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Taiwan Emissions Trading Scheme (ETS)

Years in operation	To be determined. The Climate Change Response Act (the Act) stipulates that the Climate Change Administration (CCA) shall implement the domestic cap-and-trade scheme by considering the UNFCCC and its agreements, or relevant international conventions decisions.
Overall cap & trajectory	To be determined.
Target(s)	Current economy-wide targets, against a 2005 base year, are: -2% by 2020; -10% by 2025; -24 +/- 1% by 2030; Net zero by 2050.
Emissions reduced to date	N/A
Sectors covered	To be determined. Currently installations with emissions (direct and indirect) in excess of 25,000 tonnes CO2e/year in the power, steel, petrochemical, cement, paper/pulp, semiconductor, panel sectors are required to report their emissions.
GHGs covered	To be determined.
Number of covered entities	To be determined. Currently about 512 entities are required to report their annual emissions, with third-party verification.
Allocation method	To be determined. The Act stipulates that the allocation must take into account carbon leakage and national competitiveness, and that the CCA shall allocate emission allowances to entities either freely, via auctions, or for a fixed price.
Trading rules	Only covered facilities and legal entities with an office in Japan can open trading accounts.
Use of offsets and linking	The Act stipulates that an entity may surrender credits from domestic projects and international standards recognised by CCA at a percentage to be determined by the EPA. The offset credits can be used for carbon fee, or in the ETS in the future.
Other features	To be determined.
Penalties for non-compliance	The Act sets a penalty of three times the carbon market price per tonne, with a maximum of NT\$1500 (about US\$50) per tonne.



Use of revenues

Proceeds from carbon fee, ETS auctions and trading fees will be put in the GHG Management Fund, which can be used to:

- 1. Inspect emission sources
- 2. Subsidise the implementation of GHG reduction in special municipalities, counties and cities
- 3. Subsidise the central industry competent authorities to implement GHG reductions
- 4. Subsidies and grants to entities for investment in GHG reduction technologies
- 5. Providing assistance, subsidies, and grants for efforts to reduce GHG emissions other than the three items mentioned above, and research and develop GHG reduction technologies
- 6. Administrative affairs for holding accounts establishment in the Registry, auctions, sales and allowance trading
- Employ staff to carry out administrative services in GHG reduction and management
- 8. Coordinate, plan and implement adaptation to climate change
- 9. Promote related matters concerning carbon footprint management mechanism
- 10. Educate the public and promote related matters concerning climate change and GHG reduction
- Conduct climate change and GHG reduction related international affairs
- 12. Assist the central competent agency to execute just transition
- 13. Carry out research in climate change adaptation and GHG reduction

Major Developments

The Greenhouse Gas Reduction and Management Act was enacted in 2015, and was amended as Climate Change Response Act in February 2023. However, there is still no clear timeline for the start of the cap-and-trade system in Taiwan, citing barriers such as small market size, difficulties in international linkage, and limited scope of coverage.

In addition to cap-and-trade, mandatory energy efficiency standards and a carbon fee have been added as complementary policy tools to reduce emissions. The carbon fee will be implemented first, with the ETS considered at a later time. The fee is expected to be collected starting 2025 for major emitters and large electricity users (based on 2024 emissions), and likely at a rate below NT\$300. A review committee will be established to set the carbon fee rate.

On 30 May 2022, the National Development Commission released Taiwan's roadmap for net-zero carbon emissions by 2050, by setting a goal for an electricity mix of 60-70% renewables, 9-12% hydrogen, and 20-27% fossil fuel with carbon capture, utilisation and storage. In the section on carbon pricing, the roadmap noted the implementation of carbon fee, setting up a platform for trading carbon credits (offsets), and the potential for international cooperation under the Paris Agreement.



Market Commentary

Trading is limited to domestic offsets mostly used for voluntary carbon neutrality purposes, with the credits transacted through bilateral contracts with no public price disclosure. However, the Taiwan Carbon Solution Exchange (TCX) was set up in August 2023, and before the trading regulations are set, TCX will first focus on consultation and capacity building. High quality international offsets are expected to be available for voluntary offsets by the end of 2023, and trading of domestic offsets to meet mandatory requirements will start after regulations are set by CCA.

As of August 2023, 93 domestic offset projects have been registered, and 25 projects have been issued credits totalling about 23.8 Mt. Recent revisions to Environmental Impact Assessment (EIA) regulations require new projects to offset at least 10% of increased carbon emissions and allows the use of offset credits. One of the EIA offset programmes involves the replacement of old motorcycles with electric ones and is expected to sell at a price of NT\$1500. The planned carbon fee will also allow the use of domestic and international offset credits, with the percentage to be decided by CCA later.

References

Taiwan GHG Emissions Registry

Authors

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