

The JERA logo is positioned in the top right corner of the slide. It consists of the word "Jera" in a large, blue, sans-serif font, with the tagline "Energy for a New Era" in a smaller, grey font directly below it. The background of the slide is a detailed isometric illustration of various energy and industrial components. On the left, there are battery storage units labeled "Battery storage" and a wind turbine labeled "Wind power". In the center, there are solar panels labeled "Solar power" and an offshore oil rig. On the right, there are industrial tanks and structures labeled "Thermal power". A worker in a blue uniform is shown interacting with a tablet, with dotted lines connecting them to various parts of the energy infrastructure. The overall style is clean and technical, using a color palette of blues, greys, and oranges.

Energy for a New Era

March 11th, 2025

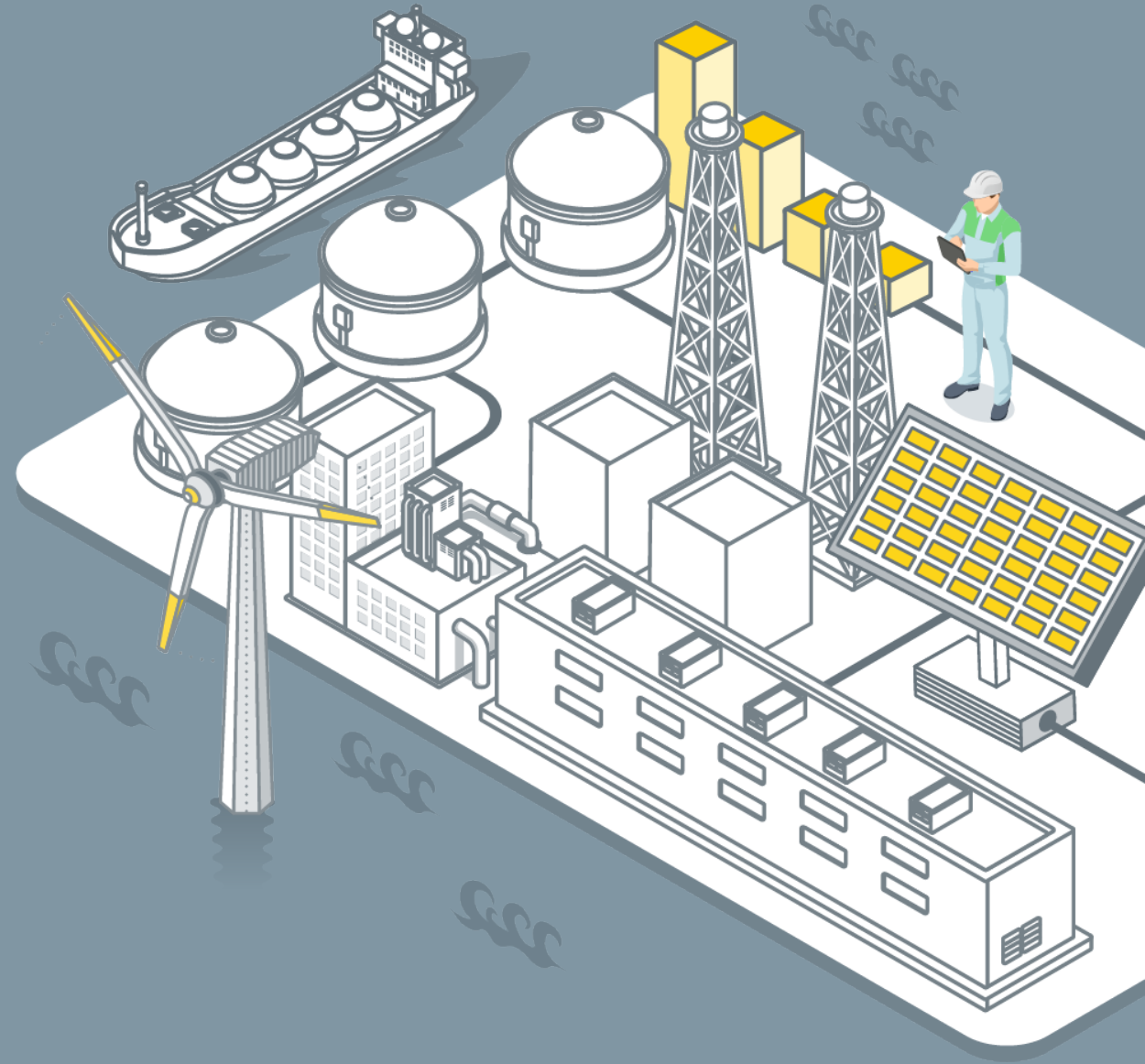
JERA Co., Inc.

Executive Officer, Head of the Low Carbon Fuel
Planning Group - **Masato Otaki**

Realizing **Hydrogen/Ammonia** **Use Case in the Power Sector** and Building the **LCF value chain**

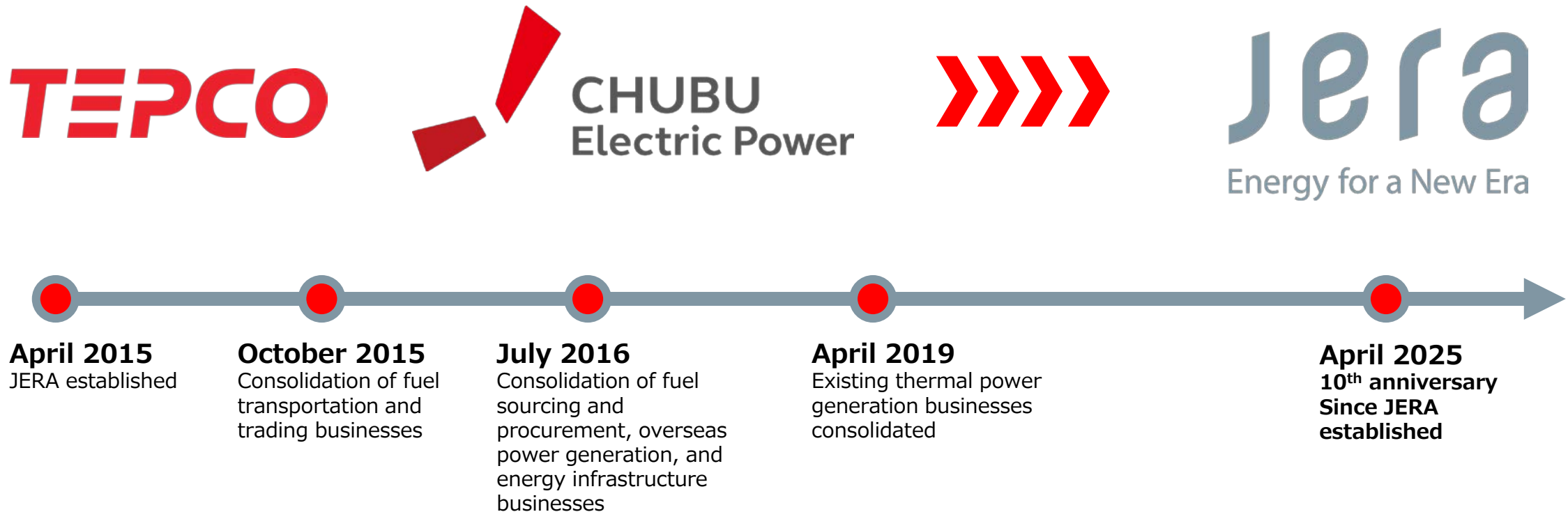
Our Company

Taking Energy into a New Era



JERA's Origins: The Path to Business Consolidation

- JERA was created through the consolidation of the fuel and thermal power departments of the Tokyo Electric Power Company and the Chubu Electric Power Company
- Established to become a Japan-based global energy company



JERA's Value Chain and Company Overview

- Covering entire value chain of fuel and thermal power generation business
- LNG transaction volume is approximately 36 MTPA, which is among the largest in the world

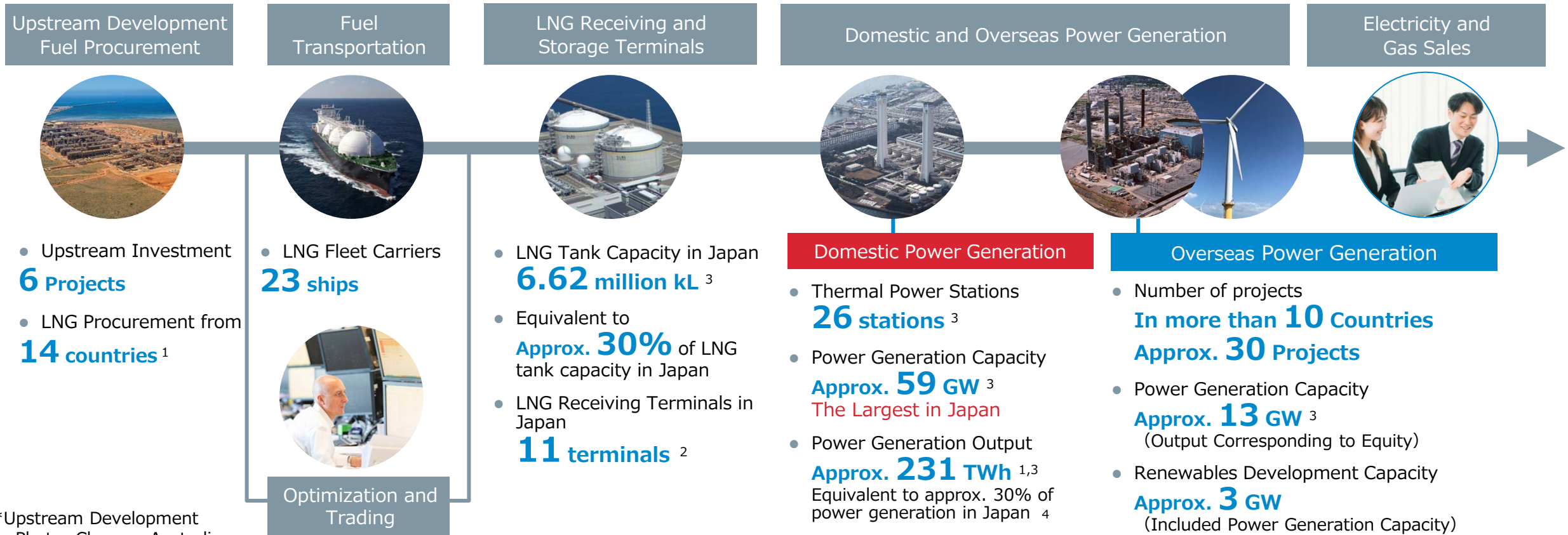
Total Assets
Approx. JPY
8.5 trillion
5

LNG Transaction Volume (Annual) ¹
Approx. **36 MTPA**
Among the largest in the world

Sales
Approx. JPY
3.7 trillion
1,5

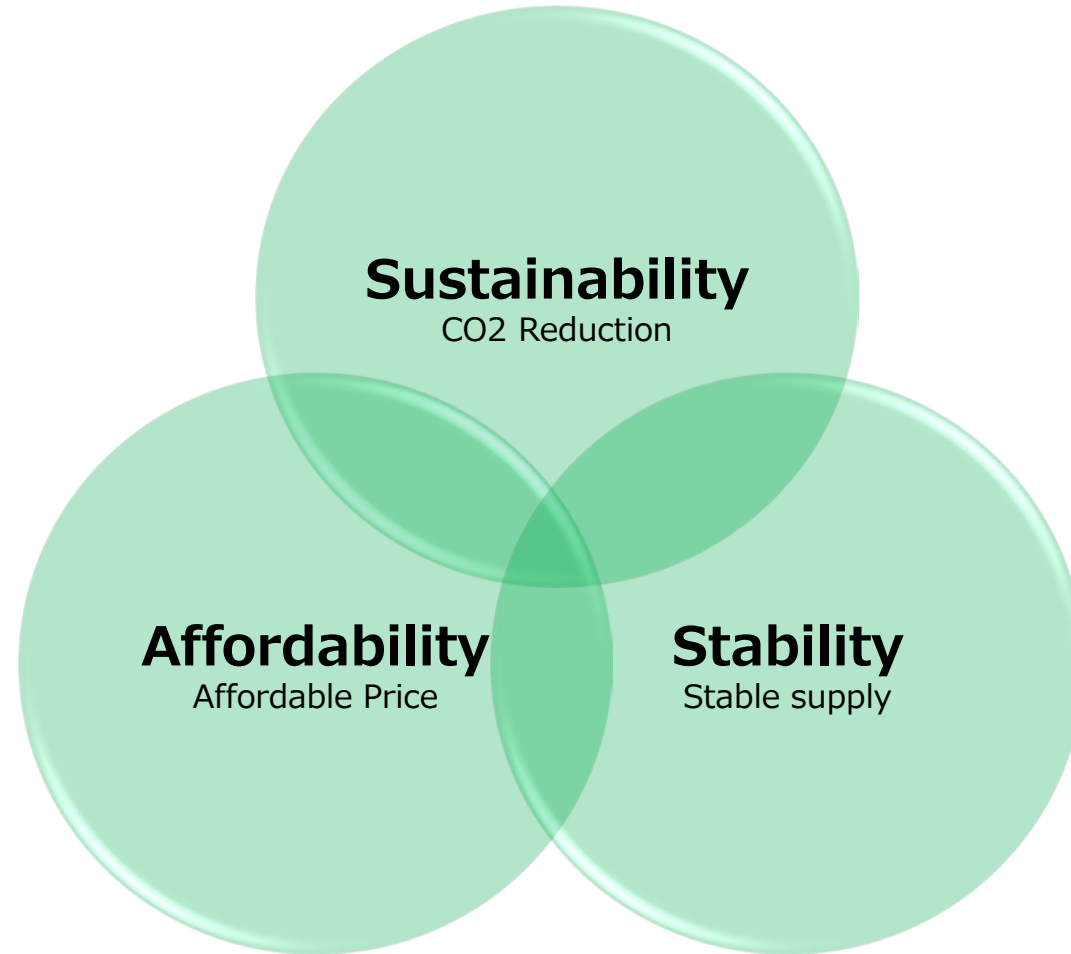
Current as of March 31, 2024

1. FY2023
2. Includes jointly operated terminals in Chita and Yokkaichi area.
3. Includes capacity under construction. Excludes joint thermal power in Japan.
4. FY2023
5. Voluntarily adopted International Financial Reporting Standards (IFRS)



*Upstream Development Photo: Chevron Australia

What is the global Energy ~~dilemma~~ Trilemma?



Taking Energy into a New Era

Mission

To provide
**cutting-edge
solutions
to the world's energy
issues**

Vision

To scale up its clean energy
platform of renewables and
low greenhouse gas thermal
power, **sparking sustainable
development in Asia** and
around the world





Our Decarbonization Strategy

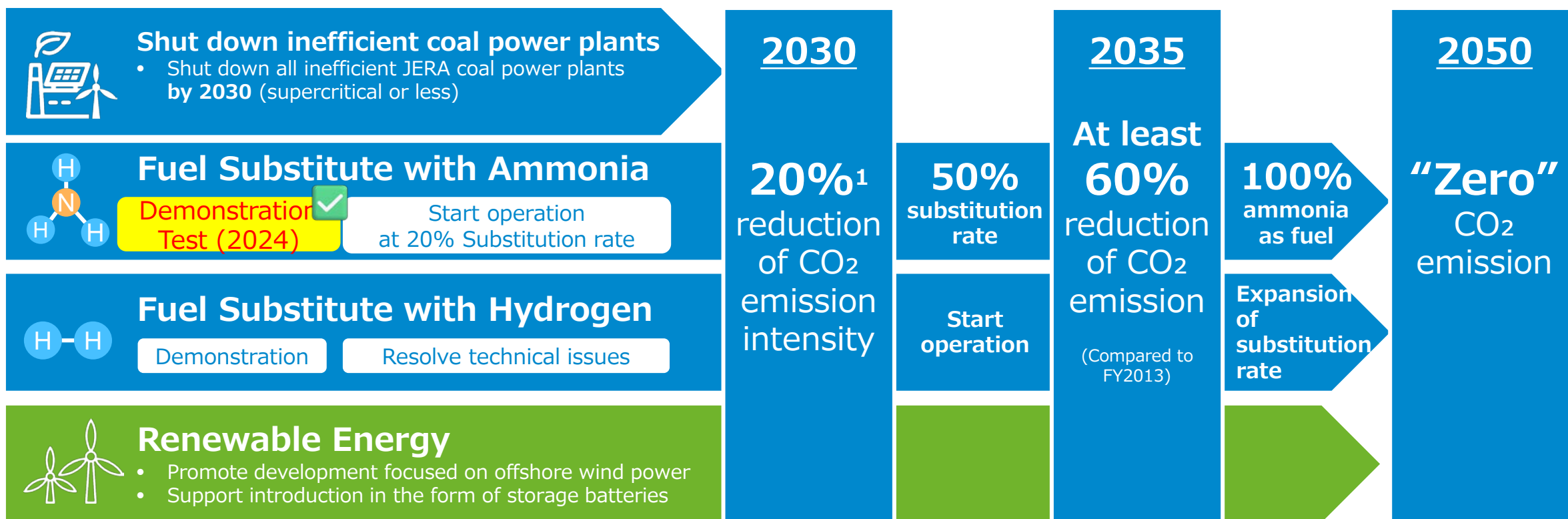
JERA Zero CO₂ Emissions 2050



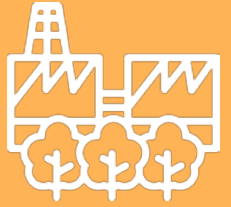


JERA Zero CO₂ Emissions 2050 Roadmap for its Business in Japan

- We have established the “JERA Zero CO₂ Emissions 2050 Roadmap for its Business in Japan,” which comprises four initiatives
- Environmental Target was set in 2030 and 2035 to achieve “Zero” CO₂ emissions from JERA operations by 2050
- Commit to reducing carbon emission intensity from thermal power generation and strive to develop and adopt renewable energy



¹ Reduce carbon emission intensity of thermal power plants by 20% based on the long-term energy supply-demand outlook for FY 2030 as set by the government



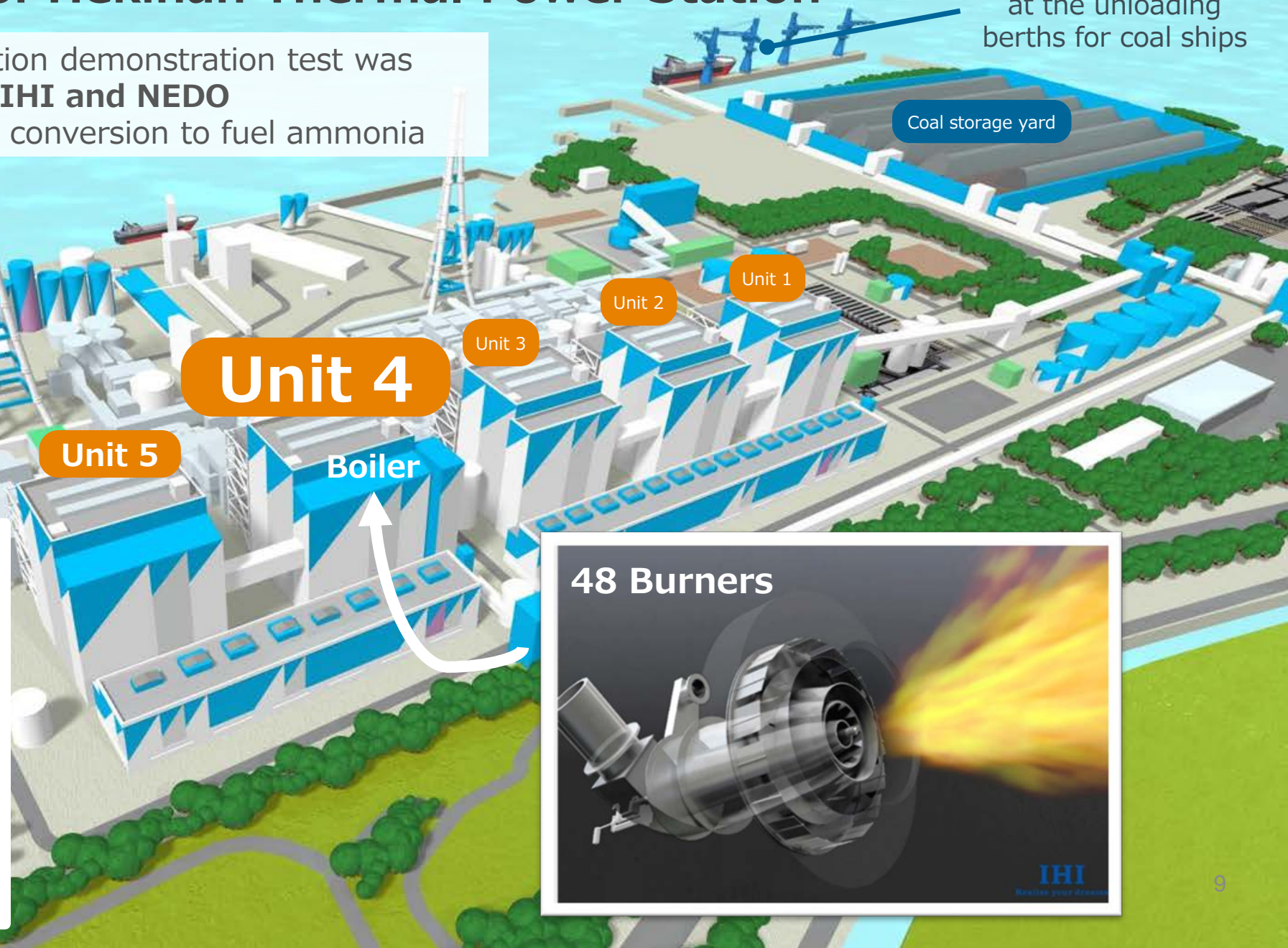
Demonstration Test of Fuel Ammonia Substitution at Hekinan Thermal Power Station



Demonstration Test of Hekinan Thermal Power Station

Ammonia is received at the unloading berths for coal ships

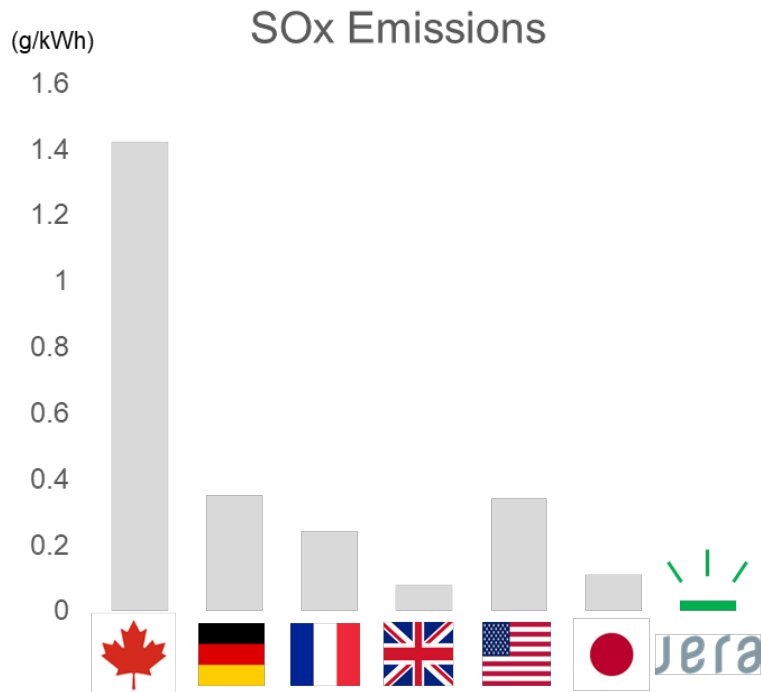
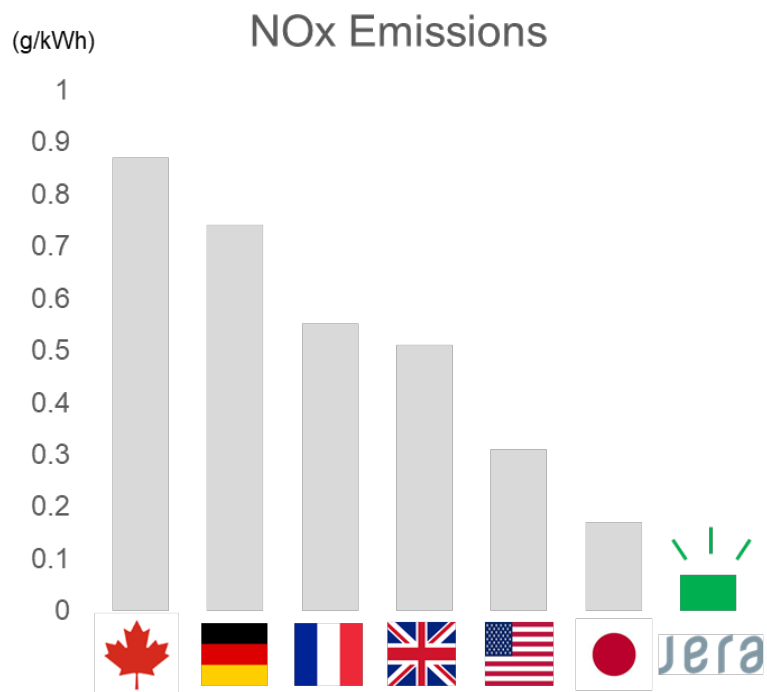
- The **world's first** fuel substitution demonstration test was completed **in June 2024** with **IHI and NEDO**
- Achieved good results for 20% conversion to fuel ammonia





Ecosystem Conservation - JERA's Efforts to Reduce NOx/SOx

- JERA has succeeded in reducing NOx/SOx emissions to the world's lowest level and committed to sustainable energy supply from a broad perspective, addressing not only CO2 emissions but also aiming to protect the global environment and ecosystem
- Demonstration test on fuel ammonia as a conversion fuel for Hekinan Thermal Power Station confirmed excellent results related to air pollution



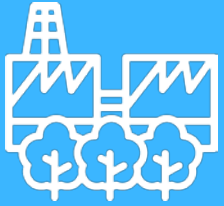
Sources: OECD Stat (NOx emissions), IEA "WORLD ENERGY BALANCES" (Electricity generated).

Ammonia Fuel Substitution Demonstration Test

Results of the evaluation:

- NOx and SOx are equal or less than before*
- No emissions of N2O was detected

* Official announcement of the results of the demonstration test shall be made after further evaluation with IHI/NEDO



Next Step

Building the LCF Value Chain
and Creating Low-carbon Fuel Solutions



Hydrogen & Ammonia – First Mover in Creating Low Carbon Value Chain with Decarbonization Solution



- Challenge to establish LCF solutions including hydrogen and ammonia by utilizing the business practices and knowledge gained from LNGVC business
- In the future, JERA will work on various projects including CCS, aiming to provide low-carbon fuel solutions across the countries.

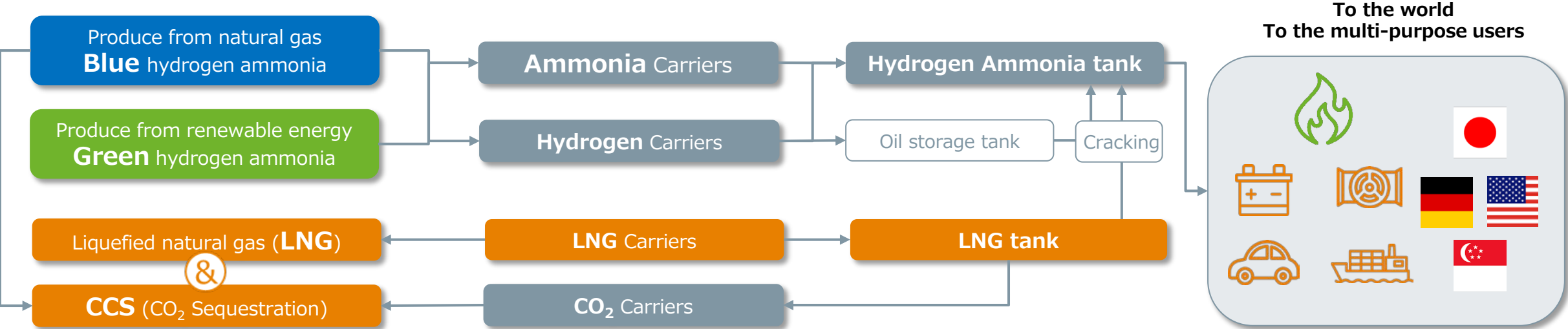
JERA's Low Carbon Fuel Value Chain

Production

Transportation

Storage

Use



Use of Hydrogen & Ammonia in the Power Sector – Door Opener for Hydrogen Society

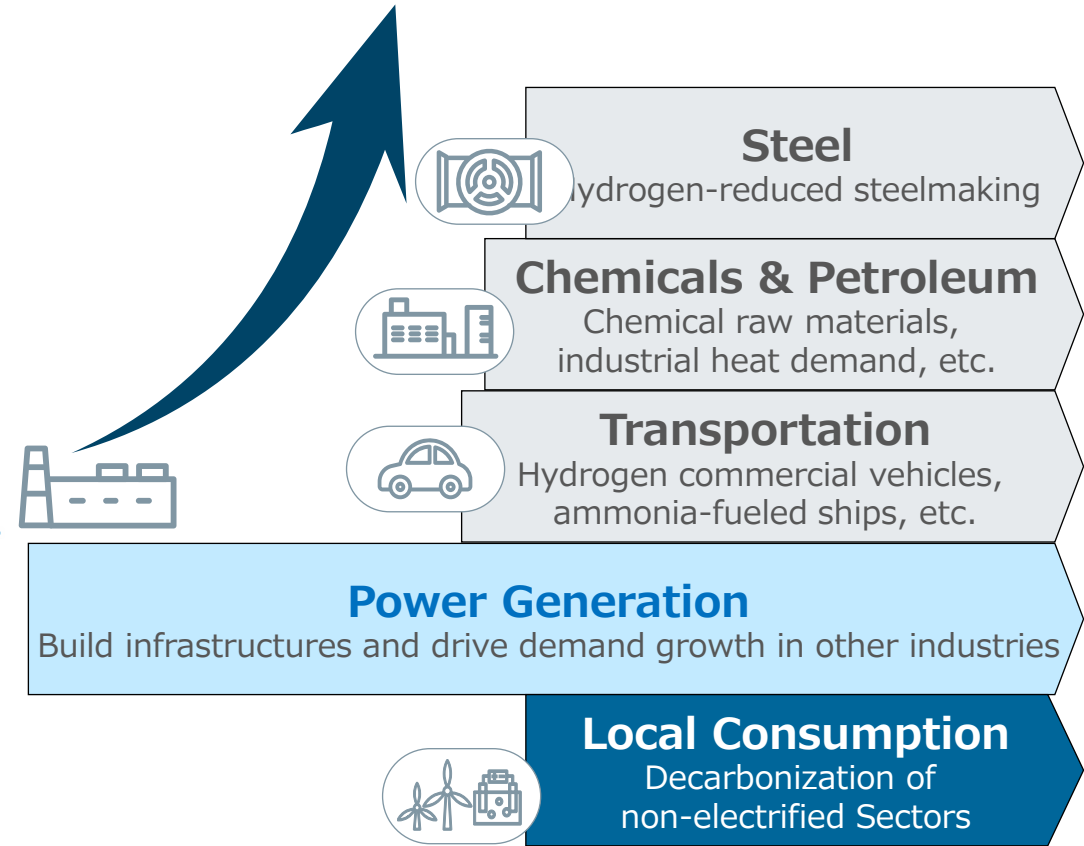
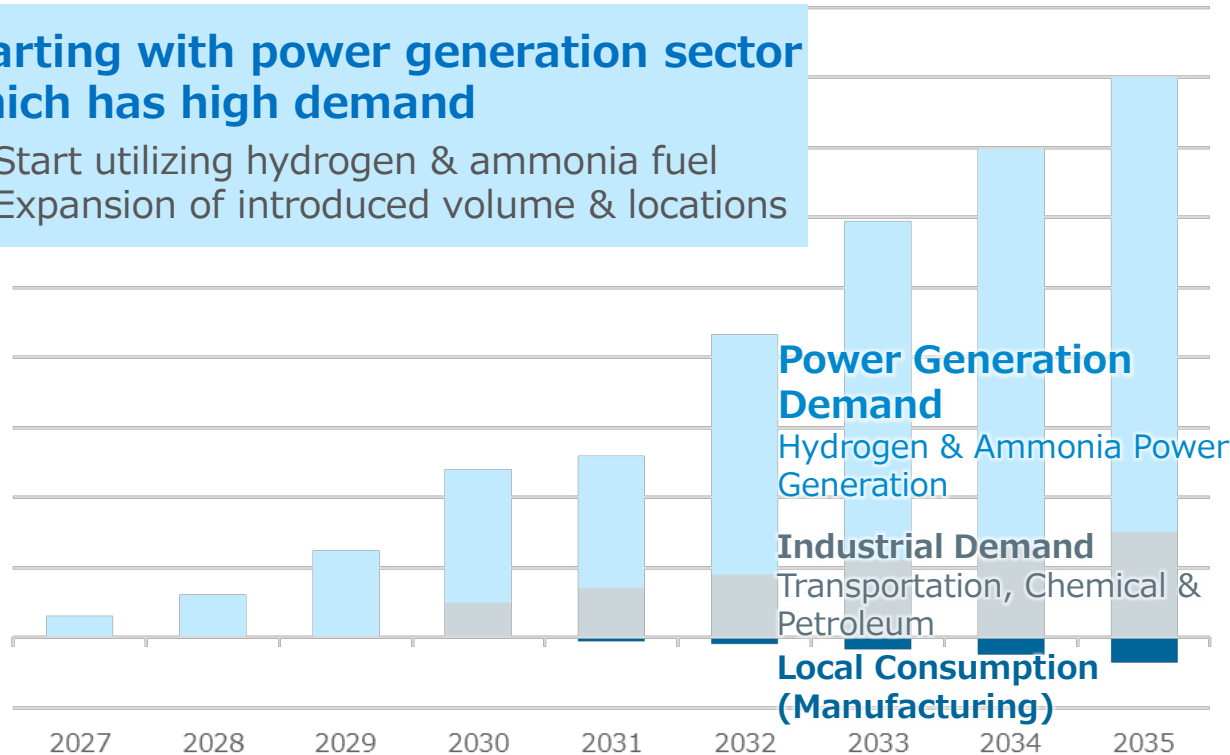


- Starting with a large-scale use at thermal power plants, JERA aim to expand use in the industrial sector as well as in infrastructure development

Picture of introducing Hydrogen & Ammonia in Japan

Starting with power generation sector which has high demand

- Start utilizing hydrogen & ammonia fuel
- Expansion of introduced volume & locations



Jera

Energy for a New Era

JERA would like to work together with you towards a decarbonized society, while promoting various initiatives.