



The Role of Carbon Pricing to Mitigate Climate Change

Mexican mission to Germany

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Outline

- Carbon Pricing is gaining momentum
- Benefits of Carbon Pricing
- Internal carbon price
- Germany's activities to promote Carbon Pricing globally



Carbon Pricing is gaining momentum

- The number of jurisdictions with carbon pricing policies has doubled over the past decade:
- 51 national and regional governments put a price on carbon through emissions trading systems (25) and taxation (26)
- Out of the 162 NDC (representing 190) more than 50% of all NDCs (92) indicate intention to use international mechanisms.
- Regional initiatives on carbon pricing:
 - Alliance “Carbon Pricing in the Americas” (CAN, CHL; PER, MEX, CAL and other jurisdictions)
 - West African Alliance on Carbon Markets/Pricing



Emissions Trading System

- EU ETS (2005) coverage: 45% of the overall GHG emissions in 31 countries, and 12,000 liable installations.
- CHN: 7 pilots launched in 2013/2014, launch of the nation-wide ETS in Dec 2017
- KAZ: ETS was introduced in Dec 2011 (on hold 2016 and relaunched 2018)
- MEX: Implementation of ETS in combination with existing Carbon Tax on fossil fuel
- CAN: pan-Canadian carbon pollution pricing benchmark: All jurisdictions will have carbon pricing in place by 2018



Carbon Tax

- About 20 countries have introduced a carbon tax
- Design of carbon taxes has evolved to allow more flexibility:
 - carbon tax exception through voluntary agreements to improve energy efficiency (Denmark)
 - or by adopting an emission reduction target (Switzerland)
 - Chile nation-wide Carbon Tax (energy sector) since 2017, use of offset credits as an option possible but not ruled out so far
- 14 European countries have carbon tax alongside the EU ETS
- Further examples: COL, MEX, IDN, JPN,
- Scheduled: South Africa, Singapore



Crediting Mechanisms

- CDM largest c.m. (project numbers and emissions reductions)
- CDM has build capacity and knowledge for c.m.
- A number of countries: considering to scale up and to use in their own domestic context.

International demand:

- International Civil Aviation: CORSIA (Pilot phase from 2021 through 2023)
- International Maritime Organization (IMO)?
- So far, few countries have indicated to purchase international credits (CAN, MEX, JPN, NZL, KOR, CHE)



CO₂ - Price developments

The price range of CO₂ prices varies between jurisdictions:

- Eg. SWE 139 € carbon tax, ARG carbon tax start with 1\$ and increase in 10 years to 10\$.
 - Pan-CAN System starts with 10 CAD and will increase to 50 CAD in 2022
 - In 2016 half of mandatory systems: market prices were below 10\$
 - Today half of mandatory systems: market prices are below 15\$
 - Too few jurisdictions have reached an efficient price level of 30 Euro for 2018 (low-end estimate of carbon costs today by OECD)
- **Globally growing number of mandatory systems and increasing CO₂-prices**



Internal CO₂ - Price

- Today, 1,389+ companies are disclosing to CDP their plans or current practice of putting a price on carbon emissions
- This represents an 11% increase from 2016
- Reason:
 - Understand that carbon risk management is a business imperative
 - Consider potential future policy development
 - Giving guidance on investment decisions
 - Identify potential opportunities to reduce emission cost-effectively



Internal CO₂ - Price usage by MDB

- World Bank: newly introduced shadow price to evaluate investment projects
- „High-Level Commission on Carbon Prices“ (Stiglitz & Stern, 2017) recommend price range: US\$ 40-80 CO₂eq t in 2020, rising to US\$ 50-100 CO₂eq t by 2030
- Other MDBs like ADB, EBRD, EIB use a shadow price with a similar approach like WB.



Benefits of Carbon Pricing

- Cost effective mitigation: ETS and CO₂-tax promote in the covered sector low-carbon development at the lowest cost.
- Multitude design options: consider national circumstances, characteristic of targeted sectors, overall objective of national climate policy
- Linking with crediting mechanisms: channel investment into further sectors, reduce the burden of the mandatory system and raise acceptance of the instrument



Benefits of Carbon Pricing

- Generates revenues for state budget and climate action:
 - Trigger development: Support transition of targeted sector or invest in social-economic activities (education, infrastructure, water supply)
 - Trigger higher ambition: Reinvesting in further GHG reductions without burdening the budget
- CAL: Revenues are used to build high-speed rail and intercity network to promote the use of public transport.
- GER: Auction revenues are fed into the Energy and Climate Fund (EKF)
- British Columbia: Revenue-neutral approach, support of poor households



Germany's activities: Fostering carbon pricing

- **Partnership for Market Readiness (PMR)** (contributing country)
- **Carbon Pricing Leadership Coalition (CPLC)** (governmental partner)
- **Carbon Pricing Panel:** Chancellor Angela Merkel supports the vision statement for faster action on carbon pricing to deliver on Paris climate change agreement (2016)
- **Carbon Market Platform:** Promoting strategic dialogue on further development of the global carbon market (established 2015 German G7 Presidency)
- **International Carbon Action Partnership** (member)



THANK YOU

For more information:
<http://www.carbon-mechanisms.de>