# Expanding business opportunities with the environment as a starting point

Group	policy	
Environmental management	DX	
Busines	s policy	
Utilization of intellectual assets	Co-creation with partners	
Strengthen our mana	agement foundation	
Financial capital strategy Human capita	Human capital and organizational climate Governance	

The Group's policy on environmental management is to focus efforts on the three priority issues related to the environment that are stated in our medium-term management plan, namely decarbonized society, recycling-based society, and biodiversity. We plan to leverage our entire value chain to create environmental value together with stakeholders.

The goal of our environmental management efforts is to expand business opportunities with the environment as a starting point in order to create earnings throughout the value chain. First, we will work to build a distinctive environmental brand. We will use our advanced initiatives, including our early achievement of the RE100 goal and adoption of internal carbon pricing, and environmental flagship projects to build environmental branding power that is unique to the Group. We aim to establish a presence as an environmentally advanced company that consumers will want to choose.

In this way, we will use the environment as a hook for increasing participation in joint ventures, strengthen relationships with other companies and governmental organizations, create collaborative projects, and advance other initiatives that can expand our opportunities. This will lead to businesses that have a considerable social impact by solving environmental issues and proposing new lifestyles.

Based on this, we will aim to secure returns from environmental investment and initiatives. In addition to providing customers with facilities and services that offer a unique added environmental value through our value chain, we will also develop businesses that provide solutions which leverage the Group's strengths, such as our renewable energy business and City OS, by collaborating with private and public sector partners on regional networks and regional vitalization.

Our environmental management growth scenarios, which are 1) appeal to customers with our uniqueness, 2) expand business opportunities, and 3) turn these opportunities into revenue, will lead to a strong Group business model which competitors will not be able to imitate.

#### Value creation through environmental management

Long-term management policy

Reducing environmental impact through all of our businesses

Creation of comfortable communities and lifestyles that contribute to the environment Strengths of the Group

Ability to work closely with landowners and communities on development and project building

Environmental value propositions that appeal to user sensibilities

Group policy for environmental management in the medium-term management plan Aim to expand business opportunities with the environment as a starting point by addressing three priority environmental issues

**Priority issues** 

Decarbonized society

ecycling-based society

**Biodiversity** 

#### Phase 1

#### Appeal to customers with our uniqueness

• Distinctive environmental flagship projects

CLIMATE GROUP RODP

- Early achievement of RE100
- Group-wide introduction of internal carbon pricing
- Comprehensive information dissemination (strategic public relations activities)





ReENE >>>



Forestgate Daikanyama

## Phase 3

#### Turn these opportunities into revenue

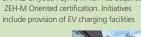
- Capture B2C revenue
- · Convert environmental value into revenue
- Appeal to highly environmentally aware customers

BRANZ Chiyoda-Fujimi, which has acquired ZEH-M Oriented certification, Initiatives

### Revive-Plus

Large-scale renovations that contribute to extending the service life of buildings

Realizing a recyclingbased society through LIBER renovation





which is contributing to the realization of a recycling-based society

#### Phase 2

**RE100** 

#### **Expand business** opportunities

- Use the environment as a hook for
- Strengthen relationships with governmental organizations to build an advantageous
- Create business opportunities in new regions



環境共生・コミュニティ自助型の

持縛可能なまちづくり

**√**₹

- Capture B2B and B2G revenue
- Form medium- to long-term collaborations with private and public sector partners
- Develop businesses that provide solutions which leverage the Group's strengths, such as the environment, renewable energy, and City OS
- Strengthen regional networks and regional vitalization initiatives





Regional revitalization agreement with Matsumae, Hokkaido

Reducing environmental impact by incorporating cutting-edge technology into Shinjuku Station West Exit Area Development Project





# Current status and outlook of the renewable energy business

The renewable energy business is one of the main focuses of our efforts to advance our Group policy for environmental management. We are aiming to grow the business even further by enhancing profitability and expanding new business opportunities.

Group	policy	
Environmental management	DX	
Busines Utilization of intellectual assets	s policy  Co-creation with partners	
Strengthen our man	agement foundation	
Financial capital strategy Human capit	Human capital and organizational climate Governance	

#### The earnings growth potential of electricity sales

FY2022 result

FY2025 forecast

¥6.5 billion > ¥10.0 billion

We launched our renewable energy business in 2014 and since then, we have developed projects, including solar and wind power generation, across Japan under the ReENE brand name. As of March 31, 2023, the total rated capacity of all our projects (before conversion to equities), including projects under development, was 1,577 MW (approximately 1.58 GW), surpassing the 1 GW benchmark required to be recognized internationally as a leading producer of renewable energy.

Currently, sales of the electricity we generate are focused on Japan's feed-in tariff (FIT) scheme, and in fiscal 2022, our profit (after deducting depreciation) was ¥ 6.5 billion. The

business is one of the core growth drivers under our Group policy for environmental management and our total investment on projects that have already been approved has grown to ¥363.1 billion, while at the same time, these projects are expected to eventually yield an annual profit of at least ¥10.0 billion.

The track record and expertise we have accumulated since entering the business has built a strong foundation for developing our own projects and going forward, we will leverage this advantage to expand the business into new areas, such as the growth areas of non-FIT power generation and offshore wind power.

#### Investment in power generation facilities (before depreciation) / gross profit from electricity sales



<sup>\*</sup> Profit from electricity sales (before deducting depreciation) for fiscal 2022: 16.7 billion yen

#### **Expanding new business opportunities**

### 1) Expanding business areas and diversifying business models

### Advancing wind power projects from the initial development stage

We are involved in onshore wind power generation projects from the initial stage of development through to commercial operation. We have also started exploring ways to fully engage in offshore wind power generation, such as establishing a joint venture with overseas partners.

#### Developing renewable energy business using the PPA model (onsite and offsite)

The power purchase agreement (PPA) model is when a business installs solar power generation equipment on the sites of clients that use a lot of electricity, in free spaces on buildings, or in offsite areas, manages and maintains this equipment, and sells the electricity generated to clients. We are widely adopting this model, including for companies, schools, and local governments.

#### Solar sharing

Solar sharing is when an agricultural business and renewable energy business are operated in tandem by installing solar power generation equipment on agricultural land. We are currently working to build a new business model that uses solar sharing to contribute to solving social issues related to both agriculture and energy, including carrying out demonstration experiments in collaboration with companies and regions. We are also contributing to community building by holding events during planting and harvesting periods.



As event at ReENE Solar Farm Higashi-Matsuyama

### 2) Realizing synergies

#### Switching data centers to 100% renewable energy

In Ishikari, Hokkaido, which has been designated by the Ministry of the Environment as a Decarbonization Leading Area, we are considering launching a data center that uses 100% locally-produced renewable energy. Going forward, we will develop this project in a way that will lead to solutions for social issues related to energy and DX promotion and contribute to regional revitalization.



The exterior of the data center

Medium- to Long-term Growth Strategy Group Policy—Environmental Management | Accelerating Renewable Energy Business Expansion

# Working toward decarbonization by strengthening strategic businesses



# Entering new business areas with partners Launching a grid-scale battery business

In fiscal 2023, Tokyu Land Corporation launched a grid-scale battery\*1 business. Its power plants built to date are already equipped with batteries, and as the adoption of renewable energy in the electricity markets continues to grow, the company is entering the grid-scale battery business in anticipation of an increase in demand for batteries that can play a role in adjusting power supplies to avoid blackouts caused by demand outstripping supply.

This business is being developed together with partner companies. A large grid-scale storage battery (rated output of 20 MW, rated capacity of 56 MW) has been installed at TENOHA Higashi-Matsuyama where it can be viewed by many visitors in an effort to promote the use of grid-scale storage batteries and contribute to the stability of Japan's electricity supply system.

#### TENOHA Higashi-Matsuyama

A community co-creation project being implemented together with local partners with the aim of creating a place for nurturing people, goods, and businesses. It is building a facility that can facilitate business collaboration and shared usage in a way that leads to regional revitalization.



#### Grid-scale battery business Grid-scale battery system **TOKYU LAND CORPORATION** Business operation / overall management Wholesale electricity market *ITO*CHW Market transactions Capacity market Construction of an optimal battery system Supply and demand adjustment market Procurement of all system components, including control equipment Electricity grid **Batteries** Battery operation **X** Power X Charge and discharge Delivery of battery units

# Promoting and expanding the PPA model through co-creation

As more and more companies and local governments begin working toward decarbonization, demand for electricity under the PPA model is growing. We are switching to renewable energy at Group-owned facilities, supplying it to private and public sector facilities, and selling it to external parties, and we are using our ability to make proposals based on this solid track record as a strength to expand the use of clean energy throughout society.

# Logistics facilities attuned to people and the environment

We are installing solar panels on the rooftops of LOGI'Q logistics facilities. This enables us to supply tenants with renewable energy that we have generated ourselves, thereby stabilizing their electricity costs, as well as enhancing their sustainability and contributing to business continuity planning efforts.

Supplying to public and private sector facilities In February 2023, Tokyu Land Corporation was selected to implement a project for introducing renewable energy to schools in Yokohama. It is proposing to install rooftop solar power generation equipment and supply renewable energy to 53 schools administered by the city. This will contribute to Yokohama's efforts to realize a model of local production for local consumption for urban areas.

**Collaborating with a major onsite PPA operator** Tokyu Land Corporation has taken a stake in i Grid Solutions Inc., a major operator of onsite PPA projects, with the primary aim of collaborating on initiatives to strengthen renewable energy power plant development capabilities.

# Launching a feasibility test for short-term corporate PPA

In April 2023, the four companies of Takashimaya Co., Ltd., Tokyu Land Corporation, ReENE Co., Ltd., and Digital Grid Corporation launched Japan's first initiative for large-scale offsite corporate PPA on a short-term contract basis to see if the idea is feasible. Over two years from April 2023 to April 2025, approximately 4 MW (rated capacity) of renewable electricity from non-FIT solar power plants either already owned or under development by Tokyu Land Corporation will be supplied to Takashimaya's Yokohama and Takasaki stores by ReENE using Digital Grid's Digital Grid Platform\*<sup>2</sup>.

# Investing in a fund for PPA that leverage non-FIT power plants

In July 2023, Tokyu Land Corporation and Sustech Inc. established a fund to carry out joint investments in non-FIT power generation facilities with the agreement that the operation of non-FIT renewable energy facilities invested in will be carried out using Sustech's ELIC distributed electricity administration platform. The fund plans to carry out equity investments with an upper limit of ¥150 billion over a period of 10 years. This collaboration between two companies that have knowledge of feed-in-premium electricity sales schemes will aim to promote the use of renewable energy and realize a cleaner society through the operation of non-FIT power plants.

- \*1. Batteries that are directly connected to the electricity grid and facilities like renewable energy power plants. They can store renewable energy, such as solar and wind power, and then use it to supplement the electricity being supplied to meet demand from households and buildings
- \*2. An electricity marketplace that realizes peer-to-peer connections between a wide range of electricity sources, including renewable sources, and users

	Group polic	у	
Environmental manage	ment	DX	
	Business polic	у	
Utilization of intellectual assets		Co-creation with partners	
Strengthe	n our manageme	nt foundation	
Financial capital strategy	Human capital and organizational climate Governance		

# The Future of the Renewable Energy Business

#### **Basic outline of the business**

Our renewable energy business leverages a wide range of expertise, including land development proposal capabilities cultivated through community development and the ability to collaborate with local communities, to develop solar, wind, and biomass power plants. In terms of scale, as of June 30, 2023, it operates 87 projects generating 1,612 MW (rated capacity), which is equivalent to the annual electricity consumed by around 739,000 regular households. As demand for renewable energy is expected to rise, we are collaborating with partner companies and other stakeholders to advance the business with the aim of realizing further growth.

Investing in growth areas, such as offshore wind and rooftop solar, in order to meet growing renewable energy demand in Japan

According to the revised Outlook for Energy Supply and Demand in FY2030 released by the Ministry of Economy, Trade and Industry in October 2021, renewable energy accounted for 18% of Japan's overall energy mix in fiscal 2019 and the country has set an ambitious target of raising this ratio to 36–38% by fiscal 2030. This will involve increasing the total amount of renewable electricity generated to 336-353 billion kWh. This ratio greatly exceeds the energy mix forecast for fiscal 2030 released in 2015, which was 22–24%, showing that factors such as recent steep increases in energy prices have further raised expectations regarding renewable energy. This means that there is plenty of growth potential for the Group's renewable energy business.

In particular, the Ministry's forecast of the amount of electricity generated by offshore wind power plants in fiscal 2030 has increased.

The target for 2030 announced in 2015 was 2.2 billion kWh, but the 2021 announcement sets a more ambitious target for 2030 of 17.0 billion kWh. This is approximately 7.7 times greater. Also, in regard to solar power, which accounts for the biggest portion of overall renewable power generation, there will be an increase in new projects, many of which are expected to be rooftop projects rather than ground-based.

Within this environment, the Group will continue to invest in new initiatives with a focus on growth areas, such as entering the offshore wind business and expanding its rooftop solar business. The renewable energy business is an important revenue base that is driving the Group's policy on environmental management, and going forward, we will focus on medium-term development and work to find applications for the business within community development as a developer with power generation capabilities that is willing to face major social issues, such as urban green transformation, head on.

## **Energy mix targets for FY2030**

(compared to FY2019)



\*Source: The revised Outlook for Energy Supply and Demand in FY2030 by the Ministry of Economy, Trade and Industry's Agency for Natural Resources and Energy (October 2021)