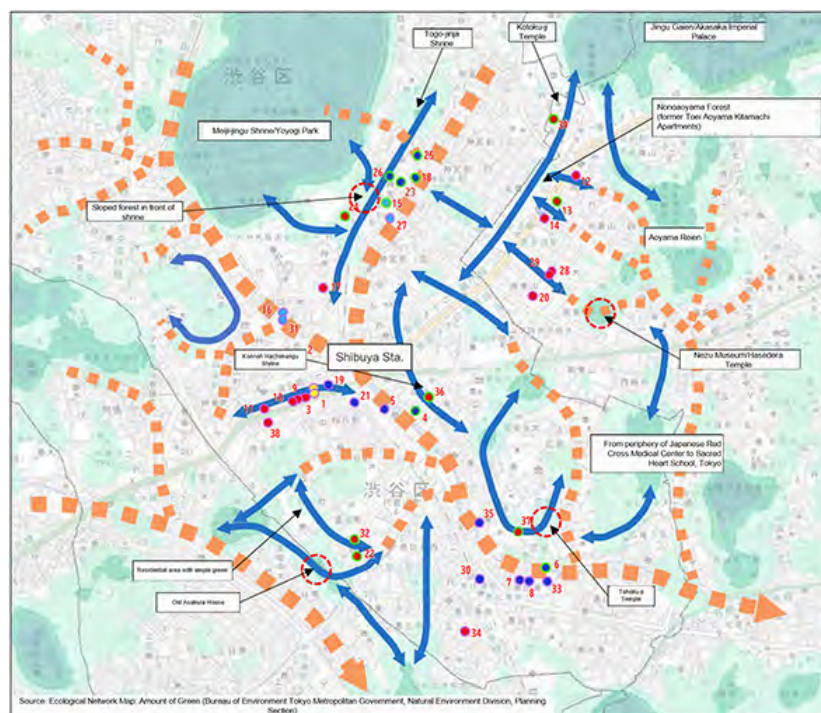
Additionally, the Company's properties are located at the red circles on the map to the right, which also constitute locations where fellow properties of ours are in proximity to each other or are concentrated.

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

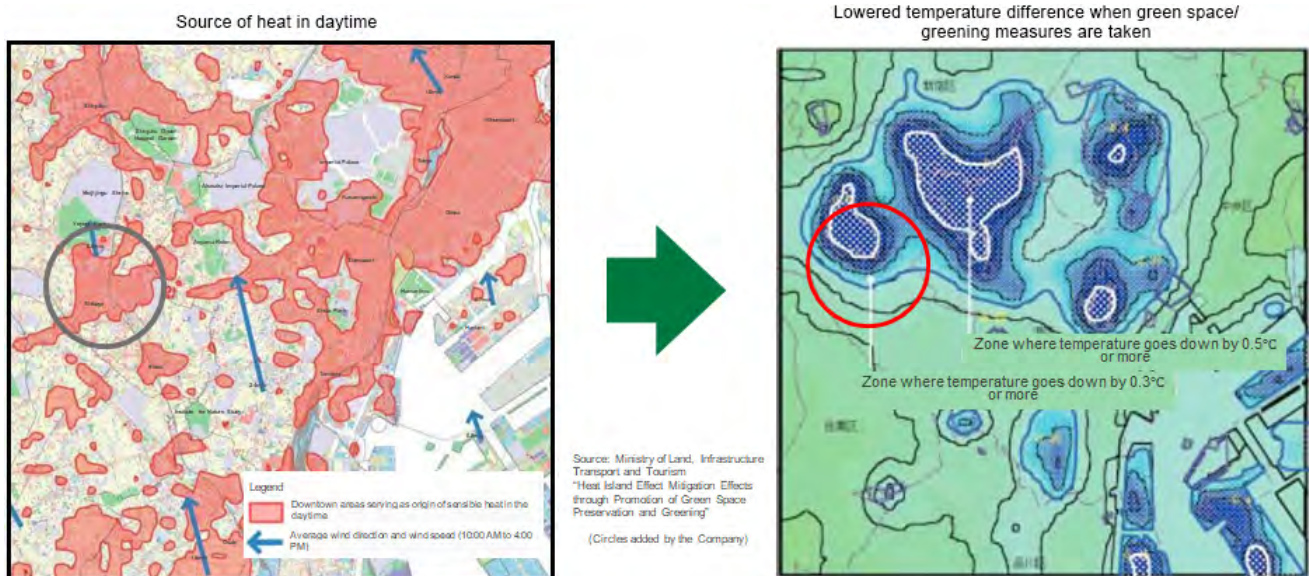
Source: Regional Environmental Planning, Inc. (2023)

"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

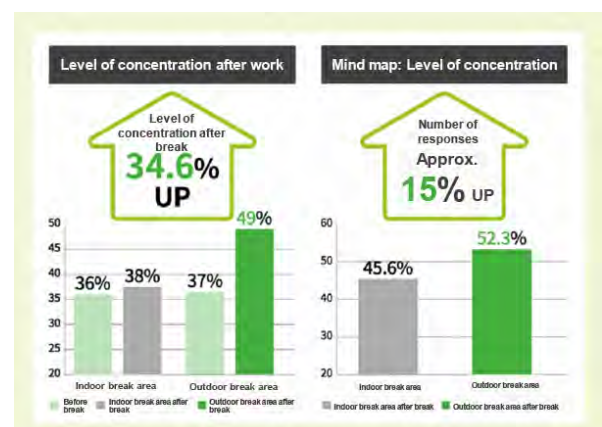
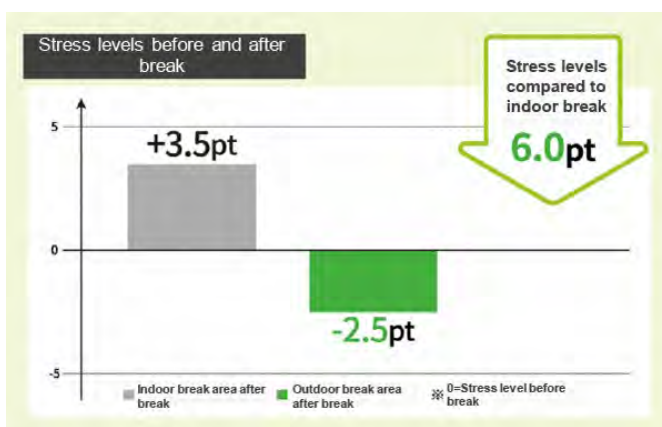
Subjects: 14 individuals (4 males in their 30s/3 males in their 40s; 4 females in their 30s/3 females in their 40s)/Date and time: Saturday, June 2, 2018

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

Based on our nature-related dependencies and impacts, we examined the risks and opportunities related to our urban development business, while also referring to external information such as social trends and policy directions. We anticipate **physical risks** such as **deterioration of the scenery and decreased comfort due to the decline in important ecosystem services**, and **transition risks** due to **changes in regulations and market environments**. *However*, we also identified **many nature-related opportunities**.

Classification			Major dependencies / impacts	Risks and opportunities in urban development business
Transition	Risks		Procurement of building materials, lumber, and other resources (impact nature)	● Shortage of building materials, lumber, etc., and increased procurement costs due to land conversion for nature conservation and tightened regulations related to resource extraction
		Policies and regulations	Land alteration and occupation following the development and operation of properties such as offices and commercial facilities (impact terrestrial ecosystems)	● Increased compliance costs due to tightened regulations calling for an increase in the greening rate of properties
				● Increased compliance costs due to the introduction and strengthening of regulations/policies calling for the improvement of greenery quality, considering the formation of ecological networks and planting of native species
		Market		● Lower negative impact on nature/Increased preference of customers and tenants for properties that benefit nature through improved greenery quantity and quality, ecological network formation, etc. (risk)
		Technology	Use of water and building materials, etc. (impact resource availability)	● Increased costs of highly resource- and energy-efficient construction technologies with a low environmental impact

Classification			Major dependencies / impacts	Risks and opportunities in urban development business
		Reputation	Negative impacts associated with land alteration/occupation, pollution, waste discharge, introduction of invasive species, etc.	● Public criticism and lawsuits against development and operations that have a negative impact on the local ecosystem, landscape, and natural cultural services
	Opportunities	Market	Reduction in negative impacts such as land alteration/occupation, pollution, and waste discharge, with positive impacts on ecosystems (and ecosystem services) associated with increased habitat availability in green spaces and formation of ecological networks	● Lower negative impacts on nature; increasing preference among customers and tenants for properties that benefit nature through improved greenery quantity and quality, greening technology advances, ecological network formation, etc.
		Policies and regulations	Reduction of negative impacts such as land alteration/occupation, pollution, waste discharge, etc.	● Policy support and incentives for developing high-quality urban green spaces
		Capital / Capital funding		● Lower negative impacts on nature; increased investment in real estate that benefits nature through improved greenery quality, greening technology advances, ecological network formation, etc.
		Reputation		● Reduced negative impacts on nature through ecosystem-conscious real estate development, sustainable resource procurement, pollution reduction, etc., and improvement in reputation and corporate value through business activities that reduce environmental impacts
				● Improvement of relationships with local community through developments and operations that benefit nature through improved greenery quantity and quality, greening technology advances, and ecological network formation ● Improvement in overall appeal, brand value, and asset value of the town through business operations that improve local natural ecosystem services
	Physical	Risks	Acute / chronic	Mitigation of heat island effect (dependency on regulation/maintenance services)
			Recreation, aesthetic amenities (dependency on cultural services)	● Deterioration of the natural landscape caused by land development by our company and other stakeholders, etc., decreasing the appeal of the town and decreasing asset value

About Tokyu Resort Town Tateшина

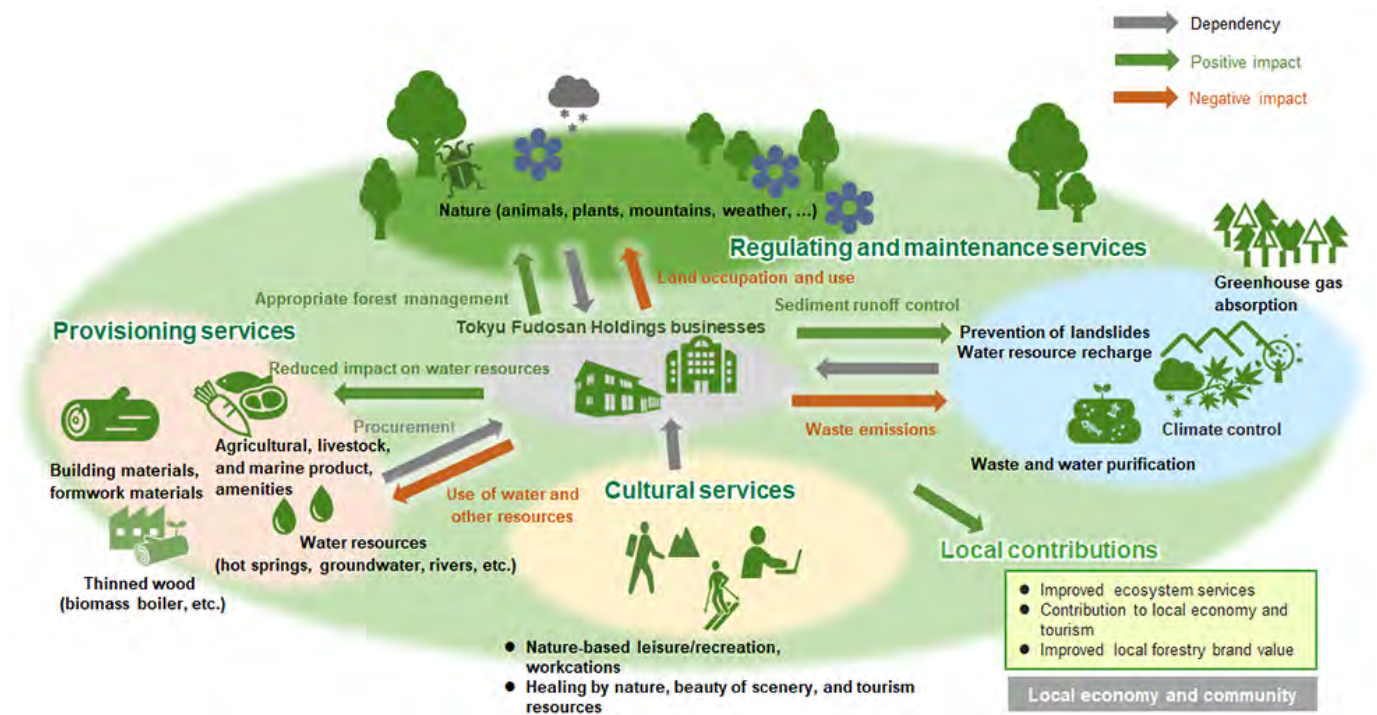
"Tokyu Resort Town Tateshina" is a large-scale resort complex located almost in the center of Tateshina Plateau in the northeastern part of Chino City, Nagano Prefecture, at an elevation of 1,100–1,800 m and a total site area of approximately 660 ha (approximately 140 Tokyo Domes' worth). The complex 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.



Major dependencies and impacts of business in Tokyu Resort Town Tateshina

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.

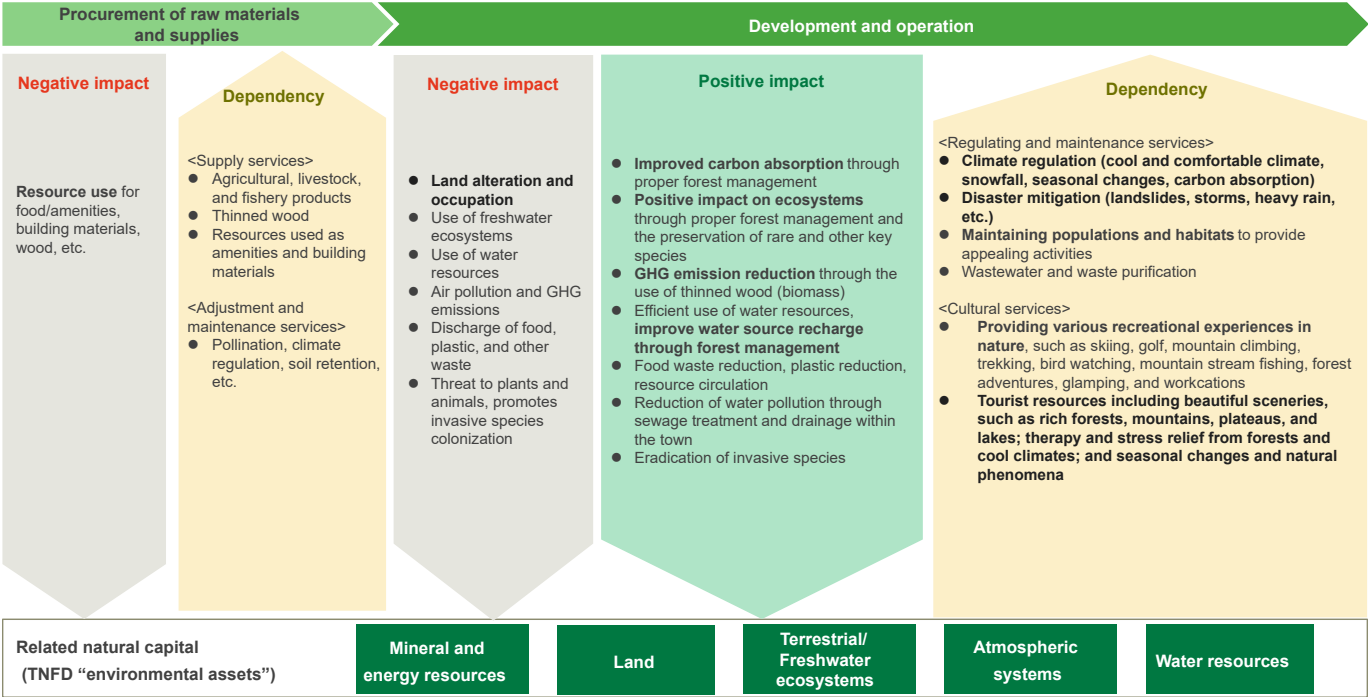


Based on the natural state of Tokyu Resort Town Tateshina, described later, we identified the major dependencies and impacts throughout our business and value chain, as shown in the figure below.

There is the potential for both negative and positive impacts on nature, and we also depend on nature in various ways.

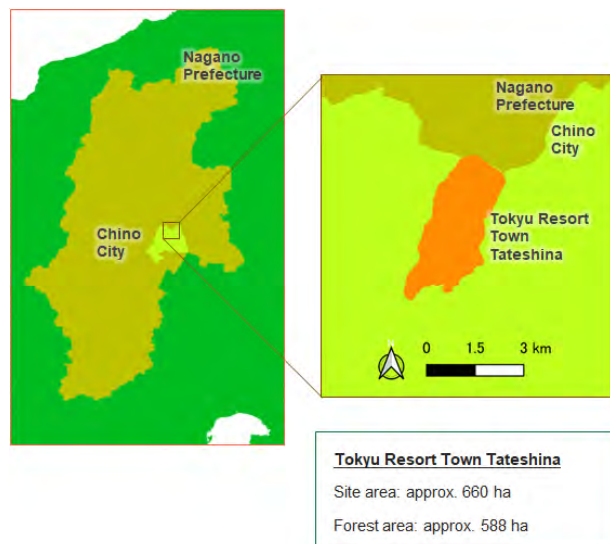
Dependencies and impacts on nature in the value chain

*Dependencies and impacts in bold are considered to be particularly important

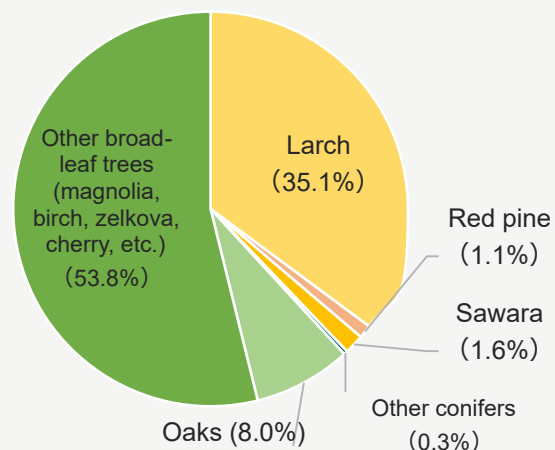


Characteristics of the nature in Tokyu Resort Town Tateshina

"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



Constituent tree species		Area	
		Hectares	Percentage
Conifers	Larch	207	35.1%
	Red pine	6	1.1%
	Sawara cypress	9	1.6%
	Other conifers	2	0.3%
Broad-leaf trees	Oaks	47	8.0%
	Other broad-leaf trees	317	53.8%

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

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.**

● Characteristics as tourism resources:

Source: Think Nature Inc.

- 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)

“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.

The following characteristics were found for Mizunara (*Quercus crispula*) and Japanese stone pine (*Pinus pumila*). These species are **abundant** and create **beautiful scenery that enhances the tourist appeal** of Tokyu Resort Town Tateshina, and support the business in terms of **maintaining and increasing the number of visitors and related populations**.

Mizunara

Although not particularly abundant in Chino City, Mizunara is abundant in Tokyu Resort Town Tateshina. Mizunara is among a community of **plants with rich autumn foliage**, such as maple trees and oaks.



Mizunara
(Source: Think Nature)



Autumn foliage at Tokyu Resort Town Tateshina



Honshū maple

Japanese stone pine

Areas with high habitat suitability are distributed to the east of Tokyu Resort Town Tateshina, consistent with the ridgeline of the Yatsugatake mountain range. Chino City is characterized by an abundance of Japanese stone pine, an alpine vegetation, which occurs nationally. The lingonberry-Japanese stone pine community is rich in lingonberries and other plants with rich autumn foliage, such as Erman's birch. This type of **alpine vegetation is thought to attract climbers**.



Japanese stone pine
(© Σ 64/Licensed under CC BY-SA 3.0)



Lingonberry
(Source: Regional Environmental Plan)



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



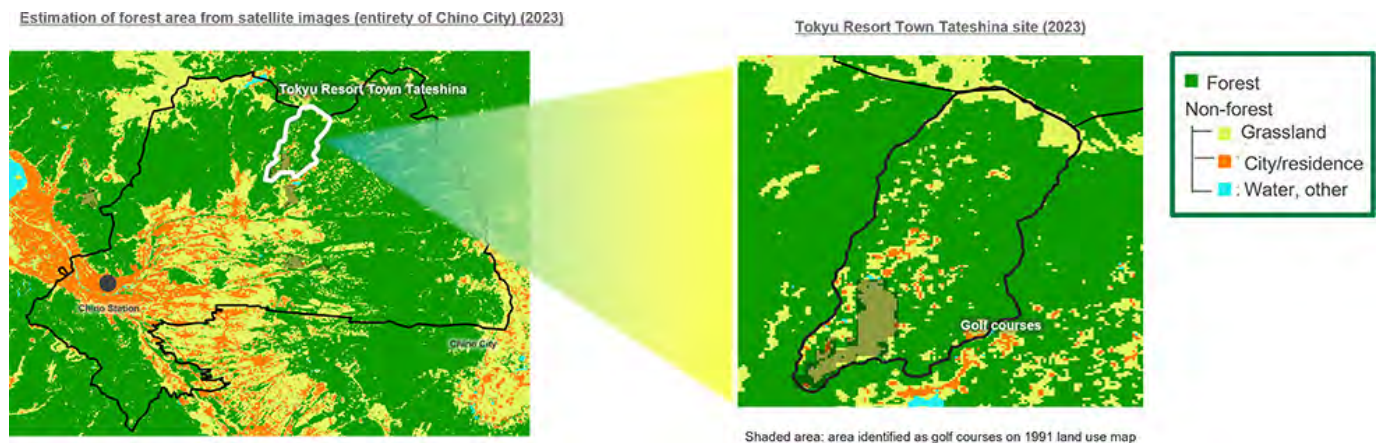
Erman's birch, autumn foliage
(©Sten Porse/Licensed under CC BY-SA 3.0)

Quantitative evaluation of impacts due to land use (methods)

Among the impacts due to the 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..

- 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.

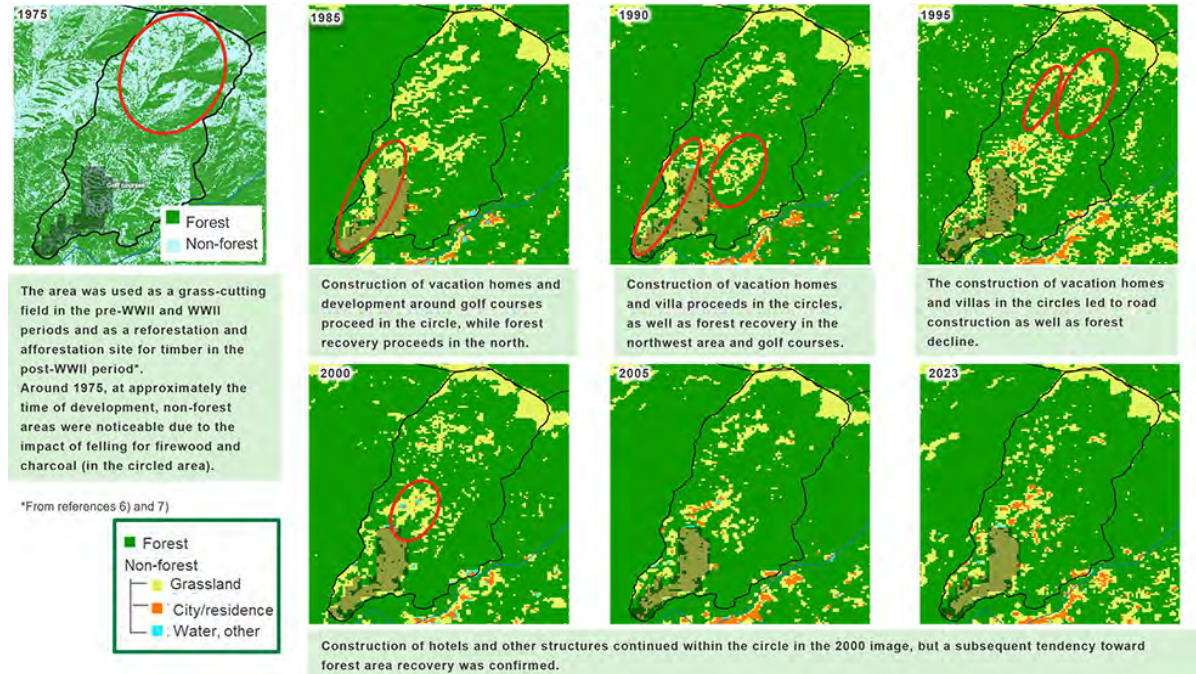
Source: Think Nature Inc.



* 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.



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.

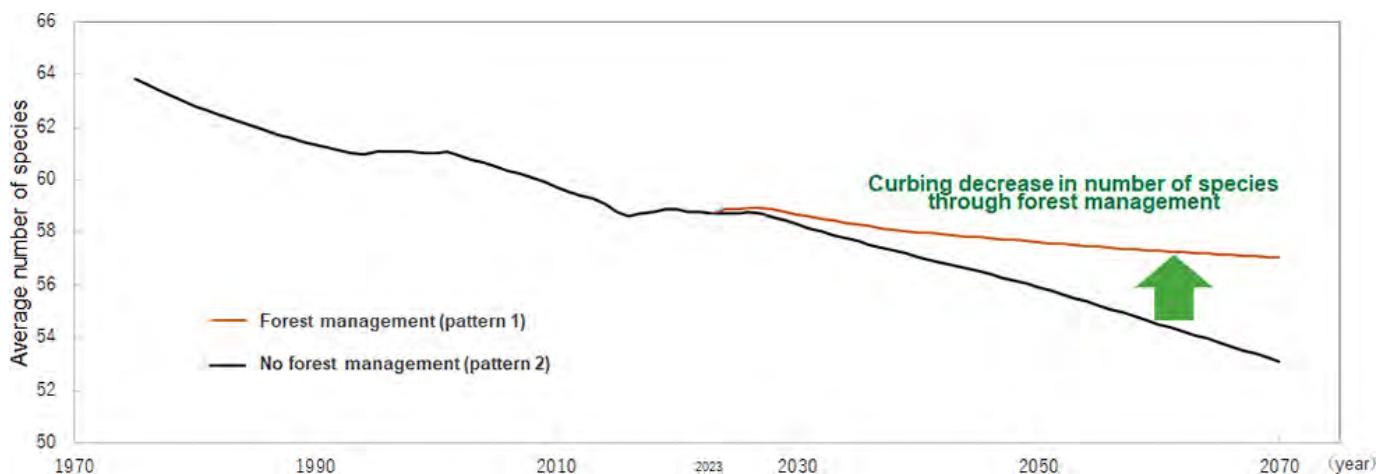
Quantitative evaluation of positive impacts due to forest management (results)

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.

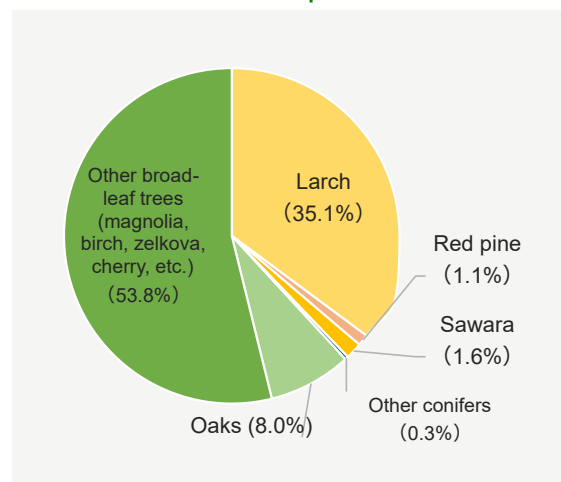
* Average number of species: value determined by dividing the larch forest into 30 m square grids (frames), analyzing the number of species contained within each grid, and calculating a simple average for all grids.

Positive impact on multifunctional roles of forests (carbon absorption function)

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.

- **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

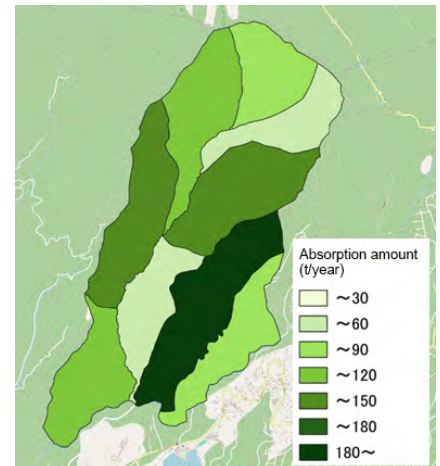
Item	Details
Creation and disclosure	Forestry Agency
Characteristics	● Calculate and display CO₂ absorption amount through forest preservation, such as J-Credit system or prefectural certification ● Calculate CO₂ absorption amount by inputting site location, tree species, age class (forest age: 5-year units), area, etc.
Formula	Annual CO ₂ absorption amount per hectare $= \textcircled{1} \text{Annual trunk growth per hectare} \times \textcircled{2} \text{Expansion factor} \times (1 + \textcircled{3} \text{Underground ratio}) \times \textcircled{4} \text{Bulk density} \times \textcircled{5} \text{Carbon content} \times \textcircled{6} 44/12$
Definitions of factors	① Annual trunk growth per hectare: the volume that tree trunks in one hectare grows per year (m³/ha) ② Expansion factor: factor for adding volume of tree branches ③ Underground ratio: ratio of tree root volume to aboveground volume (trunk + branches) ④ Bulk density: factor for converting the volume of wood to weight (t/m³) ⑤ Carbon content: percentage indicating the amount of carbon per ton of wood weight ⑥ 44/12: factor for converting carbon amount to carbon dioxide amount

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)”

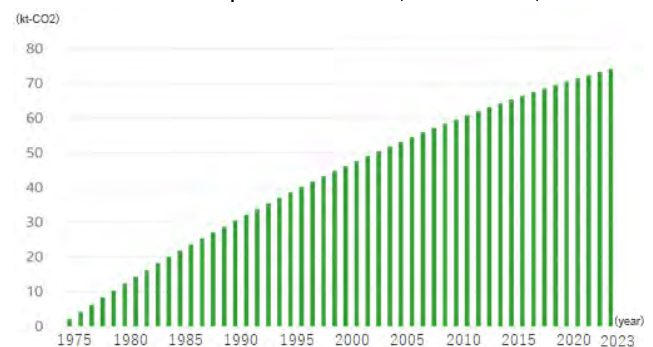
Forest CO₂ absorption amount (cumulative)

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.

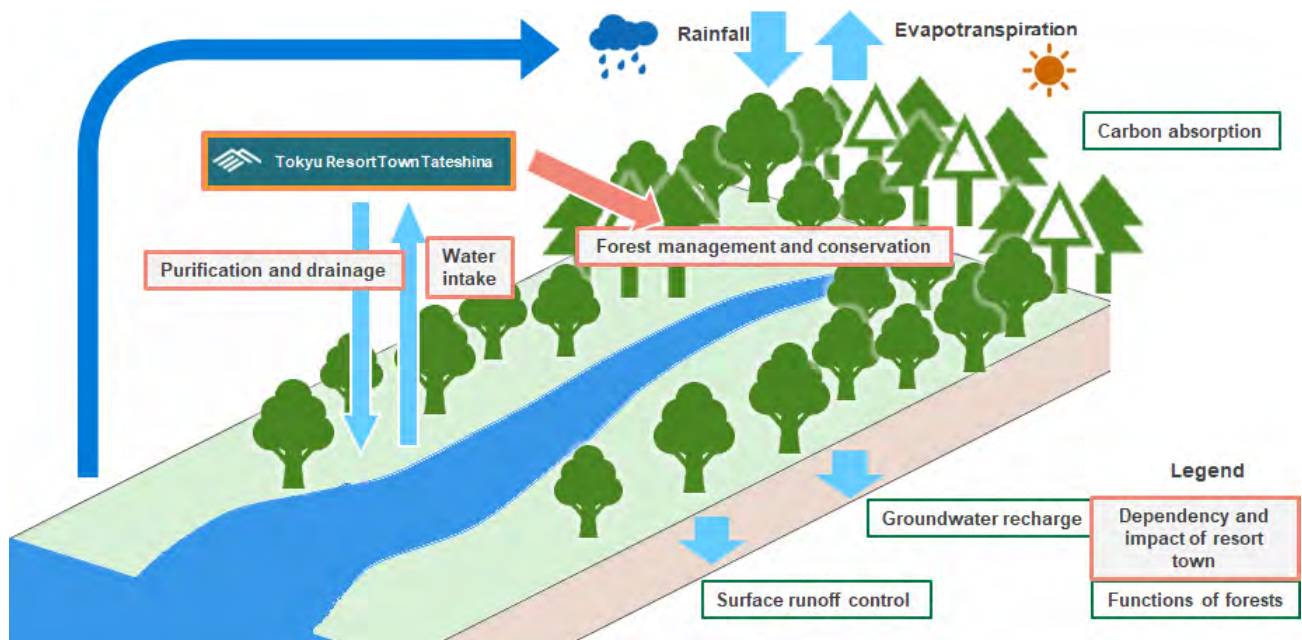
Cumulative CO ₂ absorption amount	Absorption amount by species		Cumulative total
	Larch	Other species	
Estimated cumulative amount from 1974 to 2023 (t-CO ₂)	31 k	43 k	7.4 k

CO₂ absorption amount (cumulative)



Positive impacts on the multifunctional role of forests (overview)

Tokyu Resort Town Tateshina receives its water from rivers and groundwater, which is maintained by natural forests. Forests have **multiple functions**, including **carbon absorption**, **groundwater recharge**, and **surface runoff control**, and have been integral to the sustainable development of Tokyu Resort Town Tateshina over the last 50 years. Tokyu Resort Town Tateshina not only purifies the water it uses but also conserves forests and water resources through proper forest management, including thinning. **Owing to its dependency and impact on forests, Tokyu Resort Town Tateshina has important impacts on the water cycle.**



Positive impact on multifunctional roles of forests (groundwater recharge)

Tokyu Resort Town Tateshina is a **self-sufficient resort facility that has its own water supply. It draws water from multiple natural water sources within the town to supply the entire town with tap water.** The groundwater recharge function of the town's forests plays an important role in securing and supplying sustainable water resources.

The **relationship between the forest groundwater recharge function and town's overall water intake** was quantitatively assessed using the water cycle simulator “GETFLOWS” for the forests within the town with the cooperation of Geosphere Environmental Technology Corp., a company that performs comprehensive watershed water-cycle analysis and provides scientific solutions to water problems.



Water source

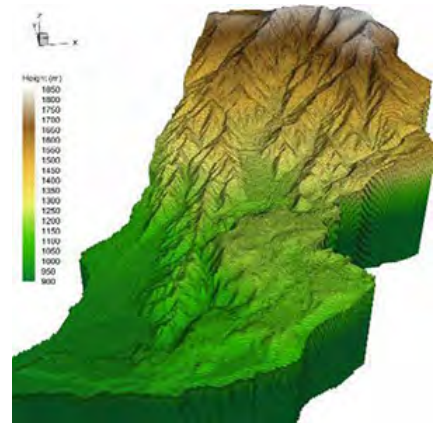
- Water is drawn from three springs and surface water sources within the town, filtered, and sterilized, and then supplied at 800-900 tons/d and as much as 2200 tons/d during the peak season.
- The upstream river and filtration ponds are cleaned three times a year, and six water reservoirs are maintained daily.

* Groundwater recharge

Rainfall seeps into the ground and is retained by forest soil. Rainfall in forests passes through the forest canopy and soil, is stored in the gaps in the soil, and slowly flows out into rivers, contributing to “flood mitigation” and “water resource storage.” Water that passes through the ground is also filtered, which is expected to provide a “water purification” function.

Quantitative analysis

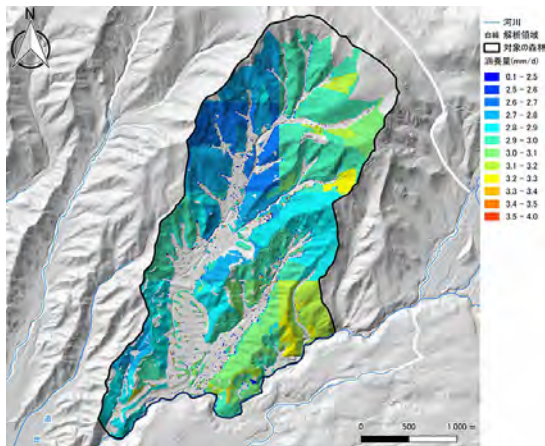
- Geosphere Environmental Technology Corp. constructed a “water circulation model” reflecting the weather conditions (precipitation, etc.), topography, land use, geology, and forest conditions (tree species, height, density, etc.) of the surrounding area including Tokyu Resort Town Tateshina.
- The model quantitatively analyzes the flow paths of surface water and groundwater in the target area and the amount of water recharge (water that seeps into the ground, calculated after considering precipitation, geological conditions, and evapotranspiration for each tree species).



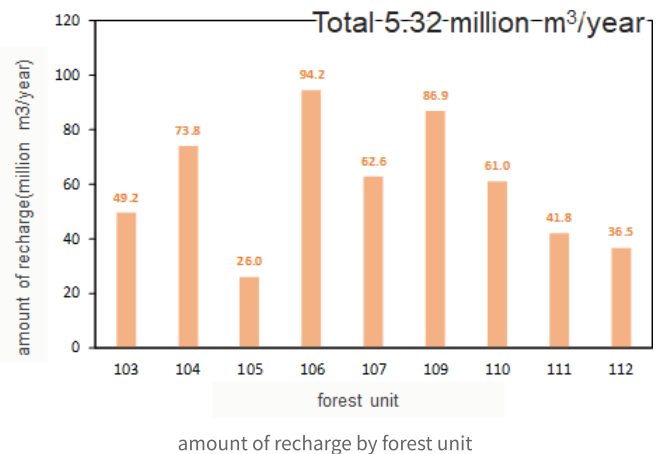
Model of study area (color-coded by altitude)

Analysis results

- The amount of water recharge in the target area varied depending on the topography, precipitation, tree species, and other forest conditions (including evapotranspiration).
- The **total amount of water recharge** was **5.32 million m³/year**. The **annual water usage in Tokyu Resort Town Tateshina** was **approximately 160,000 m³** (FY2023 results), which is only 3.1% of the total recharge volume, and all water usage within the town was supplemented through recharge within the town, indicating the high sustainability of the groundwater resources.
- If forest cover decreases, surface runoff will increase and reduce the groundwater recharge (storage capacity). Tree thinning is beneficial to properly maintain the soil and promote rainwater infiltration. These findings suggest that **water recharge and usage within the town can be sustainably used in various business activities while properly managing and protecting the forests**. The groundwater recharge function also contributes to flood mitigation, groundwater storage, and water purification, and is thought to reduce natural risks.



Distribution of groundwater recharge in Tokyu Resort Town Tateshina



Source) Geosphere Environmental Technology

Positive impact on multifunctional roles of forests (surface runoff control)

Forest soil plays an important role in groundwater recharge and forest ecosystem conservation, while surface runoff has a negative impact on groundwater recharge, water quality, and ecosystem health.

We quantitatively assessed the **extent to which surface runoff is controlled by the forests of Tokyu Resort Town Tateshina**.

Method

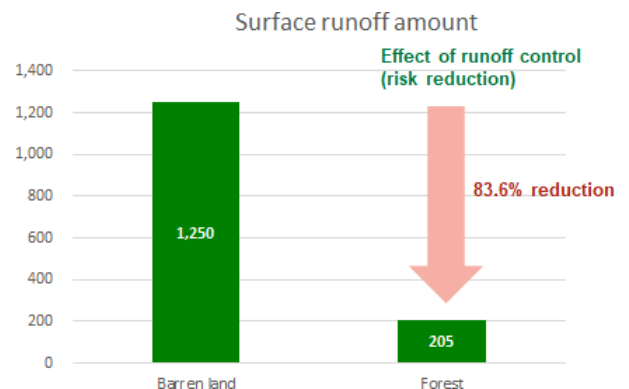
We used the universal soil loss equation (USLE), a method commonly used to predict surface runoff amounts, to analyze the difference in surface runoff between forests and barren land.

USLE

- Developed mainly by the US Department of Agriculture and adopted as the agricultural land conservation standard. It is also included in the “Land Improvement Planning Guidelines” in Japan.
- This equation assesses the average annual amount of surface runoff based on the rainfall, soil characteristics (coefficients related to runoff such as soil permeability), slope length and inclination, and surface vegetation.

Analysis results

- **If the forests are maintained, the amount of surface runoff in Tokyu Resort Town Tateshina would be 205 tons/year, whereas surface runoff would increase to 1250 tons/year for barren land. Business conducted under the proper maintenance of forests and other environments reduced the amount of runoff by 83.6% compared to the barren land.**
- Healthy tree growth maintains the soil through their properly maintained roots, and evapotranspiration regulates the amount of rainfall. Therefore, **maintaining the town's forests can effectively control runoff and maintain groundwater recharge while reducing the associated risks of disasters, deterioration of water quality, and destruction of the ecosystem.**



Important risks and opportunities in the land-based hotel and leisure business (transition risks)

Based on our analysis of Tokyu Resort Town Tateshina, we examined the risks and opportunities in the hotel and leisure business. We anticipate **physical risks such as decreased appeal as a resort and tourist destination due to the deterioration of ecosystem services**, and **transition risks due to changes in regulations and market environments**, but we also identified **many nature-related opportunities**.

Classification			Major dependencies / impacts	Risk components
Transition	Risks	Policies and regulations	Use of other resources, waste	Increased costs associated with plastic replacement and food waste reduction due to the strengthening of regulations regarding the circulation of plastics and reduction of food waste
			Use of water resources	Restrictions on water use rights to protect river water resources
			Water pollution	Tightened regulations on wastewater
			Use of terrestrial ecosystems, use of other resources	Rising prices of agricultural, livestock, and marine products served at resort facilities and restaurants due to regulations for nature conservation (e.g., restrictions on catches), restrictions on land conversion both domestically and overseas, and increasing demand for sustainable agriculture
		Technology	CO ₂ emissions, use of water resources	Increased costs due to the introduction of new equipment and technologies for efficient use of water resources and water conservation, such as energy-efficient small-scale decentralized water circulation systems
		Market	Resource use	- Increased procurement costs due to increased demand for sustainable certified products and the adoption of sustainably produced food (agricultural, livestock, and marine products) and amenities at hotels and restaurants - Rising prices due to increased demand for certified products and sustainable alternatives (biomass plastics, etc.)
		Reputation	Land use modification and water resource use in terrestrial ecosystems	Deterioration of reputation due to development and occupation of land by facilities and large-scale water resource use
			Introduction of invasive species, ecosystem disruption	Deterioration of reputation due to the introduction and spread of invasive species and the associated adverse effects on native flora and fauna

Important risks and opportunities in the land-based hotel and leisure business (transition opportunities)

Classification			Major dependencies / impacts	Opportunity components
Transition	Opportunities	Resource efficiency	Reduction of negative impacts such as land alteration and occupation, pollution, resource use, and waste discharge Positive impacts on ecosystems (and ecosystem services) through proper forest management, biological monitoring, and species protection	Reduced CO₂ emissions from biomass boilers using thinned wood, reduced energy costs, and reduced costs associated with water-efficient technologies
		Capital		Acquisition of J-Credits through proper forest management and carbon absorption initiatives
		Products and services		Sale of wood products and native aromatic goods made from larch wood generated during thinning
		Reputation		- Positive impacts associated with the preservation and increase in plant and animal species richness through proper forest management, certification as a nature-coexistence site, improved reputation from biopreservation initiatives - Improved reputation from resource circulation and sustainable resource use, such as the introduction of compost and use of plant-based materials in amenities - Improved relationships and reputation with the local community by reducing the impact on the surrounding natural environment during development - Improved relationships with local government by contributing to a circular society and ecologically minded sphere - Improved profits and reputation through business activities that utilize the unique regional natural attractions (including increased regional awareness and tourist appeal) - Improved reputation through contributions to the brand value and profits of regional forestry services by expanding the uses of thinned larch lumber
		Protection, restoration, and regeneration of nature		- Contribution to improving ecosystem services, such as groundwater recharge and landslide prevention through proper forest management - Protection of nature through invasive plant and animal eradication - Indirect positive impact on nature by raising environmental awareness among facility users through various experiences (adventures in the forest, glamping, trekking, bird watching, etc.)

Important risks and opportunities in the land-based hotel and leisure business (physical risks)

Classification			Major dependencies / impacts	Risk components
Physical	Risks	Acute / chronic	Water resources	Water resource shortages due to river pollution caused by development in the surrounding areas; reduced water recharge capacity of local forests
			Water resource supply, pollination, and climate regulation	- Water shortages in agricultural, livestock, and feed production, among other industries, and rising food prices at hotels and restaurants due to extreme and abnormal weather and disasters - Seafood shortages and price increases due to deterioration of marine and river ecosystems and reduced catches
			Soil and sediment retention, storm damage mitigation, and climate regulation	- Increased risk of landslides and floods due to forest degradation associated with development in the surrounding area - Landslide and flood risk due to deterioration of local forests under inadequate forest management - Increased risk of damage to facilities and harm to visitors/users due to increased risks of wind and flood disasters caused by climate change
			Climate regulation, natural population and habitat maintenance, and cultural services	- Impact on our net zero transition plan due to a decrease in the forest CO₂ absorption capacity - Loss of seasonal scenery and natural phenomena serving as important tourist attractions due to rising temperatures caused by climate change, and a decrease in resort appeal - Impact on ski resort operation due to a decrease in snowfall and shortened snowfall period caused by climate change - Decrease in biodiversity of birds, fish, plants, etc. due to anthropogenic impacts such as climate change and development, and insufficient forest management, reducing the appeal of nature-based activities (hiking, bird watching, etc.) - Deterioration of landscape aesthetic due to an increase in invasive species and animal damage in the region and facilities, reducing the tourist appeal of the resort for nature-based activities and outdoor therapy - Deterioration of the water quality of rivers and lakes due to human activities such as corporate development, resulting in a decline in tourism

Palau Pacific Resort

Palau Pacific Resort (PPR) is a full-service resort hotel developed in the Republic of Palau in harmony with environmental conservation.

Republic of Palau

The Republic of Palau comprises more than 200 islands and is **located at the western edge of the Micronesian region in the Pacific Ocean**. After officially gaining independence from foreign rule in 1994, Palau's primary industries have been tourism, fisheries, and agriculture. **The resort destination is accessible by a direct flight of approximately four and a half hours from Japan, and there is no time difference**. Encircled by stunning coral reefs, the surrounding seas are internationally recognized as one of the world's most dynamic diving destinations, supporting a wide variety of marine species.

About “PPR”

Situated in a prime setting overlooking the World Heritage Site known as the Rock Islands Southern Lagoon, this authentic beach resort allows guests to fully experience Palau's natural environment and culture.

PPR covers roughly 27 hectares, provides 172 guest rooms, the highest number in Palau, and diverse accommodation options, including five overwater bungalows and seven pool villas.

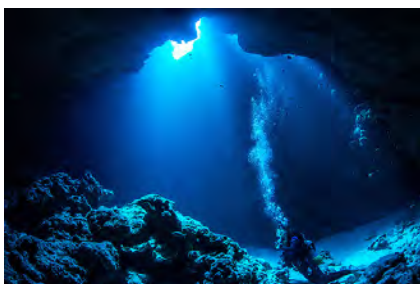
Guests can enjoy activities such as snorkeling, stand-up paddleboarding, kayaking, and others along **the approximately 250-m private beach facing the Pacific Ocean**. The grounds also include forested areas inhabited by more than 35 bird species, including endemic and endangered birds, offering opportunities for birdwatching and nature walks.



Location map



Facility layout



Diving spot



Hotel exterior



Shellfish and wild bird species

Beginning in 1956, when Tokyu Fudosan Corp.'s first president, Noboru Goto, became the first Japanese civilian to visit Palau after the war, we have continuously developed our business in Palau, often called "the last paradise on earth," while safeguarding its abundant natural environment, history, culture, and local communities.

- 1956 **First President Noboru Goto visits Palau**
- 1973 Local subsidiary established
- 1984 **"PPR" commences operations**
- 1994 Guest room expansion from 100 to 160 rooms
- 2002 **Arakabesan Sea area in front of resort designated as marine conservation area**
- 2012 Rock Islands Southern Lagoon registered as World Heritage Site
- 2015 Five overwater bungalows added, first such facilities in Micronesia
- 2019 "The Pristine Villas and Bungalows" opens, including Palau's first seven standalone pool villas
- 2025 **Luuk Nature Center opens as facility for experiencing natural environment**



Overwater bungalows



The Pristine Villas and Bungalows



Luuk Nature Center

Luuk Nature Center (opened December 2025)

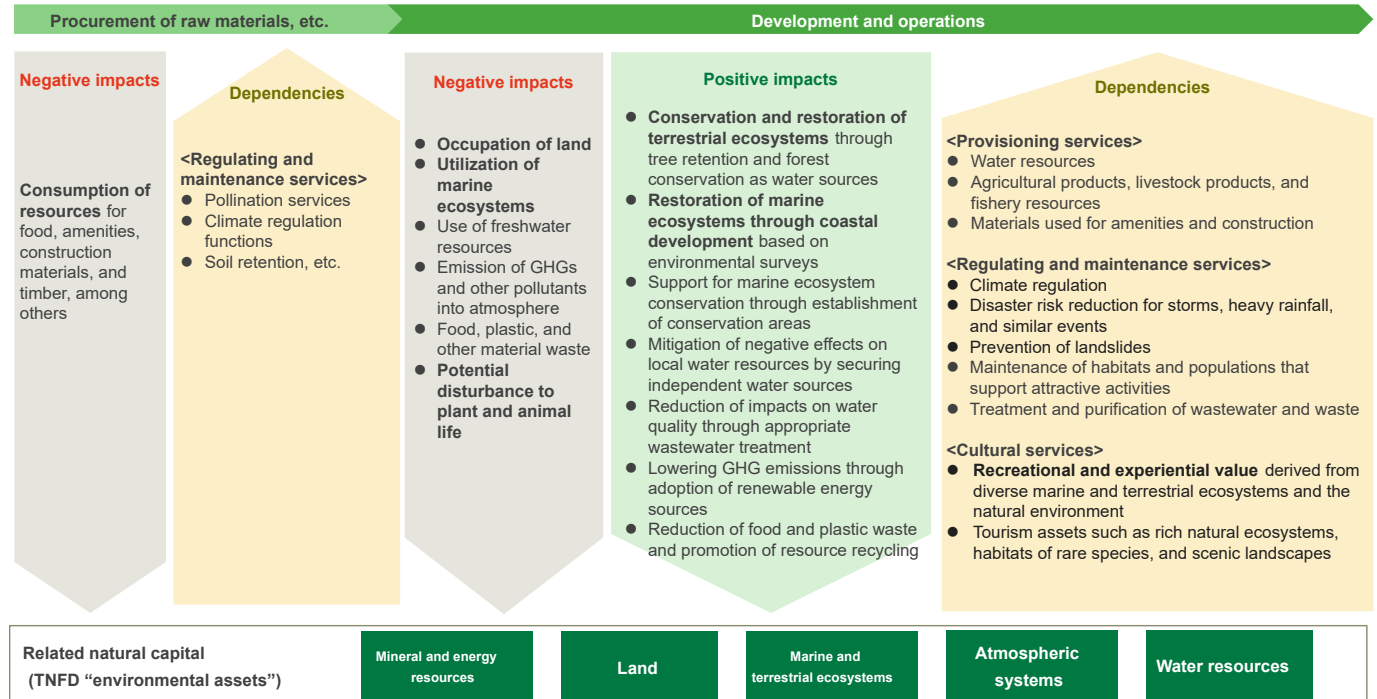
In 2025, Luuk Nature Center was launched as a space dedicated to experiencing Palau's distinctive natural environment, offering a special program that enables visitors to explore the rich ecosystems of interconnected mountains and ocean, following the concept of "Connectivity from Ridge to Reef," all within the resort grounds. While generating appreciation for Palau's dynamic natural scenery, this facility creates new value as an educational space that supports future environmental conservation efforts.

[Nature Center](#) | [Palau Pacific Resort Official](#) [🔗](#)

Major dependencies and impacts of business at “PPR”

The figure below illustrates dependencies and impacts on nature. Although our activities may generate both adverse and beneficial effects on nature, our operations also rely on natural systems in multiple ways.

Dependencies and impacts on nature across value chain * Items shown in bold are regarded as especially significant.



Assessment of dependencies on nature as tourism resource (method)

“Biodiversity importance” was assessed to determine the importance of the local area including PPR.

Assessment method

In cooperation with Think Nature Co., Ltd., we analyzed conservation priority as an indicator of biodiversity importance.

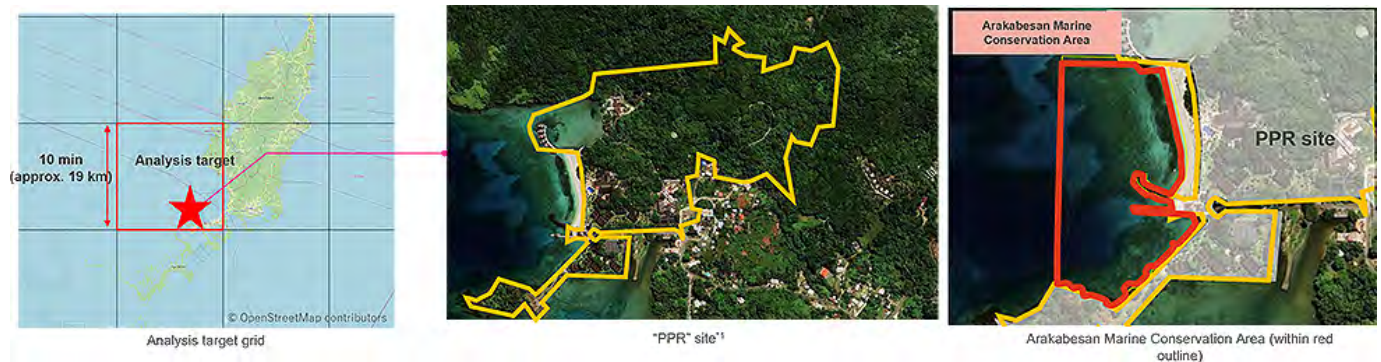
Conservation priority

The assessment area was divided into grid units; for each grid, the risk of species loss was quantified on a scale from 0 to 1, where 1 represents a rich habitat with the highest risk of loss. A conservation priority value closer to 1 indicates a greater number/higher presence of species facing extinction.

This analysis used large-scale species distribution data maintained by Think Nature Co. Ltd.

Scope of analysis

The assessment included the PPR site as well as the adjacent sea area in front of the resort, specifically the Arakabesan Marine Conservation Area.



*1 Refer to [Photo credit](#) for the image source.

* The grid divided the target area into square units of a fixed size. Biodiversity assessments were conducted for each of these units.

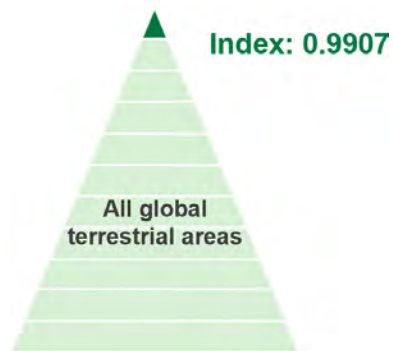
Assessment of dependencies on nature as tourism resource (results)

The conservation priority analysis for both land and sea indicated that the **terrestrial and marine areas** possess extremely high biodiversity conservation value, **placing them within the top 1% worldwide in terms of biodiversity importance.**

Relative to the global scale, the area supports a large number of species both on land and in the ocean, including many facing a high risk of extinction.

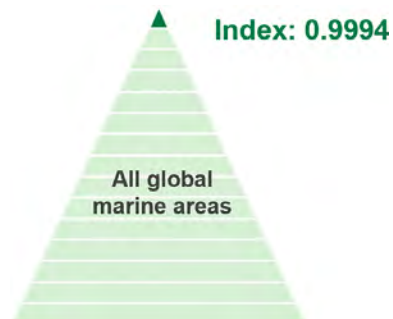
Importance of terrestrial biodiversity

Top 0.9% of global terrestrial areas

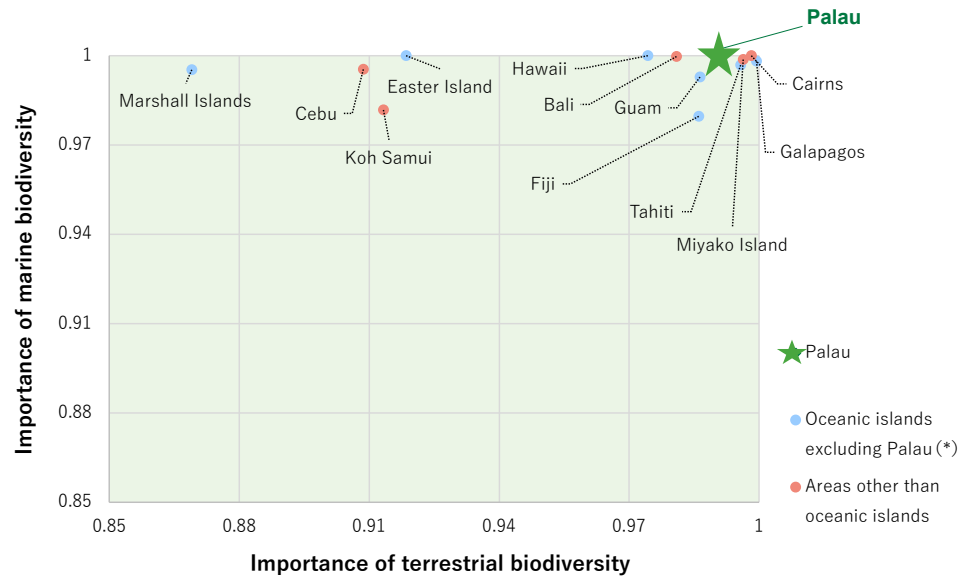


Importance of marine biodiversity

Top 0.1% of global terrestrial areas



Biodiversity importance of marine resort destinations worldwide, including marine and terrestrial areas



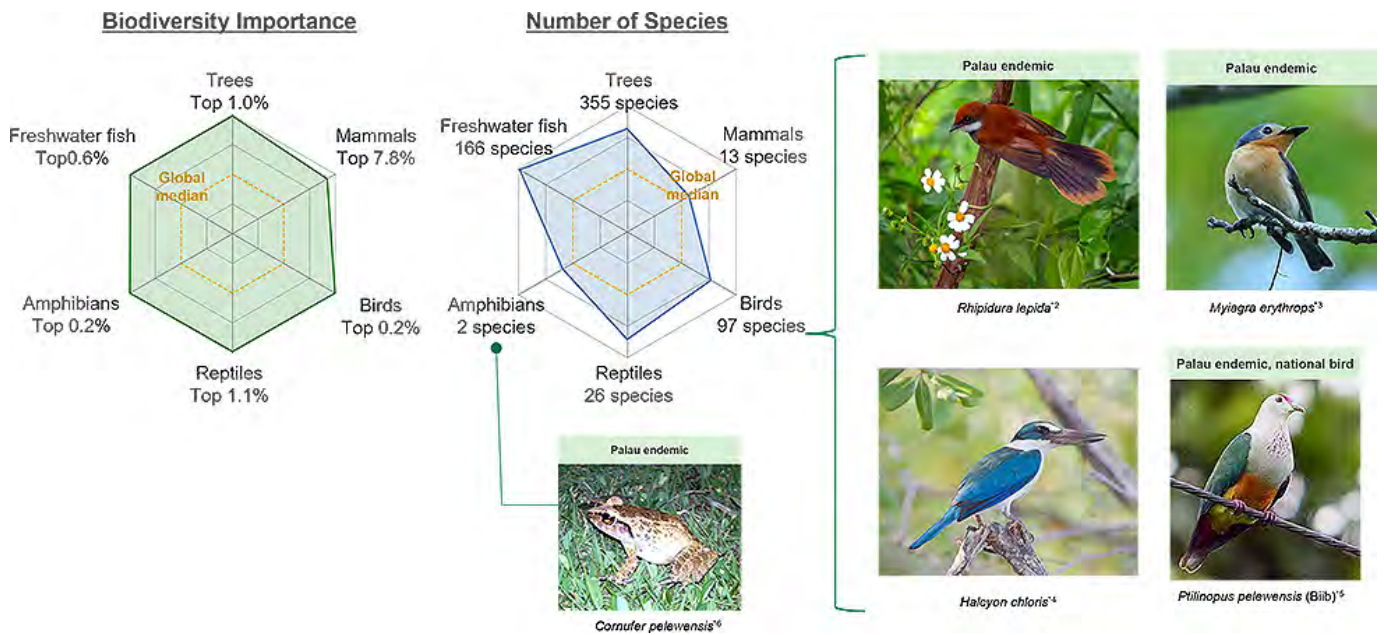
Source) Think Nature Co., Ltd.

- * Oceanic islands: Islands that have never been connected to a continent, including Palau. Generally, land areas with stronger connections to continents support a larger number of species, and thus non-oceanic islands tend to have higher biodiversity importance.

Assessment of dependencies on terrestrial nature (results)

Analysis of Think Nature Co. Ltd.'s biodiversity big data showed that, across all six terrestrial biological groups, **biodiversity importance ranked among the highest globally**, with especially large numbers of freshwater fish and reptile species, as well as many endemic bird species.

The presence of bats and birds listed in the Red List **along with the nature-conscious development at PPR and the restoration of natural forests may contribute to this high level of biodiversity.**



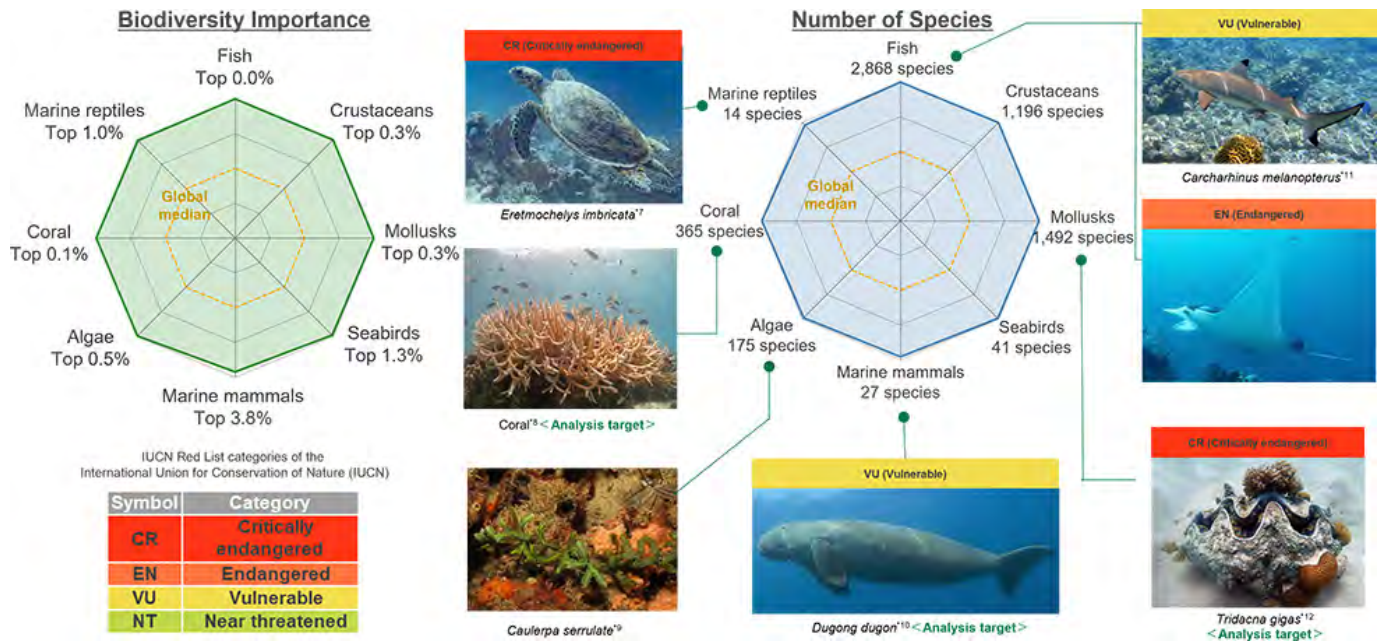
Source) Think Nature Co., Ltd.

*2-6 : Refer to [Photo credit](#) for the image source.

* Palau endemic: Species found only in Palau

Assessment of dependencies on marine nature (results)

Analysis of Think Nature Co. Ltd.'s biodiversity big data indicated that the sea area **ranked among the highest worldwide for both biodiversity importance and number of species** across all eight biological groups assessed. Species listed on the Red List include marine mammals such as *Dugong dugon* and *Physeter macrocephalus*, along with *Eretmochelys imbricata* and *Tridacna gigas*. As described later, **efforts under “PPR” to conserve and restore marine and terrestrial ecosystems may contribute to the high level of biodiversity.**



Source) Think Nature Co. Ltd.

*7-12 : Refer to [Photo credit](#) for the image source.

Reducing negative impacts during development (balancing nature and development)

Over 40 years ago, long before sustainability became a widely recognized concept, PPR was guided by the principles of “achieving balance between nature and development” and “contributing to the local community while being embraced by local residents.” These ideas are reflected in the words of Tokyu Fudosan Corp.’s first president, Noboru Goto, who said to “**not build anything taller than a palm tree**” and “**engage in work that genuinely benefits local people**”.

Terrestrial Development aligned with nature based on comprehensive environmental surveys

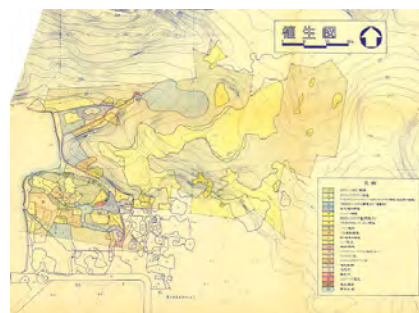
During the war, the PPR site contained military facilities. Instead of clearing forested areas, the current resort was constructed on the former military site, thereby limiting changes to the surrounding natural environment.

Before development began, **detailed environmental surveys focusing on vegetation and terrestrial ecosystems** were conducted. The findings of these surveys guided **extensive preservation of existing trees, along with the cultivation and planting of native plant species**. For instance, a “Calophyllum inophyllum/Casuarinaceae community,” unique to sandy coastal areas, was identified on the beach in 1979 and remains intact today. Additionally, **part of the northeastern section of the property has been designated as a water source protection zone** and is also utilized as a trekking area.

Site conditions before and after development



1944 (before development)



Vegetation survey
(Ishikatsu exterior, 1979)



2024 (after development)



Coastal forest

Marine Comprehensive beach restoration, coral transplantation, and initiatives toward marine conservation area designation

Before development, the sea area in front of the resort was affected by sediment runoff from land, creating conditions unsuitable for coral growth.

Guided by environmental surveys, **large-scale beach restoration efforts, including coral transplantation**, were implemented, leading to significant environmental improvements and the successful recovery of coral in the adjacent sea area in front of the resort.

Starting in the late 1990s, **the resort began releasing juvenile endangered *Tridacna gigas* into the sea with guests**, while also carrying out educational programs for both residents and visitors on restrictions against collecting living organisms.

These conservation initiatives enhanced the marine environment and **prompted a request from the state government for marine conservation measures. Consequently, in 2002 the sea area in front of the resort was designated as the Arakabesan Marine Conservation Area, marking the first such designation for a private beach.**



Coral transplantation



Tridacna clam release

Reducing negative impacts during development (contribution to local community)

Guided by the objectives of contributing to the local community and gaining acceptance from local residents, we focused on **community contributions through designs that are in harmony with local culture and traditions, as well as through employment creation and human resource development.**

Design reflecting local culture, traditions, and natural environment

The buildings are limited to a maximum of two stories, remaining lower than surrounding palm trees, and feature roofs inspired by the traditional Palauan abai, or community hall. Existing trees were retained, and the architectural design harmonizes with the surrounding ocean and greenery.

By incorporating **traditional architectural elements along with culturally symbolic buildings and sculptures**, the design **enables guests to experience Palau's culture, traditions, and natural landscapes.** This shared appreciation also **fosters pride among employees**, which contributes to higher-quality service.



Hotel exterior



Traditional building, abai (community hall)

Contribution to local community

The western coast of Arakabesan Island, where the hotel is located, is also used by local residents, thus the development initially faced opposition. Through the hiring of local residents and by clearly communicating our commitment to developing an environmentally considerate resort, we earned community understanding and proceeded with development.

Today, **approximately 60% of employees are Palauan.** In addition to **providing employment opportunities**, we support the local community through training and development in the hotel and tourism sectors.

Consequently, strong relationships have been established with the local community, and PPR's initiatives have been met with appreciation. PPR employees participate in environmental initiatives through the Green Care Committee, **regularly carry out voluntary cleanup activities, such as collecting driftwood and waste such as plastic**



Hotel staff



Green Care Committee

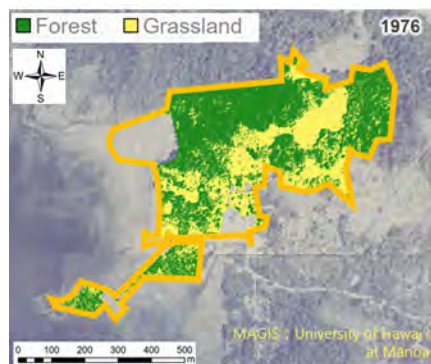
bottles from roads, bridges, and surrounding sea areas around Arakabesan Island. Members have a designated leader, with whom they discuss and plan annual activities, and actively conduct cleanup efforts not only on the property but also in nearby areas.

Quantitative evaluation of impacts due to land use (methods)

To assess the project's environmental impact, we conducted a quantitative analysis of **changes in the proportion of forested areas before and after development**, with the support of Think Nature Co., Ltd., and qualitatively confirmed land use changes using aerial photographs and vegetation survey data from the pre-development period.

Methods The PPR site was examined for 1976, 2009, and 2023, for which aerial photographs and satellite images were available. Using machine learning, images were classified into forest, grassland, and other land types such as built-up areas, and the extent of forest and grassland coverage was calculated.

Image analysis showed that, before development, natural forest coverage declined and grassland areas were extensive. **Following the development of PPR, land outside the building site was preserved, leading to a transition toward tropical rainforest**, referred to here as “natural forest.” Currently, most of the site comprises natural forest, which is considered to contribute to enhanced forest and marine biodiversity, reduced sediment runoff, and improved watershed protection.

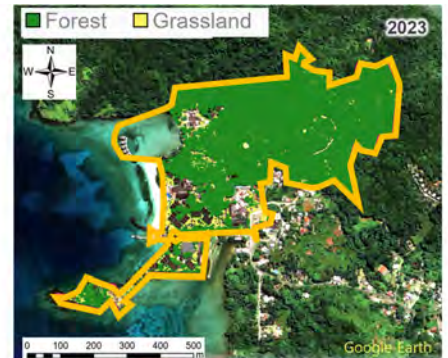


Site contains extensive grassland. Reviewing aerial photographs from 1944 together with vegetation surveys conducted during the development period suggests that areas classified as grassland **had already been cleared and used for military facilities and agricultural land before and during World War II.**

1984: PPR opens



A large portion of the site has since transitioned into dense jungle-like natural forest. Buildings are mainly concentrated along the coastline, but the surrounding areas have been carefully planted with trees and grassland vegetation, maintaining extensive green spaces.



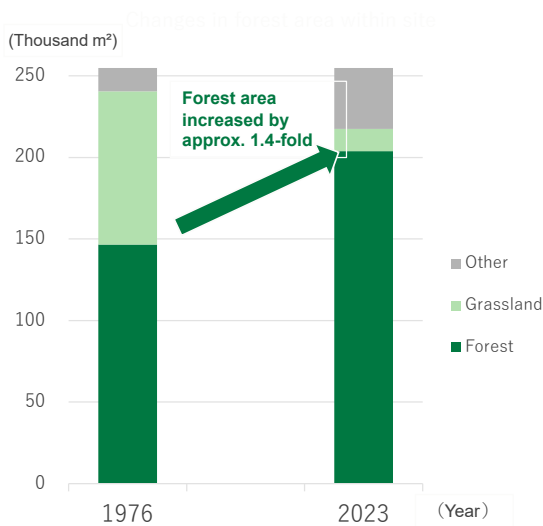
Most of the site is now covered by forest and the proportion of forested land has remained largely unchanged since 2009. **These natural forests help prevent sediment from flowing into the ocean and support the replenishment of water resources.** The forested areas also serve as trekking routes.

Source) Think Nature Co. Ltd.

Quantitative evaluation of impacts due to land use (results)

Quantitative analysis showed that, although the area used for buildings increased as development progressed, a far greater area of forest has been restored. **Since the resort opened, the proportion of forested area has grown approximately 1.4-fold.** Development and operations guided by the principle of harmony with nature support the conservation and restoration of natural forests, wildlife habitats, and ecosystem services.

Changes in forest area within site



Comparison before and after resort opened in 1984

- Grassland areas declined as they transitioned into natural forest. However, vegetation surveys conducted in 1979 indicated that **these grasslands originated from cleared farmland, and native vegetation is believed to have gradually been restored into tropical rainforest through natural succession.**
- Resort construction increased the area occupied by buildings, **but development took place on the former sites of military facilities, thereby limiting changes to the original natural environment.** Sufficient greenery has been preserved around the facilities, **creating scenery that is in harmony with nature.**



Natural forest



Development in harmony with nature

Source) Think Nature Co. Ltd.

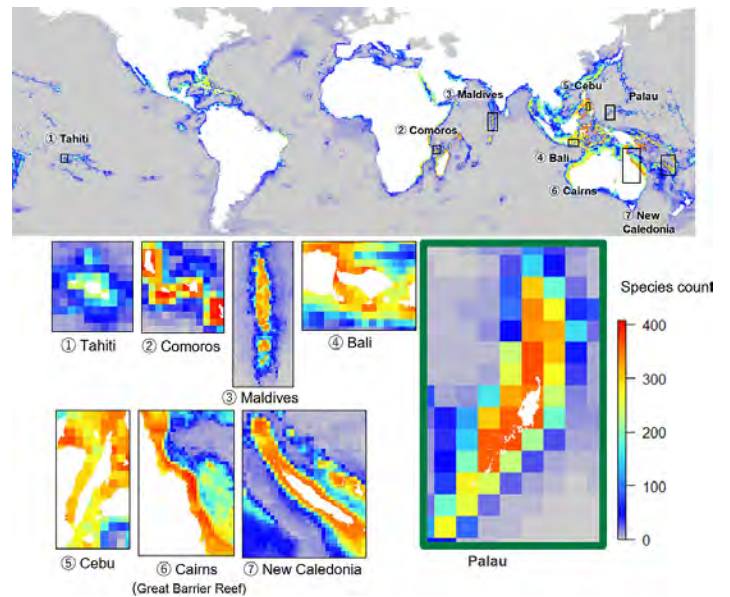
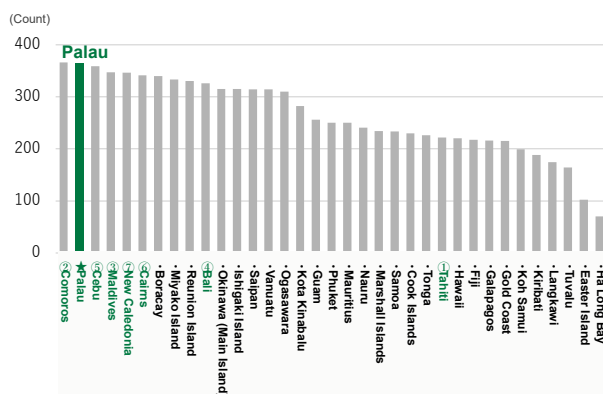
Quantitative evaluation of natural impacts in marine areas <coral>

Palau possesses some of the most abundant coral reef systems in the world, which draw many visitors and represent important tourism resources. Coral reefs function as biodiversity-rich “oases” and have **high biodiversity importance**. They also serve as **important natural assets upon which PPR’s business depends**. Accordingly, we conducted a quantitative assessment of coral reefs using Think Nature Co. Ltd.’s biodiversity big data.

Assessment of coral species counts

Analysis of **coral species counts** showed that Palau supports more than 350 species of reef-building corals out of 722 species assessed, which is a notably high figure for an oceanic island. **Compared with other resort destinations** known for coral reefs, **Palau exhibits a particularly rich diversity**.

Coral species counts at marine resort destinations worldwide



Source) Think Nature Co. Ltd.

Assessment of coral coverage

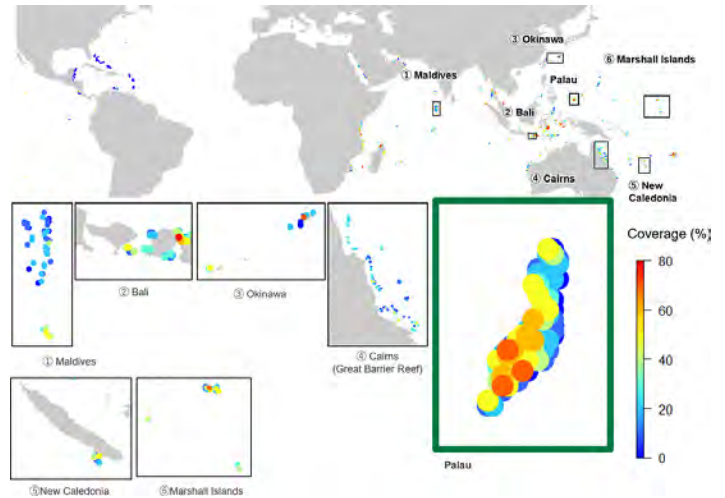
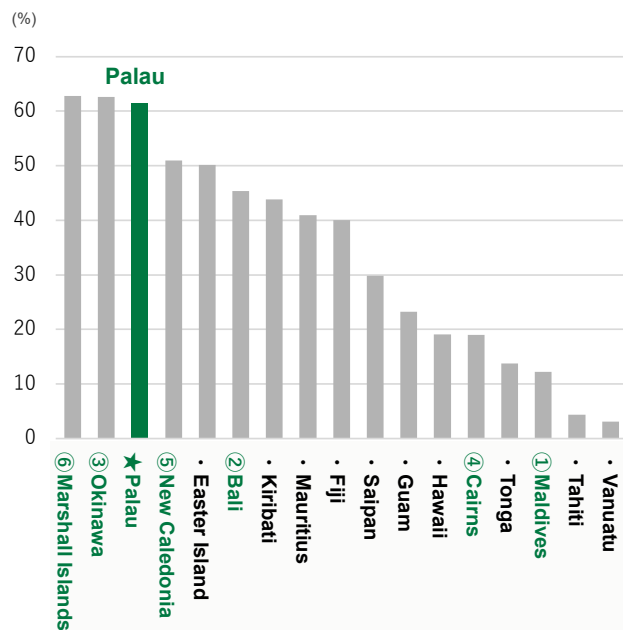
また、We collected and organized **coral coverage** data from a range of existing studies and visualized the results. Palau includes sea areas where coral coverage exceeds 60%, placing it within the top 1% worldwide, **surpassing other resort regions known for abundant coral reefs**. In particular, the southwestern seas adjacent to “PPR” exhibit the highest coral coverage levels within Palau.

Coral coverage

Coral coverage represents the proportion of the seabed area that is covered by living coral.

It is the most fundamental indicator of coral reef ecosystem abundance and health.

Coral coverage at marine resort destinations worldwide



Source) Think Nature Co. Ltd.

As part of assessing the impact of our business activities on nature, we conducted a quantitative analysis of **coral coverage trends** in collaboration with Think Nature Co. Ltd. and reviewed the findings of **on-site monitoring conducted within marine conservation areas**.

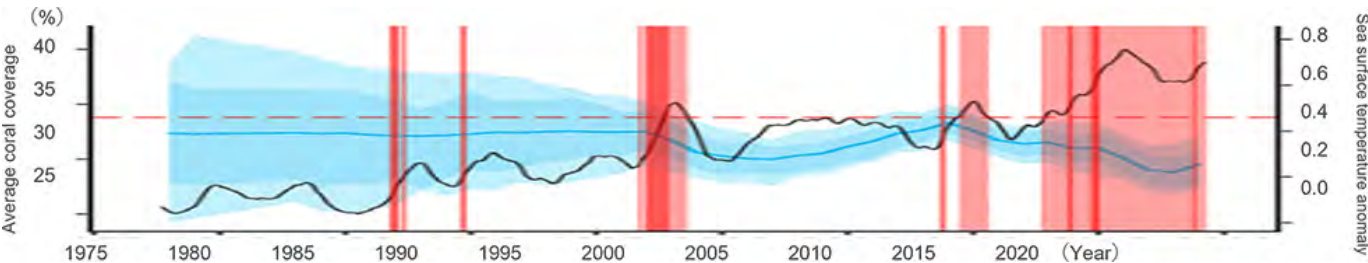
Target	Marine conservation area in front of resort (Arakabesan Marine Conservation Area) and surrounding sea areas of Rock Island
Method	- Quantitative analysis by Think Nature Co. Ltd.: Machine learning techniques were used to estimate changes in coral coverage based on satellite imagery and field survey data collected since 1994 - Verification of coral conditions using survey results from Arakabesan Marine Conservation Area

Reference : Global status of coral reefs

Coral reefs are highly sensitive to environmental changes such as climate change and ocean acidification, as well as human-driven pressures including land-based pollution from agriculture, nutrient and sediment inflows, marine pollution, overfishing, and destructive fishing methods. Consequently, they are considered at risk of global decline. Reports from the United Nations Environment Programme (UNEP) and other organizations indicate that **roughly 14% of the world’s coral reefs were lost between 2009 and 2018**, with major contributing factors including large-scale bleaching, excessive coastal development, pollution, and typhoons.

Trends in global average live coral coverage

(blue line: coral coverage, black line: sea surface temperature anomaly, red band: periods of rapid increases in sea surface temperature anomaly)



Source) ICRI, GCRMN, Australian Institute of Marine Science, UNEP, “Status of Coral Reefs of the World 2020”

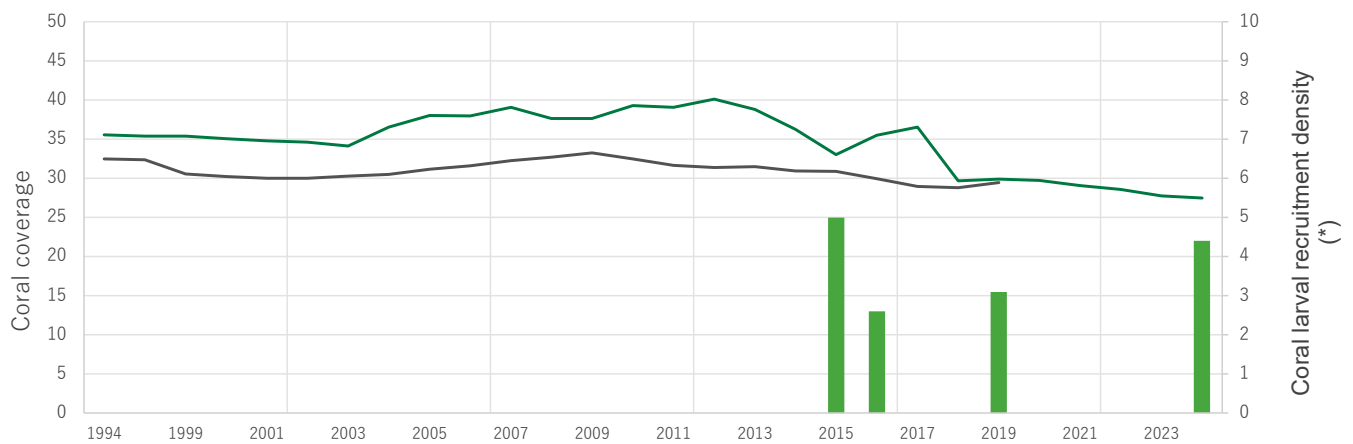
- * Coral coverage estimates are derived from data provided by more than 300 institutions worldwide. The blue line indicates the estimated global average coral cover, with 80% confidence intervals shown in dark blue and 95% confidence intervals in light blue.
- * Sea surface temperature anomaly refers to the deviation from average sea surface temperatures. The red banded areas indicate periods of rapid increases in the sea surface temperature anomaly.

The coral coverage trends are presented below. Since development began, PPR has undertaken initiatives such as beach enhancement, coral transplantation, and the designation of a marine conservation area. These efforts led to a steady increase in coral coverage up to around 2012. However, coral coverage can fluctuate due to multiple factors, and a slight decline has been observed in line with global trends caused by external factors such as rising sea temperatures, the approach of Typhoon Haiyan in 2013, extremely low tide events, and predation by coral-feeding organisms.

Coral coverage remains a high priority, and we have initiated a large-scale coral reef restoration project to restore coral abundance, a critical resource supporting our business activities.

Monitoring surveys conducted in the Arakabesan Marine Conservation Area in front of the resort showed an increase in the settlement of new coral individuals, known as larval recruitment*, indicating that coral coverage may further recover as these larvae grow.

Changes in coral coverage and coral larval recruitment density



Source: Coral coverage trends for the Rock Islands and PPR, Think Nature Co. Ltd.

Global average coverage based on ICRI, GCRMN, Australian Institute of Marine Science, and UNEP, "Status of Coral Reefs of the World 2020"

Coral larval recruitment density: PICRC (2025)⁹⁾

* Settlement of new coral individuals referred to as larval recruitment

Coral reef coverage is declining worldwide. Recognizing the importance of coral reefs for both biodiversity and PPR's business, we are collaborating with partners to conserve and restore these ecosystems through a range of initiatives.

Past initiatives

Beach improvement and coral transplantation during development

Because sediment runoff had made the sea area in front of the resort unsuitable for coral growth, **large-scale beach restoration works** were undertaken, **including coral transplantation**. These environmental improvement efforts led to the **successful restoration of the reef**.

Education and awareness activities to prevent impacts from human activity

To reduce physical damage to coral, such as trampling, warning signs and notices have been installed. In addition, **environmental education programs are provided** to explain basic coral reef ecology and the importance of conservation. Guests who meet safety requirements, such as through snorkeling lessons led by instructors, are also given opportunities to observe coral reefs directly.

New initiatives

Coral reef restoration project in partnership with Asian Development Bank (ADB)

In 2025, a **coral reef restoration initiative was launched in cooperation with ADB** to restore coral coverage and increase coral populations in the sea area in front of the resort, thereby enhancing ecosystem resilience and biodiversity. To encourage coral growth and the propagation of heat-tolerant coral species, **a coral nursery is being installed** using electrical stimulation, also known as mineral addition technology.

Predators of coral such as *Acanthaster planci* are being managed, restoration outcomes are being **monitored** to assess effectiveness, and **capacity-building** efforts are being conducted to ensure long-term sustainability. PPR plays an active role in implementing the project by supporting the installation and management of the local coral nursery and by conducting **education and awareness activities for local residents and guests through the newly established Luuk Nature Center.**



Beach following restoration



Warning sign for hotel guests



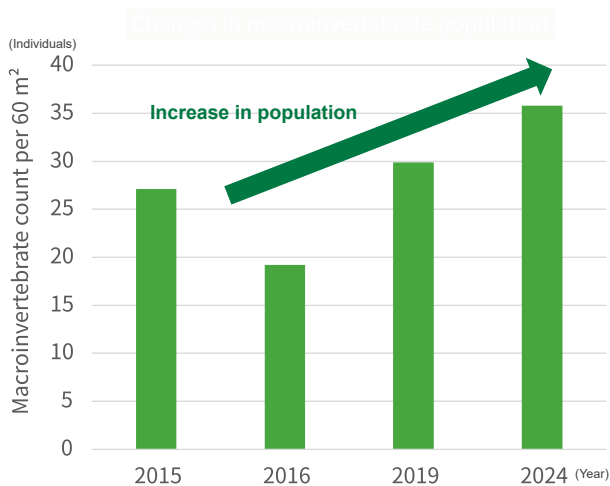
Coral nursery facility (aquaculture facility)

Quantitative evaluation of natural impacts in marine areas <Tridacna>

Tridacna gigas inhabit coral reef ecosystems and are closely associated with corals, as both maintain symbiotic relationships with photosynthetic algae known as zooxanthellae.

Since 1998, PPR has been releasing juvenile *Tridacna gigas*, an endangered species. Monitoring surveys conducted in the marine protected area in front of the resort have indicated that macroinvertebrate populations*, including *Tridacna gigas*, are increasing, suggesting that protection and restoration efforts have been effective.

Changes in macroinvertebrate population density



Source) PICRC (2025)⁹⁾

Tridacna gigas transplantation and release initiative

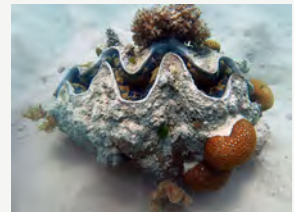
Since 1998, juvenile *Tridacna gigas*, an endangered species, have been released with the participation of guests, after the individuals reach a certain size in captivity



Juvenile *Tridacna gigas* release



Tridacna gigas release



Tridacna gigas

* Macroinvertebrates are large animals that do not have a backbone.

Quantitative evaluation of natural impacts in marine areas <Dugong dugon>

Dugong dugon are globally endangered, and Palau supports the only independent population within Micronesia. The seagrass meadows that form *Dugong dugon* habitats are also critically important for many other marine species. Accordingly, *Dugong dugon* serve as indicator species for the health and biodiversity of coastal environments.

We assessed habitat suitability in terms of the survival of *Dugong dugon* in the surrounding waters.

Methods

We used information on Dugong dugon distribution, environmental data such as water depth, and satellite imagery to identify suitable *Dugong dugon* habitats and calculate habitat suitability for the sea area surrounding “PPR.”

Dugong dugon in Palau

Dugong dugon inhabit subtropical and tropical coastal seas and are endangered in nearly all parts of their range.

Palau hosts the only isolated *Dugong dugon* population in Micronesia.



Dugong dugon habitat distribution

Source) Think Nature Co. Ltd.

Dugong dugon and seagrass beds

Dugong dugon are obligate herbivores that rely almost entirely on seagrass for food, making seagrass beds their sole feeding grounds. The existence of dense seagrass beds is therefore essential for survival.

Seagrass beds are areas of shallow seafloor where seagrass grows in meadow-like formations. They provide abundant food and habitat for a variety of marine organisms, including *Dugong dugon*, and **represent a critical ecosystem for the survival of many species.**



*Dugong dugon**10



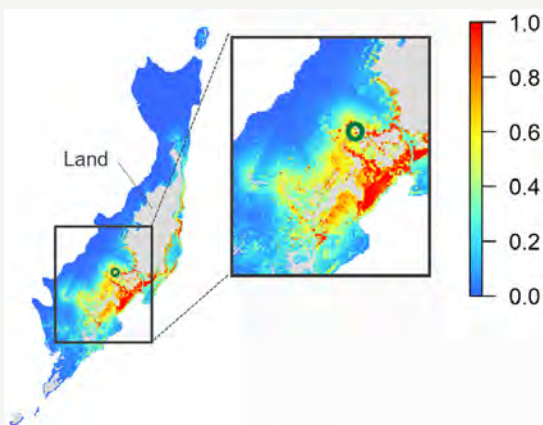
Seagrass beds

*10 : Refer to [Photo credit](#) for the image source.

The southeastern region of Palau showed the highest suitability for *Dugong dugon*, with the area surrounding “PPR” ranking **among the most consistently suitable locations in the country.** These habitats support not only *Dugong dugon* but a variety of marine organisms, including fish and crustaceans, as **reflected in the rich and diverse marine ecosystem in the surrounding seas of the resort.**

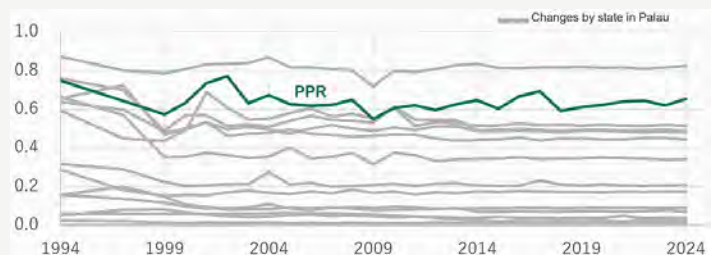
[Figure 1]

Comparison of *Dugong dugon* habitat suitability in 2024



[Figure 2]

Dugong dugon habitat suitability trends in seas in front of “PPR”



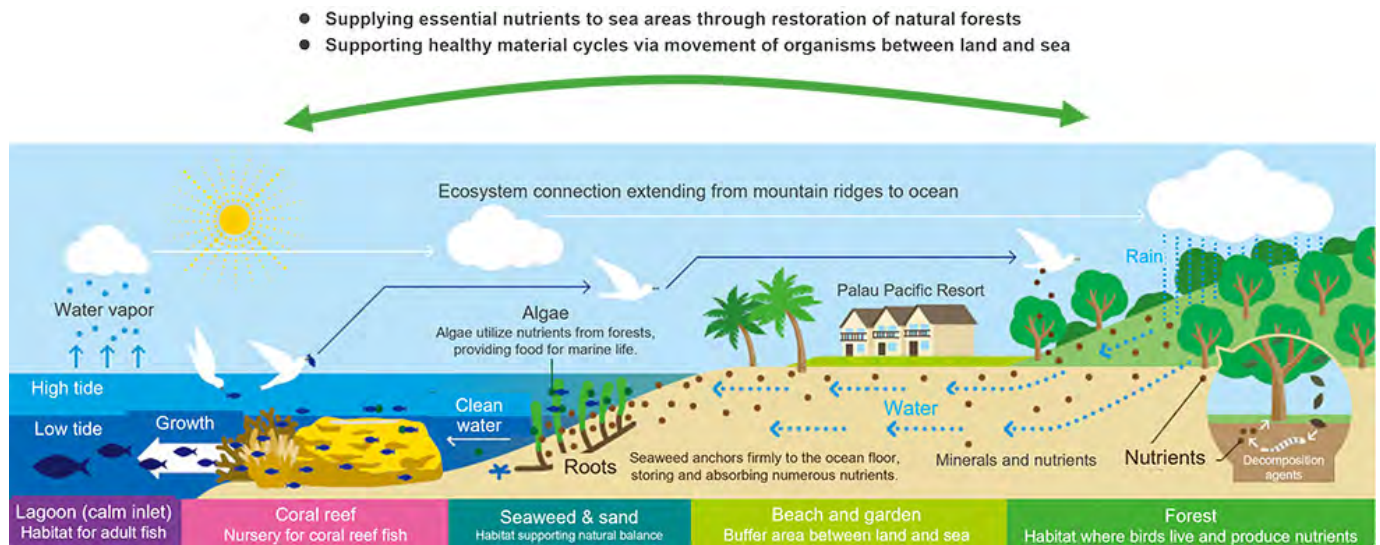
- “PPR” is situated in an area of Palau with high *Dugong dugon* habitat suitability [Figure 1].
- The *Dugong dugon* habitat suitability at “PPR” has remained consistently high and transitioned in a stable manner compared to other states, except for Koror State, where “PPR” is located [Figure 2].

Research from literature also shows that Palau has avoided accidental capture by fishing, seagrass bed degradation, and water quality decline due to urbanization, key factors causing *Dugong dugon* population declines elsewhere.

These findings suggest **that resort operations, including “PPR,” have contributed to Palau's economic growth,** and that the country's tourism-focused development **has supported the preservation of natural environments that form the foundation of the country's economy, thereby maintaining rich marine ecosystems suitable for *Dugong dugon* habitats.**

Quantitative evaluation of natural impacts (connecting land and ocean)

Qualitative and quantitative assessments of terrestrial and marine ecosystems indicated that **PPR's activities positively impact both terrestrial and marine ecosystems**. Preserving terrestrial ecosystems helps enrich marine ecosystems through the ecological connection between land and sea, known as an ecotone.



Marine conservation

- Beach restoration
 - Coral transplantation
 - Designation of marine protected areas
 - Awareness programs
- etc.

World-class terrestrial and marine biodiversity

Forest conservation

- Preservation of trees
 - Development in harmony with nature, based on detailed environmental surveys
 - Regeneration and restoration of natural forests
- etc.

Strong connections between nature and stakeholders

Qualitative and quantitative analyses of PPR's operations and its connection with nature showed that the resort has adhered to its original vision and has operated for more than 40 years while respecting both the environment and local communities, highlighting its long-term contributions to nature-positive initiatives.



Important risks and opportunities in marine hotel and leisure sector (transition risks and opportunities)

An assessment of potential nature-related risks and opportunities in the marine hotel and leisure industry, with a focus on “PPR,” showed that, although there are expected physical risks, such as a reduction in resort attractiveness and tourist appeal due to declining ecosystem services, as well as transition risks arising from regulatory and market changes, numerous nature-related opportunities may emerge.

Category			Major dependencies and impacts	Risk and opportunity details
Transition	Risks	Policies and regulations	Other resource consumption and waste	Increased costs for countermeasures due to stricter regulations on resource management, including recycling plastics and reducing food waste
		Technology	CO ₂ emissions and water resource usage	Higher expenses from implementing new equipment and technologies that enhance efficiency of energy and water usage
		Market	Resource consumption	- Increased procurement costs due to greater demand for sustainably certified products and sustainably produced food, including agricultural, livestock, and seafood items, as well as amenities for hotels and restaurants - Rising prices for certified products and sustainable alternatives due to higher demand for materials such as biomass plastics
		Reputation	General impacts	Possible reputational damage if facility's operations negatively affect surrounding environment
	Opportunities	Resource efficiency	Reduction of negative impacts such as land alteration, pollution, resource use, and waste discharge Positive contributions to nature and biodiversity	Cost savings through adoption of renewable energy
		Capital		Potential to generate biodiversity credits in future
		Products and services		Enhanced business performance by utilizing area's unique natural attractions; boosting Palau's tourism appeal and increasing visitor numbers
		Reputation		- Improved reputation resulting from efforts to preserve and restore marine ecosystems, including coral conservation - Strengthened reputation and local community relations through economic and social contributions
		Nature protection, recovery, and restoration		- Support ecosystem services through development and operations conducted in harmony with nature - Indirect positive effects on nature through heightened environmental awareness among facility users via various educational experiences offered at site

Important physical risks and opportunities for marine hotel and leisure industry (physical risks)

Category			Major dependencies and impacts	Risk description
Physical	Risk	Acute / chronic	Water resources	Water shortages caused by climate change and decreased recharge capacity of forests that provide water
			Water supply, pollination, and climate regulation	- Shortages of water, extreme weather, and natural disasters may result in food supply issues, reduced quality, and price increases for hotels and restaurants - Reduced availability of ocean and river resources, deteriorating ecosystems, and declining seafood catches can cause shortages and higher prices
			Soil retention, storm mitigation, and climate regulation	- Increased physical risk to facilities, guests, and visitors due to more frequent typhoons and rising sea levels driven by climate change - Greater risk of landslides and flooding due to forest degradation
			Climate regulation, population maintenance, habitats, and cultural services	- Loss of natural landscapes, including coral reefs, endemic and rare species, and ecosystems from rising air and sea temperatures, reducing the resort's appeal - Decline in biodiversity, including marine life, birds, and plants, caused by climate change and human impacts, leading to reduced attractiveness of nature-based activities such as diving and snorkeling

Important risks and opportunities in other businesses

We expect the below nature-related risks and opportunities for fields other than urban development and hotel and leisure businesses. There are various risks, but new business opportunities are also expected.

Classification			Risks and opportunities
Transition	Risks	Policies and laws	● Tighter regulations on land modification for nature conservation and greening of buildings (strategic investment, management and operation services) ● Shortage of biomass fuel and price hikes due to forest conservation regulations (strategic investment services) ● Shortage of building materials and lumber, etc., and increased procurement costs due to the tightening of regulations around land modification and resource extraction (strategic investment, management and operation services)
		Reputation	● Lawsuits and criticism against development that may negatively impact the local ecosystem and ecosystem services (strategic investment, management and operation services) ● Criticism against the negative impact of powerplants on the ecosystem (strategic investment services)
	Opportunities	Protection, restoration, and regeneration of nature	● Increasing customer preference for properties with lower environmental costs and benefits for ecosystem function (strategic investment, management and operation services) ● Improved relationships with local communities, consensus building during business promotion, and reputation and brand value as a company through environmentally friendly business operations (strategic investment, management and operation services)
Physical	Risks	Acute / chronic	● Increased risk of disasters such as wind and flood damage and landslides due to environmental deterioration caused by developments by our company and other stakeholders (strategic investment, management and operation services) ● Shortage of water resources due to ecosystem deterioration (strategic investment, management and operation services) ● Decreased power generation due to a decline in natural climate regulation ability, shortage of biomass due to ecosystem deterioration, and price hikes (strategic investment services)

Risk and impact management

Climate

Nature

Risk / impact management

Identifying and assessing climate- and nature-related issues

Climate

Identifying and assessing climate-related risks and opportunities

- An important theme in our long-term vision (materiality) is “Create a sustainable environment,” according to which we have incorporated environmental management in company-wide policies and organized the business opportunities and risks throughout the value chain.

Understanding, integrating, and consolidating social issues

Confirming stakeholder expectations

Identifying high-priority management issues

Identifying materiality, opportunities, and risks

- We recognize the important impacts of climate change and its mitigation on our business activities, the core of which is real estate ([Climate-related scenario analysis](#)), and conducted a scenario analysis for our four businesses (urban development, leisure, residential, and renewable energy) to identify and assess medium- to long-term risks and opportunities, and incorporated these in our business strategy.
- The analysis was conducted for the three climate scenarios, 1.5°C, 3°C, and 4°C increases in average global temperatures, based on the International Energy Agency (IEA) and Intergovernmental Panel on Climate Change (IPCC).

Nature

Identifying and assessing nature-related dependencies, impacts, risks, and opportunities

- We assessed the qualitative importance of the dependencies and impacts for each business and throughout the value chain, after which we conducted a qualitative and quantitative assessment of dependencies and impacts based on regional information for our urban development business in the Greater Shibuya area and hotel and leisure business, including Tokyu Resort Town Tateshina and Palau Pacific Resort.
- We considered the dependencies, impacts, and external environmental information, such as the National Biodiversity Strategy, and identified nature-related risks and opportunities in our hotel and leisure business, including Tokyu Resort Town Tateshina and Palau Pacific Resort an urban development project centered around the Greater Shibuya area. We identified the risks and opportunities that are of particular importance to our business activities. We are also working on a scenario analysis and assessment of the risks and opportunities in future scenarios.

Analysis of dependencies and impacts

Collecting information on the external environment

Identifying risks and opportunities

- Characterizing dependencies and impacts in all businesses and value chains
- Detailed assessment of dependencies and impacts in the “Greater Shibuya Area” and “Tokyu Resort Town Tateshina”
- Collecting information on the external environment, such as policy direction
- Identifying risks and opportunities based on dependencies and impacts
- Identifying factors with high qualitative importance

Management for climate- and nature-related issues

Climate Nature

Management for dependencies, impacts, risks, and opportunities

- We established a Sustainability Committee directly under the President and CEO, which plans and assesses company performance on important climate- and nature-related issues, and reports the results to the Board of Directors.
- The Group Sustainability Promotion Department, which serves as the secretariat for the Sustainability Committee, and each business division set their goals, manage their performance, and share information on climate-, nature-, and biodiversity-related issues. The department ensures proper reporting in accordance with relevant laws and regulations to actively reduce GHG emissions, waste emissions, and negative environmental impacts associated with the various business activities, while working to expand their benefits.
- We formulated the Sustainable Procurement Policy in January 2020, and currently focused on mitigating the risks associated with climate change and associated negative environmental impacts in the value chain by collaborating with upstream and downstream stakeholders.

Climate Nature

Integration of climate- and nature-related risks into company-wide risk management

- We identified “important risks” that have important impacts on business management.

Important risks

- ① Investment ② Financial capital ③ Personnel and labor ④ Legal compliance ⑤ IT and digital strategies
⑥ Information security ⑦ Crisis management response ⑧ Climate change

- We also identified ESG risks, including nature and biodiversity-related issues, in an integrated manner.

Examples of ESG risks

Climate change, biodiversity conservation, environmental pollution, waste reduction and proper disposal, resource use, water resource conservation, human rights protection, child labor prevention, community and societal contributions, employee health and safety, employee human rights, corruption, bribery, corporate governance, etc.

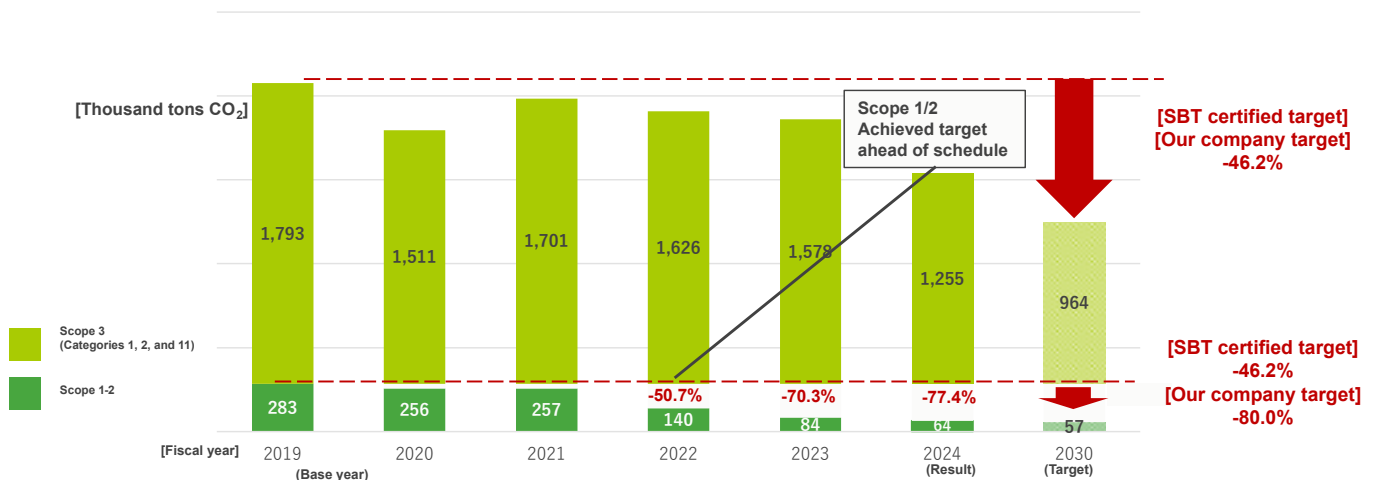
Metrics and targets

Climate change targets

Commitments and goals

- Our group has set a long-term goal of reducing GHG emissions to net zero by 2050 (for which we obtained SBT net zero certification) and promotes business activities consistent with a decarbonized society.
- Important milestones include meeting the targets of Scope 1 and 2 (our company) and Scope 3★ (supply chain; reduction targets: Categories 1, 2, and 11) for reducing CO₂ emissions by 46.2% in FY2030 compared to FY2019 [SBT (1.5°C level) certification], and are actively managing our CO₂ emissions.
- In our medium-term management plan, we aimed to reduce Scope-1 and -2 CO₂ emissions by 50% in FY2023, but we achieved this target ahead of schedule in FY2022. Our new goal for FY2025 is to reduce emissions by 80%.
 - The actual emissions have been verified by an independent environmental certification organization.

Emission performance with respect to target



★ :See “Terms and Explanations”

Climate- and nature-related metrics and targets

We have also established the following metrics and targets associated with climate- and nature-related issues.

Metric				FY2030 target	FY2025 target	FY2021 result	FY2022 result	FY2023 result	FY2024 result
Financial metric	ROE			≥10%	9%	5.7%	7.3%	9.6%	9.9%
	ROA			≥5%	4%	3.2%	4.1%	4.2%	4.5%
	D/E ratio			≤2.0x	≤2.2x	2.3x	2.2x	2.1x	2.1x
	Operating profit			≥150 billion yen	120 billion yen	83.8 billion yen	110.4 billion yen	120.2 billion yen	1,408 billion yen
	Net income			≥75 billion yen	65 billion yen	35.1 billion yen	48.2 billion yen	68.5 billion yen	776 billion yen
Environmental metric	General	Environmental certification acquired* ¹		100%	70%	35%	48.7%	65.0%	70.3%
		Environmental initiatives adopted in business activities (cumulative)		≥100 cases	≥50 cases	22 cases	36 cases	70 cases	105 cases
	Climate change	RE100 achieved (Tokyu Fudosan Corp.)		Achieved	Achieved	—	Conversion completed	Achieved	Achieved
		Renewable energy power usage ratio		≥60%	65%	4.0%	52.9%	84.1%	89.3%
		CO ₂ emissions Target is total amount compared to FY2019	Scope 1-2 (tons CO ₂)	152.4 (▲46.2%)	— 2023 (▲50%)	257.0 (▲9.3%)	139.8 (▲50.7%)	84.1 (▲70.3%)	64.3 (▲77.3%)
			Scope 3	—	—	1,801.7	1,739.0	1,645.3	1,332.2
			Categories 1, 2, and 11	964.4 (▲46.2%)	—	1,700.9 (▲5.1%)	1,626.3 (▲9.3%)	1,578.3 (▲11.9%)	1,252.1 (▲30.1%)
	Nature	Forest conservation target		3,000ha	2,400ha	2,031ha	2,086ha	2,145ha	2,304ha
		Land-use target: Building greening (rooftop, walls, etc.* ²)		100%	100%	100%	100%	100%	100%

*1 Targets large non-residential properties (with an extension area of ≥10,000 m²). Excludes some joint ventures, etc.

*2 Large new office buildings and commercial facilities owned by Tokyu Fudosan Corp.

Metrics				FY2030 target	FY2025 target	FY2021 result	FY2022 result	FY2023 result	FY2024 result
Environmental metric	—	Water usage (m ³)		—	—	4,866,901	5,101,092	5,386,895	4,624,907
		Intensity (m ³ /m ²) (compared to previous fiscal year)		Reduction from previous fiscal year	Reduction from previous fiscal year	1.4 (+7.3%)	1.7 (+19.0%)	1.8 (+9.1%)	1.6 (▲13.0%)
	Pollution / removal of pollution	Wastewater discharge (TNFD core indicator C2.1)	Total wastewater volume (m ³)	—	—	5,004,959	5,195,749	5,486,100	4,759,347
			Total discharge to surface water (m ³)	—	—	929,748	1,012,969	1,108,319	1,026,144
			Total discharge to sewer system (m ³)	—	—	4,075,211	4,182,780	4,377,781	3,733,203
			Total floor area of target facility (m ²)	—	—	3,444,317	3,034,240	2,936,936	2,896,819
		Waste generation and treatment (C2.2)	Total discharge (tons)	—	—	27,827	21,181	21,120	21,269
			Non-recycled waste discharge (tons)	—	—	10,947	13,713	12,553	13,837
			Hazardous waste discharge (tons)	—	—	86	1,040	4	5
			Recycled waste discharge (tons)	—	—	16,880	7,467	8,535	7,432
			Floor area of target facility (m ²)	—	—	3,289,418	2,853,448	2,642,814	2,517,229
			Intensity (kg/m ²) (compared to FY2019)	8.5 (FY2019 ▲11%)	—	8.5 (▲11.7%)	7.4 (▲22.5%)	8.0 (▲16.6%)	8.4 (▲11.8%)
		Air pollutants other than GHG* (C2.4)	NOx (tons)	—	—	0.229	0.135	0.135	0.208
			SOx (tons)	—	—	—	0.007	0.007	0.009
	Resource use / replenishment	Procurement of high-risk natural primary products (C3.1)	Amount of wood procured (m ³)	—	—	—	19,892	7,757	11,062
		Sustainable procurement (formwork timber)		100%	30%	0%	2.8%	9.7%	23.30%

* Annual discharge at Northport Mall (Yokohama City)

** For more detailed data, please refer to [ESG Data](#)

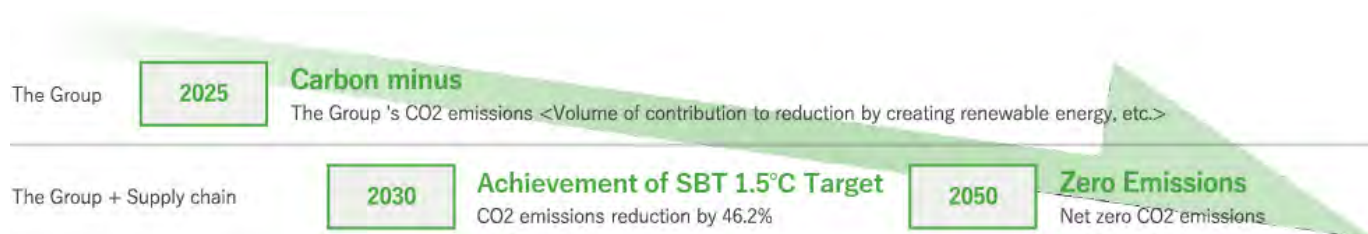
Transition plan for a decarbonized society

Climate Roadmap

Development of a transition plan in line with the framework

- We aim to reduce the environmental impact of all our businesses and have committed to achieving net zero emissions by 2050 as toward developing a decarbonized society. We are also participating in the international campaigns “Business Ambition for 1.5°C” and “Race To Zero★.” In FY2024, we obtained SBT Net Zero certification.
- As a milestone, we aim to achieve carbon-negative status for our company in FY2025, the final year of our Medium-Term Management Plan 2025. Additionally, we intend to reduce our Scope-1 and -2 CO₂ emissions by 50% by FY2023 compared to FY2019, and reduce Scope-3^{*1} CO₂ emissions by 46.2% by FY2030 (SBT certified).

★ :See “Terms and Explanations” 



*3

Transition plan components	Disclosure components
Governance structure	• Roles of the board of directors and committees regarding the transition plan, management structure
	• Remuneration and incentives
Roadmap and measures	• Skills, capabilities and training
Risks and opportunities	• Roadmap, measures and financing policy toward establishing a decarbonized society
Metrics and targets	• Scenario analysis, risks and opportunities
Stakeholder engagement	• Climate-related metrics and targets
	• Stakeholder engagement regarding the transition plan

- Under our long-term “GROUP VISION 2030” we aim to achieve these targets while sustaining business growth. This requires the adoption of relevant initiative both within our company and supply chain as well as the development of more efficient technologies. There is also a possibility that climate change will intensify beyond our expectations and regulations will be tightened. Therefore, we will regularly monitor these trends and review our plans.
- We plan to promote our longer-term plan for achieving net zero emissions by 2050 while continuing to research technological developments and industry trends.

*1 Target categories 1, 2, and 11 (accounting for >90% of CO₂ emissions in Scope 3) *2 For details, see long-term “GROUP VISION 2030”

*3 Renewable energy: hereafter referred to as “RE”

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.
- Gong 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

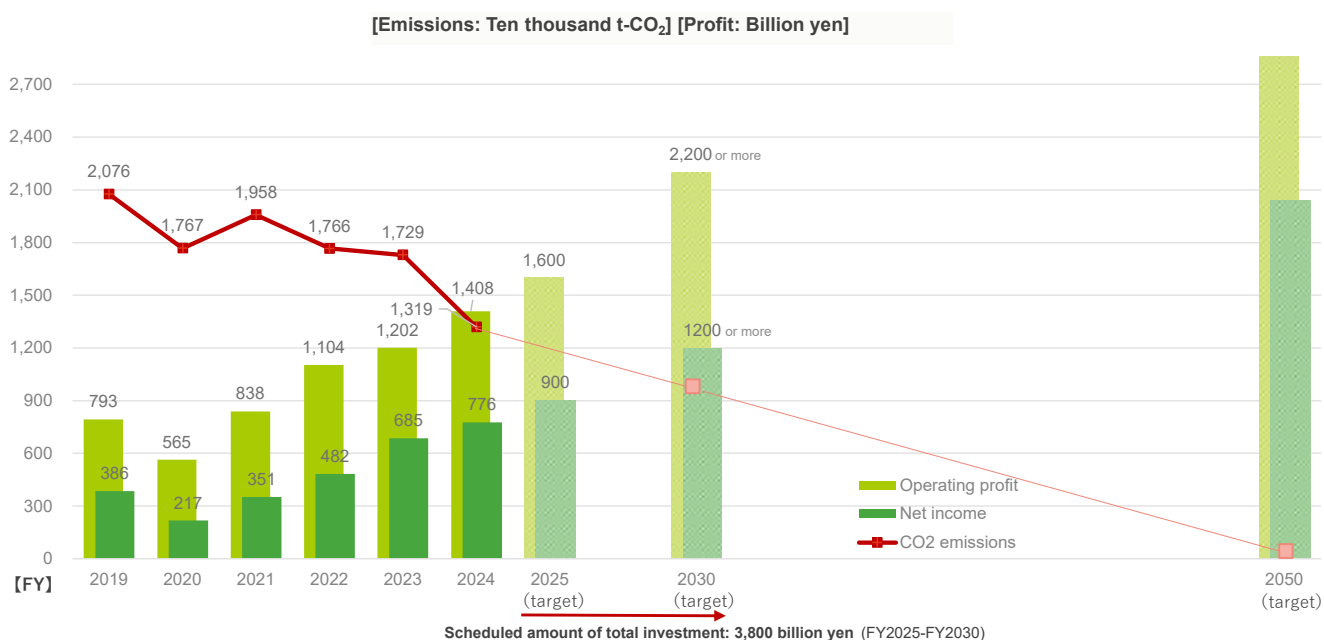
Environment certification acquisition

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



Measures for achieving a decarbonized society

- In our long-term vision, we are taking the following steps to achieve our CO₂ emission targets. The initiatives have been steadily adopted. Tokyu Fudosan Corp. achieved 100% RE use at its offices and facilities in December 2022^{*1}, and in April 2024, it became the first domestic company to be RE100 certified.
- We will continue to promote the ZEB/ZEH standardization of our facilities and obtain environmental certification.

Measure	Target	Result	Topic
Scope 1, 2			
RE100	Achieved in 2022 (Tokyu Fudosan Corp.)	100% RE conversion completed in December 2022 RE100 achieved	Utilizing Japan's top-level RE generation capacity Achieved the first conversion*2 among domestic companies
Scope 3			
ZEB/ZEH standard*3	FY2030: 100%	100% achieved (FY2024)	March 2022: All new buildings conformed with the ZEB standard September 2022: All BRANZ conformed with the ZEH standard November 2025: All BRANZ conformed with the GX ZEH-compliant standard
Other measures			
Environmental certification acquired*4	FY2025: ~70% FY2030: 100%	70.3% (FY2024)	Certification examples: Properties that have acquired “5stars” in DBJ certification include Tokyo Port City Takeshiba, Shibuya Solasta, and Hibiya Park Front
ICP implementation	Introduced as part of management decisions in FY2023	Already presented at management meetings (FY2022)	
GX League support	Agreed with the basic conditions of the GX League★ and officially participated		

*1 Excluding some joint ventures, etc.

*2 According to the list at the end of the RE100 annual disclosure report 2022

*3 Percentage of facilities such as condominiums and offices at Tokyu Fudosan Corp. with building performance equivalent to or exceeding ZEB/ZEH Oriented standards (based on start of construction)

*4 Covers large non-residential properties (extended floor area of $\geq 10,000$ m²). Some exclusions include joint ventures

★ :See “Terms and Explanations” 

Measures aimed at realizing a decarbonized society - efforts regarding renewable energy-

- The group implements a renewable energy business as a strategic investment business. Further expansion of power generation capacity, which is among the highest in Japan, will be promoted.

Long-term stable power supply initiatives

Total amount of investment in renewable energy business: Approx. 530 billion yen (5-year period between FY2025-2030)

Target for FY2030 rated capacity: 4.0 GW^{*1}

Expanding power generation sources	● Entering new power generation projects such as offshore wind power ● Implementing of solar sharing ● Expanding non-FIT★ businesses
Utilizing renewable energy	● Expanding electric power retail business domain ● Promoting local generation and consumption of electric power (building micro-grids, etc.)
Building co-creation relationships and developing systems	● Policy recommendations [REASP^{*2}] ● Community coexistence [FOURE★^{*3}]

*1 Before calculation of equity share

*2 General Incorporated Association for the Promotion of Long-Term Stable Power Supply from Renewable Energies

*3 General Incorporated Association for Renewable Energy Community Revitalization

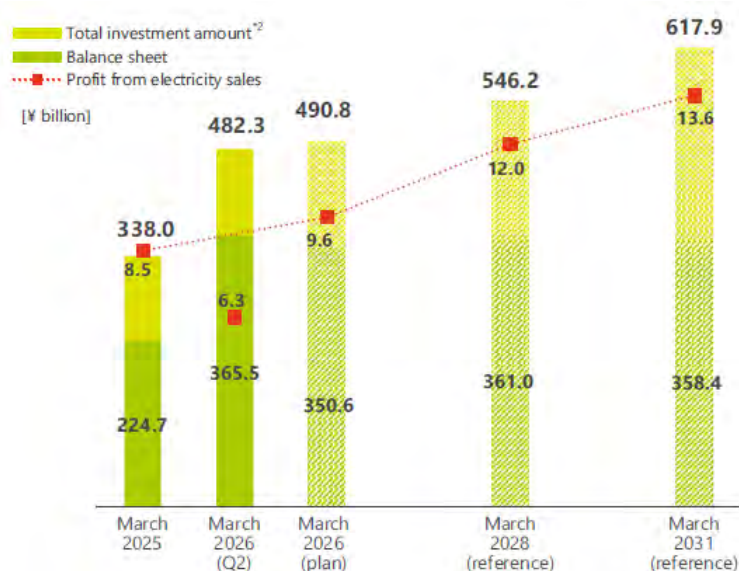
★ :See “Terms and Explanations” 

Profit plan based on facilities secured and total amount of investment

[As of end of December 31, 2025] Rated capacity*¹: 2,527MW

- Facilities in operation: 196 (184 solar power/8 wind power/3 biomass/1 rooftop)
- Facilities in development: 52 (39 solar power/8 wind power/5 biomass, etc.)

* Separate rooftop businesses: 1 (Rooftop solar power aggregated as 1 business)



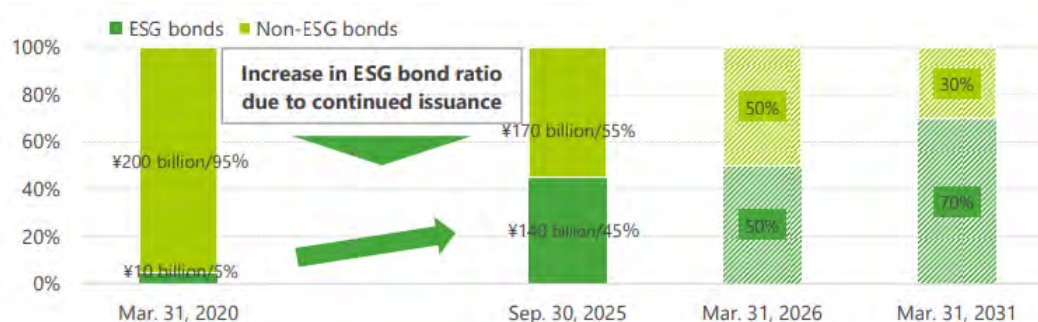
*1 Before calculation of equity share (including projects under development)

Climate Measures

Measures aimed at realizing a decarbonized society - policy on financing -

- For us to set our sights on new business opportunities and strive for decarbonization through our businesses, financing from outside the group is imperative. To widely disseminate and promote the group's efforts aimed at climate change and other ESG and bolster both the creation of stable investment opportunities for bond investors and engagement, we **formulated the WE ARE GREEN bond policy as our basic policy for ESG bond issuance** in FY2021.
- The use of funds from ESG bonds is in line with the themes of our efforts to create value (materialities) established in our GROUP VISION 2030, the Group's long-term vision. We aim to elevate the ratio of ESG bonds to our bond issuance balance to 50% or more by the end of FY2025 and to 70% or more by the end of FY2030.

Movements in ratio of ESG bonds



Stakeholder engagement (national government / upstream)

Stakeholder engagement -national government-

- We take part in the provision of information and sharing of case studies (SBT, ICP and scenario analysis) through proactive participation in support projects by the Ministry of the Environment as well as in “the GX League”★ organized by the Ministry of Economy, Trade and Industry. We also take part in “the ESG-TCFD Practitioner Working Group in the Real Estate Sector” organized by the Ministry of Land, Infrastructure Transport and Tourism as well as “the Scenario and Data-Related Organ Roundtable for the Purpose of Assessing Climate Change Risks and Opportunities”, which straddles multiple ministries and agencies.
- We contribute to the development of TCFD disclosure through the progressive disclosure of information. Examples of these include the selection of TCFD disclosure by the Group for inclusion among collections of case studies in “the Disclosures of Sustainability Information in Annual Securities Reports” publicly released by the Financial Services Agency and “the Guidelines on Climate-Related Financial Information Disclosure 3.0”^{*1} publicly released by the TCFD Consortium.
- Tokyu Land Corporation is active in the Renewable Energy Association for Sustainable Power Supply (REASP) from a neutral standpoint. Alongside presenting the REASP’s thoughts on “the Sixth Strategic Energy Plan” formulated by the Ministry of Economy, Trade and Industry and promoting climate change measures, we give policy recommendations on various renewable energy-related systems to the Japanese government as well as conduct associated investigations and research.



Stakeholder engagement -upstream-

- The Real Estate Companies Association of Japan, of which we are a member, announced the real estate industry’s long-term vision aimed at realizing a decarbonized society. Alongside implementing climate change measures, we give policy recommendations on various real estate-related systems to the Japanese government as well as conduct associated investigations and research.
- In order to achieve emission reduction targets pertaining to the upstream (Scope 3 Categories 1/2), it is necessary to ascertain the current situation by improving the precision of emission calculations as well as to examine and implement measures aimed at reduction. As a member of the Environmental Committee at the Real Estate Companies Association of Japan as well as the Study Group (and Subcommittee) for Manual for Calculating GHG Emissions upon Construction (tentative name), which is established within that committee, we proactively participated in the above formulation of that manual.

*2 image



*1 [the Guidelines on Climate-Related Financial Information Disclosure 3.0 \(PDF:50.2MB\)](#) [PDF](#)

*2 [Manual for Calculating GHG Emissions upon Construction \(PDF:567KB\)](#) [PDF](#)

★ :See “Terms and Explanations”

Stakeholder engagement (downstream)

Efforts for offsite corporate PPA★

- Alongside Takashimaya Co., Ltd. and DIGITAL GRID Corporation, Tokyu Land Corporation and ReENE Co., Ltd. engage in large-scale offsite corporate power purchase agreements (PPA) based on short-term agreements, a first for Japan^{*1}, with a view to making the swift transition to a decarbonized society and propagating renewable energy in Japan.



*1 Applies to PPA agreement services for which single-year agreements can be entered that are not based on an agreement in which the power plant and the user facility are the same corporation. (According to research by three companies (DIGITAL GRID Corporation, Tokyu Land Corporation and ReENE Co., Ltd.))

Promotion of ZEH as standard specification at all BRANZ properties to be conducted ahead of schedule in FY2023

- As one of its decarbonization measures, Tokyu Land Corporation moved up the timetable for its initial target of promoting ZEH as a standard specification at approx. 50% of properties on which worked commenced by FY2025 and 100% of properties on which worked commenced by FY2030. Instead, the company will equip all of the BRANZ condominiums that it commences work on in FY2023 and beyond with ZEH-equivalent environmental functions. Also we aim to achieve ZEB-level environmental performance in new non-residential buildings in principle. The same will be done for all buildings at the COMFORIA rental residence and the CAMPUS VILLAGE student residents, on which work will commence in FY2025 and beyond.
- Tokyu Livable, Inc. will equip all of the L'GENTE properties that it commences work on in FY2024 and beyond with ZEH-equivalent environmental functions.

Utilization of green energy at logistics facilities

- At the LOGI'Q logistics facility, we will reduce environmental impact with the use of ReENE Green Energy, which is 100% powered by renewable energy from the group, for tenant enterprises, their shipper companies, etc. In addition to installing solar power generation equipment through an onsite PPA agreement system on the roofs of logistics facilities and utilizing the raw green power generated there at those facilities, we will supply power from 100% renewable energy generated at the renewable energy power plants that we will develop across Japan to both common and exclusive areas.



★ :See “Terms and Explanations” ↻

Stakeholder engagement (local communities)

Regional coexistence efforts in the town of Matsumae, Hokkaido

- Having entered an agreement on implementation work for corporate cooperation-based community planning and other efforts with the Town of Matsumae in Hokkaido's Matsumae County, Tokyu Land Corporation is leveraging its knowledge and networks in community planning and renewable energy to jointly implement various projects aimed at sustainable community planning in the Town of Matsumae, including the formation of a regional micro grid.
- We took advantage of local assets in the form of one of Japan's strongest winds to develop and operate the ReENE Matsumae Wind Power Plant. In addition, we seek to contribute to regional revitalization that leverages the likes of tuna, Matsumae beef, cherry blossoms and other tourism resources.



Efforts to introduce solar power generation equipment in Yokohama municipal schools

- Tokyu Land Corporation was selected as an operator to introduce PPA-based solar power generation equipment in 53 municipal elementary, junior high, high and special assistance schools in Yokohama City.
- Through this effort, we will aim to reduce CO₂ by approx. 26% over previous levels. By introducing solar power generation and storage cells, in addition to using the generated power at the schools during the daytime, we made it possible to use the surplus power to charge storage cells that can be used to supply power at night, during rainy weather, and so forth.
- We will continue to do our part to improve the renewable energy power ratio in Yokohama City by supplying power to commercial facilities and hotels in the city on holidays.



* The photos are visual representations.

Stakeholder engagement (endorsement of initiatives)

Endorsement of various initiatives

- We believe it is vital that we work together with various initiatives as an environmentally advanced company.
- We endorse the below organizations, engaging in the likes of information-gathering and cooperation with fellow industry players.
- In addition to acquiring approval for SBT 1.5°C targets, we are also a party to “Business Ambition for 1.5°C” and “Race to Zero”★, two international campaigns whose aim is carbon neutrality by the year 2050.
- Along with declaring our support for TCFD, we are an active member of the TCFD Consortium, an organization of supporting Japanese enterprises.



RE100



United Nations Global Compact★



JCI★



PRI★

★ :See “Terms and Explanations” [↪](#)

Skills and human resource development

- We believe that all employees must collaborate to address climate change and achieve net zero emissions by 2050.
- To this end, we provide programs and training to raise the environmental and sustainability awareness of our employees.

Program provision and training

- In FY2022, we established the Sustainable Action Awards to recognize practitioners developing sustainable initiatives. The total number of applications has increased annually and, in FY2024, 192 applications were received, of which 30 received awards.



- In November 2024, we held Sustainability Month, a month-long experiential event aimed at spreading sustainability awareness among employees.
- We provide programs to raise employee awareness regarding sustainable business practices (including environmental themes).
 - We conduct e-learning for Group employees once every 6 months, covering sustainability themes. Our online in-house newsletter “TFHD GROUP MAGAZINE (T-MAG)” also contains many articles on sustainability.
 - In February 2024, we conducted an interactive e-learning course on circular economies under forest conservation initiatives.

Climate- and nature-related initiatives

Examples of climate-related initiatives

Condominium with 100% RE use

BRANZ Tower Tanimachi 4-chome has introduced 100% RE in all units and common areas, creating an environmentally advanced condominium that promotes decarbonization.



ZEH certification: BRANZ Chiyoda Fujimi

ZEH Oriented certification was obtained for the BRANZ Chiyoda Fujimi. The condominium aims to reduce primary energy consumption by >20% throughout the entire building, including the common areas, while maintaining the quality of the indoor environment.



Utilization of on-site PPA at logistics facility LOGI'Q

“LOGI'Q” provides environmental load reduction services using 100% RE, “ReENE Green Energy,” for tenant companies and their shippers.

Utilization of on-site renewable energy

We use renewable energy such as solar and wind power in various businesses. The facilities of Palau Pacific Resort and Tokyu Harvest Club Atami Izuyama VIALA are powered using solar power generation.

The commercial facility Tokyu Plaza Omotesando has also installed two wind power generation devices on the roof to generate natural energy.

Examples of environmental certification (DBJ Green Building-certified properties)

5 Stars



Tokyo Port City
Takeshiba



Shibuya Solasta



Hibiya Park Front



Shin-Aoyama Tokyu
Building



Jinbocho Kita Tokyu
Building



Shin-Meguro Tokyu
Building

4 Stars

Examples of environmental certifications (CASBEE certification)

In 2019, our head office, Shibuya Solasta, received the highest rank of CASBEE's new certification: CASBEE-Wellness Office, S Rank.



Examples of ZEB-certified properties

Tokyu Community Technical Training Center NOTIA (completed in 2019)

The first office building in Tokyo to receive Nearly ZEB certification. In FY2020 through a reduction of approximately 87% in primary energy consumption, exceeding the standard.



COCONO SUSUKINO (completed in 2023)

Received ZEB Ready certification at the largest domestic scale for a commercial/hotel mixed-use building.



Joint demonstration of BEV/PHEV charging services for apartment buildings

Tokyu Community Co. Ltd. has begun joint demonstrations of charging services for apartment buildings using BEV/PHEV-charging systems developed by DENSO Corp. at an apartment building in the Tokyo metropolitan that it has managed since January 2025.

100% renewable energy data center

Construction began in September 2024 on the first Ishikari RE Data Center, which will be operated on 100% renewable energy, in Ishikari City, Hokkaido. Ishikari Regional Energy LLC, an investment recipient of Tokyu Fudosan Corp., and ReENE Co., Ltd., a wholly owned subsidiary, will collaborate to directly supply RE through an on-site PPA.

Responding to physical risks

- Tokyu Housing Lease Co. Ltd. has received the Resilience Certification from the Resilience Japan Promotion Council, a national certification for organizations promoting resilience, in recognition of its initiatives to continue operations following large-scale disasters.
- Tokyu Fudosan Corp. has received for its Shibuya Minami Tokyu Building the ResREAL (Flood Edition) certification, awarded by the Japan Real Estate Institute, that quantifies the resilience of real estate against natural disasters. (Certification grade: GOLD)
- Tokyu Fudosan Corp. is strengthening its BCP by selecting suitable building locations and working with tenants and residents.



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

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

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.”



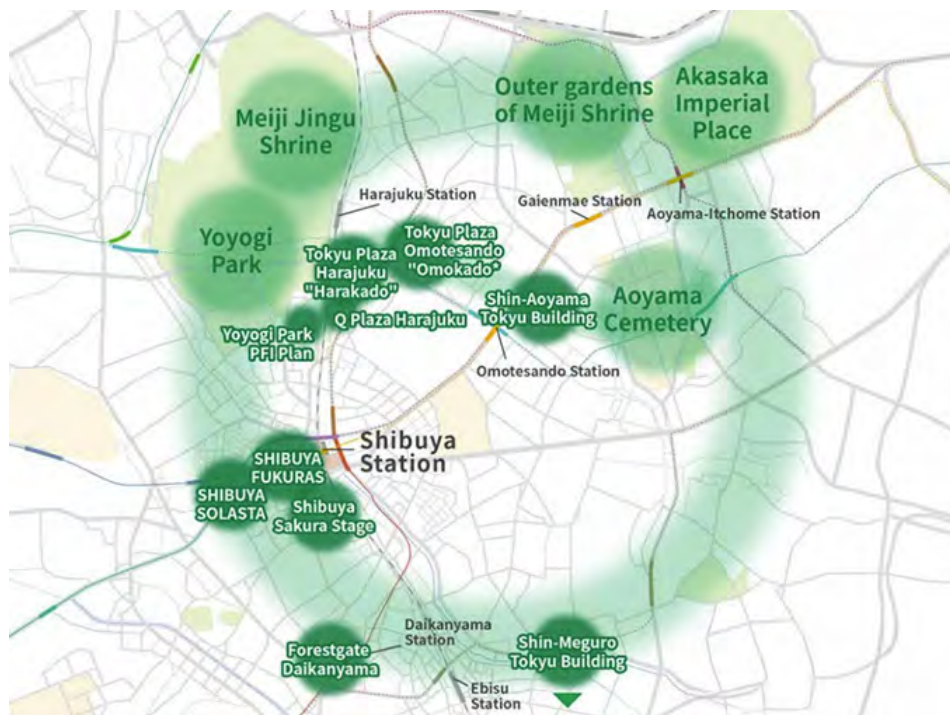
Rooftop sky terrace

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.

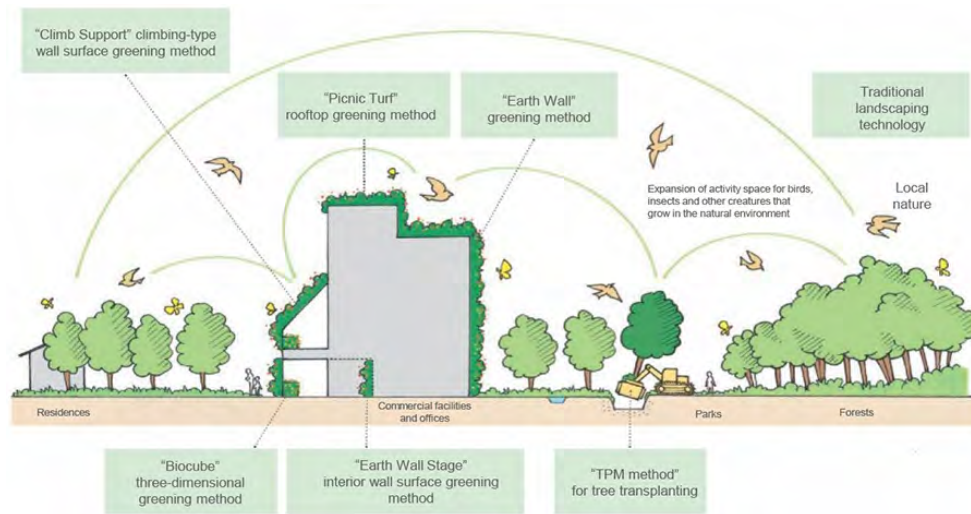


Targets

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

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

Image representation



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)

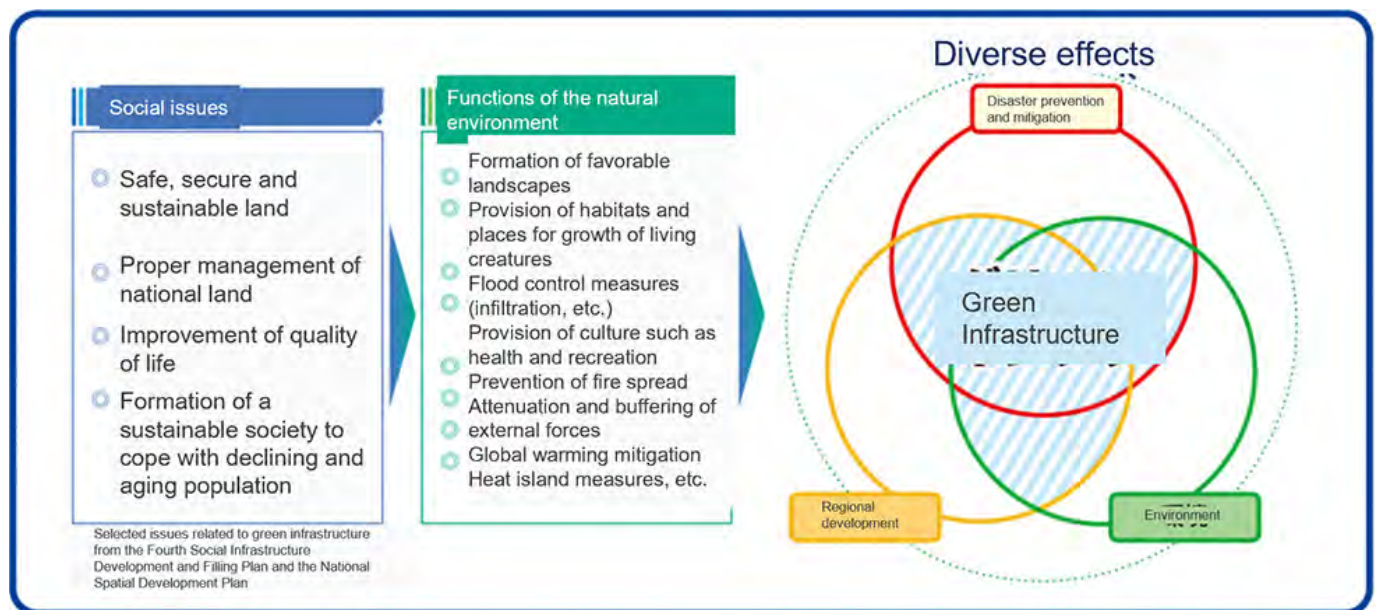
Initiatives in urban development: greening technology, planting management, green infrastructure

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

Green infrastructure menu



Example of menu



1.Planned land preservation
Transplanting in field TPM method



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

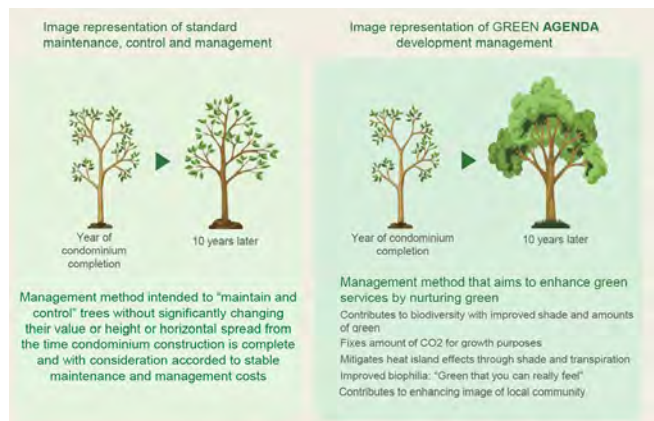
In condominiums, ISHIKATSU EXTERIOR INC. plans and constructs **greenery to realize a living environment that nurtures life**, create planting management plans (agendas) to connect them to the future, and promote "**GREEN AGENDA,**" which integrates **planning and management based on management plans 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 Image 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 FY2030**^{*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.

★ :See “Terms and Explanations” 

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

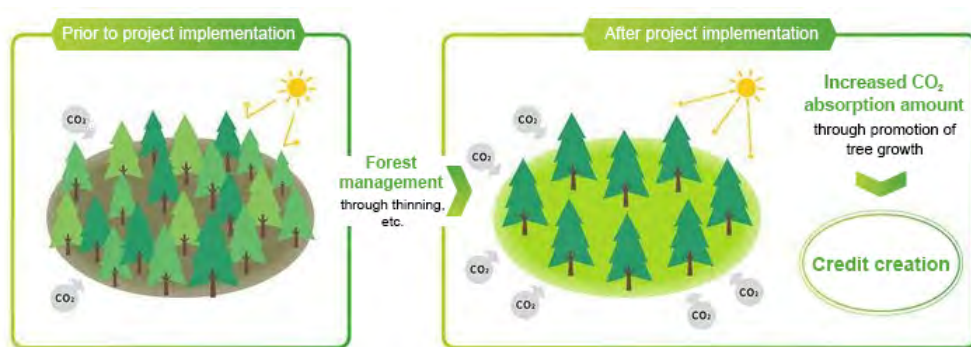
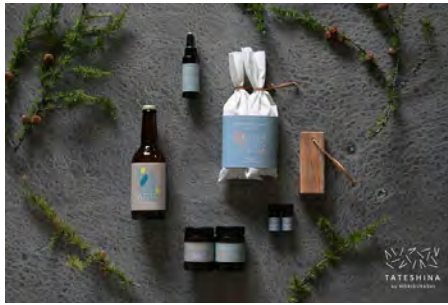


Illustration of credit creation based on forest management activities

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, leisure and overseas business: marine conservation

Establishment of Katsuura City Seaweed Bed Conservation Council

In August 2025, our group launched the Katsuura City Seaweed Bed Conservation Council in partnership with Katsuura City, Chiba Prefecture, the Shinkatsuura City Fisheries Cooperative Association, and related organizations. Katsuura City sits at the junction of warm and cold currents. Its coast features deep waters and numerous rocky reefs where seaweed thrives, supporting **diverse marine life**. However, recent climate change and the rise in herbivorous fish populations have worsened coastal denudation, causing declines in the quality of seaweed beds. The Council promotes initiatives to **maintain and recover high-quality seaweed beds**, control herbivorous fish populations, and **generate blue carbon credits**.



Katsuura City coast

Collaboration between industry, government, and academia at Hyatt Regency Seragaki Island, Okinawa

The Hyatt Regency Seragaki Island, operated by a company in which we hold an investment, is conducting the “**Seragaki Island Clownfish Cultivation Project**” in **partnership with the Okinawa Institute of Science and Technology (OIST)** in the waters around Seragaki Island in Onna Village, located on the central west coast of Okinawa Island (Main Island). Since 2021, the project has involved **hatching, rearing, and releasing clownfish**, which are sensitive to temperature changes and whose global populations are reportedly declining, **into breeding areas**.

To preserve the coral reef ecosystem that attracts tourists to the resort, we collaborate with Onna Village, designated a “Coral Village” in 2018, and the local fishing cooperative to implement initiatives such as introducing Green Fins, an environmentally friendly diving guideline.



Clownfish

Community contribution activities in Indonesia

Our group has operated in Indonesia since 1975, developing approximately 5,000 single-family homes and around 2,200 mid- to high-rise residential units. Alongside these urban development projects, we have engaged in long-term community initiatives including **coral conservation** in marine tourist areas, **sea turtle conservation**, and tree planting in the suburbs of Jakarta.



Coral planted in cooperation with a nature conservation organization

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
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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

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.

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 Nishiawakura 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 checkpoint: utilization of buildings through comprehensive building diagnosis

EM checkpoints 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 checkpoints 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 checkpoint 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 checkpoint



EM checkpoint building health rate

Reference materials, terms, and explanations

Appendix: 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 organization's governance of nature-related dependencies, impacts, risks and opportunities.	Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organization's business model, strategy and financial planning where such information is material.	Describe the processes used by the organization 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.

Appendix: 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.

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
- 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	- 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	- 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	- 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			
Strategy D)	- Strategy A) D) - Risk & Impact management A) B) - Metrics & targets B)	- Strategy A) C) D) - Risk & Impact management A) B) C) - Metrics & targets A) B)	- Governance A) B) C) - Strategy B) C) - Metrics & targets C)

Terms and explanations

Metrics and information used for location prioritization

Biodiversity Intactness Index	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 : Newbold et al. (2016) "Global map of the Biodiversity Intactness Index, from Newbold et al (2016)") (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")
Key Biodiversity Area (KBA)	Significant area serving as key to biodiversity conservation as selected according to international standards.
STAR Index	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.
Conservation priority level	Metrix 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 : Think Nature Inc.)
Baseline 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. (Source : WRI Aqueduct)

Terms

TCFD	Task Force on Climate-related Financial Disclosures: Established in 2015 by the Financial Stability Board (FSB) at the request of the G20 with Michael Bloomberg as Chair. Publicly released its final report in June 2017. Requests the proactive disclosure of information on what kind of initiatives geared towards climate change are being conducted by corporations and institutions. Revised in 2021. It recommends that companies and institutions proactively disclose the following items on how they are tackling climate change.
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.
SBT 1.5°C targets	Science Based Targets: GHG emission reduction targets configured by corporations with 5 to 10 years as the target years. SBT conform with the standards required under the Paris Agreement (rise in global temperature is at a level well below 2 °C of that before the Industrial Revolution or kept at 1.5 °C).
RE100	Renewable Energy 100%: An international collaborative initiative, in which companies from around the world participate with the goal of procuring 100% of the electric power consumed by their business activities from renewable energy sources.
ICP	Internal Carbon Pricing: A method where a company sets carbon prices independently and uses it to visualize the business impact of a carbon tax, or for organizational strategy and decision making. This is one method of carbon pricing which puts a price on CO ₂ emissions to change the behavior of emitters.

United Nations Global Compact	UNGC: Initiative through which the UN advocated complying with and practicing ten principles that concern human rights, labor rights, the environment and anti-corruption at the World Economic Forum in 1999.
IEA	International Energy Agency: Established in 1974 in the aftermath of the first oil crisis as an international agency within the framework of the organization for Economic Cooperation and Development (OECD) with the main purpose of improving the energy situation in oil-consuming nations.
ZEB / ZEH	net Zero Energy Building / net Zero Energy House: Buildings with net zero or negative annual primary energy consumption. The amount of reduction is found by summing the amount of energy saving and the amount of energy creation, in comparison with conventional buildings.
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).
BCP	Business Continuity Plan. A plan that defines the activities that should be carried out under normal circumstances and the methods and means for business continuity in an emergency, in order to enable the continuation and early recovery of core business operations while minimizing damage to assets in the event of a natural disaster or other emergency situation.
LCP	Life Continuity Plan. A plan to continue living and living while limiting damage to assets in the event of an emergency such as a natural disaster.
ENCORE	Tool for financial institutions developed by the UNEP Natural Capital Finance Alliance, or NCFA 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.
Cultural services	Cultural services that are aesthetically, spiritually, and psychologically influential that humans obtain from being in contact with nature.
Ecosystem integrity	Degree to which the composition, structure and functions of the ecosystem are within the scope of natural fluctuation.
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.
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.
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.
IPCC	Intergovernmental Panel on Climate Change. Organization established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988 to comprehensively assess manmade climate change, its effects, and adaptation and mitigation measures from scientific, technological and socioeconomic perspectives.
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.

Regulating 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.
Scope1 • 2 • 3	Categorizations of greenhouse gases established as part of the Greenhouse Gas (GHG) Protocol, an international standard of calculating and reporting GHG emissions. Depending on the emitting entity, GHG are categorized into one of the following: Scope 1 (direct emissions), Scope 2 (indirect emissions) or Scope 3 (other emissions). The sum of these is considered to be emissions by the overall supply chain.
Race To Zero	International campaign calling upon corporations, local autonomous bodies, investors, universities and other non-government actors to take action immediately to achieve the goal of reducing greenhouse gas emissions by essentially half by the year 2030.
GX League	(GX: Green Transformation): Forum for corporations that seek to realize sustainable growth to work in unison with corporate groups, government agencies and universities that engage in similar initiatives in order to transform socioeconomic systems and practice for creating new markets.
Micro grid	System for bringing together energy supply sources and consumption facilities within a certain scope and locally producing energy for local consumption. Distributed power sources for the likes of renewable energy such as solar and wind power are used to supply energy.
FIT	Feed In Tariff: System made compulsory for electric power companies so that electricity generated using renewable energy such as solar power generation is purchased at prices determined by the national government.
FOURE	Reciprocal and Regional Revitalization with Renewable Energy: Agreement between Tokyu Land Corporation, Osaka Gas, Looop, Tokyo Gas and Renewable Japan to jointly examine reciprocal and regional revitalization through renewable energy with the goal of having renewable energy and regions to develop together while taking into account policy trends of principal ministries and agencies.
PPA	Power Purchase Agreement: System through which power generated by renewable energy generation systems installed by companies who own and manage renewable energy generation equipment (PPA operators) in sites, on roofs and in other spaces supplied by the facility owner is provided to power users at that facility at a charge. ● Onsite PPA: System through which PPA operators install power generation equipment in user sites and provide electricity. ● Offsite PPA: System through which PPA operators provide electricity to specific general users through a general power grid.
JCI	Japan Climate Initiative: Established in 2018 with the participation of 105 organizations as a loose network to reinforce the communication of information and exchange of opinions by corporations, local autonomous bodies, NGOs, etc. that proactively engage in climate change measures.
PRI	Principles for Responsible Investment: launched through a partnership between the UNEP Finance Initiative and the UN Global Compact based on advocacy by the UN in 2006. Requests investors to engage in investment behavior that takes ESG information into consideration from a long-term perspective after analyzing and evaluating companies.
Biodiversity Action Plan (BAP)	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.

Reference materials

- (1) “Global Risk Report 2025,” World Economic Forum (2025)
- (2) 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”
- (3) 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”
- (4) ISHIKATSU EXTERIOR INC. (2020) “Fiscal 2019 Tokyu Plaza Omotesando Harajuku “Omokado:” Report on Biological Survey”
- (5) Regional Environmental Planning, Inc. (2020) “Survey on Ecological Networks that Contribute to Biodiversity in Greater Shibuya Area”
- (6) Serigasawa Topography Editorial Board (1990) ”Serigasawa Topoglyphy”
- (7) Chino City (1988) “Chino City history last volume”
- (8) Regional Environmental Planning, Inc.(2024) “Tokyu Resort Town Tateshina basic survey for application for certification as OECM site, conservation and utilization of natural resources”
- (9) PICRC (Palau International Coral Reef Center) (2025) "Fourth Assessment of the Arakabesan Marine Protected Area"

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The following were used as a reference in the preparation of this report.

- Task Force on Climate-related Financial Disclosures (TCFD)
 - “Recommendations of the Task Force on Climate-related Financial Disclosures”
 - “Guidance on Metrics, Targets, and Transition Plans”
- CDP
 - “Climate Transition Plan: Discussion Paper”
- Transition Plan Taskforce (TPT)
 - “The Transition Plan Taskforce Disclosure Framework Consultation”
- United Nations’ High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities (UN HLEG)
 - “Integrity Matters: Net Zero commitments by Businesses, Financial Institutions, Cities and Regions”
- Task Force on Nature-related Financial Disclosures (TNFD)
 - “Recommendations of the Taskforce on Nature-related Financial Disclosures”



Disclaimer on Forward-Looking Statements

The forecasts and other forward-looking statements in this report are based on available information and certain assumptions determined as rational as of December 2025. Consequently, any statements herein do not constitute assurances regarding actual results by the company. Actual performance may significantly differ from these forecasts due to various factors in the future.

TCFD disclosure

< Environment | Climate Change | TCFD / TNFD disclosure | **TCFD disclosure** | Transition Plan toward Decarbonized Society |

Biodiversity | TNFD disclosure | Pollution and Resources | Water Use | Supply Chain (Environment) |

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

[Home](#) > [Sustainability](#) > [Environment](#) > TCFD disclosure

TCFD disclosure

< Environment

Climate Change

TCFD / TNFD disclosure

TCFD disclosure

Transition Plan toward Decarbonized Society

Biodiversity

TNFD disclosure

Pollution and Resources

Water Use

Supply Chain (Environment)

Governance ☒ Strategy ☒ Risk management ☒ Metrics and targets ☒

Governance

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

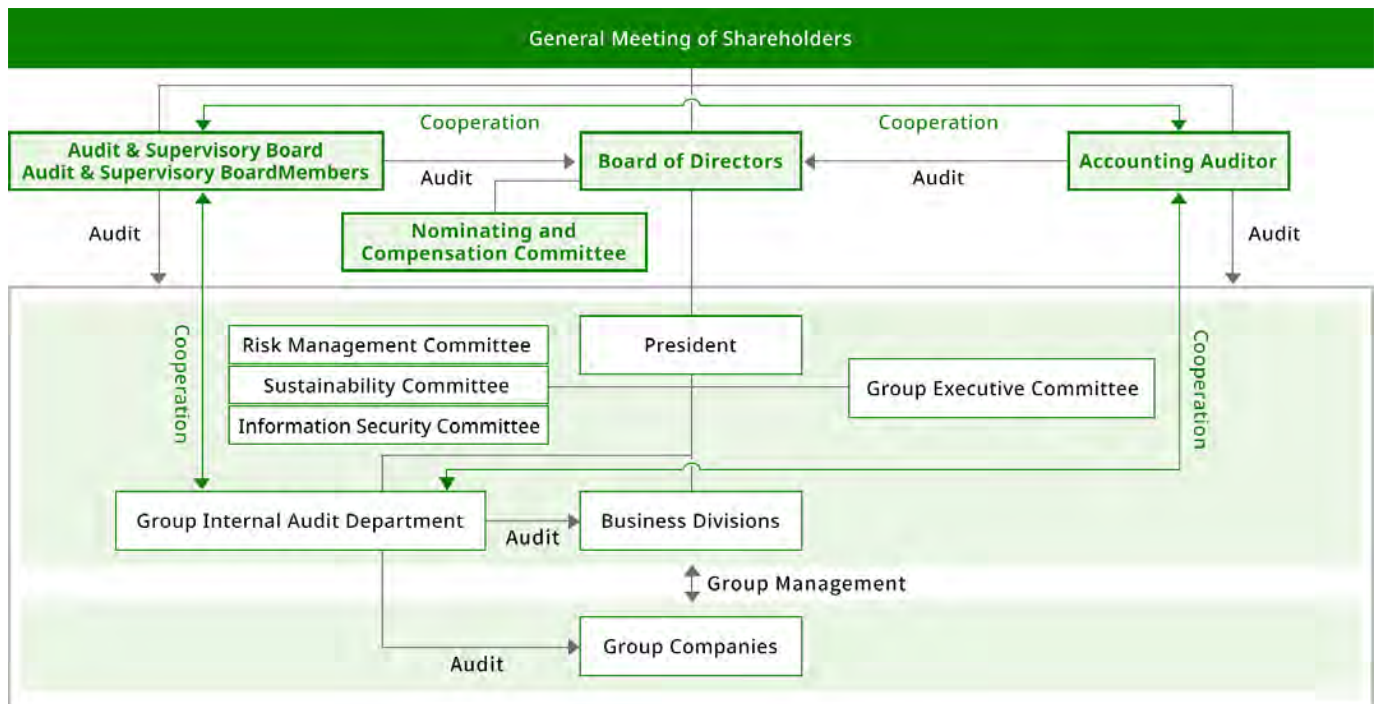
Tokyu Fudosan Holdings has in place the Sustainability Committee, comprising executive directors and chaired by the company president, which meets twice a year in conjunction with the Risk Management Committee to address, develop action plans and oversees performance against the targets, and other important 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.

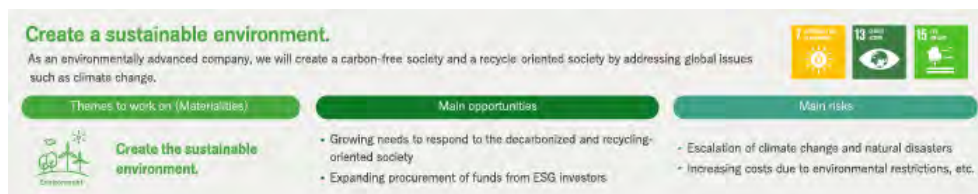
Sustainability Committee structure

Organization chart of CSR promotion



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.



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			Differentiating 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			
	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 / ReputationTechnology 【Opportunities】 Energy / Products and Services / Market	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.	
		In response to rising temperatures, there is an increasing demand from homebuyers for high-performance homes.				
	Risk / Opportunities	Renewable energy faces weak policy support, and the market trends are unclear.			Expanding the business in response to increased demand.	
		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.				
	Opportunities				Proposing new leisure lifestyles, such as "workation."	
	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 【Opportunities】 Resilience	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.				
	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 Intensification of disasters and increase in response costs	A carbon-free society and a recycle-oriented society	- RE100 ³ to be achieved by 2025*	7.2
			- 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
			- Waste volume (compared with FY2019) (11)%	12.2
			- Environment certification acquisition* (e.g. CASBEE, DBJ) 100%	12.5
			- Sustainable procurement (wood materials for molds) 100%	9.4
			- Midori wo Tsunagu Project (area of forest protected) 3,000ha	15.5
			- Environmental efforts through business 100 cases or more	15.2
				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.

Highly significant risks

- Investment risks
- Financial and capital risks
- Personnel and labor risks
- Climate change risks

Other risks

- Legal and compliance risks
- IT strategy risks/ digital strategy risks
- Information security risks
- Crisis management response

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.

Materiality

E



Create a sustainable environment.



KPI	Fiscal 2030 Targets in the Previous Mid-Term Plan	Fiscal 2030 Targets in the new Mid-Term Plan	Fiscal 2025 Targets	Fiscal 2024 results
RE100 to be achieved by 2025* ¹	Achieved	Achieved	Achieved	Achieved* ²
Percentage of renewable energy power usage	60% or more* ³	60% or more* ³	65%* ⁴	89.3%(*)
CO ₂ emissions (compared with FY2019)				
Scope1・2	(46.2)% (SBT certification)	(80)%	FY2023(50)%	(77.3)%
Scope3(category 1・2・11)	(46.2)% (SBT certification)	(46.2)% (SBT certification)		(30.1)%
(Qualitative Target)	Target for Initiatives: ● Collaborative efforts with partners (construction companies, etc.) ● Provide decarbonization value to customers	Additional Target: ● Promotion of Primary Data Collection	Same Target as in the Previous Mid-Term Plan	Achieved
CO ₂ Reduction Contribution (as a Percentage of the Company's Own Emissions)		10 times Carbon Negative	Equal Carbon Negative	3 times Carbon Negative
Water usage	Reduction compared to the previous year	7% Reduction Compared to FY2023 (also Reduced from FY2019 Levels)	Reduction compared to the previous year	(13.0)%
Waste volume (compared with FY2019)	(11)%	7% Reduction Compared to FY2023 (22% Reduction Compared to FY2019)	(6)%	(11.8)%
Environment certification acquisition (e.g. CASBEE, DBJ)* ⁵	100%	100%	70%	70.3%
Sustainable procurement (wood materials for molds)	100%	100%	30%	23.3%
Midori wo Tsunagu Project (Area of Forest Protected)	3,000ha	3,000ha	2,400ha	2,304ha
Environmental efforts through business (cumulative)	100 cases or more	150 cases or more	50 cases or more	105 cases

- *1 Tokyu Land Corporation
- *2 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
- *3 Formulated during the long-term business policy phase in 2021
- *4 The mid-term management plan announced in 2022
- *5 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](#) →

[Home](#) > [Sustainability](#) > [Environment](#) > TCFD disclosure

Transition Plan toward Decarbonized Society

[< Environment](#)[Climate Change](#)[TCFD / TNFD disclosure](#)[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.
- Gong forward, we will continue to pursue reductions of CO₂ emmissions 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

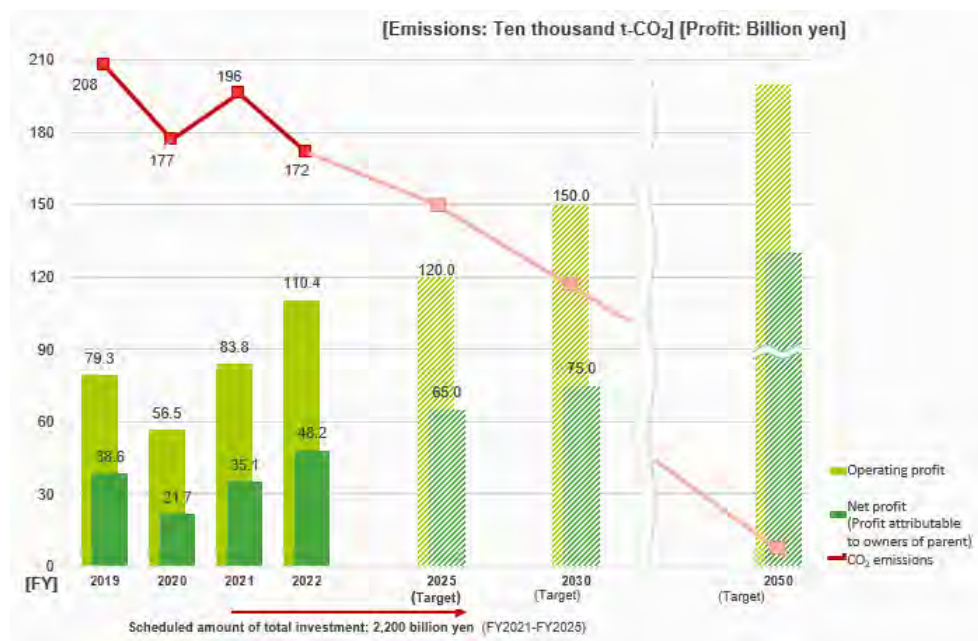
Apply internal carbon pricing (ICP)

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 FY 2019, 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](#)

Biodiversity

< Environment

Climate Change

TCFD / TNFD disclosure

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.

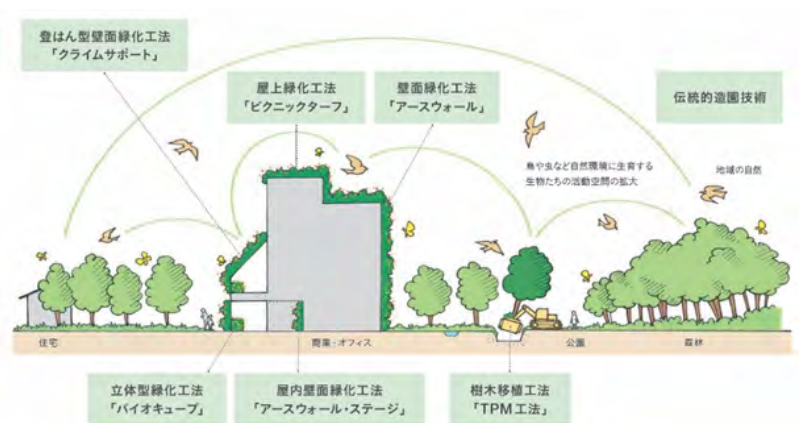
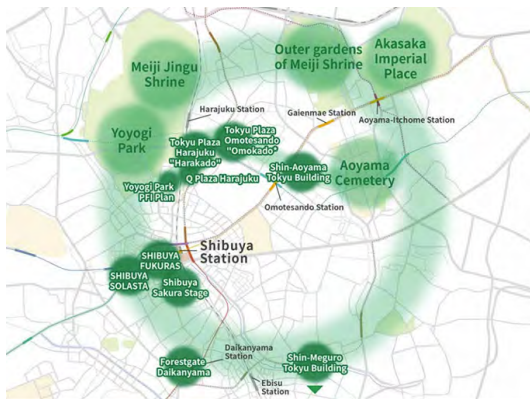
Goals, Initiatives, and Achievements

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.

ESG data: Green buildings 



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

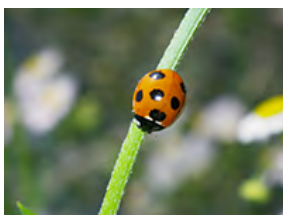
Biodiversity risk assessment(Disclosure of biodiversity habitat) ~ Conducting ecosystem studies and conserving biodiversity using greenery in the project

《**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.

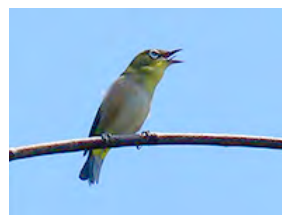
《**Existing project**》 For example, at the roof terrace garden named Omohara Forest at Tokyu Plaza Omotesando Harajuku, we conduct regular studies on living organisms throughout the year with Regional Environmental Planning, Inc., a specialist in natural environment conservation in order to gain an understanding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

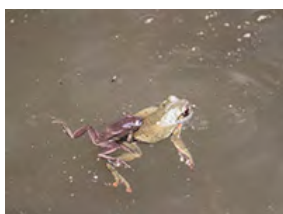


Bee hive

"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

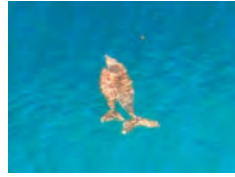


Cleaning the pond

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. Did. 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 Fudosan Holdings Corporation became a member of the Association for the Promotion of Businesses for Coexistence with Living Creatures (ABINC) in December 2024, and is actively involved in activities such as participating in committees. In particular, for properties with abundant natural environments in the surrounding area and the possibility of securing a large amount of green space on the premises, as well as office, commercial, hotel and resort facilities, we encourage properties to obtain ABINC certification in order to support the preservation of biodiversity, and we will continue to systematically expand our bases in the future.

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 Organizations

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.

TNFD disclosure

[< Environment](#) | [Climate Change](#) | [TCFD / TNFD disclosure](#) | [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 policies 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)".

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

TNFD disclosure

[< Environment](#) | [Climate Change](#) | [TCFD / TNFD disclosure](#) | [TCFD disclosure](#) | [Transition Plan toward Decarbonized Society](#) | [Biodiversity](#) | [TNFD disclosure](#) | [Pollution and Resources](#) | [Water Use](#) | [Supply Chain \(Environment\)](#)

[Introduction](#) ✓ [General Requirement](#) ✓ [Governance](#) ✓ [Strategy](#) ✓ [Risk and impact management](#) ✓
[Metrics and targets](#) ✓ [Initiatives Regarding Nature-related Risks, Opportunities and Impacts](#) ✓ [Terms and explanations](#) ✓
[References](#) ✓ [Revision History](#) ✓

INTRODUCTION

Introduction -Nature Positive as a Global Goal-

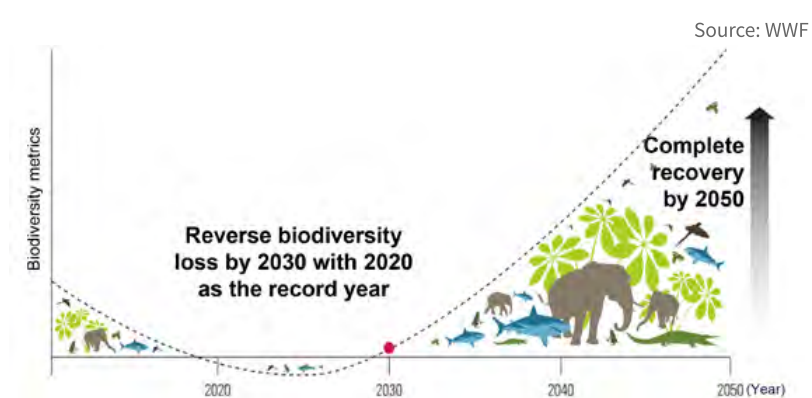
Amid increasing international recognition of how important it is to halt and recover natural loss ^(See *1), at the 15th Meeting of the Conference of the Parties to the UN Convention on Biological Diversity (COP15) that convened in December 2022, the “Kunming-Montreal Global Biodiversity Framework” (GBF) 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)**

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

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



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 organization's governance of nature-related dependencies, impacts, risks and opportunities.	Disclose the effects of nature-related dependencies, impacts, risks and opportunities on the organization's business model, strategy and financial planning where such information is material.	Describe the processes used by the organization 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

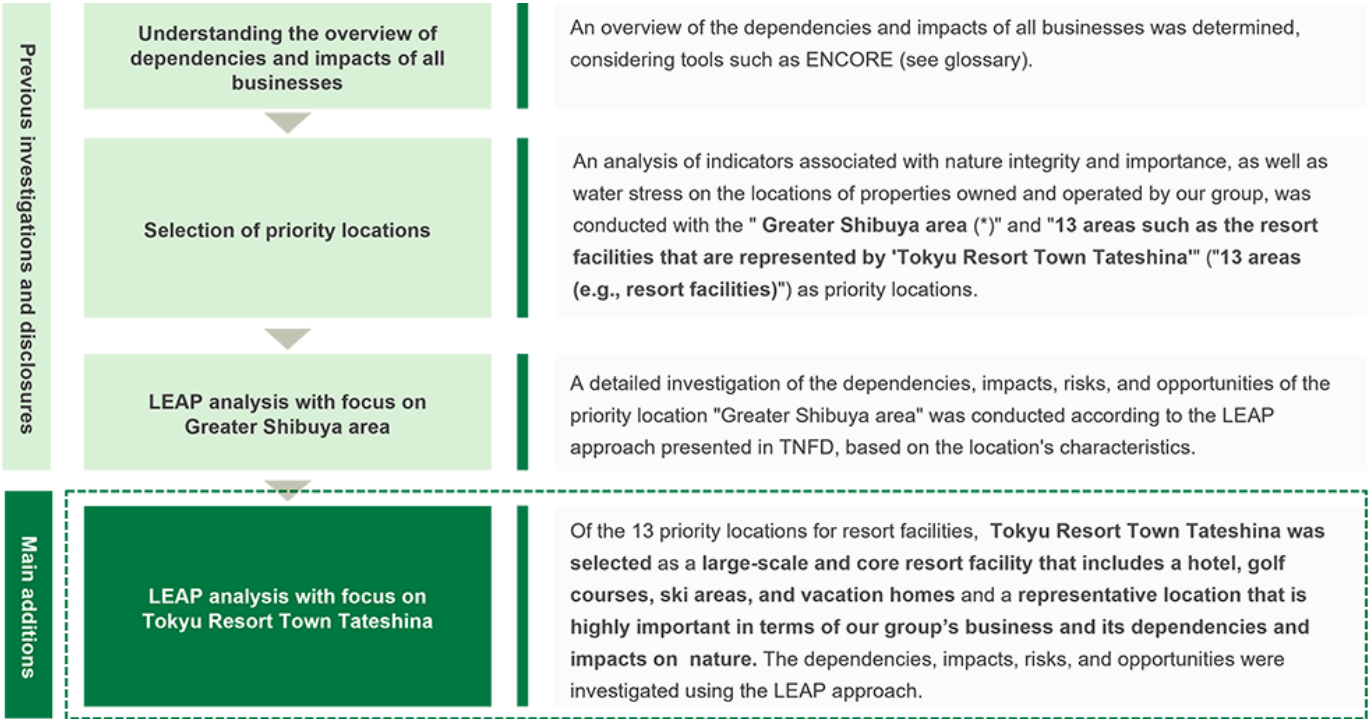
The table below summarizes which of the 14 disclosure recommendations shown on the previous page corresponds to each of the LEAP phases of the TNFD. In this report, the results of our review with reference to the LEAP approach are disclosed in accordance with the General Requirements and the TNFD Disclosure 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
- 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	- 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	- 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	- 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			
Strategy D)	- Strategy A) D) - Risk & Impact management A) B) - Metrics & targets B)	- Strategy A) C) D) - Risk & Impact management A) B) C) - Metrics & targets A) B)	- 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 (TNDF disclosure at the Company)
Governance	● Governance structure for nature-related dependencies, impacts, risks and opportunities that includes oversight structure for Board of Directors, and roles of management ● Stakeholder Engagement	● Governance structure for the Company's nature-related issues ● Human rights policy and stakeholder engagement
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	● 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 : (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	● 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	● 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	Measured metrics and targets for evaluating and managing nature-related dependencies, impacts, risks and opportunities and performance relative to targets	● Metrics and targets of Group

[Summary] Overview of Dependencies and Impact on Nature and Setting of Priority Locations

STEP 1)

Assess dependencies/impacts on nature for Group overall

Based on tools such as ENCORE (see Glossary), we reviewed an overview of dependencies and impacts in our entire business.

Segment	Business activities	Sales volume	Value chain	Impacts on nature										Dependencies on nature				
				Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use	Terrestrial ecosystem use
Urban development	Office and commercial facilities development and rental housing, etc.		Building and development	VH														
			Operation	VH														
Strategic investments	Renewable energy facilities (solar power plant, etc.)		Building and development	VH														
			Operation	VH														
Logistics facilities	Logistics facilities		Building and development	VH														
			Operation	VH														
Property management and operation	Commercial management and operation		Management, renovation and construction	VH														
			Building and development	VH														
Healthcare, etc.	Hotel, golf courses, etc.		Production of ingredients, etc.	VH														
			Operation	VH														

Impacts

Land modification/occupation, etc. upon real estate development and operation
Terrestrial ecosystem use

Dependencies

Supply services for resources, etc.
 and **cultural services** for nature-based comfort, landscapes, etc.

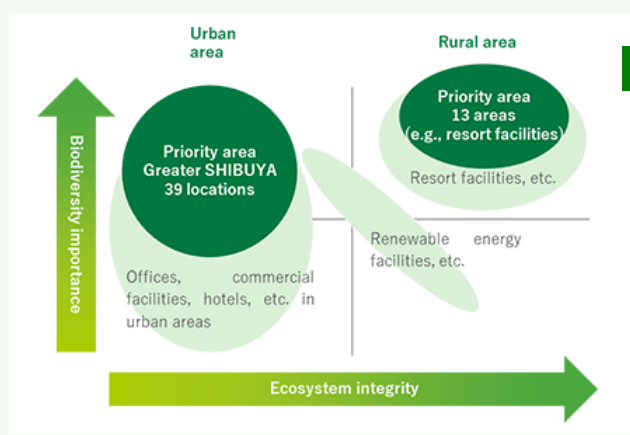


Business scale (Sales volume)

STEP 2)

Analyze importance at addresses of each property

We analyzed various metrics regarding the intactness and biodiversity importance and water stress as they pertain to the addresses of properties held and operated by the Group. Then we selected the "Greater Shibuya area" and "13 areas including resort facilities" as our priority locations.



Conduct detailed analysis at the locations below:

- (1) **Greater Shibuya area**
(Disclosed in FY2023)
- (2) **Tokyu Resort Town Tateshina**
(Disclosed in FY2024)

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

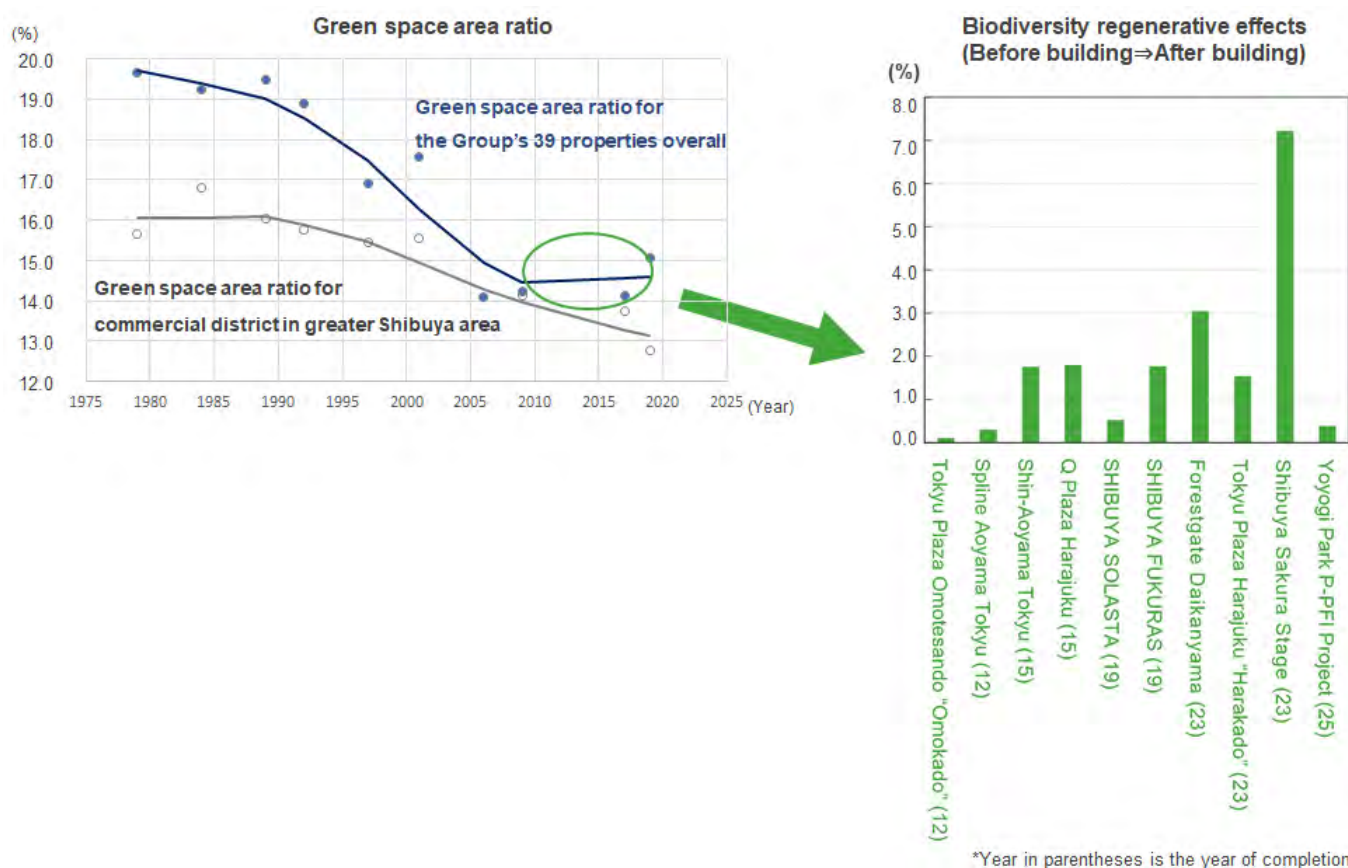
Dependencies and impacts of Greater Shibuya area

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.



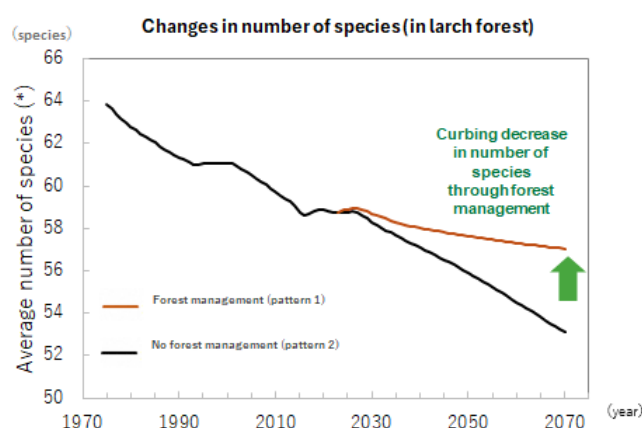
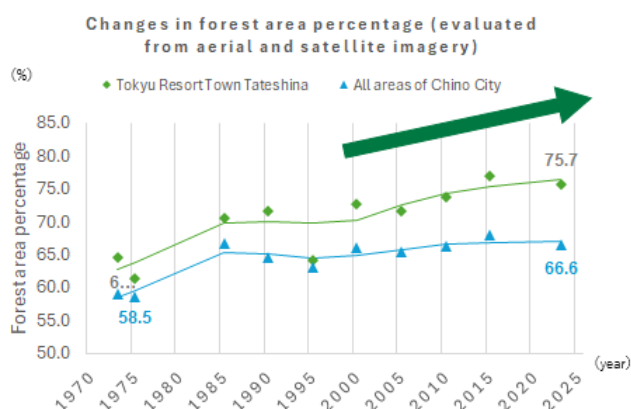
[Summary] Contributions to Nature Positive in Tokyu Resort Town Tateshina

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.

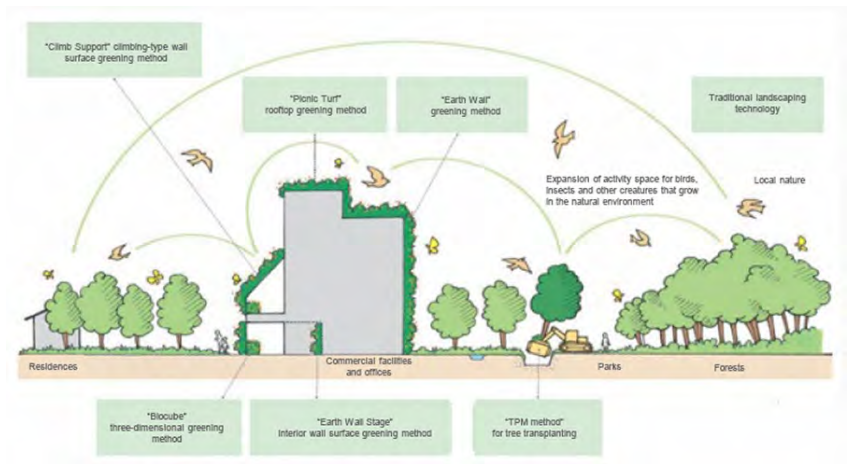


Image representation of building greening

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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- Environmental Management at Tokyu Fudosan Holdings and Positioning of TNFD Report
- Architecture of the TNFD disclosure framework
- Summary

Nature-Related Information Disclosure in line with TNFD

- General requirement
- 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
- References

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

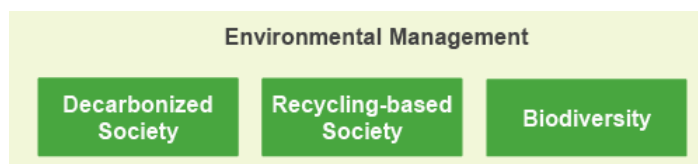
Under “governance” by the TNFD, it is recommended that corporations explain oversight by the Board of Directors and the roles of management as they pertain to nature-related dependencies, impacts, risks and opportunities.

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

Main roles of Organization

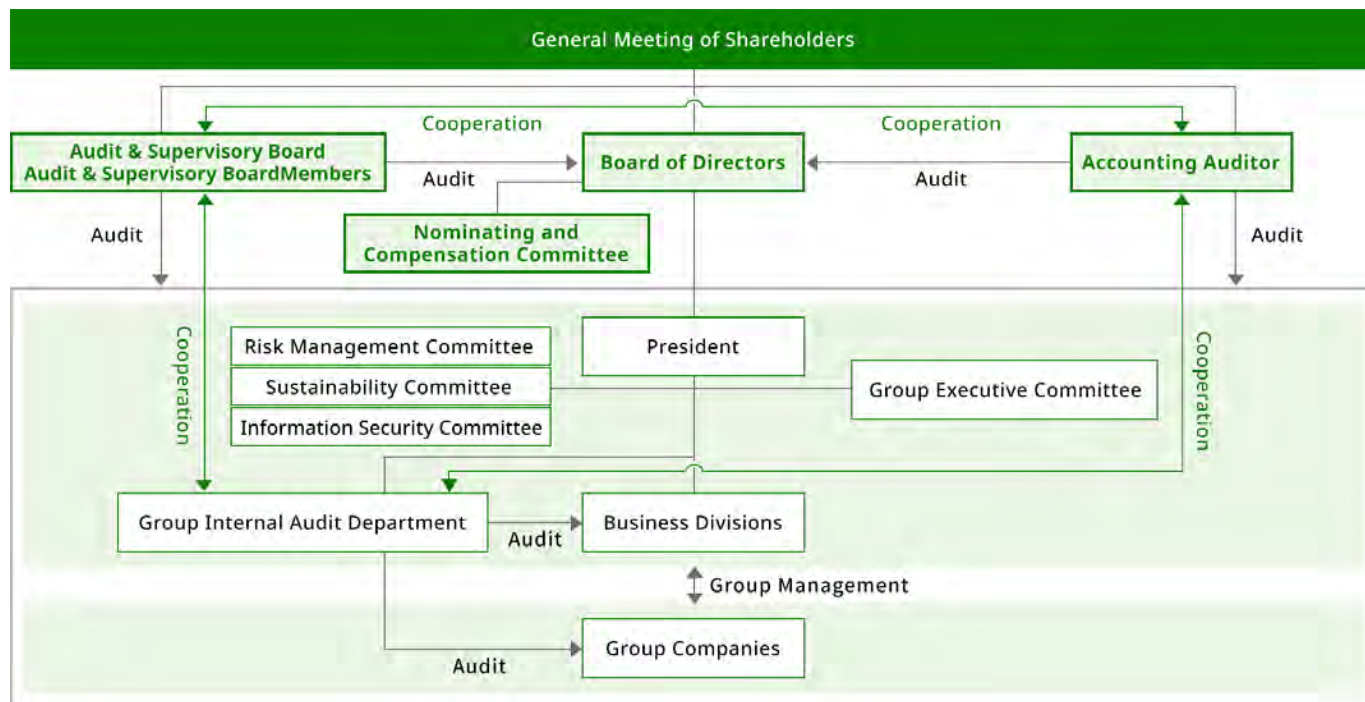
- The group established the Sustainability Committee with the president & CEO (Chair) and operating officers as its members. This committee devises plans and verified results with respect to climate change and other material sustainability issues.
- The board of directors receives reports from the Sustainability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



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)

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.



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

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.

				Impacts on nature										Dependencies on nature					
Segment	Business activities	Sales volume	Value chain	Terrestrial ecosystem use	Freshwater/marin ecosystem use	Resource use		GHG emissions	Contamination	Waste	Other	Provisioning services		Regulating and maintenanceservices			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.		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)		Building and development	VH			M	H	M	H	H		M	L					
			Fuel production	H				H	H			VH							
	Logistics facilities		Operation	VH		H	H	H	H	H	M	M	VH	L	VH				
			Building and development	VH			M	H	M	H	H		M	L					
Property management and operation	Condominium management Environment and greening management		Operation	VH				H		H	H			L	L		M		
			Management, renovation and construction	VH							H								
	Hotel, golf course, ski resort, etc.		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			
			Operation	VH	VH	H	M	H		H	H	H	M	L	M	H	VH		
	Healthcare, etc.		Building and development	VH			M	H	M	H	H		M	L					
			Operation and use	VH		H		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 • 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: Metrix 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.

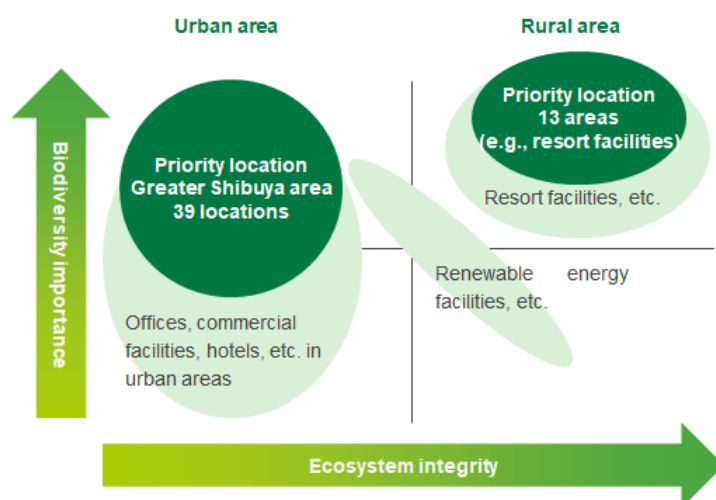
We assigned scores based on metrics and mapped relative importance within the Company.

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 \(Including Tokyu Resort Town Tateshina\)](#)).

Priority location (1): Greater Shibuya area (39 properties) <i>*Area within 2.5 km radius of Shibuya Station</i>	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.
Priority location (2): 13 areas (e.g., resort facilities)	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.



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.

Locate Discovery of the interface with nature	- 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
Evaluate Evaluation of dependencies and impacts	- 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.
Assess Assessment of risks and opportunities	- 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
Prepare Preparation for response and reporting	Examination and organization of existing initiatives for risks and opportunities

■ Map of Greater Shibuya Area



■ Tokyu Resort Town Tateshina (Chino City,Nagano)

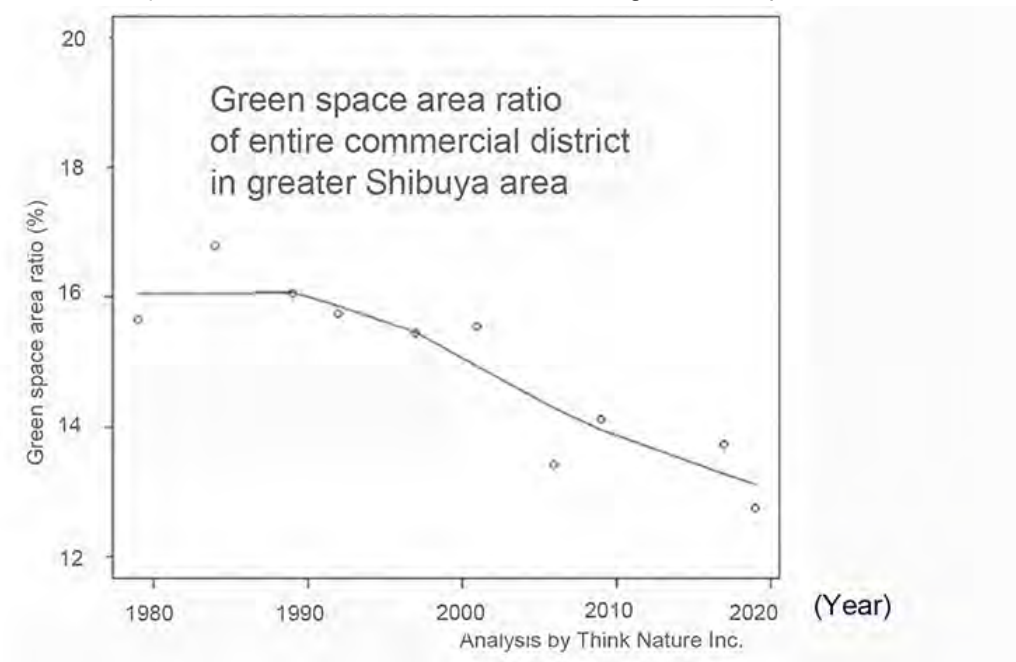


State and Importance of Nature in Greater Shibuya Area

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

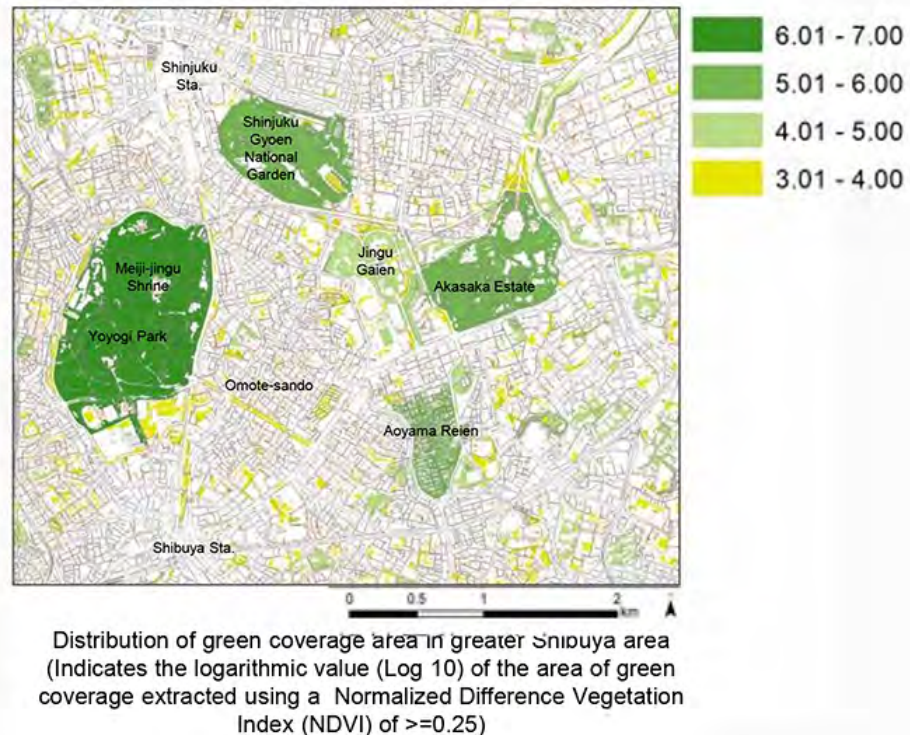


Analysis by Think Nature Inc.

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.

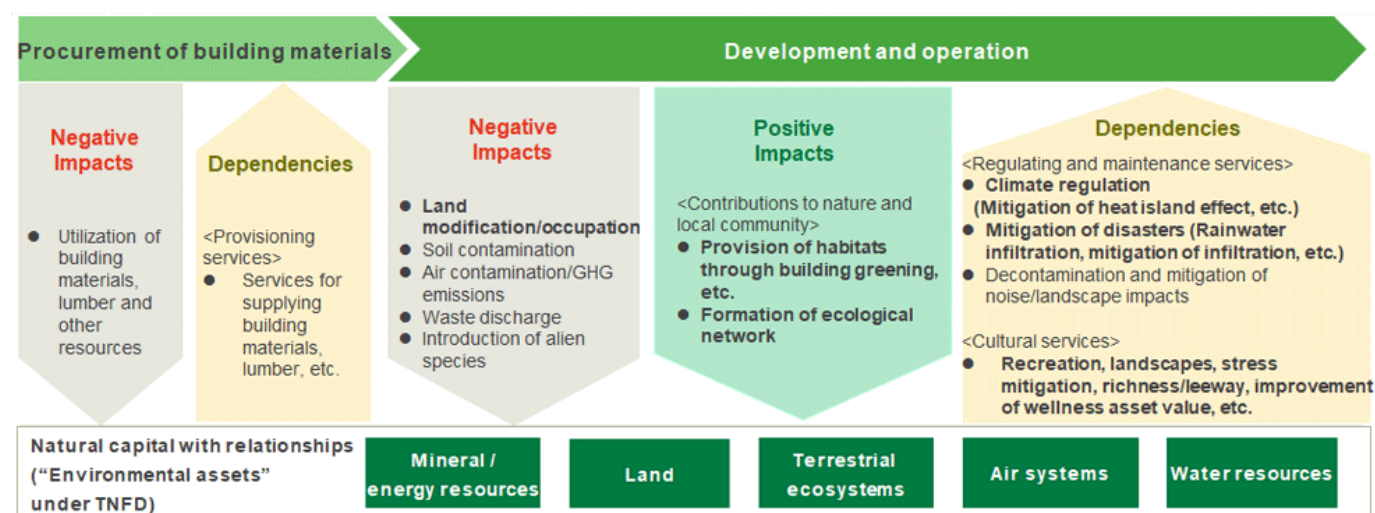
Dependencies and Impacts (Overall Picture)

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		Shiukara	Shiukara	<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				

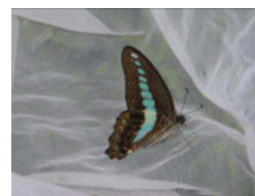
Note 1: Species names and classifications are in accordance with the "Check-List of Japanese Birds (7th Ed.)" (Ornithological Society of Japan, 2012).



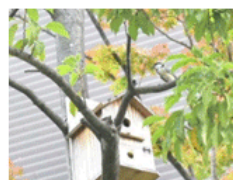
Passer montanus (Nesting in pairs)



Hakusekirei



Graphium sarpedon



Shiukara



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.

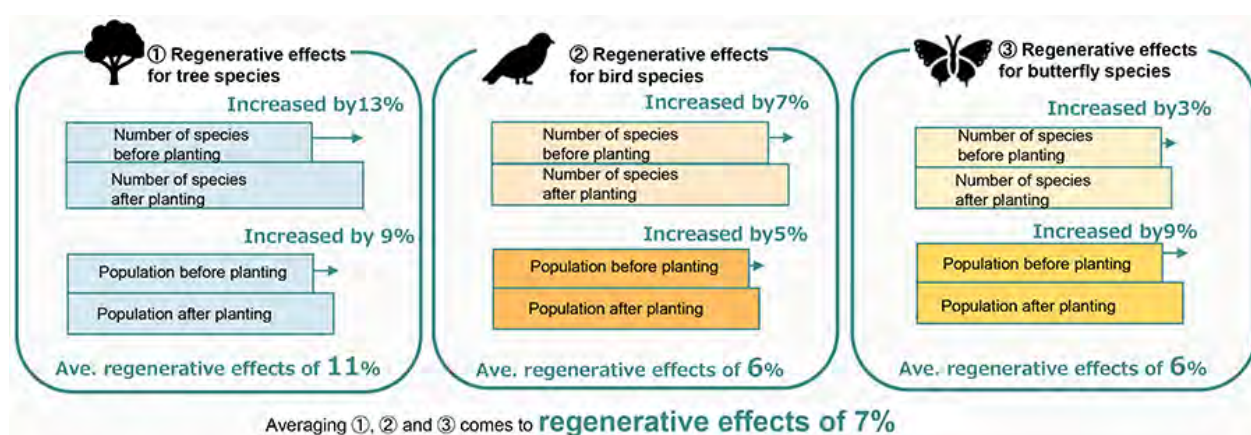


SHIBUYA SOLASTA

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.

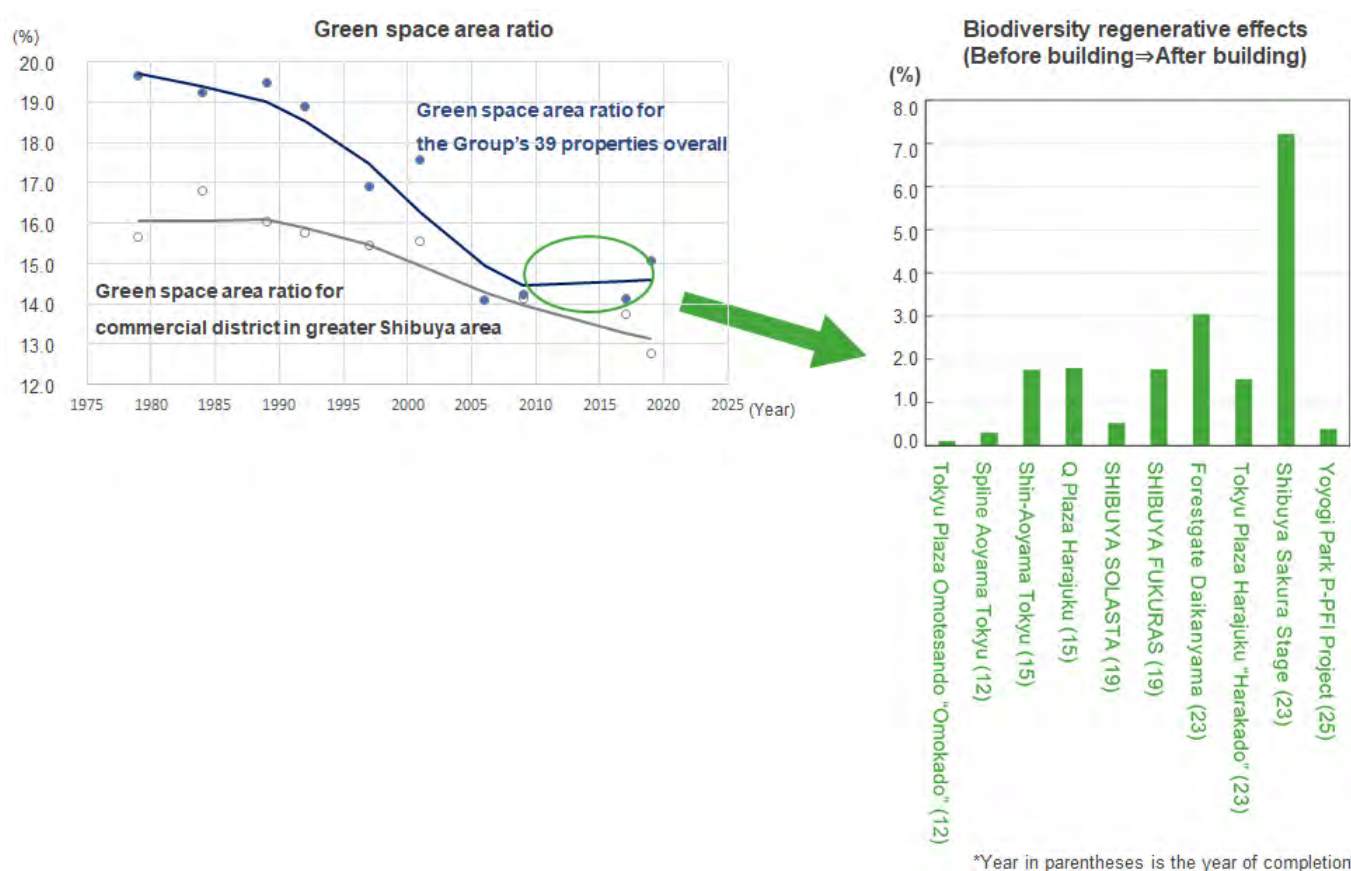
Quantitative Evaluation of Impacts Based on Building Greening (Results)

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.



Making the greater Shibuya area an environmentally advanced city from the aspect of biodiversity as well

The results of analysis performed by Think Nature Inc. on the species capture rate through planting at all 39 properties (the percentage of species inhabiting the entire greater Shibuya area that can be called to green spaces at Group properties) showed that planting efforts by those properties were capable of calling approx. 60% of bird species and approx. 90% of butterfly species. In particular, **properties where we conduct planting based on native trees** indicated a high capture rate, **The quality of green there is also contributing to higher biodiversity regenerative effects.**

For example, at “**Shibuya Sakura Stage**,” the planting of numerous tree species in large number, including species native to Tokyo, make it possible to call a large number of bird and butterfly species. This has led to a high species capture rate and **high regenerative effects (7.2%)**.

As it is now clear that greening that includes the likes of the planting of native species, particularly that conducted at properties built in recent years, contributes to the regeneration of biodiversity, we believe that it is crucial for us to continue tackling greening that is conscious of the quality of green space as we move forward.

List of species analyzed by Think Nature Inc.

[illegible]

Shibuya Sakura Stage (Completed in Nov. 2023)

At Sakuragaoka located adjacent to Shibuya Station, we are pushing forward with the development of “Shibuya Sakura Stage,” a large-scale complex to serve as a new landmark for Shibuya.

At this property, we have established “HAGUKUMI STAGE” as a richly-green relaxation sport to **promote three-dimensional greening that utilizes the ground, roof, wall surfaces and other elements** and also contributes to heat island countermeasures. In addition, we are also tackling the reduction of our environmental footprint through means such as using solar power generation and other forms of renewable energy and introducing next-generation technology.



Distant view of Shibuya Sakura Stage



Hagukumi STAGE

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.

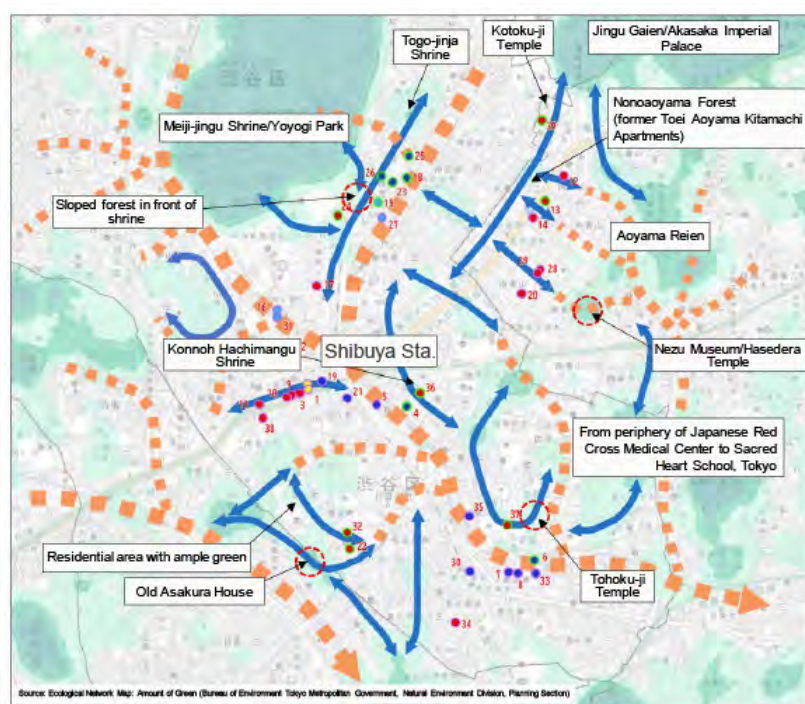
Additionally, the Company's properties are located at the red circles on the map to the right, which also constitute locations where fellow properties of ours are in proximity to each other or are concentrated.

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

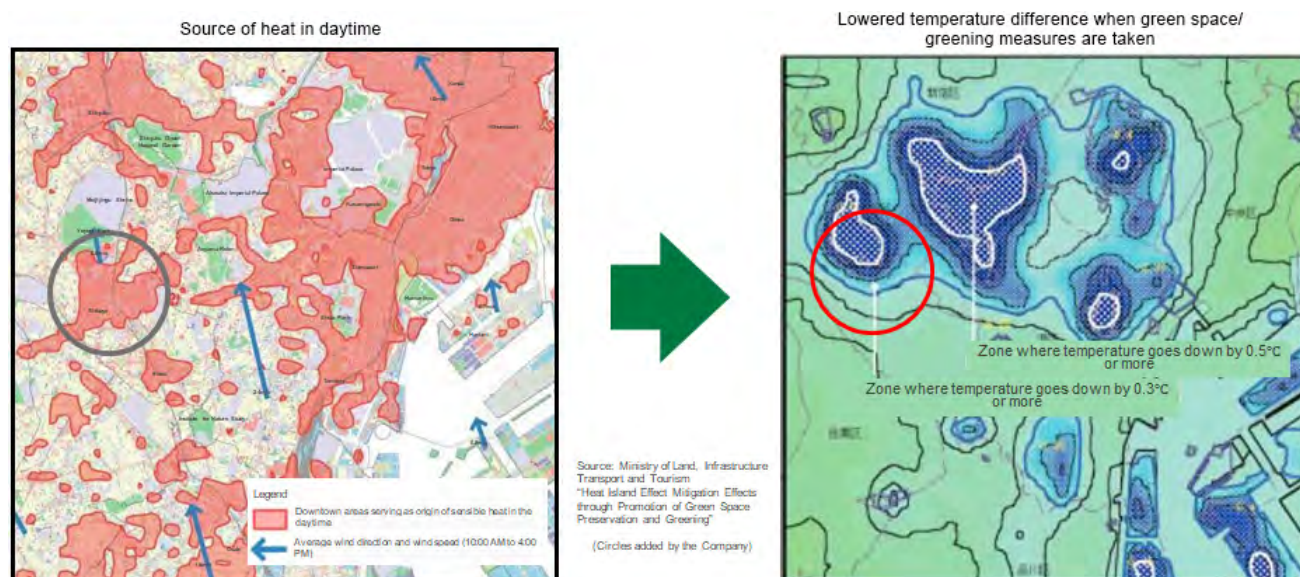
(Source: Regional Environmental Planning, Inc. (2023))
 "Survey on Ecological Networks
 that Contribute to Biodiversity in Greater Shibuya Area"

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)

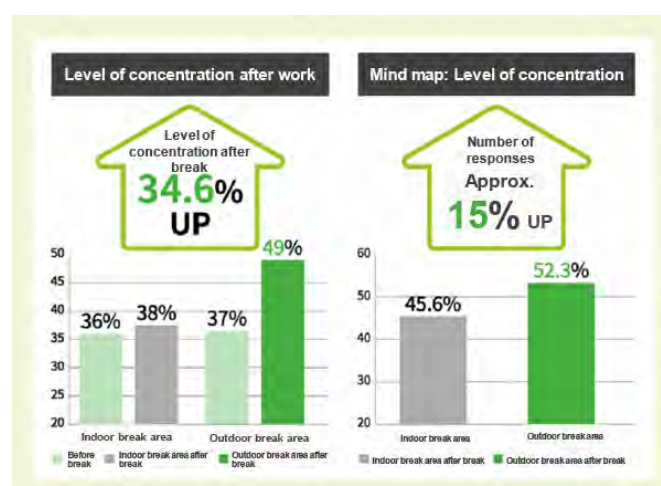
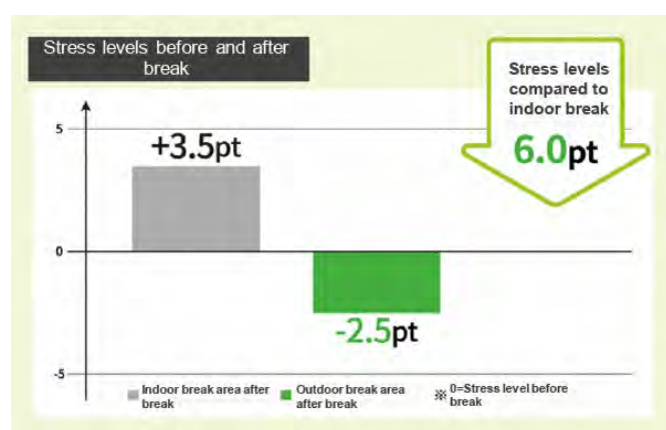
Data gathered: Brain waves, EEG, number of responses and correct answer rate for tasks for work purposes, and subjective evaluations

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)	● 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)	● 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)	● 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)	● Increase in costs to accommodate regulations due to stronger regulations calling for improved greening ratios at properties
			● 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		● 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)	● 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.	● 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

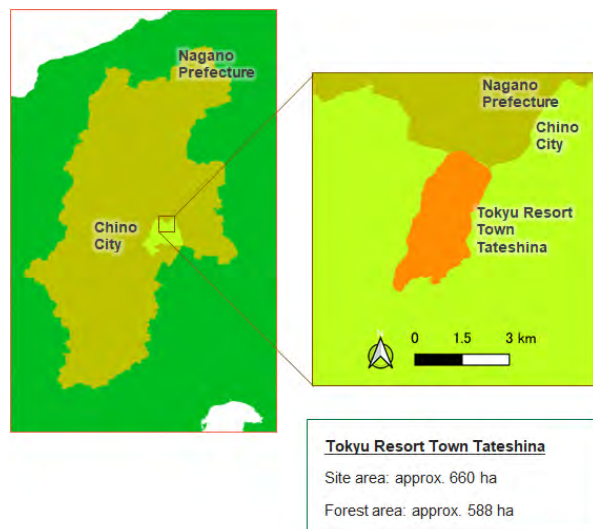
Classification of opportunities			Main dependencies and impacts	Description of opportunities in Urban Development Business
Opportunities	Market	Customers/tenants		Growth in preferences of customers and tenants towards properties that exert positive impact on nature through limited negative impact on nature/enhanced quantity and quality of green, developments in greening technology, ecological network formation, etc.
		National policies/laws		Gaining of national policy-based support and incentives for quality and quantity of green spaces under Urban Development Business
		Capital flow/finance		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	Lowering of negative impact such as land modification/occupation, contamination and waste discharge Positive impact on ecosystems (and ecosystem services) such as provision of habitats through greening and ecological network formation	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		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.
				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

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.

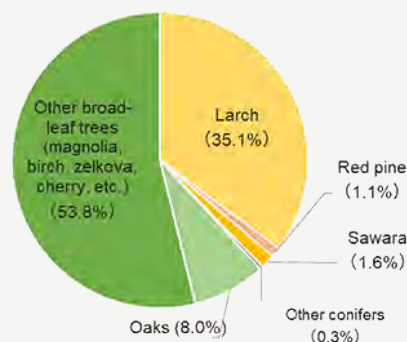


Characteristics of the Nature in Tokyu Resort Town Tateshina

"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



Constituent tree species		Area	
		Hectares	Percentage
Conifers	Larch	207	35.1%
	Red pine	6	1.1%
	Sawara cypress	9	1.6%
	Other conifers	2	0.3%
Broad-leaf trees	Oaks	47	8.0%
	Other broad-leaf trees	317	53.8%

* 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.

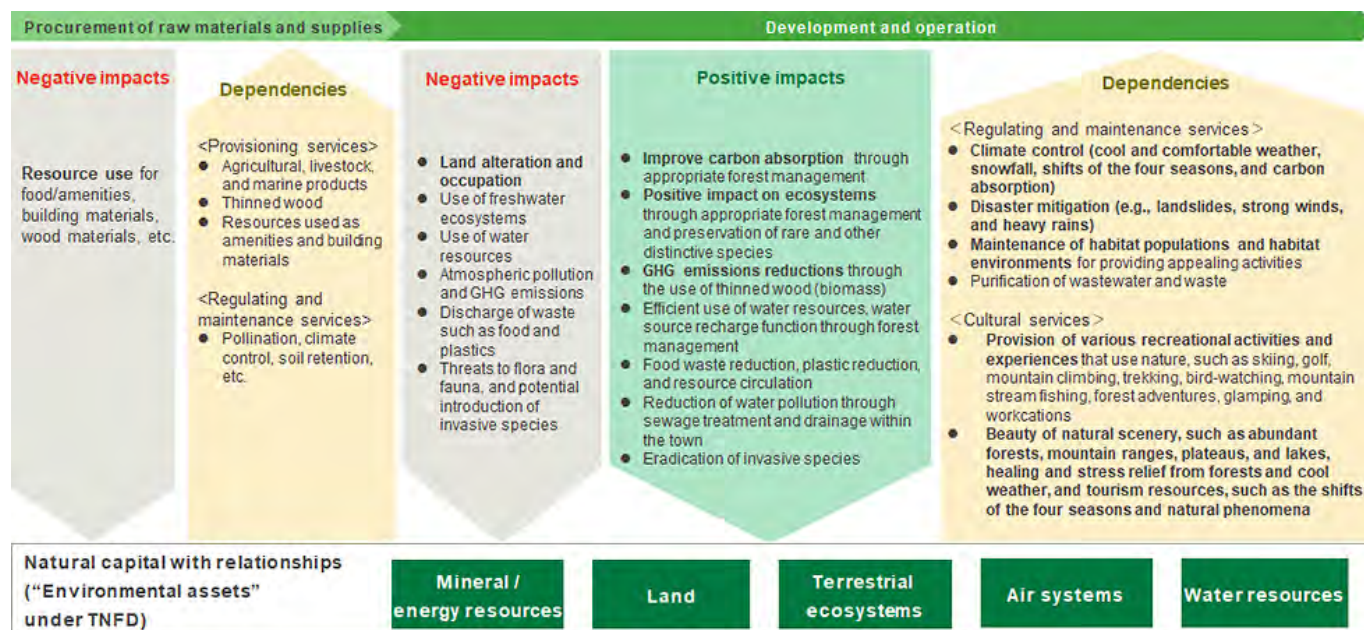


The overall picture of dependencies and impacts through value chains in the business at “Tokyu Resort Town Tateshina” is as shown in outlined below.

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

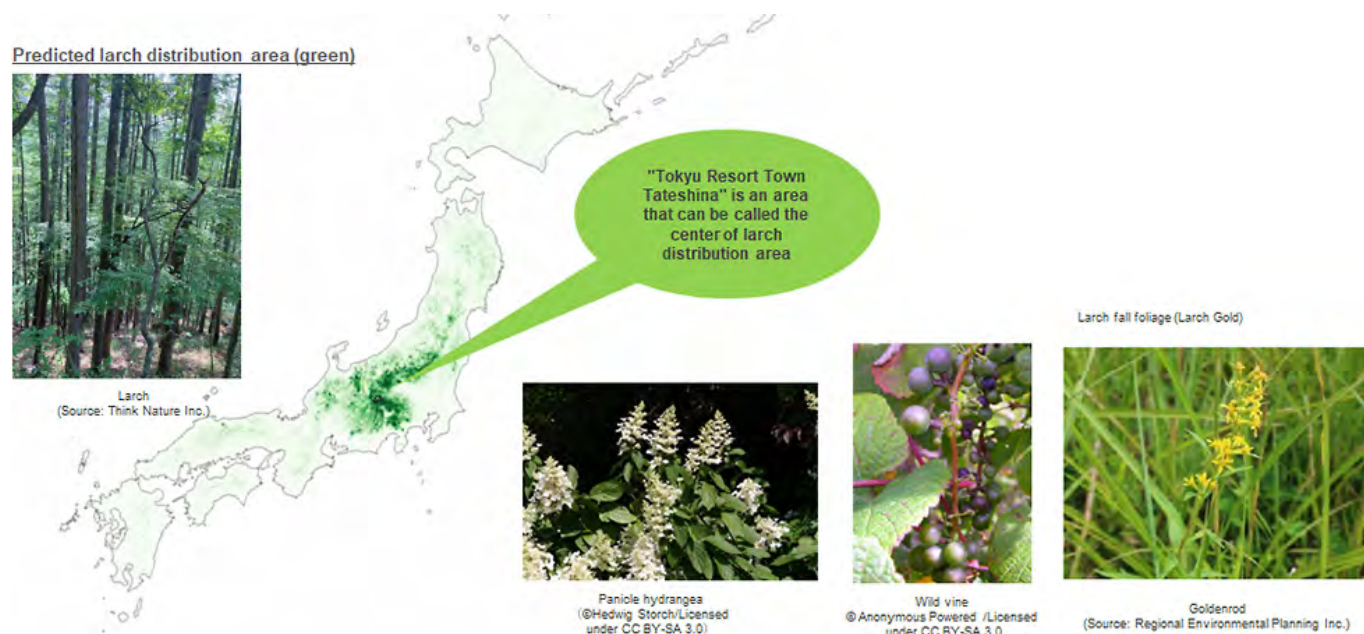
- Value that shows how many times the population of the species in the analyzed area (“Tokyu Resort Town Tateshina” and Chino City) is larger than the population of the species in all of Japan.
- **A Value > 1 indicates many areas that are suited as habitats compared to all of Japan.**

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



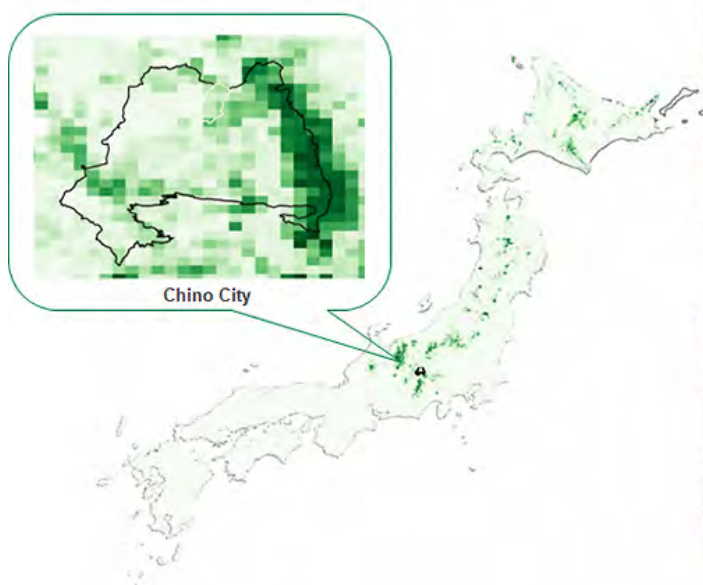
Fall foliage at Tokyu Resort Town Tateshina

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
(©SZ4/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.

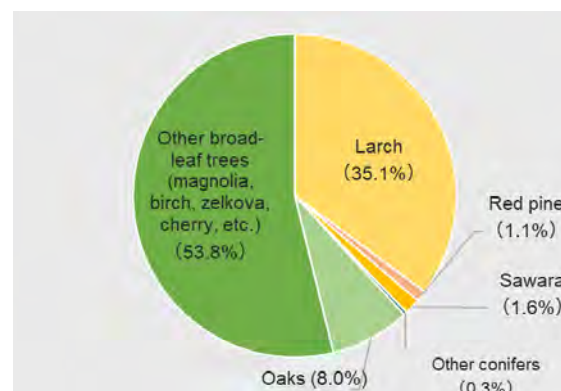
Quantitative Evaluation of Dependencies on Carbon Absorption Function (Methods)

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	• 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 $= \textcircled{1} \text{Annual trunk growth per hectare} \times \textcircled{2} \text{Expansion factor} \times (1 + \textcircled{3} \text{Underground ratio}) \times \textcircled{4} \text{Bulk density} \times \textcircled{5} \text{Carbon content} \times \textcircled{6} 44/12$
Definitions of factors	① Annual trunk growth per hectare: the volume that tree trunks in one hectare grows per year (m³/ha) ② Expansion factor: factor for adding volume of tree branches ③ Underground ratio: ratio of tree root volume to aboveground volume (trunk + branches) ④ Bulk density: factor for converting the volume of wood to weight (t/m³) ⑤ Carbon content: percentage indicating the amount of carbon per ton of wood weight ⑥ 44/12: factor for converting carbon amount to carbon dioxide amount

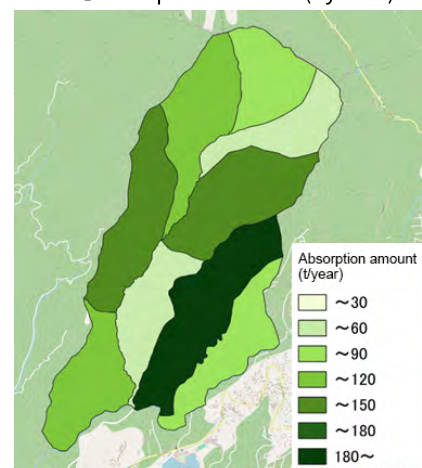
Quantitative Evaluation of Dependencies on Carbon Absorption Function (Results)

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.

CO₂ absorption amount (cumulative)



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

Quantitative Evaluation of Impacts Due to Land Use (Methods)

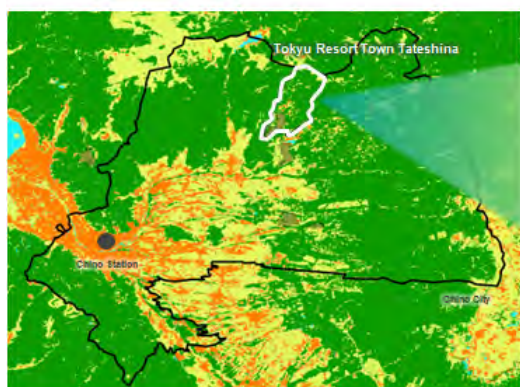
Among the impacts due to the business summarized on “[Characteristics of the Nature in Tokyu Resort Town Tateshina](#)” ~ “[Overall Picture of Nature Dependencies and Impacts Through Business](#)”, the impact of land alteration and occupation from facility development and operations was evaluated as 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

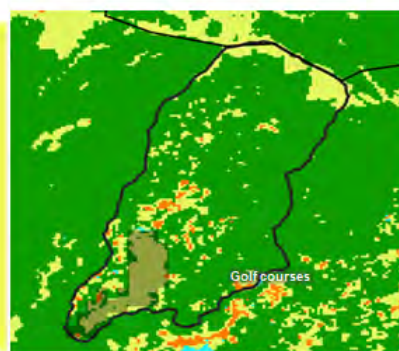
- Target: Tokyu Resort Town Tateshina
- Method: High-accuracy aerial images from 1973 and 1975 and satellite images from 1985 onwards were used alongside machine learning* with AI to provide an estimated classification of forests and non-forests and the trends in forest area change were quantitatively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

Source: Think Nature Inc.

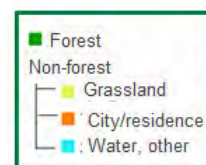
Estimation of forest area from satellite images (entirety of Chino City) (2023)



Tokyu Resort Town Tateshina site (2023)



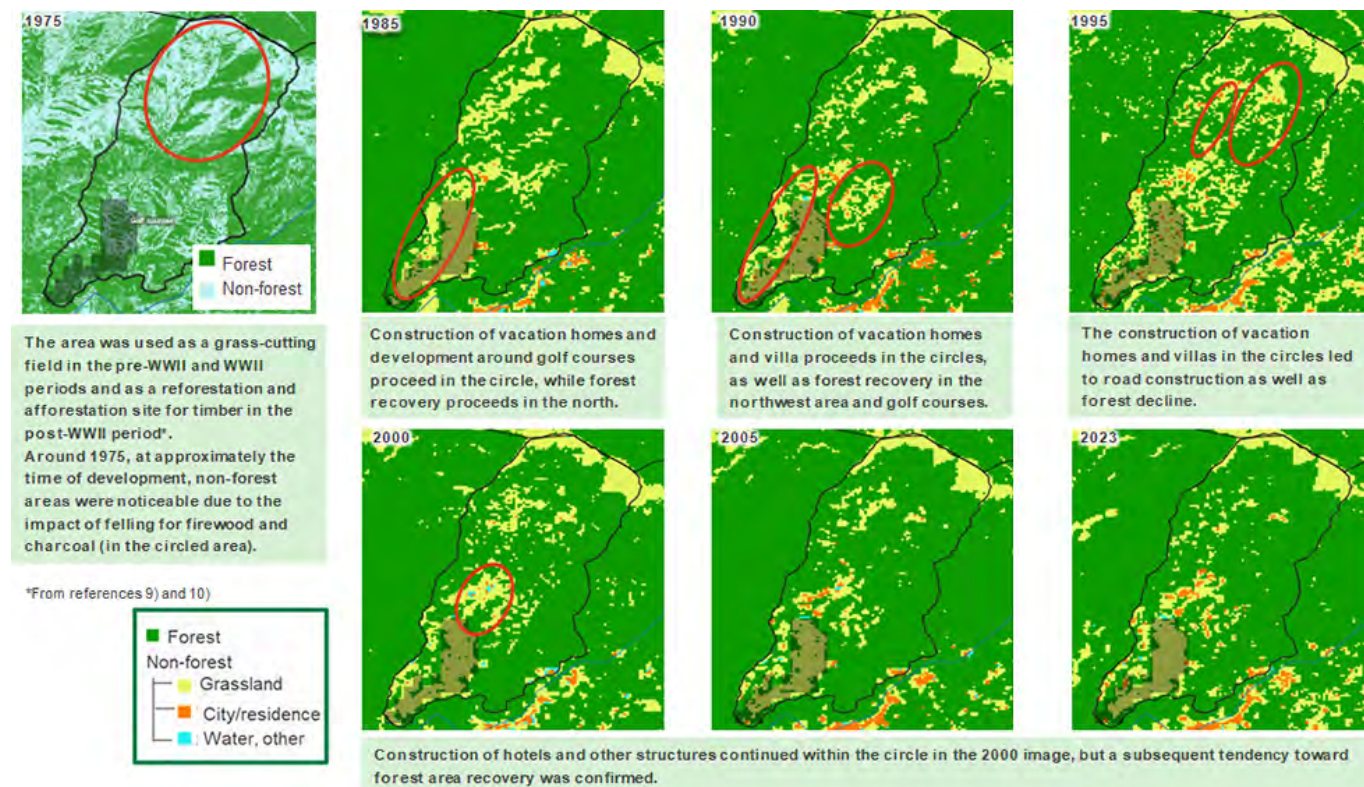
Shaded area: area identified as golf courses on 1991 land use map



* 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.



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.

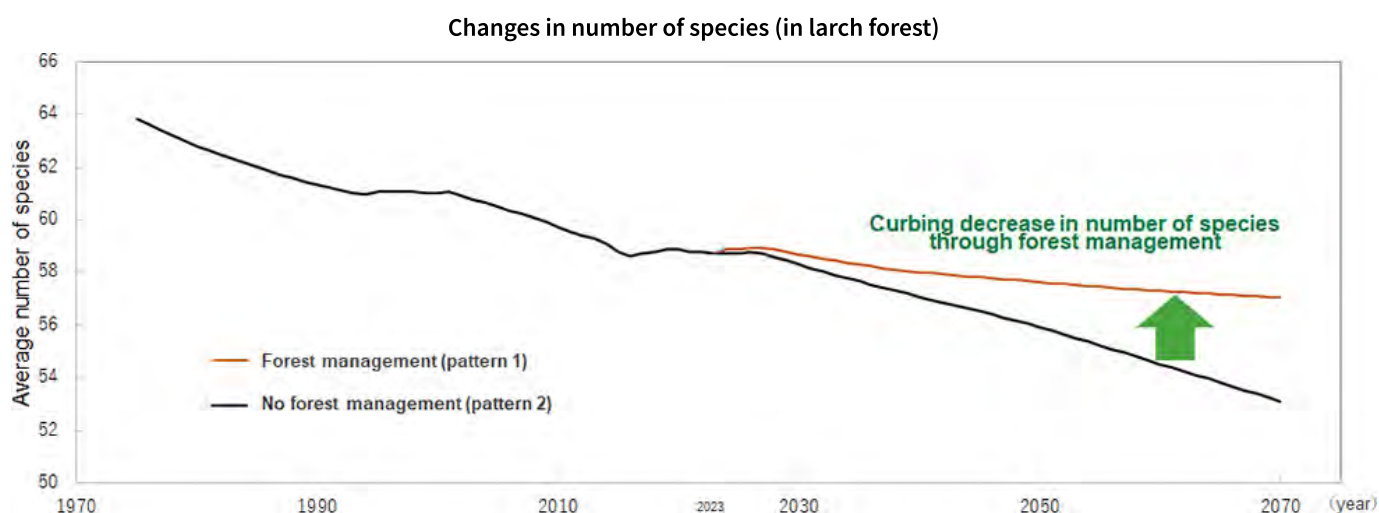
*Clear-cutting: felling a certain group of trees that constitute a forest all at once.

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.



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	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	- 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	- 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	- 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	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	Restrictions on water use rights for conserving river water resources
		Water contamination	Enforced regulations relating to wastewater
		Terrestrial ecosystem use, other resource use	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	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	- 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	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	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	Reduction of negative impacts, such as land alteration and occupation, contamination, resource use, and waste discharge Positive impacts on ecosystems (and ecosystem services) through appropriate forest management, as well as monitoring and conservation of organisms	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		Acquisition of J-Credits through carbon absorption from appropriate forest management
		Products and services		Sales of wood products and original aroma goods that use larch wood resulting from thinning
	Reputation capital	Corporate value		- 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		- 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		- 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	- 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	- 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	- 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		- 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.

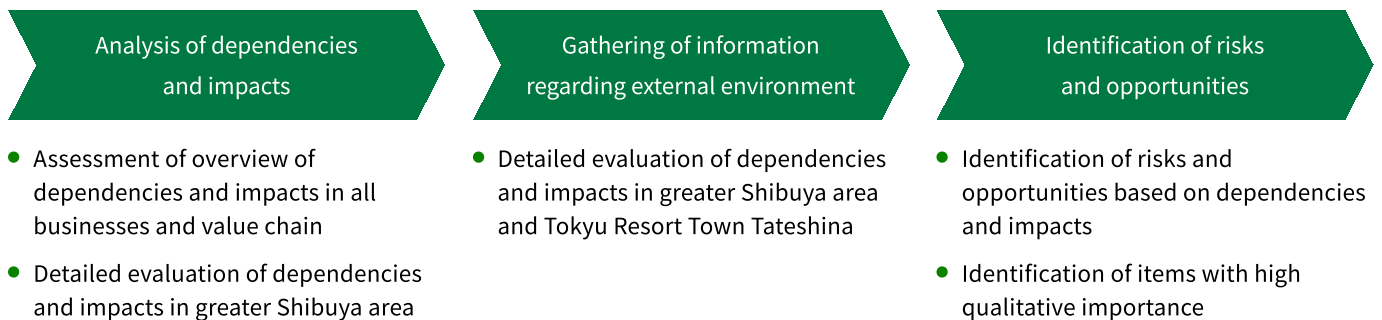
An explanation of processes, specific initiatives and stakeholder engagement is provided below based on that.

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	FY2018	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

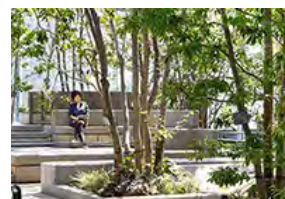
In the greater Shibuya area, which has Shibuya Station at its center, we further evolved upon and deepened our “Greater SHIBUYA 1.0” concept for the area to formulate our new community planning strategy “Greater SHIBUYA 2.0.” In addition to bringing together the three elements of workplaces, residences 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.”



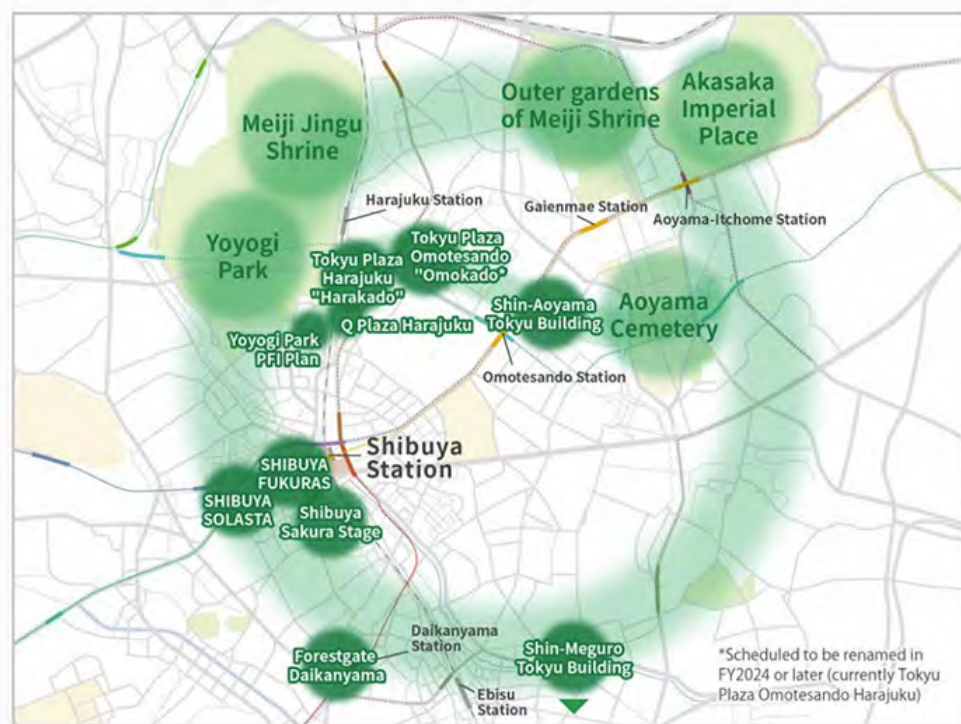
Rooftop sky terrace

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.

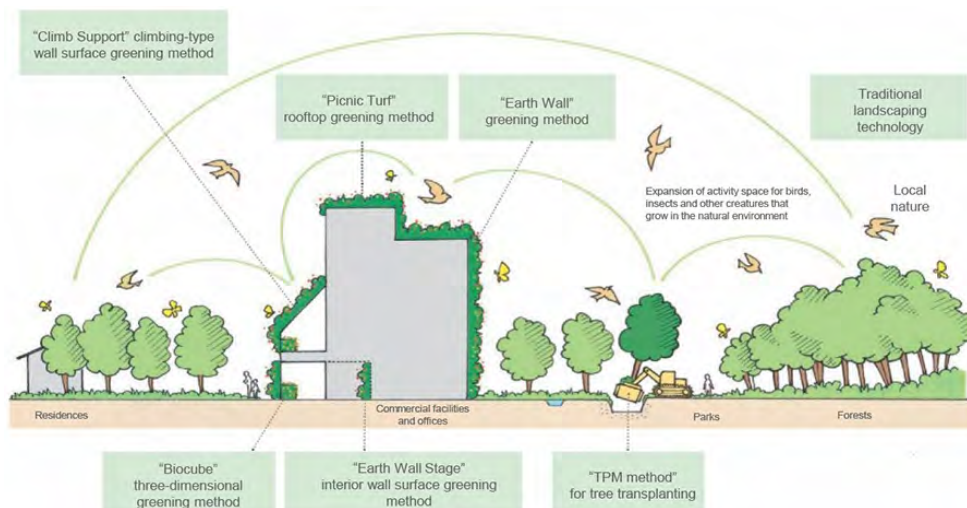
In particular, when we develop large-scale properties with considerable impact on the local community, we carry out ecosystem studies in the peripheral area at the planning stage, perform greening using vegetation that takes the bird and insect species that inhabit the area into consideration, and pursue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

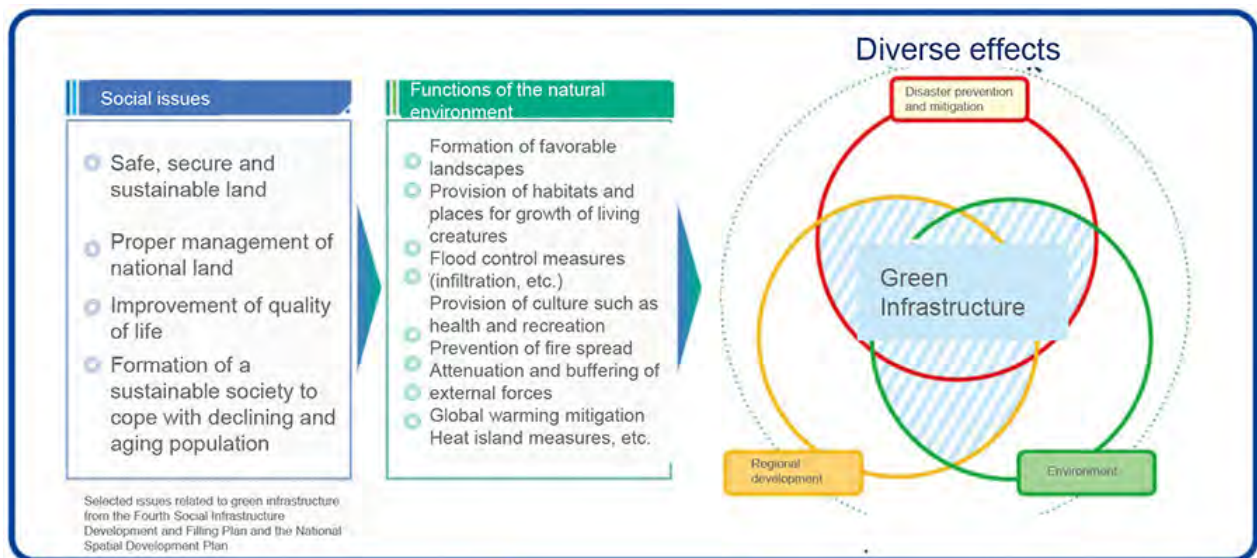
Initiatives in Urban Development: Greening Technology, Planting Management, Green Infrastructure

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

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

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

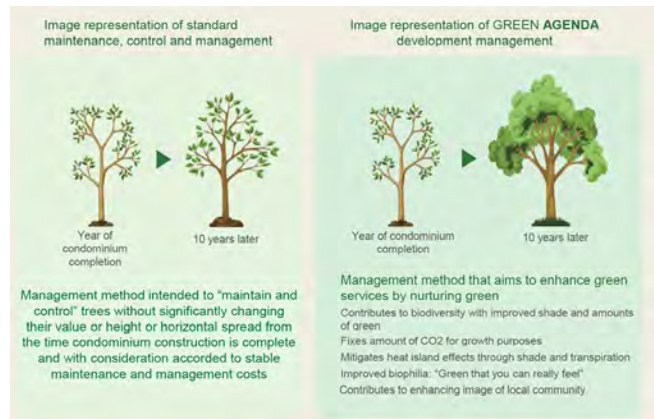
In condominiums, ISHIKATSU EXTERIOR INC. plans and constructs **greenery to realize a living environment that nurtures life**, create planting management plans (agendas) to connect them to the future, and promote "GREEN AGENDA," which integrates **planning and management based on management plans and 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 aims 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 image 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 FY2030^{*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

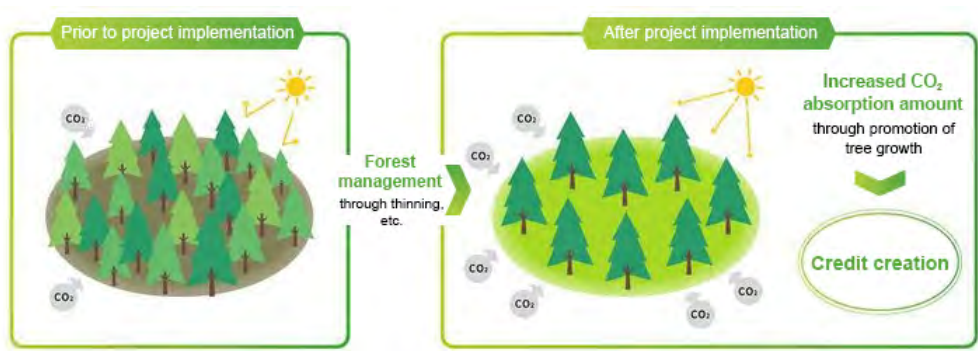
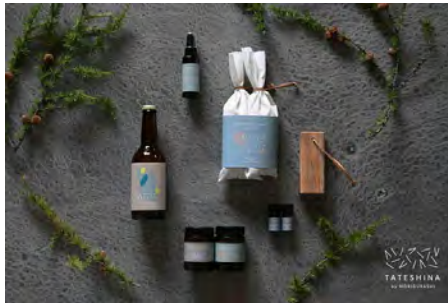


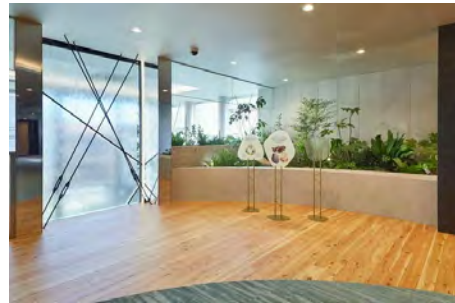
Illustration of credit creation based on forest management activities

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 “TENOKA Tateshina”

In “Tokyu Resort Town Tateshina,” **TENOKA 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 TENOKA 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 TENOKA Tateshina, achieving a form of local collaboration.

Furthermore, the plaza adjacent to TENOKA 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.



TENOKA Tateshina exterior



TENOKA 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.”



Rock Islands of Palau, designated as wildlife sanctuary



Biib, national bird

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**.



Beach in front of hotel

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.



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
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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
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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



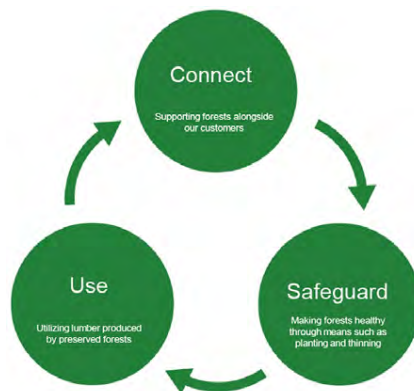
COMFORIA Takashimadaira



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 Nishiawakura 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 NCFA 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	● First edition issued based on TNFD disclosure recommendations beta version V0.4
Ver. 2	1/19/2024	● Revision and addition of the following text based on changes in the official version of the TNDF disclosure recommendations announced in September 2023: ● 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: ● 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	● Addition of the following content regarding Tokyu Resort Town Tateshina: ● 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: ● 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.



Pollution and Resources

[< Environment](#) | [Climate Change](#) | [TCFD / TNFD disclosure](#) | [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

Time-specific targets to reduce pollution

The commercial facilities operated and managed by our company emit NOx and SOx during the operation of air conditioning equipment, etc., but we adjust operation as needed to keep emissions below target levels, and we confirm that these levels remain below target levels every year.

ESG Data : Other pollutant emissions →

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

Waste

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

ESG Data : Waste discharge amount 

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

Our Group is continually working to reduce the environmental impact of our business activities. TOKYU COMMUNITY CORP. and Tokyu Real Estate REIT Management Co., Ltd. have obtained ISO 14001 certification and is contributing to the environment by building a system for reducing environmental impact.

The percentage of business locations in our Group that have obtained ISO 14001 certification is 33.3%. (As of April 2025)

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

For existing buildings where rebuilding is considered the most efficient use, our Group actively promotes regeneration architecture by utilizing and reinforcing the existing framework as a method of extending the economic value and useful life of the building. The average lifespan of buildings in Japan is approximately 30 years, which is significantly shorter than the approximately 100 years in Western countries. However, the reality is that many old Japanese buildings still have sound frameworks; they simply have concerns about earthquake resistance due to aging or are no longer suited to changing needs over time. For such buildings, "regeneration architecture" makes use of the existing framework while also maximizing real estate value through flexible design and planning, while also pursuing profitability. Using "regeneration architecture" can significantly reduce CO₂ emissions and industrial waste during construction compared to rebuilding.

ESG Data :Regeneration Architecture →

In addition, in the office buildings we manage and operate, we not only use recycled carpets during development, but also in restoration work for tenants.

Raw material used

Tokyu Land Corporation conducts development projects while taking into consideration the effective use of resources. In particular, when it comes to timber use, we monitor the areas where we source wood to determine whether there is any deforestation or conversion of natural ecosystems (DCF).

ESG Data : Raw material used →

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.

Water Use

< Environment | Climate Change | TCFD / TNFD disclosure | 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 ✓ | Third-party Independent Verification ✓

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 water usage, data on water consumption (tap water, sewage, and grey water) are included in the scope of verification.

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



Independent Verification Report by a third party →



Supply Chain (Environment)

< Environment

Climate Change

TCFD / TNFD disclosure

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

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% each fiscal year

* 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.

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

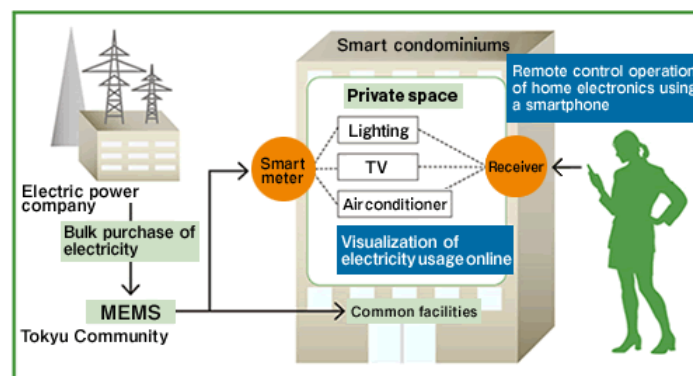
To promote efficient energy use, smart meters are installed at all facilities operated and managed by TOKYU LAND CORPORATION.



Smart meter (sample image)

Managing energy usage of condominiums

Tokyu Community Corporation has been selected to be an 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.