Major Environmental Policies

April 2025

1. MOENV Announces Emission Sources for Enterprises Subject to Inventory

Carbon inventory is the foundation of carbon reduction. The MOENV released the goals for the regulatory stages of greenhouse gas emissions for 2030 by the end of 2024, as well as announced the expansion of inventory. The scope, originally covering energy and manufacturing sectors, now includes residential, commercial and transportation sectors and combines various assistance measures and intense energy efficiency to accelerate reduction efforts. The MOENV indicates that the *Enterprise Emission Sources Subject to Inventory and Registration of Greenhouse Gas Emissions* (事業應盤查登錄溫室氣體排放量之排放源) have been promulgated on 4 March after going through preannouncement, discussions and incorporation of public opinions. Starting from 2026, enterprises in service industry and transportation, hospitals and medical institutes, colleges and universities, and small and medium-sized manufacturers with high demands for electricity, oil, or other fossil fuels are required to conduct and register their own carbon emissions of the previous year by every 30 April. It is stressed that inventory scope has been expanded to increase the reduction efforts in all major sectors with the principle of no hustle, no outsourcing, no verification and no carbon fees.

The MOENV points out that approximately 500 more enterprises are expected to be included under this expansion, and they may determine if they are potentially subject to inventory based on the energy audit registration data of 2024, number of vehicles or storefronts. Actual determination, however, is based on energy use, number of storefronts, number of vehicles, or hospital assessment results of the previous year of the one with mandatory inventory and registration. An enterprise is also determined subject to inventory if it meets the required conditions above in that year. The MOENV will request all industry competent authorities to help with determination and assistance for enterprises in conducting inventory and registration. For enterprises that are not manufacturing and hospitality industries or hospitals, inventory and registration shall be conducted by headquarters or universities for their branch companies, branch stores, branch offices, appointed or franchise stores, schools and campuses.

I. Information service industry, department stores, shopping centers, wholesale stores, railway transportation, mass transit systems and universities: Enterprises whose annual purchase of electricity exceeds 20 million kWh or more; or enterprises with a single venue whose annual purchase of electricity exceeds 10 million kWh or more.

II. Hospitality industry: Enterprises with a single venue whose annual purchase of electricity exceeds 10 million kWh or more.

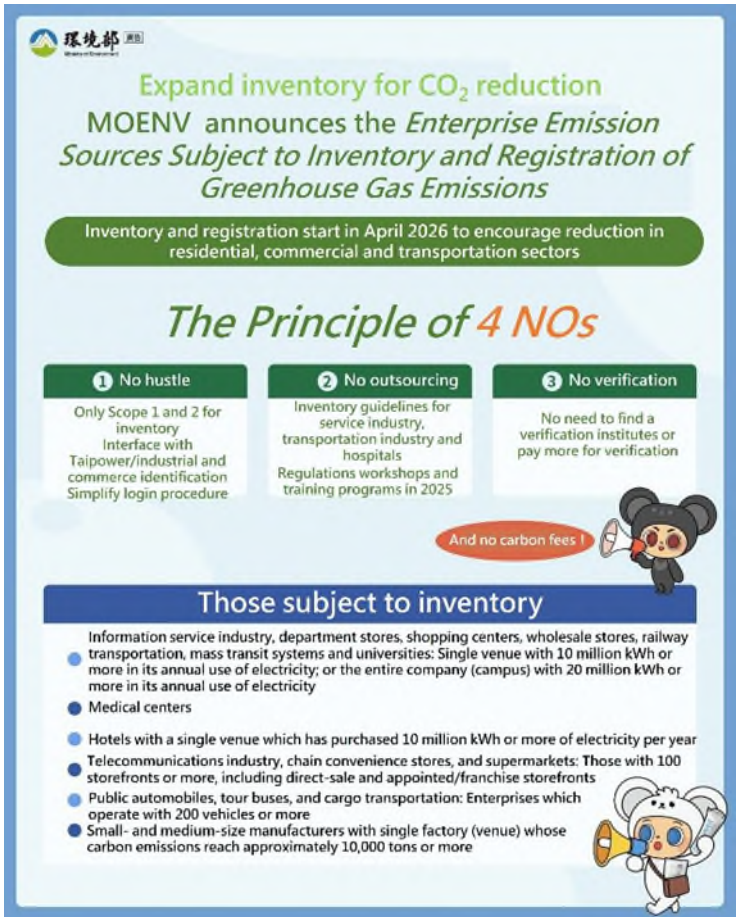
III. Telecommunications industry, chain convenience stores, and supermarkets: Enterprises with 100 storefronts or more, including direct-sale and appointed/franchise storefronts.

IV. Hospitals: Enterprises identified as medical centers by the Ministry of Health and Welfare in the hospital accreditations.

V. Vehicle transportation: Enterprises in highway automobile transportation, metropolitan automobile transportation, tourist bus transportation, automobile cargo transportation, or automobile cargo transportation within designated routes which operate with 200 vehicles or more.

VI. Manufacturing: Entire factory (venue) with facility whose energy use meets one of the following conditions, which are 4,000 tons or more in annual use of coal; 3,200 kiloliters or more in annual use of burning fuels; five million m3 or more of annual use of natural gas; 10 million kcal/hour or more for the total design or actual heat input of combustion facilities with the same one exhaust; or 20 million kWh or more of annual purchase of electricity for the entire factory (facility).

The " ` Nos" principle was adopted in the MOENV's announcements of those subject to inventory and registration. The calculation tool is provided on the Mandatory Greenhouse Gas Reporting System, suitable for those subjects to inventory and registration that mostly operate on electricity. The system is designed to interface with Taipower's power usage data, allowing enterprises to log in with its industrial commerce identification card and conduct inventory only under Scope 1 and 2 without increasing their burdens. Additional efforts later this year include a series of workshops regarding regulations and training programs as well as editing and publishing of inventory guidelines for service industry, transportation industry and hospitals to assist enterprises in conducting inventory. The MOENV will commend enterprises active in reduction and encourage environmentally friendly enterprises with excellent performances.



Targets and relevant measures under the promulgated *Enterprise Emission Sources Subject to Inventory and Registration of Greenhouse Gas Emissions*

2. MOENV Announces Amended Regulations of Industrial Waste Reuse

The MOENV has been aligning the Executive Yuan's efforts in organizational restructure and improving management for reuse of industrial wastes. As a result, the *Management Regulations for the Reuse of Industrial Wastes of the Environmental Protection Administration, Executive Yuan* (行政院環境保護署事業廢棄物再利用管理辦法) were amended and renamed the *Management Regulations for the Reuse of Industrial Wastes of the of Ministry of Environment* (環境部事業廢棄物再利用管理辦法) on 6 March 2025. The aim is to improve the overall operation and management mechanism for the reuse of industrial waste.

The MOENV' Resource Circulation Administration points out that the regulations apply to enterprises whose industry competent authority is the MOENV, including government-operated and private waste disposal entities, soil and groundwater pollution sites where soil is handled off-site, enterprises disposing recyclable wastes, and environmental testing services. The amendment is summarized as follows:

I. Regulations regarding the number of copies of documents needed for reuse permit application are deleted for better flexibility of administration.

II. Enterprises are required to keep records consisting of contracts signed in accordance with the regulations and test results for three years for better voluntary management.

III. Regulations are added to authorize local competent authorities to order reuse entities to stop improper reuse activities to stop illegal activities in time.

3. MOENV Approves Agricultural Soil Management Methodology for Improving to Enhance Carbon Sequestration

The "agricultural soil improvement management" (改進農業土壤管理方法學) proposed by the Ministry of Agriculture (MOA) was reviewed and approved on the 14th meeting of the MOENV's Greenhouse Gas Offset Project and Voluntary Reduction Project Review Board on 20 March. This adds one more method for local reduction via natural carbon sink in hopes of encouraging domestic agricultural activities to adopt agricultural soil management measures to increase organic carbon in the soil, therefore helping achieve Taiwan's net-zero goals.

The MOENV pointed out that there were 146 items in 13 categories of greenhouse gas reduction methods previously approved and released. This proposal was made by the MOA in February 2024 and finally approved in the 14th review board meeting with revision comments on 20 March after draft announcement, public opinion solicitation, and discussions among experts in meetings. Now, the proposal becomes the first local reduction method under the category of "agriculture and land use" that is approved after the *Greenhouse Gas Voluntary Emission Reduction Projects Regulations* (溫室氣體自願減量專案管理辦法) was promulgated. Details are summarized below:

I. Scope and conditions of application

The scope of the proposal in the project shall cover lands that have been used steadily for agricultural purposes for ten years before the project's starting date. Listed in the approval are

primary measures that help increase deposits of soil organic carbon (SOC) in a typical farming system, including the use of organic materials, reduced farming/improved farming waste management, and improved crop systems. In addition, it is required that no project shall lead to reduced production by over 5% compared to that of the original farming activities; and the reduction results are considered only as increased carbon sinks instead of emission reduction.

II. Quantification design

This methodology focuses on evaluating SOC change and providing three ways of quantification. They include (1) measurement and modeling; (2) direct measurement; and (3) predefined coefficients, to adapt to projects of different scales and needs. In addition, project-related management measures should be included for project consideration and calculation, if they will result in changes in carbon pools or emission sources by over 5%.

III. Inclusion of environmental impact analysis in project applications when appropriate

The scope of this methodology's application covers the use of organic materials, reduced farming/improved farming waste management, and improved crops system. It is necessary to analyze impacts on the surrounding environment and take corresponding measures during implementation of each individual case to fully consider potential impacts from measures taken, for example possible effects on groundwater quality due to use of organic materials.

IV. Real-time modification to align with international practices

There are many uncertainties in SOC from sampling to testing due to soil inhomogeneity. Moreover, both the Paris Agreement Crediting Mechanism (PACM) and the Verra mechanism based on which this reduction methodology is proposed are reviewing relevant principles, requirements, and methodologies. As a result, the reduction methodology will be modified accordingly in real time should the PACM or Verra mechanism be updated, as required by the additional decision made during the approval of the methodology.

At the same time, the MOENV mentioned that verification by a third-party verification institute is mandatory in applications of voluntary reduction projects. Therefore, the MOA has been requested to establish a verification institute as soon as possible to help enterprises involved start the tasks of increasing soil carbon sinks.

The approved reduction methodology will be announced on the Voluntary Greenhouse Gas Reduction and Offset Information Platform by the MOENV for public access once the MOA finishes revision based on the meeting decisions. The MOENV reminded, on the other hand, that although improving agriculture management measures may help increase carbon sequestration in soils, there is still a possibility that such effects may be lowered during the project implementation due to, for example, heavy rain erosions and exposure to high temperature. These influences will be factored in the calculation of the quantity of reduction credits issued. Not only so, but all also interested parties are urged to take full consideration as it takes substantial manpower, resources, time, and finance to apply for voluntary reduction projects using the methodology approved this time.

4. RCA Promulgates Amended Guidelines for Loan Credit and Subsidies for Recyclable Wastes Recycling and Disposal Enterprises

The MOENV's Resource Circulation Administration (RCA) has promulgated the *Guidelines of Loan Credit Guarantee and Interest Subsidies for Recyclable Waste Recycling and Disposal Enterprises* (應回收廢棄物回收處理業專案貸款信用保證及利息補貼實施要點) on 1 January 2023. The purpose is to enhance automation processes and pollution control equipment performance for recycling and disposal enterprises dealing with recyclable wastes and help them purchase equipment and remove financing obstacles. The RCA works with the Small and Medium Enterprise Credit Guarantee Fund of Taiwan (TSMEG) to establish the respective guarantee funds, introduce the loan credit guarantee mechanism is introduced to help enterprises finance equipment purchases. Incentives are provided in the form of interest subsidies as well so that enterprises can speed up technological upgrades.

The RCA indicates that this amendment aims to better facilitate transition for the resource circulation industry, hence expanding the scope of loan applicants and adding recycling and disposal industries and enterprises that form alliances with other industries to enhance quality and purposes of recycled materials. Also, new uses for loans are added, including expenditures required to purchase smart, low-carbon production machinery and equipment for refining recycled materials, green energy-using, low-carbon equipment or that with high-value applications, and equipment for fire and disaster prevention and safety protection to facilitate equipment upgrades and improve factory safety. The promulgation was made on 18 March 2025 on the letter numbered Huan Xuen Ji 1146104011.

Up to 90% can be guaranteed for loan credits and a loan can be taken out at NT$50 million maximum with a term of 5 years, the longest. The maximum grace period for principal is 2 years. In addition, businesses eligible for the loan may enjoy interest subsidies for up to 5 years, which is the annual loan interest rate at 1% each year. It is expected to reduce enterprises' financial burden and further enhance the competitive edge of Taiwan's resource recycling industry.

Applications for loan credit guarantees and interest subsidies

Application for loan credit guarantees and interest subsidies - 3 categories of applicants

Application for loan credit guarantees and interest subsidies – 2 application types

Application for loan credit guarantees and interest subsidies – 5 purposes of application

Application for loan credit guarantees and interest subsidies – 4 major benefits

5. Four Forest-Based Reduction Methods in Place to Build Carbon Sink

Forests, which also are green carbon sinks, have multiple environmental benefits. MOENV has reviewed and approved four local greenhouse gas reduction methods. They are carbon sinks through forestation and tree planting, carbon sinks through enhanced forestry, carbon sinks through enhanced bamboo forestry, and carbon sinks in low stocking forests, each suitable for different types of green carbon sinks management and operation activities. It is hoped to use the reduction credits as one of the driving forces for green carbon sinks and encourage enterprises to put resources into increasing carbon sinks, such as reforestation and forestry.

Reduction of greenhouse gas (GHG) emissions is now at its full swing in Taiwan, which has included natural carbon sinks in the 12 key strategies to reach the goal of net zero by 2050. Forest carbon sinks, also known as green carbon, refer to CO_2 (carbon pools) captured by forests from the atmosphere and stored in various deposits (carbon pools), such as wood, root systems and harvested forest products. MOENV points out that, though not an alternative for deep carbon reduction, natural carbon sink has multiple benefits and removes CO_2 from the atmosphere, which helps departments with difficulty transitioning offset residual emissions and thus slowing down the progress of global warming. Therefore, it can be factored in the planning of promotion pathways in consideration of carbon removal process and storage time. Green carbon has relatively mature technologies due to long facilitation period and is now actively promoted.

The MOENV says that four domestic reduction methods involving green carbon have been reviewed and approved and that a suitable reduction method can be selected to plan for forestation or forest

operation based on land use situation and wood growths. Measures are described below:

I. Forestation or reforestation for non-forested lands

The method “carbon sinks through forestation and tree planting may be selected with forestation size greater than 0.5 hectare and soil disturbance size no more than 40% for flatlands and 33% for hillslopes. Moreover, it is not to cause existing agricultural activities to move away.

II. Increase of carbon stocking for forests of poor stocking capacity

The method “carbon sink in low stocking forests may be selected to increase the stocking with forestry management measures. The project shall be carried out on a forest that has remained covered by wood for at least 20 years previously with carbon stocking capacity lower than the average capacity of the same forest type (excluding bamboo forests and scrub forests), and there shall not be any commercial feeling. Only low-strength thinning is suitable for felling as part of forestry operations during project implementation for stocking increase at the beginning, and forest product harvest is not considered in the calculation of caron deposits.

III. Strengthening of operation for existing forests

For woodlands that already meet the definition of forest before the project starts, the method “carbon sinks through enhanced forestry” may be selected to enhance operation management measures. Forest products, such as wooden materials and logs, can be harvested to increase carbon sinks in addition to increasing stocking capacity. However, products of short lifecycles, such as paper products and wood pulp, are not considered in the calculation of caron deposits.

IV. Operation management for existing bamboo forests

For woodlands that have been bamboo forests for five years before the project starts, the method “carbon sinks through of enhanced bamboo forestry operation” may be selected for operation management measures. Bamboo products, such as bamboo poles, can be harvested to increase carbon sink. However, bamboo shoots and products harvested from bamboos with lifecycles of fewer than five years, such as bamboo skewers, chopsticks and farming materials, are not considered in the calculation of caron deposits. Trees along the project borders shall not be harvested unless necessary for forest protection purposes.

The MOENV also reminds that not all wooded lands are eligible to obtain reduction credits. To participate in voluntary reduction projects, it is necessary to demonstrate that efforts have been made to meet the requirements imposed by the voluntary reduction mechanism and properly calculate emissions caused by forestry activities, such as sapling transportation, planting holes, planting, weeding and felling. Therefore, projects are to be implemented according to the MOENV-approved reduction methods and reviewed to prevent inappropriate issuance of reduction credits from affecting Taiwan’s net-zero goal. The methods are now made available on the Voluntary Greenhouse Gas Reduction and Offset Information Platform for public access. Interested parties need to have the expertise in forestry operation as well as invest considerable manpower, resources and time, think through wood status on their lands, and adopt appropriate measures accordingly.

6. MOENV Releases Labeling Regulations for Voluntary Product Carbon Footprints and Amended Regulations for Accreditation and Verification Bodies to Facilitate Low-Carbon Production

The MOENV released the *Regulations Governing Voluntary Verification, Labeling, and Management of Carbon Footprints of Products* (自願性產品碳足跡核定標示及管理辦法) and partial amendments of the *Management Regulations for Greenhouse Gas Certification and Inspection Organizations* (溫室氣體認證機構及查驗機構管理辦法) on 19 March. Such announcement was made according to the *Climate Change Response Act* (氣候變遷因應法) in order to encourage and manage calculation and labeling of products' carbon footprints. This allows enterprises that manufacture, import or sell products to keep track of carbon emissions from product manufacturing processes to supply chains and facilitate consistency in calculation and disclosure for references for the public and consumers. It is hoped, through the regulations, to encourage green product designs and low-carbon production and accelerate carbon reduction.

The MOENV indicates that Taiwan has been promoting carbon footprint label on products for years. There are currently 636 products with valid carbon footprint labels, most of which are products used in daily life, including food products, cooking oil, cleaning products as well as transportation services. Article 37 Paragraph 2 of the *Climate Change Response Act*, promulgated in 2023, specifically voluntary applications of products carbon footprints regarding approval, verification and labeling. Considering previous experiences, the MOENV aimed to improve and expand the system of carbon footprint approval and labeling system and therefore preannounced the draft *Management Regulations Governing Voluntary Verification, Labeling, and Inspection of Carbon Footprints of Products* (自願性產品碳足跡核定標示及管理辦法) in December 2024. It was promulgated on 19 March after solicitation of public opinions and a series of workshops. The regulations consist of 25 articles, summarized as follows:

I. Legislation of application process

The regulations specify calculations, verifications, application procedures, required documents, reviews and post-approval periods regarding product carbon footprints. Carbon footprint verification is to be conducted according to the MOENV's regulations on product categories for carbon footprints and using the criteria and emission coefficients set forth under ISO 14067 for carbon footprint calculation. The results shall be verified by a verification institute before the required documents and information are uploaded to the specified platform and applications for product carbon footprints are filed to the MOENV.

MOENV explains that there are currently 172 product categories on carbon footprints. If an enterprise wishes to file applications of carbon footprints for a product not under any categories, an appropriate product category is to be proposed for approval. The regulations also encourage governments of all levels to help enterprises to file joint applications for product categories as to shorten the schedule for the applications for the same product types.

II. Improvement of carbon footprint disclosure system

The product carbon footprint labeling specified by the regulations is shown below. Once applications are reviewed and approved by the MOENV, enterprise shall use and label the

products according to the approved product names and models, values and units, approval number, expiration dates and descriptions for use. Contents of reviews and approvals above will be disclosed by the MOENV on a designated website. To ensure that carbon footprint data is correct, the carbon footprint approval is valid for two years based widely recognized international practice. To maintain its validity, the renewal application shall be proposed three months before the expiration. For those who have been approved for the carbon footprint labels before the promulgation of the regulations, their labels remain valid. However, they are to follow the regulations regarding the use, display, and extension of the labels.

The MOENV expressed that penalties are specified in the regulations for violations as well. They include that (1) use and labeling of carbon footprint labels without being approved footprint or after the approval expires; (2) failure to use products according to the approval, or environment-related statements or declarations not compliant with regulations regarding product carbon footprints (for example, exaggerations of products' environmental benefits or ambiguous or false carbon emissions of products); and (3) failure to apply for modification in accordance with the regulations, report label usage regularly, or store information accordingly. Violators will be fined from NT$10,000 up to NT$1,000,000 according to Article 54 of the Climate Change Response Act in addition to being required to improve by given deadlines. Failure to improve by the given deadlines will be punished consecutively.

The *Management Regulations for Greenhouse Gas Certification and Inspection Organizations* have been revised at the same time with the conjunction of the development of the regulations. Revisions include adding, regarding product carbon footprints, verification categories and requirements for the implementation of verification that are to be complied. Also, an already certified verification institutes for product carbon footprints shall apply to the MOENV for permits or for transition periods for adding verification categories within six months after the promulgation of the amended regulations, thus ensuring continuation of existing verification operations without interruptions.

MOENV points out that the label of product carbon footprints is an important part to drive the green production from the consumer end. Amendments of both sets of regulations will result in improving the management mechanism. Moreover, the MOENV will increase the promotion efforts, including inviting all ministries involved to propose product categories that should be given priority for promoting carbon footprint labeling, establishing and disclosing necessary product categories and emission factors, and combining green procurement. This will allow consumers and producers to work together to achieve a net-zero, green living.

The carbon footprint label

7. Regulations Governing Water Pollution Control Fees Amended to Promote Green Transition

On 31 March 2025, the Ministry of Environment (MOENV) announced amendments to the *"Regulations Governing the Collection of Water Pollution Control Fees from Enterprises and Sewage System Operators"*, (事業及污水下水道系統水污染防治費收費辦法) aimed at encouraging businesses to reduce CO_2 emissions. The amendments cover fee rate adjustments for substances hazardous to health, such as ammonia, zinc and tin, to be subject to control fee collection, along with measures to offset emissions by converting waste to reusable resources or energy, towards achieving the goal of green transition.

I. Fee rates are rationalized to follow polluter pay principle

The MOENV stated that after comprehensive discussions and study of the latest wastewater/sewage treatment and control costs, a number of substances hazardous to health commonly found in the wastewater of specific industries, such as lead, nickel, copper, total mercury, arsenic and cyanites, were selected for fee rate rationalization, so as to meet the "polluters pays principle", and to encourage businesses with large discharge volumes to assume greater responsibility and provide them with more incentives to reduce pollution.

In addition, because in recent years amendments have tightened the *Effluents Standards* (放流水標準), ammonia nitrogen and discharges thereof have been added to the control list. Control standards for ammonia nitrogen control are commonly not met and these compounds are frequently found in polluted sections of water bodies. Ammonia nitrogen is hazardous to aquatic life and is a precursor for eutrophication. Meanwhile, zinc and tin are heavy metals that accumulate in the human body. Thus, ammonia nitrogen, zinc and tin have been added for fee

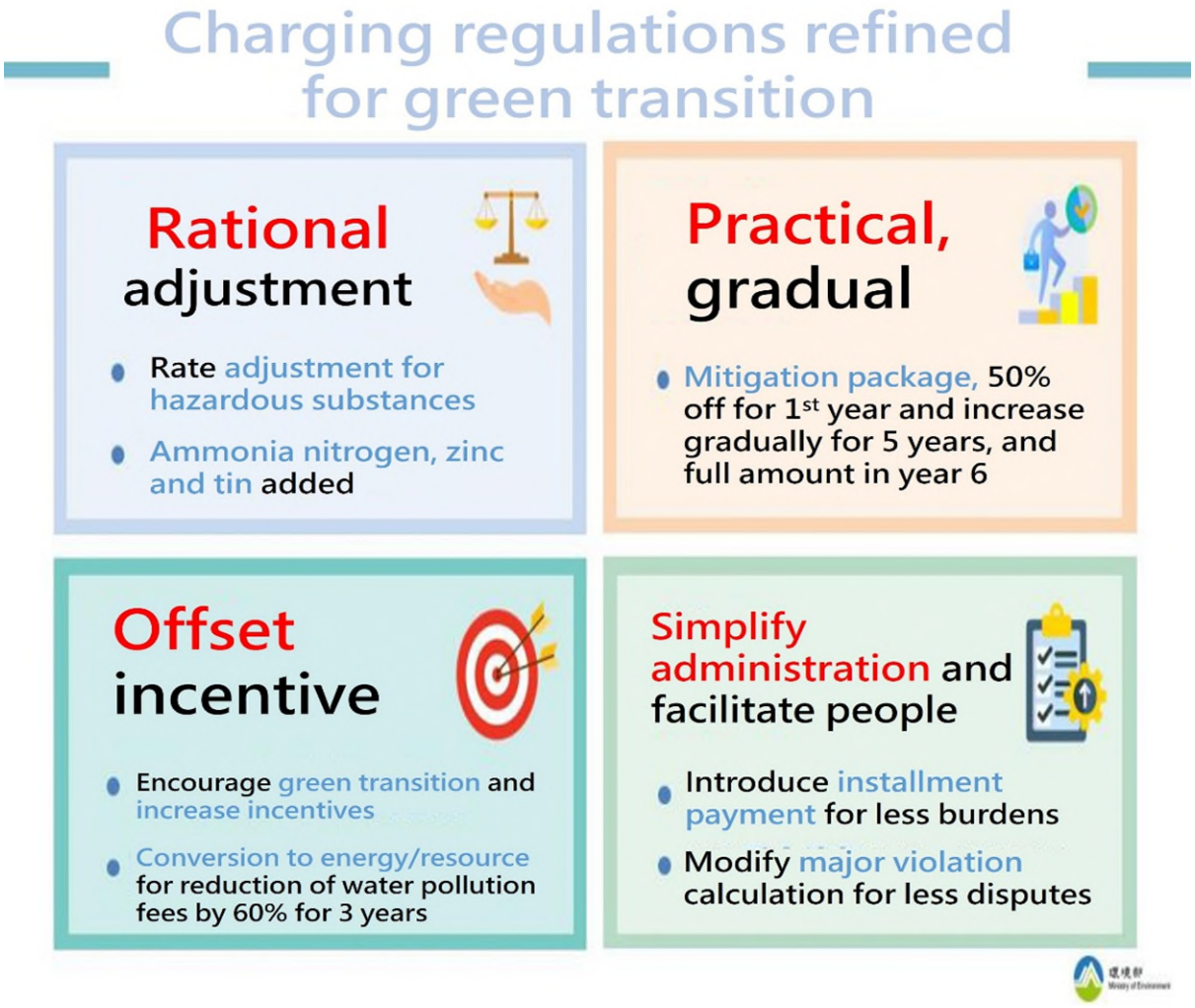
collection, with a rate of NT$40/kg for ammonia nitrogen, and NT$1,000 for zinc and tin effective for the first year after the amendment.

II. Rates to be increased gradually in phases to minimize impacts; only a handful of businesses will be affected

The MOENV stated the adjusted fee rates and new fee items are expected to take effect in 2026. To mitigate impacts on businesses, the fees will be given a 50% discount on the full rate in the first year, with the discount gradually decreasing yearly, until the full rates are charged in the sixth year. A closer look at the fee rate adjustment showed that only 2,200 businesses will be affected, most of them being sewage system operators of industrial or science parks, wafer foundries/semiconductor manufacturers, power plants, PCB manufacturers and electroplating businesses. The number of affected businesses and amounts collected will be limited. In the first year after the amendment, for 90% of those subject to pollution control fees, their fees will increase by less than NT$20,000.

III. Investment offsets and promotion of green transition

To further encourage action toward global net-zero, a scheme for earning offsets by investing in wastewater treatment equipment was also included in this amendment. Say a company is considering investing in a new wastewater treatment facility to enable the recovery of energy or reusable resources, for example: a papermill introduces anaerobic treatment to collect methane for power generation and circular economy benefits; or, a semiconductor manufacturer recovers high-concentration ammonia from wastewater and converts the recovered waste into useful resources. Such enterprises may prepare the required documents and apply to the MOENV or local environmental protection bureau for water pollution fee offsets. The offsets can be as much as 60% of the current fees for up to three years. It is hoped that wastewater treatment can also contribute to power generation in addition to resource recovery, encouraging more businesses to invest in conversion facilities and drive the green transition in the industrial sector.



Amendments to *Regulations Governing the Collection of Water Pollution Control Fees from Enterprises and Sewage System Operators*

8. Ministry of Environment and Global enabling Sustainability Initiative (GeSI) sign MOU for Green Digitalization and Net-Zero Opportunities

The Ministry of Environment (MOENV) is working diligently on "digital transition and net-zero transition" to help reach Taiwan's goal of net-zero CO_2 emissions by 2050. Thus, on 21 March 2025, MOENV Minister Peng Chi-Ming met with the CEO of the Global enabling Sustainability Initiative (GeSI), Mr. Luís Neves, to sign a MOU on cooperating to create new opportunities for green digitalization and net zero, to focus on accelerating Taiwan's sustainable development through green digital solutions, and to create a win-win for environmental sustainability and economic growth.

Minister Peng said in his speech that digital technology is always a key driver for moving sustainable development forward as the world faces the challenges of global climate change. GeSI, a global alliance of leaders in information and communications technology (ICT) industries, has been working with the European Union on multiple projects, particularly in dealing with how to support the EU's Sustainable Development Goals (SDGs) and the European Green Deal with ICT, while providing suggestions about digitalization and sustainable development policies. With this MOU, both the GeSI

and the MOENV will work together on the “Net Carbon Impact Assessment Methodology for ICT Solutions” and “Digital with Purpose Performance Framework Certification”, which assist Taiwan’s ICT industries in playing an active role toward reaching the net-zero goal and help the ICT industry evaluate its ESG (Environmental, Social, Governance) performance. In addition, Taiwan will learn from GeSI’s international experience to develop its own voluntary carbon market and intelligent carbon cities, accelerate green digital transition, resolve environmental problems with innovative technology and create new green economy opportunities.

GeSI CEO Neves noted that Taiwan is a world leader in the ICT industry and is an important hub for technological innovation. GeSI’s members come from important ICT enterprises around the world, and the organization has been involved with great progress in the areas of smart cities, artificial intelligence and the digital UNGIH platform under the United Nations Framework Convention on Climate Change (UNFCCC). Witnessing the signing of the MOU were Iris Liu, Vice GM of Taiwan mobile and a board member of GeSI, and Richard Lee, Chairman of Taiwan Electrical and Electronic Manufacturers’ Association (TEEMA), also a member of GeSI. The signatories believed that this cooperation would strengthen the international network by bringing GeSI and Taiwan’s technical strength together for the development and promotion of sustainable digital solutions and contribute to global sustainable development.

The cooperation between the MOENV and GeSI will not only accelerate Taiwan’s green digital transition, but also help the nation contribute to sustainable development worldwide. With high expectations for the cooperation agreement, both parties will deepen efforts toward “digital and net-zero transitions” and create a brighter, more sustainable future.

Officials at the MOU signing between the Global enabling Sustainability Initiative (GeSI) and the Ministry of Environment – from left to right, Ms. Shih Wen-Chen, Deputy Minister of Environment; Mr. Richard Lee, Chairman of TEEMA; MOENV Minister Peng Chi-Ming; Mr. Luis Neves, CEO of GeSI; Iris Liu, Vice GM of Taiwan Mobile; and Ms. Tsai Lin-Yi, Director General of the Climate Change Administration

MOENV Minister Peng Chi-Ming (left) and CEO Luís Neves of GeSI displaying the signed copies of the MOU

9. "Ministry of Environment Green Collar Talent Incubation Alliance" Established

To accelerate the incubation of green collar talent, the National Environmental Research Academy (NERA hereinafter), working with 28 universities and colleges in Taiwan, has established the "Net-Zero Green Collar Talent Incubation Alliance" (淨零綠領人才培育聯盟). The Alliance will work to accelerate the incubation of professionals in environmental professions, with a "Net-zero Green Collar Talent Incubation Program" having been recently rolled out. Tuition for this short, 48-hour course is NT$12,000, with a tuition discount available for students under 30 years old and those from low-income households. The program aims to incubate 3,500 people per year, an attempt to fill the demand for green collar professionals through better promotion of policy and use of educational resources.

I. Four regional incubation centers working with 28 universities and colleges to build incubation bases

The "Net-Zero Green Collar Talent Incubation Alliance" is working with 28 universities and colleges throughout Taiwan. It has four regional incubation centers in northern, central, southern and eastern Taiwan, located in major cities to allow trainees to study at the center nearest to them. This is expected to facilitate learning and broaden the student application pool.

1. Northern Taiwan incubation center: located at National Taiwan Normal University and 2 others.
2. Central Taiwan incubation center: National Yunlin University of Science and Technology and 7 others.
3. Southern Taiwan incubation center: National Cheng Kung University and 8 others.
4. Eastern Taiwan incubation center: Tzu Chi University and 7 others.

II. The program is suitable for those without a science or engineering background

The program is designed to cover both theory and practice, described as follows:

1. Climate change and greenhouse gas (GHG) management
2. GHG measurement
3. Voluntary GHG reduction and reduction credits
4. Product carbon footprints

The program consists of 48 hours of instruction and is expected to start in late April at the regional incubation centers. Professional instructors are invited to help trainees build a solid professional foundation.

III. "Green collar manpower" evolves into "green collar talents" for better market competitiveness

The MOENV stressed that the "Climate change professionals incubation program" is designed not only to improve the professionalism of those working in the green industry, but also to help "green collar manpower" evolve into "green collar talents".

Green collar manpower refers to workers who are working in the green industry primarily for green production, environmental protection and sustainable development.

Green talents: refer to those who have taken professional training, received technical training and/or passed qualification examinations and have higher level professional literacy and market competitiveness, enabling them to act as mentors and facilitate innovation in the green sector.

IV. Tuition discounts to encourage young people and the socially disadvantaged

To encourage young people and the socially disadvantaged to participate, the following discounts are available:

1. Undergraduate and graduate students younger than 30 years of age: 50% off (NT$6,000);
2. Low-income households: free tuition (NT$12,000).

Trainees will be granted an official certificate issued by the MOENV and be awarded the tuition discount after they complete the training and pass a qualification exam.

V. Sign up information

Those who are interested in the program may visit the NERA's "Net-zero green collar talent incubation program" webpage at https://ulvis.net/iTs8 for sign-up information.

All guests at the press conference for the establishment of the "Ministry of Environment Green Collar Talent Incubation Alliance", including alliance members from all four regional centers, and in the front row: MOENV Minister Peng Chi-Ming (4th from right), MOENV Deputy Minister Shih Wen-Chen (4th from left), President Liu Tsung-Yung of the NERA (3rd from left), Council of Indigenous Peoples Deputy Director Kao Wen-Ping (1st from left), Ministry of Labor Section Chief Shen Wen-Li (2nd from left), Ministry of Health and Welfare Vice CEO Lin Ming-Nan (1st from right)

Minister Peng Chi-Ming spoke at the press conference for the establishment of the "Ministry of Environment Green Collar Talent Incubation Alliance"

10. National Environmental Research Academy and National Land Management Agency Sign MOU on Climate Change Adaptation

On 26 March 2025, the National Environmental Research Academy (NERA) of the Ministry of Environment and the National Land Management Agency (NLMA) of the Ministry of the Interior signed an MOU on cooperation to improve domestic climate change adaptability, promote climate change mitigation, technological governance and homeland planning. The cooperation between the two departments will facilitate the integration of research resources from both parties, encourage data sharing and cooperation exchanges, and enhance support for decision-making on climate change adaptation and homeland planning, thus setting the foundation for Taiwan to progress toward resilient and sustainable development.

The NERA stated that the impacts of climate change on environmental governance and use of national land are increasing. Extreme weather events are becoming more frequent, which makes it necessary to focus on both forward-looking plans and resilience when it comes to national land planning. The NERA focuses on climate change science, adaptation strategy studies, environmental monitoring and good governance. Meanwhile, the NLMA's expertise is in land use, national land governance and land resource planning, and overseas national land use, urban planning and redevelopment, building management and residence policies. This cooperation will help both the NERA and the NLMA promote climate change adaptation and research involving application of national land data, improve the scientific basis and precision for environmental management and national land planning decisions, and facilitate the balance between environmentally sustainable development and usage of national land.

The environment is one side of a coin and land use is the other. Facing the challenges brought by climate change and extreme weather, scientific research and policy planning must join forces for the effective improvement of resilience against and adaptability to extreme weather events. Currently, the NERA is seeking opportunities to work with government agencies such as the NLMA on a pilot plan for a scientific research cooperation platform on climate change adaptation. This cooperation MOU shows that both the NLMA and the NERA will push forward their cooperation and interaction in terms of scientific research, data sharing, climate change adaptation evaluation and application, to drive the technology- and science-based governance of the environment and the homeland and thus advance the sustainable development of Taiwan in an era of global climate change. The NERA stressed that they would do what they are best at professionally and work with other government agencies on climate change adaptation and sustainable development, build a safer, more resilient and livable homeland environment through cross-departmental cooperation and resource integration, ensure Taiwan's steady development under climate change, and move toward a more resilient and sustainable future.

Promoting climate change adaptation for Taiwan's sustainable future – President Liu Tsung-Yung of the NERA (left) and Director General Wu Hsin-Hsou of the NLMA (right)

The NERA of the MOENV, and the NLMA of the Ministry of the Interior reach a new milestone of cooperation

President Liu Tsung-Yung of the NERA emphasized how important climate change adaptation will be in the future

Director General Wu Hsin-Hsou of the NLMA affirms that this cooperation is important to sustainable development of national lands

11. Taiwan Works with ASEAN Countries on Sustainable Governance of Soil and Groundwater

The Environmental Management Administration (EMA) of the Ministry of Environment (MOENV) held the "ASEAN Regional Forum on Soil and Groundwater Challenges: Sustainable Remediation Strategies" on 26 March 2025 at the GIS Taipei Tech Convention Center. Gathering at the forum to explore challenges and cooperation strategies in the field of soil and groundwater environment governance in the ASEAN region and Taiwan, were: officials from the Ministry of Natural Resources and Environment of Thailand; officials from the Ministry of Natural Resources and Environment of Vietnam; researchers from Thailand, Indonesia and Vietnam; environmental protection agencies from Taiwan; industrial and academic representatives, and; foreign and local graduate students in soil and groundwater studies. In addition to the forum, an award ceremony for the "Investigation and Remediation Research Competition" was held to recognize the achievements of outstanding research teams.

Deputy Director General Liu Rui-Hsiang of the EMA outlined in his opening speech how water pollution control, air pollution control and waste disposal in Taiwan started in the 1970s. The *"Soil and Groundwater Pollution Remediation Act"* (土壤及地下水污染整治法) was promulgated in the year 2000, followed by many relevant laws and regulations established in this regard, and pollution prevention and remediation have been promoted effectively through measures such as the collection of pollution control fees. Director General Yen Hsu-Ming indicated that Taiwan has accumulated rich experience in pollution investigation and remediation technology over 20 years. It has kept aligned with international practices through international workshops, technology conferences and guidance committees, and continues to improve its technical capabilities through exchanges, establishing a solid foundation for bilateral and multilateral cooperation centered on Taiwan. This forum facilitated partnership relations among the industrial, governmental and academic sectors by providing in-depth interactions with ASEAN countries, which further increases technical capabilities, improves environmental quality and promotes regional sustainable development goals.

The forum was focused on the challenges of protecting the soil and groundwater environment in Indonesia, Thailand, Vietnam and Taiwan. It advanced understanding of ASEAN partner countries, brought the wisdom of industry, government, and academia together, deepened international cooperation, and expanded Taiwan's influence in the ASEAN region. A research competition roundtable forum was set up to listen to presentations on the innovative achievements of participants in the "Investigation and Remediation Research Competition". Twenty-nine teams entered the competition, with ten selected for the secondary review. These teams presented their projects at the forum. Thanks to interactions between experts and students, the understanding of environmental governance was deepened and innovative strategies and applications for pollution control were explored. Finally, five winning teams were selected and awarded prizes totaling NT$120,000. Competition combines academics and practice, stimulates innovation and creative thinking, and advances the sustainable development of soil and groundwater environment in ASEAN countries.

The EMA stressed that the sustainability of soil and groundwater resources is a global environmental issue. It is hoped that the interactive platform established at the forum will deepen the partnership with ASEAN countries in the field of protection of soil and groundwater environment and help all work together for a better environment and quality of life.

Director General Yen Hsu-Ming of the EMA giving his speech at the awards ceremony for the Investigation and Remediation Research Competition

Deputy Director General Liu Rui-Hsiang (front row, 4th from the left) with honored guests of the international forum

All guests of the international forum

Investigation and Remediation Research Competition participants at the afternoon roundtable

Director General Yen Hsu-Ming of the EMA (front row, 6th from left) with award winning teams, review panel members and honored guests