

Regulatory Alert

Global Environmental and Chemical Regulations, Policies, and Standards

Alert 26



Climate Change Response Act Region: Taiwan

WHY IS THIS ALERT IMPORTANT?

If your company has operations in Taiwan, this regulatory alert will provide you with an update on the critical changes in the nation's Climate Action Policies. Based on the scale of your operations and your annual Greenhouse Gases (GHG) emissions in Taiwan, the following 2023 Climate Change Response Act (the Act) requirements may apply:

- » a carbon fee
- » carbon footprint labeling requirements
- » regulations on emissions reduction measures
- » emissions reporting
- » CO₂ capture and storage

The exact specifics of the Emissions Trading Scheme, carbon fee structure, mandatory standards, and timeline for implementation are still under development (no timeline has been set for implementation). However, once the obligatory requirements enter into force, non-compliance will result in penalties and fines ranging from New Taiwan Dollar (NT\$) 100,000 to NT\$ 1 million per offense. Harsher enforcement actions will be imposed if non-compliance is not rectified.

INTENDED AUDIENCE

This Regulatory Alert is intended for IAEG members and their suppliers with manufacturing, importing, processing, and selling operations in Taiwan.

EXECUTIVE SUMMARY

On February 15, 2023, Taiwanese President Tsai Ing-wen signed this major climate change law that introduces a net-zero carbon target for 2050 in Taiwan. Taiwan is a highly industrialized island nation with substantial carbon emissions (22nd largest emitter globally) ([Glen et al., 2021](#)). However, its unique geopolitical status and economic model have limited its climate policies and actions ([Chao et al., 2023](#)). Taiwan is excluded from the United Nations (UN) system and is overlooked during climate change initiatives led by organizations like the World Bank ([Su, 2005](#)). It has limited participation in agreements like the UN Framework Convention on Climate Change (UNFCCC). Because it is not obliged to conform to international agreements, the country's climate actions have been voluntary, resulting in passive mitigation approaches in recent years.

In February 2023, the Taiwanese government promulgated the "Climate Change Response Act." This amends and replaces the "Greenhouse Gas Reduction and Management Act," Taiwan's chief climate action policy since 2015. The Act aims to align Taiwan's climate policy closer with the Paris Agreement, the UN Sustainable

Development Goals, and other global carbon reduction initiatives. Through these measures, the nation intends to protect its export-oriented economy and expand its international recognition ([Chao et al., 2023](#)).

It is important to note that the specifics of the Emissions Trading System (ETS), carbon fee, implementation timeline, and associated broad-ranging regulations are still in development.

BACKGROUND ON ACT

The chief Climate Action Policy, the "Greenhouse Gas Reduction and Management Act," was drafted in 2006 but only came into effect in 2015. It legislated a 50% emissions reduction target for 2050 compared to 2005 GHG levels. Under the Act, Taiwan's Environmental Protection Agency (EPA) published the "GHG Reduction Action Plan" in 2018, which outlined mitigation policies and implementation strategies. Based on this plan, the central industry competent authorities of the six sectors (energy, manufacturing, transportation, residential and commercial buildings, agriculture, and environment) approved various "GHG Emissions Control Action Programs." The GHG Reduction Action Plan proposed setting up the regulatory framework and implementing an ETS. However, an exact timeline was not provided, and ETS has not been implemented. The overall scope of the 2015 Act and the progress on its mandates has been limited in Taiwan due to socio political and economic complexities ([Chao et al., 2023](#), [LSE Report 2020](#)). The barriers to implementation are speculated to be concerns around regulatory capacity, negative impact on the industry, and a lack of political and public consensus.

In recent years, increasing global calls for concerted and decisive action against climate change and external supply chain pressures led EPA to propose amendments to the Act in late 2020 ([Chao et al., 2023](#), [LSE Report 2020](#)). The introduction of carbon fees and incentives for developing low-carbon technology were included in the proposal. The changes were suggested to expedite Taiwan's transition to net zero emission and establish more resilient systems to cope with climate change impact.

In February 2023, the "Climate Change Response Act" was announced by the Taiwanese government. The broad-ranging amendments to the 2015 Act include a revised goal of reducing GHG emissions by 2050, the likely imposition of a carbon fee, and the declaration of penalty provisions. The Emissions Trading System and regulatory structure are expected to be developed soon.

WHAT'S NEW

The original Act had 4 Chapters and 34 Articles. The amended act has 7 Chapters and 63 Articles indicating significant changes in scope and direction. The sections below summarize the new developments as applied to industry:

- » a revised goal of reducing GHG emissions to zero by 2050
- » the provision for the relevant central, sector-specific, and local authorities to:
 - introduce GHG emissions performance standards for specific equipment or industrial processes
 - draw up permissible GHG emissions or mitigation requirements for manufacturers and importers
 - develop and enforce regulations in areas, such as purchasing reduction credits, importing certain goods, and labeling the carbon footprint on certain products
 - prescribe decarbonization measures, including a cap-and-trade system

- prohibit or restrict the manufacture, import, export, selling, use or emission of high global warming potential GHGs in alignment with international environmental conventions
- formulate incentives for industries to apply for carbon fee discounts if they use low-carbon fuel, adopt carbon-negative and other green technologies, or use renewable energy sources
- » the imposition of a carbon fee which will be incrementally implemented in stages based on the source's direct and indirect GHG emissions
- » penalty provisions for non-compliance with regulatory and mandatory standards requirements following their establishment and entry into force

SALIENT FEATURES OF THE ACT

The sweeping Act is broader in scope and significantly amends the 2015 Act. Below are features in *Part 1: Policy Initiatives (Upcoming Regulations, Standards, Fees, Schemes, and Guidelines)*:

a. User Pays Model (in development)

The Act specifies that under the "user pays" model, the free allowances allocation method will be gradually replaced by allowances auctioned or sold at a fixed charge. The government may implement GHG emissions tax (or fee) mechanisms based on carbon dioxide equivalent (Article 5).

b. National Climate Change Action Guidelines (in development)

Article 9 states that the central competent authority will develop National Climate Change Action Guidelines based on the nation's economy, energy and environment, and international trends and make them available to the public after approval by the Executive Yuan. The guidelines are expected to be reviewed at least once every four years, considering the UNFCCC, its agreements, and related international conventions.

c. Sectoral GHG Reduction Action Programs (in development)

Based on Articles 11 and 15, the central industry competent authorities will formulate and revise the Sectoral GHG Reduction Action Programs and the target for each year, while municipality, county and city competent authorities will formulate and revise the GHG Reduction Implementation Programs.

d. GHG emissions Management Regulations (in development)

Based on Article 21, the central competent authority will determine management regulations for the inventories of GHG emissions, reporting and registration frequency, record keeping, reporting items and deadlines, verification processes, and management matters.

e. Performance Standards (in development)

According to Article 23, the central competent and industry competent authorities will determine the regulations on performance standards on mitigation of GHG emissions and inspection, which will be made publicly available after approval.

f. Procedural Regulations (in development)

Under Article 25, the central competent authority will determine management regulations for applicable candidates, application procedures, voluntary emission reduction methods, project content, review and approval procedures, calculation of reduction credits, and conditions for the use of such credits, deadlines, withdrawal, special case or reduction credit cancellation, management, and other binding matters. The

authority will determine regulations regarding account management, reduction of credit transfer and trade, number limits, proceeds, targets of reduction credit auctions, and methods.

g. Carbon fees and their imposition in stages (in development)

The central competent authority may impose carbon fees¹ in stages against Direct and Indirect GHG Emission Sources (under Article 28). The central competent authority may announce and periodically review targets of carbon fees and the rates based on the status of domestic GHG reduction, types of Emission Sources, types of GHG emissions, emissions scales, the voluntary reduction situation, and its effectiveness. Under Article 30, entities subject to carbon fees may apply to the central competent authority for deductions of emissions according to specifications in Article 28.

h. Carbon leakage implications (in development)

Article 31 specifies that to avoid carbon leakage², entities importing goods designated by the central competent authority should report the amount of total carbon emissions of the products and obtain reduction credits from the platform specified in Article 25, according to the differences between carbon emissions declared and those audited by the central competent authority. For goods that have been charged carbon taxes or carbon fees in an exporting country that has started emission trading, the importers will not receive export rebates.

The central competent authority and relevant agencies will determine management regulations for declaration, review procedures, the calculation of the differences in carbon emission, the deduction rate, the calculation of monetary substitution, payment deadlines, and payment procedures.

i. Domestic cap-and-trade scheme and its alignment with UNFCCC and other initiatives (in development)

Article 34 describes that the domestic cap-and-trade scheme will be implemented considering the UNFCCC and its agreements or relevant international convention decisions in response to international GHG reduction requirements.

After accounting, verification and registration and establishing regulations for voluntary reduction, allowance allocation and trading, the central competent authority will develop a GHG Cap-and-Trade Scheme Plan and implement the cap-and-trade scheme.

The cap-and-trade system is expected to be implemented in alliance with foreign country governments or international organizations under mutual agreement. The central competent authority will announce the designated emission sources included in the cap-and-trade program and set the total cap emission target in stages (Article 35).

j. Carbon-footprint labeling (in development)

Article 37 specifies that the central competent authority will design certain kinds or scales of products, and the entities that manufacture, import, or sell these products shall apply to the central competent authority for carbon footprint labeling within a specified period.

¹ The carbon fee will be imposed first on large emitters; other carbon emitting groups will be added after the initial law is passed.

² Carbon leakage refers to the implementation of cap-and-trade scheme that may result in relocation of energy-intensive production in less-controlled regions which could cause global carbon emissions to increase.

Regulatory Alert



The central competent authority will review, inspect, and calculate the carbon footprint for products, which will be marked on the container or packaging of the product according to their approved content and grading within a prescribed period. The central competent authority will review, inspect, and calculate the carbon footprint of products, which shall be used according to their approved content and grading.

The central competent authority will determine the regulations regarding the application of carbon footprint, documentation to be submitted, reviewing, inspection, calculation methods, rating, labelling, use, expiry dates, cancellation, and management.

RELEVANT DATE

Effective (2023 Climate Change Response Act): 15 February 2023

REGULATORY OBLIGATIONS

Some of the impending regulatory obligations associated with this law that may impact the Aerospace and Defense Industry include but are not limited to the following:

| Article Number | Requirement |
|----------------|---|
| 21 | Entities with emission sources designated by the central competent authority will be expected to conduct emission inventories to be submitted to the Registry by the established deadline. For entities designated by the central competent authority, a verification body shall verify the data about emission inventories. |
| 23 | Structure of and installations in new buildings will be expected to conform to the GHG emission mitigation requirements. |
| 24 | Entities with newly installed or modified Emission Sources that reach a certain scale will be expected to offset their increased GHG emissions based on a certain percentage of increased emissions. |
| 28 | Carbon fees may be imposed in stages against direct and indirect GHG emission sources. <u>Direct Emission Sources:</u> the fee shall be collected based on the quantity of emissions from the owners/managers of the Emission Sources. <u>Indirect Emission Sources:</u> the fee shall be collected based on the quantity of indirect emissions generated from the use of electricity by the owners/managers of the Emission Sources. |
| 31 | Entities importing goods designated by the central competent authority will be expected to report the products' total carbon emissions and obtain reduction credits from the established platform. Importers will be expected to apply to the central competent authority to obtain reduction credits upon providing proof documents. Entities will have to pay monetary substitutions in cases where they fail to purchase adequate reduction credits. |

Regulatory Alert



| | |
|----|--|
| 37 | Entities that manufacture, import, or sell certain products designated by authorities will have to apply for carbon footprint labeling. |
| 38 | Entities that manufacture, import, export, sell, use, or emit high global warming potential GHGs and products that use such GHGs, which are regulated by international environmental conventions must apply to the central competent authority for approval, recording, and reporting. |
| 39 | Capture and storage of carbon dioxide conducted by entities shall be approved by the central competent authority, and entities may be required to submit monitoring records amongst other requirements. |
| 40 | Site visits may be conducted on entities, emission sources or other relevant sites to inspect an Emission Source's operation, emission-related facilities, carbon footprint labels, etc. |

RISKS TO AEROSPACE AND DEFENSE

Some of the penalty provisions for non-compliance are listed below. The penalties delineated in Chapter 6, Articles 47-60, are extensive and may impact entities in the aerospace and defense industry once regulatory framework and mandatory standards are finalized. The period for making corrections, making improvements, or reporting for the violations listed below is limited to 90 days in accordance with Article 57 unless a request to grant additional time is authorized.

| Article Number | Description | Fine Amount - New Taiwan Dollar (NT\$) |
|----------------|---|--|
| 47 | Under severe cases, the following entities will be ordered to suspend operations: <ul style="list-style-type: none"> » Violation of obligations related to accounting and registration of emission inventories under Article 21(1) » Violation of Article 36(2) by providing misinformation regarding emission allowances and reduction credits | NT\$200,000 to NT\$2 million |
| 48 | Entities who evade, impede, or refuse investigation or information requested in Article 40. | NT\$200,000 to NT\$2 million |
| 49 | Entities who violate Article 21(2) regarding emission accounting, registration, or other management requirements, and have been notified to make corrections but fail to do so. | NT\$100,000 to NT\$1 million |

Regulatory Alert



| | | |
|----|---|---|
| 51 | Entities in: <ul style="list-style-type: none">» Violation of Article 25(5) regarding the targets for reduction credits transfer, trade, or auction» Violation of Article 36(4) regarding regulations of targets for transfer and auction of emissions allowances | NT\$100,000 to NT\$1 million |
| 52 | Entities that: <ul style="list-style-type: none">» Failed to offset increased GHG emissions under Article 24(1)» Violate regulations specified by Article 38(1,2,3) that restrict the manufacture, import, export, sale, use or emission of high potential GHGs | NT\$100,000 to NT\$1 million |
| 53 | Entities that: <ul style="list-style-type: none">» Are violators of Article 39(2) that conduct carbon dioxide capture and storage without approval» Are violations of Article 39(4,5) that fail to implement the approved content regarding carbon capture and storage | NT\$100,000 to NT\$1 million |
| 54 | Failure to apply for and use approved carbon footprint labeling | NT\$100,000 to NT\$1 million |
| 55 | Intentionally underreporting carbon fees to be paid. | May calculate the carbon fees at double the carbon fee rate |
| 56 | Entities failing to surrender the specified number of emissions allowances within the deadline. | Monetary penalty three times the carbon market price |

USEFUL LINKS

[2023 Climate Change Response Act](#)

[2015 Greenhouse Gas Reduction and Management Act](#)

[Detailed description of amendments](#)

Regulatory Alert



DISCLAIMER

THIS DOCUMENT IS PROVIDED BY INTERNATIONAL AEROSPACE ENVIRONMENTAL GROUP, INC. ("IAEG") FOR INFORMATIONAL PURPOSES ONLY. ANY INACCURACY OR OMISSION IS NOT THE RESPONSIBILITY OF IAEG. DETERMINATION OF WHETHER AND/OR HOW TO USE ALL OR ANY PORTION OF THIS DOCUMENT IS TO BE MADE IN YOUR SOLE AND ABSOLUTE DISCRETION. PRIOR TO USING THIS DOCUMENT OR ITS CONTENTS, YOU SHOULD REVIEW IT WITH YOUR OWN LEGAL COUNSEL. NO PART OF THIS DOCUMENT CONSTITUTES LEGAL ADVICE. USE OF THIS DOCUMENT IS VOLUNTARY. IAEG DOES NOT MAKE ANY REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THIS DOCUMENT OR ITS CONTENTS. IAEG HEREBY DISCLAIMS ALL WARRANTIES OF ANY NATURE, EXPRESS, IMPLIED OR OTHERWISE, OR ARISING FROM TRADE OR CUSTOM, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, NONINFRINGEMENT, QUALITY, TITLE, FITNESS FOR A PARTICULAR PURPOSE, COMPLETENESS OR ACCURACY. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAWS, IAEG SHALL NOT BE LIABLE FOR ANY LOSSES, EXPENSES OR DAMAGES OF ANY NATURE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, PUNITIVE, DIRECT, INDIRECT OR CONSEQUENTIAL DAMAGES OR LOST INCOME OR PROFITS, RESULTING FROM OR ARISING OUT OF A COMPANY'S OR INDIVIDUAL'S USE OF THIS DOCUMENT, WHETHER ARISING IN TORT, CONTRACT, STATUTE, OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.