RENOVA

Medium-term Management Plan 2030

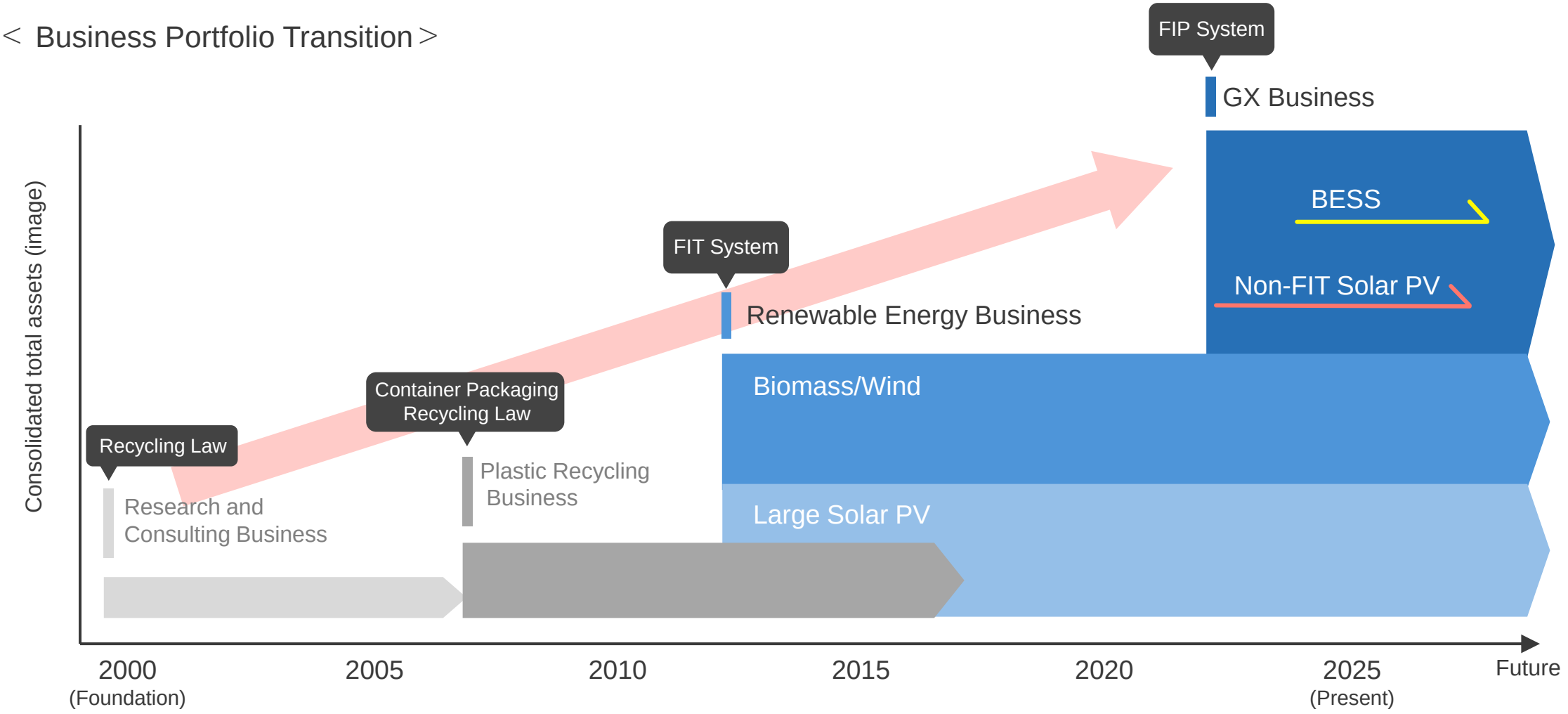
May 2025

RENOVA: Present Business Status

RENOVA's Business Development Timeline

- Recognized the changing times and switched business formats to broaden the scope of its solutions for environmental issues since its foundation.
- In 2012, launched its renewable energy business.

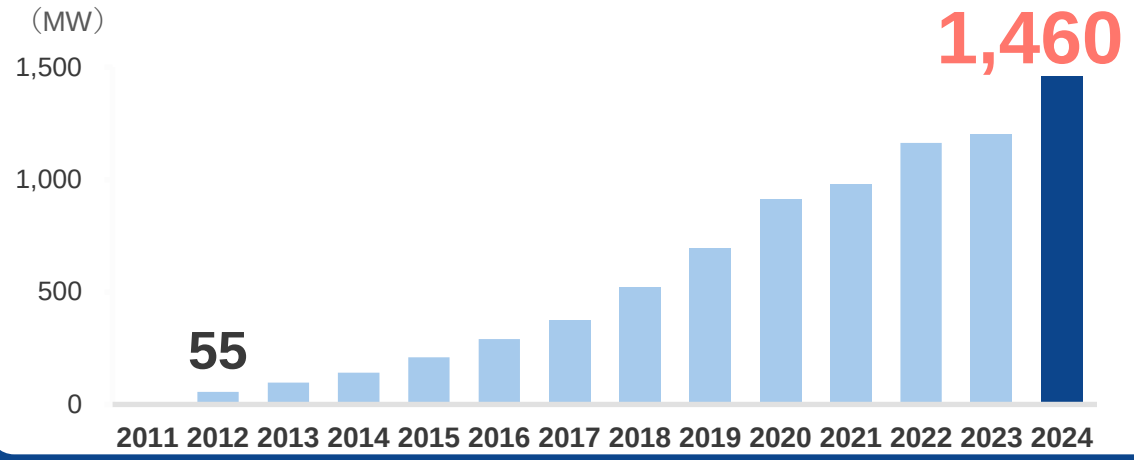
< Business Portfolio Transition >



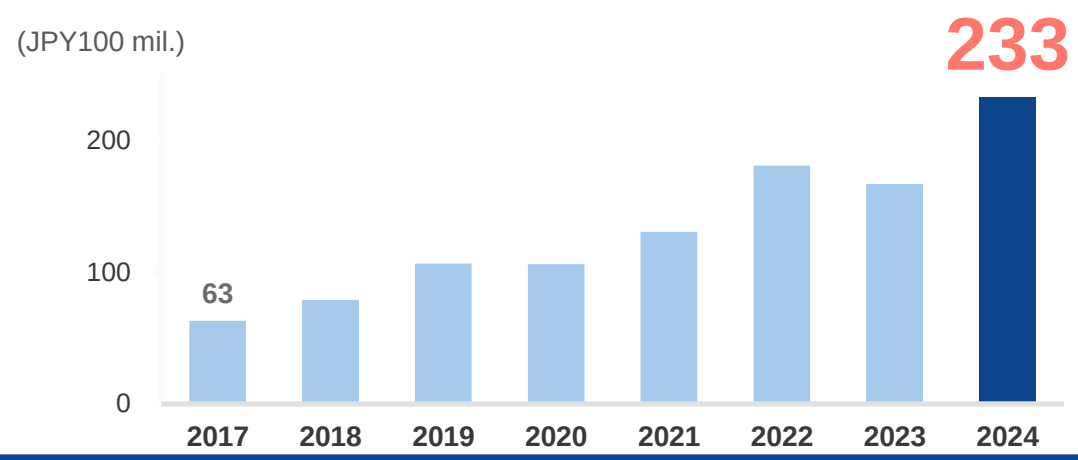
Steady Growth as a Renewable Energy Developer and Operator

- Since listing, installed capacity and revenue have steadily grown.
- Secured sales of 1.8 trillion yen as of the end of March 2025 with long-term power purchase agreements.

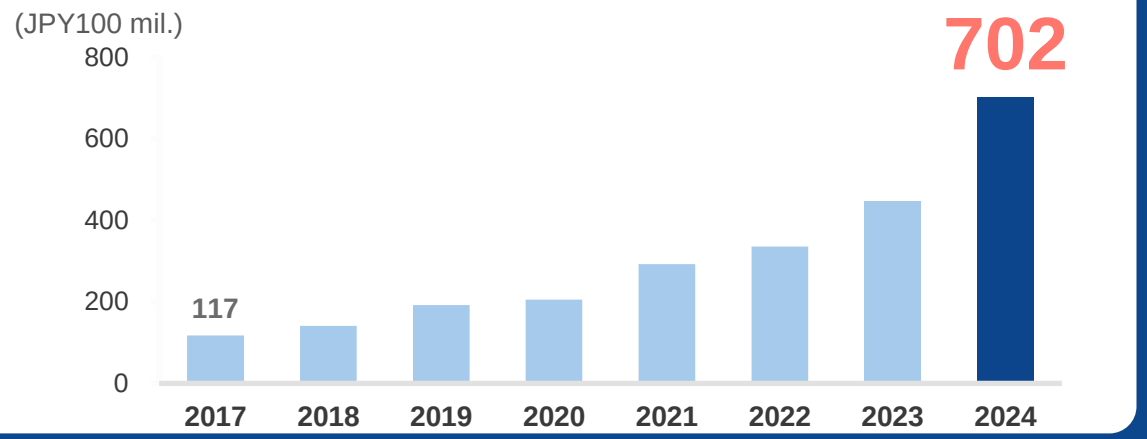
Installed Capacity*1: Construction and Operation



EBITDA



Revenue



Secured Electricity Sales*2

Project Period*3

20~30yrs

Average Remaining Contract Period*4

17.5yrs

End-March 2025

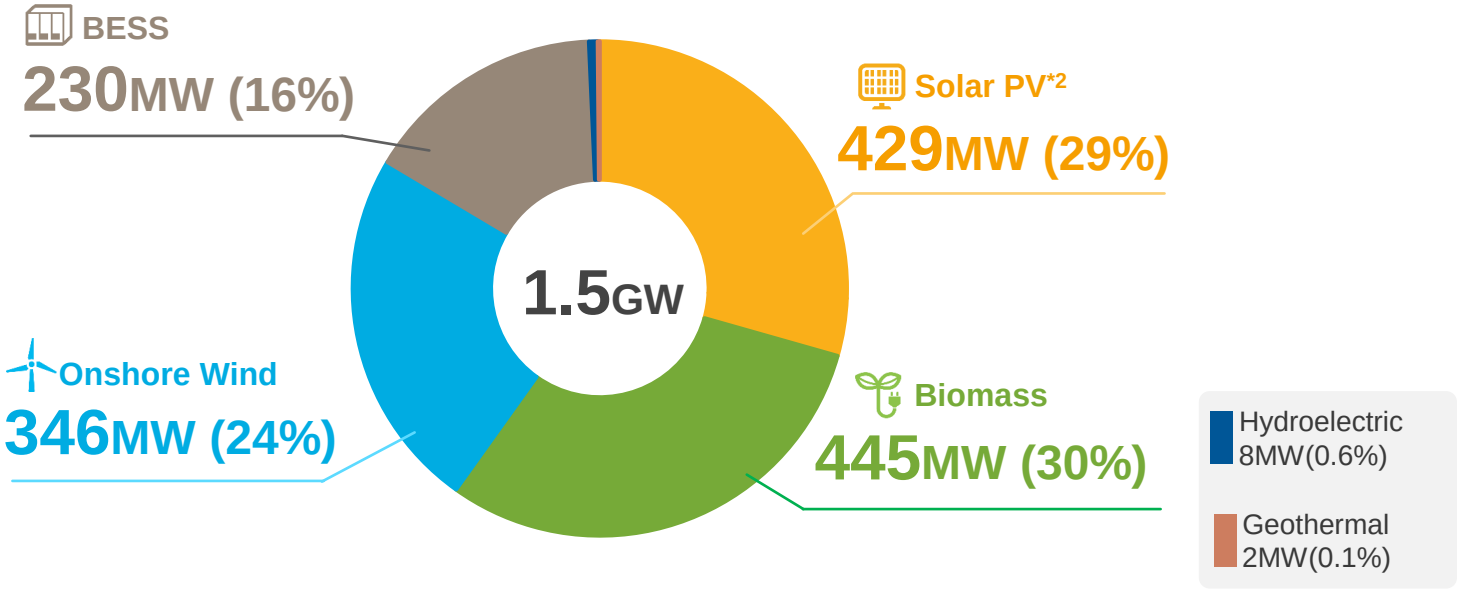
Secured Electricity Sales

Approx. JPY**1.8**tn.

*1 Gross installed capacity *2 The electricity unit price specified in the power purchase agreements of the consolidated power plants is multiplied by the expected generation volume over the contract period to calculate the sales *3 Period contracted by power purchase agreements *4 Remaining period of power purchase agreements contracted by consolidated power plants as of the end of March 2025

- Developed and owns 1.5GW portfolio in total generation capacity across multiple technologies, with total assets of around JPY500bn.

Portfolio with Diversified Technologies*1



Total Assets

FY2024

Approx. JPY500bn

Number of Personnel

FY2024

Approx. 300

Countries

FY2024

5

*1 Total installed capacity of projects in operation and under construction. Showing the gross capacity even for projects with minority shares
*2 Total capacity at the end of March 2025, including both FIT and Non-FIT Solar PV.

- ”Develop to own” strategy enables long-term stable cash flow generation and growth investments.

Develop | **Hold** | **Operate**

Develop to own

Create our own business and hold the asset for a long period

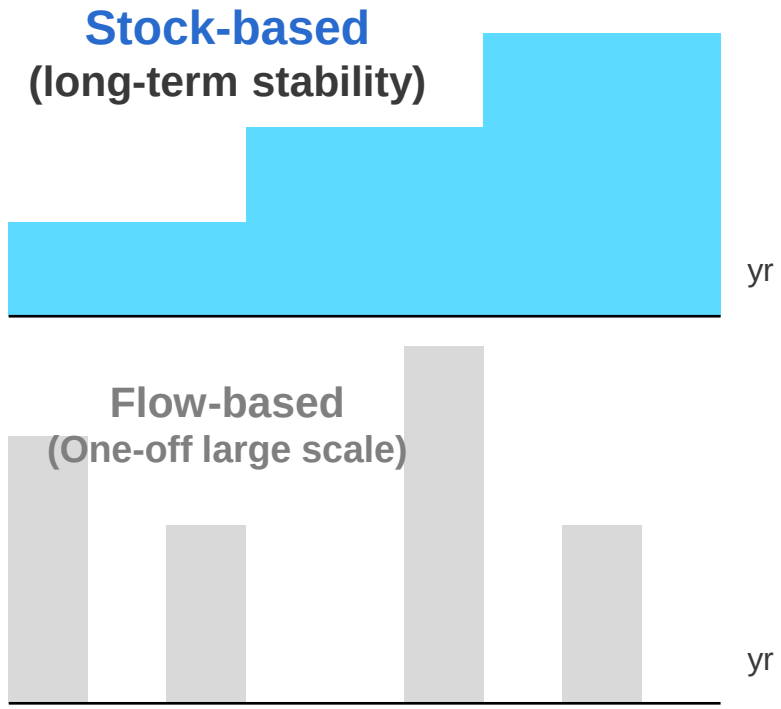
Long term (20-30yrs)

Develop to sell

Business is not retained, but sold in the process

Short term
(Several yrs)

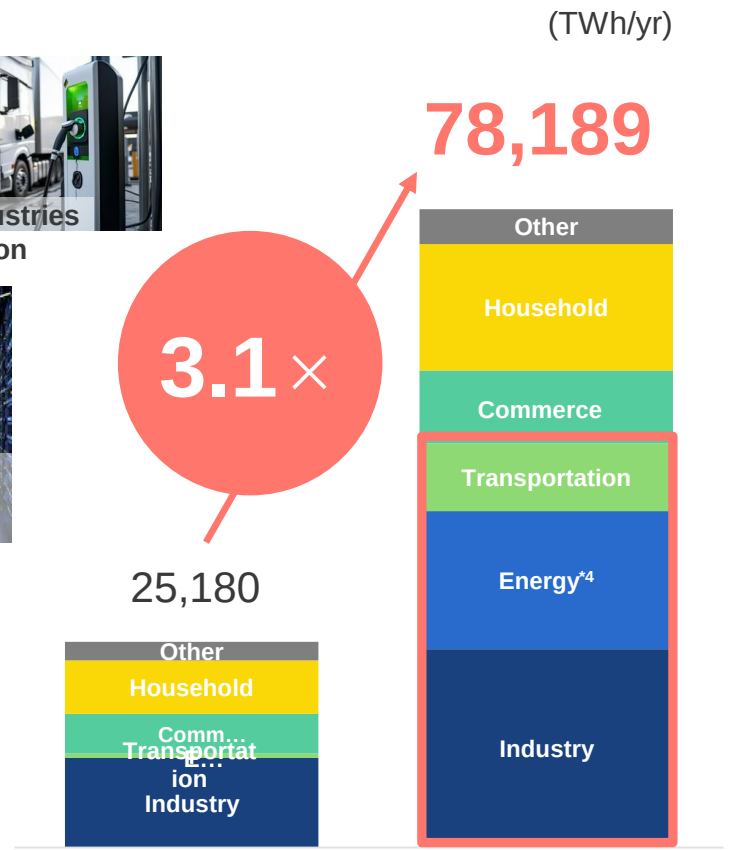
Revenue Image



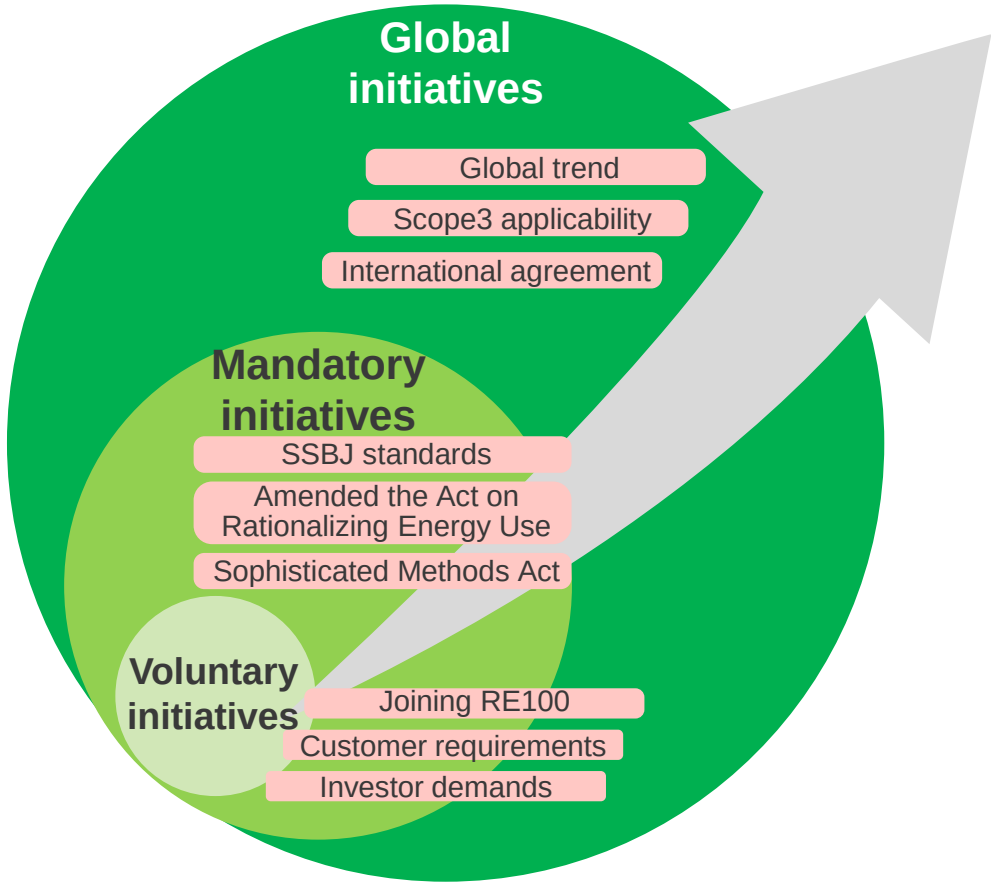
Renewable Energy Market Outlook

- Electricity demand is expected to significantly increase driven by the electrification of industries and transportation, along with new construction and expansion of data center.
- As decarbonization accelerates, demand for renewable energy is expected to grow further.

Global Electricity Demand Forecast*1



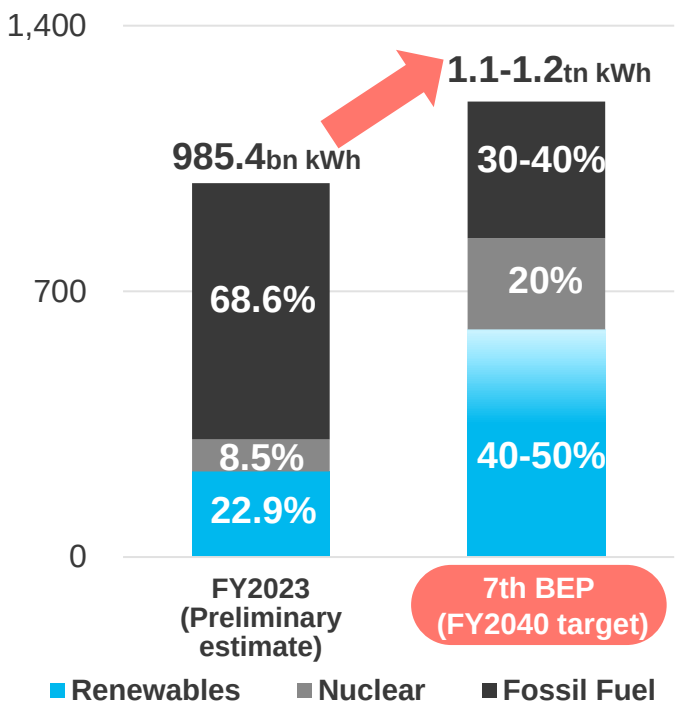
Acceleration of Decarbonization



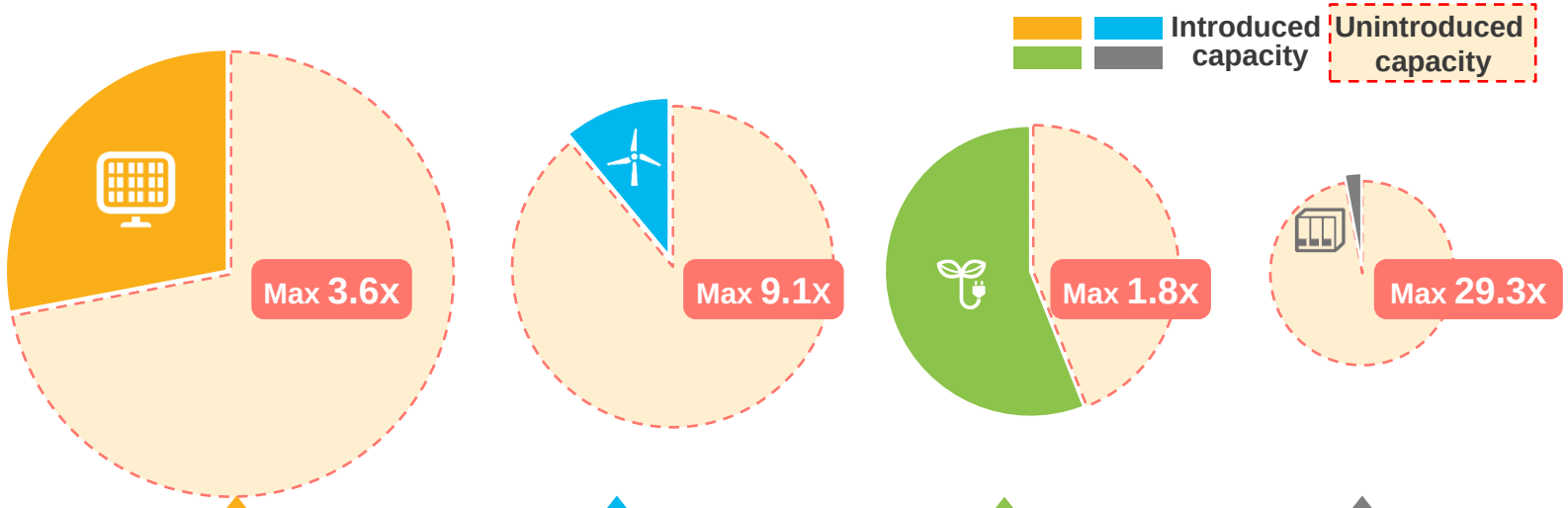
*1 Created based on Bloomberg NEF New Energy Outlook
*2 Power consumption related to fuel production, self-consumption in the energy industry, and green hydrogen production.

- In February 2025, the 7th Basic Energy Plan, which outlines the power generation mix for FY 2040, was approved by the Cabinet.
- Total power generation is expected to increase to 1.1~1.2 trillion kWh and the share of renewable energy to around 40~50%.
- Japan must introduce renewable energy assets of approx. 214.7bn~434.7bn kWh[*1] (estimated: approx. 143~275GW[*2]).

Energy Mix (Total power generation)



Unintroduced Renewable Energy Capacity to Achieve 2040 Basic Energy Plan



Solar PV
Power Generation[*3]
253~348bn kWh
Capacity[*2]
204~280GW

Wind
Power Generation[*3]
44~96bn kWh
Capacity[*2]
21~46GW

Biomass
Power Generation[*3]
55~72bn kWh
Capacity[*2]
9~12GW

BESS[*4]
Storage Capacity[*4]
0.063bn kWh
Generation Capacity[*4]
20.9GW

*1 The uninstalled capacity is the figure obtained by subtracting the amount of capacity installed in the results (preliminary estimate) from the target values of the 7th Basic Energy Plan published by METI in February 2025. Our company estimates based on the FY2023 results (preliminary estimate) published by METI on November 22, 2024, "FY2023 Energy Supply and Demand Results Summary (Preliminary)." This does not include storage batteries. *2 The installed capacity (in GW) is estimated based on assumed ratios of onshore/offshore and capacity utilization rates for each power source. *3 The power generation amount for each power source is estimated based on the 7th Basic Energy Plan published by METI in December 2024. *4 The storage output for FY2040 is calculated based on the "Estimation of Power Source Costs Considering Part of System Integration" presented as reference material for the discussion of the 7th Basic Energy Plan, assuming a 3-hour rate. The installed storage capacity for FY2023 is referenced from BloombergNEF "2H 2024 Energy Storage Market Outlook".

Growing PPA *1 Market in Japan

- With companies speeding up their decarbonization initiatives, the demand for renewable energy is rising, leading to PPA *1 market growth.
- Over the past 2-3 years, the annual domestic Solar PV installation has been 3-4GW*2, and the supply has not met the high demand.

Renewable Energy*3 Procurement Volume for RE100 (as of 2030)

Number of Companies*4

89

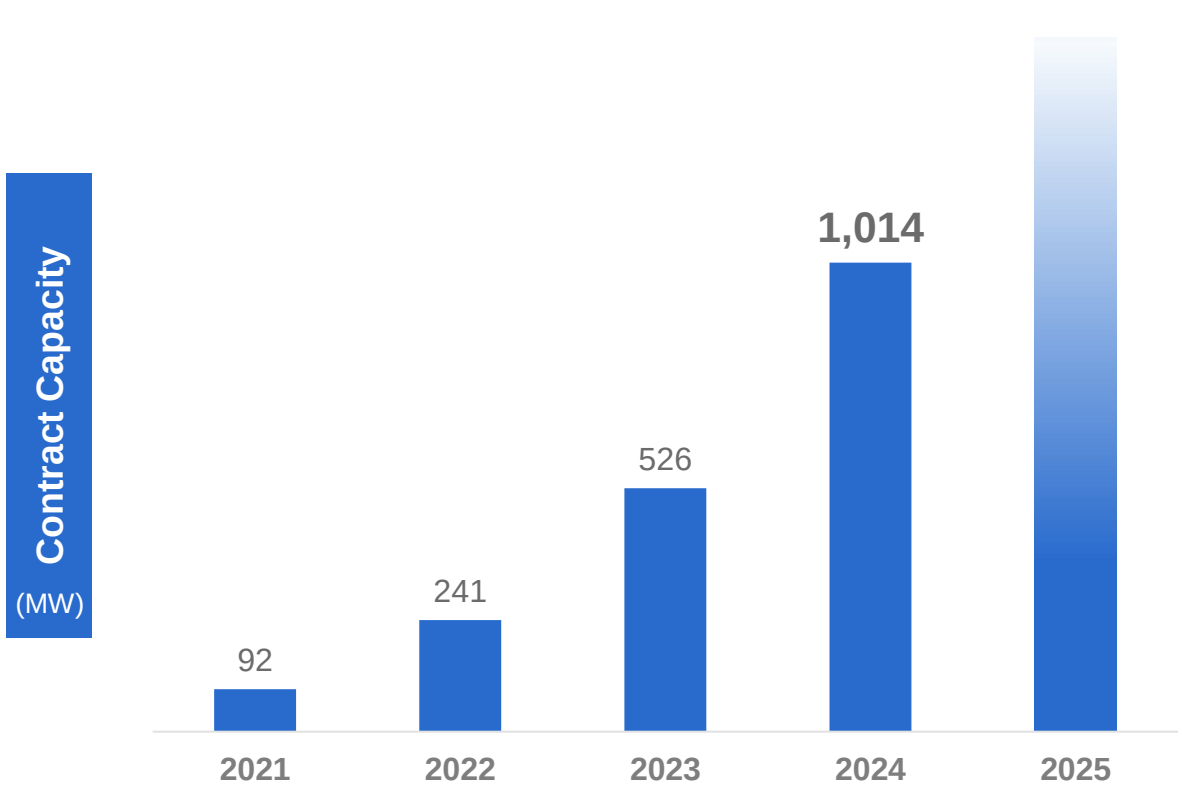
Procurement Volume*5

Approx. 43TWh

Solar PV conversion

約36GW

Trends in Corporate PPA*6



*1 Power Purchase Agreement: A long-term agreement whereby electricity consumers, including corporations, procure renewable energy from power generation companies.
*2 Source: Council documents of Ministry of Economy, Trade and Industry *3 RE100, an abbreviation for “Renewable Electricity 100%”, is a global initiative that brings together companies committed to sourcing 100% of the electricity used in their business operations from renewable energy. *4 As of February 2025 *4 The total required procurement quantity of 88 companies as seen in the Bloomberg NEF RE100 Data Viewer.
*5 Created based on 1H 2025 Japan Market Outlook from Bloomberg NEF

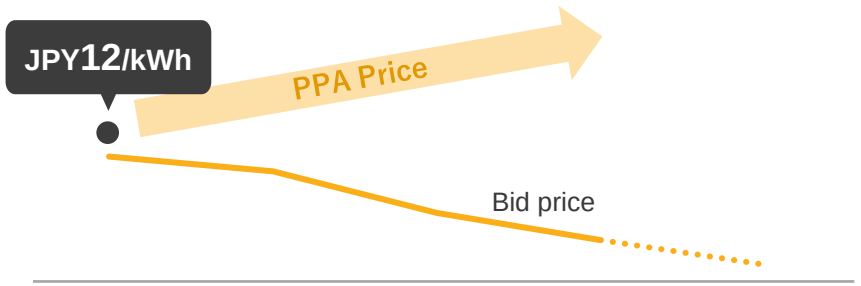
Rising Renewable Energy Selling Prices and Declining Generation Costs

- A supply-demand gap is causing a substantial increase in tariffs over a short period.
- Renewable energy costs are declining and are economically competitive compared to other technologies.

Increase in Electricity Selling Prices (PPA)*1

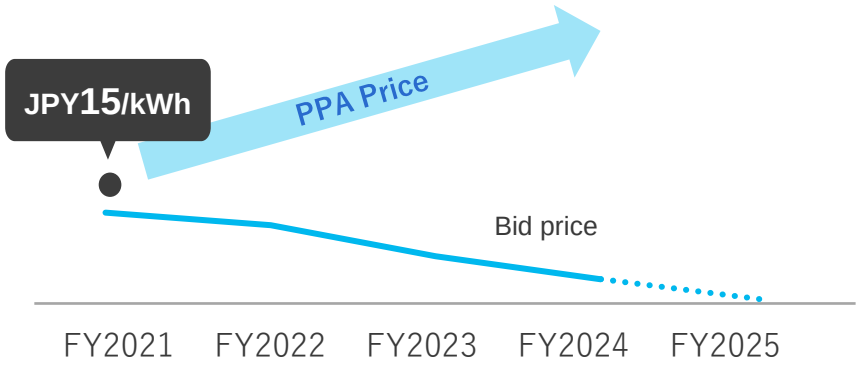
Solar PV

Increase by 20-30% over two years

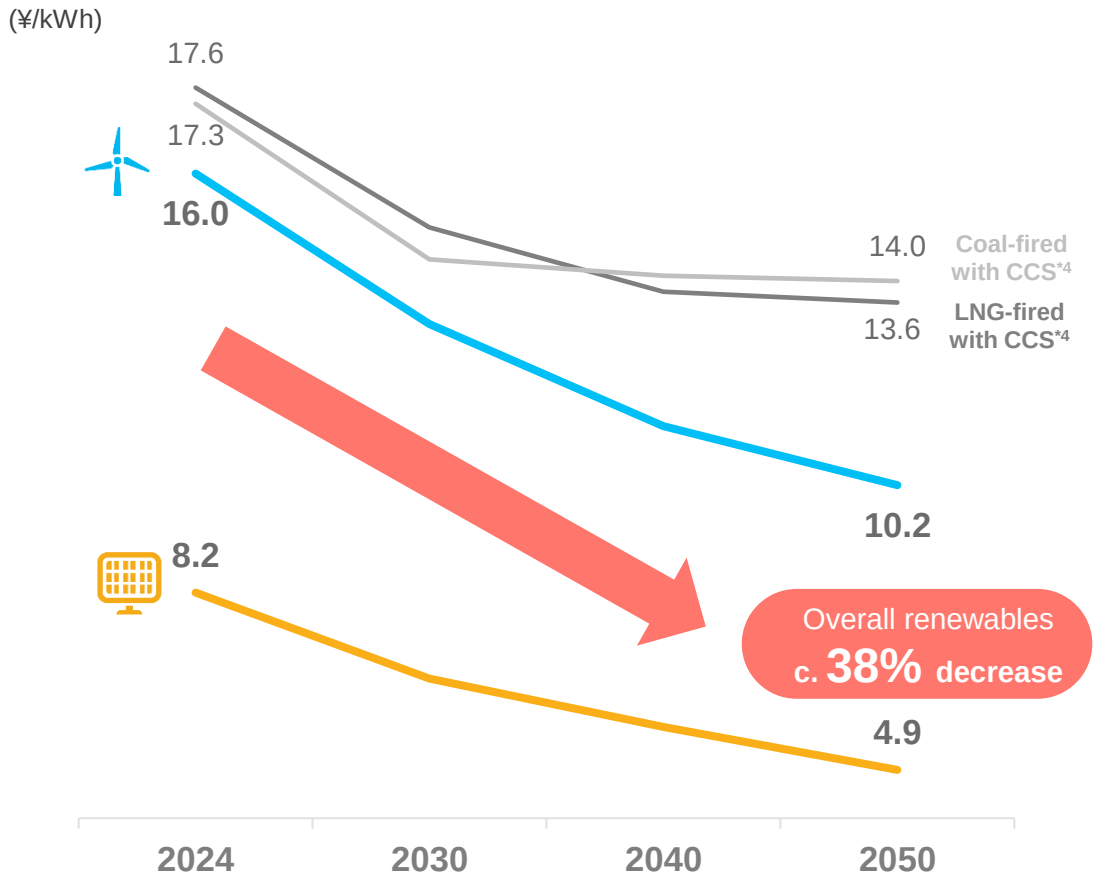


Onshore Wind

Increase by 30-50% over two years



Projected Power Generation Costs *2*3

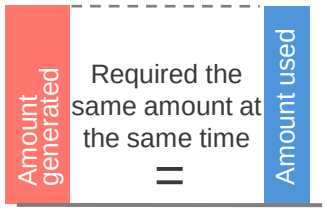


*1 FIT/FIP Price are calculated using the weighted average price for each year. PPA price and bid price for FY2024/2025 are for illustrative purposes. *2 Levelized Cost Of Electricity：Cost per unit of electricity generated, including construction costs as well as operation and maintenance expenses. *3 Source: Bloomberg NEF 2025-02-19 - 2025 LCOE Data Viewer Tool. Calculated based on an exchange rate of $1=¥155円
*4 Carbon dioxide Capture and Storage

- Larger demand for balancing capacity due to the increase in renewable energy and the ongoing system improvement for the introduction of BESS.
- Significant reduction of BESS cost and acceleration of BESS installation to the grid system are expected concurrently.

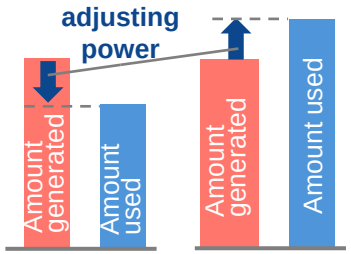
Balancing

In the power system, the quantity of Demand (usage) and Supply (generation) must always be balanced.
(Power imbalance trigger the risks of large-scale power outage, etc.)



Need for Balancing Capacity due to Increase in Renewable Energy

Expansion of renewable energy installation creates a **gap in electricity demand and supply.**
Balancing capacity is required.

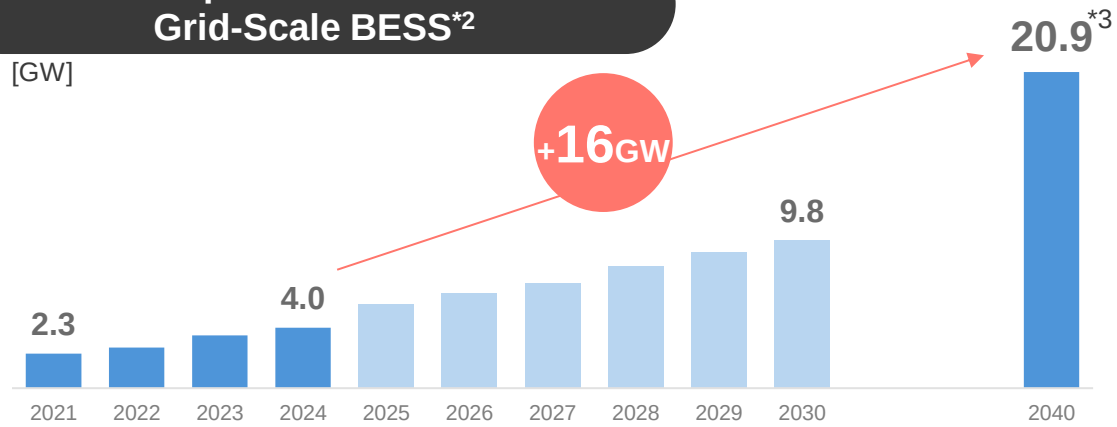


System Development for Installing of Grid-Scale BESS

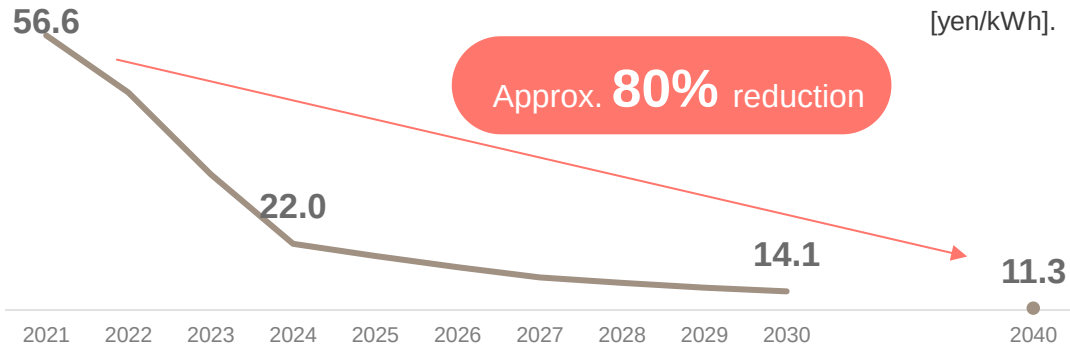
In May 2022, the revision of the Electricity Business Act liftied the ban on **market transactions using BESS.**

In January 2024, **Long-term decarbonization power source auction*1 began.**

Actual/Expected Introduction of Grid-Scale BESS*2



Cost (LCOE) Forecasts for BESS*2



*1Auction system established in FY2023 to promote new investment in decarbonized power sources (including replacement and refurbishment) and to secure supply capacity from decarbonized power sources over the long term. *2 Refer to Bloomberg NEF 2025-02-19 - 2025 LCOE Data Viewer Tool, calculated at 155 yen to the dollar.
*3 Storage battery capacity in FY2040 as shown in the Power Generation Cost Verification WG's "Estimation of Costs by Power Source Considering Part of System Integration," which was presented as a reference material for discussion of the Seventh Basic Energy Plan.

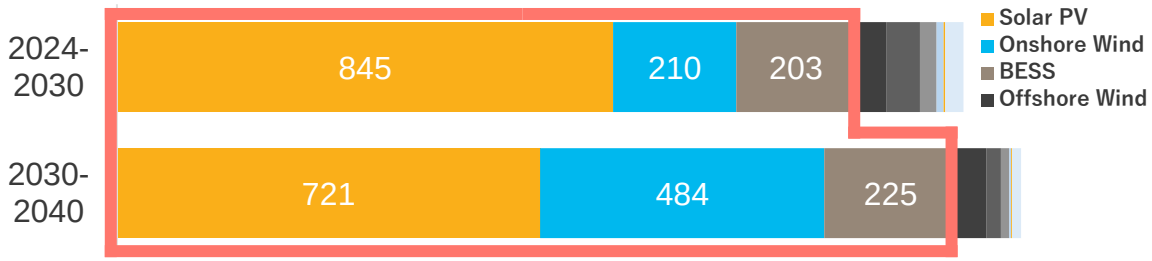
FY2030 Goal and Strategy

- Focusing on three technologies due to market growth potential, RENOVA's know-how and development speed.

Market Growth

- Expected to grow globally
- Forecasted to reduce LCOE[*1]
- Higher demands due to the adoption of renewable energy

<Global Annual Renewable Energy Installations Forecast by Technology (GW/y) [*2]>



Track Records and Know-how

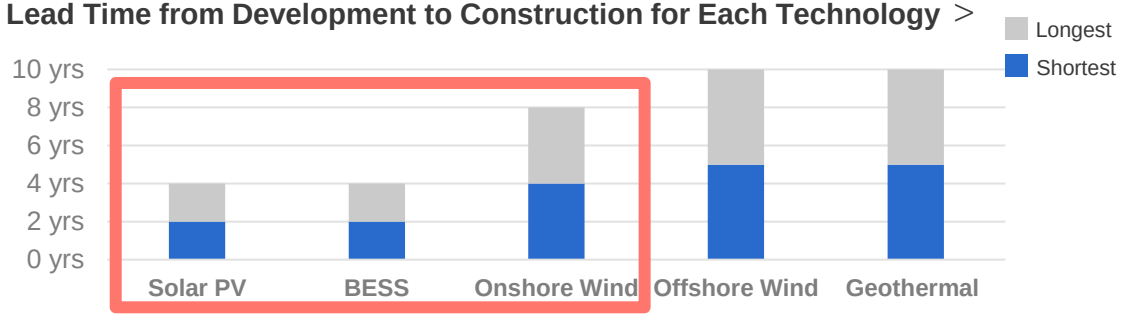
- Proven track record in the three technologies
- Leveraging expertise in development, engineering, procurement, and operation for future developments

<Our Installed Capacity[*4] by Technology : Development, Construction, and Operation>

Development Speed (+Urgent Demand)

- Short development period for Solar PV and BESS
- High PPA demands for Solar PV and Onshore Wind in Japan
- BESS can be monetized through regulatory system improvements

< Lead Time from Development to Construction for Each Technology >



*1 Levelized Cost Of Electricity: Costs per unit of electricity generated, including construction and operating and maintenance expenses
*2 Produced based on Bloomberg NEF 2025-02-19 - New Energy Outlook 2024 Data Viewer (1.1) *3 Total capacity at the end of March 2025, including both FIT and Non-FIT Solar PV.
*4 Showing the gross capacity even for projects with minority shares

- As decarbonization accelerates, demand for renewable energy among consumers is becoming more advanced year by year.
- RENOVA is promoting the development of multiple technologies to meet diverse customer needs.

Advanced Needs

e.g., Customer Requirements

Due to strong pressure from GAFAM, the use of renewable energy in manufacturing has become mandatory.
(Suppliers are now required to achieve 100% renewable energy with additionality*1 by 2030. etc.)

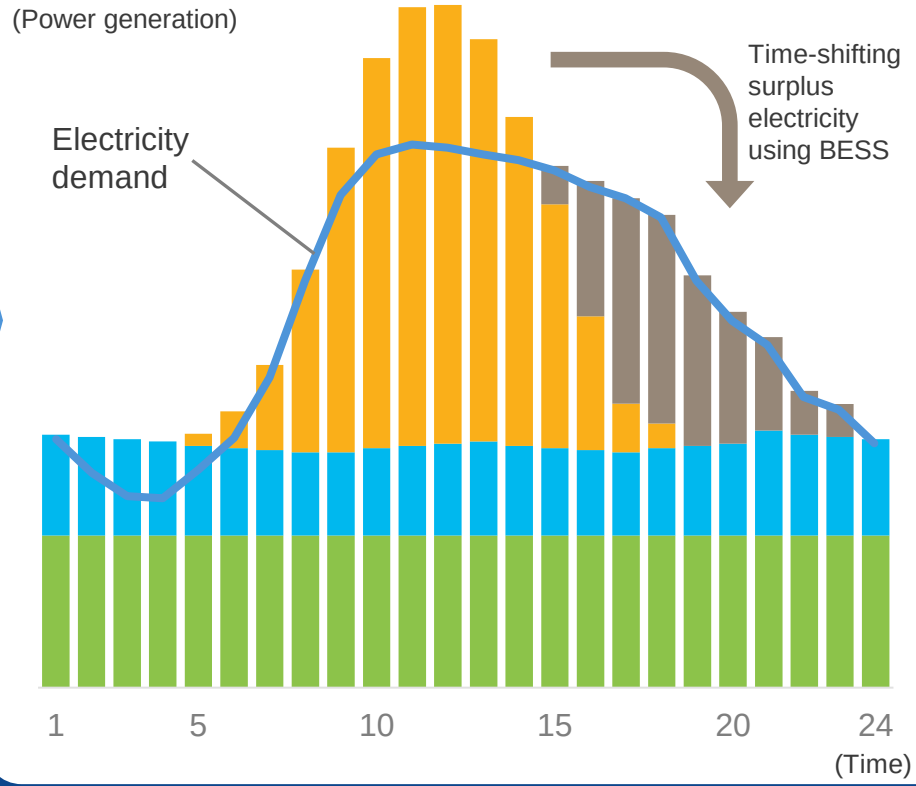
e.g., RE demand throughout the day and night

As more data centers are added, their decarbonization will require a constant supply of large-scale renewable energy, available 24 hours a day, 365 days a year.

Meeting Customer Needs through RENOVA's Multi-Technology Portfolio

Electricity Supply Image by Multi-Technology

Providing renewable energy in response to customer demand



Solar PV
Daytime-only Electricity Supply
Generation increases in summer due to higher solar irradiance and moderates in winter

BESS
Charging during surplus, discharging during shortages
※Charging volumes not shown in the left diagram

Wind
Relatively Stable Electricity Supply
Generation increases in winter and moderates in summer

Biomass
Stable Electricity Supply

*1 Renewable energy with additionality refers to renewable energy that contributes to the development of new renewable energy facilities by purchasing electricity generated by renewable energy. For example, this includes new renewable energy facility

- Targeting to 5.0MW gross installed capacity and 3.5MW net capacity under construction and in operation.

	Gross Capacity*1	Net Capacity*1,2	Annual Power Generation	Cumulative GHG*3 Reduction
FY 2024	1.5GW (incl. 1.0GW in operation)	1.0GW (incl. 0.7GW in operation)	2.9bn kWh/y (Eq. to 700k households)	4mn t-CO2 (Eq. to annual emissions by 1,570k households)
FY 2030	**5.0GW** (incl. 4.0GW in operation)	**3.5GW** (incl. 2.7GW in operation)	**8.1bn kWh/y** (Eq. to 1,950k households)	**20mn t-CO2** (Eq. to annual emissions by 7,800k households)

*1 Total installed capacity of projects in operation and under construction. *2 Calculated via gross installed capacity multiplied by RENOVA's equity share for each project *3 Greenhouse Gas

- Aiming to achieve the installed capacity target and meet the following financial goals for FY2030.

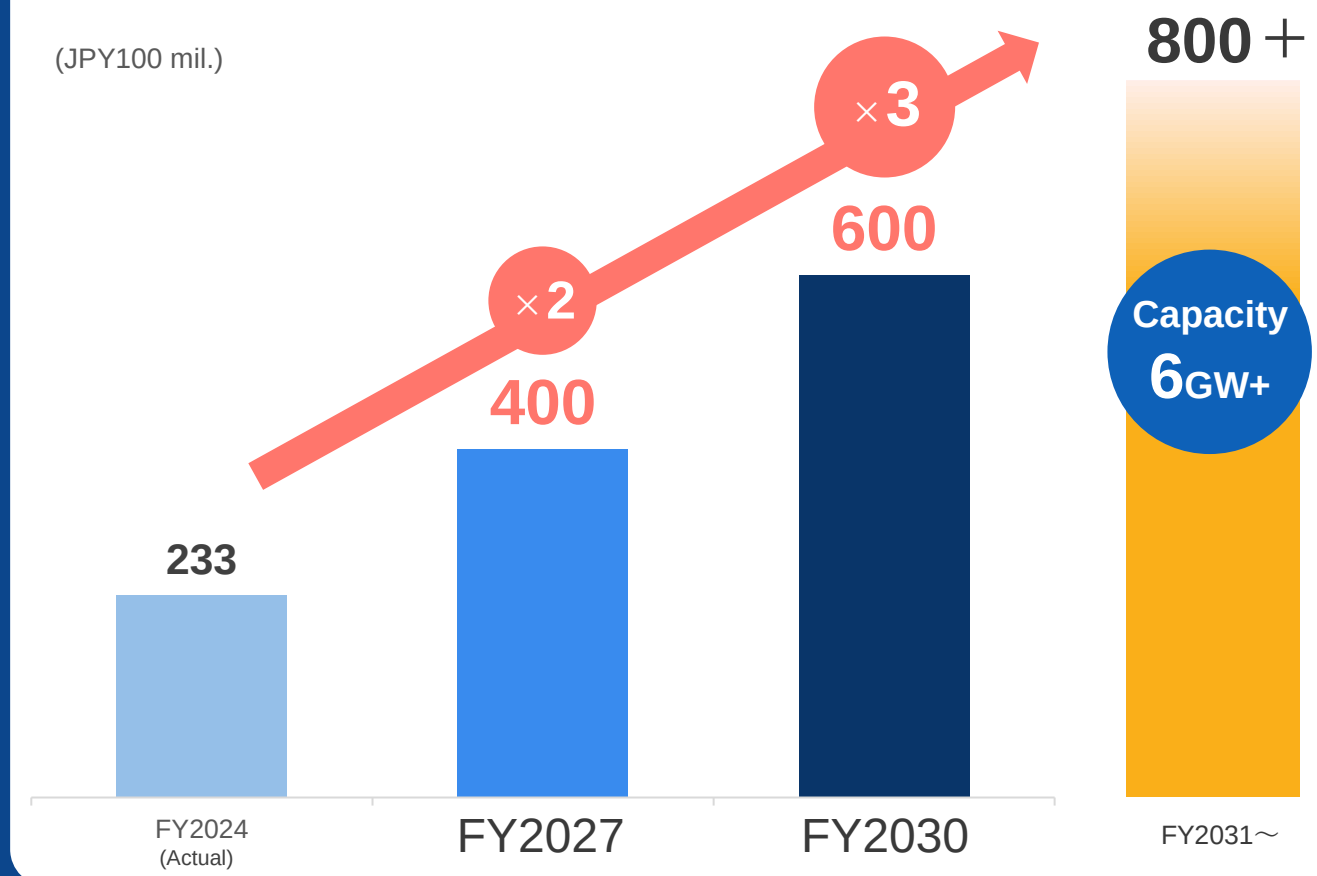
	Revenue	EBITDA	Operating Profit	Operational / Under Construction Business Value*1
FY 2024	JPY70.2bn	JPY23.3bn	JPY4.1bn	JPY160bn+
FY 2030	**JPY130bn** (×2)	**JPY60bn** (×3)	**JPY25bn** (×6)	**JPY280bn** (+ JPY120bn)

*1 Total net present value of RENOVA's projects in operation and under construction (an indicator that represents the present value of cash flow expected from future business operations)

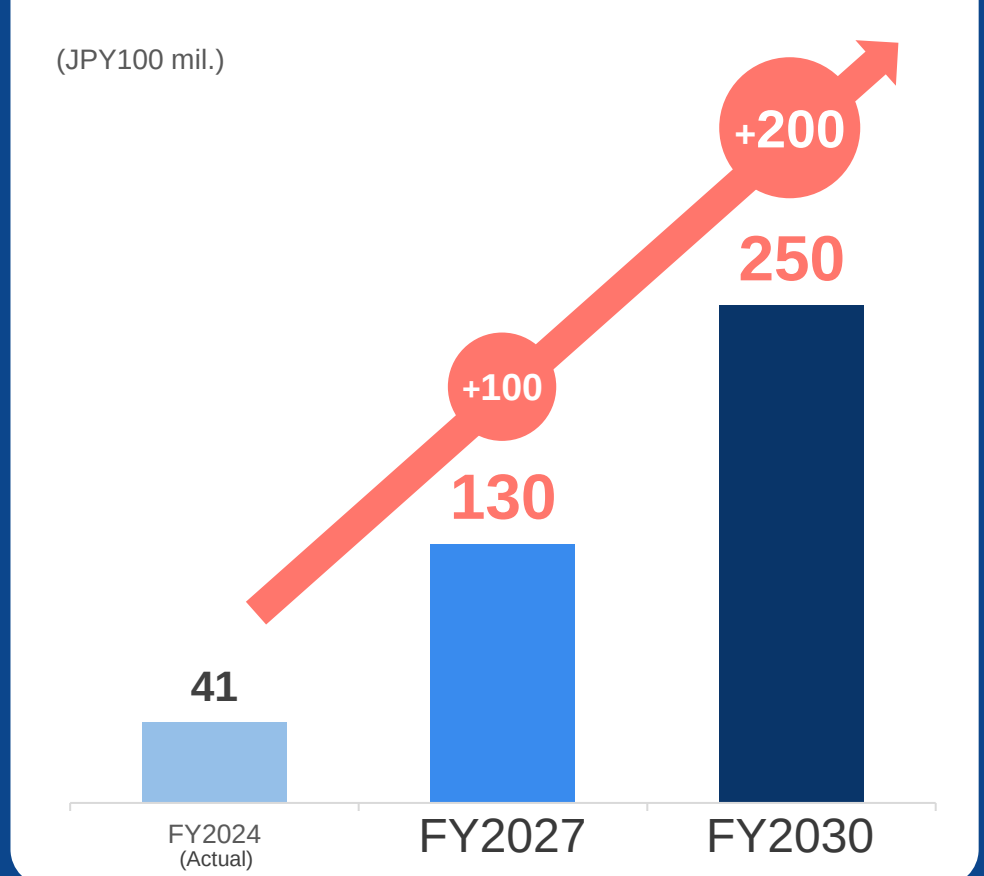
FY2030 Financial Targets (EBITDA and Operating Profits)

- EBITDA is targeted to double by FY2027 and triple by FY2030.
- Operating profit is targeted to grow steadily, with an increase of +100M in 2027 and +200M by 2030.

EBITDA

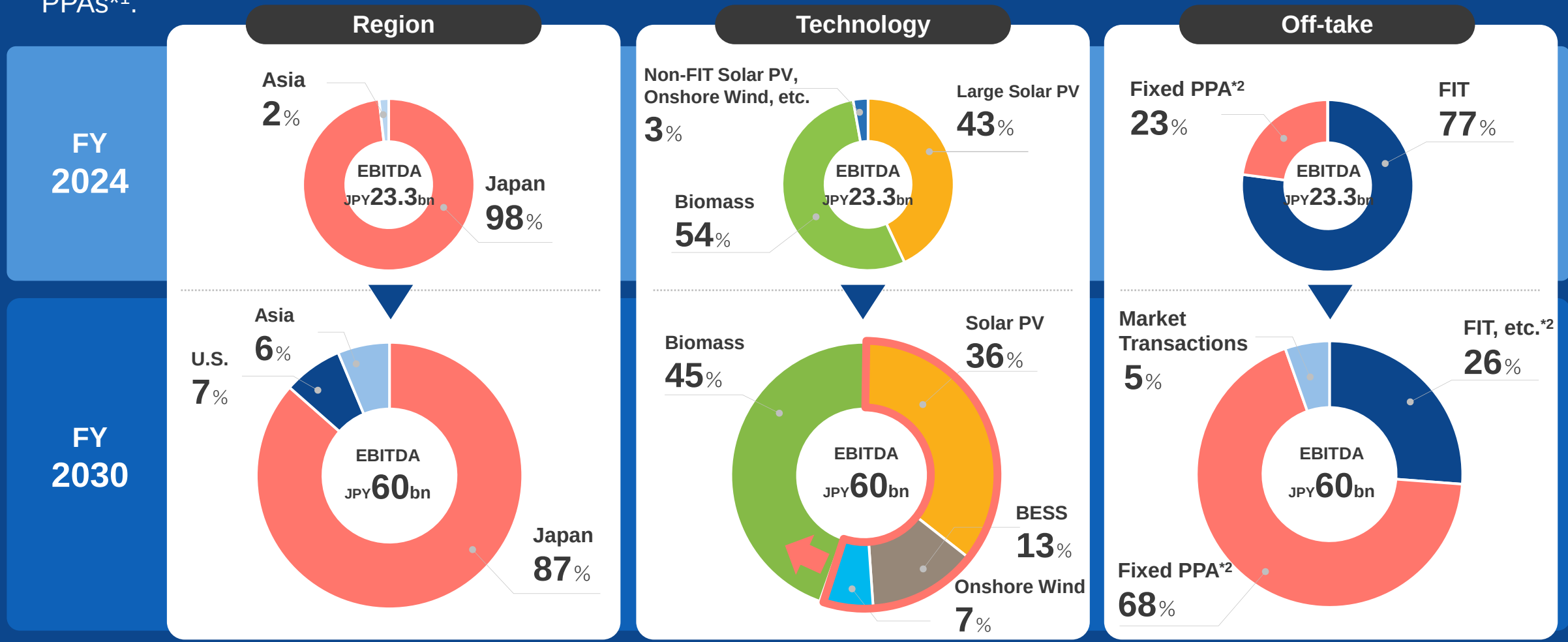


Operating Profit



Business Portfolio (EBITDA)

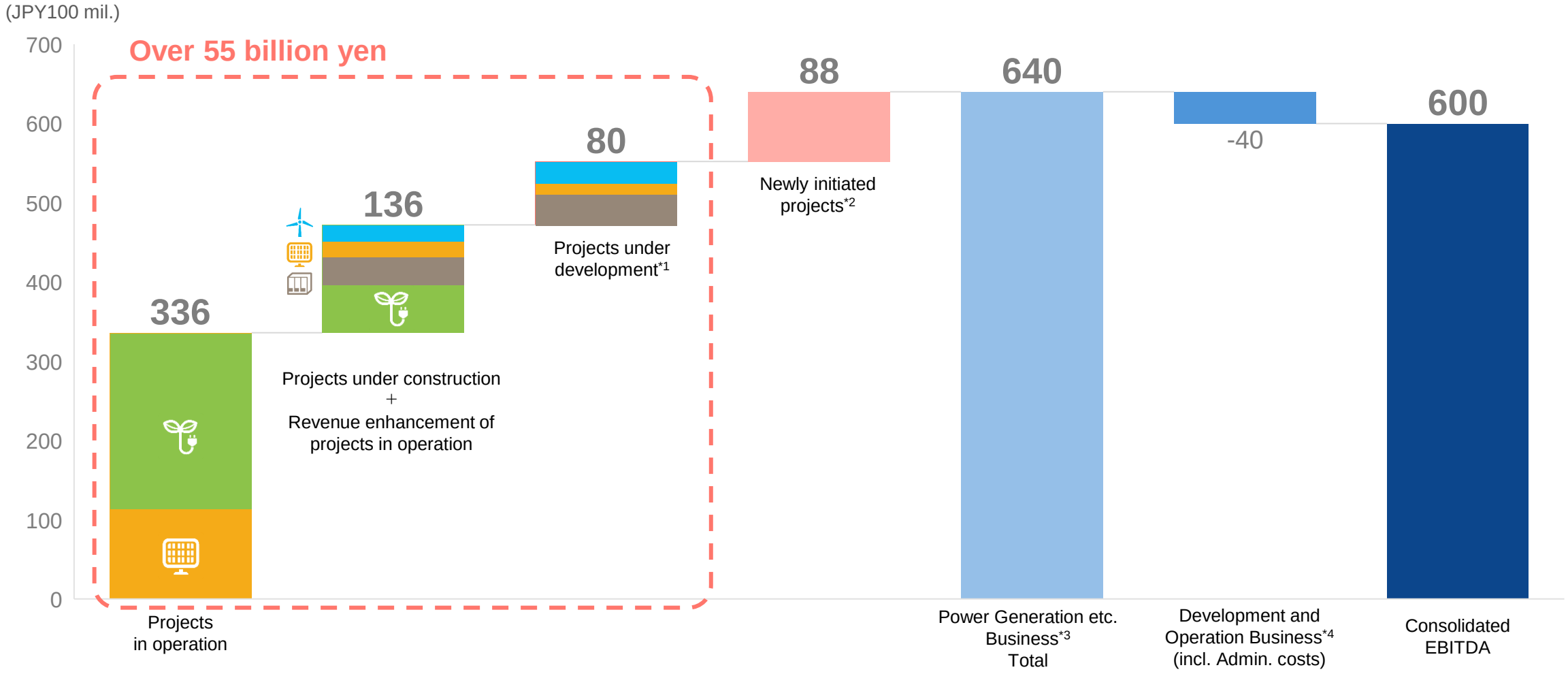
- Japan with strong track record continues to be a center of growth.
- Focus on development of Solar PV, BESS and Onshore Wind. Aiming to further increase the proportion of these three power sources beyond FY2031.
- Transitioning to an earnings structure independent of regulatory support such as FIT, by increasing the proportion of fixed PPAs*1.



*1 PPAs (Power purchase agreements) with fixed electricity price over the long term and offtake agreements for BESS are included.
*2 Capacity market revenue from Long-Term Decarbonization Power Source Auction in Japan and oversea electricity sales system with long-term fixed price such as FIT are included.

EBITDA by Project Phase (FY2030)

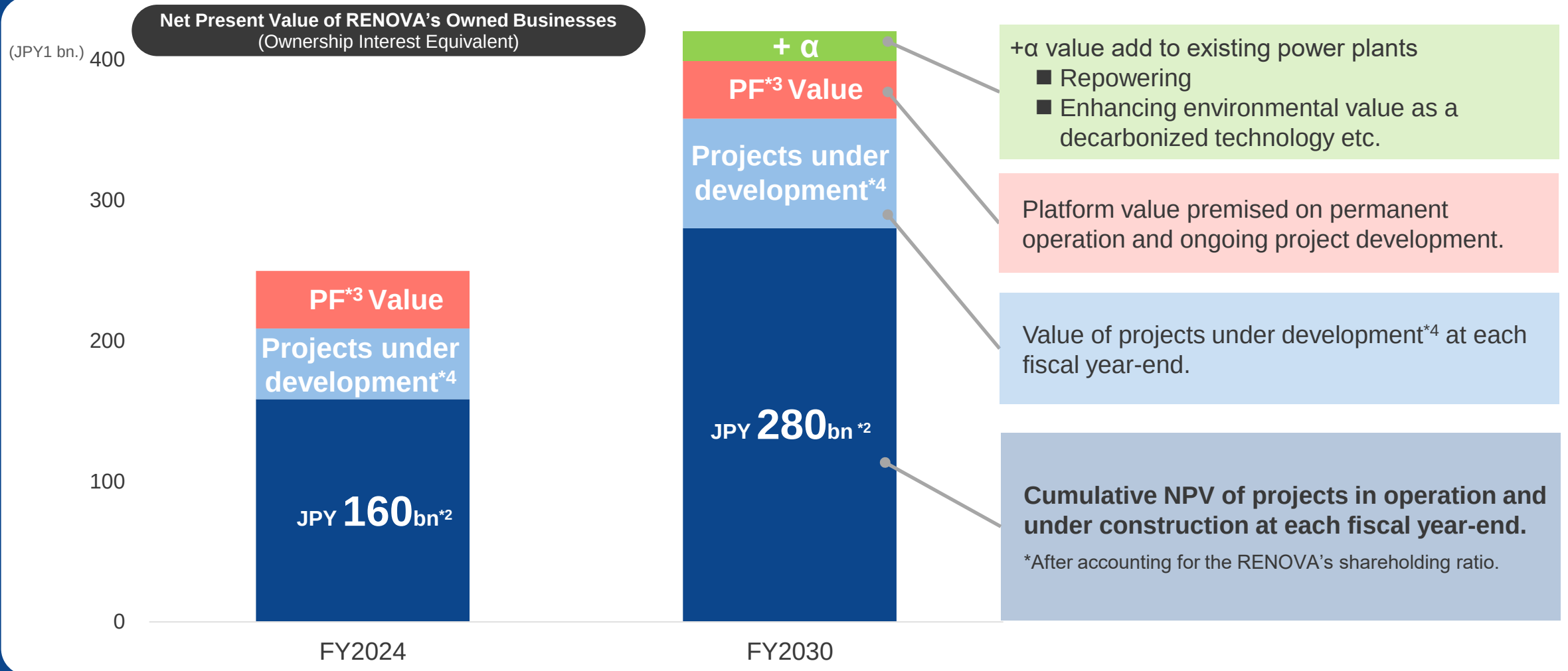
- Projecting EBITDA of over 55 billion yen only from existing projects that are in operation, under construction and under development.
- Our FY2030 goal of 60 billion yen comprises the total of Power Generation etc. Business[*3] including newly initiated projects and Developments and Operation Business.



*1 Projects in progress with development prospects as of the end of FY2024 *2 Projects under consideration for commercialization as of the end of FY2024
*3 Renewable Energy Power Generation etc. Business defined by RENOVA as a business segment *4 Development and Operation Business defined by RENOVA as a business segment

Net Present Value of RENOVA's Owned Businesses (Ownership Interest Equivalent)*1,2

- Net present value of the projects in operation and under construction is approx. JPY 160bn as of FY2024.
- Net present value of the projects in operation and under construction is projected to reach approx. JPY 280bn as of FY2030.



*1 Total net present value of RENOVA's projects in operation and under construction (an indicator that represents the present value of cash flow expected from future business operations)
*2 Please refer to the Appendix for details on the assumptions and methodology, *3 Platform：An entity that continuously develops power generation and related projects. *4 Projects under development before start of construction

Our Core Competence

- Internalizing 5 key functions across multiple technologies, from development to operation.
- A strong and integrated platform that enables end-to-end project lead and execution, even for highly challenging projects.

Development	Design / Procurement	Financing	Construction/ Operation・Ownership	Sourcing Consumers
Proposals enable coexistence with local communities	**Engineering**	**Finance**	**Operation**	**Power Purchase Agreement (PPA)**
● **Executing highly challenging projects** with **a team of c. 70 development expert** ● Capability to design and propose projects that **gain community acceptance**	● **A team of c. 50 engineers leading optimal design and procurement** ● Achieving **the development of complex projects and reduction of LCOE**	● A dedicated finance team leads the structuring of complex project financing ● **Project finance track record exceeding JPY500 billion**	● Achieving high-efficiency and stable operation by accumulating and sharing know-how – **with Biomass capacify factors exceeding 90%**[*2] ● **Maximizing business value** by internalizing key operational functions	● Developing high-quality, multi-technology power plants to meet customer needs ● **PPA execution track record: 437MW with 13 agreements** across multiple technologies[*3]

End-to-end Project Lead

*1 Levelized Cost Of Electricity： Cost per unit of electricity generated, including construction costs as well as operation and maintenance expenses
*2 Capacity factor excluding the impact of external factors such as curtailment. *3 Including PPAs subject to commencement of operation and ones in final discussions

Development Capabilities Driven by Community Engagement and Proactive Solutions

- Realize highly-challenging projects development by our professional development team.
- Souring projects, prioritizing shared prosperity with local partners, shaping ventures that inspire community pride through dialogue.

RENOVA's Development Team

Project Managers



What Projects Need

- Land
- Community Dialogue
- Permitting
- Environmental Impact Assessment*1
- Joint Venture

70+ experienced professionals

25+ projects successfully developed

Technology




What We Can Achieve

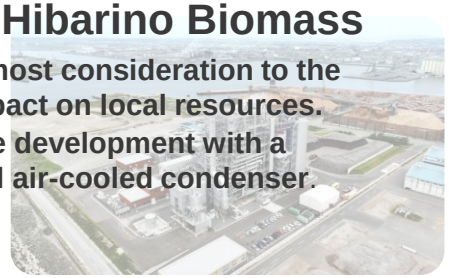
- **Development of Highly-Challenging Projects**
  - Turning even highly-challenging projects (landowners unknown, local understanding, issues with permits and environmental assessments, etc.) into reality by crafting solutions
- **Coexistence-Oriented Project Development with local community**
  - Engaging in open dialogue with communities to create projects they are proud of and happy to have embraced.

Case Studies

Karumai West Solar

- The challenge was to unlock over 40ha of land held under divested afforestation contracts
- Terminated the existing contract by utilizing the 'Farming and Fishing Village Re-energy Law' through cooperation with the town and realized a development.

Ishinomaki Hibarino Biomass



- Gave the utmost consideration to the potential impact on local resources.
- Achieved the development with a conventional air-cooled condenser.

Reihoku-Amakusa Onshore Wind

- RENOVA's first Onshore Wind project in Japan that was developed entirely from scratch.
- Implemented the development by completing environmental assessments, securing access to protected forest land, and undertaking various other necessary procedures.

*1 A system for investigating, predicting, and evaluating the environmental impacts of business projects, followed by public disclosure of the findings and soliciting opinions from the government.
*2 A system where companies or organizations bear the costs of afforestation and tending on national forest land. In return, the revenue generated from timber harvesting in the future is shared between the national government and the participating entity. *3 Act for Promoting the Sound Development of Agriculture, Forestry, and Fisheries and Harmonious Renewable Energy Power Generation

- RENOVA's engineering team is capable of driving optimal design and procurement for multi-technology development.
- In-house team enables LCOE*1 reduction and development of highly challenging projects.

RENOVA's Engineering Team

Engineering Managers

Technical Element

- Basic Design
- Geotechnical and Civil Engineering
- Electricity & Grid
- Selection and Procurement
- Wind Survey (wind power only)

50+
Qualified engineering team

25+
projects successfully developed

Technology

What We Can Achieve

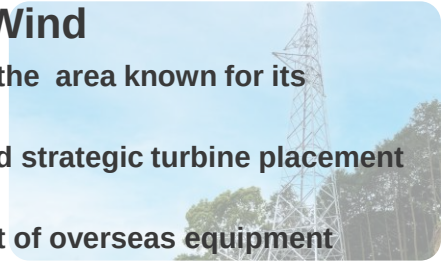
- **LCOE*1 Reduction**
  - In-house production from basic design to final adjustments to maximize power generation efficiency
  - Achieving procurement of optimal equipment at optimal prices through in-house technical DD
- **Realization of Technically Challenging Projects**
  - Achieving development of projects that would be technically difficult by other developers

Case Studies

Sendai Gamo Biomass

- Limitations in land area posed a challenge for construction of fuel storage facilities.
- Selected a company with expertise in specialized construction methods through global sourcing .
- No company was capable of being the prime contractor, so multiple EPC companies were managed and coordinated by our team

Reihoku-Amakusa Onshore Wind



- Construction process optimization in the area known for its challenging grid connection
- Optimized civil engineering design and strategic turbine placement aimed at maximizing project revenue.
- Quality and supply chain management of overseas equipment

*1 The cost per unit of electricity generated, including construction operation and maintenance expenses.
*2 A contractor responsible for a series of processes in power plant construction, including Engineering, Procurement and Construction.

Leading the Execution of Highly Leveraged Financing

- Leading the structuring of highly leveraged project financing with in-house finance team.
- Able to structure even highly-challenging and industry-first projects by leveraging deep expertise into bank perspectives.

RENOVA 's Finance Team

In-house Finance Team

- High Degree of Understanding to Bank Perspectives
- High Level of Expertise Strong Track Records
- Maximization of NPV
- Relationships with Banks

Technology

Proven Experience

Project Finance

25 cases

Total amount raised

¥500bn+

Average leverage ratio

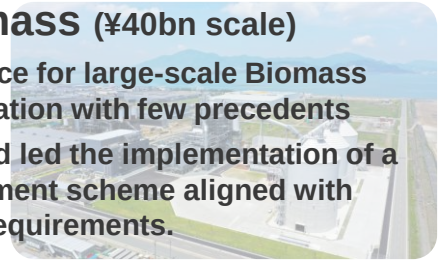
88%.

What We Can Achieve

- **Lead Project Finance**
  - Finance structuring is being caried out without relying on external advisors.
  - Securing favorable financing conditions to maximize NPV
- **Highly Challenging Financing**
  - Capable to develop bankable plans from the early stage even for highly challenging projects.
  - Capable to realize projects with no precedent in the industry.

Case Studies

Kanda Biomass (¥40bn scale)



- Project finance for large-scale Biomass power generation with few precedents
- Designed and led the implementation of a fuel procurement scheme aligned with bankability requirements.

Quang Tri Onshore Wind (¥20bn scale)

- Achieved the first project financing in the Onshore Wind industry in Vietnam, supported by Asia Development Bank.

Himeji BESS (15GW, financing amount not disclosed)

- Successfully led project financing for the first BESS project, which had no precedent at the time in Japan

Operation Team that Supports Stable Operation and Maximizes Profits

- Achieving high-efficiency and stable operation, while minimizing unplanned outages by accumulating and sharing knowledge from existing power plants.
- Driving initiatives to enhance overall project value by internalizing key operational functions.

RENOVA 's Operation Team

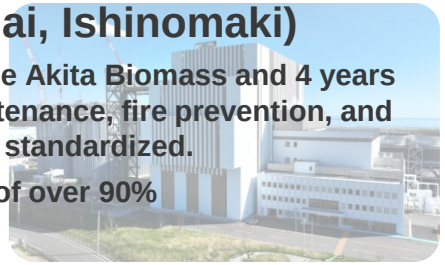
Key Elements of Operations		Technology	Proven Experience
Dedicated Engineering team	Stable operation with employees from boiler manufacturers, etc.		93%. 87%. High Capacity Factor*1 93%. 91%.
Dedicated Fuel Procurement team	Stable procurement, composed of people from trading, petroleum and shipping companies		
Monitoring	Power generation forecasting and remote monitoring for immediate anomaly detection		Minimizing unplanned outages
Maintenance	Establishment of a system for responding to abnormalities and periodic inspections		Highly accurate revenue forecasting

What We Can Achieve

- **Stable Operation**
  - Realizing stable operation by sharing insights—including troubleshooting knowledge—across all power plants.
- **Profitability Improvement**
  - Able to lead facility upgrades in preparation for the post-FIT by internalizing operations.
  - Strong commitment and trust have driven new offtaker acquisitions.

Case Studies

Biomass (Akita, Kanda, Sendai, Ishinomaki)



- Drawing on 8 years experience with the Akita Biomass and 4 years with Kanda Biomass, preventive maintenance, fire prevention, and fuel procurement practices have been standardized.
- Achieving an average capacity factor of over 90%

Existing Large Solar PVs

- Output curtailment is increasing depending on the area.
- Advance planning for conversion to the FIP system and installing BESS to minimize output curtailment.

*1 Note that among external factors, curtailment is added to actual power generation, while downtime due to third parties is excluded from the calculation. Refer to the 98th Calculation Committee for Procurement Price, the average capacity factor of domestic biomass plants is 72.9% for unused material (over 2,000kW) and 63.1% for general wood.

- Successfully secured corporate PPAs totaling 437 MW (13 contracts across all 4 technologies)*1 as of the end of FY2024.
- Owning multiple technologies and BESS enables flexible response to customer needs.

RENOVA's Team of Specialists in the Renewable Energy Market

Factors of Developing Customers

- Thorough Knowledge of the Policy & Market
- Understanding Customers
- Ability to Make Proposals
- High-quality Power Plants

Technology

Proven Experience

437MW*1 (as of 2025/3)

*In order of PPA signing date

TOKYO GAS, EverGreen, NTT アノードエナジー, muRata, Suzuyo 鈴与商事, 大塚商会, TOHO GAS

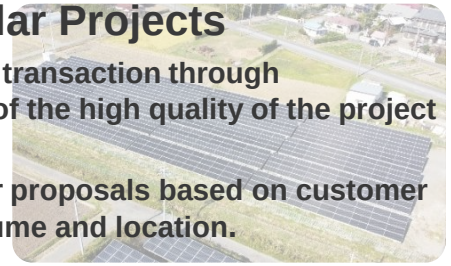
+2 domestic customers

What can be realized

- **Tailored Proposals to meet Customers' needs**
  - In-house engineers enable to own high-quality power plants
  - Proficiency in multiple technologies enables flexible proposals to meet customer renewable energy needs (Volume and Area).
- **Proper Demonstration of Environmental Value**
  - Leveraging insights into regulatory frameworks and market conditions to rationally demonstrate the value of renewable energy

Case Studies

Non-FIT Solar Projects



- Realized the transaction through recognition of the high quality of the project facilities.
- Able to tailor proposals based on customer demand volume and location.

Biomass Projects

- Successfully concluded multiple PPAs with FIT price＋α
- Win-win agreements achieved using the FIP scheme.

BESS

- Developing new customers with an interest in BESS utilization.
- Final stage to conclude the 2nd offtake agreement*2 in the industry for BESS

*1 Including PPAs that are subject to start of operation and PPAs that are in final discussions *2 A long-term fixed-revenue contract that grants electricity consumers the right to use BESS.

Investment Criteria and Financial Policy

- Considering RENOVA's business characteristics and strategy, EBITDA and Business Value (NPV[*1]) are prioritized as key management indicators.

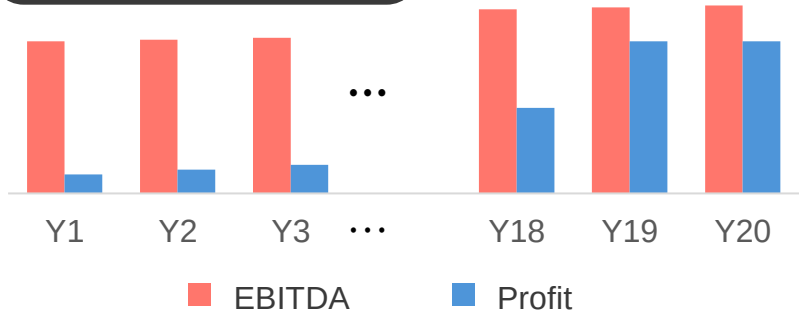
Cash Flow (EBITDA)

- **Due to significant capital investments, depreciation expenses are substantial, and the business is characterized by strong cash flow generation relative to profits.**
- **Pursuing high capital efficiency and utilizing high-leverage project financing for substantial capital investments.**

Emphasize on long-term stable cash flow (EBITDA) growth

(Profits will gradually grow after amortization and interest expenses.)

Project Earnings Image **CF remains stable long-term**

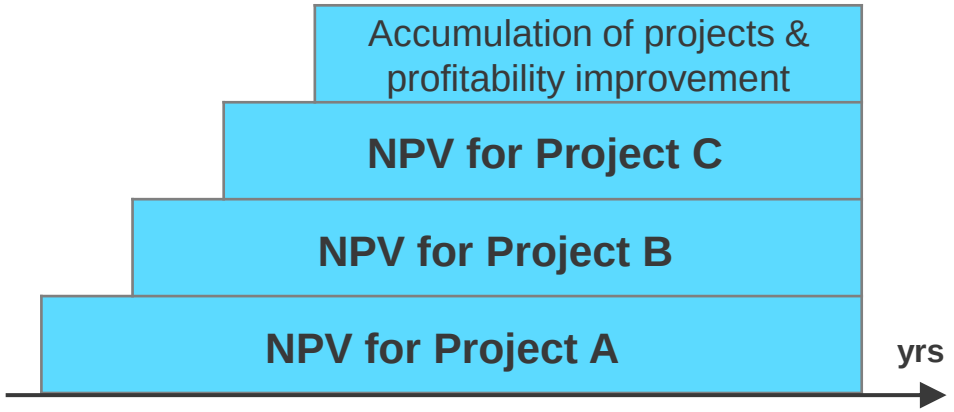


Business Value (NPV)

- **Aiming to accumulate multiple projects with long-term cash flow with high predictability and sustain such projects over the long term.**
- **RENOVA possesses NPV of stable cash flow over 20-30 years at the timing of start of construction.**

Prioritize maximizing NPV by accumulating projects and improving profitability

NPV Accumulation Image **Stock-type**

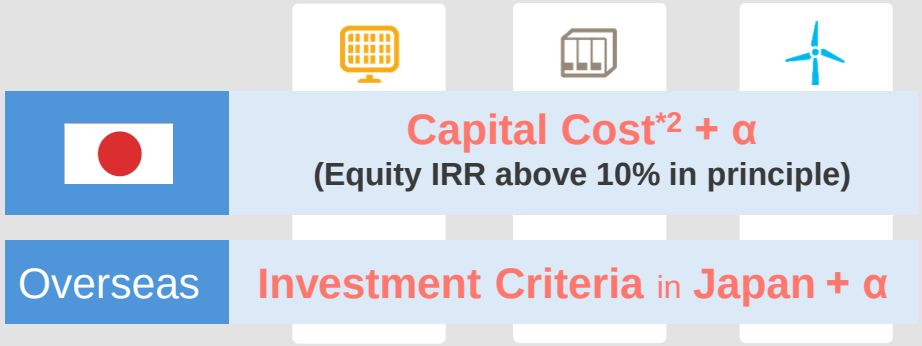


*1 Net Present Value：A metric that converts future cash flows from a project into their present value

- Established a “risk appetite” policy which defines risks to take or not to take.
- Set strict investment criteria as part of the risk appetite policy and continue growth investment exceeding capital costs (WACC)*2.

Risk Appetite Policy*1

Investment Criteria by Country and Technology



Key Factors in Investment Criteria

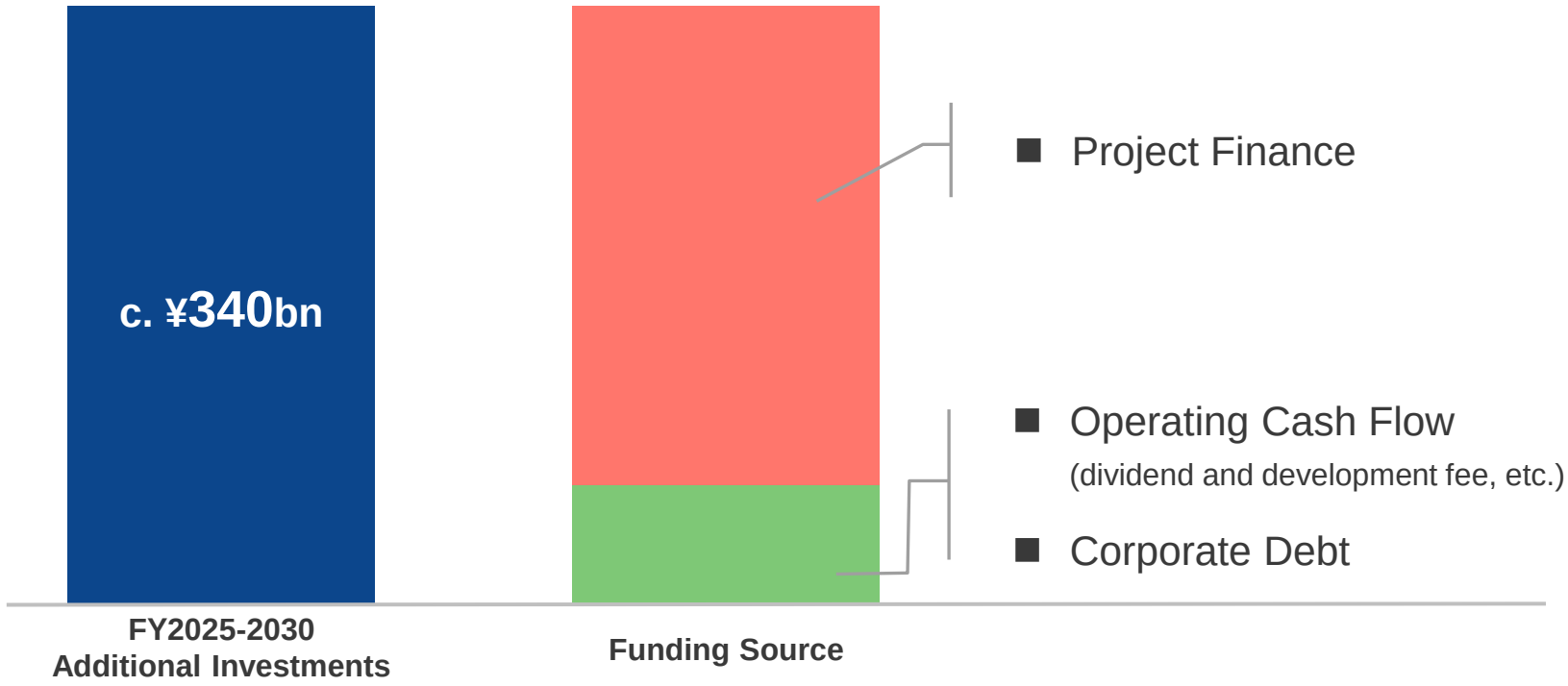
- Country Risk
- Contract Period
- Inflation Risk
- Merchant Exposure

Assumptions for IRR Calculation

- **Calculate equity IRR for each project, and make final investment decisions based on the criteria**
- **IRR calculated over 20-30 years**
  - Period based on each project’s power sales contract terms
- Consider inflation and contingency cost
- Set offtake price conservatively, considering transaction performance and third-party forecasts
- For project with merchant revenues, use third-party forecasts
- Calculate without assuming terminal value

*1 Types and levels of risk an organization is willing to accept to achieve its objectives and business plan.
*2 Weighted Average Cost of Capital: The weighted average of the cost of borrowing and the cost of capital for a company that employs multiple financing methods. An important indicator for a company’s investment decision and business evaluation.

- Additional investments of JPY 340 billion is planned by FY2030.
- Utilizing highly leveraged project finance supported by the long-term stable CF[*1], equity contributions are covered by full use of operating cash flow and corporate debt.
- Minimizing the need to raise equity capital via the RENOVA parent entity.



Net debt / EBITDA

FY2024 (Actual)	FY2030
11x	7x improvement

Equity Ratio

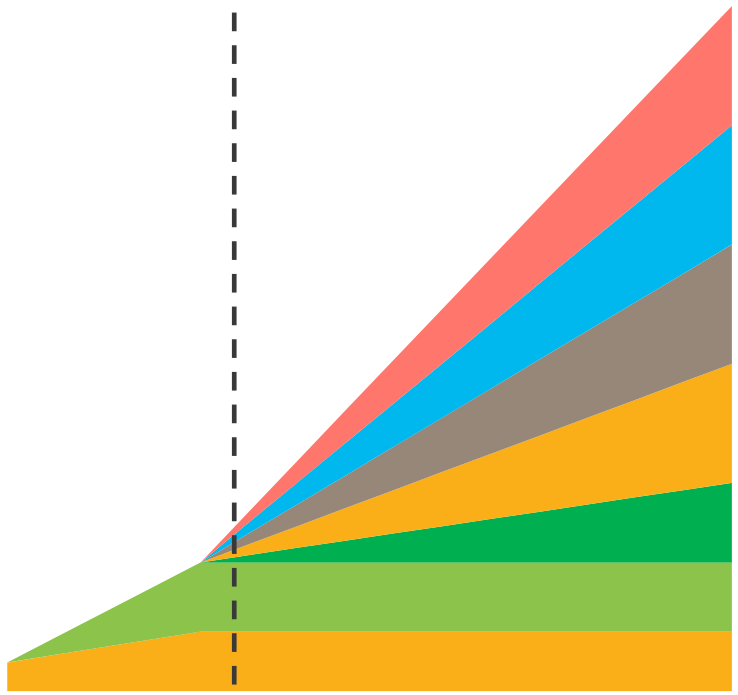
FY2024 (Actual)	FY2030
17%	Remain stable even after significant investment

*1 Cash Flow

Business Strategy towards FY2030 Goal

- Generating stable cash flow through improved profitability of existing Large Solar PV and Biomass.
- Accumulating tangible business value by sequentially starting the operations of Non-FIT Solar, BESS and Onshore Wind projects with high profitability in Japan.
- Generating additional profits by advancing business development with local partners in the U.S. and Asia.

Growth Outlook



FY2024
(as of now)

Prospects

Basic Strategy

Overseas Development

Accumulating expertise by partnerships with local players in late-stage project development.

In operation/under construction + 1.6GW

Accumulating Business in Japan

Onshore Wind	Steadily advancing high-return projects with completed wind surveys.	Under construction + 0.4GW
BESS	Expanding the business by leveraging 3 proven revenue streams*1. Maximizing profitability through in-house aggregation.	In operation/under construction + 0.6GW
Non-FIT Solar PV	Expanding number of partners and development capability Securing competitive power purchase agreements	In operation/under construction + 0.8GW

Expansion of Existing Business Profitability

Biomass	Ensuring safe, stable operations and acquiring high-price PPAs. Expanding profits through low-cost fuel procurement.	EBITDA + ¥16bn
Large Solar PV	Enhancing profitability through BESS integration	

*1 Long-term Decarbonization Power Source Auctions (Long-term fixed revenue for 20 years), Offtake agreements (Long-term fixed revenue), Market-based transactions

- Large Solar PV: Improving profitability by BESS co-location and advancing initiatives such as repowering towards post-FIT.
- Biomass: Enhancing revenue by ensuring safe and stable operations, acquiring PPAs with higher tariff and procuring affordable fuel.

Large Solar PV

- Promote digitalization and automation
- Continuous operational improvement

Cost Reduction

- **Reduce output curtailment and optimize electricity selling prices by co-location of BESS.**

Revenue Maximization

- **Increase generation amount and extend the life span of facilities by repowering** towards post-FIT period

Value Growth beyond FY2030

Biomass

Safe Operation × **Stable** Operation × **Profit improvement**

Company-wide safety initiatives

Sharing knowledge and trouble cases across 7 plants

PPA*1 with higher tariff + Cost optimization

Stable and Economical Fuel Procurement

In-house Fuel Procurement team + bulk procurement

Stable and High-yield

Baseload Renewable Energy Power

FY2030

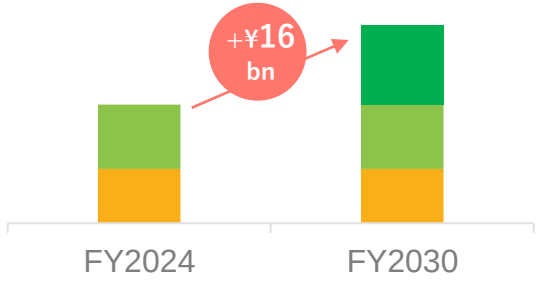
Capacity
(In operation / Under construction)

0.8GW
(net 0.6GW)

EBITDA (Growth Portion)

+ ¥16bn

（FY24: ¥24bn → FY30: ¥40bn）



*1 Changing to a long-term fixed-price PPA (Power Purchase Agreement) with consumers at prices higher than FIT (Feed-in Tariff).

- Continuing to secure attractive long-term PPAs by leveraging strong renewable energy demand from Supply-Demand Gap
- Expanding collaboration with development partners to build a massive supply network by aggregating Small-Scale Solar PV projects across the county

Market Conditions

Expanding renewable energy Supply-Demand Gap

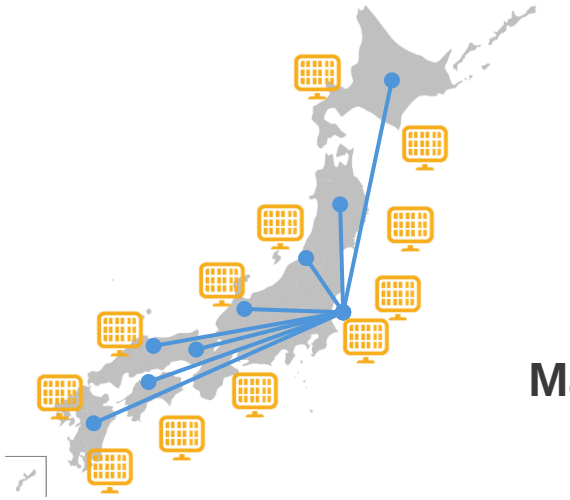
Depletion of suitable sites for large-scale solar in Japan

Non-FIT Solar Growth Strategy

Strong Demand for Renewable Energy
from RE100 companies, etc.

+

Secure Long-Term PPAs
by leveraging sales capabilities



Nationwide Network
with development partners

×

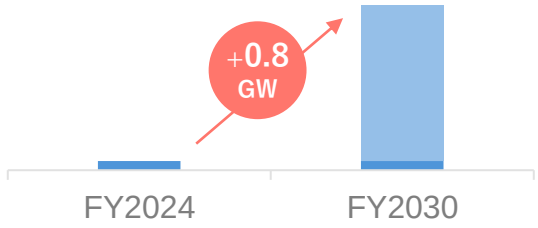
Aggregation of Small-Scale Solar Projects

Massive Supply Network for Solar PV

FY2030

Capacity
(In operation / Under construction*1)

0.9GW
(net 0.9GW)



EBITDA

¥7.0bn

*1 Recognize projects under construction if Capacity which Power Generation Adjustment Supply Agreements (a power generator supplies electricity in accordance with the generation plan. An interconnection agreement is also applied at the same time) are applied before COD

- Expanding business through three methods with our proven track record: long-term decarbonized power source auctions, offtake agreement and market transactions.
- Maximizing revenue by developing in-house aggregation functions.

Market Requests

Due to increase in demand for electric power,
Requests from the Capacity Market

Due to increase in renewable energy,
Requests for Demand and Supply Adjustment

Expanding Business through Three Methods with Proven Track Record

Market transaction
Himeji BESS (Under construction)

Earn revenue by buying and selling in the electricity market such as capacity market, supply and demand adjustment market, etc.

Offtake agreement*1
Under development (Approaching contract finalization)

Grant storage battery usage rights and receive fixed usage fees
RENOVA is responsible for the maintenance and management of the facility.

Long-Term Decarbonized Power Source Auction(LTDA)*2
FY23LTDA*3 (Preparing for construction)

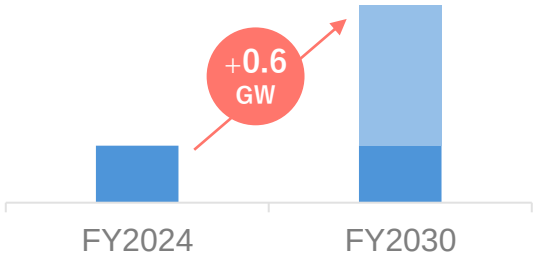
In principle, receive a fixed fee for the installed capacity for 20 years.

Develop in-house aggregation functions = maximize revenue

FY2030

Capacity
(In operation / Under construction)

0.9GW
(net 0.7GW)



EBITDA

¥6.5bn

*1 A business model in which the right to use storage batteries maintained and managed by RENOVA is granted to a third party, and the third party pays a fixed fee for the use of the storage batteries.
*2 In order to secure the capacity of decarbonized power sources required for the entire country, new installation/replacement/renovation of renewable energy, storage batteries, etc. are subject to bidding, and the system under which a contract amount for securing capacity multiplied by the amount of the winning bid (price fluctuations are adjusted each year of the system period) is paid, in principle, for 20 years by the Organization for Promotion of Electricity Wide Area Operations. *3 Refer to three BESS business at Tomakomai, Shiraoi and Morimachi Mutsumi, which RENOVA has successfully bid on FY2023 LTDA.

- Developing projects leveraging know-how from Reihoku Amakusa Onshore Wind.
- Aiming to start construction of 400 MW high-profitability projects by FY2030.

~ FY2026	~ FY2028	~ FY2030
Advance Developments (wind assessment, land, environmental studies, transmission system, permitting, negotiation with off-taker)		**400MW** **Start of Construction**

Utilization for new projects

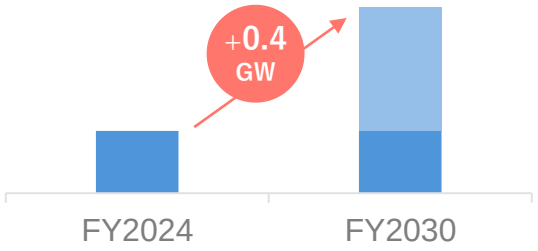
Reihoku Amakusa Onshore Wind Completion
(The first zero-based development*1)

- Corporate PPA conclusion with FIP
- Accumulated knowledge in operation and maintenance

FY2030

Capacity
(In operation / Under construction)

0.6GW
(net 0.3GW)



EBITDA

¥1.7bn
(FY2035: over ¥20.0bn)*2

*1 Project led by RENOVA from site screening to implementation.
*2 Assumed EBITDA for a 400 MW project that starts construction by FY2030 and operation by FY2035.

- Accumulate know-how and track records from late-stage development projects with local partners.
- Develop BESS and Solar PV in the U.S. and Solar PV and Onshore Wind in Asia.

Basic Strategy

Priority given to **late-stage development** projects = Emphasis on **short-term results**

RENOVA
- **Engineering & Procurement**
- **Construction and Operations Management**
- **Finance**
- **Off-take arrangement**
- **Interconnection system**

Local Partners
- **Land and local coordination**
- **Permit and license support**
- **Off-take arrangement**
- **Interconnection system**

Priority Technologies for Development

Increase in demand for electric power due to the expansion of new data centers, etc

Expanding demand for renewable energy mainly from Corporate **PPAs by companies**

BESS

BESS, PV Hybrid

Accelerating introduction of renewable energy by guaranteed long-term fixed-price under Government Assistance Program (**GEAP**)*1 and **PPA**

Solar PV

Onshore Wind

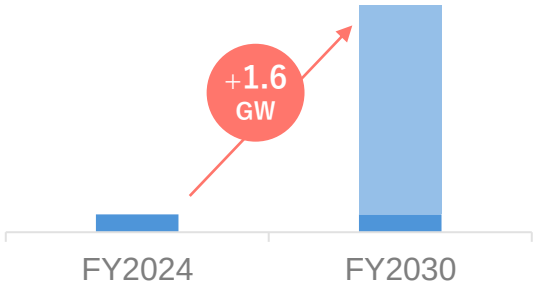
Accelerating introduction of renewable energy by guaranteed long-term fixed-price under Government Support Programs (**RPS**)*2

Onshore Wind

FY2030

Capacity
(In operation / Under construction)

1.8GW
(net 1.0GW)



EBITDA

¥8.8bn

*1 20-year feed-in tariff system in the form of an auction in the Philippines
*2 Compensation for the difference between the base price and the market price determined by auction or consultation (a system similar to the Japanese FIP system)

Aspirational Vision after FY2030

FY2012～FY2024 | FY2025～FY2030 | FY2031～

Growing Electricity Demand × Accelerated Decarbonization

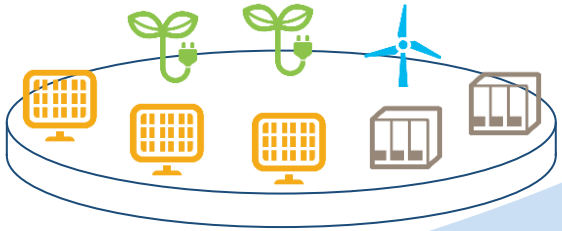
Installing Renewable Energy and Developing Multiple Technologies

Accumulating development expertise

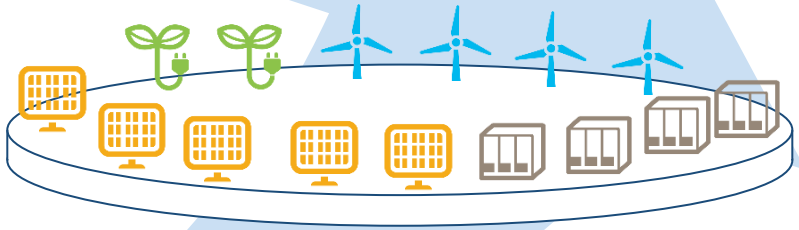
Medium-term Management Plan 2030 (Current)

Business Expansion Driven by Accelerated Decarbonization

Further expansion of renewable energy
Supplying renewable energy in line with customer needs
Investing in BESS to enhance renewable energy supply



Rapid Growth as a Decarbonization Solution Provider



Contributing to the creation of a sustainable society

Our Mission

To create green and sustainable energy systems

for a better world

Our Vision

To become Asia’s renewable energy leader

Creating our future with renewable energy.

RENOVA

Appendix

Net Present Value of RENOVA's Owned Projects (Ownership Interest Equivalent)- Valuation Methodology

Valuation Methods

Project Values Calculated and Aggregated Using DCF (Sum-of-the-Parts Analysis)

- Discounting CF attributed to RENOVA as an equity investor, which include the investment amount from RENOVA and recovered funds such as dividends after debt repayment, using a discount rate specific to each business unit.
- Projects that are in operation or under constructions as of each fiscal year are included.
- Business Plan

  Existing Projects in operation: Business plan for each project (recovered funds incl. dividends)

  Existing Projects under construction: Business plan for each project (investment amount and recovered funds incl. dividends)

  New Projects: Business plan developed by country and technology based on the specific project under development

Other Key Assumptions and Reference Information

- Discount rate: Set based on country- and technology- characteristics and RV's cost of capital.
- Admin. Costs: Included to PF value of each fiscal year
- Net Debt of RENOVA parent entity: JPY20.7bil as of FY2024-end. New investments after FY2025 are incorporated into NPV calculation for each project.
- Net Debt for each project: Incorporated into NPV calculation as NPV is based CF after repayment funds.

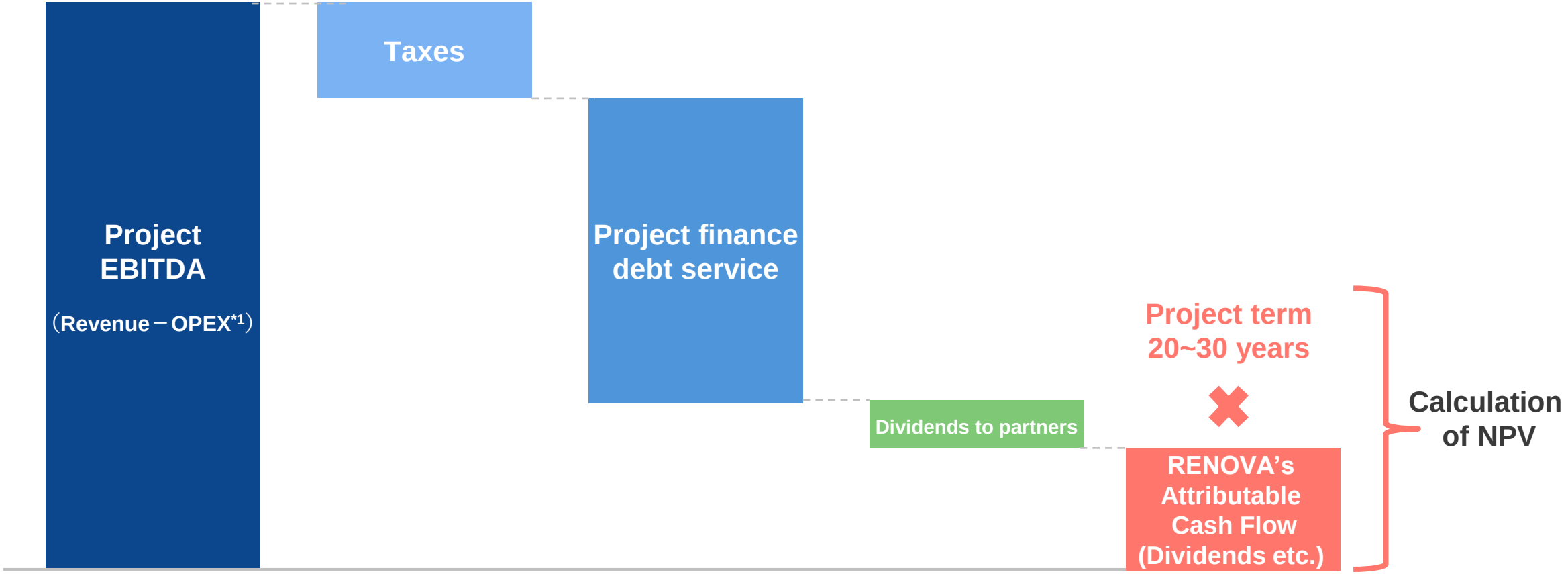
Preconditions

							FY2024		FY2030	
New/ Existing	Country	Technology	Project term	Ownership interest	D/E ratio	Discount rate	MW (in operation)	MW (under construction)	MW (in operation)	MW (under construction)
Existing	Japan	Large Solar PV	30 yrs.	20~100%	90～95%	4%	374	-	374	-
		Biomass	20 yrs.	35~75%*2	80～90%	6%	395	50	445	-
		Onshore Wind*1	25 yrs.	90%	80%	5%	-	55	55	-
	Vietnam	Onshore Wind	20 yrs.	40%	70%	9%	144	-	144	-
New	Japan	Solar PV	30 yrs.	100%	85%	4%	55	107*3	790	110*3
		BESS*4	20 yrs.	60~90%	50~95%	5~8%	-	230	560	310*5
		Onshore Wind	25 yrs.	80%	88%	5%	-	-	-	400*5
	Asia	Solar PV	30 yrs.	approx. 50%	70%	8%	-	-	1,439	200*5
		Onshore Wind	25 yrs.	approx. 50%	70%	9%	-	-		
	US	BESS	20 yrs.	approx. 50~70%	approx. 80%	8%	-	-		
		BESS, PV Hybrid	30 yrs.	approx. 30~70%	approx. 80%	8%	-	-		

*1 Abukuma 147MW Onshore Wind with 10% owner ship interest is excluded for NPV calculation. *2 Indicating the dividend ratio. *3 Recognize projects under construction if Capacity which Power Generation Adjustment Supply Agreements (a power generator supplies electricity in accordance with the generation plan. An interconnection agreement is also applied at the same time) are applied before COD
*4 Ownership interest and D/E ratio are adjusted according to expected revenue scheme (long-term fixed revenue or market-based transactions).
*5 Indicating only projects expected to be under construction during FY2030 at this point.

Conceptual Diagram of Project EBITDA and RENOVA's Attributable Cash Flow

- The Cash flow attributable to RENOVA is the amount remaining after deducting taxes, debt service and dividends to partners from EBITDA.
- Net present value (NPV) is calculated by discounting the cash flows attributable to RENOVA over the long term (20-30 years).



*1 OPEX (Operating Expenditure) refers to operating expenses such as O&M expenses, fuel costs and SG&A expenses.

Unit：JPY 100 million

	FY2024 (Actual)	FY2025 (Forecast)	FY2027 (Target)	FY2030 (Target)
Revenue	702	905	1,050	1,300
EBITDA*1	233	316	400	600
Operating Profit	41	93	130	250
Profit Attributable to Owners of the Parent	27	15	(Not disclosed)	(Not disclosed)
Total Assets	5,301	5,500	6,500	8,000
Interest-bearing Debt	3,329	3,500	4,000	5,000
Interest-bearing Debt*2	2,455	2,700	3,200	4,200
Net Debt / EBITDA	11x	9x	8x	7x
Equity Ratio*3	17%	16%	Similar level as FY2024	Similar level as FY2024

*1 Assumptions for FY2025: Foreign exchange USD1 = JPY 145, Biomass spot fuel price Wood pellet: USD175/t, PKS: USD140/t Assumption for FY2027 and FY2030: onward: Foreign exchange USD1 = JPY 145, Biomass spot fuel price Wood pellet: USD185/t, PKS: USD130/t *2 Net interest-bearing debt = Interest bearing debt - Cash and deposits *3 Equity attributable to owners of parent / Equity