BloombergNEF

Taiwan's New Carbon Market Could Take a Cue From Singapore

By Fauziah Marzuki

- Taiwan's carbon market will support companies to trade credits
- Upcoming carbon fee needs to be high enough to be effective

Taiwan is joining the pack of Asian economies looking to use carbon markets to springboard their net-zero aspirations.

The Taiwan Stock Exchange is teaming up with the National Development Fund to establish a carbon-trading platform. The exchange is aimed at supporting Taiwanese companies along their net-zero journeys by enabling them to trade both domestic and international carbon credits.

This marketplace will first focus on facilitating the purchase of international credits, until there is more clarity on emissions reduction targets for corporations and details of a planned carbon fee. Taiwan may also be taking notes from neighbors like Singapore on best practices.

Starting an exchange to foster carbon credit trading

Details of how the carbon market exchange will operate and the governing principles are still being hammered out by a task force. It could see trading start as early as the third quarter.

Creating a domestic voluntary carbon market platform allows Taiwanese companies to procure offset credits to meet their own net-zero ambitions. The first stage will be to help local firms purchase overseas carbon credits.

Some corporations have already been tapping the international market. Taiwanese materials producer Chimei joined Singapore's Climate Impact X marketplace in April last year, and semiconductor supplier Winbond Electronics followed suit in September.

At some point, Taiwan may also look to create its own domestic supply of carbon offset credits – particularly leveraging its agriculture sector. The new platform is expected to be where companies will eventually trade their carbon credit allocations once a carbon trading mechanism is implemented.

Taiwan's carbon price could start at around $10 per ton

A policy draft of Taiwan's proposed 'carbon fee', or 'carbon levy scheme', from the Environmental Protection Administration should be released in August. Effectively a carbon tax, it is called a 'carbon fee' in this market for administrative reasons so that the proceeds can be used for specified purposes.

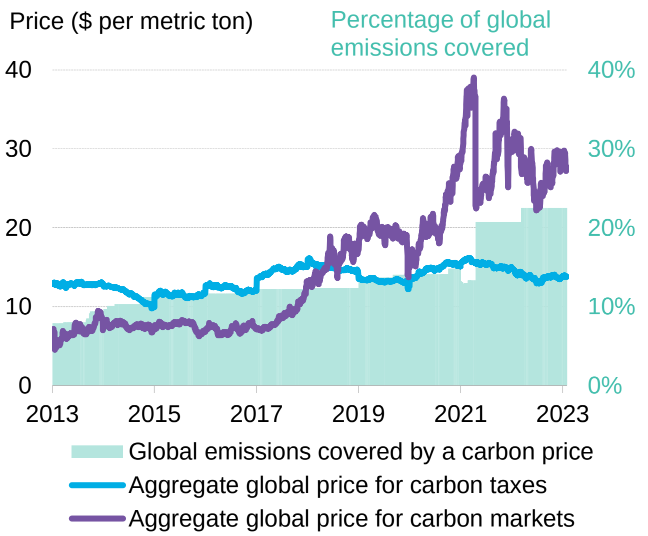
The final rates will only be known after the policy draft is released or next year. According to the most recent report from Bloomberg News in October, Taiwan was considering a carbon fee of NT$300 per metric ton of carbon dioxide equivalent.

Equating to around $10/ton, this is far below the carbon prices currently seen in Europe. But Taiwan is not in terribly bad company by the standards of Asia's more nascent markets. Japan's carbon tax is ¥289/ton ($2/ton). In Singapore, the current carbon tax rate is S$5/ton ($4/ton), although that is set to escalate to S$25/ton from 2024, S$45/ton in 2026-27 and then to S$50-80/ton by 2030.

Taiwan does not look too out of place when looking at the global picture either. The Real Carbon Price Index, a measure of the weighted-average price of carbon emissions worldwide was sitting at $5.21/ton on May 29, while the aggregated real carbon price index by tax regimes was $13.47/ton.

- *Explore the various carbon price indexes available on the Bloomberg Terminal via RCPI <GO>, or visit the Real Carbon Price Index website.*

Global carbon prices and emissions covered by carbon pricing mechanisms



Source: Monash University, BloombergNEF.

The key points on the different rates Taiwanese companies and sectors will pay, what the emissions reduction targets will be, and so on, are all unclear at this stage. What the draft proposal churns out will determine how effective the proposed carbon price is at actually curbing emissions.

Taiwan's largest emitters will be up against a wall

Taiwan's biggest listed companies need to disclose their greenhouse gas emissions in their 2022 financial reports and emissions reduction plans. Utility Taiwan Power Company, better known as Taipower, is one of the island's largest emitters by far. It is not clear if policymakers will adjust regulated electricity retail tariffs to allow Taipower to recover the cost of the carbon fee from consumers.

Other large emitters, such as petrochemical, steel, cement and electronics manufacturers, would also feel the pinch and have voiced concerns that it may impact their competitiveness in the international market. How high Taiwan's carbon price is will matter when its export goods come face-to-face with the EU's Carbon Border Adjustment Mechanism.

Taking a cue from Singapore

Taiwan may not have to look very far for inspiration on how to implement a carbon tax and a template for setting up a carbon credit market.

Singapore's carbon tax is progressive and allows for companies to adapt accordingly. Having a carbon tax sets a very clear price floor for carbon market participants to trade around, which goes a long way in making it an effective tool in creating value from decarbonization efforts.

Firms will also be able to use offsets to cover up to 5% of their taxable emissions from 2024. This has created an ecosystem that helped the Climate Impact X carbon credit trading platform to thrive by assuring local demand for offset credits. It also sets a firm cap on how much offsetting a company can do and forces real emissions abatement measures.

- For more, see *Singapore Budget Dives In on Carbon Market, Green Finance* (web | terminal).

Singapore will be handing its emissions-intensive, trade-exposed companies transitory allowances to mitigate the financial impact of the tax. Taiwan could do something similar or have differentiated pricing for various sectors. Whatever it chooses to implement, Taiwan needs to ensure it does not end up being too generous in the early stages and risk its carbon price being ineffective.

Carbon levy supports other tools in Taiwan's net-zero arsenal

Taiwan legislated its net-zero emissions target for 2050 in February. The Climate Change Response Act, an amendment from the previous Greenhouse Gas

Reduction and Management Act, sets Taiwan's legal foundation for climate governance.

The press release from the EPA following the legislation outlined that the revenues from the carbon levy will be dedicated to greenhouse gas emissions reduction work, the development of low-carbon and negative-emissions technology and industries, and subsidies and incentives for investment in greenhouse gas reduction technology.

As part of its net-zero roadmap, Taiwan wants to have 60-70% of its power come from renewable sources by 2050, another 9-12% from hydrogen, and up to 27% from thermal power generation (in other words, coal and gas) with carbon capture and storage.

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Fauziah Marzuki	Head of APAC Gas, Power and Carbon	nmarzuki1@bloomberg.net