Major Environmental Policies



June 2025

1. President Launches Green Growth Alliance to Create Net-Zero Values

The Launching Taiwan's Green Growth: Asia Green Growth Forum was held together by the MOENV and the National Development Council with assistance from the Financial Supervisory Commission on 23 May 2025. President Lai attended and led all domestic enterprises to launch the Green Growth Forum and unveiled the NT\$10-billion Taiwan Green Growth Fund and Taiwan's first College of Sustainability, which is under National Tsing-Hua University. Such move is to pave a solid path to green growth for Taiwan based on the three milestones of "industry strength, funding momentum, and talent pillars".

The President said in his speech that the green growth and 2050 net-zero transition are the core strategies for Taiwan's national development. In the past year, public opinions and strengths were gathered through the National Climate Change Committee, leading to proposals of the new national carbon reduction goals and the *Taiwan General Carbon Reduction Action Plan* (台灣總體減碳行動計畫). As the result, Taiwan has officially entered the era of carbon pricing" this year. It demonstrates Taiwan's new understanding of environmental costs and symbolizes that the economic system of Taiwan has become in line with the international carbon market.

The President has witnessed the three milestones of Taiwan's green growth, which is as followed:

- I. Official launch of the Green Growth Alliance: The alliance was formed by 17 businesses with green growth potential and all ministries involved, all gathered by the MOENV. It is a platform of private-public cooperation set up as a more powerful support for Taiwan's carbon reduction actions. After in-depth dialogues were opened with experts from Japan's Green Transformation (GX) League, Taiwan and Japan will launch the Asian Green Growth Forum as Net-Zero Strategic Partners and work together towards net-zero transition.
- II. Official unveiling of the Taiwan Green Growth Fund: Through government-led initiatives, the MOENV strives to invest a NT\$10-billion fund in emerging industries of net-zero sustainability to create new momentum to push green economic growth.
- III. Official unveiling of College of Sustainable Development under National Tsing Hua University: Taiwan's first college that is centered on sustainability as its core value will work with the government to cultivate green talents, promote technological innovation and industry-university cooperation, and open a new ground for climate education and research.

The President encouraged that "transition" may sound daunting, but with "faith",

"strategies", "resources", and "teamwork" Taiwan will be able to get a head start in the global competition of net-zero economy and obtain good results in reduction innovation and green growth. The President also recognized the public for their support and contributions and told the world through joint actions that Taiwan is not just a participant, But also more a contributor. Taiwan has technology, determination, and strengths of enterprises and the public to create unlimited possibilities for green growth, which will allow Taiwan and the world to move towards a more sustainable and beautiful future.

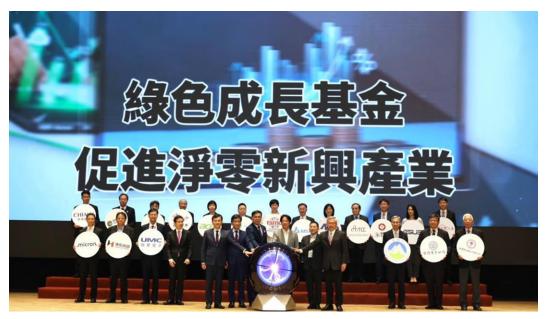
The MOENV Minister Peng Chih-Ming said that Taiwan was the first to propose the New Strategy for Taiwan's Green Growth and redefine Taiwan's new reduction goals, striving for NT\$10 million in the Green Growth Fund. The fund will be used for green growth investment plans over ten years to build an ecosystem for the emerging netzero industry, urge multiplying investments of private capital investment, optimize the industry structure and green transition, and create a market for green talent as well as economic growth. He also explained the strategies of net-zero technologies and provided measures to support the industries' low-carbon transition, emphasizing that net zero will mutually benefit from both pollution and emissions and improve air quality.

During the forum, representative Katayama of the Japan-Taiwan Exchange Association said that climate change and decarbonization are global issues, actively promoted in Japan and Taiwan and around the world. Japan has declared "Carbon Neutrality in 2050" in 2020 and formulated green growth strategies for such goal to facilitate development of decarbonization technologies and equipment investment. In 2024, the GX League was established to promote public and private funds to jointly invest in green transition. The Japan-Taiwan Exchange Association also signed the Japan-Taiwan Memorandum of Understanding for Environmental Protection Exchange and Cooperation with the Taiwan-Japan Relations Association in 2019, actively supporting interactions and cooperation between Japan and Taiwan on environmental issues including climate change. It is sincerely hoped that the cooperation between Japan and Taiwan will drive green growth in Asia and contribute to the sustainable development of the region and the world.

On that day, Director Hideki Takada of Japan's GX League was invited to give a feature talk on "Japan's Green Transition: Decarbonization and Economic Growth", introducing Japan's GX implementation agencies and GX policies. He explained that the Japanese government has invested 20 trillion Japanese yen in issuing the world's first batch of sovereign bonds centering on transitions, the "Japan Climate Transition Bonds", and combined it with a growth-oriented carbon pricing mechanism. It is expected to drive 150 trillion Japanese yen in investment within ten years with the goal of decarbonization by 2050 while promoting economic growth and industry competitive edges.

Additionally, experts from Japan and Taiwan gathered for in-depth discussions and exchanges, including Chairman Nobuo Tanaka of the guidance committee of the Cool Innovation for Earth Forum; Professor Toshihide Arimura of Waseda University; President Lawrence Yen of M.I.H. Capital Management; and Niven Huang, Managing Director of KPMG. It is hoped that such exchanges and dialogues among experts will point the right direction for Taiwan's 2050 Net Zero Pathway and create new momentum for

green growth in Taiwan's sustainable future.



President Lai Ching-Te presides the launching ceremony of Green Growth Alliance



Mr. Katayama of the Japan-Taiwan Exchange Association delivers speech



President Lai and all attendees at the "Launching Taiwan's Green Growth: Asia Green Growth Forum"

2. Air Quality Polic White Paper Released as Roadmap to Clean Air

The MOENV has released the Air Quality Policy White Paper after six months of a series of activities including "wish making, citizen cafés, expert platform and technology forums" A total of 570 suggestions from the public and experts were collected, which focus on 42 key issues and were consolidated into 62 tasks . With the vision of "health and sustainability", it is specified that the average annual concentration of fine particulate matters (PM2.5) shall drop below 10 μ g/m³ by 2030 and 8 μ g/m³ by 2035. This will take Taiwan's air quality governance to a brand-new milestone.

The MOENV indicated that this white paper came into shape through four stages. First was a series of "wish-making" events launched at the end of 2024, where 319 comments were collected from the public and NGOs in four weeks, followed by three sessions of citizen cafés that collected 253 suggestions in face-to-face in-depth dialogues. Then, seven meetings took place to gather and refine experts' ideas. Finally, six speeches by international experts and four seminars were held in the two-day "AIR 2025: Smart Cities – Sustainable and Clean Air Technology Innovation Forum", focusing on future governance and technological development.

"What people cares the most is not just the improvement of monitoring numbers," said Minister Peng, "but also what they really "feel" in their daily life. This is where the white paper focuses on, to create air quality policies with a vision close to people that is based on science and centered on public opinions."

Director General Huang Wei-Ming of Department of Atmospheric Environment pointed out that air pollution governance has entered deep water as the marginal benefits of PM_{2.5} reduction gradually decrease. In addition to continual increase of regulatory efforts, it is also necessary to combine it with the task of net-zero emissions. The

white paper will be carried out in two approaches, to serve as a guide for top-level plans and as part of the amendments to the *Air Pollution Control Act* (空氣污染防制法) and relevant sub-laws.

The MOENV pointed out that the public cares the most about three pollution issues, transportation sources (switch to electric transportation vehicles and limitations in certain areas), industrial sources (control on odors and illegal discharges), and fugitive sources in daily life (open-air burning). To respond to public expectations, the white paper consists of four chapters including improvement of sustainability and health for the public, enhancement of key pollution improvements. co-benefits of net zero and pollution reduction, and technological application and public participation. Each chapter corresponds to the challenges and opportunities for the current air pollution governance in Taiwan. In the chapter of sustainability and health, the focus is on the rights to clean air for children, teenagers, and vulnerable and sensitive groups as well as on indoor air quality management as the policy core. As for pollution control, the emphasis is placed on reducing fugitive pollution from transportation and household sources, which is what most people are concerned about during wish-making events.

Regarding policy tools, the white paper mentions introduction of technical means, such as artificial intelligence management, big data analysis and technological monitoring to improve odor detections and pollution improvement. At the same time, the MOENV also established the Air Quality Monitoring and Forecasting Center to bring the public and air quality closer through mechanisms such as multiple information platforms and interactions on environmental information The center will also help foster the next-generation professionals for air pollution prevention and control and sustain resources of human talents.

In addition, the white paper also specifically proposes approaches able to mutually benefit from both pollution and carbon for sectors such as transportation, energy, housing, commerce and residence, and agriculture to connect to the 2050 net zero policy. It includes increasing electric vehicles, building power supply facilities at ports, promoting energy-conserving and low-carbon methods for building constructions, and developing vegetations to purify air quality. The aim is to create a low-pollution lifestyle from the source and achieve green transition.

Experts participating the four-stage events also attended the press conference of the Air Quality Policy White Paper including Professor Lin Neng-Hui and Chang Moo-Been of National Central University, Professor Lai Hsin-Chih of Chang Jung Christian University, and Researcher Chen Yu-Cheng of the National Health Research Institutes. They shared experiences of participating in the process and recognized MOENV's innovative actions to integrate public opinions.

Professor Chang Moo-Been said that future air pollution control must be coupled with the net-zero strategies. It is necessary to enhance reduction measures on the industries' side and rely on the public to conserve energy and lower emission in their daily lives. Professor Lin Neng-Hui added that through the four-stage series of activities the public now can rationally examine their own responsibilities in transportation and lifestyle besides looking at factory emissions. Professor Lai Hsin-Chih believes that the

release of the white paper is a declaration of the government's policies and symbolizes the official launch of joint action with all citizens. And lastly Researcher Chen Yu-Cheng reminded that finer suspended particulate matter, PM1, will become the focus in the next stage and that it is required to continue collecting scientific research results and keep up with international trends.

Finally, MOENV appreciated all the people and groups participating in the four-stage process for their valuable suggestions, which provided multi-faceted ideas for the white paper during its process and perfected its content. At the same time, it also emphasizes that the white paper's publication, but the beginning of a new stage. It will serve as the core guide for the third phase of the *Air Pollution Control Plan* and the future amendments of the *Air Pollution Control Act*. The MOENV will keep soliciting public ideas and look forward to the public participation in promoting air pollution control and creating a healthier and more accommodating Taiwan for the next generation.



The launch ceremony



Minister Peng delivers speech



Guests of the press conference

3. Guidelines Promulgated for Employer Qualification Regarding Introducing Foreign Workers for Waste Recycling and Treatment

The MOENV promulgated the "Guidelines of Employer Qualification Review by the Ministry of Environment for Applications of Introducing Foreign Workers for Waste and Resource Recycling and Treatment" (環境部審查廢棄物及資源物回收處理工作申請引進移工之雇主資格認定作業要點) on 19 May 2025. This is to help the

Ministry of Labor (MOL) review qualification of employers applying for foreign workers for waste disposal and recycling according to Paragraph 56-2 Article 2 according to the Review Standards and Employment Qualifications for Foreign Workers Engaging in Work Specified in Subparagraph 8 to 11 of Paragraph 1 of Article 46 of the Employment Service Act (外國人從事就業服務法第四十六條第一項第八款至第十一款工作資格及審查標準). The guidelines are effective immediately.

The MOENV indicated that the MOL revised and promulgated the standards on 7 May 2025, adding provisions that allow waste recycling and disposal industries and public and private waste disposal facilities to employ foreign workers for waste disposal and recycling. According to the standards, employers shall first apply for qualifications from the MOENV, obtain needed documents once the application is approved, and apply for foreign worker recruitment permits from the MOL. The guidelines specify the applicant's eligibility, procedures, qualifications, and validity of the qualification documents.



Waste disposal and recycling enterprises are allowed to employ foreign workers starting from May 2025

4. Latest National Emission Inventory Shows 4.64% drop in Taiwan's 2023 Net Emissions in 2023

The MOENV has taken references from the United Nations Framework Convention on Climate Change (UNFCCC) and compiled the National Greenhouse Gas (GHG)

Emission Inventory (version 2025) jointly with other ministries based on Article 13 of the Climate Change Response Act (氣候變遷因應法). The Inventory is now published on the Climate Talks platform. Statistics have shown that Taiwan emitted a total of 278.63 million metric tons CO_2e of GHG in 2023, a 4.48% drop compared to the base year (2005). With 21.73 million metric tons of CO_2e of carbon sink deducted, the net emissions were 256.90 million metric tons of CO_2e , a 4.64% and 3.02% drop compared to the base year and the previous year (2022), respectively. Taiwan's overall GHG emissions have shown a decreasing trend year by year.

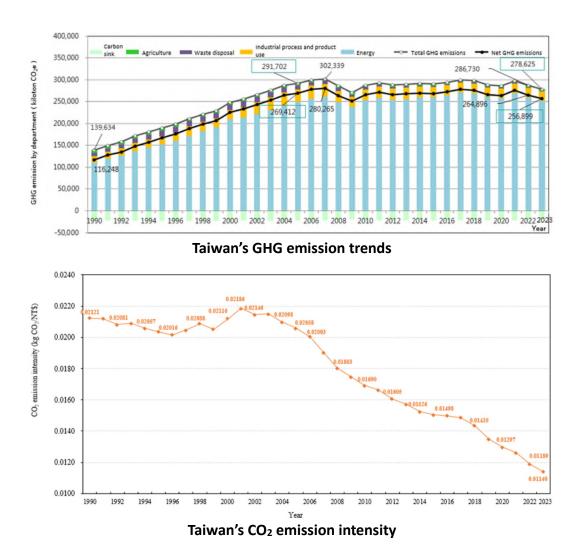
The MOENV pointed out that the UNFCCC requires the parties of its Annex 1 to propose an annual national inventory report (NIR) of the precious two years. A total of 40 countries has released their NIRs for 2023 online as of now this year. Though not a UNFCCC member, Taiwan is still willing to keep up with the global community, Having since 2015 compiled and published NIRs according to the Guidelines for National Greenhouse Gas Inventories of UN's Intergovernmental Panel on Climate Change (IPCC). Data provided in Taiwan's NIRs have been included by international organizations as well, such as Potsdam Institute for Climate Impact Research (PIK).

The MOENV said the complete report and execution summary of the 2025 National Greenhouse Gas Emission Inventory have been published on Climate Talks (https://gov.tw/9EA), available for public viewing and download. Below are the key points:

- I. Taiwan's GHG emissions display a downward slide after peaking in 2007. Despite the increase in 2021 as the world and Taiwan were reviving economically from the pandemic, the emissions in 2022 and 2024 showed steady decrease (see "Taiwan's GHG emission trends").
- II. Analysis of the types of GHG emitted in 2023 shows that the highest percentage goes to carbon dioxide (95.86%), followed by methane (1.60%) and nitrous oxide (1.31%). Also, statistics by department indicate that CO₂ from burning fuels accounts for 90% of Taiwan's emissions.
- III. The CO₂ emissions intensity, i.e. CO₂ emission per GDP (see "Taiwan's CO₂ emission intensity") is 0.01140 kgCO₂/NT\$ in 2023, a decrease by 4.14% compared to 2022 and 44.62% to the base year, indicating improvement of Taiwan's energy efficiency every year.
- IV. Regarding global GHG emissions, data of Emissions Database for Global Atmospheric Research (EDGAR) under EU's Joint Research Centre (JRC) indicate that the world emitted up to 53 billion metric tons of CO₂e in 2023, an increase by 1.9% compared to 2022, a new record high. In comparison, Taiwan's emissions showed a steady decrease in 2023, with both CO₂ emissions intensity and per capita emission improved. It is a clear reflection of Taiwan's efforts in reduction in recent year and the decoupling of economic growth from GHG emissions.

The MOENV added that the inventory is what is used to examine whether the national emission reduction target has been met. As Taiwan is stepping into the third phase of

control goals in 2026, the Executive Yuan has approved the *Phase III Periodic Regulatory Goals of Greenhouse Gas Emissions (2026-2030)* on 6 May 2025. As required by the *Climate Change Response Act*, the ministries in charge of six major fields will develop their respective reduction action plans within six months, and so will local governments within eight months. Such plans above will be disclosed for public participation during their preparation as legally required. Information such as periodic goals above, draft action plans, and public hearings will be released at the "Climate Talks" platform. All parties may provide their opinions or sign up for the hearings online during the legal period. Opinions and suggestions collected will be incorporated in the plan revision and approval, encouraging the public to promote GHG reduction.



5. Controls Tightened for PFOS, Polyfluoroalkyl Substances, NP, NEPO and Cyclobutane Derivatives According to Antifouling System Convention

The MOENV promulgated the amended Categories and Management of Handling for Toxic Chemical Substances (列管毒性化學物質及其運作管理事項) and Categories and Management of Handling for Concerned Chemical Substances (列管關注化

學物質及其運作管理事項) on 13 May 2025. Perfluorooctanesulfonic acid (PFOS) acid, its salts and associated compounds; perfluorooctanoic (PFOA) acid, its salts and associated compounds; nonylphenol (NP) and nonylphenol polyethoxylate (NPEO); and Cyclobutane derivatives are newly listed as toxic and concerned substances for control, and control measured are set in place to safeguard the environment and human health.

The MOENV pointed out that PFOS and PFOA are difficult to degrade in environment and, therefore, bio-accumulative, suggesting their impacts on the ecosystem and human health through the food chain. UN's Stockholm Convention has included PFOA, PFOS, their salts and associated compounds in Annex A, List of Items to Be Eliminated, and Annex B, List of Items to Be Limited. Taking references from the Stockholm Convention, the Chemicals Administration has added five PFOS salts and their associated compounds as well as 352 PFOA salts and their associated compounds, and specified their applications based on the Convention.

NP and NPEO are known for their endocrinologic interference. They mimic natural hormones in human bodies and, therefore, interfere with human physical health and normal development for children. Both NP and NPEO have been regulated as toxic chemical substances in 2007, and their use in household cleaning agents is prohibited.

MOENV continues to monitor the domestic and international controls of NP and NPEO. Considering their endocrine disrupting properties that are clearly harmful to human health and have adverse effects on aquatic organisms and the ecological environment, the MOENV has intensified the control of NP and NPEO based on the EU regulations. Control concentration is tightened down to 0.1%, and their use restricted in the manufacture of cleaning agents and other uses with environmental risks. Imports of NP and NPEO-containing cleaning agents are restricted according to the *Waste Disposal Act* (廢棄物清理法), fully blocking these agents in order to protect the domestic environment and citizens' health.

Cyclobutane derivatives are listed as concerned chemical substances in accordance with international bans and prohibition standards because of its obvious bioconcentrating and toxicological properties. The control threshold is set at full concentration, and its use in the manufacture of antifouling paint, antifouling systems and biocides is specifically prohibited. The MOENV stressed that existing enterprises are given a buffer period of 18 to 24 months for enough time to respond and encouraged them to find alternative substances to reduce impacts on the domestic environment and citizens' health.



Press conference photo (MOENV Deputy Minister Yeh Jiunn-Horng [2nd from left], Director General Hsieh Yein-Rui of the Chemicals Administration [3rd from left], Vice President Lee Chiun-Chang Lee of National Cheng Kung University [1st from right], and Deputy Director General Hsu Chih-Lun of the Resource Circulation Administration [1st from left])



Deputy Minister Yeh Jiunn-Horng explains management direction in his speech

6. Preannouncement Made to Rename Resource Recycling Act and Revise Waste Disposal Act

The MOENV has proposed the draft amendment of the Resource Recycling Act (資源

回收再利用法) in response to the challenges coming with limited resources and overloading environmental burdens and in order to achieve the sustainable visions of 2050 net-zero emission and zero waste. The revisions proposes to rename the Resource Recycling Act to the Resource Circulation Promotion Act (資源循環推動法) as well as amend the "Waste Disposal Act" (廢棄物清理法). The preannouncement is valid immediately and will last for 60 days, during which opinions and suggestions are welcomed.

The MOENV said that the current laws are insufficient to completely respond to the development of the circular economy and various industries' practical needs. Aiming to complete Taiwan's resource recycling system, draft amendments to these two acts are proposed based on extensively collected opinions from industries, public associations, environmental groups, scholars and experts, and relevant ministries. Revisions of the *Resource Recycling Promotion Act* centers on full lifecycle management, value creation, waste reduction, and material consumption with four major priorities, while revisions of the Waste Disposal Act focus on effective prevention and deterrence of illegal dumping with four major priorities planned out as well.

I. Key points to amendment of the Resource Circulation Promotion Act

- **i. Cross-departmental promotion:** Establish resource circulation promotion committee for all ministries to jointly facilitate resource circulation projects together.
- **ii. Sustainable product policies:** Introduce measures regarding green design guidelines, use of recycled materials in products and constructions, at-source reductions, bans and restrictions of use, and maintenance to extend product life; also, encourage consumers to select products with fully disclosed information and promote digital product tracking.
- **iii. Market creation and circular procurement:** Prioritize government purchase of circular products to create circular supply chains.
- **iv. Assistance in circular industries:** Establish rewards, subsidies, financing and guarantee mechanisms; assist in providing land for resource recycling industries to solve the difficulties in obtaining properties and set up a "circular experiment sandbox" to encourage innovations.

II. Key points to amendment of the Waste Disposal Act

- i. Control for emerging wastes: Incorporates emerging wastes such as solar photovoltaic panels and wind turbine blades into management.
- **ii. Reuse management enhancement:** The MOENV will coordinate ten ministries and 14 management regulations and strengthen the quality and operational management of recycled products.
- iii. Deterrence of illegal dumping and punishments for illegal activities: Authorize

the competent authorities to track the entire whereabouts of leftover construction materials, deploy technological law enforcement tools such as electronic fences, increase penalties and reserve funds to cover environmental restoration costs to implement environmental justice.

iv. Maintenance of environmental and sanitation quality: Increase penalties and reverse the responsibility of providing proof about violations regarding general waste, environment, and sanitation.

In addition to integrating recycling and reuse responsibilities, the MOENV further explained that this amendment will further provide recycling enterprises with a two-year buffer period for transition to adapt to industries' actual operations.

7. Application Deadline for Voluntary Carbon Reduction Plans Postponed Two Months Due to International Tariff Uncertainty

Taiwan's carbon fee system is scheduled for launch in 2025. Considering those subject to carbon fees for the green transition may suffer from impacts of US tariff policies, the Ministry of Environment (MOENV) has decided to postpone the deadline for voluntary carbon reduction plan applications by two months, as the Ministry of Finance has done for reporting and payment of income taxes. This will help businesses retain their eligibility for preferential rates through the "register for application first and provide the necessary technical information" method. It will also help businesses physically prepare for the implementation of technical solutions as part of their voluntary carbon reduction plans. In addition, the technical guidance information provided by the MOENV and the Ministry of Economic Affairs will help those subject to carbon fees apply for preferential rates based on their voluntary reduction plans and make the most of the opportunities presented by the transition to low-carbon.

The MOENV pointed out that Taiwan launched the carbon fee system in 2025, with 252 businesses (464 factories) subject to carbon fees. According to the "Regulations Governing the Collection of Carbon Fees" (碳費收費辦法) and "Regulations for Administration of Self-Determined Reduction Plans" (自主減量計畫管理辦法), businesses are required to propose their carbon reduction plans to the MOENV by 30 June 2025 in order to become eligible for a preferential rate (NT\$100/metric ton CO₂e or NT\$50/metric ton CO₂e) once their plans are approved and they are ready to pay the carbon fee in 2026. Otherwise, they must pay the regular rate (NT\$300/metric ton CO₂e) next year if they fail to meet the deadline of 30 June. A recent MOENV survey indicated that nearly 90% of businesses are willing to propose their carbon reduction plans to be eligible for preferential rates. Considering that businesses are feeling the impacts of US tariff policy uncertainty, the MOENV decided to postpone the carbon reduction plan application deadline by two months, to 31 August 2025. At the same time, a counseling team has been established under the Climate Change Administration to provide services such as technical support, application guidance and assistance in writing applications, to help businesses deal with the transition challenges, ensure the quality of voluntary carbon reduction plans and accelerate the overall low-carbon

transition in Taiwan.

Furthermore, the MOENV mentioned that the government will work hand in hand with industry with a "firm and gentle" attitude to advance the net zero transition. With the carbon fee collection schedule remaining unchanged, the government has provided two supporting measures. First, the Legislative Yuan approved Article 10-1 of the "Statute for Industrial Innovation" (產業創新條例) on 18 April 2025, adding energy saving and CO2 reduction as an investment offset item. Second, the Financial Supervisory Commission included the voluntary reduction plan as an assessment item for priority investment funding in the "Green and Transition Finance Action Plan" (綠色及轉型金融行動方案), providing substantial funding assistance for industrial low-carbon transition efforts.

The MOENV stressed that the carbon fee system is a key policy tool for helping Taiwan realize the 2050 net-zero transition, as well as an important strategy for improving the international competitiveness of Taiwan's industry. With CO₂ reduction as the starting point, the carbon fee system aims to lead industry through a green transition using financial incentives. By postponing the voluntary carbon reduction plan application deadline by two months, the government is demonstrating its understanding and support to deal with the challenges of industrial green transition, helping businesses steadily work toward net-zero emissions.

8. "MOENV Net-Zero Green Collar Talent Incubation Program": Tuition Discount Eligibility Broadened to Include Middle- and Low-Income Households and Those with Disabilities

The eligibility for tuition discounts has been broadened for the "Ministry of Environment Net-Zero Green Collar Talent Incubation Program" (環境部淨零綠領人才培育課程). Effective immediately, applicants from middle- and low-income households and those with disabilities are eligible for a full tuition subsidy of NT\$12,000. Minister Peng Chi-Ming of the Ministry of Environment (MOENV) is hoping that widening the eligibility will encourage the socially disadvantaged to join the ranks of net-zero green collar trainees.

The National Environmental Research Academy, MOENV (hereinafter the NERA) joined forces with 32 universities and colleges throughout Taiwan to found the "MOENV Net-Zero Green Collar Talent Incubation Alliance" on 28 March 2025. The tuition for the "MOENV Net-Zero Green Collar Talent Incubation Program" is NT\$12,000 per person and collected by the school that provides the program, consisting of 48 instruction hours. At the time of the program's launch, only those under 30 years of age, currently a college/university student (not including those attending on-the-job programs), from a middle- or low-income household and who have passed the admission exam on their first attempt were eligible for the tuition subsidies (covering 50% of the tuition for students and 100% for those from a middle- or low-income household).

The first term of the "MOENV Net-Zero Green Collar Talent Incubation Program" opened for registration online on 1 April 2025 (at https://ulvis.net/iTs8). All 40 student

spots were filled in just 16 minutes. Despite the tuition of NT\$12,000 per person, more than 80% of the registered trainees were ineligible for tuition discounts, clearly showing how interested the public is in green collar professions or career transitions and gaining net-zero skills. The students were on average roughly 37 years old, with 60% females. Their past professions included engineers, salespersons, clerk assistants, accountants, general affairs clerks and even college faculty members.

Seeing that the public is highly interested in learning professional net-zero skills, the NERA expanded the tuition discounts for the "MOENV's Net-Zero Green Collar Talent Incubation Program" to include middle- and low-income households and people with disabilities, following the concept of "the financially disadvantaged need not be educationally disadvantaged". Those who complete the training and pass the first test are eligible to apply for a full tuition rebate (NT\$12,000); however, the eligibility does not cover those who take the make-up test. Trainees who have already registered are still eligible for the discount, if they meet the qualifications.

The 32 colleges and universities in the alliance are expected to offer at least 60 programs by the end of 2025, providing more than 2,400 enrolment spots. Trainees are required to take a test once they complete the program. After passing exams, the MOENV will issue an official certificate of qualification.

The first exam under the "MOENV Net-Zero Green Collar Talent Incubation Program" is scheduled for late August 2025. Thus, college students are encouraged to sign up online (at https://ulvis.net/iTs8) before the end of summer vacation to use their break time to strengthen their personal net zero knowledge and skills and become indispensable green collar talents for the net zero generation. The second exam this year is scheduled for late November. Starting next year, three exams will be provided for at least 3,500 green collar talents every year.



Front row, left to right: Council of Indigenous Peoples Deputy Chief Kao Wen-Pin; Ministry of Labor Chief Shen Wen-Li; NERA President Tsung-Yung Liu; MOENV Deputy Minister Shih Wen-Chen; MOENV Minister Peng Chi-Ming, and (first on right) Ministry of Health and Welfare Deputy Director Lin Ming-Nan, with alliance members



Minister Peng Chi-Ming explains the structure of the MOENV's Net-Zero Green Collar Talent Incubation Alliance



Deputy Director General Hsu Hsu-Cheng of the Climate Change Administration giving a lecture at National Taiwan Normal University

"Circular Resource" Carbon Reduction Flagship Action Plan Meeting Seeks Cross-Departmental Consensus on Circular and Low-Carbon Future

An outreach meeting of the "Circular Resource" Carbon Reduction Flagship Action Plan was held by the Ministry of Environment (MOENV) on 23 May 2025 to work toward the "New National Carbon Reduction Goals" and promote "Taiwan's Overall Carbon Reduction Action Plan". The meeting was chaired by Deputy Director Lin Tzu-Lun of the Office of Energy and Carbon Reduction and Deputy Minister Shen Chih-Hsiu of the MOENV. Representatives from the Ministry of Transportation and Communications, the Ministry of Economic Affairs, the Ministry of Agriculture and experts from industrial, academic, research sectors and NGOs were invited to the meeting. They focused on the content of a draft plan, exchanged opinions, built consensus on net zero, and sought opportunities for cross-sector collaboration.

Deputy Minister Shen Chih-Hsiu of the MOENV pointed out in the meeting that "resource circulation" is not only the core of environmental protection work, but also one of the key strategies towards net zero transition in the face of the severe challenges of increasing resource shortages and climate change. To promote a circular economy, the government must actively invest resources. MOENV promotes the Green Growth Fund and is committed to cultivating green collar talents, hoping to attract more young people to invest themselves in net-zero related fields. Deputy Minister Shen emphasized that he hoped to gather opinions from the public through the meeting, to help make the plan more comprehensive. The "Circular Resource" Carbon Reduction Flagship Action Plan (Draft) includes:

I. Public-private cooperation for resource circulation: promote the "8+N Resource

Circulation Alliance"; develop a climate technology circulation park; subsidize electric recycling vehicles; connect the upstream, midstream and downstream of industrial chains; improve the efficiency of converting waste into resources with higher value; reduce dependence on raw resources; and minimize CO₂ emissions.

- II. Energy saving in wastewater treatment and co-creation of green energy: promote livestock biogas recovery for power generation; introduce energy-saving and energy-generating technologies in wastewater treatment plants; improve energy self-sufficiency; consider CO₂ reduction and resource circulation.
- III. Improve the quality of life and reduce pollution: encourage the manufacturing industry to upgrade pollution prevention facilities; encourage residential and commercial sectors to use high-efficiency LED lighting for lower emissions and better air quality; reduce light pollution; promote energy conservation.
- IV. Transition to low-carbon for incineration plants and garbage trucks: plan and install waste heat power generation and carbon capture facilities in incineration plants; accelerate the replacement of old garbage trucks; consider both CO₂ reduction and transportation efficiency.

The departments under the MOENV explained the carbon reduction flagship plan, and speakers were invited to share their experiences and present cases of promoting resource circulation. Peng Kui-Chih, president of the Taiwan Homemakers United Consumers Co-op., called on industry, government, and consumers to work together and build a resilient society. At the event, participants pointed out important directions for policy optimization, enthusiastically coming up with valuable suggestions, ranging from main plan components, implementation mechanisms, and modifying regulatory barriers obstructing resource integration. The MOENV said it will compile the opinions from this meeting as an important reference for adjusting and improving the plan, and to strengthen cross-departmental and industry cooperation, to jointly create a circular, low-carbon, sustainable Taiwan.



MOENV Minister Peng Chi-Ming, Deputy Minister Shen Chih-Hsiu, Deputy Chief Kao, Wen-Pin of the Council of Indigenous Peoples, Chief Shen Wen-Li of the Ministry of Labor, and Deputy Director Lin Ming-Nan of the Ministry of Health and Welfare met with alliance members.



The meeting was chaired by Deputy Minister Shen Chih-Hsiu of the MOENV (center), Deputy Director Lin Tzu-Lun of the Office of Energy and Carbon Reduction (right), and Director General Lai Ying-Ying of the Resource Circulation Administration (left).

10. Brand-new "One-Stop Vehicle Recycling Service" for a Convenient One-Stop Service Platform

In an effort to improve vehicle retirement and recycling processes and associated administrative efficiency, the Resource Circulation Administration (RECA) of Ministry of Environment (MOENV) rolled out the platform "One-Stop Vehicle Recycling Service" (https://recyclecar.moenv.gov.tw/), providing a one-portal, one-stop service that combines the old "Scrap motorized vehicle recycling system" and "One-stop scrap vehicle recycling". This merger simplifies work procedures and integrates multiple search functions on one single website, for an intelligent recycling platform that makes navigation more focused and efficient.

The RECA pointed out that the "Scrap motorized vehicle recycling system" was established in 2008 for everything related to recycling scrap cars, such as electric vehicles for recycling businesses, scrap car auditing and certification, and incentive reward approvals. In 2022, the "One-stop scrap vehicle recycling" platform was built as a cross-departmental effort, providing eight service functions: "vehicle recycling", "vehicle registration cancellation", "vehicle fuel fee payment", "license fee payment", "recycling reward application", "subsidy for replacement with electric motorcycles", "refunding of overpaid vehicle fuel fee" and "refunding of overpaid license fee". The recycling and scrapping procedure could then be done through a one-stop online service. One survey indicated 96% satisfaction.

The RECA expressed that the integration of both systems is a simplification of operating procedures for all recycling businesses. All the services provided on both the systems are integrated under the "One-Stop Vehicle Recycling Service" platform. Not only is the operating process simplified, but also the search time is reduced. Previously, recycling businesses or individuals had to switch between both systems for recycling/scrapping procedures, scrapping certificate downloads and searches for motor-cycle inspection records. Now, everything is done on the one-stop platform, i.e., a lot can be done all at once simply by logging in. It is estimated that the search time is reduced by 50% on average, effectively reducing repeated operations, minimizing the risk of losses, and comprehensively improving work efficiency.

In addition, the platform has been expanded and integrated with eight search service functions, including "search for application progress and vehicle recycling/scrapping certificate download", "FAQs of vehicle scrapping, recycling and incentive rewards", "latest development information on vehicle environmental protection", "vehicle scrapping guide", "search for green vehicles and environmental protection mark vehicles", "traffic fine inquiry and payment" "regular motorcycle exhaust inspection search" and "freeway charges (ETC) inquiry".

The RECA encourages the public to take advantage of the "One-Stop Vehicle Recycling Service" for vehicles that need to be recycled or scrapped. Quick online registration is easy and convenient for making integrated inquiries, allowing resources from scrap vehicles to be further reused and recycled. Working together we can contribute to environmental sustainability.



A recycling company returns the license plate of a recycled car at the Motor Vehicles Office for scrapping as a part of the One-Stop Service.



A recycling company worker checks the registration of a car with its owner as a part of the One-Stop Service.



8 services provided by One-Stop Vehicle Recycling Service

11. All Gasoline and Diesel Storage Tanks Subject to Self-Monitoring for Pollution Prevention

As of 1 January 2025, approximately 250 businesses operating an above ground gasoline/diesel storage tank with capacity ranging from 200 liters to 1,000 kL are required to monitor their facilities to prevent soil and groundwater contamination caused by such tanks, and to submit their first reports by the end of May. Failure to do so will result in penalties in accordance with the *Water Pollution Control Act* (水污染防治法). By the end of May, all gasoline and diesel storage tanks throughout Taiwan should be covered in self-monitoring and reporting system for the prevention of pollution, to protect the soil and groundwater environment.

The Environmental Management Administration (EMA), Ministry of Environment (MOENV), indicated that storage tanks above ground and underground are important facilities for the storage of fuel and chemicals. Poor management of these facilities may lead to the contamination of soil and groundwater or may even compromise environmental quality and threaten human health. The EMA decided to promote this measure according to capacity, type of substance and year, following the "Regulations for Installation and Management of Facilities and Monitoring Equipment in Storage Systems for Preventing Pollution of Groundwater" (防止貯存系統污染地下水體設施及監測設備設置管理辦法) ("the Regulations" hereinafter). Currently, there are roughly 3,500 gas stations and above ground or underground storage tanks for the storage of gasoline and diesel, all of which are subject to submitting daily usage reports and regular third-party underground environmental monitoring. The monitoring results are reported every January, May and September for better self-management and pollution prevention.

The EMA stressed that gasoline and diesel storage tanks installed above ground with a capacity between 200 liters and 1,000 kL are commonly found in factories and by commercial office buildings to meet daily needs. Businesses operating them shall be

responsible for their inspection and maintenance. Starting from 1 January 2025, voluntary monitoring is required according to the Regulations and results are to be reported to the local environmental protection bureau every four months. Failure to monitor or report will be subject to penalties in accordance with the *Water Pollution Control Act*.

The EMA reminds all businesses that monitoring and reporting are not only legal obligations but are also the embodiment of important corporate social responsibilities. It is necessary to submit the first report by the end of May, properly maintain the reported data and continue the tasks of daily inspections and maintenance of tanks. Leaks or any other irregularities shall be reported to the local competent authority within three hours and facilities shall be checked and repaired if necessary. Self-monitoring measures shall be implemented to protect the quality of the underground environment and create a better living environment.



Above ground installation with gasoline and diesel storage tanks and associated pollution prevention facilities



Above ground installation of diesel storage tanks with surface and associated pollution prevention facilities



Checking a soil gas monitoring well on site