

DEVELOPING A FLEXIBLE

VINOD KESAVA CHARTS CARBON PRICING'S EVOLUTION IN ASIA FROM THE EARLY DAYS OF THE KYOTO PROTOCOL TO THE POSSIBILITIES THE PARIS AGREEMENT BRINGS FOR THE FUTURE

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THE PROFILE of global carbon markets is rapidly changing and advancing, as governments lay foundations to meet their respective Nationally Determined Contributions (NDCs) under the Paris Agreement. This is especially true with respect to the fact that the Paris Agreement fundamentally differs from its predecessor, the Kyoto Protocol: while the Protocol provided the basis for a start to the carbon markets, the Paris Agreement goes further in ensuring that entire world can work collaboratively and holistically in achieving their respective reduction targets under Article 6.

Over time, a global carbon pricing mechanism needs to be discovered and established to match the requirements of various countries in meeting their NDCs and to ensure that the goals of the Paris Agreement are achieved.

In March 2016, the World Bank announced the Networked Carbon Markets initiative as a key component of its efforts to promote carbon pricing. Under this programme, representatives from different countries are designing various cooperative approaches, using the power of the Internationally Transferred Mitigation Outcomes (ITMO) established by Article 6.2 of the Agreement; a centralised approach that involves the use of a Sustainable Development Mechanism (SDM) as set out in Article 6.4; and also a framework for non-market approaches to meet the overall goals of the Paris Agreement. Refinements are currently underway to ensure that all approaches are carefully thought through.

Besides Japan, which was the very first developed country under the Kyoto Protocol compliance rules to actually reduce its emissions, no other Asian or ASEAN country was required to do so under the 1997 regime. However, prior to the ratification of the Paris Agreement, both South Korea and China had already set up their own emissions trading schemes (ETS). South Korea was first, in 2015, and China has also moved from regional pilot programmes to a national ETS that will eventually cover eight sectors, starting with the power generation sectors (see page 4 for more on the China ETS). These are significant milestones from two Asian giants because they are large markets that govern important industrial and economic sectors. Further, Thailand has announced the creation of a voluntary ETS, although this is not yet operationalised.

Closer to home, in February 2017 Singapore announced a carbon tax for emissions-intensive trade-exposed (EITE) sectors. These include petrochemicals, oil refineries, semiconductor manufacturing, power generation, chemical processes and other electronic manufacturing companies. The initial price was announced at S\$10-20 (US\$7.46-14.92) per tonne.

During public consultations, Climate Resources Exchange proposed augmenting the carbon tax with a Flexible Carbon Pricing Mechanism (F-CPM) that could possibly link to the rest of ASEAN, Asia and the rest of the world. The initiatives suggested included the development of Renewable Energy Certificate (REC) products that would assist in meeting

Singapore's NDC and provide various forms of market links, such as both domestic and internationally linked cap-and-trade systems.

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In early March 2018, Singapore's Finance Minister, during the Budget Parliament's meeting, announced that the carbon tax would start at S\$5/t from 1 January 2019 for EITE sectors and the companies firmly affected by the tax would need to buy Singaporean "carbon credits" or allowances from the enforcing agency, National Environment Agency (NEA), once monitoring protocols have been established and emissions verified in. He added that the carbon tax would be gradually increased to S\$10-15/t in the early 2020s, however with some flexibility for the use of international carbon credits.

Many companies questioned the decision, given that it was a significant drop from the price announced in 2017: this is because several companies which have a shadow carbon price peg it at at least US\$50-100 per tonne.



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What is the rationale behind this drop? There is a simple answer, and some more complex considerations to be made. The simple part is that most of the “questioners” were from the energy generation or energy retail sector: for them, it’s basically a question of passing the carbon tax downstream, ie to consumers, while striving to improve energy efficiency or investing in renewable sources of power.

But I have had many occasions to speak to the “questioners” on various platforms, and I personally think the government’s decision is brilliant: there are five other sectors to be considered, all of which emit GHGs which are much more potent than carbon dioxide, meaning their global warming impact is greater. For example, the semiconductor industries generate PFC gases that are approximately 11,000 times stronger than carbon dioxide. In other words, Singapore is starting off on a compliance-trial basis to test where it leads; in this way, Singapore has become

the first South East Asian country to employ a carbon tax without allowing a potential decrease to its current and/or forecasted economic growth potential.

There are compliance markets that now exist in China and Korea that are looking to be flexible in the mid-long term period. There is also an existing substantial private market for voluntary and company-bound-compliance standards. These markets are designed to assist the countries that they originate from to meet their respective NDCs.

The greatest attention is owed to the use of ITMOs to serve heterogeneous markets around the world. This essentially means that countries can collaborate to meet their NDCs, despite a diversity in how these plans are expressed. For example, Singapore’s NDC states that it will reduce its emissions intensity by 36% compared with 2005 levels by 2030. By contrast another country could state their NDC is to achieve a target of

reduction of say 20% of absolute emissions within five years. These complementary requirements naturally create the opportunity for cooperation without compromising the individual and respective risk of increasing their emissions profile.

The most important consideration is to ensure flexibility in all forms of cooperation because this will stimulate economic growth for countries interested in creating new jobs, creating new economies for industry and ensuring that it all ties in with the UN’s 17 Sustainable Development Goals in some shape of form – to be reinvigorated at every possible opportunity through holistic and collaborative action.

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