Looking Ahead: Partner dialogue on carbon pricing, enabling environment, and capacity development

Tom Howes, Head of Energy and Environment Division, International Energy Agency
carbon pricing can be difficult to implement ...
A host of policies and technologies will be needed across every sector to keep climate targets within reach. Carbon pricing is one of the several levers that could be used to reduce energy-related CO₂ emissions.
Carbon pricing can trigger multiple layers of actions

**Fuel switch**
Encouraging shift towards use of low-carbon technologies

**Consumption**
Carbon-intensive goods integrate climate change costs

**Use of carbon pricing revenues**
E.g. support innovation, address issues of distributional equity

**Early retirement or retrofitting**
of less efficient assets

**Investments**
Providing incentives for less carbon-intensive investments
Carbon pricing instruments around the world

**Emission Trading Schemes (ETGs)**

**Carbon taxes**

**International carbon markets / offsetting schemes**

46 national + 30 subnational jurisdictions + international carbon markets (e.g. Kyoto Protocol)

Source: World Bank, 2019
The energy sector is covered in most of ETS, focusing in particular on industry and power sector emissions.
Carbon pricing revenues can be used to support innovation in low-carbon technologies and address issues of distributional equity.

Revenues can fulfil different functions according to economic and political priorities.

Use of carbon pricing revenues
E.g. support innovation, address issues of distributional equity

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (bn$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>~22</td>
</tr>
<tr>
<td>2017</td>
<td>~33</td>
</tr>
<tr>
<td>2018</td>
<td>~45</td>
</tr>
</tbody>
</table>

Source:
Implementing an effective Emission Trading System (2020)

• Examination of **international experiences in the design and implementation of emission trading systems** around the world
  - Key energy-related challenges drawn from “real world” experiences
  - Key lessons and questions especially for jurisdictions interested in developing new ETS

• Focus on **four main issues** that different trading systems have had to address:
  - The **ETS’ role and function**
  - The **interaction with wider energy transition strategies**
  - The application of an ETS to different **power market structures**
  - The application of an ETS to **industrial sectors**
Examples of work of IEA’s Environment and Climate Change Team on carbon pricing

• Since 2017, work with the Department of Climate Change (Ministry of Ecology and Environment) to support development of China’s National ETS.
  
• Report to assess the effects of the proposed ETS allowance allocation on coal-fired power plants (June 2020)
  
• Since 2020, work with the Thailand Greenhouse Gas Management Organisation (TGO) to explore a) the challenges and opportunities of carbon market for the power sector (December 2020) and b) the integration of carbon market with other clean energy policies (August 2020).
  
• Since 2020, work with the National Treasury and Department of Mineral Resources and Energy on integration of South African carbon tax policy package with clean energy transition incentives.
  
• Assessment of carbon pricing drivers for electricity sector transition: emissions intensity benchmark for power plants to drive enhanced performance (June 2020)
  
• Report “Implementing Effective ETS” - Analysis of international experiences with ETS implementation, with focus on the power and industry sectors (July 2020):
  
  - Lessons learnt for implementing effective and efficient ETS
  
  - Guiding questions for policy makers
IEA remains a key partner for ASEAN energy policy and planning

- IEA a “Strategic Partner” at AMEM 2019 and has been mandated to provide support on a series of key issues:
  - ASEAN Plan of Action for Energy Cooperation (APAEC) and other planning initiatives
  - Multilateral Power Trade (MPT)
  - Renewable Energy
  - Energy Sector Investment
  - Energy Efficiency

- IEA also provides technical support to governments on carbon pricing through in-country analysis:
  - China (since 2018)
  - Thailand (since 2020)
  - South Africa (since 2020)

Previous publications on ASEAN or carbon pricing
https://webstore.iea.org/

Web article:
https://www.iea.org/articles/putting-a-price-on-carbon-an-efficient-way-for-thailand-to-meet-its-bold-emission-target
IEA work on international carbon markets and Article 6

- OECD-IEA Climate Change Expert Group (CCXG) within STO/ECC:
  - Technical papers
  - Negotiators and experts convening at the CCXG Global Forum twice per year (next: 31 March-1 April at OECD)