ABDULLAH BIN HAMAD AL-ATTIYAH INTERNATIONAL FOUNDATION FOR ENERGY & SUSTAINABLE DEVELOPMENT



Monthly Sustainability Newsletter

CHAIRMAN'S MESSAGE

October 2017, Vol. 1, Issue 9

Dear members, partners and friends,

It is my pleasure to introduce the October issue of the Monthly Sustainability Newsletter from the Al-Attiyah Foundation. This issue is devoted to the broader topic of Carbon Markets.

The end of 2016 marked the start of a new era in global action against climate change, with the adoption of the Paris Agreement. While implementation of National Determined Contributions (NDCs) in the newly ratified Accord will rely on a range of policies and programs, carbon pricing initiatives will play an increasing role, with about 100 Parties, accounting for 58 percent of global GHG emissions, planning or considering these instruments. The pivotal role of carbon pricing in supporting efforts to decarbonize is also reflected in Article 6 of the Agreement, providing a basis for facilitating international recognition of cooperative carbon pricing approaches and identifying new concepts that may pave the way for this cooperation to be pursued.

National or regional carbon trading schemes are now operational in Europe, the USA, New Zealand, China and elsewhere. The experiences gained from these schemes are bound to shape the outcome of negotiation on the rulebook for Article 6.

This month's newsletter presents an insight on carbon markets worldwide.

Book Launch

'The Sustainable Development Goals and Energy Nexus'



Upcoming Events

Nov 16 Global Energy Policy's RT

Nov 28 8th Bosphorus Summit

Dec 5 CEO Roundtable Series 6

Dec 11 NUMOV Energy Conference

Important Announcement

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CEO Roundtable Series 6

"Energy Outlook to the Year Ahead"

Date: 5th December 2017

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8th Bosphorus Summit – Turkey

Date: 28 – 30 November 2017

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This Month's Highlights

The Genesis of Carbon Trading.

The Kyoto Era.

Progression in the wake of the Paris Accord.

Unstable Carbon Prices.

Outlook.

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Energy, Poverty and Sustainable Development

In the late 1960s an economist at the University of Chicago, Ronald Coase, began promoting the idea of 'pollution trading'. Coase believed that pollution should be seen as part of the cost of production. He considered that if pollution was priced as part of the process of production, market forces would eventually deter businesses from polluting the environment because it would become less and less cost-effective for them to do so. In 1976, the US Environmental Protection Agency (EPA) applied the concept of pollution trading to reduce the level of certain air pollutants. Companies were to be granted permission to build polluting factories in certain regions only if the company guaranteed to reduce pollution by a greater amount elsewhere. However, the scheme was not a success. Pollution levels did not drop, but just spread over a wider area. This was followed by the Clean Air Act Amendments which aimed to combat the problem of acid rain. Under this system, emissions

permits were given free of charge to the major polluters. It was slightly more successful than pollution trading but it not until was the the negotiations on Kyoto Protocol under the UNFCCC, that the trading of carbon



allocations became a key element of the international climate treaty. Since then, carbon trading has become a central pillar of international climate policy.

The Kyoto Era, Carbon Market Mechanisms

The Kyoto Protocol, adopted in 1997, established commitments necessary to implement the United Nations Framework Convention on Climate Change (UNFCCC). The Protocol defined fixed objectives for the most industrialized countries to collectively reduce by at least 5% their overall emissions. To help countries achieve their reduction objectives, the Protocol included three flexibility mechanisms: an International Emission Trading (IET), the Joint Implementation (JI) and the Clean Development Mechanism (CDM). CDM and JI are the two project-based mechanisms which feed the IET. The CDM involves investment in emission reduction or removal enhancement projects in developing countries that contribute to their sustainable development, while JI enables developed countries to carry out emission reduction or removal enhancement projects in other developed countries. Emission reduction credits from the projects, certified and issued by the UN, become tradeable commodities, as part of efforts to meet the Kyoto targets.

(Source: www.un.org, www.worldbank.org)



Carbon Markets in Figures





Source: www.worldbank.org

Progression in the wake of the Paris Accord.

Following adoption of the Paris Agreement, Member States of the International Civil Aviation Organization (ICAO) agreed on the first global sectoral carbon pricing initiative. ICAO's Carbon Offsetting and Reduction Scheme for International Aviation was adopted on October 7, 2016, capping GHG emissions from international aviation at 2020 levels.

At the national and subnational level, new initiatives can build on substantial progress and experience with carbon pricing over the last 25 years. As of 2017, over 40 national and 25 subnational jurisdictions are putting a price on carbon.

Since 2016, eight new carbon pricing initiatives have been implemented, highlighting the continued momentum for carbon pricing:

2016:

- ➤ The Greenhouse Gas Industrial Reporting and Control Act in British Columbia, establishing a baseline-and-credit system in addition to the province's existing revenue neutral carbon tax;
- The safeguard mechanism to the Emissions Reduction Fund in Australia, launching a baseline-and-offset system;
- The newest pilot ETS in Fujian Province, which covers GHG emissions in 2016, in preparation for the introduction of the Chinese national ETS later in 2017.

2017:

- A carbon tax in Alberta, covering all GHG emissions from combustion that are not
- covered by its existing carbon pricing initiative for large emitters;

 A carbon tax in Chile, which applies to CO2 emissions from large emitters
- from the power and industrial sector;

 An economy-wide carbon tax in Colombia on all liquid and gaseous fossil
- fuels used for combustion;
 An ETS in Ontario, covering GHG emissions from industry, electricity generators and importers, natural gas distributors and fuel suppliers;
- ➤ The Clean Air Rule in Washington State, establishing a baseline-and-credit system which initially covers fuel distributors and industrial companies that are not considered to be energy intensive nor trade exposed.

China:

After successful launch of pilot provincial ETS, China is beginning the commencement of its national ETS, which is planned for the end of this year. This will be the largest carbon pricing initiative in the world, surpassing the European Union ETS (EU ETS). Already, the eight Chinese ETS pilots collectively cover 1.2 GtCO2e, or about ten percent of the country's GHG emissions. Following the launch of the Chinese national ETS, the emissions covered by the world's largest emitter could increase fourfold. (www.worldbank.org)



Carbon Markets in Figures





Source: www.worldbank.org

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The Americas:

The number of carbon pricing initiatives will continue to grow, with several new initiatives under consideration. The Americas, Canada and the Pacific Alliance countries have been at the forefront of carbon pricing developments. In Canada, a national framework was put forward by the government in 2016, requiring all jurisdictions to implement a carbon price by 2018. Jurisdictions that do not already have existing carbon pricing initiatives have taken steps to implement this requirement. Furthermore, Mexico started a one-year ETS simulation to create domestic awareness and prepare for the launch of an ETS in 2018, while Colombia and Chile continue to consider setting up an ETS following the introduction of their carbon taxes.

Europe:

The EU's Emissions Trading System (EU ETS) is a cornerstone of the EU's policy to fight climate change. It covers more than 11,000 installations in 31 countries (28 EU Member States, as well as Norway, Iceland and Lichtenstein) including airlines performing aviation activities between EEA airports, and has created a functioning market infrastructure and a liquid market. Recently, to provide greater price stability and predictability in the EU ETS, a market stability reserve was legislated and will start shaping the supply of allowances from January 2019. In addition, the European Commission is also providing cooperative initiatives with China and the Republic of Korea. The cooperation focused on providing technical assistance and establishing dialogues on potential for future linking between the jurisdictions.

(Source: www. europa.eu)

Unstable Carbon Prices

The observed carbon prices span a wide range, from less than US\$1 up to US\$126/tCO2e. Despite an increase in average prices witnessed in some newer initiatives such as in France and the Republic of Korea, about three quarters of covered emissions remain priced at less than US\$10/tCO2e. Higher prices will be needed to increase the economic impact of carbon pricing. To that end, the High-Level Commission on Carbon Prices was launched at the COP 22 to identify indicative corridors of carbon prices which can be used to guide the design of carbon pricing instruments and other climate policies.

Outlook

Looking ahead, carbon pricing could play a pivotal role in enabling countries to meet their NDCs through initiatives that facilitate international cooperation. The implementation of these initiatives will enable Parties to achieve emission reductions at a lower cost and to bring them closer to their ambition to meet the Paris Agreement pledge to keep the global average temperature increases to well below 2°C.

(Source: www. unfccc.org)









Source: www.worldbank.org