



Major Environmental Policies

May 2024

1. Drafts Preannounced regarding Carbon Fee Collection, Voluntary Reduction Plans, and Designated Reduction Goals for Collection Targets

The MOENV preannounced the drafts of the *Regulations Governing Carbon Fee Collection* (碳費收費辦法), the *Regulations for Voluntary Carbon Reduction Management Plan* (自主減量計畫管理辦法) and the *Designated Greenhouse Gas Reduction Goals for Entities Subject to Carbon Fees* (碳費徵收對象溫室氣體減量指定目標) according to the *Climate Change Response Act* (氣候變遷因應法) (the *Climate Act* hereinafter). The purpose is to establish Taiwan's carbon pricing system and smoothly facilitate reductions. The drafts preannounced on 29 April 2024 are the mechanism for future carbon fee collection and combined with general and preferential fee rates to encourage entities subject to carbon fees to take larger and faster steps toward carbon reduction.

The MOENV stressed that the carbon fee system is designed to provide incentives for carbon reduction instead of a financial tool. The drafts preannounced serve as important guidelines for entities subject to carbon fees to develop their reduction measures and paths early on, as an attempt to move toward Taiwan's goal of net zero by 2050. Communications with the public will be carried out to reach a collective consensus in addition to soliciting comments during the 60-day preannouncement period. The drafts are outlines as follows:

1. Draft of the *Regulations Governing Carbon Fee Collection*:

- (1) Entities subject to carbon fees: Enterprises in the electric power industry and manufacturing industry that meet qualifications of the *Enterprise Emission Sources Subject to Inventory, Registration and Inspection of Greenhouse Gas Emissions* (事業應盤查登錄及查驗溫室氣體排放量之排放源) and whose annual emissions, both directly from entire factories (sites) and indirect from the use of electricity reach a total of 25,000 metric tons of CO₂e or more. In addition, considering fair competition within the same industry, the collection threshold of 25,000 tons of CO₂e may be deducted in principle when enterprises determine emissions to be charged for carbon fees.
- (2) Starting from the next year after carbon fee collection starts, entities subject to carbon fees are to determine the amount of carbon fee payment by the end of May each year based on the emissions from 1 January to 31 December of the previous year.
- (3) The carbon fee payable by the entities subject to carbon fees is the "charged emissions" multiplied by the "fee rate". For the calculation of "charged emissions", the MOENV took into consideration the global competitions faced by the industry and the fact that the low-carbon transition requires a certain amount of time and space. Therefore, to guide the industry to invest funds in carbon reduction works, a transition mechanism was designed in the collection regulations based on the practices in EU and other countries (such as partial free allocation or tax exemption). For industries with high carbon leakage risks, different carbon leakage risk coefficient (0.2, 0.4, and 0.6) are given in three stages to adjust charged emissions and to maintain the edges of Taiwan's industries in the international competition. Industries with high carbon leakage risks that are interested in this transition mechanism are to submit an application for voluntary reduction plans to the central competent authorities

for approval for the eligibility of this mechanism. In addition, the collection threshold of 25,000 metric tons of CO₂e will not be deducted from the charged emissions for such industries.

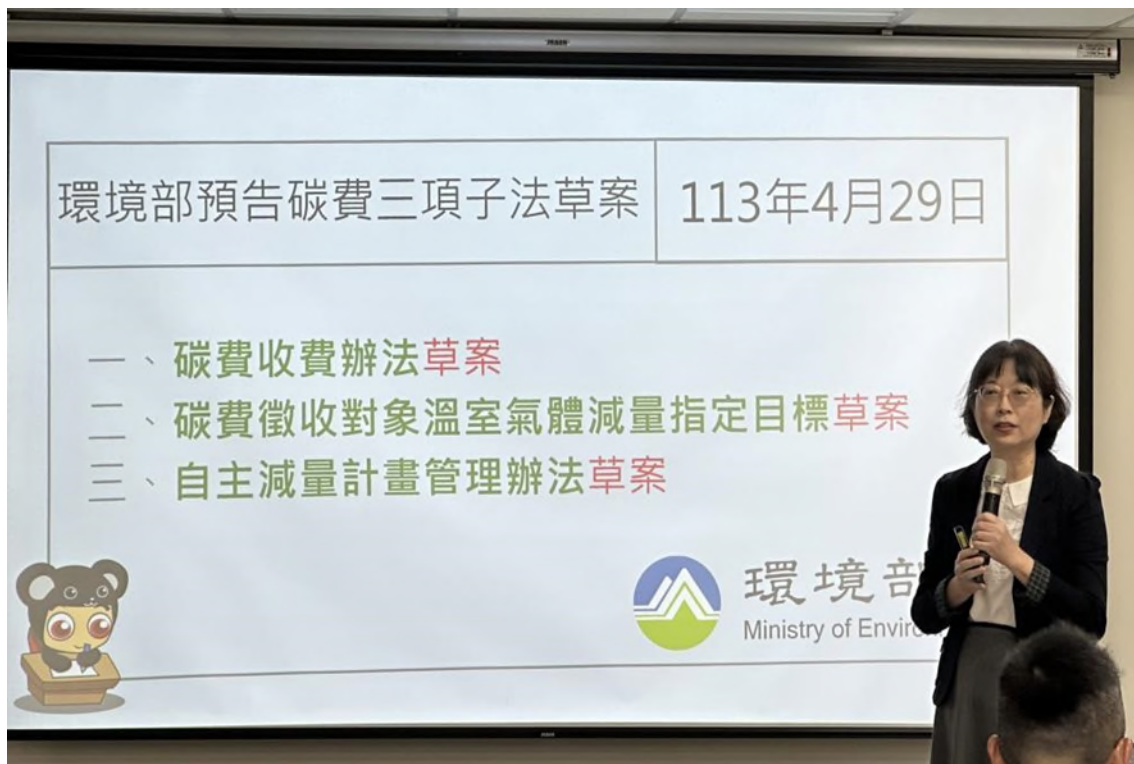
2. Drafts of the *Designated Greenhouse Gas Reduction Goals for Entities Subject to Carbon Fees* and the *Regulations for Voluntary Carbon Reduction Management Plan*:

Article 29 of the *Climate Act* specifies that entities subject to carbon fees who switch to low carbon fuels, adopt negative emission technologies, increase energy efficiency, use renewable energy or take measures to reduce GHG emissions effectively by improving manufacturing processes and reaching goals designated by the central competent authority, may propose voluntary reduction plans and apply for a preferential rate from the central competent authority. The preannounced drafts this time are designed to achieve the 2030 reduction goal.

- (1) **Designated reduction goal:** Two ways are provided in the drafts to determine the designated goals; one is the industry-specific reduction rate based on the science-based targets (SBTi), and the other is the technical benchmark-based designated reduction rate, set according to domestic and international technical emission benchmarks and also under the condition of reaching the nationally determined contributions by 2030.
- (2) **Voluntary reduction plan:** for the eligibility of the preferential rates, entities subject to carbon fees must select one of the two ways of determination to set their designated reduction goal for 2030 and develop their own reduction measures to be adopted until 2030. A voluntary reduction plan shall be submitted to the central competent authorities and will be reviewed by a review board formed by all central competent industry authorities.
- (3) **Regular result inspections:** The central competent authorities will inspect the progress of the voluntary reduction plan every year. Enterprises need to submit the progress report of the voluntary reduction plan for the previous year by the end of every April. Those who meet the progress are eligible for preferential rates in the current year. However, the voluntary reduction plan will be cancelled in accordance with regulations if an enterprise is found by the central competent authorities failing to implement the plan accordingly, and the difference in payment between the general rate and the preferential rate for the current year will be recovered.

Finally, the MOENV sets the ratio of reduction credits from charged emissions at 1.2 for entities subject to carbon fees who use the voluntary reduction projects and offset projects, provided that the deduction limit for using reduction credits shall not exceed 10% of the enterprise's charged emissions. This is to encourage entities subject to carbon fees (major emission sources) to lead those not subject to carbon fees for emission reduction and keep their funds in Taiwan as a priority. Also, the ratio of reduction credits from charged emissions at is set at 0.3 for enterprises not of high carbon leakage risks which started the pilot reduction projects two years before the collection of carbon fees, as recognize their early reduction efforts. In addition, enterprises not of high carbon leakage risks are eligible to use the foreign reduction credits approved by the central competent authorities as an additional supporting package, provided that the upper reduction limit does not exceed 5% of the charged emissions.

The MOENV pointed out that the carbon fee collection system is designed with reduction in mind, rather than an additional source of government incomes. It is hoped that the economic incentives of carbon fee collection will accelerate the carbon reduction of Taiwan's industries and facilitate the low-carbon transition.



Tsai, Ling-Yi of the MOENV's Climate Change Administration explains the three preannounced sub-laws of carbon fee collection

2. The MOENV Starts Youth Programs for Net-Zero Talents

Companies are facing new regulations and business models like carbon inventory, carbon reduction, and collection carbon fees and taxes, as the goal of net zero by 2050 has been incorporated in the Climate Change Response Act (氣候變遷因應法), which was announced in February 2023. As a result, the needs for green-collar workers suddenly skyrockets. To cope with the enormous need of talents in response to the net-zero transition, the MOENV's National Environmental Research Academy (NERA) has come up with a series of net-zero technology training programs starting from April this year. In particular, admission is free for university/college students so as help in their green-collar career development. Program enrollment is now open to companies and the public who are interested in net-zero emissions.

The 28th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP28) in 2023 issued a "Global Stocktake" emphasizing that sustainable and just solutions to the climate crisis must be based on meaningful and effective social dialogues with and participation of youth among other stakeholders. As a response, on 17 January 2024, the second meeting of the fourth Youth Advisory Committee of the Executive Yuan passed a proposal of promoting youth participation in climate change policies, demonstrating that Taiwan will strive to build youth's climate change capabilities and help them express what they have to say. Therefore, the NERA has designed special youth programs specifically for young students and workers. The programs cover international trends of climate change, Taiwan's net-zero progress, promotion of climate governance and carbon reduction mechanisms, and facilitate interactions on issues of concern to young people. It is hoped to gradually improve the development of climate change capabilities in youth, and collect their opinions so that climate change response efforts uphold generational justice.

The NERA President Liu Tsung-Yung said that the amended *Climate Change Response Act* includes a number of new regulations regarding reduction mechanisms, highlighting how important emission inventory and reductions are. The NERA is expected to hold 26 sessions for 1,000 people to help enterprises establish self-inventory and reduction capabilities and meet the future talent needs of domestic and international supply chains.

President Liu stressed that the program lecturers are mostly the MOENV's supervisory staff in charge of regulations and policies, top scholars from universities and colleges, and senior managers with practical experience in the industry. The faculty consists of experts from the industry, governmental and academic sectors with expertise covering net-zero regulations and policies, fundamental theories and practical implementation and will help build trainees' professional competencies for the future demand for talents in net-zero emissions.

This series of enhancement training provides basic and advanced programs that feature modular planning for a duration ranging from two to five days. The training covers five major topics, namely the basics of net-zero emissions, GHG inventory, carbon footprint verification, environmental-social-governance (ESG) reports and voluntary reductions. The main focuses are on the international trends of net-zero emissions, Taiwan's GHG reduction strategies and management mechanisms, introduction to ISO14064 and ISO14067 standards, writing principles and examples of ESG reports, and method descriptions and examples of voluntary reductions. Trainees who attend the training and pass the test will be issued a certificate of attendance by the NERA. The program information will soon be provided and available on the NERA's Environmental Protection Training Management System website.

Visit the NERA's Environmental Protection Training Management System at: <https://record.moenv.gov.tw/NERAWEB/Library/Home.aspx>



The NERA President Liu Tsung-Yung presents the series of training programs for young net-zero talents



Group photo for the commencement of training program

3. Amended Points Recording and Handling Announced for Violating Regulations Regarding Fugitive Dust Air Pollutions from Stationary Sources

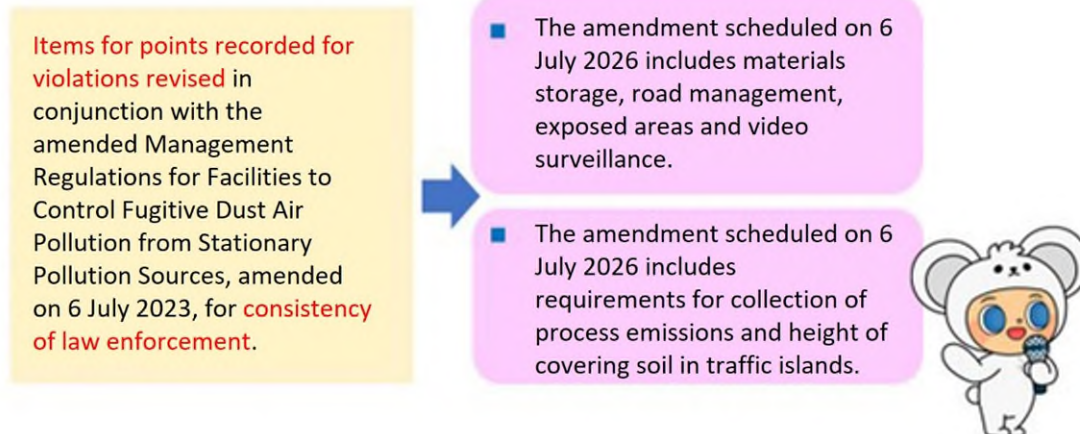
The MOENV promulgated the amended *Principles for Recording of Points and Handling for Violating Management Regulations for Facilities to Control Fugitive Dust Air Pollution from Stationary Pollution Sources* (固定污染源逸散性粒狀污染物空氣污染防制設施管理辦法) (the *Principles* hereinafter) on 2 April 2024. This was done according to the amended *Management Regulations for Facilities to Control Fugitive Dust Air Pollution from Stationary Pollution Sources* (固定污染源逸散性粒狀污染物空氣污染防制設施管理辦法) (the *Management Regulations* hereinafter) promulgated on 6 July 2023. The recording of points for and handling of violations are specified so that local environmental authorities implement the *Management Regulations* with a consistent basis and in a manner proportional to the extent of violations.

This amendment is in line with the amended Management Regulations, revising items that warrant point recorded for violation in the table of Article 2 of the *Principles* simultaneously. New addition target public and private venues which fail to install or adopt air pollution control facilities, monitoring instruments or video surveillance systems in accordance with the *Management Regulations*, and have proposed alternative method and have it approved by municipal or county (city) competent authorities, but still fail to carry out the alternative. They will be considered failing to install or adopt air pollution control facilities and have ten points recorded for violations. This is designed to urge implementation of alternative methods at public and private venues and prevent unusual emissions of air pollutants.

Furthermore, in conjunction with Article 14 of the *Management Regulations*, paragraph 2 of Article 7 and paragraph 3 of Article 9 of the *Principles* are to be implemented three years after the promulgation, and the rest of the amendment is given a buffer year after promulgation. The new regulations will be implemented on 6 July 2024. The MOENV points out that the new system is about to be take effect. Public and private venues subject to the *Management Regulations* need to check again that the air pollution control facilities in the place and comply with the amendment in

order to avoid violations and punishments.

Reasons and features of amendment of the *Principles for Recording of Points and Handling for Violating Management Regulations for Facilities to Control Fugitive Dust Air Pollution from Stationary Pollution Sources*



Reasons and features of amendment of the Principles for Recording of Points and Handling for Violating Management Regulations for Facilities to Control Fugitive Dust Air Pollution from Stationary Pollution Sources

4. Face-to-Face Consultation Provided to Ease Industries' Carbon Anxiety

The MOENV's Climate Change Administration (CCA) provided consultation services on carbon inventory and voluntary reduction projects on 9, 17 and 24 April to improve enterprises' capacities of carbon inventory and reductions. The first-hand, face-to-face consultations have helped enterprises on how to deal with carbon inventory and carry out voluntary reductions, freeing them from carbon anxiety!

The MOENV amended the *Management Regulations for the Inventory, Registration and Inspection of Greenhouse Gas Emissions* (溫室氣體排放量盤查登錄及查驗管理辦法) on 14 September 2023. It mandated manufacturing enterprises of specific industries and whose emissions of the entire factories (sites) reach 25,000 metric tons of CO₂e per year to register their emissions inventory and inventory reports in the Mandatory Greenhouse Gas Reporting System by 30 April. In addition, the MOENV formulated the *Management Regulations for Voluntary Greenhouse Gas Reduction Projects* (溫室氣體自願減量專案管理辦法) on 12 October 2023. The purpose is to encourage enterprises and governments at all levels to plan reduction measures based on diverse voluntary reduction methods, submit project plans for registration with the MOENV, carry out and monitor the approved plans, and then apply for reduction credits based on the actual monitored reduction results. The CCA stated that many enterprises and governments at all levels started asking how to conduct carbon inventories and obtain reduction credits (also known as "carbon rights") since the promulgation of the two management regulations above. On top of that, courses of carbon inventory or carbon rights acquisition in the market vary widely in terms of quality. Seeing this, the CCA provided this special consultation service which covers regulatory contents, operational practices and case studies to meet the urgent needs for carbon inventory and voluntary reductions. Enterprises and governments received first-hand, accurate and completely free information about carbon inventory and voluntary reductions.

5. MOENV Assists Local Governments to Dispose Asbestos Waste from Earthquake-Damaged Areas

The Ministry of Environment (MOENV) is working with local governments after a Richter scale 7.2 earthquake struck Hualien early in the morning of 3 April 2024. Those in need of disposing asbestos-containing building wastes generated by the earthquake may file a request to a local environmental protection bureau for help.

Old buildings are damaged or collapse in earthquakes, and asbestos-containing building wastes may be generated. If asbestos-containing building materials are damaged in residential buildings, there may still be health risks even though the possibility or exposure to asbestos dust is low. The public needs to know the following three dos and three don'ts: don't leave exposed asbestos unattended, don't remove the wastes without protection, and don't throw the wastes away untreated; and, do remove the damaged sections quickly and safely, do keep the wastes in safe containers, and do report to a local environmental protection bureau for disposal free of charge.

The MOENV secured a budget of NT\$1.6 billion last year for a joint supply contract of "removal and disposal of asbestos building wastes." Those in need of disposal of asbestos-containing building wastes may file a request to a local environmental protection bureau for help.

In the aftermath of the Hualien earthquake, the MOENV has offered to help people with the removal of asbestos-containing building wastes and environmental protection measures free of charge in response to the emergency. Once asbestos-containing building materials are removed, the waste is to be moistened and placed in two layers of plastic bags and then in solid containers, before calling local environmental protection bureaus which will in turn ask contractors for removal and disposal.

Information on removal and disposal of asbestos building wastes is available and requests for subsidies can be made by calling 02-8771-0152 or a local environmental protection bureau. Or, please visit the asbestos information section of the MOENV website at <https://topic.moenv.gov.tw/asbestos/mp-4.html>.

4 steps to remove and dispose of asbestos building wastes



4 steps to remove and dispose of asbestos-containing building wastes

6. Ministry of Environment promulgates amendments to “Regulations for the Establishment and Management of Air Pollutant Emissions Inspection Stations for Motor Vehicles”

The Ministry of Environment (MOENV) promulgated the amended “Regulations for the Establishment and Management of Air Pollutant Emissions Inspection Stations for Motor Vehicles” (hereinafter the Regulations) on 17 April 2024, increasing the motorcycle exhaust inspection fee from NT\$80 to NT\$100. In addition, the conditions for establishing regular inspection stations in remote areas have been relaxed, and motorcycle exhaust inspection stations and personnel management have been strengthened to make the motorcycle exhaust inspection system more streamlined and effective. The MOENV expressed specifically that the motorcycle inspections be paid in full by the MOENV from the Air Pollution Fund. Vehicle owners will not have to pay a dollar.

The MOENV pointed out a few keys to the amendment. For example:

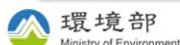
- A regular inspection station established in a remote area shall not be restricted to the shop size limit of 35 m².
- The motorcycle exhaust inspection fee is now NT\$100/motorcycle.
- The inspection certificate will be cancelled or withdrawn if the exhaust inspection station and its technicians perform inspections in an illegal or improper way. In such cases, the person in charge shall be banned from being designated as responsible for a motorcycle exhaust inspection station

for three years, and the technician involved shall also be banned from conducting exhaust inspection work for a year after his/her registration is cancelled.

- Violations shall include: failure of an exhaust analyzer of a motorcycle exhaust inspection station to pass an audit conducted by the competent authority or its entrusted agent, and; daily gas comparison results reaching a 10% failure rate within a quarter.

The MOENV once again urges the public to utilize the motorcycle exhaust inspection system, as vehicle owners need to know how much pollution their motorcycles make, keep their motorcycles well-maintained, prevent exhaust from polluting the environment, and make sure to repair their motorcycles when they break down, so as to maintain air quality.

Meeting to discuss the partial draft amendment of the "Regulations for the Establishment and Management of Air Pollutant Emissions Inspection Stations for Motor Vehicles"



Partial draft amendment to the "Regulations for the Establishment and Management of Air Pollutant Emissions Inspection Stations for Motor Vehicles"

7. Climate Info Hub to Officially Go Online on Earth Day 2024

The online volume of keywords such as "net zero emissions" and "greenhouse gases" entered into search engines has surged in recent years, which clearly shows the need to integrate climate information and disclose it to the public. In order to implement the *Climate Change Response Act* and improve the public participation mechanism for information disclosure, the Ministry of Environment (MOENV) revised the official website of the Climate Change Administration (CCA; at <https://www.cca.gov.tw>), scheduled for official launch on Earth Day 2024. At the same time, the "Climate Info Hub" (at <https://www.cca.gov.tw/info/>) is designated as the dedicated website for open climate information from government agencies at all levels, employing the Climate Info Hub concept to create a channel for transparent and open climate information and public participation. In addition, external content websites such as "Climate Talks" (at <https://www.cca.gov.tw/climatetalks/>) are integrated in the CCA's official website to provide the public with the latest and most accurate climate information, and the CCA is committed to making the website bilingual to bring Taiwan's climate governance in line with international standards. Several keys to the revision are described as follows:

1. Designate the Climate Info Hub for integration of open statutory climate information

It is specified in Article 24 of the "Enforcement Rules of the Climate Change Response Act" that the information to be disclosed by the competent authorities at all levels and those of target enterprises shall be made public on designated website(s). Information is to be made open and publicly accessible through a single channel. For this, the MOENV established the "Climate Info Hub" and designated it as the statutory open climate information website of Taiwan, enabling, for example, the disclosure of documents from central agencies down to local governments on greenhouse gas reduction and climate change adaptation. The documents to be made public range from: the National Climate Change Action Guidelines, periodic regulatory goals, Sectorial GHG Reduction Action Programs, the National Adaptation Action Plan, action programs for seven adaptation areas, result reports, national GHG emissions inventory, national reports on the reduction action plans of local governments, and their achievement reports. To date, a total of 212 documents have been uploaded to the website. The architecture of the information platform is based on the "Environmental Impact Assessment Inquiry System," where climate information is categorized and concentrated upwards for easy access and downloads. All central competent authorities for target enterprises and local governments will follow this pattern to disclose information on this website.

2. Build a channel accessible to the public for participation in climate actions

To promote public participation in climate change policies and strengthen communications, public meetings required by the Climate Act and held by governments at all levels shall be made public on the "Climate Info Hub" at a certain time before the meetings are held, including public hearings of central agencies and local government symposiums. The website will include meeting information, reports, and even meeting minutes, live broadcasts and recordings in full. The public may access the webpage for free, register online to attend meetings, make real-time inquiries for complete and accurate information, and provide online comments, while public comments can be solicited for document drafts. In addition, through the platform, government agencies at all levels may publish information on climate change-related forums, public hearings, communication workshops, and legislation amendment meetings, allowing the public access to the latest meeting information all at one site, thereby promoting public participation and enhancing capacity building.

3. Integrate information of content type websites for easy access

Continuous efforts are made to improve and enrich the content of the official website of the Climate Change Administration, lower the threshold for people to access climate information, and integrate three websites: "Climate Talks", "National GHG Inventory Report" and "We Are on the Same Ship – Taiwan Climate Change Adaptation Platform". For example, the integrated "Climate Talks" will still provide interactive graphics to keep the public up to date on the latest greenhouse gas reduction results of Taiwan and the six main ministries involved, as well as progress of the 12 key strategic action plans for the transition to net zero. Meanwhile, citizens can post comments online in public discussions on climate change.

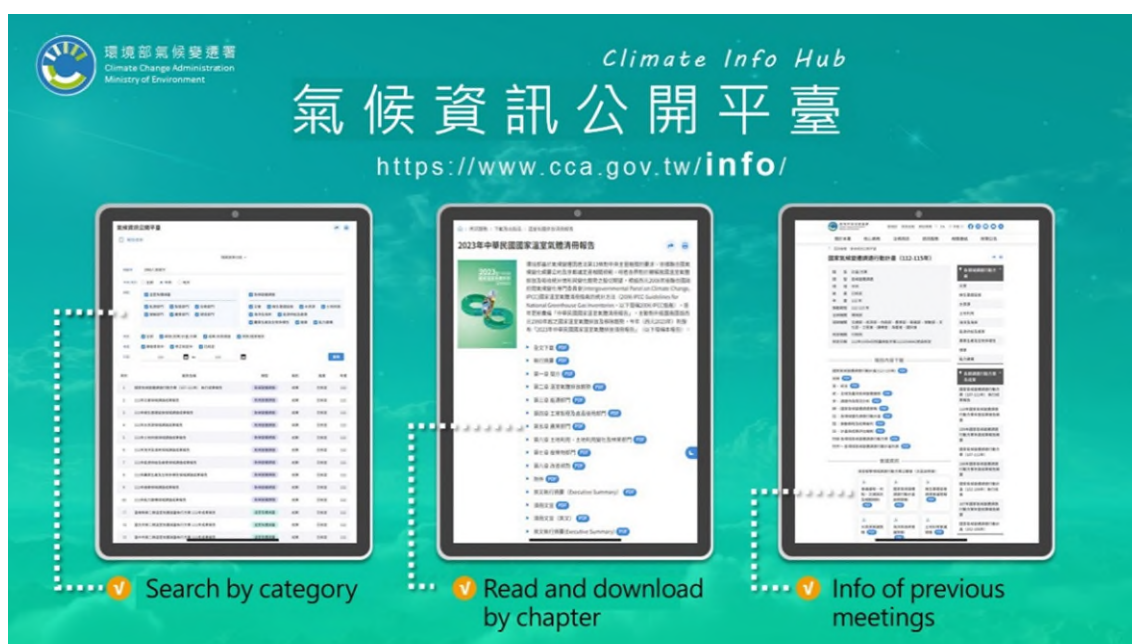
4. Build bilingual websites to connect to the world

This website update is committed to building a bilingual environment to make Taiwan's achievements in climate change governance accessible to the world. An English webpage is provided and English versions of documents related to international conventions are published, such as Nationally Determined Contributions (NDC), the National GHG Inventory

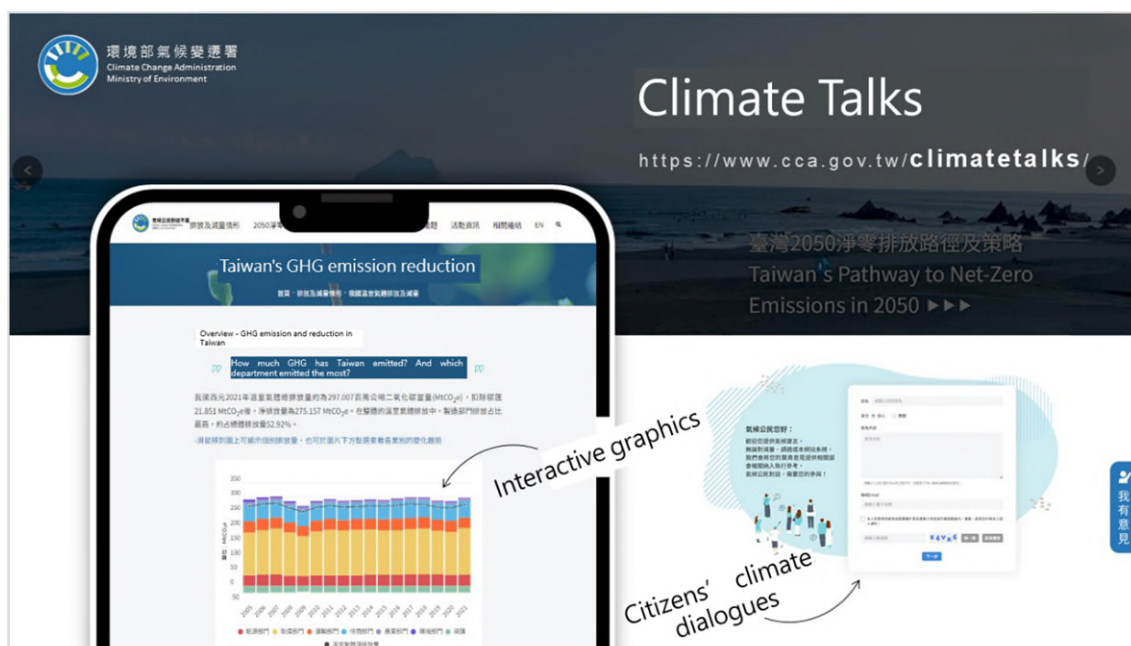
Report, GHG National Communication, and Adaptation Communication. All of this is done to promote the internationalization and globalization of Taiwan's important climate governance information, expand the scope of open information and maximize the effectiveness of international connections.



Climate Change Administration website upgrade in both Chinese and English



Climate Info Hub



Climate Talks

8. MOENV Adds Substances to Control List in Line with *Stockholm Convention*

Perfluorohexane sulfonic acid, its salts and associated compounds are included in the Annex A elimination list as part of the *United Nations Stockholm Convention on Persistent Organic Pollutants* (hereinafter the *Stockholm Convention*). To keep up with this measure, these substances are now classified as Class 1 toxic chemical substances as announced by the Ministry of Environment (MOENV). They are listed under Category 1 and operation and management regulations have been established. At the same time, the use of perfluorooctane sulfonic acid, perfluorooctane sulfonate fluoride and perfluorooctanoic acid for foam fire extinguishing equipment for Class B fires has reached the phase-out deadline under the *Stockholm Convention*. Thus, the use of these substances is no longer permitted, in line with international management trends.

The MOENV pointed out that perfluorohexane sulfonic acid, its salts and associated compounds have been added to the Annex A (elimination) list of the *Stockholm Convention* and, therefore, the manufacture, import, sales and other uses not publicly declared of these substances are now banned in Taiwan. However, the use of these substances for the purposes of research, experiments and education is still permitted, within concentrations that satisfy the control levels.

The MOENV stated that perfluorooctane sulfonate (PFOS), perfluorooctane sulfonate lithium acid salt (PFOS-Li), perfluorooctane sulfonate fluoride (PFOSF) and perfluorooctanoic acid (PFOA) were determined to be toxic chemical substances and controlled by laws that took effect in 2010 and 2018, to prevent perfluorinated and polyfluoroalkane organic substances from polluting the environment and harming human health, and to comply with the *Stockholm Convention*. Now, since the control of perfluoroalkyl organic compounds has been tightened under the *Stockholm Convention*, the concentration control levels have also been tightened, and the use of these substances is no longer permitted, since their usage in fire-extinguishing foam for fire-extinguishing equipment for Class B fires has expired as per the *Stockholm Convention*.

The MOENV stated that a number of meetings were held to consult with industry in response to

this change, and the consulted firms said that they are familiar with the *Stockholm Convention* and have actively reduced the use of per- and polyfluoroalkyl substances or have sought alternative substances. Currently, none of the 147 types of perfluorohexane sulfonate, its salts and associated compounds in this announcement are used, except for small amounts used for research, testing and educational purposes. Regarding traces of pollutants that are not intentionally added, the MOENV added that the requirement does not apply to per- and polyfluoroalkyl substances that are used at a concentration below the listed thresholds and are not intentionally added, as per the international exemption threshold regulations.

The MOENV emphasized that a grace period will be given to operators, in stages from 6 to 18 months, for perfluorohexane sulfonate, its salts and associated compounds, as well as perfluorooctane sulfonic acid, perfluorooctane sulfonate lithium salt, perfluorooctane, sulfonyl fluoride and perfluorooctanoic acid, in concentrations less than 0.01%, and for which requirements have been met, such as completed license (approval) document application, labeling, hazard prevention and other measures specified in the chapter on contingencies.

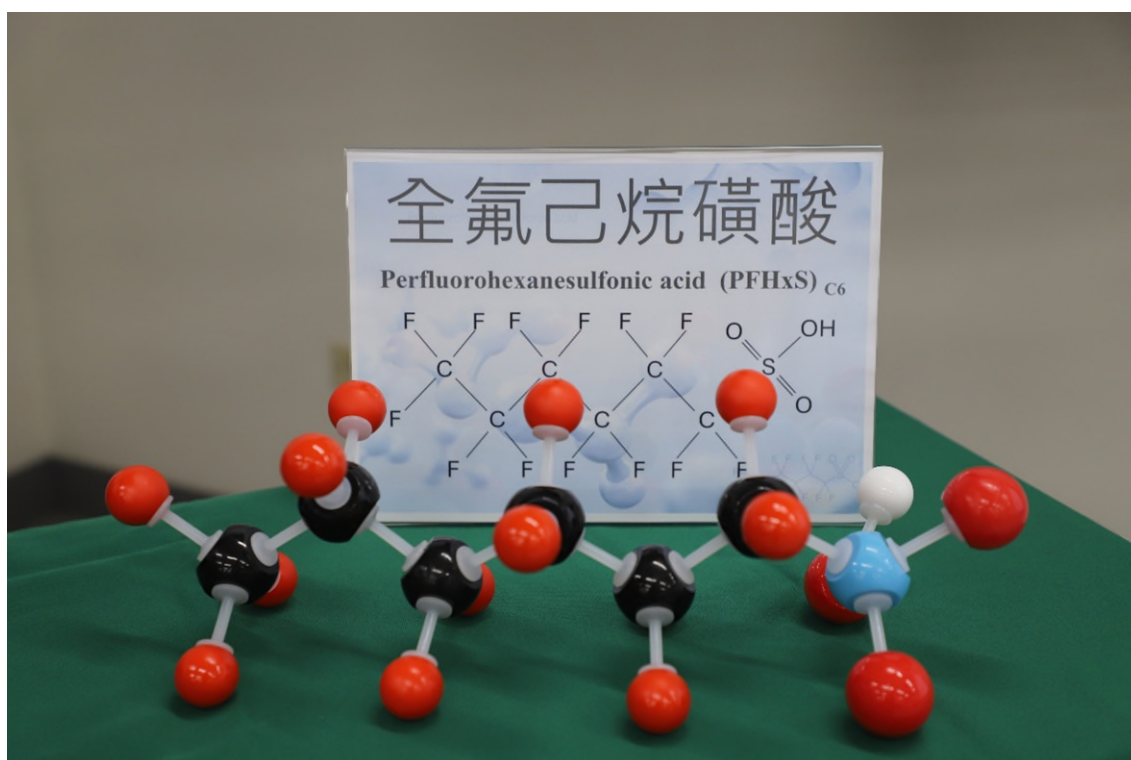
In addition to revised management matters, the MOENV also invited the Ministry of Agriculture, Ministry of Health and Welfare, Ministry of Economic Affairs, Ministry of Finance, Ministry of the Interior, Ministry of Labor, Ministry of Education, Ministry of National Defense, the Ocean Affairs Council and National Health Research Institute to work together and draft a "per- and polyfluoroalkyl substances (PFAS) management action plan" to align with international trends. Comments have been collected from the industrial and academic sectors. A joint management mechanism will be discussed based on the regulations of governmental departments for public health and environmental safety.



Director General Yein-Rui Hsieh of the Chemicals Administration explains recent regulatory amendments



Information on perfluorohexane sulfonic acid, its salts and associated compounds displayed at a press conference on alignment with international conventions



Model of perfluorooctane sulfonic acid molecule

9. Agricultural Tarp Recycling and Reuse Mechanism Established through Cross-departmental Cooperation

Seeing problems such as the lack of pre-processing of tarps used in agriculture and the difficulty of centralized recycling due to scattered farms, the Ministry of Environment (MOENV) joined forces with the Ministry of Agriculture to improve the recycling and reuse mechanisms for agricultural tarps. The Ministry of Agriculture will educate farmers on the proper recycling and pre-processing of agricultural tarps, and provide subsidies for pre-processing machinery and equipment for agricultural tarp recycling. The MOENV will survey and provide a list of businesses interested in agricultural tarp recycling (currently 43 in Taiwan), and will fund local governments for agricultural tarp recycling mechanisms.

The MOENV stated that the Pingtung County Government and Chiayi County Government have submitted their requests for subsidies. The plan is to actively promote the recycling and reuse of agricultural tarps within their jurisdictions, provide guidance on the establishment of agricultural tarp recycling and storage, assist in transporting tarps to back-end reuse firms, standardize agricultural tarp processing and recycling, and generally strengthen agricultural tarp recycling and reuse pipelines. Meanwhile, the Agricultural and Food Agency of the Ministry of Agriculture has assisted in the construction of a demonstration agricultural tarp cleaning and recycling yard in Chiayi County to further resolve the problem of dirt and gravel remaining in agricultural tarps, making them difficult to recycle. Agricultural tarps should be cleaned first before having plastic recycling firms collect them, so as to increase the willingness of recycling firms to accept and promote material circulation. The MOENV will also help the demonstration yard find more sources of material, and guide local governments to transport agricultural tarps to the demonstration yard for cleaning before having them recycled.

There have been problems of waste incineration in the open and illegal dumping. In recent years the MOENV has introduced technology such as drones, satellite imaging and positioning to monitor incineration spots or suspected dumping sites, and has dispatched personnel to conduct inspections and strengthen enforcement of laws against such illegal activities.

The MOENV stressed that farmers may choose to use natural materials such as straw or biodegradable agricultural tarps for mulching in order to reduce at source the production of plastic agricultural tarps. Another option is to have the plastic agricultural tarps sorted according to the "three principles of agricultural tarp recycling", then sent to designated site(s) according to the recycling mechanism specified by the relevant local government, so as to promote resource circulation and avoid penalties for violating relevant laws and regulations.

10. MOENV Announces Amendments to "Air Quality Standards"

The Ministry of Environment (MOENV) preannounced a draft amendment of the "Air Quality Standards" on 29 April 2024. For the fine particulate matter (PM_{2.5}) criteria that people of Taiwan are most concerned about, the standard for annual average concentration will be tightened to 12 µg/m³ from 15 µg/m³. Standards were also tightened for allowable concentrations of pollutants such as particulate matter (PM₁₀), ozone (O₃), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), and carbon monoxide (CO) (see attached table for details). The amendment also specifies that each measurement station within the jurisdiction of each county and city must show that air quality meets the standards before they can be designated as Class 2 air pollution control areas, replacing the previous method of determining compliance with the standards based on the average concentration of all measurement stations within a jurisdiction. The goal is to practically and steadily uphold the public right to respiratory health.

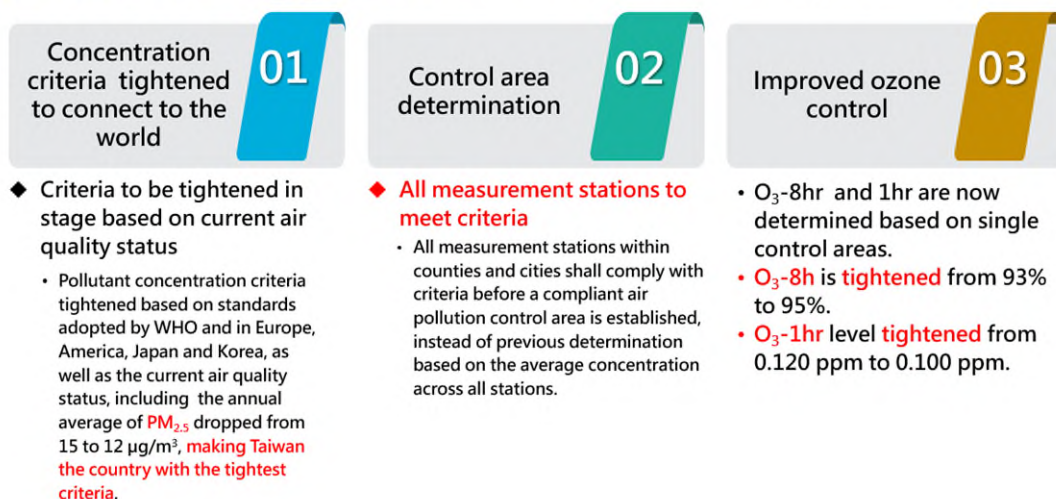
The MOENV stated that the new amendments to the *Air Quality Standards* and the criteria for

appropriately tightening standards for each pollutant in Taiwan were determined by taking into account factors recommended by World Health Organization (WHO) guidelines, targets for the different phases of various pollutants, and the record of other regulatory amendments around the world. The WHO guidelines emphasize that when setting air quality standards, countries should take into account factors such as current air quality, pollution control technology, health impacts, and social and economic development. With PM_{2.5}, for example, Taiwan's annual average concentration has dropped from 20 µg/m³ in 2016 to 13.7 µg/m³ in 2023. However, greater challenges await air quality improvement, as the world faces post-pandemic economic recovery and the impacts of extreme weather events. Therefore, the MOENV is promoting the stage 2 air pollution control plan, which is expected to lower the target annual average concentration of PM_{2.5} to 13 µg/m³ by 2027, gradually moving toward the longer-term target of 12 µg/m³ set in the *Air Quality Standards* draft..

The MOENV stated that this amendment pushes Taiwan's air quality standards towards goals set by the World Health Organization. Taking a deeper look, in Taiwan, SO₂, CO, and lead (Pb) standards have all reached the World Health Organization's final targets or have become the world's tightest standards; PM₁₀ and PM_{2.5} standards are tighter than those in Japan, South Korea, Hong Kong and China; and NO₂ and O₃ are comparable to those in neighboring countries such as Japan and South Korea.

The MOENV stated that this amendment will push the air quality improvement targets one step further, thereby urging central and local competent authorities to strengthen their responsibilities for air quality control. At the same time, all those responsible for pollution sources shall be required to fulfill their obligations to ameliorate air pollution emissions, to help improve Taiwan's air quality and reduce health risks to the public.

Amendment key points – draft of Air Quality Standards



Key points of the amendment to the Air Quality Standards

11. “Check, See and Listen” When Making Property Transactions

In recent years it has been frequently reported that land and factories are abandoned or used as waste dumps by illegal operators. People who are buying, selling or leasing properties must be

very cautious and careful, because there have been incidents in which properties were abandoned or used for waste burial, which easily leads to land and soil pollution problems, and may even cause groundwater pollution.

The Environmental Management Administration (EMA) particularly warned that people need to keep in mind the three tips of "check, see, and listen" when buying, selling, and leasing property, that is, check information, view the site, and listen to opinions in order to avoid buying or leasing properties with problematic issues.

The EMA explained that first of all, the public may access information about property enterprises and their management of environmental protection concerns via the MOENV's Pollutant Release and Transfer Register (<https://prtr.moenv.gov.tw>). Also, one can check whether a piece of property is a contaminated site by looking at the Soil and Groundwater Pollution Remediation Website of the EMA (<https://sgw.moenv.gov.tw>). Citizens may confirm whether there is information on contaminated sites by applying for a copy of the land registration transcript. Next, members of the public may visit the site and see if there is anything unusual, and conduct assessment, investigation and testing as necessary. Finally, people may listen to what locals have to say about the property of interest, and take professional comments into consideration. Citizens may "check, see and listen" for better knowledge about the history and quality of the property of interest.

The Environmental Management Administration urges people to "check, see and listen" when interested in a piece of property, so as to avoid dealing with properties that have been abandoned or contaminated. People need to pay special attention to what the lessee actually does with the leased property when renting out their properties. In addition, property owners, users and managers should fulfill their responsibilities, keeping in mind the three tips of "check, take notes, report", and visit their properties regularly and keep records. For any environmental pollution discovered, please call the competent authority for environmental protection at 0800-066666 to report to any suspected foul play.



Deputy Executive Secretary Mr. Wang Chen explains what to do during property transfers



Deputy Director General Liu and colleagues show people the “check, see and listen” tips for property transactions

12. Successful Public-Private Collaboration on Adopting Urban Air Purification Zones

The Ministry of Environment (MOENV) has promoted air quality purification zones since 1995 to improve urban air quality by using vegetation to retain dust and absorb air pollutants. Corporations may adopt and maintain sites they select as concrete actions in pursuit of sustainable development (ESG) goals. A total of 1,281 sites are currently maintained across Taiwan, with the size of vegetation and purification coverage up to 1,269 hectares, equivalent to 29 Daan Forest Parks. It is estimated that the annual purification effects include intercepting 28.8 **metric** tons of particulate matter (PM₁₀), reducing 16.2 **metric** tons of nitrogen dioxide and 45.2 **metric** tons of ozone. In 2023, 57 sites were recommended by local governments to encourage public-private cooperation in the adoption, maintenance and operation of air quality purification areas. After a selection panel of scholars and experts selected 25 sites and 29 enterprises, communities and NGOs for outstanding adoption performance, the "2023 Excellent Air Quality Purification Area Adoption Award Ceremony" was held at the MOENV on 30 April 2024. Director Chang Shun-chin presented the award and showed his gratitude and recognition of environmental protection partners who have worked silently to ensure that Taiwan has a better living environment.

The MOENV explained that the focus of promoting air quality purification areas has shifted from tree planting and greening of public properties, such as closed landfills, bare land or waste dumps, to suitable land and suitable plants for air purification, thus aligning with international

development trends. Trees are excellent air purifiers and local governments are encouraged to plant them in locations surrounding large pollution sources, with high concentrations of key pollutants, and in densely populated urban areas. Precision management is implemented for air quality improvement; thus trees are chosen that will not interact with existing pollutants to produce ozone. In this way environmental quality can be improved and resources used sustainably.

The awards presented at this ceremony were based on the 2023 maintenance and operation results of air quality purification areas. Outstanding performance awards and service model awards were given to commend the adopting units for their excellent maintenance results and to recognize their continuous efforts to actively protect air-purifying plants over the years. In addition, seven county, city and municipal governments were selected for performing well in promoting air purification area adoptions. The local governments of Taoyuan City, Taichung City, Miaoli County, Hsinchu County, Hsinchu City, Pingtung County and Hualien County were recognized for their active promotion of the adoption of air purification areas.

The MOENV expressed appreciation of all local environmental protection partners for their enthusiastic participation in holding a successful "Excellent Air Quality Purification Area Adoption Award Ceremony". Data shows that more than 50% of the air quality purification areas throughout Taiwan have been adopted and are maintained by enterprises and NGOs, with the number growing every year. Air pollution control measures or plans are being gradually included in counties and cities to bring out the best of local governance. In the future, local governments will continue with the selection of excellent adoption units based on regional characteristics and local conditions, improve the efficiency of air quality purification, and promote public-private collaboration for a better living environment.



Group photo of the Excellent Air Quality Purification Area Adoption Award Ceremony