

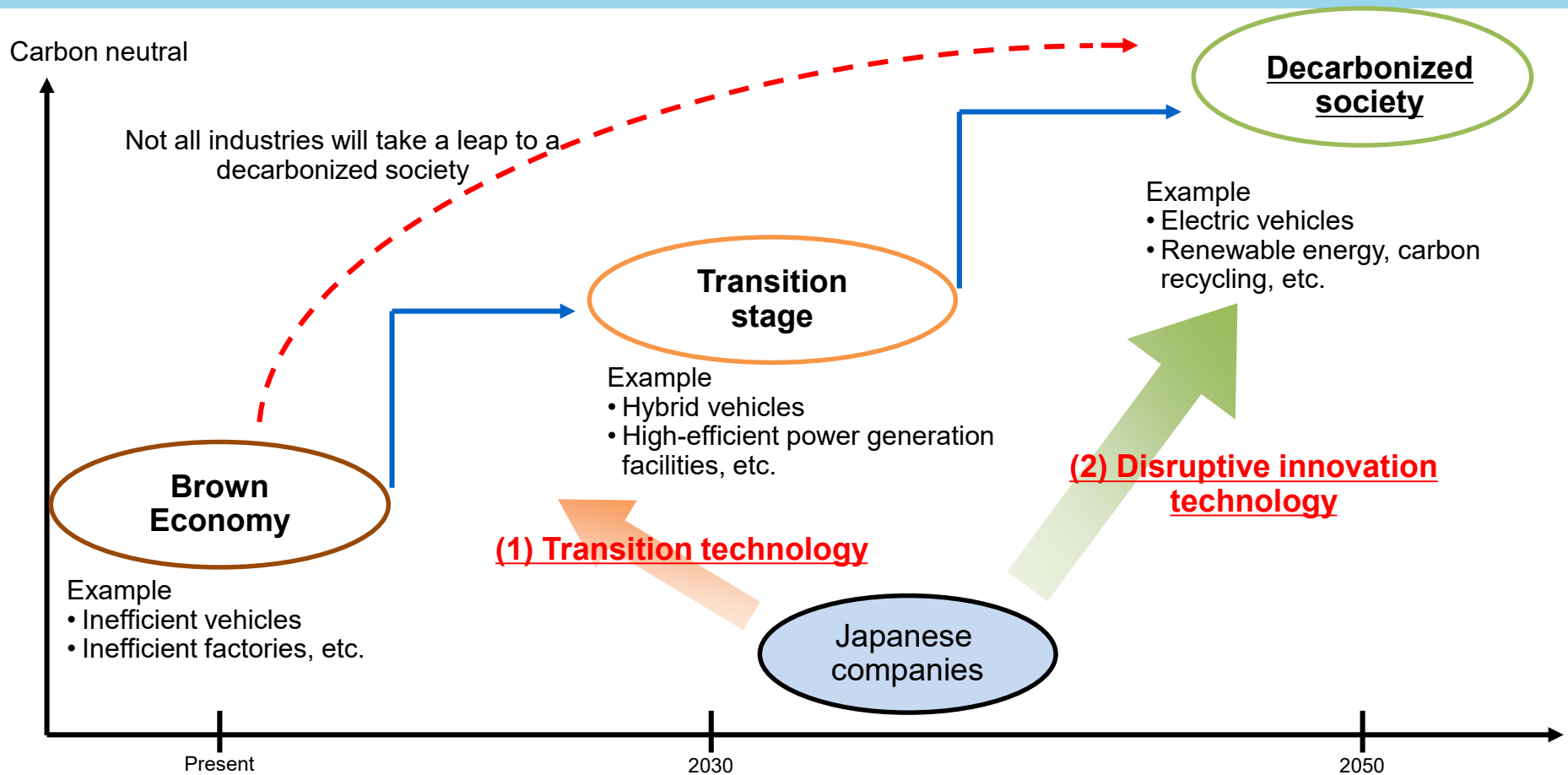
Pathways to realize carbon neutrality

9 March, 2021

**Industrial Science and Technology Policy
and Environment Bureau**

The Importance of Climate Innovation

- Since Prime Minister Suga declared Japan's intention to aim for carbon neutrality by 2050, decarbonization became even more urgent and important.
- We must take action. Considering the situation of industries throughout the world, including emerging countries, not all industries will be able to take a leap towards a carbon neutral society.
- To achieve carbon neutrality by 2050 and move forward steadily, we need to focus not only green but also transition.

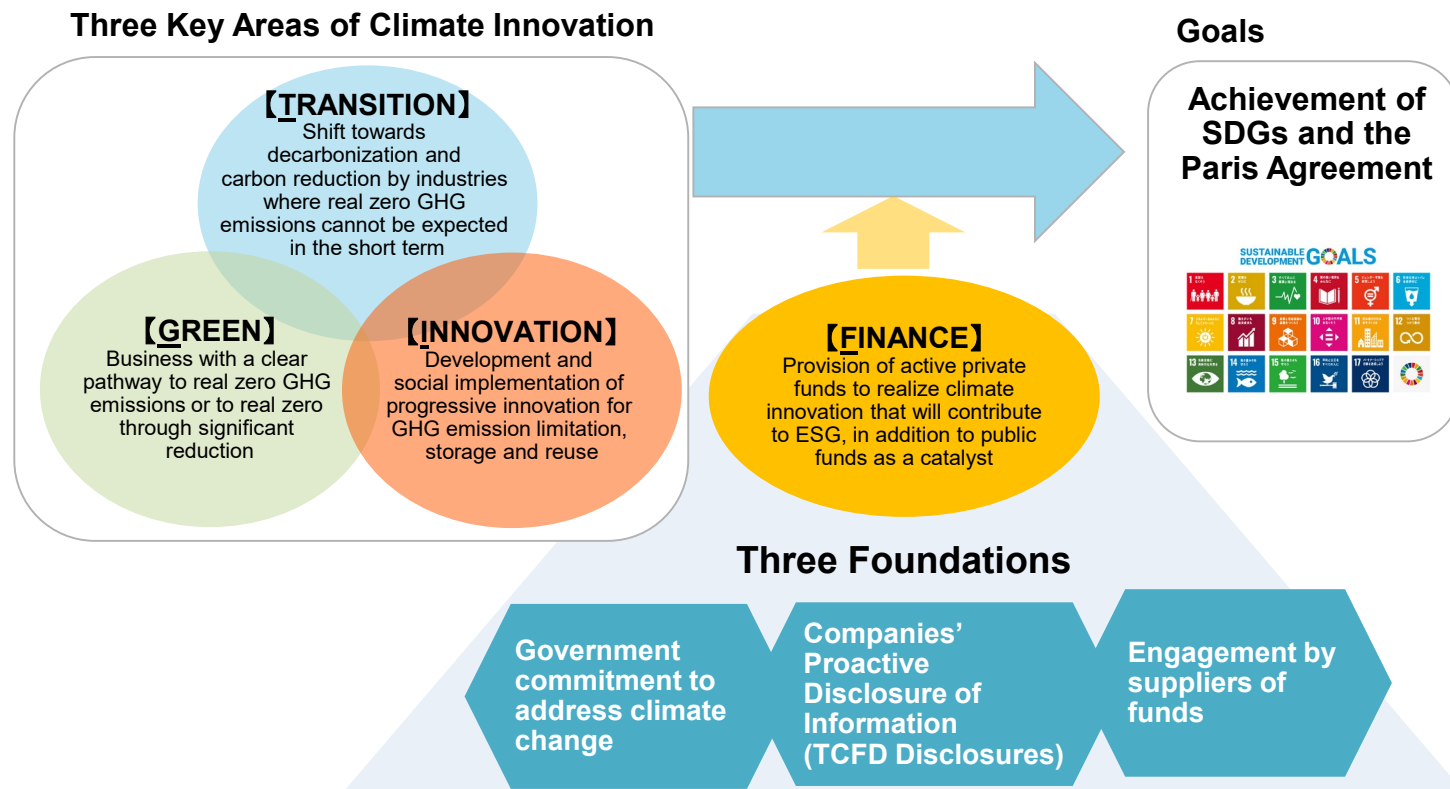


Climate Innovation Finance Strategy 2020 (September 2020)

Basic approach to Climate Innovation Finance - TGIF

- Climate innovation consists of three key areas of (1) **transition** initiatives to steadily proceed carbon reduction, such as energy conservation of manufacturing industry, (2) **green** initiatives that already meet carbon free, such as renewable energy, and (3) **innovation** initiatives where technologies are in the stage of R&D and social implementation for carbon free, such as artificial photosynthesis.
- Those areas need to be realized by **finance**.

[Achieving goals by simultaneous promotion of TGIF (concept design)]



Challenges and directions for transition finance

- Green bond market has been steadily growing by publishing guidelines. Green finance should be further enhanced.
- Transition finance is a new area. As there are fewer case examples of transition finance worldwide, a common understanding has not yet been developed compared to green bonds.
- To establish credibility of transition and facilitate finance to it, Japan is formulating guidelines in line with international principles and roadmaps. Also the government supports costs of third party assessments.
- To encourage transition, a new interest subsidy was established.

Challenges

- a common understanding on the concept definition of “transition finance” does not exist among financial institutions and issuers.
- Some express concern that transition finance is “secondary to green finance” or “green-washing”.

Direction of measures

(1) Develop guidelines in line with international principles

- ✓ Japan formulates basic guidelines for issuance of transaction bonds in line with International Capital Market Association (ICMA) handbook by spring 2021.
- ✓ Government supports third party assessment costs to increase credibility.

(2) Create roadmaps for high CO₂ emitting industries and promote investment

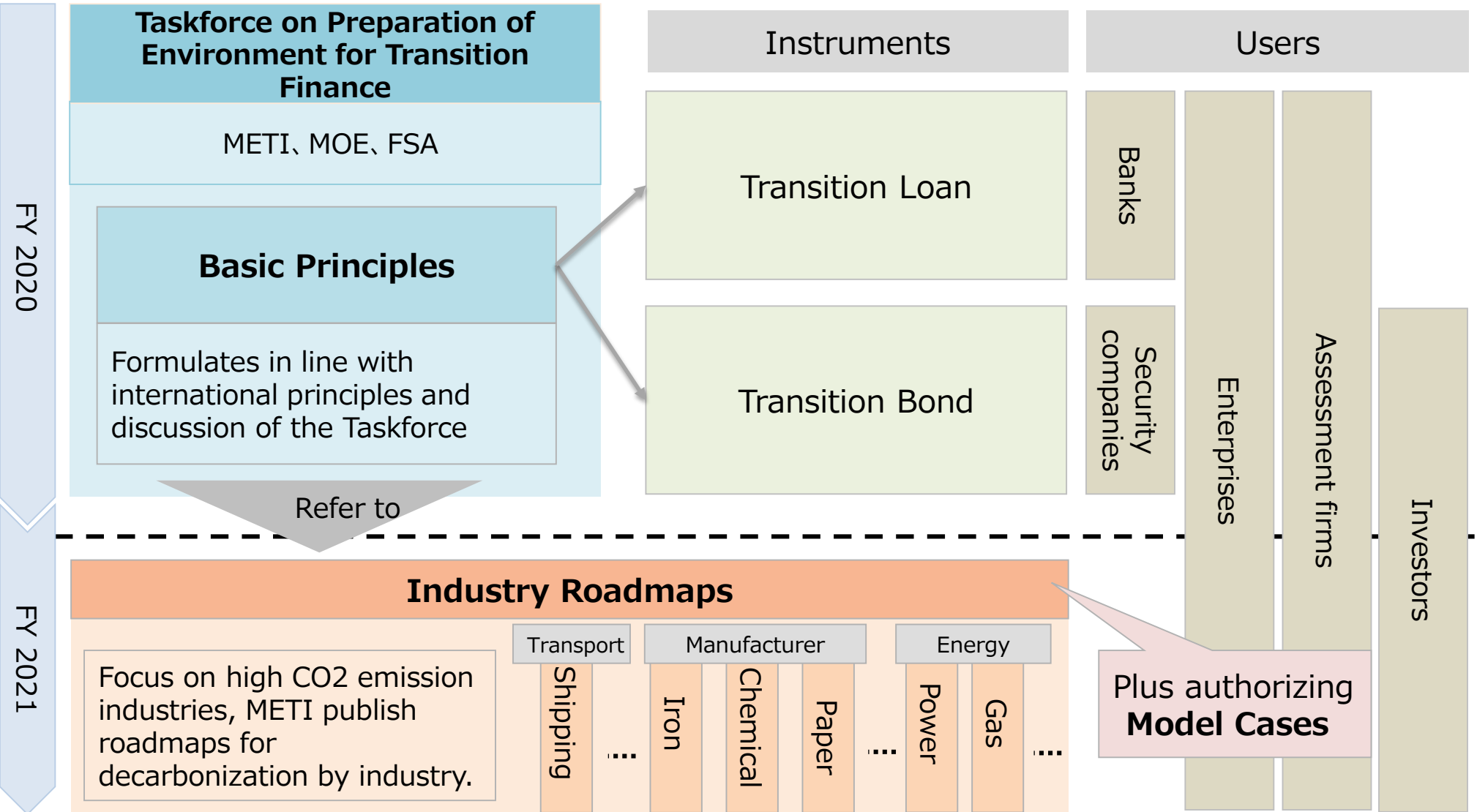
- ✓ Create roadmaps in line with industrial policy for each industry with high CO₂ emissions
- ✓ Government authorizes case examples of transition investment

(3) Encourage transition finance

- ✓ Establish a scheme of an interest subsidy for loans with output oriented goals.

【Reference】 Taskforce on Preparation of the Environment for Transition Finance, Basic Principles and Roadmaps

- The taskforce will publish Japan's Basic Principles in April and the roadmaps by industries which could be referred as a transition trajectory will be made in FY 2021.



Challenges and future directions for innovation finance

- For innovation, more government support is needed.
- Make company data visible to investors and create opportunities for communication by Zero-emission challenge.
- Support dialogue on innovation between companies and investors which is currently not well developed in Japan.
- Create Green Innovation Fund to support research, development and demonstration.

Challenges

- In general early stage technologies are not easy area to invest.
- Japanese business entities typically prioritize technological advantage, while investors are unfamiliar with handling atypical and forward looking data, such as innovation.

Direction of measures

(1) Visibility of companies taking on the zero-emission challenge for investors

- ✓ Make a list of companies taking on efforts for environmental innovation under the Zero Emissions Challenge project (see next page).
- ✓ Hope financial products will be made by utilizing the list.

(2) Dialogue between companies and investors

- ✓ Create opportunities for dialogue on topics of high interest to investors, such as hydrogen, CCUS, and renewables. Consider evaluation framework and KPI for financing.

(3) Creation of green innovation fund

- ✓ Support incubation of innovation for ten years in prioritized areas such as hydrogen and batteries to companies who make commitment.

Reference: Zero Emissions Challenge

- METI prepared a list of companies taking on environmental innovation under the Zero Emissions Challenge, which is organized by the content of technologies and development phase. The list was made in cooperation with Keidanren and NEDO.
- A list of approx.300 companies published on October 9 including both listed and unlisted companies.
- Moving forward, METI will hold dialogues between companies taking on the Zero Emissions Challenge, investors, and policy makers. Development of funds and indexes utilizing the list is also expected in private finance sector.

<Criteria of companies taking on the Zero-Emission Challenge>

Companies taking on the Zero-Emission Challenge

Agreement to the purpose of Zero Emissions Challenge and to be included in the list

*Also TCFD disclosure, participation in Keidanren's Challenge Zero is considered

Companies related to Environment Innovation Strategy

Involvement in a national project associated with the 39 themes of the Environment Innovation Strategy.

*The first list is about industries related to METI. Later the list will also include other industries.

Companies tackling energy/ environmental innovation

Meeting requirements for companies receiving consignment or subsidy from national government or incorporated administrative agency.

<Future actions>

- (1) Created logo for use in annual consolidated reports
Development of funds and indexes are expected

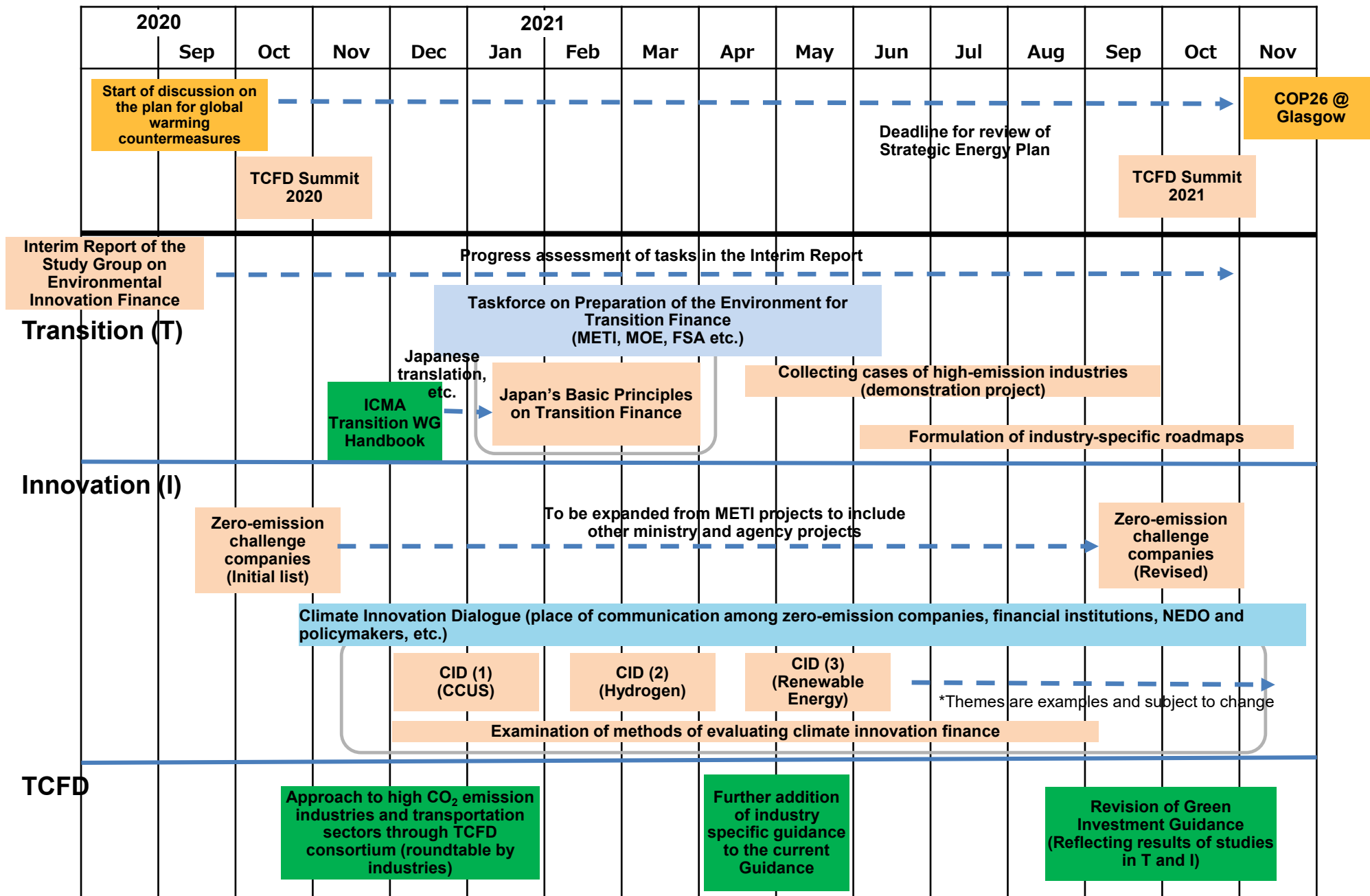


- (2) Update the list annually tied to PDCA cycle of the Green Innovation Strategy Steering Meeting
- (3) Hold dialogues between companies, investors, policy makers on topics of high interest, such as hydrogen, CCUS, and renewables.

Promote understanding of trends in innovation and attract further private funding

Climate Innovation Finance Strategy 2020

The Road to Glasgow (Provisional Schedule)



Green Growth Strategy

Background and concept

- In Oct. 2020, Prime Minister Suga declared Japan's intention to aim for carbon neutrality by 2050. This challenge has become the core of Japan's growth strategy.
- **The Green Growth Strategy is an industrial policy** which aims to create a positive cycle of economic growth and environmental protection, together with the business community.
- The aim is to set ambitious goals and fully support the private sector's efforts toward carbon neutrality.
- The strategy includes 5 cross sectoral policy tools (support measures) and action plans for 14 sectors, and will be updated continuously.

Points of the 5 Cross Sectoral Policy tools

Grant funding

- ✓ Green Innovation Fund: 2 trillion yen over 10 years
- ✓ Stimulate **15 trillion yen** worth of private R&D and investment.

Tax incentive

- ✓ Tax incentives to stimulate **1.7 trillion yen** worth of private investment over 10 years.

Guidance policy on Finance

- ✓ Formulate guidelines for transition finance and establish a scheme for long-term funds with an interest subsidy (1 trillion yen in 3 years in business scale basis) to attract global ESG investment.

Regulatory Reform

- ✓ Consider regulatory reform in areas such as **hydrogen, offshore wind power, and mobility/batteries.**
- ✓ Discuss issues concerning carbon border adjustment and related policies with a view to ensuring global level playing field

International Collaboration

- ✓ Cooperation with various players, including both developed and emerging countries, on **innovation policy, joint projects** including third countries, **standardization and rule-making,** and providing wide variety of **solutions toward de-carbonization**
- ✓ World wide promotion efforts through “**Tokyo Beyond-Zero Week**”