Regional Climate Week

Asia-Pacific

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United Nations Climate Change

Session 1d: Carbon pricing approaches



United Nations Climate Change

The role of carbon credits





Crediting mechanisms

- A crediting mechanism (a baseline and credit system) enables remuneration of achieved emission reductions; tradable certificates are issued for actual emission reductions achieved.
- Participation in a crediting mechanism is voluntary.
- Demand for generated certificates can be created, for example, by allowing the certificates generated under the crediting mechanism to be traded in an emissions trading scheme or used against a carbon tax.
- In addition to the compliance market (with binding emission reduction targets), a market for voluntary use of greenhouse gas emissions has also developed in recent years, creating demand for carbon credits





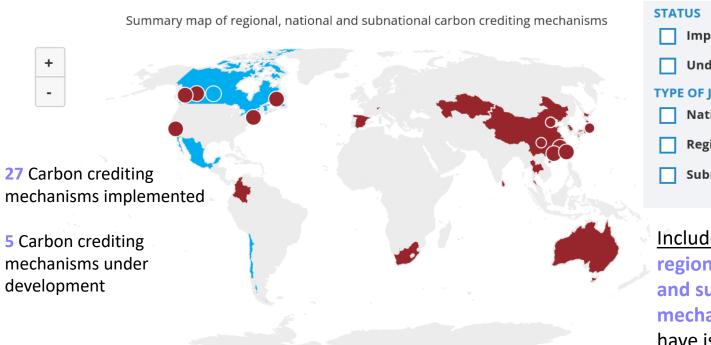
Using carbon pricing with carbon credits

- **ETS**: possibility to allow the use of carbon credits (instead of emission allowances) for compliance.
 - → Less demand for emission allowances will soften their price.
- Carbon tax: possibility to reduce the carbon tax liability by reducing net emissions through the use of offsets for X% of emissions.
 - → Less tax revenue but more climate achievement.
- In both cases: The use of carbon credits creates an incentive to reduce emissions outside the scope of the carbon pricing.





Carbon crediting mechanisms



Carbon crediting mechanisms implemented
Carbon crediting mechanisms under development
Source: https://carbonpricingdashboard.worldbank.org/carboncrediting



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Data last updated March, 31 2023



Included are regional, national and subnational mechanisms that have issued carbon credits that can be used under mandatory carbon pricing initiatives;

Not included:

International crediting mechanisms:

They are those governed by international climate treaties and are usually administered by international institutions. (i.e., CDM and JI, and most recently the promising Article 6.4 Mechanism).

Independent crediting mechanisms:

They are those not governed by any national regulation or international treaties. They are administered by private and independent third-party organizations, which are often nongovernmental organizations. (ACR, CAR, Gold Standard, VCS)

Domestic Carbon Markets for NDC achievement

Example

Company A participates in an ETS. It has emitted 5600 tCO2e more than it currently has allowances. To ensure compliance, it will purchase 5600 units in allowances or offsets so that it can surrender 1 compliance unit for each tonne emitted to the regulator

Company B is liable to a carbon tax. It can offset up to 10% of its emissions to reduce its tax liability an chooses to buy and cancel emission credits accordingly

| Jurisdiction: | ? | |
|---------------|----------|--------|
| Motivation | = ? | |
| Buyers = ? | | _ |
| Units: ? | | |
| | Scope: ? | - • |

Type of Instrument ?





Domestic Carbon Markets for NDC achievement

Example

Company A participates in an ETS. It has emitted 5600 tCO2e more than it currently has allowances. To ensure compliance, it will purchase 5600 units in allowances or offsets so that it can surrender 1 compliance unit for each tonne emitted to the regulator

Company B is liable to a carbon tax. It can offset up to 10% of its emissions to reduce its tax liability an chooses to buy and cancel emission credits accordingly

Compliance market

For achieving NDCs domestically

Motivation = compliance with mandated pricing instrument (carbon tax, ETS, etc.)

Buyers = compliance entities (corporates)

Units: emission allowances & offset credits

Domestic or sectoral regulations





Carbon crediting mechanisms

Examples for use of carbon credits under compliance systems:

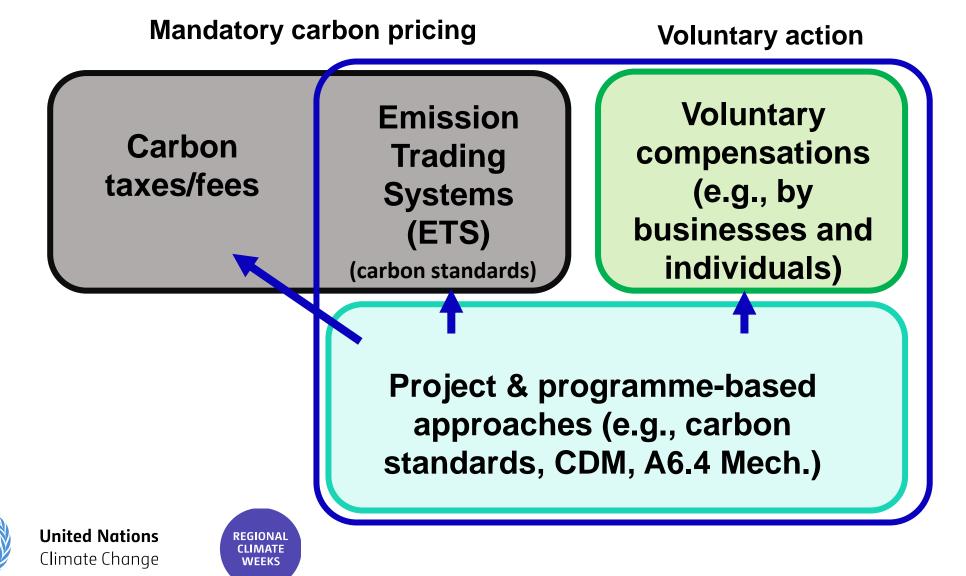
- International credits:
 - The Republic of Korea offset credit mechanism was implemented to provide the offset credits for use within the Korea ETS; allows for CERs from Korean CDM projects to be reissued as KOCs
 - The Colombia Carbon Tax Offset System was established to allow companies to offset emissions liable to carbon taxation. Voluntary cancellation of CERs against Colombia's carbon tax is possible.
- Domestic Credits:
 - The California Compliance Offset Program is the mechanism that supplies carbon offset credits within California's cap-and-trade program (ARBOCs accepted by California ETS, Quebec ETS).
 - The Kazakhstan ETS sets out the option for compliance entities to utilize domestic offset credits to help meet compliance obligations; non-ETS sectors can seek to implement offset credit projects under a Kazakhstan domestic crediting mechanism.
- Independent Credits:
 - The South African Carbon Tax Act allows companies to reduce their carbon tax liabilities by up to 10, whereby projects in South Africa developed under the CDM, VCS and the Gold Standard are potentially eligible.



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About carbon pricing and carbon markets



Carbon markets





I can use carbon credits in combination with:



Only emission trading schemes.



B

Both carbon taxes and ETS.







Based on Best, Burke, Jotzo 2020

The use of carbon credits under a carbon tax may:

Α

Decrease the carbon tax price.

Β

Decrease the cost of the carbon tax if credits are cheaper than the tax rate.

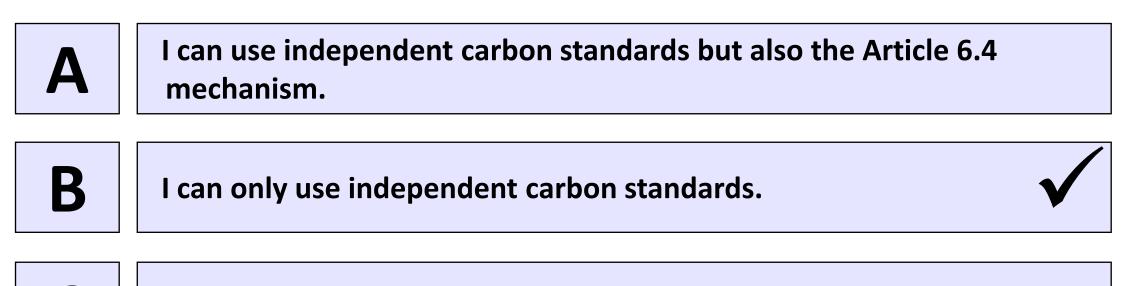






Based on Best, Burke, Jotzo 2020

To use carbon credits domestically under a carbon tax or an ETS



I have to establish a national carbon crediting scheme.







Based on Best, Burke, Jotzo 2020

THANK YOU FOR ATTENDING!



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