



ADB

Asia Clean Energy Forum 2023

Carbon Pricing and ADB's Carbon Market Program

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16 June 2023

Carbon Pricing in the Broader Climate Policy Architecture

- Carbon pricing creates a price on carbon dioxide and/or other greenhouse gas (GHG) emissions
- Carbon pricing is key in the overall climate policy architecture
- By internalizing the external cost of GHG emissions, carbon pricing aims to achieve GHG emission reductions in a cost efficient manner

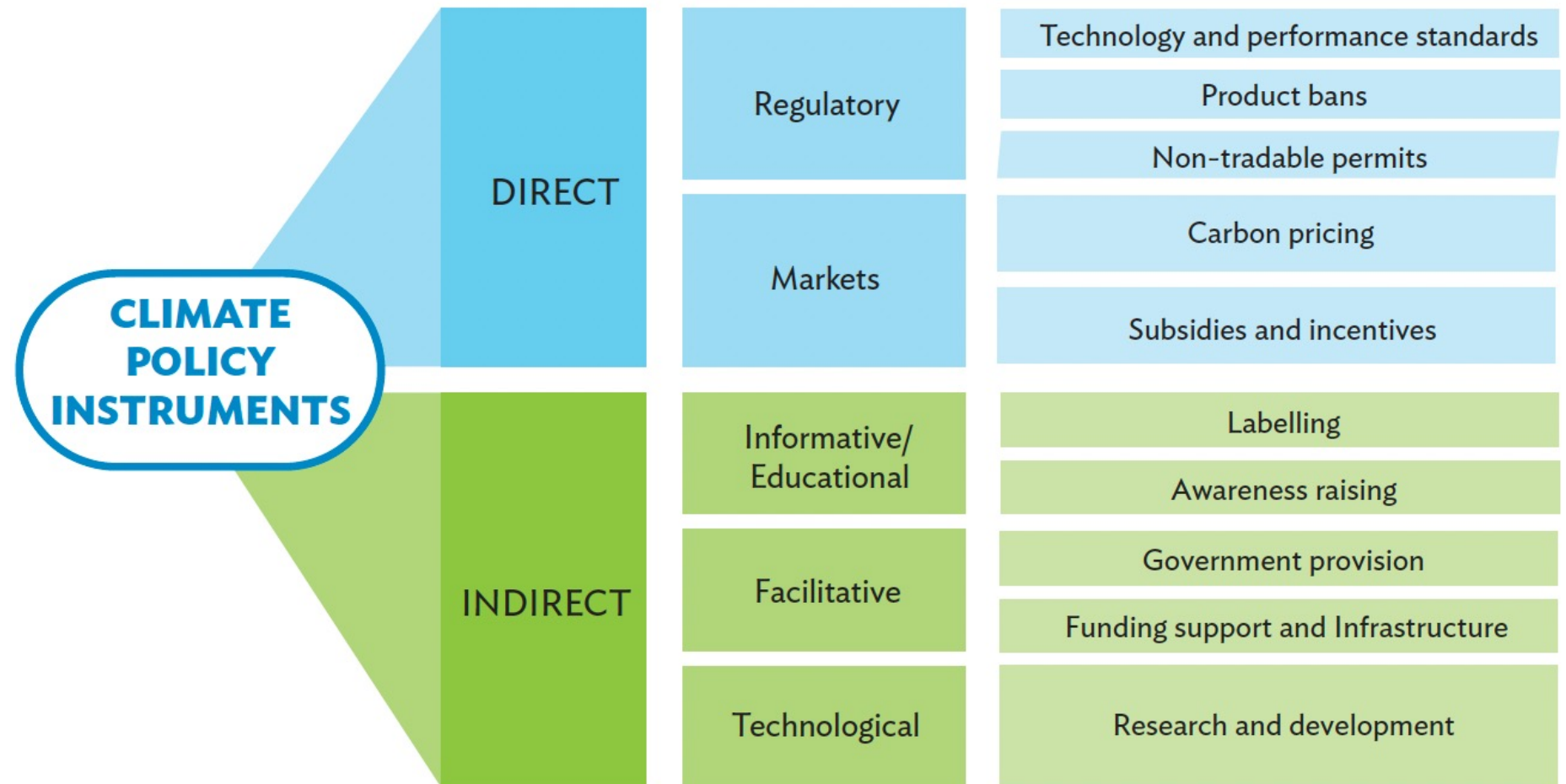


Figure: Carbon Pricing in the Broader Climate Policy Architecture (Source: Asian Development Bank)

Landscape of Carbon Pricing Instruments

- There is a broad landscape of carbon pricing instruments.
- Emissions Trading Systems (ETS) and carbon taxes are the two most common, direct carbon pricing instruments.
- Baseline and crediting mechanisms, including compliance markets under Article 6 and the voluntary carbon market (VCM) also put a price on carbon, and they play an essential role in supplementing Emission Trading System and carbon taxes.
- Internal carbon pricing instruments relate to those taken in a company wide level i.e. not being a response to the government imposing carbon pricing

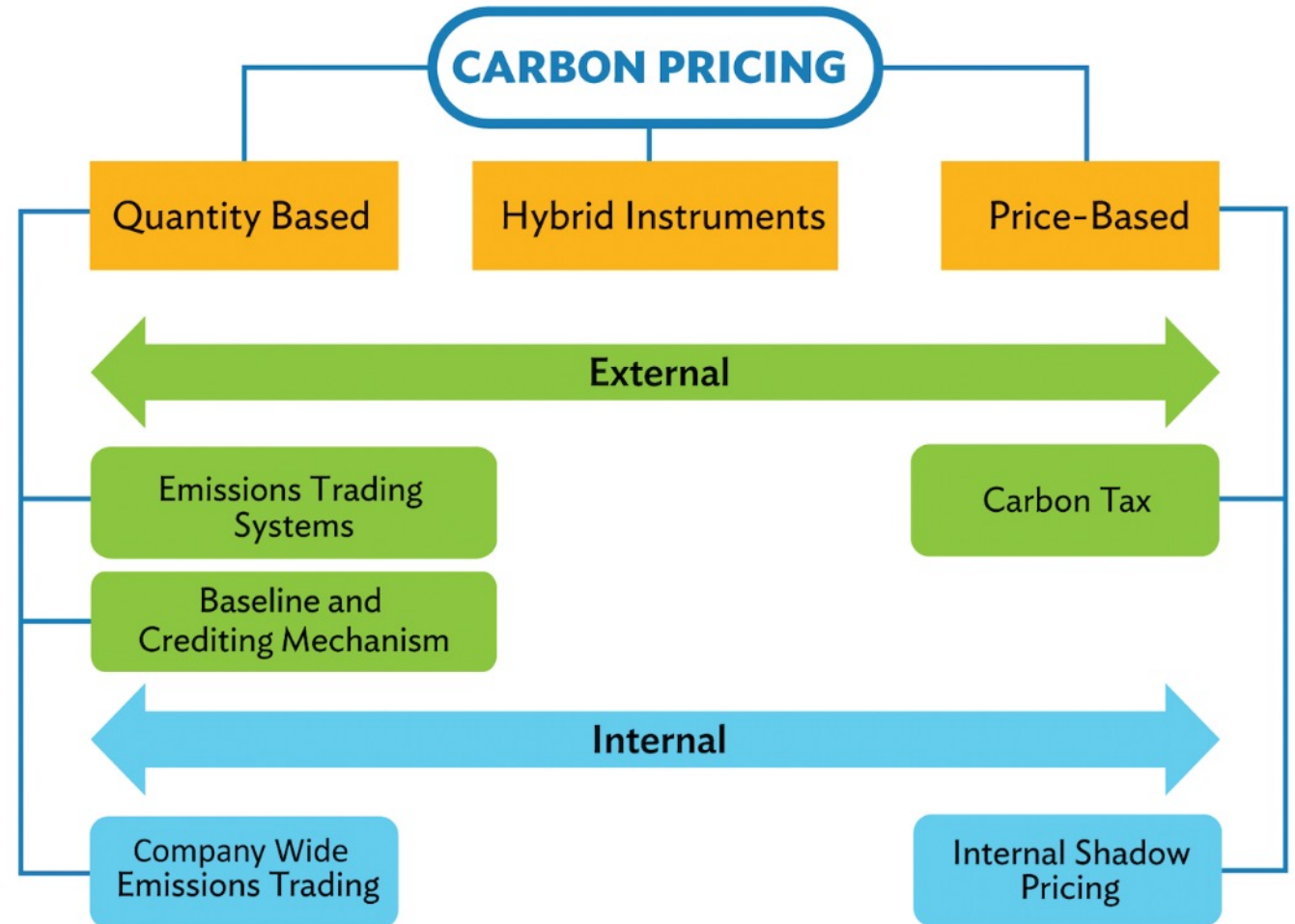
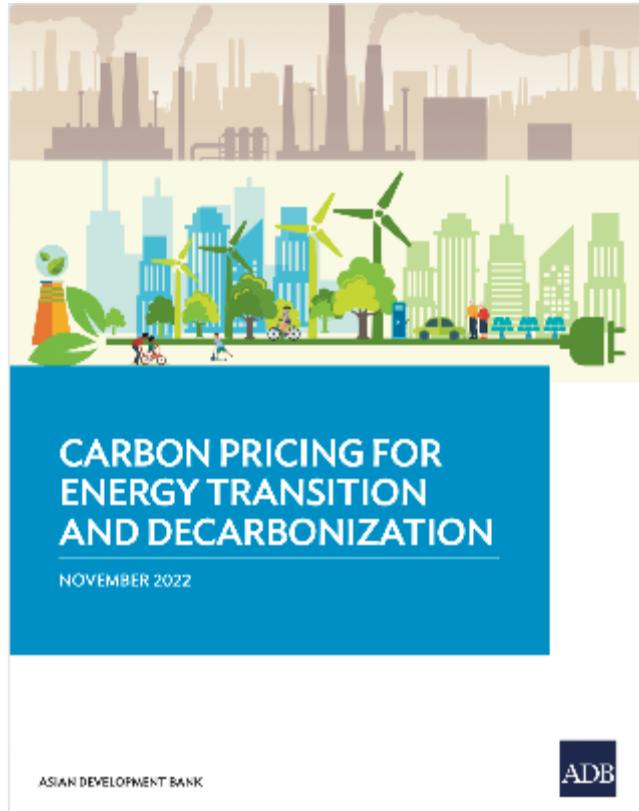


Figure: Asian Development Bank

Benefits of Carbon Pricing



Well-designed carbon pricing instruments can:

- Support the achievement of nationally determined contribution (NDC) targets cost-effectively and raise ambition.
- Serve as a powerful and cost-effective driver for decarbonization, a just transition, and support the realization of wider energy policy objectives
- Catalyze the mobilization of carbon finance and incentivize the diffusion of advanced low technologies through international financing under Article 6 of the Paris Climate Change Agreement
- Raise much-needed revenues for national governments

EU CBAM — Potential Impacts and Role of Carbon Pricing

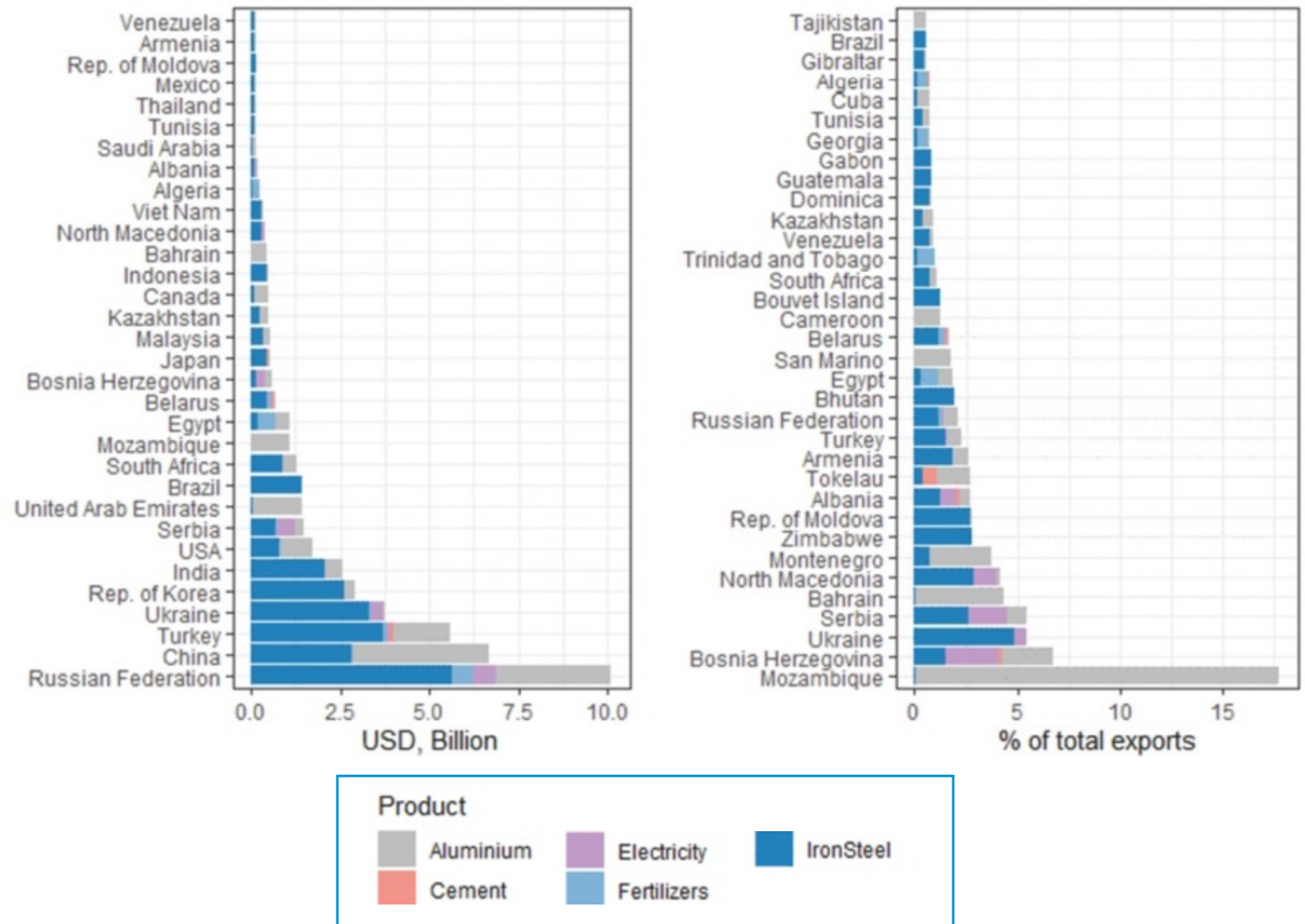
The empirical studies and modelling exercises on the impacts of EU-CBAM to developing countries confirm that the introduction of CBAM will impact countries proportionately to their exports to the EU.

The countries from Asia and the Pacific most impacted by EU-CBAM are the PRC, Japan, Republic of Korea and India.

In Southeast Asia, Indonesia, Philippines, Thailand and Viet Nam are impacted by CBAM with particular exposure from Iron and steel production, as well as, potentially the plastics sector.

CBAM can work as a much needed incentive to not just introduce carbon pricing but also increase the price of carbon over time as a carbon price domestically can cushion against the potential impacts of CBAM

Exports of CBAM products to EU countries, by country (2019)





Source: Magacho, G., Espagne, É. & Godin, A (2022)

Growing Momentum of Carbon Pricing

- Carbon taxes and Emissions Trading Systems (ETS) are the two most common, direct carbon pricing instruments.
- Japan** and **Singapore** employ a **carbon tax**
- Kazakhstan, New Zealand, the Republic of Korea** and **People's Republic of China** have launched a **National ETS**
- Indonesia has announced the implementation of a hybrid cap-trade-and-tax system
- Viet Nam, Thailand, Philippines and Pakistan are considering adopting carbon pricing instrument(s)

Carbon Pricing in Asia Pacific

-  Emissions Trading System
-  Carbon Tax

- | | |
|--------------------|---------------------|
| ① Kazakhstan | ⑨ Fujian |
| ② PRC National ETS | ⑩ Shanghai |
| ③ Chongqing | ⑪ Republic of Korea |
| ④ Beijing | ⑫ Saitama |
| ⑤ Hubei | ⑬ Tokyo |
| ⑥ Guangdong | ⑭ New Zealand |
| ⑦ Shenzhen | ⑮ Singapore |
| ⑧ Tianjin | ⑯ Japan |

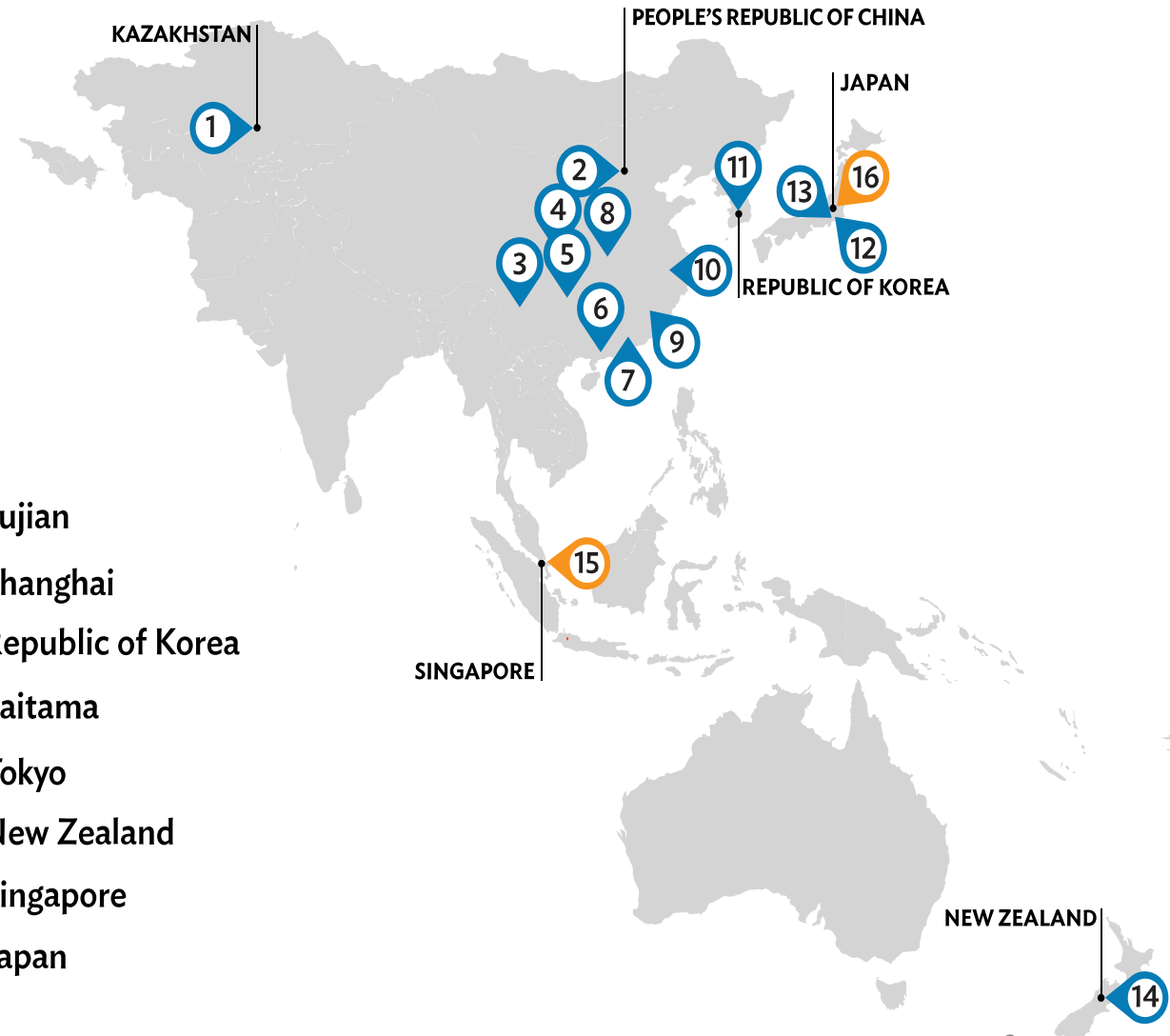


Figure: Carbon Pricing in Asia and the Pacific (Source: Asian Development Bank)

Spotlight on Republic of Korea ETS (K-ETS)

Launched in 2015, the ETS of the Republic of Korea is the first national ETS in Asia. It covers around 74% of South Korea's national GHG emissions and will help the country in its objective to become carbon neutral by 2050, a target embedded in the "Carbon Neutral Framework Act" of 2021. The K-ETS covers 684 of the country's largest emitters in the power, industrial, buildings, waste, transport, and domestic aviation sectors. The K-ETS was established by the "Framework Act on Low Carbon, Green Growth" (2010).

Sectors covered



POWER



INDUSTRY



DOMESTIC
AVIATION



TRANSPORT



BUILDINGS



WASTE

GHGs covered

CO₂, CH₄, N₂O,
PFCs, HFCs, SF₆

Number of entities

684

Allocation method

Free allocation
Auctioning

CAP 2019

589.3
MtCO₂e
(2023)

Use of offsets & credits

Domestic

Average price 2022

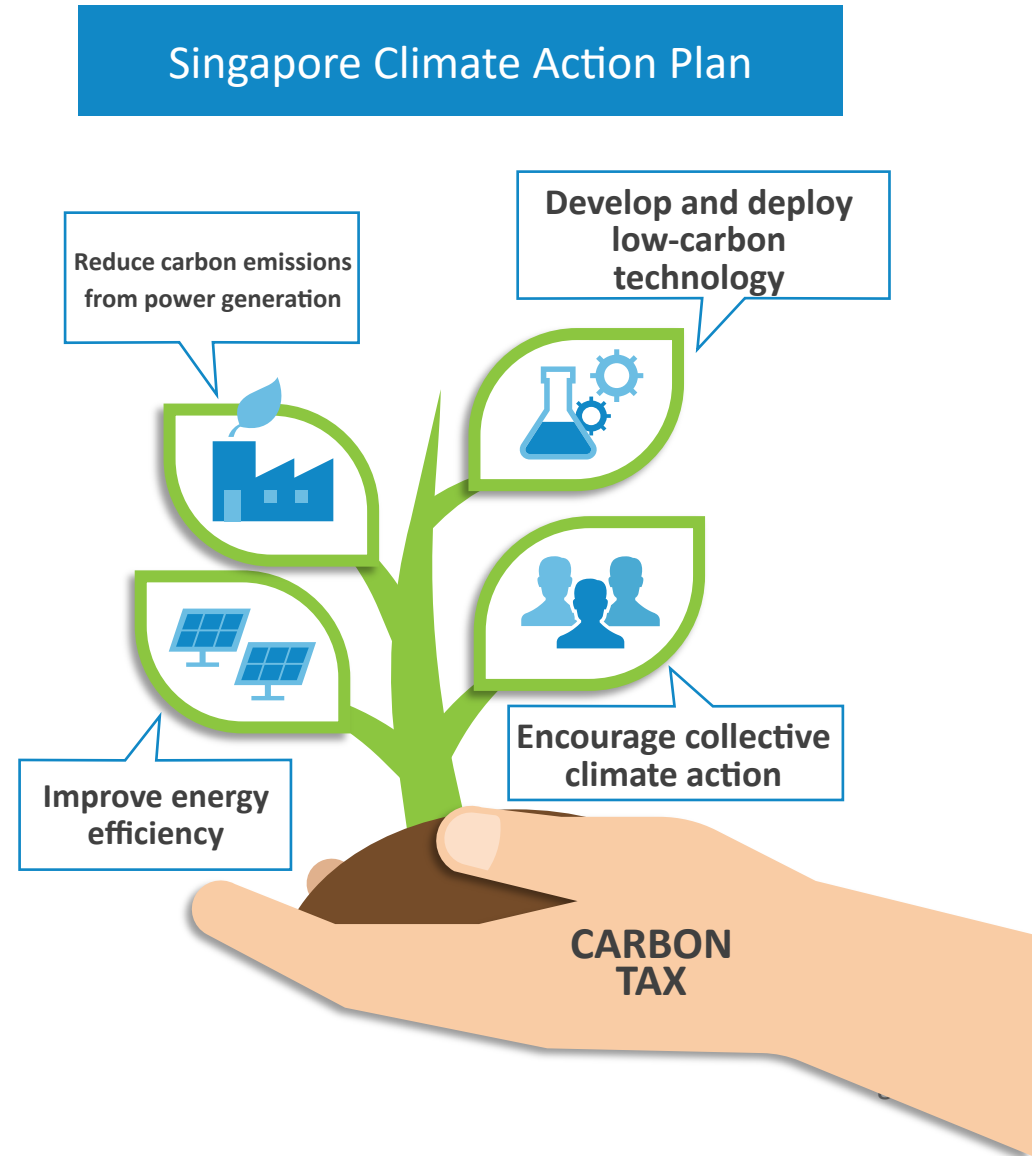
\$17.99
(average auction price)

Future reduction targets

40% below 2018 levels by
2030
Carbon neutrality by 2050

Singapore Carbon Tax

- A **simple design**. Regulating about 50 of the largest emitters helps limit the administrative burden of the policy instrument
- The carbon tax level is set at **S\$5/tCO₂e** in the first instance from 2019 to 2023, to provide a transitional period to give emitters time to adjust. Gradually phasing in the system allows **businesses to adjust** their operations
- The carbon tax will be raised to **\$25/tCO₂e** in 2024 and 2025, and **\$45/tCO₂e** in 2026 and 2027, with a view to reaching **\$50-80/tCO₂e** by 2030.
- **Rebates**, set at about 15USD per eligible household per year, have been planned for the first three years, to help **households adjust** to the carbon tax
- Revenue from the carbon tax is **recycled back** to the economy, by providing support to companies to implement energy-efficiency measures

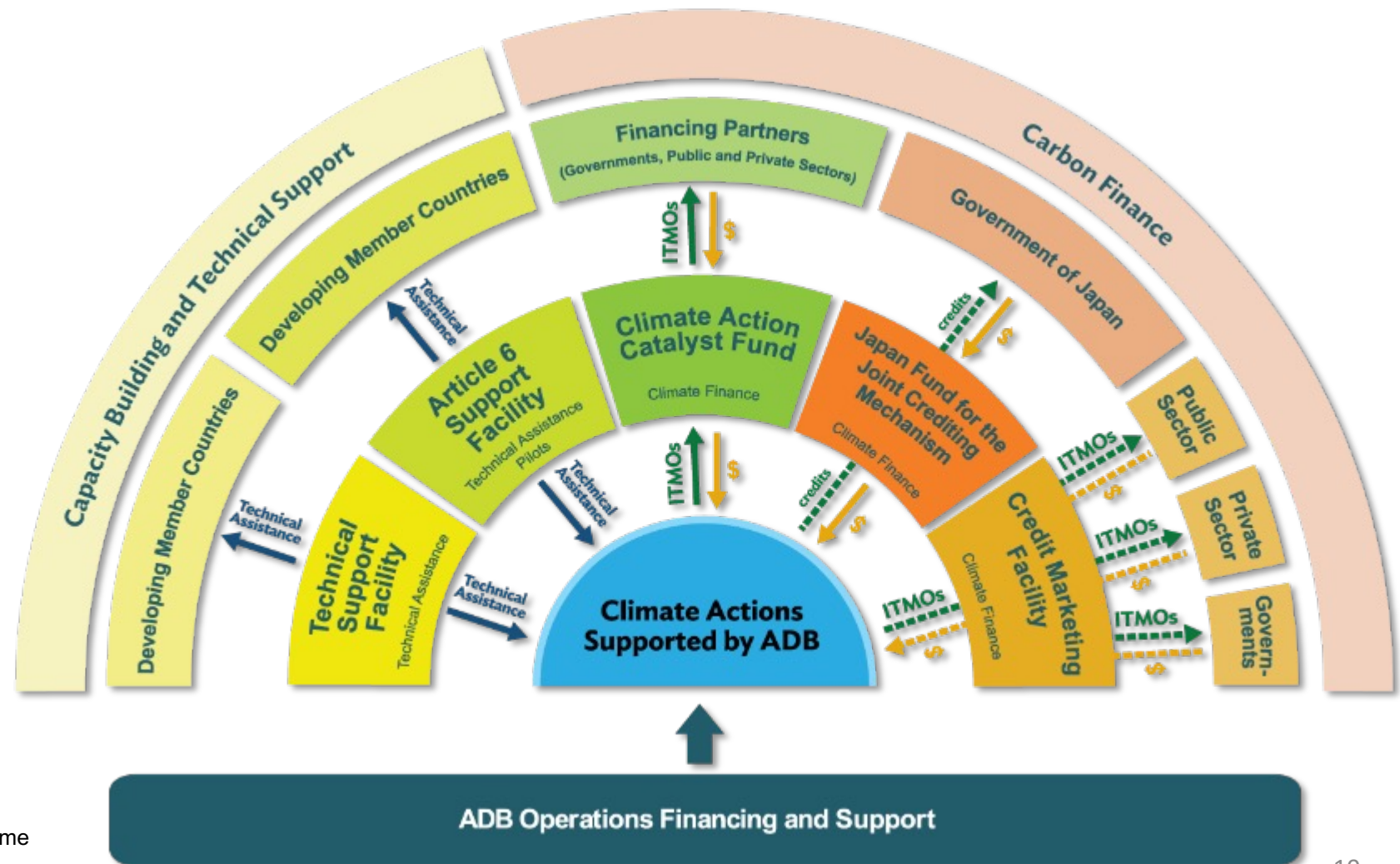


ADB Support on Carbon Pricing Two-Pronged Strategy

- Carbon pricing is an integral element of the broader **climate policy architecture** that can help countries reduce emissions cost-effectively and raise ambition over time.
- ADB recognizes the important role carbon pricing can play to support its DMCs with their climate ambitions.
- ADB takes a **holistic approach** to support its developing member countries in pursuing carbon pricing and markets by mobilizing **carbon finance**, incentivizing investments in **low carbon technologies**, and providing technical and **capacity** building support.
- The ADB adopts **two-pronged strategy** in its engagement with carbon pricing by:
 - » providing technical and capacity building support; and
 - » mobilizing carbon finance
- ADB has a long-standing engagement with carbon markets through is **Carbon Market Program**

ADB's Carbon Market Program 2.0

- Carbon finance
- Technical support
- Capacity building
- Knowledge support



ITMO = internationally transferred mitigation outcome

ADB Support on Carbon Markets

Future Carbon Fund

- **\$115 million** Trust Fund to purchase post-2012 CERs.
- Commenced operations in 2009.
- Funding from 4 Sovereign and 2 private sector entities in Asia and Europe.
- Providing **\$53 million** worth of carbon finance to 33 GHG mitigation projects.
- Purchased **8.68 million** post-2012 CERs from projects hosted in 10 DMCs.
- Supports 1.1GW renewable energy projects.
- To be closed in 2023

JFJCM

- Japan Fund for the Joint Crediting Mechanism (JFJCM).
- Commenced in 2014 and provides grants for advanced low-carbon technologies in ADB-financed and administered projects utilizing the JCM initiated by Japan.
- **\$117 million** contributed by the Government of Japan (as of Mar 2023). Supports seven mitigation activities in **Indonesia, Maldives, Bangladesh, and Mongolia** allocating \$47.68 million.
- Supports three TAs to prepare projects to be financed by the JFJCM and build capacity of DMCs, allocating \$4 million.

Article 6 Support Facility

- Established in 2018.
- Providing technical, capacity building, and policy development support to enhance DMC's preparedness to participate in new carbon markets envisaged under the framework of Article 6.
- Supporting Article 6 piloting including POAs, infrastructure for accounting and MRV
- **\$6.2 million** facility funded by ADB and the Governments of Germany and Sweden.
- Supports **Bhutan, Georgia, Indonesia, Mongolia, Pakistan, Philippines, Thailand, and Viet Nam.**

Technical Support Facility

- Established in 2006 and implemented through a series of successive TA projects to support DMCs in enhancing the financial viability of mitigation actions through carbon markets.
- Supported by a cumulative amount of \$13.20 million provided by the Governments of Austria, Finland, Japan, Luxembourg, ROK, Spain, and Switzerland.
- Currently implementing TA 6730, which provides participating DMCs with technical and capacity-building support for promoting life-cycle management of HFCs.
- Supports **Maldives, Mongolia, Philippines** and **Viet Nam**

CACF

- **Climate Action Catalyst Fund (CACF) is a new carbon fund** to mobilize carbon finance to purchase carbon credits under Article 6 of the Paris Agreement
- **\$100million plus*** to support DMCs in achieving NDC commitments cost effectively and raising ambition over time
- Will support a diverse range of **transformative actions** including projects, programs, and scaled-up activities such as sectoral and policy interventions
- ADB is in discussion with its development partners for mobilizing financial contribution for CACF
- Expected to commence the operation in **Q1 2024**

**The ADB is in discussions with potential Financing Partners to join the Fund, but no commitments have been made yet.*



Thank you!



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