Carbon Credit Report (Summary)

Assumptions in the use of carbon credits

• In order to achieve Japan's goal of carbon neutrality by 2050, it is necessary for every company to make steady progress in reducing its own emissions. First priority is given to emission reductions by the companies themselves, and the use of carbon credits for residual emissions that remain after such efforts are made.

What is a carbon credit?

■ Definition of a carbon credit (in this report)

- The difference between baseline and actual emissions and sequestrations/removals to be certified through MRV (≠ cap-and-trade, certificate)
- Main requirements of carbon credits (cf. ICROA standard)
- Real, Measurable, Permanent, Additional, Independently verified, Unique
- □ Category of carbon credits
- Avoidance/Reduction (Ex: forest conservation, renewable energy, fuel exchange, etc)
- Sequestration/Removal (Ex: reforestation, blue carbon, DACCS, biochar, etc)

Carbon credit trends

International trends

- At COP26, Article 6 of the Paris Agreement was agreed upon, establishing rules for handling carbon credits as a means of achieving each country's NDCs. Various international initiatives have discussed the handling of carbon credits, and trading in the international voluntary credit markets and voluntary use of carbon credits by businesses are also expanding.
- □ Carbon credit trends in Japan
- > Efforts to expand supply are ongoing under the J-Credit scheme and JCM, and domestic companies are also voluntarily using carbon credits.

2021 Emission 2050 Carbon Credit Utilization

Importance of Carbon Credit Utilization for Carbon Neutrality

1) In achieving carbon neutrality

Carbon neutral is a condition in which anthropogenic GHG emissions associated with a subject are balanced by anthropogenic GHG removals. Carbon credit trading is expected between emitting entities and carbon removal/sequestration entities, and the use of carbon removal/sequestration credits is important.

②In the Transition toward carbon neutrality

In the transition toward carbon neutrality, the use of emission reduction carbon credits is also important **from the perspective of economic rationality to incentivize emission reduction efforts by a wide range of entities and to promote emission reductions from initiatives with lower marginal abatement costs**.

③Function by Publicly Announcing the Price

If a price is assigned through carbon credits, the trading prices of the various carbon credits themselves could function as voluntary, market-based carbon pricing in Japan related to each of the initiatives of emission reduction, carbon sequestration/removal.

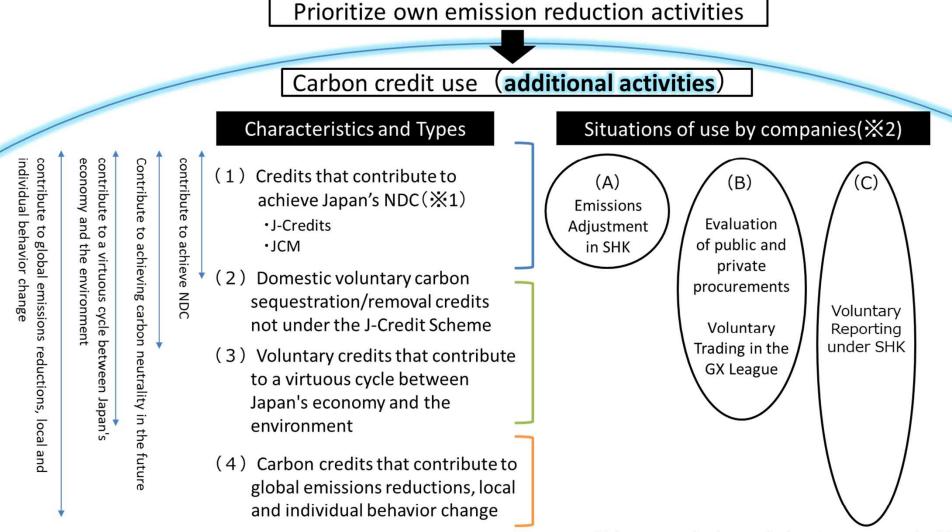
Issues of carbon credits in Japan

- Involving demand
- Some companies have said that it is difficult to determine which of the many types of carbon credits, such as J-Credits, JCMs, voluntary credit, etc., to procure.
- Methods for utilizing carbon credits are not sufficiently organized, including various domestic systems and how they will be handled in the future in response to regulations.
- Involving supply
- The credits alone issued under the methodology based on the current inventory <u>cannot promote in the form of carbon credit</u> <u>issuance</u>, <u>even for initiatives that could be reflected in future</u> <u>inventories</u>, such as <u>new technologies</u> like DACCS and BECCS, or <u>nature-based removal credits</u> from blue carbon.
- There is no basis for carbon credit creation in daily lowcarbon activities.
- involving circulation
- Domestic distribution is <u>mainly through relative trading</u>, and <u>trading volume and prices are uncertain, therefore carbon</u> <u>credit prices do not fully function as explicit carbon prices.</u>

Direction and specific measures

- Clarification of the roadmap for utilization considering the diversity of carbon credits
 Organize the characteristics of various carbon credits and clarify their position and direction of consideration in each domestic system (reporting under the SHK, public procurements, GX League, etc.) [Figure 1 on page 2].
- Promotion of information disclosures based on the diversity of carbon credits
- Suggested examples of desirable information disclosure items when using carbon credits [Figure 2 on page 3].
- □ Expanding the issuance of carbon credits that contribute to the achievement of NDCs
- Securing the supply of J-Credits and JCM credits from emission reductions, carbon sequestrations/removals.
- **Expanding the issuance of carbon credits from carbon sequestrations/removals**
- Promote the issuance of nature-based domestic voluntary credits
- Promote development of NETs (Negative Emission Technologies) and issuance of NETs credits
- Promote investment and procurement commitments for future issuance of carbon sequestration/ removal credits
- Promotion of behavioral change by products, services, and events that use carbon credits
- ☐ Establish "Carbon Credit Market" [Figure 3 on page 3]
- Clarify legal, accounting, and tax treatment of carbon credits to ensure transaction stability

(Figure 1: Image of Carbon Credit Utilization in Domestic Systems)

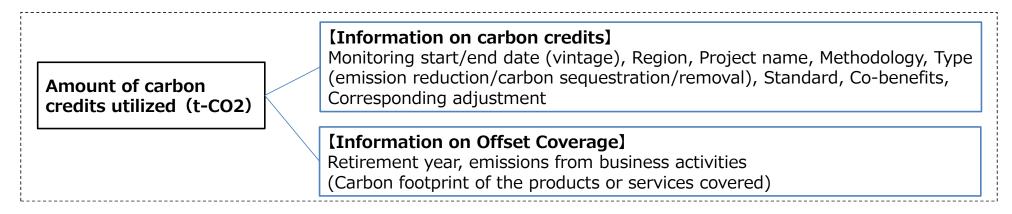


★1:Further discussion is needed on the corresponding adjusted voluntary credits in Article 6.2 and UN credits in Article 6.4 under the Paris Agreement.

※2: just an example

*Voluntary use of carbon credits by private operators should be allowed based on voluntary decisions, subject to information disclosure.

(Figure 2 Examples of Recommended Information Disclosure Items for Carbon Credit Utilization)



[Figure 3 Establish "Carbon Credit Market"] Carbon Credit Market (Image)

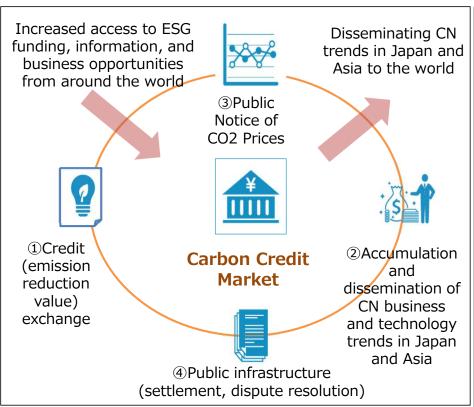


Diagram of issues and functions related to the basic design of the market (example)

