

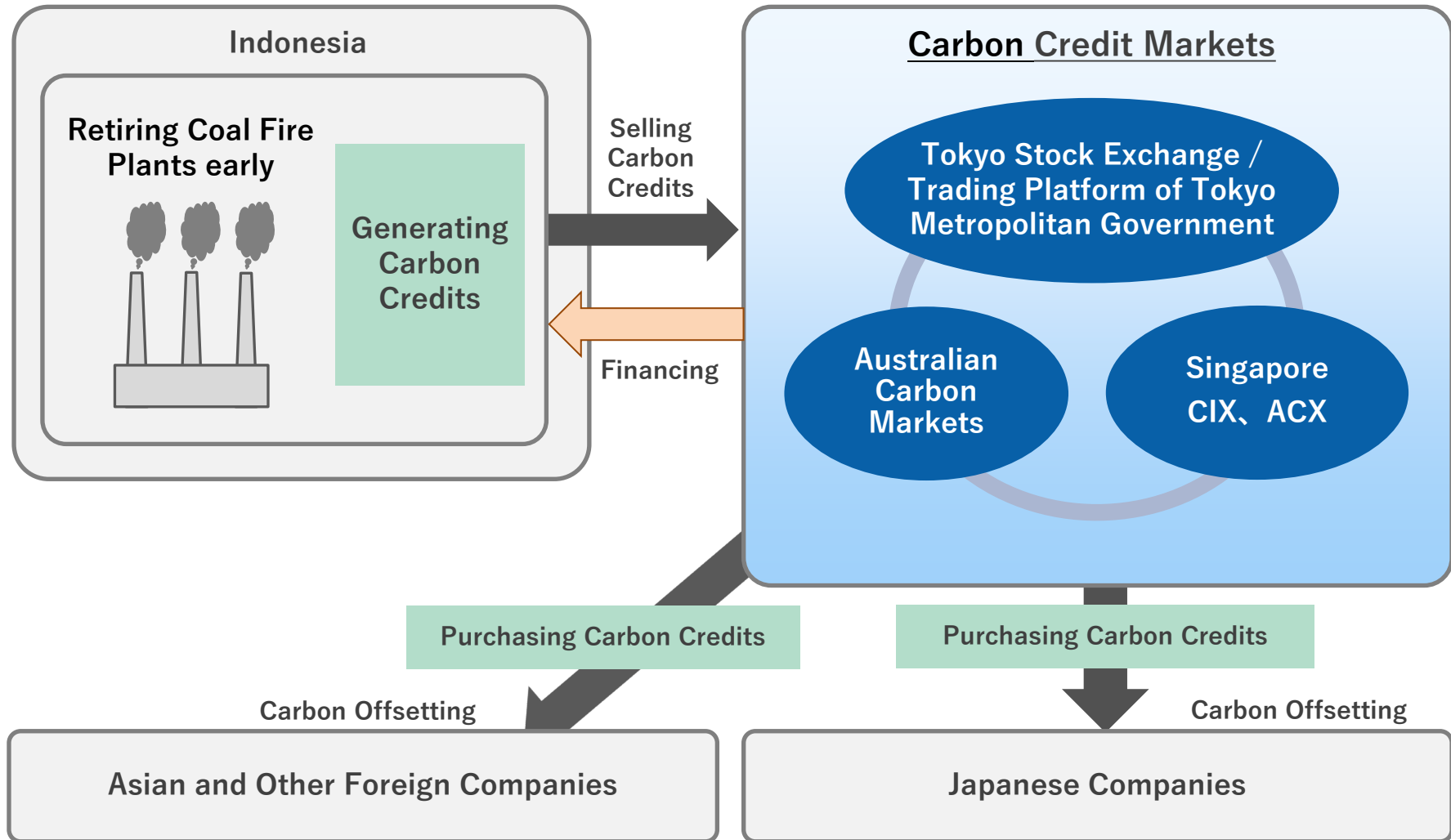
# **Promoting Interoperable Voluntary Carbon Markets in the Asia-Pacific Region**

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October 2, 2024

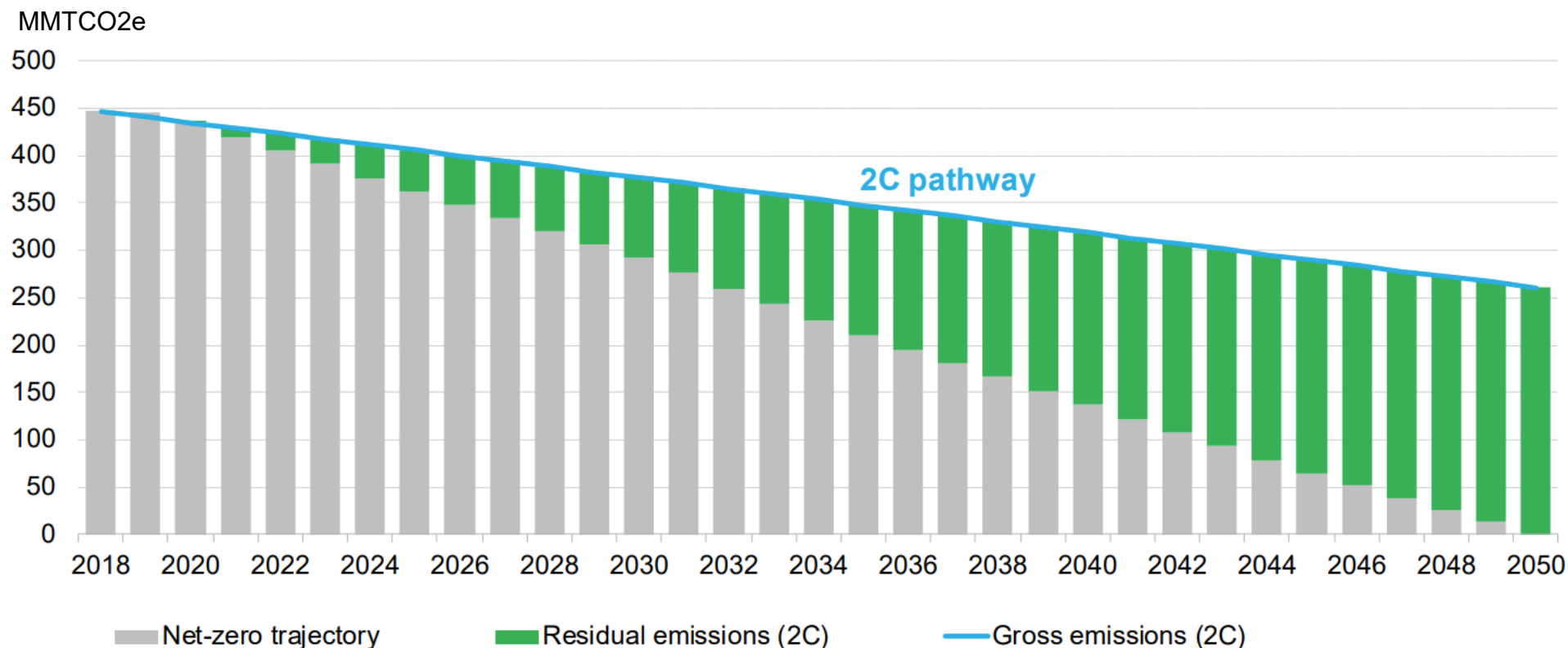
Hiroshi Nakaso  
Chairman of the Institute  
Daiwa Institute of Research Ltd.

# Concept of Interoperable Carbon Credit Markets in the Asia-Pacific



Sources : Various Sources; compiled by DIR.

# Cumulative Emissions Covered Under Net Zero from Select Asia-Pacific Companies



Note: Select companies include: PetroChina, Sony, Singapore Airlines, POSCO, BHP Group, Reliance Industries, Hon Hai Precision Industry, Geely Automobile, Petronas and CC ALL PLC.

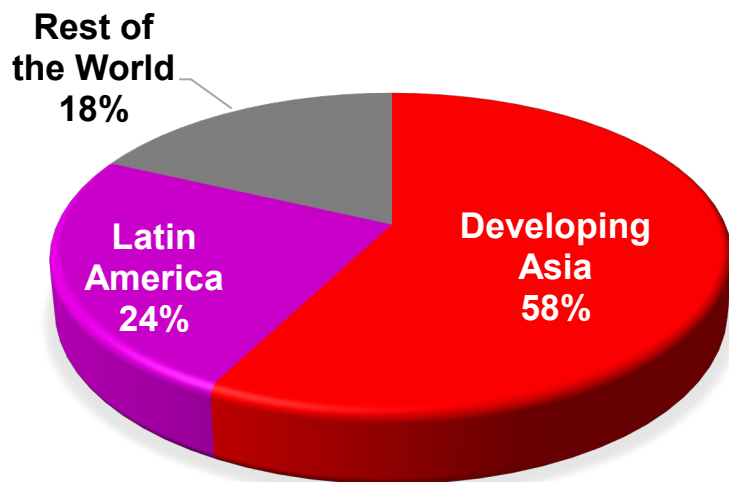
Note: Chart only includes emissions covered under a net-zero target.

Sources: BloombergNEF, Bloomberg Terminal, company filings; compiled by DIR.

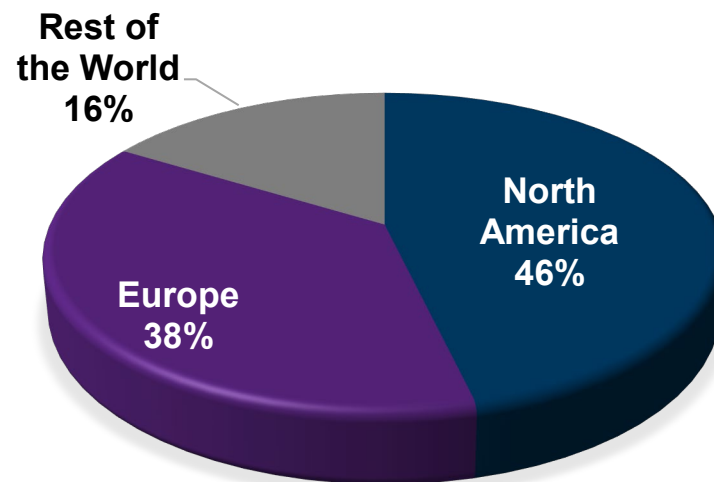
## Demand and Supply within the Asia-Pacific Region

**APEC economies are well-positioned to use VCMs to reach their net zero goals and become leaders if they are able to collaborate in developing interoperable high-integrity markets.**

### Supply of Carbon Credits



### Demand from Buyers of Carbon Credits



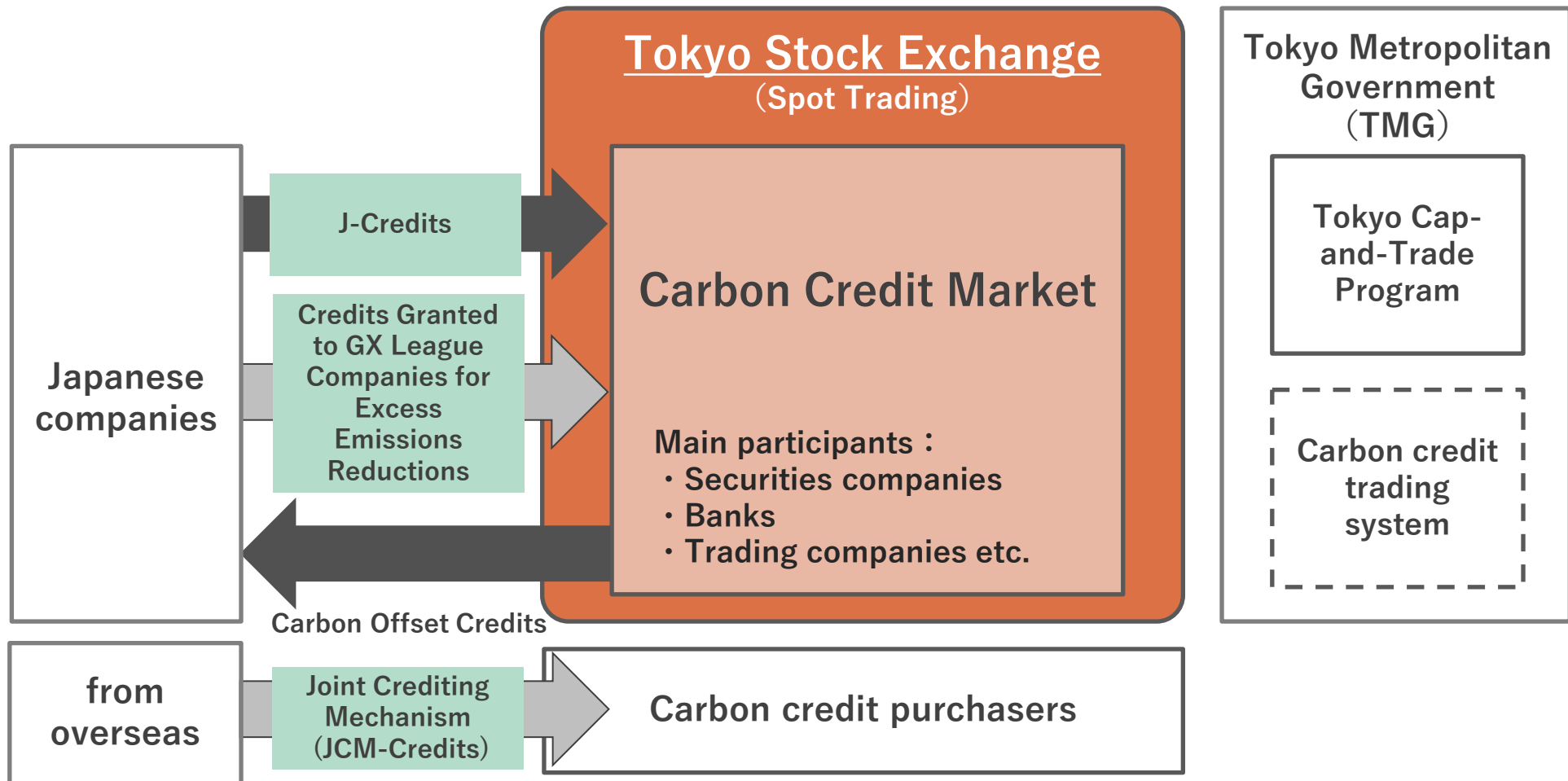
Sources: BloombergNEF, Verra; compiled by DIR.

# Typology of Carbon Markets

Mechanism	Creation of allowances or credits	Objective	Type of market
Cap-and-trade	By reducing emissions from the quota (quota - actual emissions)	Compliance with regulations etc.	Compliance carbon markets
Baseline-and-credit	By reducing emissions more than the baseline emissions (baseline - actual emissions)	Voluntary effort	Voluntary carbon markets

Sources: Financial Law Board (Japan), Tokyo Metropolitan Government ; compiled by DIR.

# Current Carbon Credit Markets in Japan



Note: Tokyo Metropolitan Government runs “Cap & Trade program” and plans to launch by the end of March 2025 a new trading system in which J-Credits and voluntary carbon credits are to be traded.

Sources : Various Sources; compiled by DIR.

# Major Carbon Credits Standards

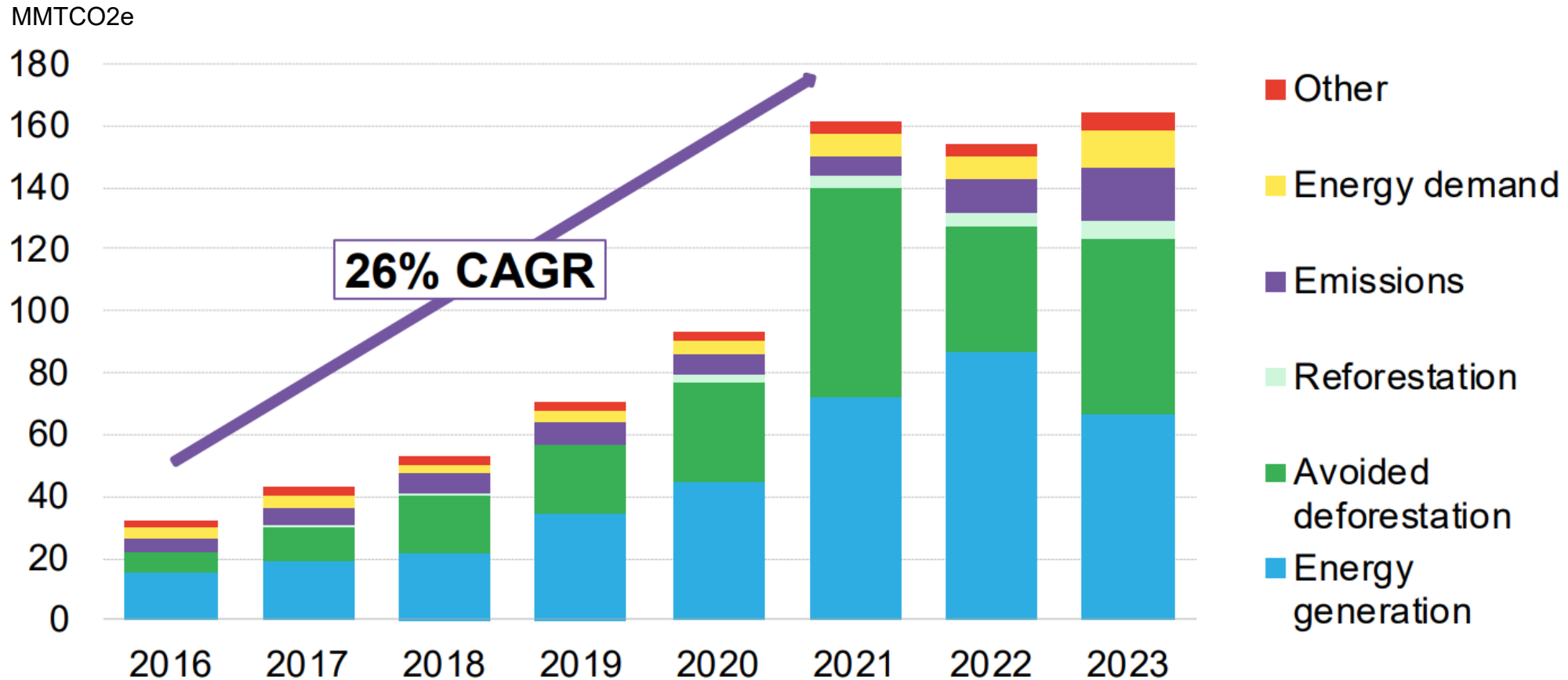
Verified Carbon Standard (VCS)	World Business Council for Sustainable Development (WBCSD), International Emissions Trading Association (IETA), and other organizations in which private companies participate established this certification standard in 2005. Various types of projects are being implemented, including those related to the forest and land use sector such as REDD+* and projects that reduce emissions through wetland conservation.
Gold Standard (GS)	A certification standard established in 2003 by the World Wide Fund for Nature (WWF), an international environmental NGO. In addition to issuing its own Verified Emission Reductions (VER), GS certifies CDM (Clean Development Mechanism) projects deemed to have incidental benefits, such as contributing to local communities**.
American Carbon Registry (ACR)	The world's first private credit certification standard, established in 1996 by NPO Winrock International.
Climate Action Reserve (CAR)	A certification standard that originated from the California Climate Action Registry founded in 2001.

Note(\*): Reduce emissions from deforestation and forest degradation (REDD), as well as restore forests and protect intact forests (+)

Note(\*\*): In addition to the CDM certification and verification process, carbon credits that meet the following independent criteria: (1) project eligibility, (2) additionality and baseline, (3) contribution to sustainable development, and (4) stakeholder consultation.

Sources: Ministry of Economy, Trade and Industry ; compiled by DIR.

## Voluntary Carbon Offset Retirements by Sector



Note: MMTCO<sub>2</sub>e is million metric tons of carbon dioxide equivalent

Sources: BloombergNEF, Verra, Gold Standard, American Carbon Registry, Climate Action Reserve

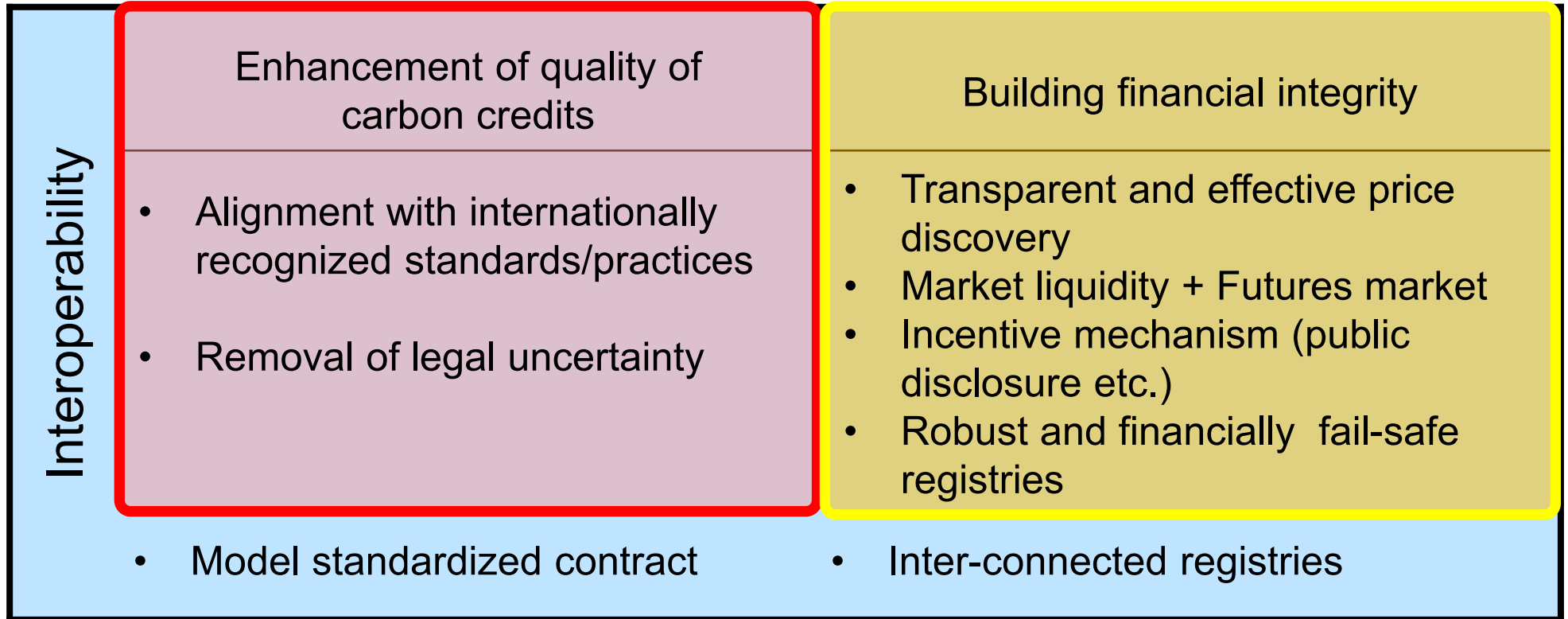


## Internationally Recognized Standards

- **ICVCM's\* Core Carbon Principles (CCP)** for high-quality projects and carbon credits (supply side) or CCP-aligned carbon crediting programs including VERRA's VCS\*, Gold Standard, ART\*, ACR\*, CAR\*  
*\* ICVCM (Integrity Council for the Voluntary Carbon Market), VCS (Verified Carbon Standard)  
ART (Architecture for REDD+ Transactions), ACR (American Carbon Registry), CAR (Climate Action Reserve)*
- **ICVCM's Assessment Framework** for carbon-crediting programs (supply side)
- **VCMi's Claims Code of Practice** for integrity of buyers of carbon credits (demand side)  
*\* VCMi (Voluntary Carbon Markets Integrity Initiative)*
- **SBTi's\* science-based sector-specific net-zero targets**  
*\* SBTi (Science Based Targets Initiative)*
- **ISDA Verified Carbon Credit Transactions Definitions** for derivatives transactions
- **IOSCO's 21 Good Practices** for promoting VCM integrity
- **UNIDROIT\* Principles on the Legal Nature of Verified Carbon Credits** (under development)  
*\*UNIDROIT (International Institute for the Unification of Private Law)*

Sources : ABAC Finance and Investment Task Force (October 2024) "ABAC-APFF Voluntary Carbon Markets Roundtables: Enabling Development of Interoperable Voluntary Carbon Markets in the Asia-Pacific Region"; compiled by DIR.

# Key Challenges



Sources : Various Sources; compiled by DIR.

## ABAC's Pathfinder Initiative

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- **Laying the foundation for collaboration with standard setters for the alignment of participating economies with the established standards**
- **Capacity building for developing policy/regulatory ecosystems**
- **Building interoperable carbon credit registries**
- **Pilot project to execute cross-border transaction of carbon credits**

Attention

This cover letter is an unofficial translation. The official document is in Japanese.

## **Notification items pursuant to Article 37 of the Financial Instruments and Exchange Law**

**(This Notification is only applicable to where report is distributed by Daiwa Securities Co. Ltd.)**

If you decide to enter into a business arrangement with our company based on the information described in materials presented along with this cover letter, we ask you to pay close attention to the following items.

- In addition to the purchase price of a financial instrument, our company will collect a trading commission\* for each transaction as agreed beforehand with you. Since commissions may be included in the purchase price or may not be charged for certain transactions, we recommend that you confirm the commission for each transaction. In some cases, our company also may charge a maximum of ¥ 2 million (including tax) per year as a standing proxy fee for our deposit of your securities, if you are a non-resident.
- For derivative and margin transactions etc., our company may require collateral or margin requirements in accordance with an agreement made beforehand with you. Ordinarily in such cases, the amount of the transaction will be in excess of the required collateral or margin requirements\*\*.
- There is a risk that you will incur losses on your transactions due to changes in the market price of financial instruments based on fluctuations in interest rates, exchange rates, stock prices, real estate prices, commodity prices, and others. In addition, depending on the content of the transaction, the loss could exceed the amount of the collateral or margin requirements.
- There may be a difference between bid price etc. and ask price etc. of OTC derivatives handled by our company.
- Before engaging in any trading, please thoroughly confirm accounting and tax treatments regarding your trading in financial instruments with such experts as certified public accountants.

\* The amount of the trading commission cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

\*\* The ratio of margin requirements etc. to the amount of the transaction cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

When making an actual transaction, please be sure to carefully read the materials presented to you prior to the execution of agreement, and to take responsibility for your own decisions regarding the signing of the agreement with our company.

Corporate Name: Daiwa Securities Co. Ltd.

Registered: Financial Instruments Business Operator, Chief of Kanto Local Finance Bureau  
(Kin-sho) No.108

Memberships: Japan Securities Dealers Association  
The Financial Futures Association of Japan  
Japan Investment Advisers Association  
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