

# Transition Plan toward Decarbonized Society



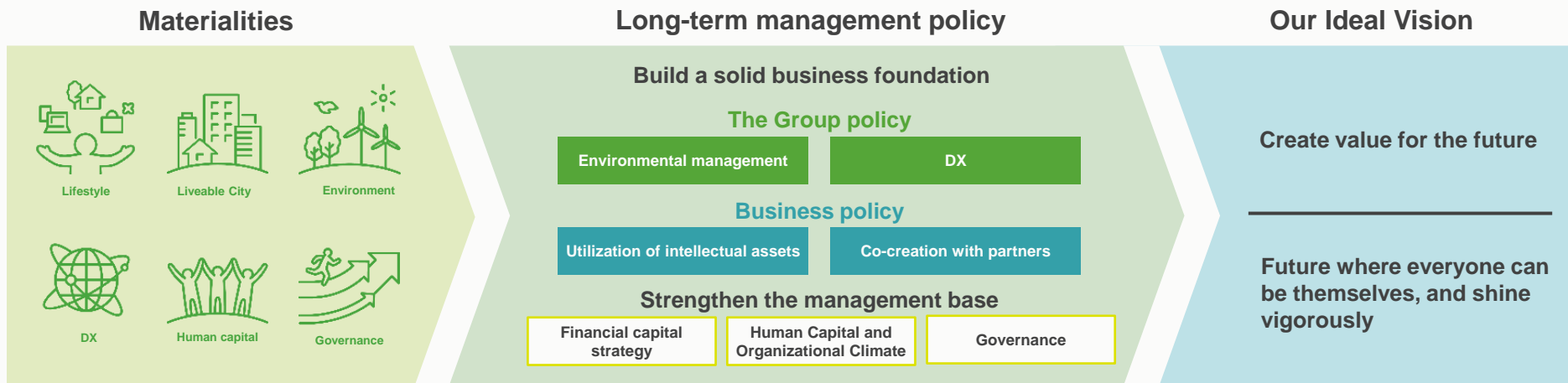
**TOKYU FUDOSAN HOLDINGS**



# INTRODUCTION

# Environmental Management by Tokyu Fudosan Holdings and the Positioning of the Transition Plan

- 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.

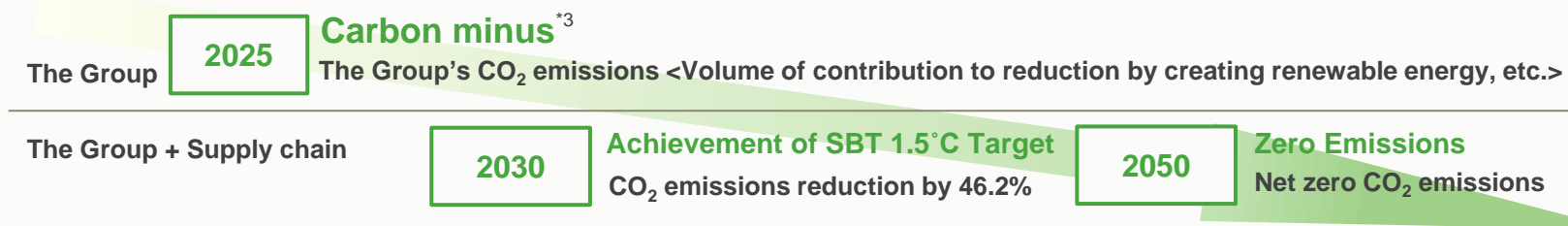


- Additionally, through its myriad of business activities, the group has been tackling the realization of a sustainable society and environment challenges since its founding. In May 2021, we formulated our GROUP VISION 2030, the Group's long-term vision based on materialities such as creating lifestyles that contribute to the environment.
- In our long-term vision and our Medium-Term Management Plan 2025, having positioned environmental management as a major pillar, 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 CO<sub>2</sub> emissions and are striving to reduce our environmental impact through our businesses.
- This document is a transition plan that organizes and summarizes information on our efforts toward decarbonization from these Long-Term Management Policies, Mid-Term Management Plan and our other initiatives.

## Upon Forming Transition Plan

- Aiming to reduce its environmental footprint through all of its businesses, the group has adopted a policy of net zero emissions by the year 2050 with a decarbonized society as its goal. We are also taking part in Business Ambition for 1.5°C and Race to Zero, both of which are international campaigns, and are pushing forward with associated efforts.
- As a milestone, we are aiming to make the group carbon minus by 2025, the final year of Medium-Term Management Plan 2025. We commits to reduce absolute scope 1 and 2 GHG emissions 46.2% by FY2030 from a FY2019 base year. We also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, capital goods, and use of sold products <sup>\*1</sup> 46.2% over the same timeframe.(SBTi-approved targets).  
In addition, the Medium-Term Management Plan called for a 50% reduction in Scope 1 and 2 GHG<sup>\*2</sup> emissions in FY2023, and we achieved this goal one year ahead of schedule with a 50.6% reduction in FY2022 (preliminary figures).

### Targets related to climate change



- Under GROUP VISION 2030, the Group's long-term vision, we are aiming to achieve these targets based on the premise of our business growth. However, in doing so, factors such as the engagement with the group's supply chain and technological development are imperative. We may also be subject to the further intensification of climate change and regulatory tightening beyond what we are envisioning. While regularly following up on these trends, we will proceed to revise our business plans as appropriate.
- Additionally, for our longer-term plans aimed at realizing net zero emissions by the year 2050, we plan on further implementing efforts in the future while gathering information on the likes of technological development and business trends.

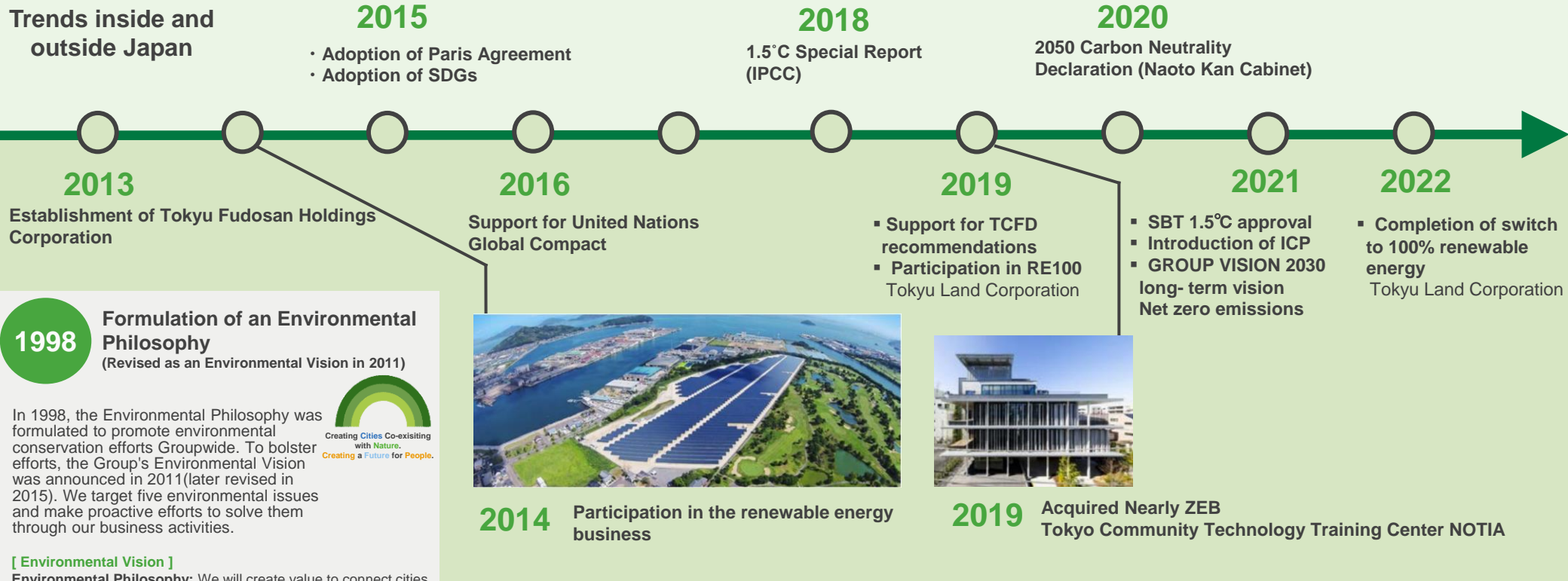
\*1: Category1: purchased goods and services / Category2: capital goods / Category11: use of sold products (CO<sub>2</sub> emissions in Scope 3 account for over 90% of those three categories)

\*2: Since more than 99.9% of our GHG emissions are CO<sub>2</sub>, the term "CO<sub>2</sub>" is used hereafter.

\*3: For details, see the GROUP VISION 2030

# History of the Group's Environmental Management Efforts

Trends inside and outside Japan



**1998** Formulation of an Environmental Philosophy  
(Revised as an Environmental Vision in 2011)

In 1998, the Environmental Philosophy was formulated to promote environmental conservation efforts Groupwide. To bolster efforts, the Group's Environmental Vision was announced in 2011 (later revised in 2015). We target five environmental issues and make proactive efforts to solve them through our business activities.



[ Environmental Vision ]  
**Environmental Philosophy:** We will create value to connect cities and nature, and people with the future.

**Environmental Policy:** We will make efforts to harmonize the environment and the economy through business activities.

**Environmental Action:** We will tackle five environmental issues from three viewpoints.

[ Three viewpoints ]

- Publicize a goal 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 chains

Accommodated TCFD



**2014** Participation in the renewable energy business



**2019** Acquired Nearly ZEB Tokyo Community Technology Training Center NOTIA

**2018** Implemented scenario analysis as Ministry of the Environment-supported project

Implemented analysis for **2°C** and **4°C** scenarios. Target businesses were urban development, which was analyzed for 2030, and leisure, which was analyzed for 2050.

**2020** Expansion of target fields Revision of scenario analysis

Implemented analysis for **1.5°C**, **3°C** and **4°C** scenarios. Target businesses were urban development, residential, leisure and renewable energy, each of which were analyzed for 2030 and 2050.

**2023** Incorporation of net zero emissions by 2050 based on updated scenario by IEA

Incorporated newly-presented **1.5°C** scenario. Target businesses were urban development, residential, leisure and renewable energy, each of which were analyzed for 2030 and 2050.

# Highlights of Efforts Geared Towards Decarbonization

## Effort Example

### Condominiums that have introduced 100% renewable energy electricity

Branz Tower Tanimachi 4-Chome has introduced effectively 100% renewable energy for all units and common areas, achieving an environmentally advanced condominium promoting decarbonization together with residents.



### BRANZ Chiyoda Fujimi (ZEH-certified)

Acquired ZEH oriented certification. While preserving the quality of the indoor environment, we will aim to reduce primary energy consumption in the entire condominium, common areas included, by at least 20%.



### Utilized onsite PPA at LOGI'Q logistics facility

We will reduce environmental impact with the use of ReENE green energy, which is 100% powered by renewable energy, for tenant enterprises, their shipper companies, etc. in LOGI'Q.

### Example of environment certification acquired (Properties with DBJ Green Building Certification)

#### ●5Stars



TOKYO PORTCITY  
TAKESHIBA



SHIBUYA  
SOLASTA



Hibiya Park Front

#### ●4Stars



Shin-Aoyama  
Tokyu Building



Jimbocho Kita  
Tokyu Building



Shin-Meguro  
Tokyu Building

### Example of a ZEB certified property

#### ●Tokyo Community Technology Training Center NOTIA (completed in 2019)

First city office building to acquire nearly ZEB certification. Successfully reduced primary energy consumption by 87%, which is above standard levels, in FY2020.



#### ●COCONO SUSUKINO (scheduled for completion in 2023)

Obtained "ZEB Ready" certification, the nation's largest certification for a commercial/hotel mixed-use building as a whole.



## Highlights in figure form (FY2022)

Scope1, 2  
**50.6% reduction in emissions<sup>\*1</sup>**  
(Target achieved 1 year ahead of schedule)

RE100  
Switch to renewable energy  
**Achieved 100%<sup>\*2</sup>**  
(Tokyu Land Corporation)

Environment certification acquisition<sup>\*3</sup>  
(CASBEE/DBJ, etc.)  
**48.7%**

ZEB/ZEH level<sup>\*4</sup>  
**25%**

CDP climate change A list  
**2 consecutive years**

Environmental efforts through business  
**36 cumulative efforts**

### Renewable Energy Business

- Rated capacity<sup>\*5</sup> : **1,577MW**
- Amount of generation per year<sup>\*5</sup> : **3,495GWh**  
(equivalent to **approximately 736,000 ordinary households<sup>\*6</sup>**)
- CO<sub>2</sub> reduction<sup>\*7</sup> : **approximately 1,520,000 t-CO<sub>2</sub>/year**

<sup>\*1</sup>: FY2022 results are preliminary figures before third-party certification. <sup>\*2</sup>: Certain exceptions (joint businesses, etc.) are present. <sup>\*3</sup>: Non-residential large-scale holdings (total floor area of 10,000 m2 or more). Excluding some joint projects, etc. <sup>\*4</sup>: Percentage of condominiums, offices, and other facilities for sale by Tokyu Land Corporation that have building performance equivalent to ZEB/ZEH Oriented or higher (based on construction starts). <sup>\*5</sup>: Before calculation of equity share (including projects under development). <sup>\*6</sup>: Calculated based on the electricity consumption per household of 4,743 kWh/year (based on the "Indication Guidelines FY2022" from Japan Photovoltaic Energy Association). <sup>\*7</sup>: CO<sub>2</sub> emission factor of 435g-CO<sub>2</sub>/kWh for nationwide average coefficient in "Emission Factors by Electric Utility (FY2021 Results)" published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.

## INTRODUCTION

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## TRANSITION PLAN

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# TRANSITION PLAN



# Corporate Governance System

Governance	Strategy
Risk management	Metrics and targets

- With climate-related targets, etc. having been approved by the board of directors, the group has established a system to oversee associated progress.
  - Upon electing directors, we are mindful of outfitting competence in the environment and sustainability.
  - Having clarified the roles and responsibility of management, we are responsibly working towards the realization of net zero emissions by the year 2050.

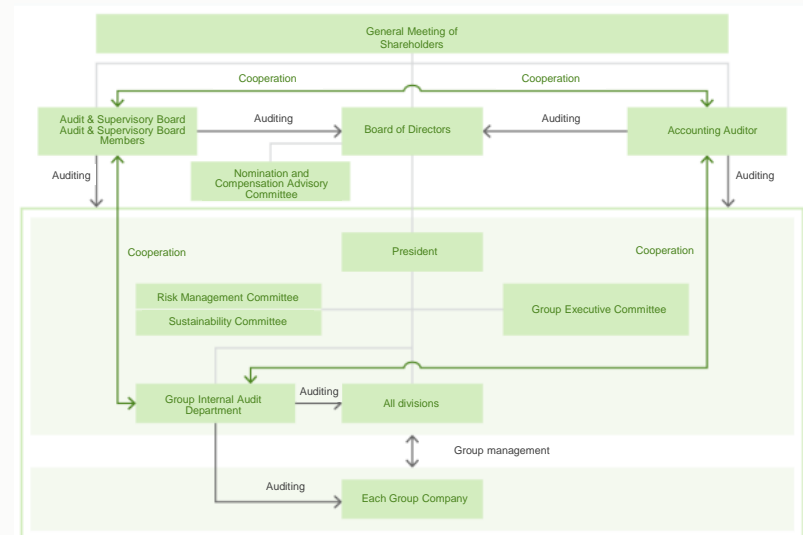
## Main roles of organization

- The group established a sustainability committee with the president & CEO (Chair) and operating officers as its members. This committee devises plans and verified results with respect to material sustainability issues including the assesment and the management of climate change risk and opportunity.
- 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.

Based on the instructions of the president & CEO to adopt environmental management as one of our pillars, in FY2020, we established net zero emissions by 2050 as a target and applied for SBT 1.5°C target, and acquired its approval in FY2021. Also starting in FY2021 year, we also take efforts for climate-related challenges and other ESG into consideration when determining officer remuneration.

## Organizational chart

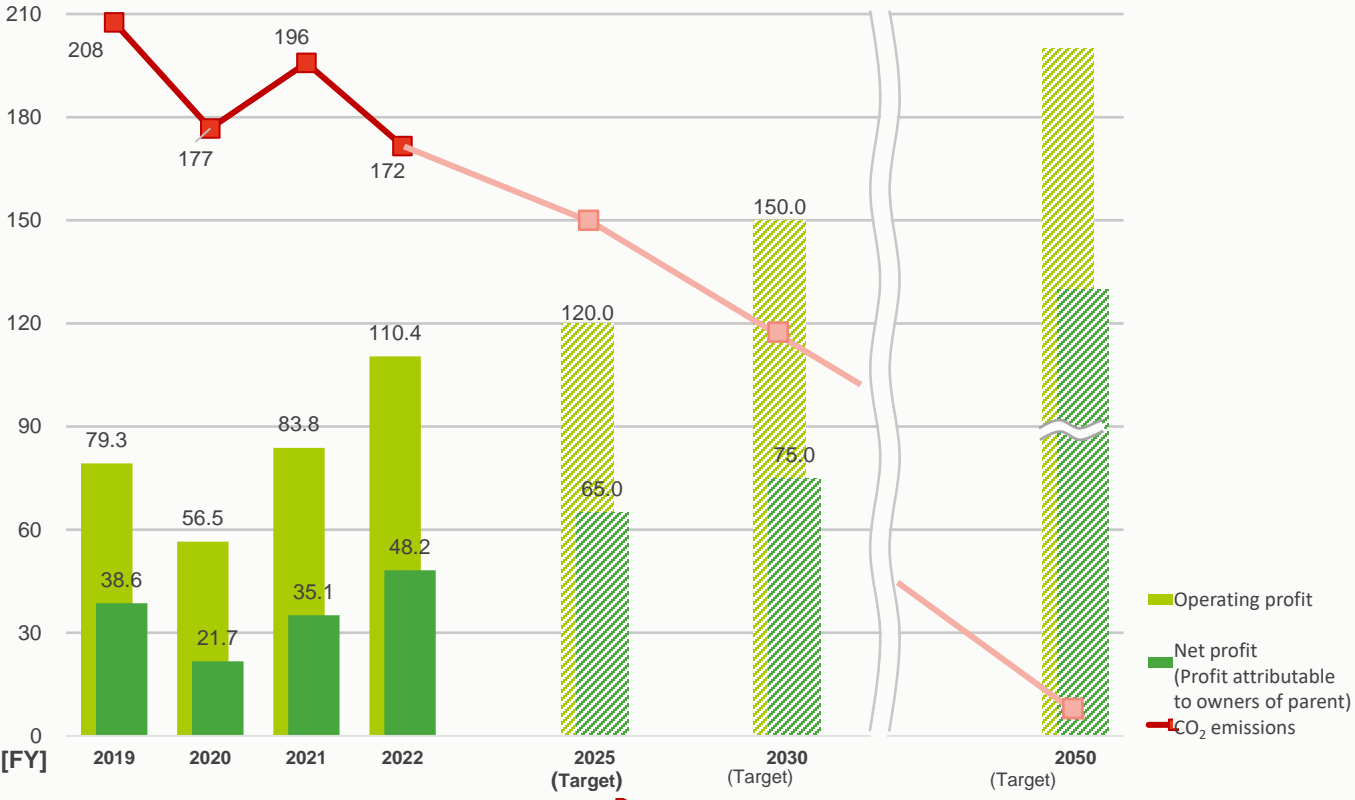
- The group executive committee and sustainability committee work in tandem to formulate policies, targets (KPI) and action plans related to environmental management, with oversight provided by the board of directors.
- The monitoring of KPI progress and the management of results is conducted by the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



# 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 CO<sub>2</sub> emissions through efforts such as switching power used at offices of and facilities held by Tokyu Land Corporation, our core company, to 100% renewable energy, setting ZEB standards for new buildings in principle, and promoting ZEH as a standard specification at BRANZ condominiums.
- Going forward, we will continue to pursue reductions of CO<sub>2</sub> 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.

[Emissions: Ten thousand t-CO<sub>2</sub>] [Profit: Billion yen]



Scheduled amount of total investment: 2,200 billion yen (FY2021-FY2025)

■ **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 Aimed at Realizing a Decarbonized Society

Governance	Strategy
Risk management	Metrics and targets

- Under our Medium-Term Management Plan, we are pursuing the below efforts in order to achieve our CO<sub>2</sub> emissions reduction targets. Efforts by the group are steadily making progress. At Tokyu Land Corporation, we completed the switch of power used at offices of and facilities held by the company to 100% renewable energy, one of the RE100 requirements, in December 2022\*1.
- We will continue to promote ZEB/ZEH standardization at facilities, environment certification acquisition, and implement other efforts.

Measures	Targets	Results	Topics
Scope1 and 2			
RE100	Achieved in 2022 (Tokyu Land Corporation)	Completed switch to 100% renewable energy in December 2022	Utilized highest domestic level of renewable energy power generation capability Achieved faster*2 than any other Japanese business company
Scope3			
ZEB/ZEH level *3	FY2025: Approx. 50% FY2030: 100%	Achieved 25% (FY2022)	March 2022: All new buildings to be ZEB level in principle Sep 2022: Promoted ZEH as standard specification at all BRANZ
Other measures			
Environment Certification Acquisition*4	FY2025: Approx. 70% FY2030: 100%	48.7% (FY2022)	Example of acquisition of certifications: Properties for which we acquired 5 stars under DBJ certification TOKYO PORTCITY TAKESHIBA/SHIBUYA SOLASTA/Hibiya Park Front
Introduction of ICP	FY2023 Introduction into management decisions	Commencement of “visualization” in cases submitted to Executive Committee or review (FY2022)	*1: Certain exceptions (joint businesses, etc.) are present *2: According to list at end of RE100 Annual disclosure report *3: Percentage of condominiums, offices and other facilities of Tokyu Land Corporation with a building performance equivalent to or greater than ZEB/ZEH Oriented (construction start basis) *4: Large non-residential properties held (with a floor space of 10,000 m <sup>2</sup> or more) are subject to certification. Certain exceptions (joint businesses, etc.) are present.
GX League Support	In support of the basic concept of the GX League, we have decided to officially join the GX League.		

# Measures Aimed at Realizing a Decarbonized Society - Efforts Regarding Renewable Energy-

Governance	Strategy
Risk management	Metrics and targets

- 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. 240 billion yen (5-year period between FY2021-2025)

Target for FY2025 rated capacity: 2.1 GW\*<sup>1</sup> (Equivalent to 2 nuclear power plants\*<sup>2</sup>)

### 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\*<sup>3</sup>]
- Community coexistence [FOURE\*<sup>4</sup>]

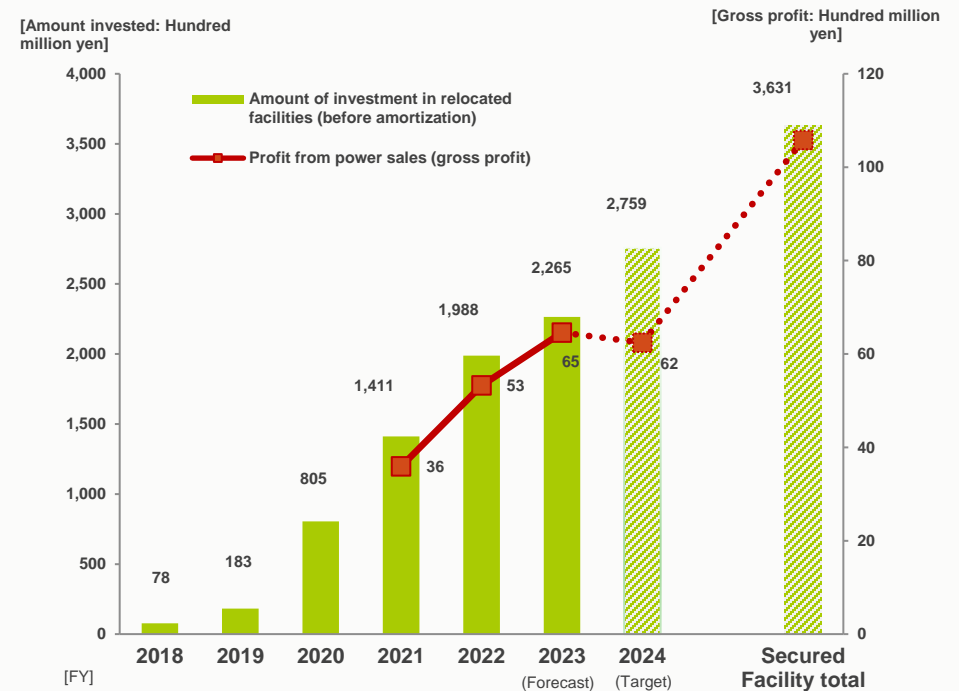
\*1: Before calculation of equity share \*2: Power generated per station calculated as 1GW  
 \*3: General Incorporated Association for the Promotion of Long-Term Stable Power Supply from Renewable Energies  
 \*4: General Incorporated Association for Renewable Energy Community Revitalization

## Profit plan based on facilities secured and total amount of investment

[As of end of March 31, 2023] Rated capacity\*<sup>5</sup>: 1,577MW

- Facilities in operation: 65 (59 solar power/5 wind power/1 biomass)
- Facilities in development: 23 (12 solar power/7 wind power/4 biomass)

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



\*5 : Before calculation of equity share (including projects under development)

For details, see Briefing Materials on FY2022 Financial Results

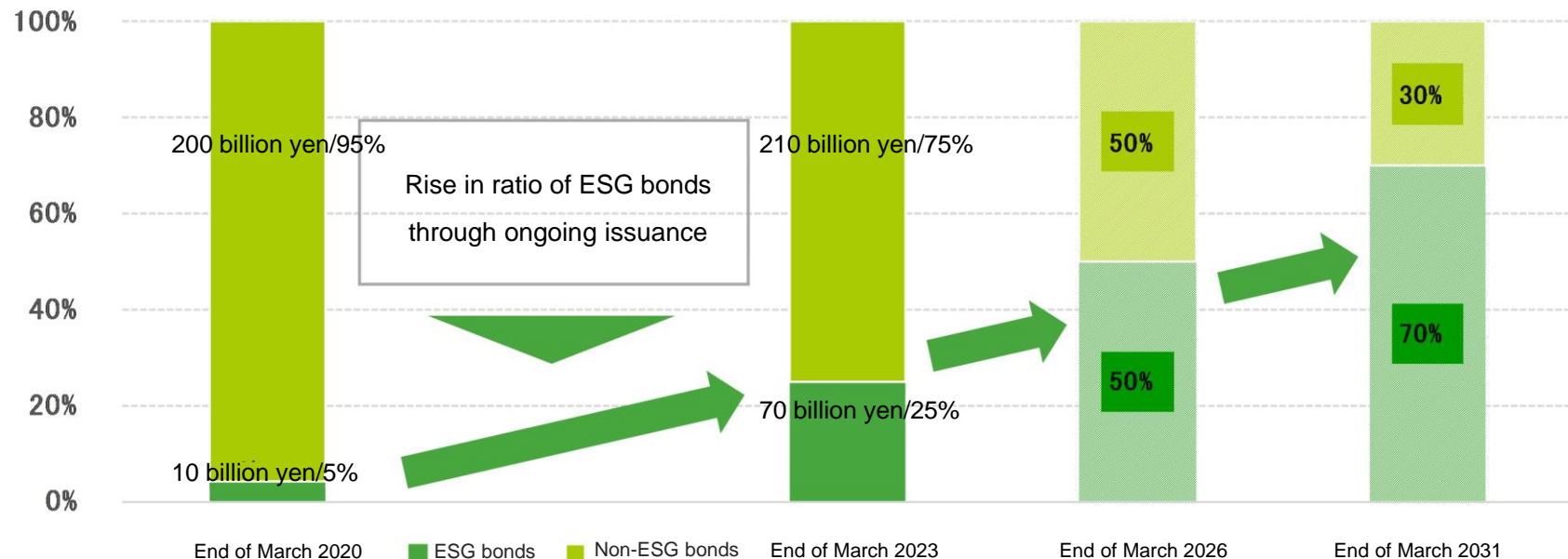
# Measures Aimed at Realizing a Decarbonized Society

## -Policy on Financing-

Governance	Strategy
Risk management	Metrics and targets

- 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



# Scenario Analysis, Risks and Opportunities

Governance	Strategy
Risk management	Metrics and targets

- We perform scenario analysis to identify, assess and manage risks and opportunities related to climate change over the medium term (FY2030) and long term (FY2050) for the group's four businesses (Urban development, leisure, residential and renewable energy) and incorporate those assessments in our business strategy.
- We performed analysis based on the three cases of 1.5°C, 3°C and 4°C using scenarios by the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC) as a reference

## Scenarios referenced

### 1.5°C scenario

- Adopted scenario of keeping the rise in average global temperature at the end of the 21st century to 1.5°C relative to that before the Industrial Revolution as government policy, technology, markets, etc. steadily make the transition to a decarbonized society under the Paris Agreement.

### 3°C scenario

- Adopted scenario in which the rise in average global temperature at the end of the 21st century is approx. 3°C relative to that before the Industrial Revolution should each country comply with Nationally Determined Contributions (NDCs).

### 4°C scenario

- Adopted scenario in which government policy, technology, markets, etc. grow along their current trajectory and the rise in average global temperature at the end of the 21st century is approx. 4°C relative to that before the Industrial Revolution, causing climate change-induced natural disaster risks to increase.

For details, see Disclosures based on TCFD recommendations

## Material climate-related challenges

- With respect to climate-related risks and opportunities, significant challenges that impact the Group are recognized in the following fashion.

Classification	Types	Material issues	Serious impact
Transition risks	Current regulation	Energy conservation reporting requirement Energy Efficient Building Codes	
	Emerging Regulation	More stringent GHG emission reduction regulations Carbon taxation	○
	Technologies	Increase in construction and renovation costs for ZEB/ZEH	○
	Legal costs	Credit purchase under Tokyo Cap-and-Trade Program	
	Market	Delayed response to price trend reflecting environmental value Increasing energy cost	○
	Reputation	Changing attitudes of customers and investors	
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	Utilization ESG finance	○
	Resilience	Energy conservation renovation of operating assets, BCP compliance	

# Scenario Analysis, Risks and Opportunities

## - Overview of 1.5°C Scenario Analysis -

Governance	Strategy
Risk management	Metrics and targets

Category	Description of risks and opportunities		Strategies of the group	Financial impact			
				Businesses	Medium term	Long term	
[Transition risks] Policy and legal / Technologies / Markets / Reputation  [Opportunities] Energy sources / Products and services / Market	[Risks]	Rise in cost of new construction, improvements and repairs in line Act on the Rational Use of Energy being reinforced and ZEB/ZEH becoming mandatory	Promote ZEB/ZEH at newly-constructed buildings, carry out equipment updates at existing facilities of operation and differentiate ourselves through early introduction of renewable energy power			High	Medium low
		Cost of construction and operation rising due to introduction of carbon pricing program	Reduce CO <sub>2</sub> emissions up to the building stage by working together with general contractors and reduce the impact of the introduction of carbon pricing			Medium low	Low
	[Risks] or [Opportunities]	Increase in tenant-side needs for ZEB buildings affecting rents and vacancy rates	Promote low carbon under each business by introducing internal carbon pricing and reduce the impact of the introduction of official pricing system			Medium low	Low
		Increase in residence buyer-side needs for ZEH buildings causing competition among products to intensify	Expand businesses that accommodate that increase in needs			Medium high	Low
	[Opportunities]	Considerable increase in renewable energy power needs	Utilize local natural energy			Medium high	Low
	[Physical risks] Acute / Chronic  [Opportunities] Resilience	[Risks]	Gradual increase in damage to facilities as a result of natural disasters	Facilitate differentiation through bolstering of BCP/LCP through selection of building locations and cooperation with tenants and residents			Low
Shorter business hours at ski resorts due to rise in outdoor temperatures						Low	Medium low
[Risks] or [Opportunities]		Increase in tenant-side needs for Business Continuity Plan (BCP) at facilities affecting rent and vacancy rates	Secure revenues through off-season use of facilities			Low	Medium low
		Increase in residence buyer-side needs for Life Continuity Plan (LCP) causing regional selection and competition among products to intensify				Low	Medium low

Urban Development: Residential: Leisure: Renewable Energy:

\*The degree of impact is classified as shown below.
















High: 10% or more of consolidated operating revenue Medium-high: 10% or more of operating revenue of applicable business portfolio Medium: 5% to 10% of operating revenue of applicable business portfolio Medium-low: 2% to 5% of operating revenue of applicable business portfolio Low: Less than 2% of operating revenue of applicable business portfolio



# Scenario Analysis, Risks and Opportunities

## - Overview of 3°C Scenario Analysis -

Governance	Strategy
Risk management	Metrics and targets

Category	Description of risks and opportunities		Strategies of the group	Financial impact			
				Businesses	Medium term	Long term	
[Transition risks] Policy and legal / Technologies / Markets / Reputation  [Opportunities] Energy sources / Products and services / Market	[Risks]	Rise in cost of new construction, improvements and repairs in line Act on the Rational Use of Energy being reinforced and ZEB/ZEH becoming mandatory	Promote ZEB/ZEH at newly-constructed buildings, carry out equipment updates at existing facilities of operation and differentiate ourselves through early introduction of renewable energy power 		Medium high	Medium high	
		Cost of construction and operation rising due to introduction of carbon pricing program					Reduce CO <sub>2</sub> emissions up to the building stage by working together with general contractors and reduce the impact of the introduction of carbon pricing 
	[Risks] or [Opportunities]	Increase in tenant-side needs for ZEB buildings affecting rents and vacancy rates	Promote low carbon under each business by introducing internal carbon pricing and reduce the impact of the introduction of official pricing system 		Medium low	Medium low	
		Increase in residence buyer-side needs for ZEH buildings causing competition among products to intensify					Expand businesses that accommodate that increase in needs 
	[Opportunities]	Considerable increase in renewable energy power needs	Utilize local natural energy 		Medium high	Medium high	
		Shrinking demand for tenant offices due to popularization of teleworking affecting increase in demand for satellite offices despite rent and vacancy rates being impacted	Expand satellite offices in anticipation of popularization 				
	[Physical risks] Acute / Chronic  [Opportunities] Resilience	[Risks]	Gradual increase in damage to facilities as a result of natural disasters	Facilitate differentiation through bolstering of BCP/LCP through selection of building locations and cooperation with tenants and residents 		Low	
			Shorter business hours at ski resorts due to rise in outdoor temperatures				Facilitate differentiation from competing facilities through off-season use of facilities, intensive investment in ski resorts located in high-longitude areas where there is ample snowfall and golf course management using turf with formidable heat tolerance 
		[Risks] or [Opportunities]	Increase in tenant-side needs for BCP at facilities affecting rent and vacancy rates	Facilitate differentiation from competing facilities through off-season use of facilities, intensive investment in ski resorts located in high-longitude areas where there is ample snowfall and golf course management using turf with formidable heat tolerance 		Low	Medium
			Increase in residence buyer-side needs for LCP causing regional selection and competition among products to intensify				

Urban Development:  Residential:  Leisure:  Renewable Energy: 

\*The degree of impact is classified as shown below.

High: 10% or more of consolidated operating revenue Medium-high: 10% or more of operating revenue of applicable business portfolio Medium: 5% to 10% of operating revenue of applicable business portfolio Medium-low: 2% to 5% of operating revenue of applicable business portfolio Low: Less than 2% of operating revenue of applicable business portfolio

# Scenario Analysis, Risks and Opportunities

## - Overview of 4°C Scenario Analysis -

Governance	Strategy
Risk management	Metrics and targets

Category	Description of risks and opportunities		Strategies of the group	Financial impact		
				Businesses	Medium term	Long term
[Transition risks] Policy and legal / Technologies / Markets / Reputation  [Opportunities] Energy sources / Products and services / Market	[Risks]	Increase in building costs of general contractors and air conditioning expenses during operation due to rise in outdoor temperatures	Aggressively enhance performance of newly-built buildings and update equipment of existing facilities in operation and differentiate ourselves through early introduction of renewable energy power		Low	Low
	[Risks]	Increase in residence buyer-side needs for high-performance residences to cope with higher outdoor temperatures	Expand businesses that accommodate that increase in needs		Low	Medium low
	[Opportunities]	Anemic government policy support for and unclear market trends surrounding renewable energy power	Propose new leisure lifestyles such as workations		Low	Medium
	[Opportunities]	Shrinking demand for tenant offices due to popularization of teleworking and increase in demand for satellite offices despite rent and vacancy rates being impacted	Expand satellite offices in anticipation of popularization		Low	Low
[Physical risks] Acute / Chronic  [Opportunities] Resilience	[Risks]	Increase of impact from rise in sea level, prompting rapid increase in damage to facilities from natural disasters	Facilitate differentiation through bolstering of BCP/LCP through selection of building locations and cooperation with tenants and residents		Low	Medium
	[Risks]	Shorter business hours at ski resorts due to rise in outdoor temperatures	Facilitate differentiation in the form of measures to reinforce infrastructure in local communities, including introduction of storage cells		Low	Medium
	[Risks]	Increase in tenant-side needs for BCP at facilities affecting rent and vacancy rates	Facilitate differentiation from competing facilities through off-season use of facilities, intensive investment in ski resorts located in high-longitude areas where there is ample snowfall and golf course management using turf with formidable heat tolerance		Low	Medium high
	[Opportunities]	Increase in residence buyer-side needs for LCP causing regional selection and competition among products to intensify			Low	Medium

Urban Development: Residential: Leisure: Renewable Energy:

\*The degree of impact is classified as shown below.

High: 10% or more of consolidated operating revenue    Medium-high: 10% or more of operating revenue of applicable business portfolio    Medium: 5% to 10% of operating revenue of applicable business portfolio  
 Medium-low: 2% to 5% of operating revenue of applicable business portfolio    Low: Less than 2% of operating revenue of applicable business portfolio

# Metrics and targets - CO<sub>2</sub> Emission-related -

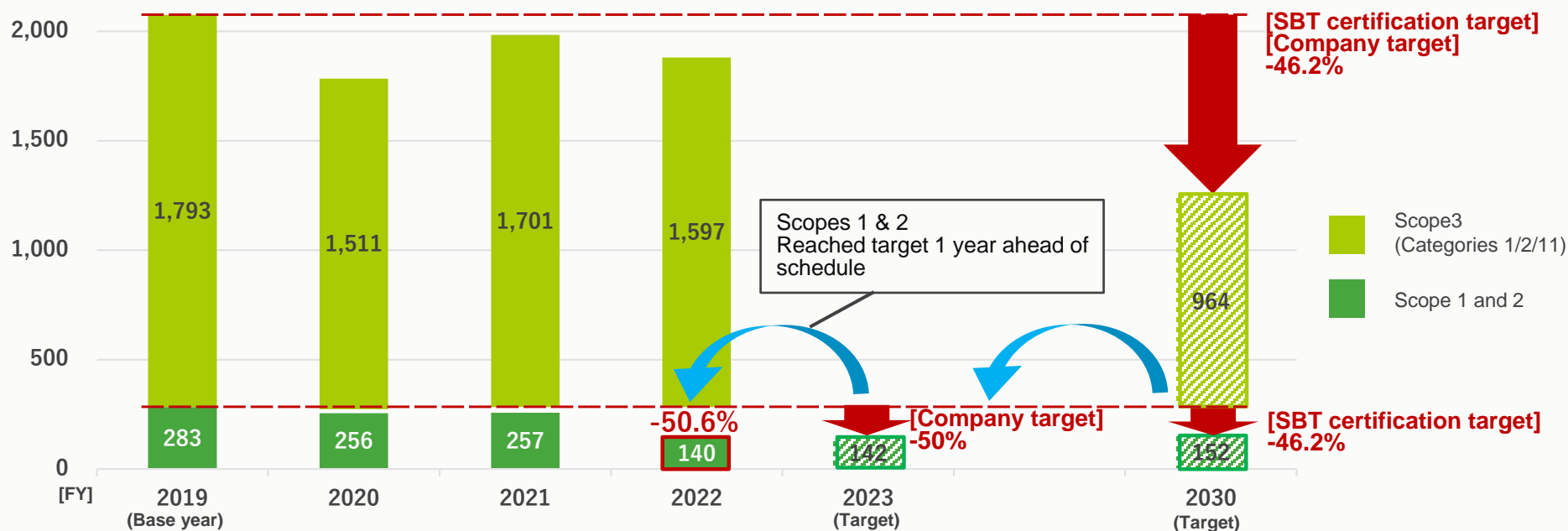
Governance	Strategy
Risk management	<b>Metrics and targets</b>

## 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 CO<sub>2</sub> 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 CO<sub>2</sub> emissions.
  - In addition, the Medium-Term Management Plan called for a 50% reduction in Scope 1 and 2 CO<sub>2</sub> emissions in FY2023, and we achieved this goal one year ahead of schedule with a 50.6% reduction in FY2022 (preliminary figures).
  - Our emission figures undergo a third-party guarantee by an environmental certification agency.

## Emission results and targets

[Thousand t-CO<sub>2</sub>]



## Metrics and targets - Other -

Governance	Strategy
Risk management	Metrics and targets

- In addition to CO<sub>2</sub> emissions, the group has set KPI for the below items, which each of our business departments tackling them responsibly.

KPI		FY2030 targets	FY2025 targets	FY2021 result	FY2022 result
Financial targets	ROE	10% or more	9%	5.7%	7.3%
	ROA	5% or more	4%	3.2%	4.1%
	D/E ratio	2.0 times or less	2.2 times or less	2.3 times	2.2 times
	Operating profit	150 billion yen or more	120 billion yen	83.8 billion yen	110.4 billion yen
	Net profit	75 billion yen or more	65 billion yen	35.1 billion yen	48.2 billion yen
Environmental targets	Achieve RE100 (Tokyu Land Corporation)	Achieved	Achieved	-	Completed switch
	Percentage of renewable energy power usage	60% or more	65%	4.0%	52.9%
	Environment certification acquisition <sup>*1</sup>	100%	70%	35%	48.7%
	Environmental efforts through business (cumulative)	100 cases or more	50 cases or more	22 cases	36 cases
BCP targets	Strengthening of safety and security measures <sup>*2</sup>	100%	100%	100%	100%

\*1: Large non-residential properties held (with a floor space of 10,000 m<sup>2</sup> or more) are subject to certification. Certain exceptions (joint businesses, etc.) are present.

\*2: Support people who have difficulty returning home in the event of a disaster in a large and non-residential building, etc.

## Examples of CASBEE, DBJ and other environmental certifications

- In FY2019, we acquired an S-rank of CASBEE's new CASBEE-Wellness Office certification, the highest rank of that certification, at SHIBUYA SOLASTA, where our headquarters is located.



- In FY2020, we acquired a 5-star DBJ Green Building ranking for an outstanding level of environmental and social consideration, among the highest in Japan, at the TOKYO PORTCITY TAKESHIBA Office Tower.



# Stakeholder Engagement

Governance	Strategy
Risk management	Metrics and targets

- In the real estate business operated by the group, the processes between the development and operation of our residential, office, commercial, leisure and other facilities include the involvement of many interested parties over a long period of time. In order to conduct an appropriate environmental response, we believe that we must tackle it through out our supply chain as a whole, working together with our stakeholders (design and construction companies, customers, etc.).
- With respect to supplier-side decarbonization efforts, we have stipulated in our Sustainable Procurement Policy that we will endeavor to promote the efficient use of energy and the use of renewable energy and reduce the impact of GHG emissions generated by our business activities on climate change.
- Also, through these efforts, we were selected as the CDP2022 Supplier Engagement Leader. (Selected for three consecutive years)
- In addition, we believe it is vital that we work together with various initiatives as an environmentally advanced company.



## Endorsement of various initiatives

- 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.



United Nations  
Global Compact



JCI



PRI



Governance	Strategy
Risk management	Metrics and targets

## Activities through industry organizations

- 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.

## Participation in formulation of manual for calculating GHG emissions upon construction

- 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. Given demands in the industry at large to improve the precision of emission calculations upstream, the Real Estate Companies Association of Japan formulated an emission calculation manual.
- 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.



\*

## Dissemination of environmental policy

- We distribute our Sustainable Procurement Policy to the construction companies that constitute our suppliers and verify suppliers' status of compliance with our environmental policy. We aim to establish a responsible supply chain by cooperating and collaborating to respond to issues when they are present.
- Tokyu Re・design Corporation conducts training at safety convention and other forums for members of management and personnel in charge of actual business at the construction companies that constitute our suppliers. In the course of doing so, we explain our environmental policy and endeavor to disseminate it. In FY2022, we conduct training on areas such as the handling of construction waste and measures to prevent environmental contamination by harmful substances generated during work.

\* [https://fdk.or.jp/k\\_environment/pdf/ghg\\_press\\_2306.pdf](https://fdk.or.jp/k_environment/pdf/ghg_press_2306.pdf)  
Manual image from the above release article

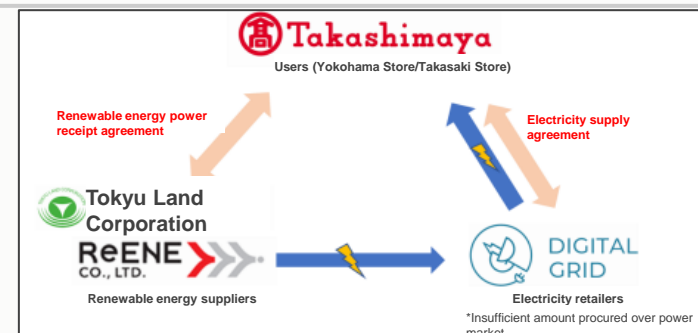
# Stakeholder Engagement - Downstream-

Governance	Strategy
Risk management	Metrics and targets

## 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.)

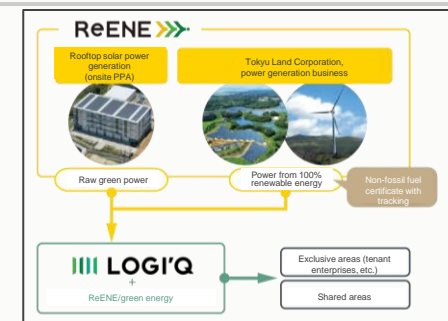


## Promotion of ZEH as standard specification at all BRANZ properties to be conducted ahead of schedule in FY2023

- 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.





# Stakeholder Engagement - National Government-

Governance	Strategy
Risk management	Metrics and targets

- In order to achieve net zero emissions around the world by the year 2050, we believe it is vital that we work together with the national government as an environmentally advanced company.

## Proactive participation in national government projects

- 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” publicly released by the TCFD Consortium.



\*1



\*2

## REASP activities

- 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.



\*1 <https://www.fsa.go.jp/news/r4/singi/20230131/01.pdf>

\*2 [https://tcfcd-consortium.jp/pdf/news/22100501/TCFD\\_Guidance\\_3.0\\_Case\\_Examples\\_j\\_v2.pdf](https://tcfcd-consortium.jp/pdf/news/22100501/TCFD_Guidance_3.0_Case_Examples_j_v2.pdf)

## 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 CO<sub>2</sub> 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.

For details, see Environmentally Advanced TOPICS

## Skill and Human Capital Development

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- In order to achieve net zero emissions by 2050, we believe that all of us in the group must collectively tackle climate change.
- To that end, we offer programs and conduct training for employees of the group to enhance their awareness of the environment and sustainability.

### Programs offered and training conducted

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- In FY2022, we established the “Sustainable Action Award” to recognize group employees as practitioners who take on the challenge of sustainable initiatives. In FY2022, we received 123 entries for this award, out of which 12 entries were recognized. We intend to continue holding the award in FY2023 as well.
- The group offers programs for enhancing its employees’ awareness of sustainability (including environmental themes) and engages in associated training.



- We conduct e-training for group employees once every six months in which we cover themes concerning sustainability. We also publish articles on sustainability in “TFHD GROUP MAGAZINE” (T-MAG), the group’s online newsletter.
- Tokyu Land Corporation conducted e-training on environmental management in January 2023.

## Other Efforts Concerning the Environment

- Under GROUP VISION 2030, the Group's long-term vision, we are pursuing environmental management as one of our group policies, and are focusing on a recycling-based society and biodiversity as well as a decarbonized society. Also, as climate change is envisioned to yield a certain level of impact even in a society that aims to decarbonize, we will also move to respond to physical risks as an adaptation measure and maintain our business continuity.
- For efforts that we will pursue as we aim to realize a decarbonized society, we will endeavor to ascertain risks from multiple sides through our Sustainability Committee, and will carry out those efforts after taking our contribution to a recycling-based society and impact on biodiversity into consideration.

### Recycling-based society

- Contribution to realization of recycling-oriented business cycle and sustainable local communities
  - Reduction of waste and water use
  - Stock utilization
  - Businesses based on coexistence between the community and the environment



Forestgate Daikanyama, a place for realizing the circular economy

### Biodiversity

- Contribution to preservation of local ecosystems with city and regional characteristics retained
  - CO<sub>2</sub> Absorption Type J-Credit Certification for Company-Owned Forests
  - Long-term maintenance and management of urban greenery
  - Sustainable procurement



Tokyu Resort Town Tateshina promotes "MORIGURASHI®".

### Response to physical risks

- Having set forth the likes of verifying the status of damage to company-managed real estate and payment to business partners as important operations in its BCP, Tokyu Housing Lease Corporation was recognized for its efforts in business continuity in situations where the risk of a large-scale disaster occurs and in other areas. This resulted in the company acquiring Resilience Certification, which is granted by ASSOCIATION FOR RESILIENCE JAPAN to certify organizations that contribute to national resilience.
- Tokyu Land Corporation has acquired the "ResREAL (flood damage version)" certification system that quantifies and visualizes the resilience of real estate against natural disasters certified by the Japan Real Estate Institute for the "Shibuya Minami Tokyu Building" owned by Tokyu Land Corporation. (Certification grade: GOLD)
- We are bolstering our BCP through the selection of building locations and cooperation with tenants and residents.



For details, see Environmental Management Report 2022

## Explanation of Terms

### ■ Reference scenarios for scenario analysis (p. 14-17)

IEA	<p>International Energy Agency: Established in 1974 in the aftermath of the first oil crisis as an international agency within the framework of the Organisation for Economic Cooperation and Development (OECD) with the main purpose of improving the energy situation in oil-consuming nations.</p> <p>[Scenarios]</p> <ul style="list-style-type: none"> <li>• SDS: Sustainable Development Scenario (under 2°C)</li> <li>• B2DS: Beyond 2 Degrees Scenario (under 2°C)</li> <li>• NZE2050: Net Zero by 2050 (1.5°C scenario)</li> <li>• STEPS: Stated Policies Scenario</li> <li>• RTS: Reference Technology Scenario</li> </ul>						
IPCC	<p>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.</p> <p>[Scenarios]</p> <p>RCP: Representative Concentration Pathways</p>						
	<table border="1"> <thead> <tr> <th>1.5°C</th> <th>3°C</th> <th>4°C</th> </tr> </thead> <tbody> <tr> <td>[IEA] SDS, B2DS, NZE2050 [IPCC] RCP2.6</td> <td>[IEA] STEPS, RTS, [IPCC] RCP6.0</td> <td>[IPCC] RCP8.5</td> </tr> </tbody> </table>	1.5°C	3°C	4°C	[IEA] SDS, B2DS, NZE2050 [IPCC] RCP2.6	[IEA] STEPS, RTS, [IPCC] RCP6.0	[IPCC] RCP8.5
1.5°C	3°C	4°C					
[IEA] SDS, B2DS, NZE2050 [IPCC] RCP2.6	[IEA] STEPS, RTS, [IPCC] RCP6.0	[IPCC] RCP8.5					

### ■ Terms

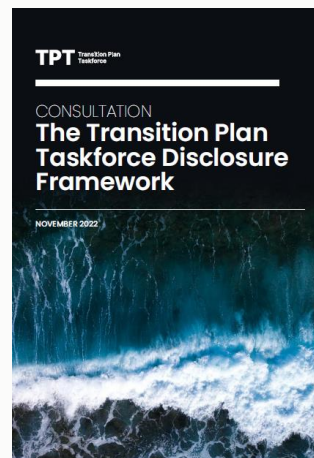
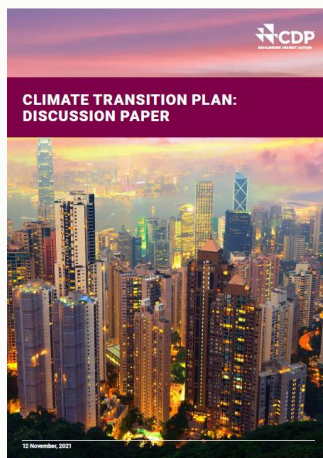
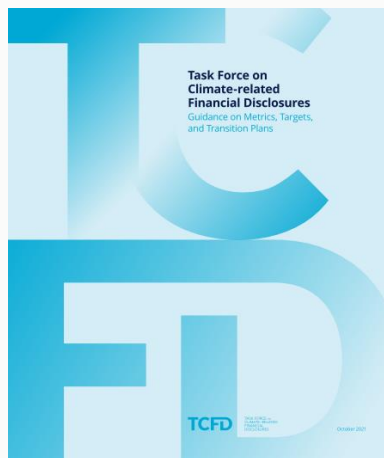
P. 4	Race To Zero	International campaign calling upon corporations, local autonomous bodies, investors, universities and other non-government actors to take action immediately to achieve the goal of reducing greenhouse gas emissions by essentially half by the year 2030.
P. 4	Scope 1, 2 & 3	Categorizations of greenhouse gasses 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.
P. 5	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).
P. 5	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.
P. 5	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. Disclosure recommendations: governance, strategy, risk management, metrics and targets

## Explanation of Terms

P. 5	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.
P. 5	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 <sub>2</sub> emissions to change the behavior of emitters.
P. 5	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.
P. 6	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. <ul style="list-style-type: none"> <li>· Onsite PPA: System through which PPA operators install power generation equipment in user sites and provide electricity.</li> <li>· Offsite PPA: System through which PPA operators provide electricity to specific general users through a general power grid.</li> </ul>
P. 11	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.
p.12	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.
P.12	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.
P.12	FOURE concept	Reciprocal and Regional Revitalization with Renewable Energy: Agreement between Tokyu Land Corporation, Osaka Gas, Loop, 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.
P. 20	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.
P. 20	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.
P. 20	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.



- The following were used as a reference in the preparation of this report.
- Task Force on Climate-related Financial Disclosures (TCFD)
  - “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”



### 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 July 2023. 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.



# *WE ARE GREEN*



**TOKYU FUDOSAN HOLDINGS**

*WE ARE GREEN* — We strive to merge the power of various forms of green deployed by our Group to create a future where everyone can be themselves and shine vigorously.