

# Japan's Approach to Carbon Neutrality



Ministry of Economy Trade and Industry,  
JAPAN

# Basic Policy for Realization of GX (Green Transformation)

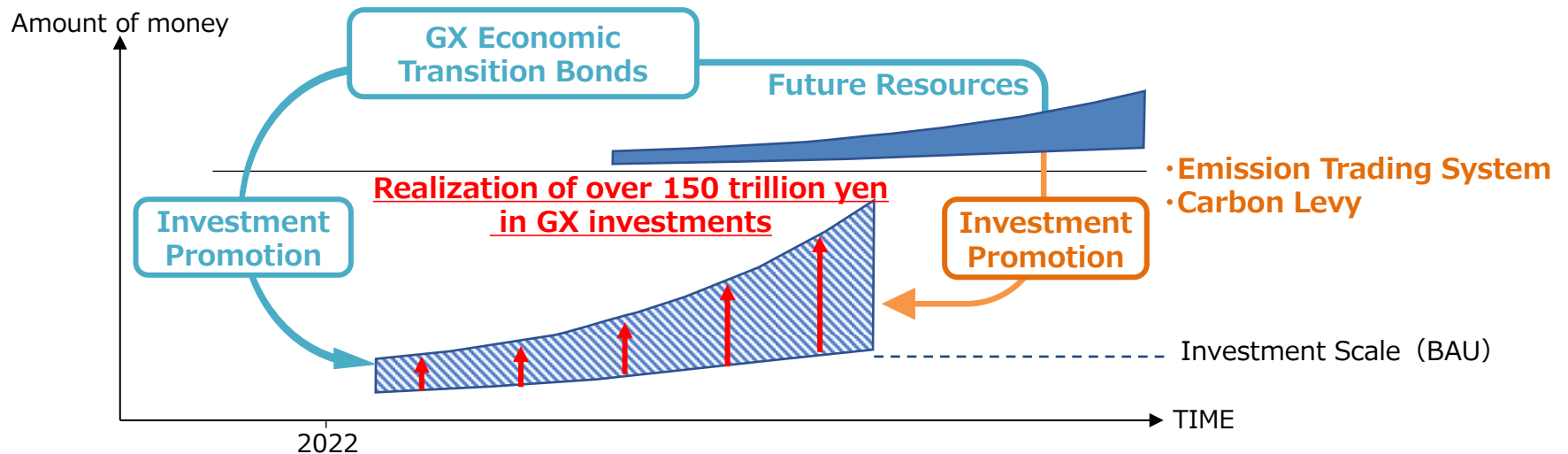
To rebuild a stable supply of energy, measures including maximum use of clean power sources will be taken.

- **Renewable Energy:** To expand the introduction of renewable energy, a **grid development plan** has been established. **Investment in the next 10 years will be 8 times** as much as that in the past 10 years.
- **Nuclear power** : **Replacement** of reactors decided to be decommissioned with next generation innovative reactors. **Review of operating period** (40 years + 20-year extension + shutdown period such as inspection)

Government support will be provided for **upfront investment of 20 trillion yen** to achieve carbon neutrality by 2050 while strengthening industrial competitiveness and realizing economic growth, **aiming for more than 150 trillion yen of public and private investment over the next 10 years.**

To promote the GX investment as described above, a "**Growth Oriented Carbon Pricing Concept**" will be embodied and implemented as soon as possible.

- ① **Government support for bold upfront investment** by issuing "**GX Economic Transition Bonds**" (20 trillion yen over the next 10 years)
- ② **Introduction of carbon pricing to give incentives for GX investment**
  - (1) Full-scale operation of **emissions trading system** in high emission industries [from **FY2026**].  
+ Allowance auctioning is phased in gradually to **power generation companies** [from **FY2033**]
  - (2) Introduction of a **carbon levy** on fossil fuel importers [from **FY2028**]
- ③ Strengthen financial support through public-private partnership



- To realize the Paris Agreement, both “green” initiatives such as renewable energy and “transitions” that will steadily realize low carbonization are important.
- Unlike green bonds, transition finance is relatively new, therefore we need to develop market environment.
- Japanese government published the Basic Guidelines on Climate Transition Finance in May 2021. METI is supporting transition finance by formulating sector roadmaps for hard-to-abate industries and by subsidizing model cases.

## Basic Guidelines

- ✓ JFSA, MOE and METI formulated the Guidelines to establish transition finance in line with the ICMA transition handbook



## Sector Roadmaps

- ✓ An Annex to the Basic Guidelines for evaluating the eligibility of a company' transition strategy
- ✓ Best available technologies and innovative technologies to achieve carbon neutrality by 2050
- ✓ In FY 2021, METI will formulate roadmaps in 7 sectors: steel, chemicals, cement, paper and pulp, electricity, gas, and petroleum.

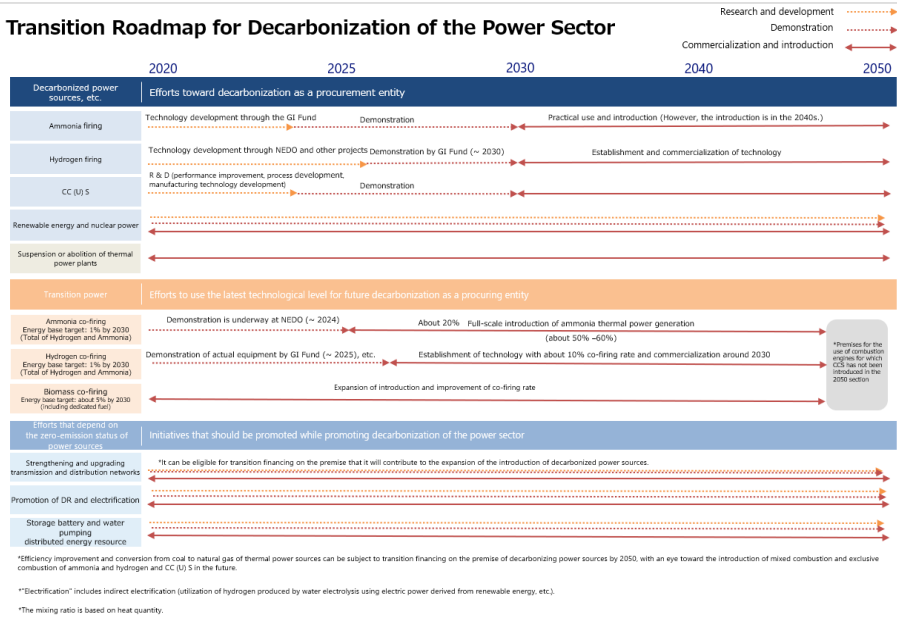
## Model Projects

- ✓ Subsidize 90% of cost for external opinion providers for model cases to see the alignment to the Basic Guidelines
- ✓ Post the cases to be referenced as a good example

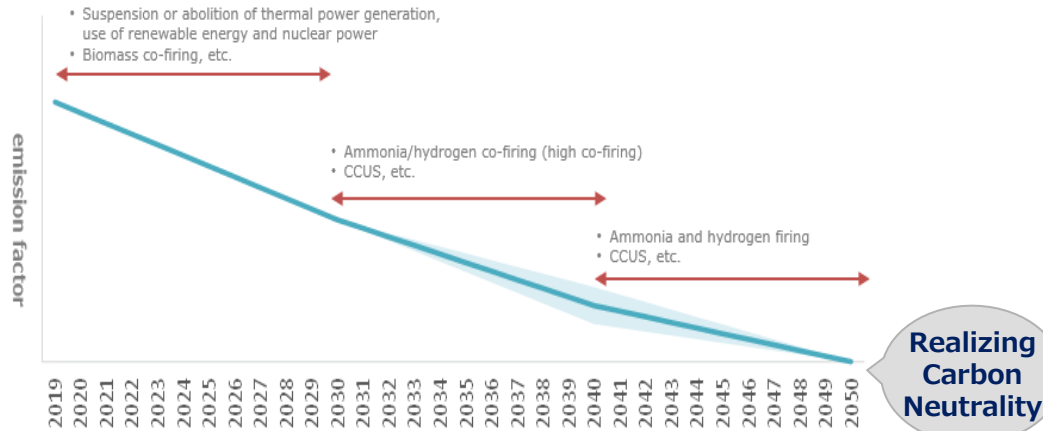
# Roadmap Examples: Power and Iron/Steel

## Power

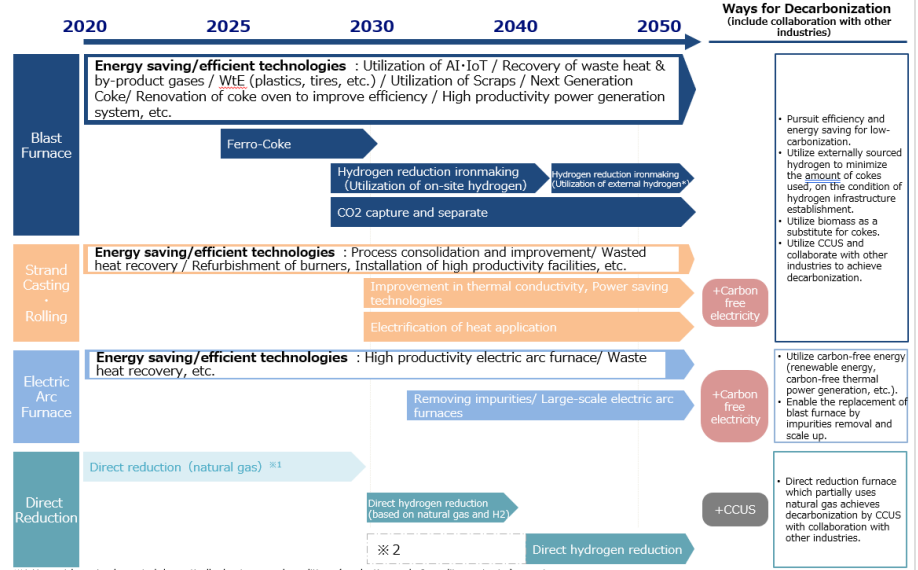
### Transition Roadmap for Decarbonization of the Power Sector



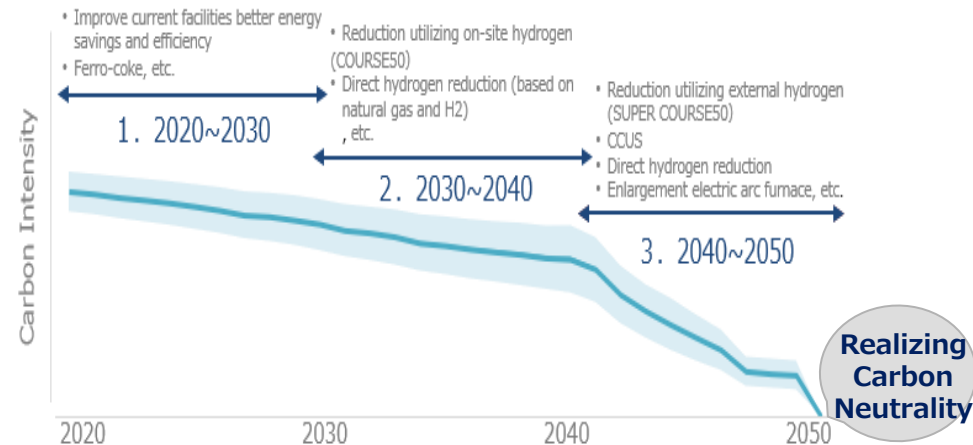
### Assumed CO2 Reduction Pathway



## Iron & Steel



### Assumed CO2 Reduction Pathway\*



Iron & Steel

[https://www.meti.go.jp/policy/energy\\_environment/global\\_warming/transition/transition\\_finance\\_technology\\_roadmap\\_iron\\_and\\_steel\\_eng.pdf](https://www.meti.go.jp/policy/energy_environment/global_warming/transition/transition_finance_technology_roadmap_iron_and_steel_eng.pdf)