

# Pathways to Japan's Green Transformation (GX)



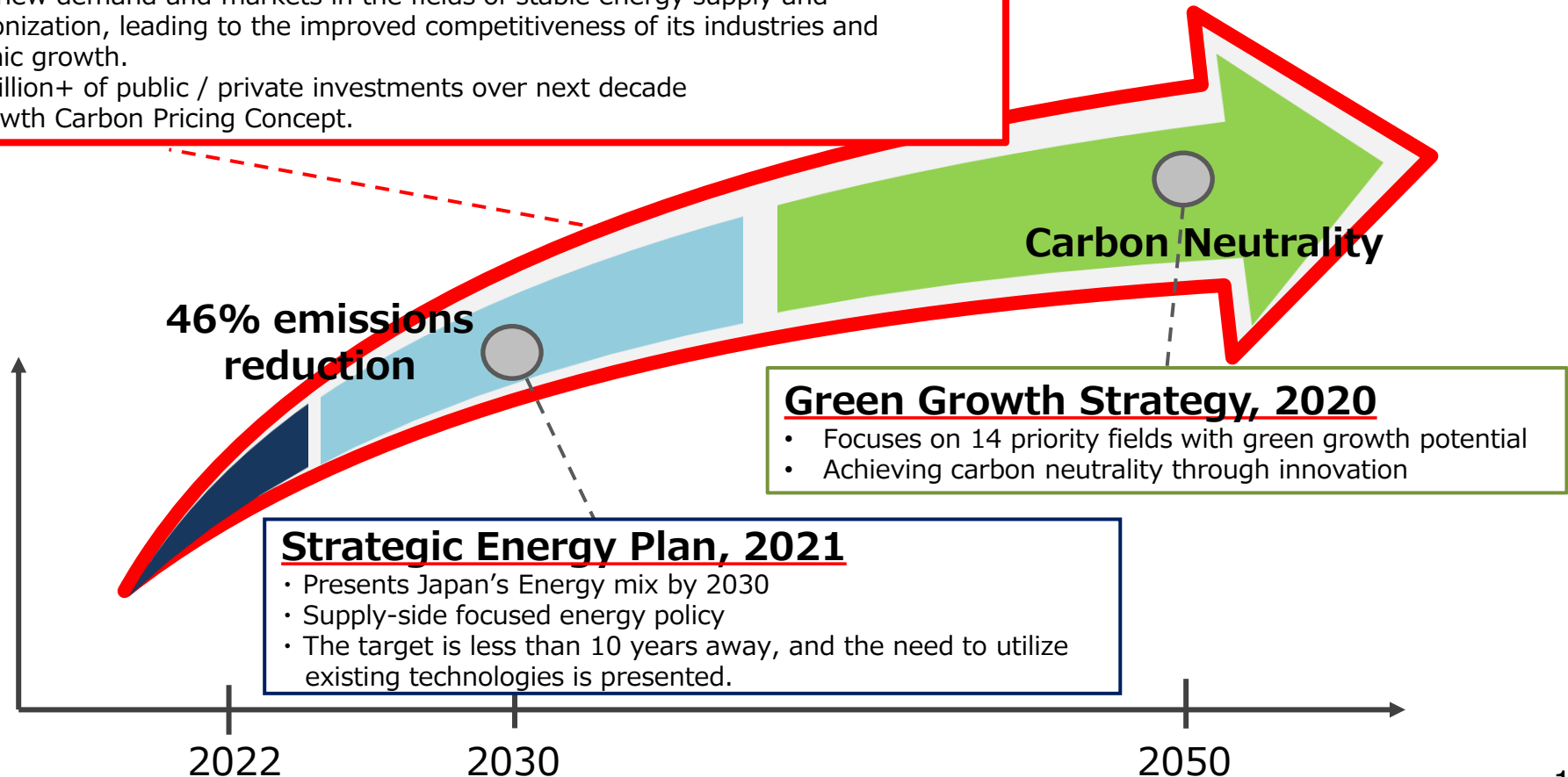
**Ministry of Economy, Trade and Industry, JAPAN**

# Japan's Green Transformation aims emission reduction & growth

- GoJ announced the Basic Policy for the Realization of GX in February 2023. Relevant bills passed the Diet session in May.
- Green Transformation (GX) delivers both **emission reduction** and **economic growth**. Successful GX initiatives enhance competitiveness of companies and nations

## Basic Policy for the Realization of GX, 2023

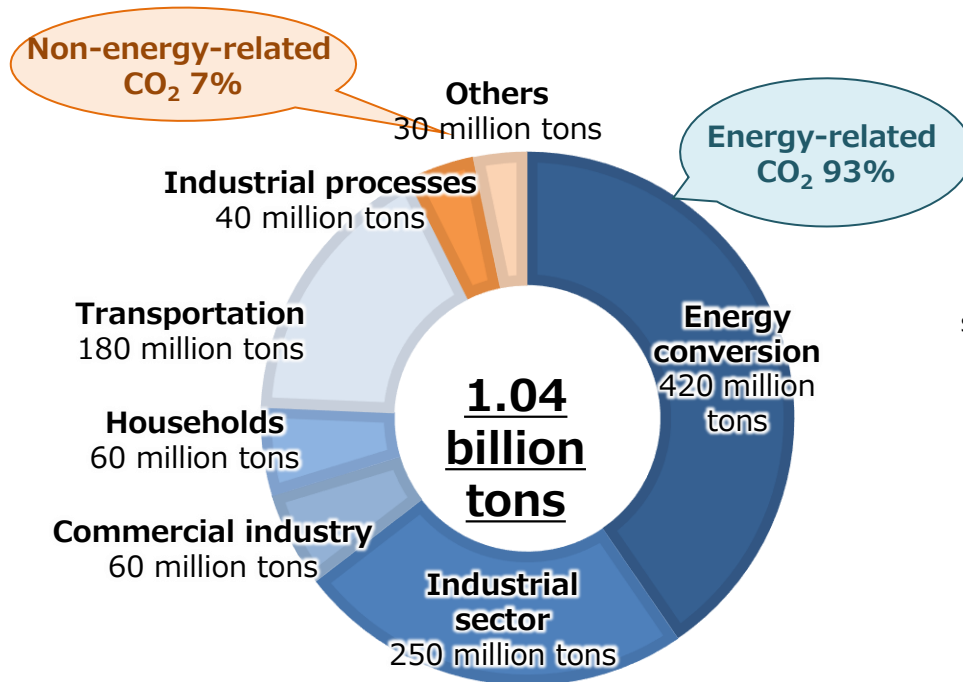
- Create new demand and markets in the fields of stable energy supply and decarbonization, leading to the improved competitiveness of its industries and economic growth.
- ¥150 trillion+ of public / private investments over next decade
- Pro Growth Carbon Pricing Concept.



# Non electricity matters

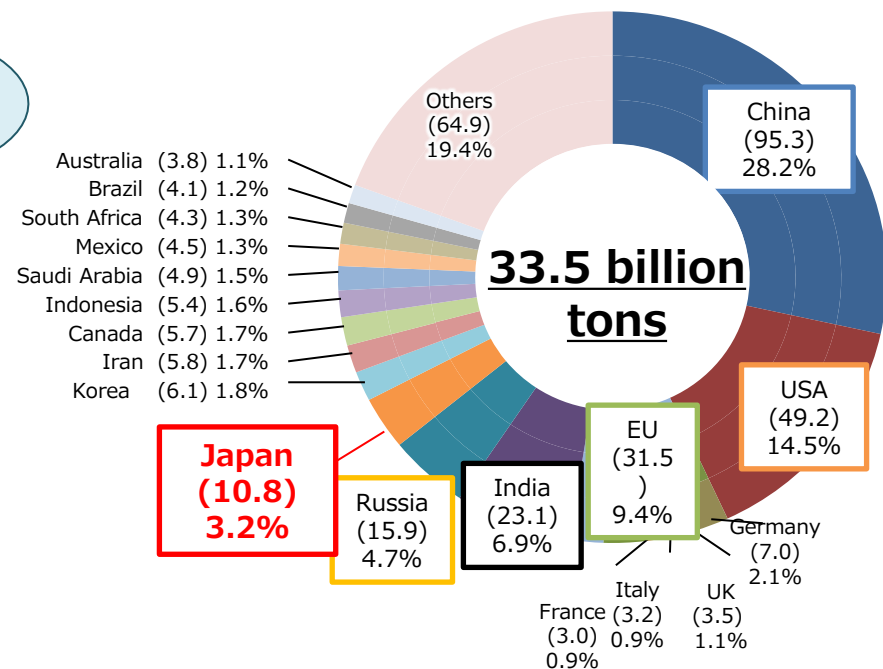
- In Japan, CO<sub>2</sub> emissions from power sector accounts for 40%. Emission reduction from Industrial and other sectors are crucial towards carbon neutral.
- Japan will contribute to global emission reduction by providing solution for ourselves and beyond.

## Japan's CO<sub>2</sub> emissions (2020)



(Source)  
Created from Greenhouse Gas Inventory Office  
"Japanese greenhouse gas emission data"

## Global energy-related CO<sub>2</sub> emissions (2020)

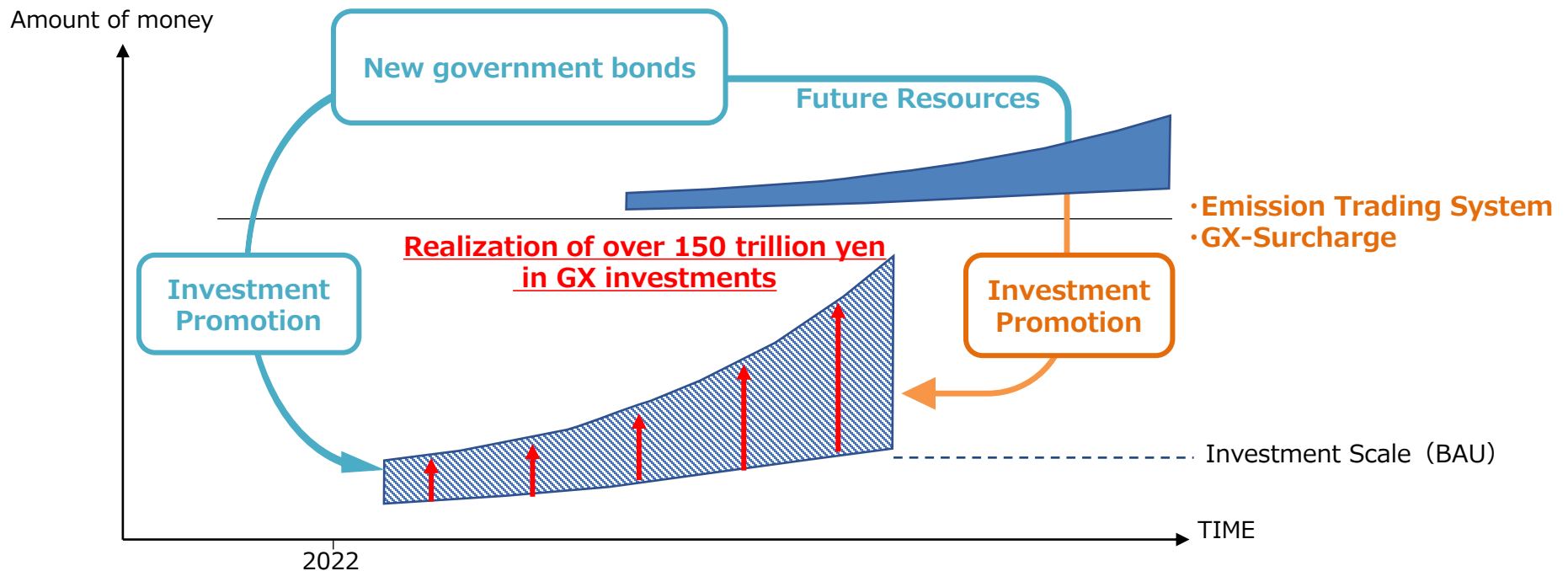


(Source) IEA, CO<sub>2</sub> Emissions from Fuel Combustion Highlights 2020

# Pro-Growth Carbon Pricing Concept

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

- ① **Government support for bold upfront investment** by issuing **new government 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 to be phased in gradually to **power generation companies** [**from FY2033**]
  - (2) Introduction of a **GX-Surcharge** on fossil fuel supply [**from FY2028**]
- ③ Strengthen financial support through public-private partnership



# Work on the hard to abate sector

- To realize carbon neutrality, efforts as listed below (①～④) are needed in the power and industry sectors.

① Increasing energy efficiency

② Decarbonization of electricity

} **Commercialized  
Technology Available**

③ **Decarbonization of heat (fuel)**

**Hydrogen, Ammonia**, SAF, Synthetic Fuels, etc. are still under development

④ **Decarbonization of manufacturing processes and materials**

**Hydrogen reduction ironmaking**, naphtha are still under development.

**Electrifying heat processes** are candidates for technology development.

} **HARD TO ABATE**  
**Technology still being  
developed toward  
commercialization**



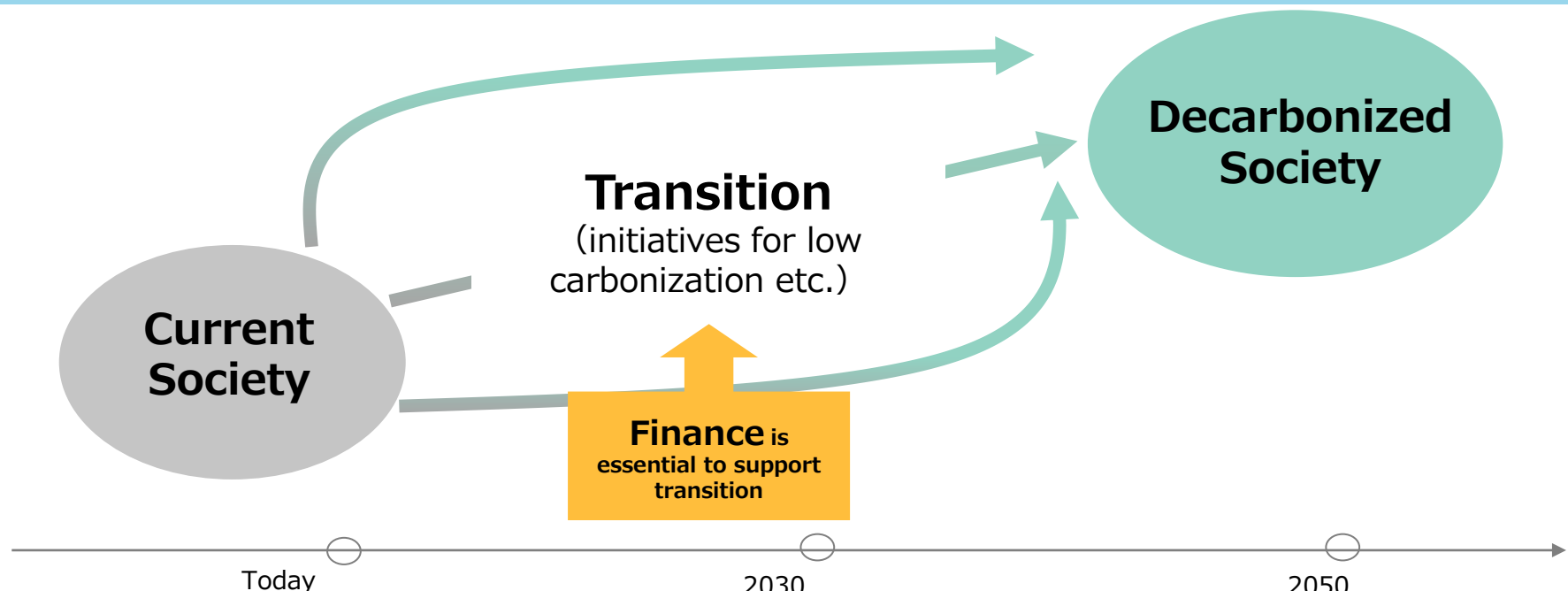
# Transition Finance



# The Importance of Transition Finance

**Transition finance refers to financial services supporting the whole-of-economy transition**, in the context of the SDGs, towards lower and net-zero emissions and climate resilience, in a way aligned with the goals of the Paris Agreement.

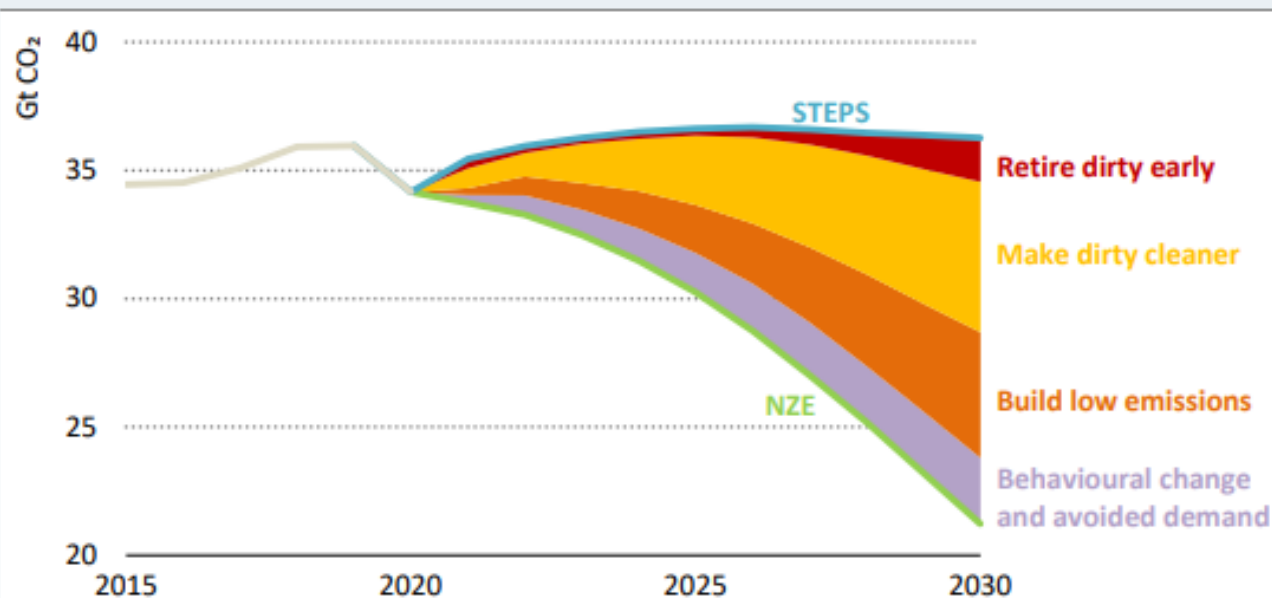
- Companies in many hard-to-abate sectors cannot immediately jump into the decarbonized society due to the outside factors including limitation of innovative technologies and geographical background of energy mix.
- To meet the Paris goals, it is salient to green all sectors and industries. Sectors that are currently GHG intensive but in its process of transitioning to net-zero emissions also require financing in their journey towards net-zero.
- Active engagement with all sectors and industries through transition finance is key in realizing this whole-of-economy transition.



# Transitional technologies delivers significant reductions

- In the World Energy Outlook, 2021 IEA reported that the combination of *i) retiring from dirty early ii) **make dirty cleaner** iii) build low emissions iv) behavioral change and avoided demand* is essential for filling the gap of STEPS and Net Zero Emission trajectory.
- It is stated that the middle ground of actions that “make dirty cleaner” is crucial in determining the speed and scope of energy transitions, and delivers the largest share of emissions reductions.

**Figure 1.13** ▶ Emissions reductions in the Net Zero Emissions by 2050  
Scenario relative to the Stated Policies Scenario



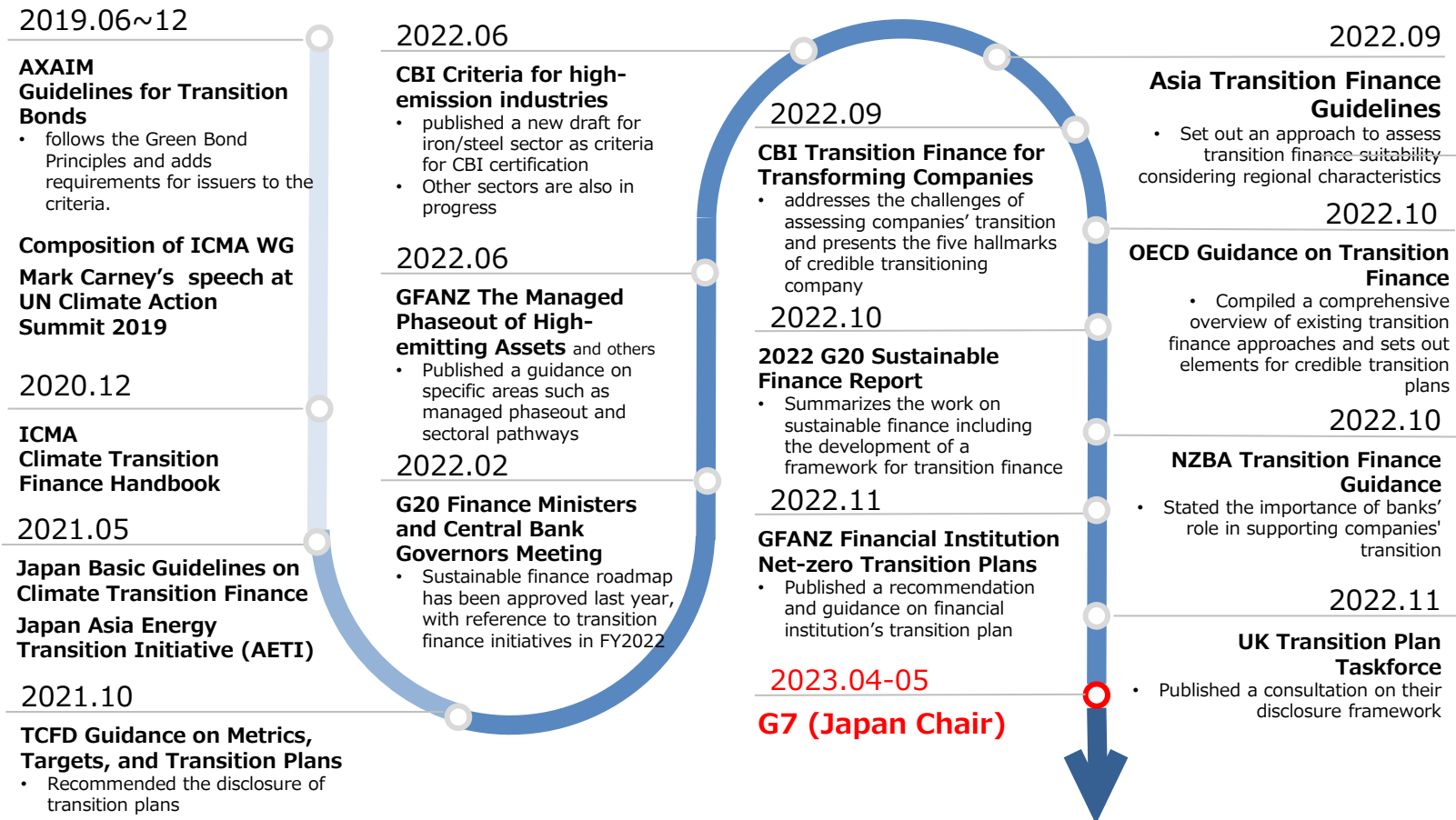
IEA. All rights reserved.

*Delivering net zero requires more than retiring dirty and building low emissions projects; there is a large middle ground that defines the speed and scope of change*



# International Initiatives on Transition Finance

- The importance of transition plan are being recognized as a crucial tool to achieve the Paris Agreement and related initiatives are seen worldwide.



# 2023 G7 Hiroshima Summit

- G7 Hiroshima Summit was held from 19<sup>th</sup> to 22<sup>nd</sup> May 2023.
- The importance of transition finance to advance the decarbonization of the whole economy was agreed among the leaders.  
(also agreed among G7 Ministers' Meeting on Climate, Energy and Environment & Finance Ministers and Central Bank Governors' Meeting)



## Leaders' Communiqué



⋮

We remain committed to supporting the implementation and monitoring of G20 Sustainable Finance Roadmap.

We highlight the need for corporates to implement their net-zero transition in line with the temperature goal of the Paris Agreement based on credible corporate climate transition plans.

**We also highlight that transition finance**, in line with keeping a limit of 1.5°C temperature rise within reach, avoiding carbon lock-ins and based on effective emissions reduction, **has a significant role in advancing the decarbonization of the economy as a whole.**

⋮

# Japan's 4 step policy tools on Climate Transition Finance

G7 Leaders Summit (May 2023, Hiroshima)

- **Transition finance**, in line with keeping a limit of 1.5°C temperature rise within reach, avoiding carbon lock-ins and based on effective emissions reduction, **has a significant role in advancing the decarbonization of the economy as a whole.**

- Although green projects have attracted investment, transition to net zero requires more.
- To encourage private finance flow for transition, Japanese government take 4-step-policy.
- Companies are expected to show their credible transition strategy. They can account for their plan by referring to the technologies and pathway of the roadmap.

## 1. Basic Guidelines

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



## 2. Sector Roadmaps

- ✓ Roadmaps with technologies for transition is formulated for 8 sectors: **iron & steel, chemical, electricity, gas, oil, cement and paper & pulp, and automobiles.**
- ✓ The roadmaps can be referred by companies to formulate their strategies and pathways, and by financial entities to evaluate those of clients

## 3. Model Projects

- ✓ 21 model projects from shipping, steel, aviation, chemical, energy and heavy industry sectors.
- ✓ **The market of transition finance has reached 1 trillion yen cumulatively.**

## 4. Follow-up Guidance

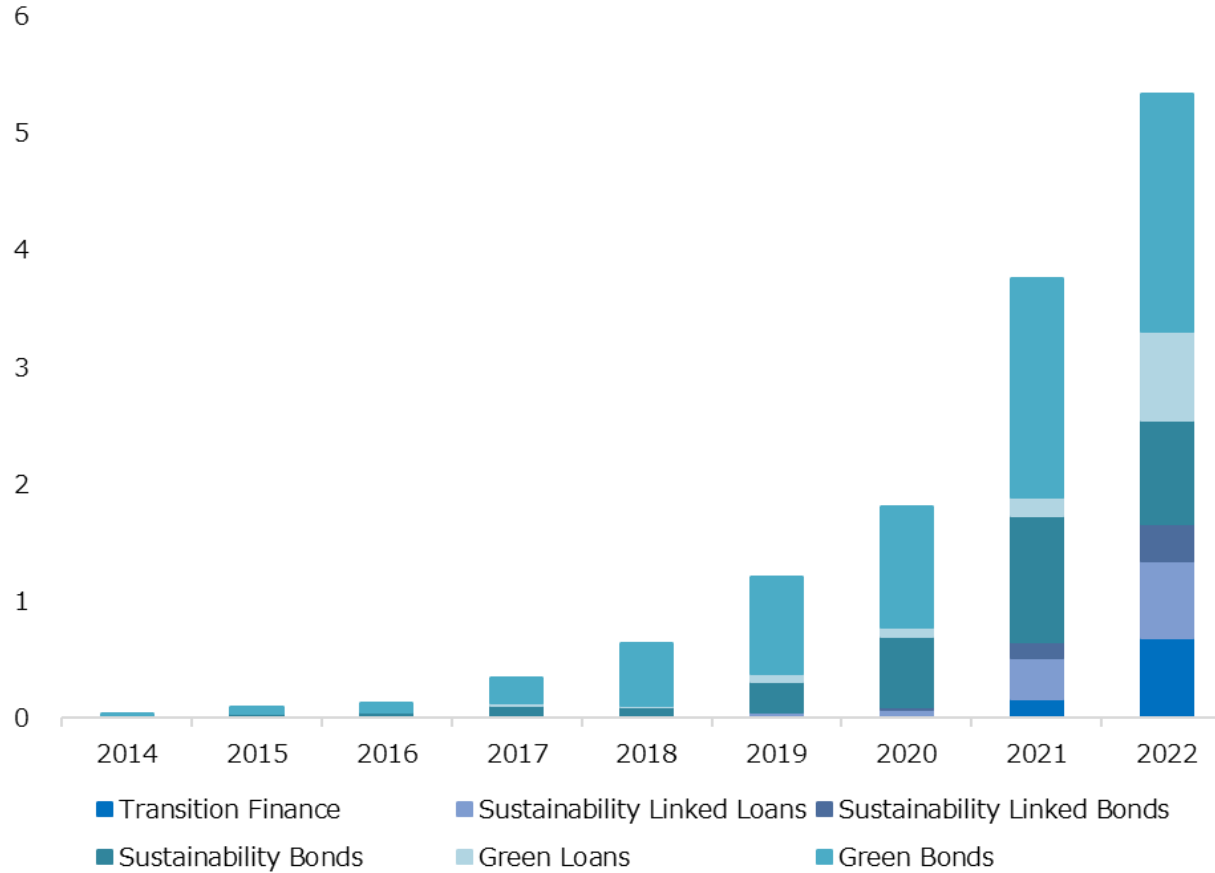
- ✓ **Guidance for financiers (especially bond issuers)** in following up after the issuance of transition finance was released in June 2023



# One trillion JPY transition-labeled bonds and loans issued in Japan

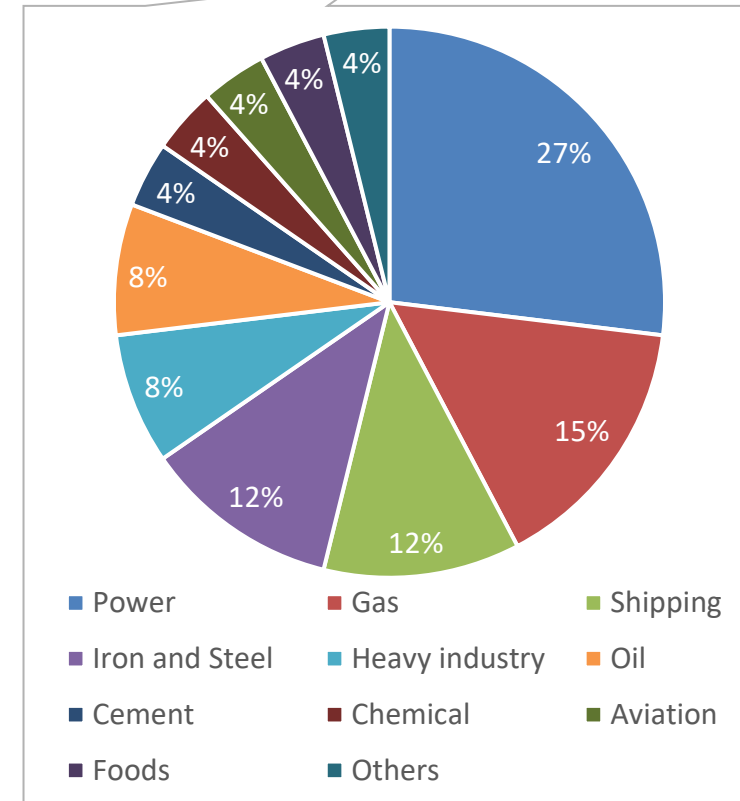
- The cumulative amount of transition-labeled bonds and loans has grown and surpassed 1 trillion JPY.

(trillion JPY)



the cumulative amount of  
transition-labeled bond and loans  
In Japan  
(Jan.2021-Mar.2023)

Apprx. **1** trillion JPY



Source) MOE "Green Finance Portal" (<https://greenfinanceportal.env.go.jp/>),  
METI "Transition Finance HP" ([https://www.meti.go.jp/policy/energy\\_environment/global\\_warming/transition\\_finance.html](https://www.meti.go.jp/policy/energy_environment/global_warming/transition_finance.html)), Other public information.

# Thank you

