

Briefing Materials for the Regular Press Conference

31 May 2023
JERA Co., Inc.

Contents

1. Renewable Energy Business

- Initiatives in Taiwan **3**
- Acquisition of major renewable energy companies in Europe and Japan **4**
- JERA's renewable energy development status and initiatives **5**
- Developing a global renewable energy business **6**

2. Review of Power Supply and Demand and Plans for a Stable Supply Going Forward

- Efforts to secure kW (power supply capacity) **8**
- Efforts to secure kWh (fuel) **9**
- Initiatives to ensure a stable supply of electricity going forward..... **10**

3. FY2022 Consolidated Financial Results and Synergy Effects

- FY2022 consolidated financial results **12**
- Segment information **13**
- Synergies gained by integrating existing thermal power generation businesses **14**

1 . Renewable Energy Business

Initiatives in Taiwan

- Participated in **Asia's first large-scale project, Formosa 1, and its successor Formosa 2**, in Taiwan, a leading region for offshore wind power in Asia.
- Took a **leading role in the Formosa 2 project from the construction stage**, accumulating unique experience and expertise as a Japanese participant.

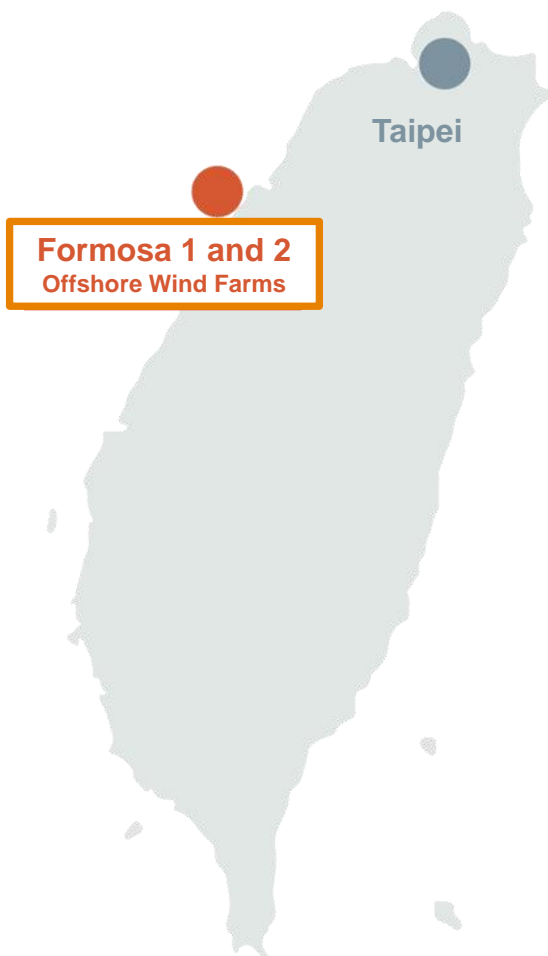


Formosa 1

		Phase 1	Phase 2
Generation Capacity		8 MW	120 MW
Net Capacity		2.6 MW	39 MW
Constr uction	Start	Apr 2016	Jun 2018
	Completion	Oct 2016	Oct 2019
COD		Apr 2017	Dec 2019



Jera



Generation Capacity		376 MW
Net Capacity		184.24 MW
Constr uction	Start	Jun 2019
	Completion	Jan 2023
COD		In progress



FORMOSA 2

Acquisition of major renewable energy companies in Europe and Japan

- Utilize the talents and expertise of Parkwind in **Japan and other strategic regions**
 - Align with the achievements, experience, and future potential of offshore wind power from Green Power Investment (GPI) to complement our global resources
- ⇒ Aim for **further expansion of the global offshore wind power business** with Parkwind and GPI as twin pillars

Acquisition of Parkwind, the largest offshore wind power operator in Belgium

- Acquisition of over 130 talented professionals including development engineers, project managers, and operation technicians.
- Gain knowledge and insights into offshore wind power operations in Europe.

Phase	In Operation				Under Construction	Under Development
	Belwind	Northwind	Nobelwind	Northwester 2	Arcadis Ost 1	
Offshore Wind Project						
Generation Capacity (MW)	171	216	165	219	257	-
Net Capacity (MW)	134	65	68	153	180	4,526

Acquisition of GPI, the leading renewable power generation company in Japan¹






- Engaged in the development, construction, and operation of domestic renewable energy projects for many years. Possess around 200 talented professionals who are well-versed in these areas.
- Currently constructing an offshore wind farm (with a capacity of 112MW) in Ishikari Bay, Hokkaido

Phase	In Operation		Under Construction		Under Development	
	PV	Onshore Wind	Onshore Wind	Offshore Wind	Onshore Wind	Offshore Wind
Generation Capacity ²	56	281	80	112	Approx. 1,500 ³	Before public auction

1. Joint acquisition with NTT Anode Energy 2. Includes stakes in other companies 3. Limited to FIT-certified projects

JERA's renewable energy development status and initiatives

Renewable energy development status

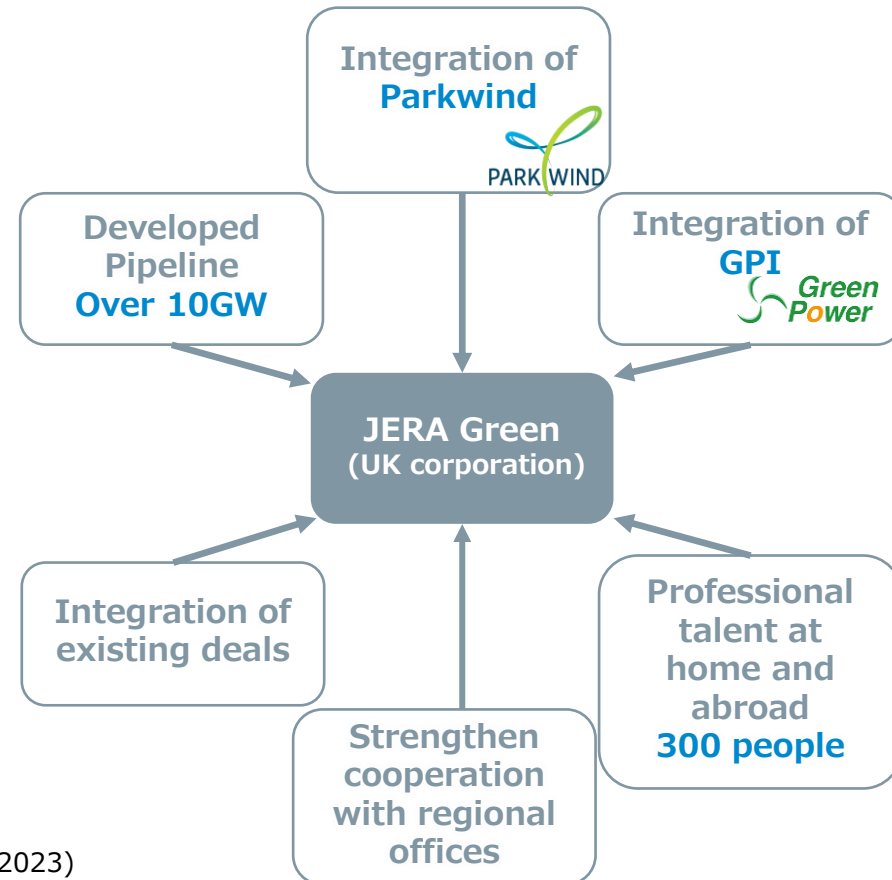
JERA and other major renewable energy operators in Asia	Equity generation capacity
 (Japan)	3.1 GW*
 (India)	8.0 GW
 (India)	7.7 GW
 (Korea)	5.6 GW
 (Malaysia)	3.8 GW
 (India)	3.6 GW

*After completion of the acquisition of shares in Parkwind and GPI.

Source: Compiled by JERA based on each company's website (as of May 2023)

Future initiatives

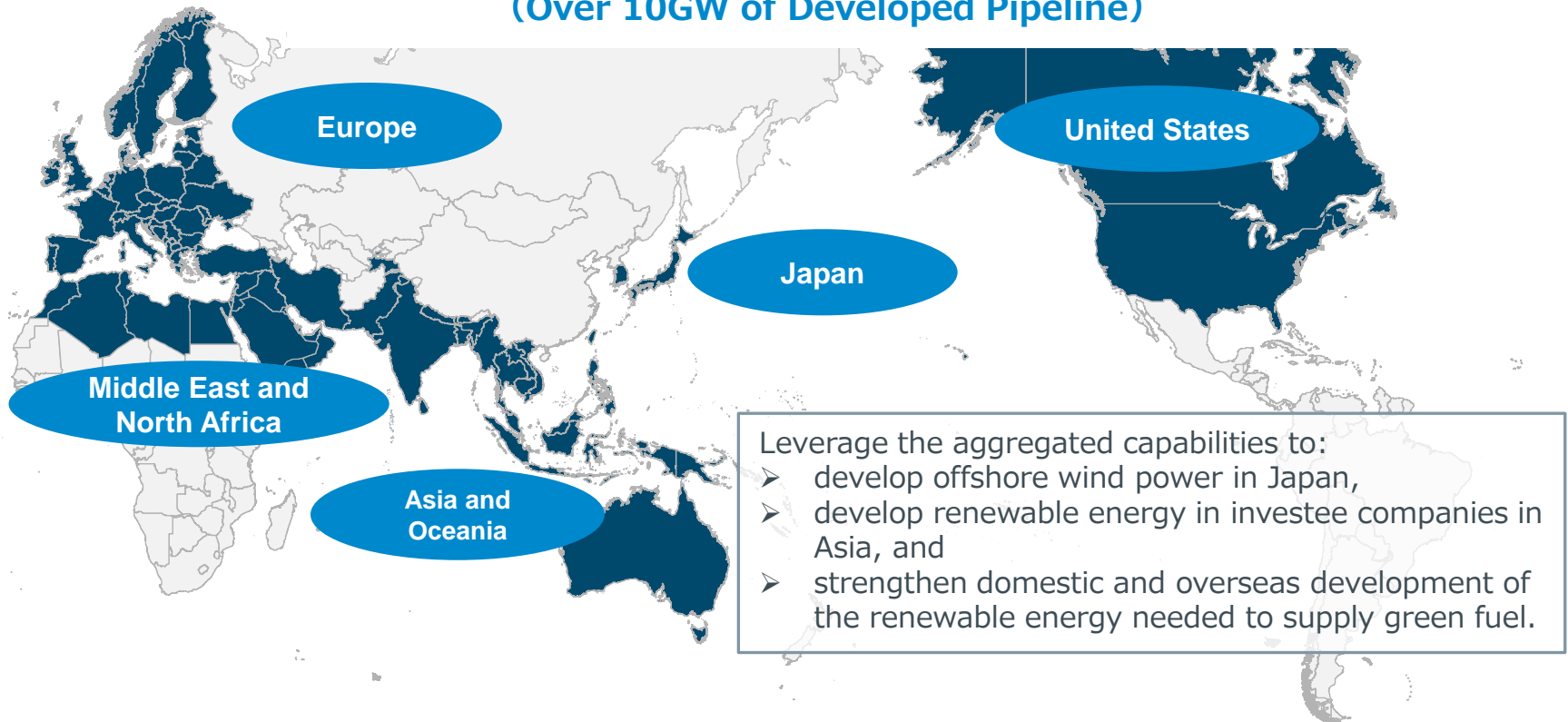
Consolidate renewable energy businesses under a specialized organization to create a global structure



Developing a global renewable energy business

- Utilize the knowledge and technology accumulated in our company's renewable energy organization for renewable energy projects in Japan and overseas
- Provide optimal solutions by providing multiple options combining LNG and hydrogen/ammonia with renewable energy

JERA's Renewable Energy Project Area (Over 10GW of Developed Pipeline)



- Leverage the aggregated capabilities to:
- develop offshore wind power in Japan,
 - develop renewable energy in investee companies in Asia, and
 - strengthen domestic and overseas development of the renewable energy needed to supply green fuel.

2. Review of Power Supply and Demand and Plans for a Stable Supply Going Forward

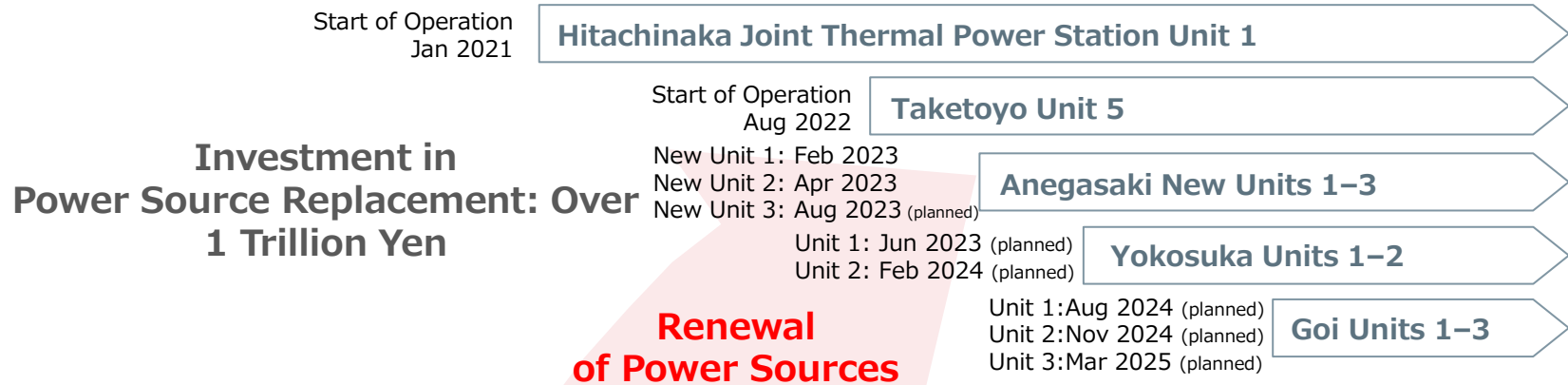
Efforts to secure kW (power supply capacity)

- Power plants constructed during the period of high economic growth have aged, making it increasingly difficult to ensure a stable supply by maintaining existing facilities.
- ⇒ Contribute to a stable supply by renewing our sources of power by **investing more than 1 trillion yen in the replacement** and decommissioning of aging equipment

JERA STEP 3 (Integration of existing thermal power generation businesses)



Replacement
7,310MW



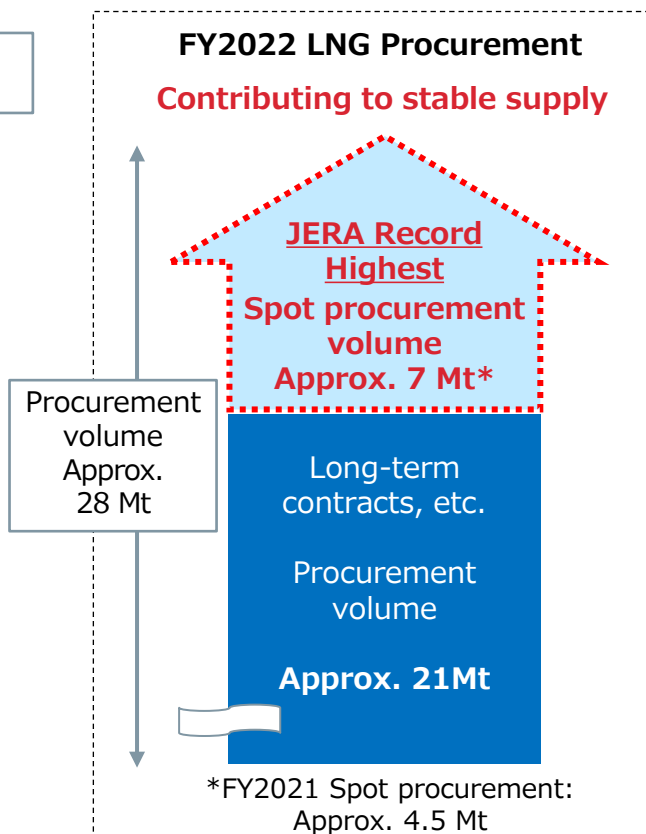
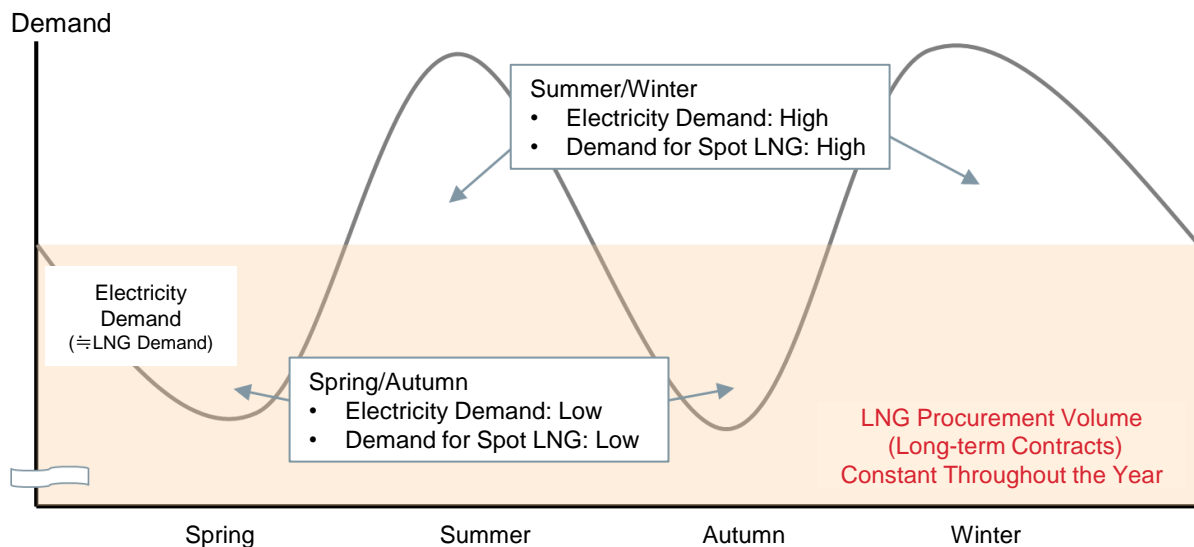
Shutdown
10,630MW



Efforts to secure kWh (fuel)

- Although there is a **surplus of LNG in spring and autumn** when electricity demand is low, a **considerable amount of spot procurement is required in summer and winter** when electricity demand peaks (**LNG spot procurement in fiscal 2022: approximately 7 million tons**).
- We are working to secure a stable supply of fuel **by building an LNG portfolio** (combining long-term contracts, short-term contracts, and spot procurement) and **by optimizing flexible procurement and resale through JERAGM to strike a balance in accordance with the seasons**.

Conceptual Diagram:
Balance between Electricity Demand (\approx LNG Demand) and Fuel Procurement



Initiatives to ensure a stable supply of electricity going forward

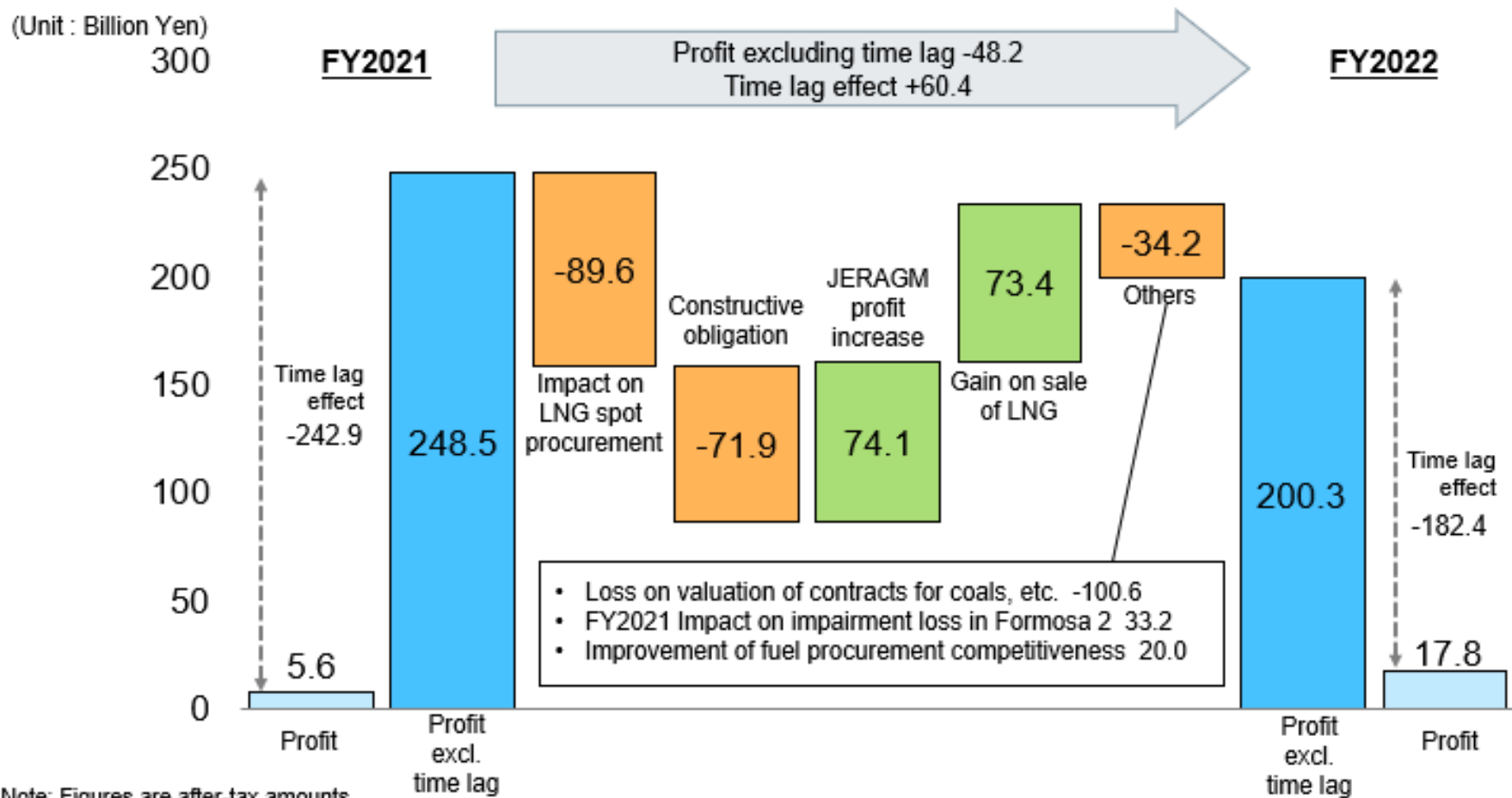
- Although falling global demand enabled us to safely procure fuel in FY 2022, we are not optimistic about fuel procurement in 2023.
 - We expect to secure the minimum reserve required for the summer, but the situation remains unpredictable.
- ⇒ **Ensure fuel procurement for a stable supply by closely monitoring fuel market conditions and receiving support from the government. As the same time, we will strive to secure kW by steadily replacing aging equipment with state-of-the-art power stations and responding to public auctions in the event of a shortage.**

Effect on electricity supply and demand			FY2022	FY2023
LNG market	Overseas demand	Europe	×Demand for LNG increased as a substitute for Russian gas ○Decreased demand due to mild winter	×Demand for LNG increases as a substitute for Russian gas ? Fluctuations in demand
		China	○Decreased demand due to zero-Covid policy	? Effect of changes to zero-Covid policy
	Supply		—	? Sluggish production at LNG plants
Domestic electricity market	kW	×Shortage of kW in summer and winter ⇒○Resolved through public auction	×Shortage of kW in summer ⇒Conditions remain difficult despite public auctions ? kW in summer	
	kWh	○Decreased demand due to mild winter	? Fluctuations in demand	

3. FY2022 Consolidated Financial Results and Synergy Effects

FY2022 Consolidated Financial Results

【 From the FY 2022 Financial Results Briefing 】



[From the FY 2022 Financial Results Briefing]

(Unit: Billion Yen)

	FY2022(A)		FY2021(B)		Change(A-B)		Main Factors of Changes in Net Income
	Operating Revenue	Net Income / Loss	Operating Revenue	Net Income / Loss	Operating Revenue	Net Income / Loss	
Fuel Related	585.7	201.3	454.7	146.1	131.0	55.1	•JERAGM profit increase +74.1
Overseas Power Generation	8.6	-6.5	4.1	-34.7	4.5	28.2	•(2021) Impairment loss in Formosa 2 +33.2 •Profit decrease in overseas IPPs -21.1
Domestic Thermal Power Generation and Gas Supply	6,153.4	-11.0 154.8 ^{※2}	3,118.3	-121.4 131.0 ^{※2}	3,035.1	110.4 23.7 ^{※2}	•Gain on sale of LNG +73.4 •Improvement of fuel procurement competitiveness +20.0 •Impact of fuel inventory unit prices +14.7 •Impairment loss, etc. +29.4 •Impact on LNG spot procurement -89.6 •Constructive obligation -71.9
Adjustments ^{※1}	-2,010.0	-165.8 -149.2 ^{※2}	-808.1	15.7 6.2 ^{※2}	-1,201.8	-181.6 -155.4 ^{※2}	•Loss on valuation of contracts for coals, etc. -100.6
Consolidated	4,737.8	17.8 200.3 ^{※2}	2,769.1	5.6 248.5 ^{※2}	1,968.7	12.1 48.2 ^{※2}	

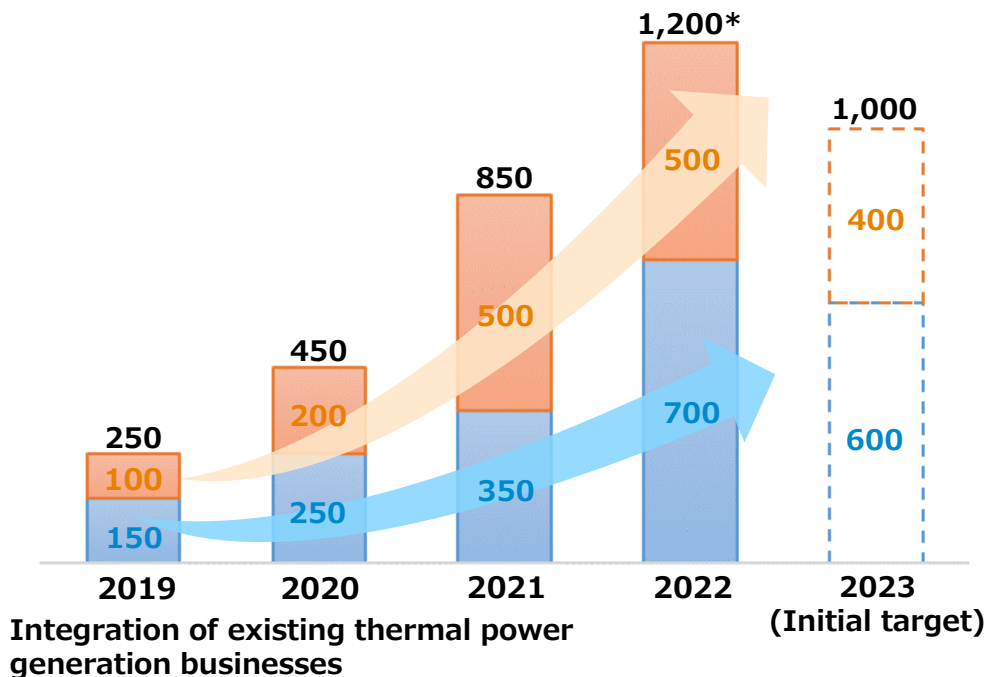
※1 : "Adjustments" includes headquarter expenses and consolidation adjustments such as intersegment eliminations

※2 : Excluding the effect of time lag

We will review how segment disclosures should be, for the next fiscal year.

Synergies gained by integrating existing thermal power generation businesses

- In 2019, JERA integrated its existing thermal power generation businesses. We aimed to achieve synergies worth at least 100 billion yen per year within five years and have achieved this goal a year ahead of schedule.
- Contribute to the stable supply of electricity to the domestic market by improving cost efficiency in the O&M sector and creating new sources of revenue that can become foundations of the business.



New sources of revenue as foundations of the business

- Global level O&M business
- Optimization of the entire value chain through integrated operations
- Project development leveraging our enhanced presence due to the Step 3 integration that made us one of the world's leading energy companies

Making the thermal power generation business more cost-competitive

- Make O&M model more efficient using best practices of TEPCO and Chubu
- Rationalization through material procurement and outsourcing that leverages economies of scale
- Development and operation of state-of-the-art methods.

*Excluding the 80-billion-yen one-time profit contribution from the trading business that does not depend on synergies