Major Environmental Policies

June 2026

1. Amended Air Pollutant Emission Standards for the Cement Industry Issued to Align with International Practices While Advancing the Circular Economy and Air Pollution Control to Safeguard Public Health

To support the objectives of resource circulation, net-zero carbon emissions, and air quality maintenance, the Ministry of Environment amended and issued the *"Air Pollutant Emission Standards for the Cement Industry"*（水泥業空氣污染物排放標準）on May 18, 2026. The focus of this amendment is to align Taiwan's regulatory framework with international standards and strengthen controls on hazardous air pollutants. Specifically, the revised standards introduce regulatory limits for dioxins and 12 specified heavy metals while also establishing emission standards for hydrogen fluoride (HF), hydrogen chloride (HCl), and carbon monoxide (CO). In addition, a feedstock management mechanism has been introduced to regulate the selection of raw materials and alternative fuels, encouraging the industry to implement source reduction measures and strengthen operational management practices, thereby enhancing the overall effectiveness of pollution prevention and control. Through these amendments, the Ministry of Environment seeks to ensure that the promotion of the circular economy proceeds in tandem with robust air quality protection measures, safeguarding both environmental quality and public health.

The Ministry of Environment stated that, as net-zero emissions policies continue to be actively advanced, the proportion of waste-derived alternative fuels co-processed in domestic cement kilns has steadily increased. To prevent the potential pollution risks associated with increasingly diverse feedstock sources, and recognizing the strong correlation between pollutant emissions from cement manufacturing and feedstock composition, the amended standards introduce a new "Screening and Usage Proportioning Management Plan for Raw Materials, Other Materials, and Fuels." Under this framework, the traceability and use of resource-circulation materials will be subject to enhanced management, encouraging operators to select such inputs based on the processing capacity of their own cement kilns. The mechanism is designed to help operators better understand the composition of resource-circulation materials and ensure compliance with emission standards at the source through feedstock screening, quality control measures, and adjustments to feedstock ratios. In addition, recognizing that the industry will require time to upgrade equipment and optimize operating parameters, the amendments include transitional measures. Operators may submit the aforementioned management plan to the local competent authority for approval by October 30, 2026, and apply for a compliance transition (buffer) period. This arrangement provides a reasonable timeframe for adaptation, with any approved transition period extending no later than 1 January 2029.

The Ministry of Environment emphasized that the amendments were developed through extensive interagency coordination and multiple rounds of consultation with industry, government, and academic stakeholders, resulting in broad consensus among all parties. By adopting a dual-track approach that combines more stringent end-of-pipe emission standards with feedstock composition controls, the revised framework balances the advancement of the circular economy with effective air pollution management. Looking ahead, the Ministry will continue to support the steady transformation and upgrading of the industry through rigorous scientific data and a macro-level regulatory framework, fostering a sustainable future in which economic development and environmental protection advance hand in hand.

In addition, in response to recent public concern regarding the environmental impacts of benzo[a]pyrene (BaP), the Ministry stated that it has continued to closely monitor this pollutant and has conducted long-term measurements through air quality monitoring stations located in specialized industrial parks. According to environmental ambient air monitoring data collected from 2022 to 2024, the average concentrations of BaP were 0.07 ng/m³ in the Yunlin Offshore Industrial Park, 0.15 ng/m³ in the Linyuan Industrial Park, and 0.136 ng/m³ in the Linhai Industrial Park. These monitoring results are all below relevant international benchmarks, including the Long-term Air Monitoring Comparison Value (AMCV) established by the Texas Commission on Environmental Quality (TCEQ), which is 3 ng/m³, and the European Union's air quality target value for airborne polycyclic aromatic hydrocarbons (PAHs), for which BaP serves as the indicator substance, with an annual average concentration limit of 1 ng/m³. The Ministry of Environment has also announced plans to initiate revisions to the Hazardous Air Pollutant Emission Standards in 2026, under which BaP will be incorporated into the regulatory emission control framework.

2. Expanding Green Consumer Choice: Ministry of Environment Issues Key Points to Advance Circular Products and Services

The Resource Circulation Administration of the Ministry of Environment promulgated the "Key Points for Promoting Circular Products and Circular Services"（循環產品及循環服務推動作業要點）on 6 May, 2026. To accelerate industrial green transition, the Key Points encourage businesses to invest in the circular economy by developing products that reduce resource consumption, are made from fully recyclable materials, or incorporate recycled content. At the same time, they promote the reuse of packaging and containers, as well as the provision of repair services that extend product life cycles. Through the transformation of consumer markets and consumption patterns, the Ministry aims to improve resource-use efficiency and reduce waste generation, thereby advancing the transition toward a more sustainable circular economy.

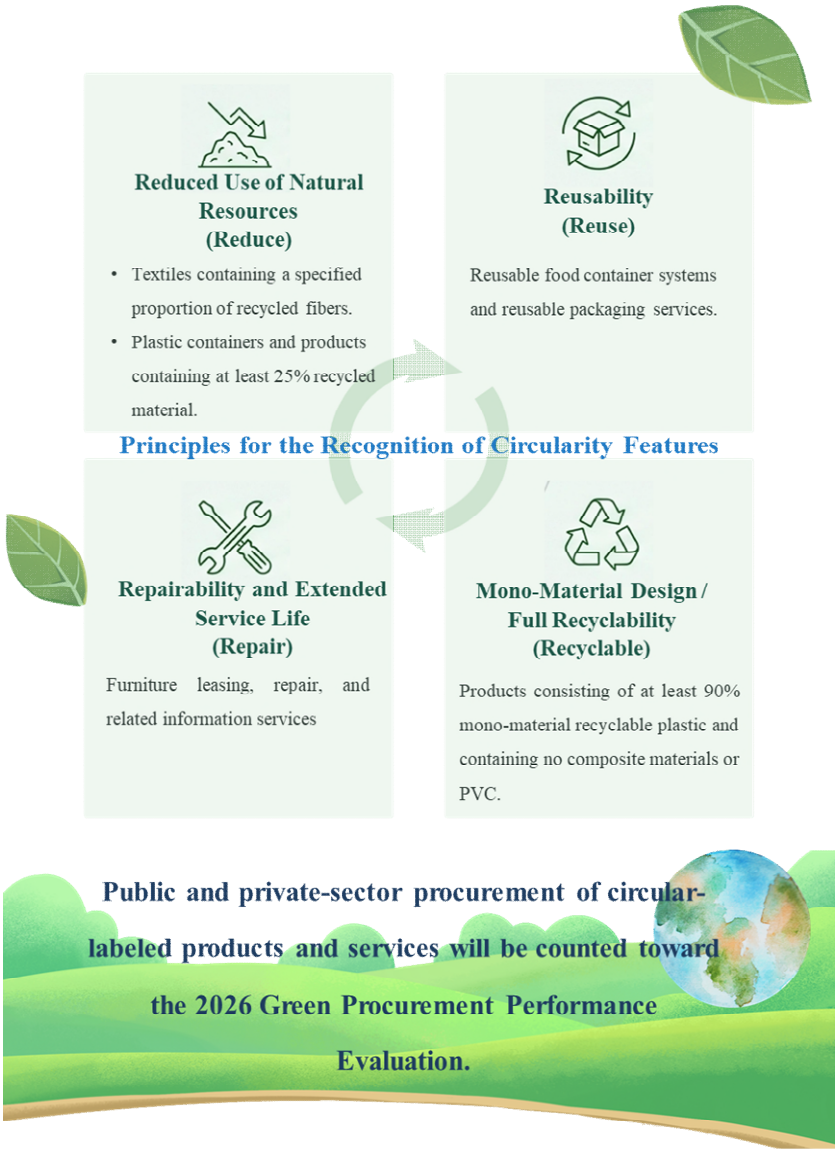
The Resource Circulation Administration stated that the Key Points clearly define the eligibility criteria for recognizing circularity features. Products and services that reduce the use of natural resources, adopt mono-material designs to facilitate full recyclability, are made using recycled materials, or can extend their life cycles through reuse and

repair are all eligible to apply to the Resource Circulation Administration for authorization to use the circular label. This system not only helps businesses enhance product visibility and market competitiveness, but also serves as a reference for procurement by consumers, as well as public- and private-sector buyers, making green consumption more straightforward and intuitive.

The Resource Circulation Administration explained that the application process for authorization to use the circular label is divided into two stages: documentary (formal) review and substantive review. Application materials should primarily demonstrate operational performance or production information related to circular products and services. To facilitate industry applications, cases that comply with the announced product categories and technical specifications will, in principle, be reviewed through a documentary assessment based on submitted materials. The first batch of circular product and service categories was announced on May 28, covering five major categories—textiles, plastics, glass containers, circular services, and inorganic materials—and comprising 12 product and service items in total, representing a wide range of product types and service models. Authorization to use the circular label is generally valid for three years. If there are no revisions to the relevant technical specifications, the authorization may be extended once for an additional six years.

To help stakeholders better understand the operational management of the Key Points, as well as the subsequent procedures for applying for, issuing, and using the *"Circular Label"*（循環標誌）, the Resource Circulation Administration held three informational sessions in northern, central, and southern Taiwan on May 12, 15, and 18, respectively. These sessions provided in-depth explanations of the application process, the first batch of announced circular product and service categories, and the principles for verifying technical specifications. A total of 225 participants attended the three sessions in person and online.

In addition to promoting and encouraging businesses to apply for and obtain the circular label, the Resource Circulation Administration will also concurrently publicize and promote matchmaking initiatives for circular procurement across both the public and private sectors, as well as encourage general consumers to prioritize products and services bearing the circular label. For example, in the Ministry of Environment's 2026 Green Procurement Performance Evaluation for government agencies, procurement expenditures on circular-labeled products and services by both public and private entities have been included as an additional assessment item. Through this approach of leveraging public-sector leadership to drive private-sector participation, the government aims to support the transformation of industries toward a circular economy and lay the foundation for a circular society in Taiwan.



Key Points for Promoting Circular Products and Circular Services

3. World Environment Day: Advancing Climate-Friendly Actions Through Public Participation

To actively respond to the 2026 World Environment Day call for global climate action, the Ministry of Environment, in collaboration with local governments, held the *"National Climate Action Joint Carnival"*（氣候行動全國聯合嘉年華） on 30 May, 2026, at the Pier-2 Art Zone in Kaohsiung. In light of the increasing risk of heat-related illness driven by extreme global climate conditions, the event was specially scheduled to begin at 3:00 p.m. In doing so, government agencies led by example, demonstrating concrete climate adaptation measures and flexible response strategies to enhance climate resilience.

At the launch ceremony, Minister Peng Chi-Ming of the Ministry of Environment emphasized that climate change is an ongoing, real-time challenge facing both the nation and the world. In line with the principles of the *"Climate Change Response Act"*（氣

候變遷因應法）, he stressed that advancing climate adaptation and emissions-reduction efforts is an urgent priority. Minister Peng further noted that, in response to global warming trends, President Lai Ching-te assigned an important task six months ago to deliberate on and develop a climate adaptation policy to promote urban forestry in Taiwan. The Executive Yuan also convened the first meeting of the *"Urban Forest Promotion Committee"*（都市林推動委員會） this week, chaired by Vice Premier Cheng. The initiative aims to promote climate adaptation through nationwide greening efforts, leveraging trees' dual functions as "nature's air conditioners" (cooling urban areas through shade and reducing the need for air conditioning) and "water-absorbing sponges" (absorbing rainfall during heavy storms to mitigate flooding risks).

Minister Peng further called on the public to recognize that Taiwan's path toward 2050 Net-Zero Emissions（2050 淨零排放）depends critically on a society-wide "lifestyle transformation." Government efforts alone are not sufficient; achieving this goal requires collective action from all citizens to put the "Three Major Actions to Cool the Earth" into practice and help lighten the planet's burden:

I. **Bring Your Own and Share (Plastic Reduction Action):** Encourage the public to carry reusable water bottles in daily life and share eco-friendly shopping bags. The Minister highlighted the successful revamp of Taipei's Jianguo Holiday Flower Market, where approximately 50% of visitors now bring their own reusable bags, with a target of increasing this rate to 70%. In the future, the Ministry also plans to work with Kaohsiung to select a site for cultivating a culture of plastic reduction.

II. **Choose Low-Carbon and Local Ingredients: I**n daily diets, prioritize low-carbon, local, and seasonal foods to reduce carbon footprints at the source and avoid food waste.

III. **Prioritize Green Mark-Certified Products:** Look for the Taiwan Green Mark eco-label（環保綠色標章）when you shop, and put your money behind manufacturers that are producing environmentally friendly products.

At the carnival, awards were also presented for the "Mission for the Planet" video competition, recognizing the administrative ingenuity and outstanding achievements of local environmental protection agencies in implementing environmental policies on the front lines. In the expert panel's professional judging, the host-side entrant, the Kaohsiung City Government, led by the mayor, who personally delivered a highly creative presentation, earned first place nationwide in the Professional Category. In addition, the Pingtung County Government also delivered an excellent performance, standing out among 22 entries from across Taiwan to win first place in the online popularity vote.

The 30 informational booths set up at the event showcased the innovative capabilities of cities and counties across Taiwan in advancing emissions reduction and resource-circulation initiatives. Yunlin County promoted its "Protect the Pomelo, Green Action for the Planet" campaign, featuring whole-fruit utilization of pomelos and hands-on hydrosol-making activities, thereby advancing the valorization of agricultural waste. Tainan City and New Taipei City engaged the public through a "Green Action Spin

Wheel" and interactive challenge games, helping participants better understand environmental labels and incorporate net-zero green living practices into their daily routines. Kinmen County highlighted the concept of green consumption by encouraging the purchase of locally grown cosmetically imperfect produce, guiding the public toward reducing resource waste at the source. The host city, Kaohsiung, established a "Green Living Laboratory," offering on-site demonstrations that decode practical formulas for achieving a net-zero lifestyle. Taichung City focused on creating a more environmentally friendly home environment, actively promoting indoor air quality management and the repair and reuse of furniture. Through these immersive, educational, and entertaining experiences, local governments successfully turned substantive environmental policies and green knowledge into practical everyday actions that the public can easily adopt to reduce carbon emissions.

The Ministry of Environment further explained that, in order to translate often abstract climate change policies into a more visual and engaging theatrical language, this event partnered with the Ifkids Theatre Studio（如果兒童劇團）to adapt an environmental education picture book into a stage production titled "*The North Wind and the Sun: Earth Mission Activated!"*（北風與太陽：地球任務啟動！）, which was performed as a featured highlight. The program also included a Taiwan-exclusive interactive real-world puzzle game, *"Future City: The Mystery of the Old Harbor"*（北城市未來式：舊港未解之謎）, along with a closing performance by the rising boy band "ARKis." Together, these elements successfully brought climate action closer to younger generations and family audiences, helping to deepen public engagement and understanding.

The Ministry of Environment expressed its hope that this event will not only serve as a meaningful showcase of achievements, but also mark a new starting point for deepening "net-zero green living" across Taiwan. The Ministry earnestly calls on every household and industry to translate environmental awareness into everyday actions. Working hand in hand with the government through public-private collaboration, all sectors of society are encouraged to jointly build a better future for Taiwan—one that is low-carbon, sustainable, and resilient to climate change.

Opening ceremony of the 2026 World Environment Day event

Minister Peng Chi-Ming, Mayor Chen Chi-Mai, and Legislator Hsu Chih-Chieh visit exhibition booths to promote bringing your own reusable lunchbox

Remarks delivered by Minister Peng Chi-Ming

4. Taiwan–Paraguay Climate Cooperation: Creating New Opportunities for Cross-Border Emissions Reduction

To expand opportunities for cooperation and exchange between Taiwan and Paraguay in addressing climate change, the Ministry of Environment held the *"International Mitigation Cooperation Exchange Roundtable"*（國際減量合作交流座談會）on 7 May, 2026. The session was chaired by Minister Peng Chi-ming. The meeting brought together Mr. Victor González, Director of the Carbon Market Division of Paraguay's Ministry of Environment and Sustainable Development, representatives from Paraguay's carbon market sector, Taiwan's Green Growth Alliance（綠色成長聯盟）, and the Taiwan Carbon Solution Exchange （臺灣碳權交易所）, among other stakeholders. Participants engaged in in-depth discussions on the potential for collaboration in carbon credit development between Taiwan and Paraguay, as well as possible implementation mechanisms and future policy pathways. Through strengthened international cooperation and public-private partnerships, the Ministry expressed its hope of creating a mutually beneficial outcome for both governments and enterprises in Taiwan and Paraguay.

The Ministry of Environment stated that the Republic of Paraguay is one of Taiwan's key diplomatic allies. Paraguay's abundant forest resources serve as its primary carbon sink and a central pillar of its emissions-reduction strategy. Following the signing of the *"Memorandum of Understanding on Cooperation under the Paris Agreement"*（在《巴黎協定》下合作備忘錄） on 1 October, 2025, Minister Peng of the Ministry of Environment announced in November the launch of 12 *"Taiwan–Paraguay Environmental Governance Action Plans"*（臺巴環境治理行動方案）. The roundtable brought together enterprises from both sides to exchange views on future mechanisms for tangible emissions-reduction cooperation.

In his remarks, Minister Peng stated that as the global net-zero transition continues to advance, Taiwan should align both its national strategic mitigation planning and corporate development needs with Article 6 of the Paris Agreement in implementing international mitigation cooperation. This includes the generation of Internationally Transferred Mitigation Outcomes (ITMOs) and the application of corresponding adjustments, ensuring high-integrity carbon credits that are real, transparent, and free from double counting. The government is currently in discussions with Paraguay regarding the signing of an Implementation Agreement (IA). Under this framework, the government will lead enterprises in jointly establishing emissions-mitigation cooperation with Paraguay, ensuring that bilateral projects comply with international standards for high-quality mitigation outcomes. These efforts are expected to be eligible for offsetting up to 5% of taxable carbon-fee emissions. Minister Peng also expressed hope that Taiwan-funded enterprises will participate in forestry carbon-sink projects in Paraguay. This would not only help Taiwan advance toward its emissions-reduction targets and enhance corporate competitiveness, but also deliver tangible benefits to local communities and ecosystems in Paraguay.

Director González stated in his remarks that, in recent years, Paraguay has actively advanced cooperation mechanisms under Article 6 of the Paris Agreement, working to establish a robust, transparent system for the transfer of ITMOs that ensures high environmental integrity and avoids double counting. He noted that Paraguay has already engaged in cooperation with multiple countries and accumulated practical experience, and that its efforts are highly complementary to Taiwan's initiatives in advancing international emissions-mitigation cooperation. He expressed hope that Taiwan and Paraguay can deepen collaboration in areas such as expanding natural carbon sinks, renewable energy, and green transportation, and that their partnership could serve as a practical demonstration of how Article 6 of the Paris Agreement can be implemented.

In an increasingly competitive international landscape for mitigation cooperation, Minister Peng expressed deep appreciation and sincere gratitude that Director González and Paraguayan business representatives traveled to Taiwan to discuss cooperation on emissions rights. Beyond future cooperation with Paraguay on reforestation and afforestation projects for emissions reduction, Taiwan is also concurrently advancing domestic planning for "urban forests." Through public-private partnerships, the Ministry aims to achieve multiple win-win outcomes, including strengthened climate action, expanded green investment, sustainable development, and the further consolidation of bilateral diplomatic ties.

Minister Peng with Paraguay's Director of Carbon Markets, Victor González, Paraguayan business representatives, and Taiwan's Green Growth Alliance

Minister Peng presiding over the "International Emissions-Mitigation Cooperation Exchange Roundtable"

Representatives from Taiwan and Paraguay jointly exploring opportunities for international mitigation cooperation

5. Strengthening Taiwan–UK Bilateral Engagement: "2026 Taiwan–UK Industrial Decarbonization Workshop" Brings Stakeholders Together to Advance Net-Zero Transition and Climate Cooperation

To deepen the climate partnership between Taiwan and the United Kingdom, the Ministry of Environment and the British Office Taipei jointly held the *"2026 Taiwan–UK Industrial Decarbonization Workshop"*（2026 臺英工業減碳工作坊） on May 12, 2026, bringing together experts from both sides for in-depth dialogue on net-zero emissions and decarbonization strategies. On May 13, Minister Peng Chi-Ming of the Ministry of Environment also received visiting delegates from the UK Department for Energy Security and Net Zero (DESNZ) and representatives from industry. He emphasized the long-standing importance of Taiwan–UK cooperation on climate issues and expressed hope that collaboration could extend beyond policy dialogue to stronger industrial linkages, working together to accelerate progress toward net-zero emissions goals.

On May 12, Taiwan and the United Kingdom jointly held the "2026 Taiwan–UK Industrial Decarbonization Workshop," which was attended by Deputy Minister Hsieh Yen-Ju of the Ministry of Environment and Representative Ruth Bradley-Jones of the British Office Taipei. The workshop brought together experts from both sides for in-depth exchanges on policy frameworks, power grid modernization, emissions reduction in heavy industry and small and medium-sized enterprises (SMEs), and a just transition. Through discussions on the challenges and opportunities of industrial decarbonization, participants built a shared understanding of policy directions, promoted cooperation in decarbonization technologies across industries and supply chains, and enhanced

overall industrial competitiveness.

Deputy Minister Hsieh Yen-Ju of the Ministry of Environment stated that Taiwan has formally incorporated the goal of net-zero emissions by 2050 into law and has strengthened its interim carbon-reduction targets, setting a reduction target of 28% ± 2% by 2030 and 38% ± 2% by 2035. He further noted that Taiwan's carbon pricing mechanism, which took effect in 2025, will in the future be paired with a NT$10 billion "Green Growth Fund" to comprehensively accelerate the low-carbon transition of industry.

Representative Ruth Bradley-Jones of the British Office Taipei emphasized that the United Kingdom and Taiwan possess highly complementary strengths in addressing industrial decarbonization. At the same time, both face a number of shared challenges. More importantly, she noted that, like Taiwan, the United Kingdom views industrial decarbonization not merely as an isolated climate issue, but as a broader driver of economic transformation.

The workshop was further contextualized through keynote speeches delivered by Director-General Tsai Ling-Yi of the Climate Change Administration under the Ministry of Environment and Harley Collins, Head of Industrial Decarbonization Strategy at the UK DESNZ, who outlined the policy vision and direction. This was followed by four focused panel discussions featuring experts from government, industry, and academia. The sessions explored key topics, including the development of smart and flexible grid infrastructure, practical decarbonization solutions for heavy-industry transition, ways to help SMEs overcome barriers to emissions reduction, and the exchange of approaches to just-transition policies supporting the workforce.

The Minister further emphasized during the meeting with the delegation that Taiwan and the United Kingdom have long maintained a close partnership on climate issues, and expressed appreciation for the UK's assistance in supporting Taiwan's development and implementation of its carbon pricing mechanism. Looking ahead to more substantive exchanges, the Minister outlined three key areas for future cooperation:

I. **Introducing Market-Based Mechanisms:** Taiwan hopes to draw on the UK's experience to incorporate more market-oriented approaches and institutional arrangements, with the aim of strengthening and improving the future operation of its emissions trading system (ETS).

II. **Expanding Investment in the Green Energy Industry:** Taiwan welcomes investment from UK enterprises and capital in Taiwan, particularly in net-zero sectors such as offshore wind power and carbon capture and storage (CCS), to jointly create new green business opportunities.

III. **Joint Expansion into Global Markets:** Taiwan aims to combine its strengths in semiconductors and the information and communications technology (ICT) manufacturing supply chain, as well as its robust capital market capacity, with the United Kingdom's advantages in finance, climate policy, and innovation. Together, the two sides seek to serve net-zero markets across Asia and the world.

The Ministry of Environment stated that, through the courtesy meeting and the in-depth exchanges held during the workshop, Taiwan and the United Kingdom look forward to continuing to leverage their respective strengths to advance more substantive cooperation in emissions reduction and net-zero transition efforts.

Minister Peng Chi-Ming of the Ministry of Environment (fourth from left) receives Deputy Representative Edward Avery of the British Office in Taipei (fifth from right) and visiting delegation members

Deputy Minister Hsieh Yen-Ju of the Ministry of Environment and Representative Ruth Bradley-Jones of the British Office Taipei pose for a group photo at the "Taiwan–UK Industrial Decarbonization Workshop"

6. National Environmental Research Institute Demonstrates Top-Tier Analytical Capabilities; Water Quality Testing Performance Internationally Recognized

The National Environmental Research Institute (hereinafter the NERI) under the Ministry of Environment recently participated in drinking water and wastewater proficiency testing (PT) programs organized by the internationally renowned provider Environmental Resource Associates, Inc. (ERA) of the United States, demonstrating outstanding analytical and testing capabilities. In the two major categories of volatile organic compounds (VOCs) and heavy metals in water, all evaluated items received a "Satisfactory" rating. The NERI was also awarded the "Laboratory of Excellence" certificate by ERA, underscoring that its environmental testing technologies meet world-class international standards.

I. Drinking Water VOC Testing: Strong Analytical Capability Ensures Drinking Water Safety

The NERI conducted PT on 16 VOCs in drinking water, including trihalomethanes (such as chloroform), benzene, carbon tetrachloride, and vinyl chloride, all of which pose potential health risks. In a global comparison involving 349 participating laboratories, the NERI achieved a 100% pass rate for the parameters it submitted, demonstrating the stability and accuracy of its analytical capabilities for trace-level VOCs in drinking water.

II. Heavy Metal Testing in Effluent: Strict Safeguards Against Water Pollution

To ensure the continued reliability of its analytical capabilities for pollutants in industrial wastewater discharges, the NERI participated in a PT program for effluent analysis. The tested parameters included seven key heavy metals: cadmium, chromium, copper, lead, nickel, silver, and zinc. In an even more competitive interlaboratory comparison involving 963 laboratories worldwide, the NERI once again delivered outstanding performance, achieving a 100% pass rate across all evaluated items.

The NERI explained that PT is an essential external quality assurance tool for verifying laboratory analytical capability. By comparing results with those of participating laboratories worldwide, it helps confirm the effectiveness of testing methods, instrument operation, and quality assurance and quality control (QA/QC) procedures. Director-General Chang Shun-Chin emphasized that VOCs in drinking water and heavy metals in effluent are critical analytical parameters for environmental quality management and public health risk control. Successfully passing this international PT program organized by ERA not only demonstrates that the NERI's analytical testing capabilities continue to meet international standards, but also helps strengthen the credibility of Taiwan's environmental monitoring data, providing a solid scientific foundation for drinking water safety, pollution source control, and environmental quality management.

The Ministry of Environment stated that, going forward, the NERI will continue to par-

ticipate in international PT programs and advance the continuous improvement of laboratory quality management systems. These efforts aim to enhance technical capacity for environmental testing and analysis and ensure that testing data remain accurate, reliable, and traceable, thereby supporting policy objectives related to environmental governance and the protection of public health.

NERI staff operating a gas chromatography–mass spectrometry (GC-MS) instrument

NERI staff operating an inductively coupled plasma optical emission spectrometer (ICP-OES) (1)

NERI staff operating an inductively coupled plasma optical emission spectrometer (ICP-OES) (2)

Laboratory of Excellence

National Environmental Research Academy

This laboratory has been recognized by ERA as a Laboratory of Excellence for achieving 100% acceptable data in the

March 2026 WS ERA Proficiency Testing Round 356

which included 349 participating laboratories. This achievement is a demonstration of the superior quality of this laboratory in evaluation of the analyte(s) listed below.

Chloroform	1,1-Dichloroethylene	1,2-Dichloroethane	1,4-Dichlorobenzene
Benzene	Carbon tetrachloride	Chlorobenzene	cis-1,2-Dichloroethylene
Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	Trichloroethylene
Vinyl chloride	1,1-Dichloroethane	Chloromethane	Naphthalene

ERA
A Waters Company

Emily Devers, *Quality Assurance Manager*

Certificate of Excellence for drinking water VOC testing laboratory

7. Green Fee Rates Incentivize Green Design and Use of Recycled Materials in Plastic Containers

The Resource Circulation Administration (RECA) of the Ministry of Environment (MOENV) launched the "*Green Fee Rates*" (綠色費率) policy on 1 January 2025, establishing a powerful economic incentive to encourage 53 key indicator businesses to adopt circular design frameworks aimed at maximizing resource efficiency. In the first year of implementation, official statistics show the policy successfully integrated recycled materials into the production of 368 million consumer plastic containers.

The RECA indicated that the green fee rates policy for plastic containers encourages businesses to design packaging that is more easily recyclable and presents lower environmental burdens. The policy provides economic incentives in the form of reduced recycling and clearance fees, ensuring that every container's value within the resource circulation cycle is maximized. The number of participating businesses has grown from 32 at the inception in 2025 to 53 in 2026, spanning sectors such as skincare products, household detergents, beverages, bottled water, health foods, and lubricating oil. The pioneering enterprises that invested early in the policy have played a significant demonstration role, driving upstream and downstream supply chains to re-evaluate and adjust product design strategies. Many brand enterprises are actively putting plastic-reduction concepts into practice. Adjusting for one enterprise that met two assessment criteria simultaneously, the verified total comprises 53 unique corporate entities, representing a cumulative production of 368 million certified containers in the first year of implementation. Details are as follows:

I. **Materials "Recycled and Reborn" (159 million containers):** There are 35 businesses in this category, including Nice, Magic Amah, HUCC, and CPC. They have successfully introduced 25% or more recycled material content into their packaging matrices, resulting in a reduction of more than 1,600 metric tons of virgin plastics. Through this mechanism, recycled materials are no longer confined as testing samples in a lab but have successfully transitioned into mainstream household products found in daily life.

II. **"Simple and Clean" bottles (149 million containers):** Thirteen beverage giants, including Vedan, Taisun, and HeySong, have aligned with the principles of "pure materials, original colors, and reduced labeling." By simplifying material compositions, the purity and quality of recycled plastics are greatly improved, effectively resolving the long-standing industry pain point of "low recycling efficiency caused by colored bottles" and facilitating the transformation of waste containers into high-quality recycled feedstock.

III. **Cap "Tethered to Bottle" (70 million containers):** The "tethered cap" (non-detachable cap) design was adopted by 6 leading enterprises, including Grape King, Taisun, and Pro-Partner, ensuring that bottle caps remain attached and re-enter the recycling chain along with the bottles. This intervention effectively eliminates the risk at the source of micro-plastic caps scattering into terrestrial and marine environments.

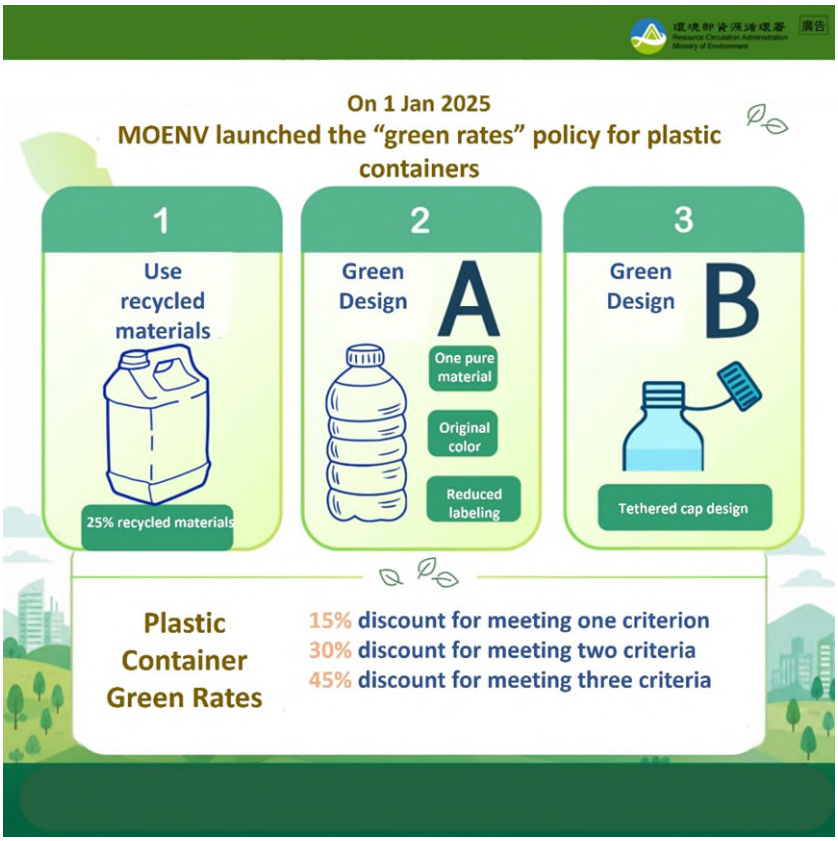
IV. **Dual-Category Excellence (10 million containers):** Taisun delivered the most outstanding performance by overcoming manufacturing and technical difficulties in the recycling process to meet the statutory specifications for both bottles and caps, successfully realizing an eco-friendly synergistic value of 1+1 > 2.

The RECA highlighted that for each single criterion met in their product design (incorporation of recycled materials, easily recyclable architectures, or tethered caps), a business is eligible for a 15% discount on baseline recycling fee rates, scaling up to a maximum cumulative discount of 45% for full compliance across all three pillars. Currently, Taisun has taken the lead in meeting two criteria simultaneously, qualifying for the Level 2 Green Fee Rate and a 30% financial incentive discount.

V. **The Demonstration Effect Deepens as Resource Circulation Standardizes Across Supply Chains**

The RECA pointed out that the green fee rates policy has yielded remarkable success in its first year. To build on this momentum and further expand the circular economy, the *"Key Points for Promoting Circular Products and Circular Services"* (循環產品及循環服務推動作業要點) were officially announced on 6 May 2026 to incentivize broader enterprise investment. In addition to supporting products made with recycled materials, future promotional priorities will target manufacturing pipelines that minimize natural resource depletion and utilize 100% fully recyclable materials. Looking ahead, the RECA will continue to integrate industrial supply chains and drive consumer market transformation, thereby systematically increasing the market penetration of product recycling and circular applications

to achieve the definitive goals of resource-use efficiency and source waste reduction.



Poster explaining the green rate policy for plastic containers

Poster showing results of the first year (2025) of implementation of the green rate policy for plastic containers

8. Ministry of Environment and Ocean Affairs Council Join Forces to Build a Monitoring and Control Defense Line Against Microplastics

Facing the global challenge of microplastic pollution, Minister Peng Chi-Ming of the Ministry of Environment (MOENV) and Minister Kuan Bi-Ling of the Ocean Affairs Council (OAC) held a joint press conference on 8 May 2026. They announced a cross-ministerial initiative to build a comprehensive monitoring and control defense line "From Land to Sea". By combining strategic pillars such as lifestyle transformation, advanced scientific monitoring, and targeted environmental remediation, the government is actively partnering with the private sector to reduce microplastics. Associate Professor Shiu Ruei-Feng, Professor Cheng Tsun-Jen, and Principal Huang Chien-Jung of Yue-Ming Elementary and Junior High School in Yilan were invited to share the fruitful results of this public-private partnership (PPP) and to call on the general public to mobilize for plastic reduction and marine conservation, thereby collectively safeguarding Taiwan.

The core paradigm of microplastic governance lies in lifestyle transformation and the integration of green product design. As early as 2017, MOENV enacted a ban on intentionally added microplastics in cosmetics and personal care products. Currently, the MOENV is actively advancing legislative amendments to the Two Acts of Resource Circulation to pivot from traditional "prohibitions and restrictions" toward "evaluating and optimizing a product's circular potential at its source." This involves promoting

robust reuse models to decrease the consumption of single-use products and eliminate the intentional introduction of plastic particulates. Regarding environmental detection frameworks, the National Environmental Research Institute (NERI) under the MOENV has established cutting-edge analytical methodologies in recent years. According to 2025 m (with only 8 sites testing positive), with concentration values spanning strictly from 0 to 4 particles/liter. This baseline performance is significantly cleaner than the global metrics published by the international non-profit Orb Media, which cited an 83% detection rate and a concentration scale of 0 to 57 particles/liter.

Marine environments are one of the final environmental receptors of microplastics. Taiwan is bringing several ministries together to promote the *"Salute to the Ocean - Coastal Cleanup and Maintenance Plan."* (陸海聯手環保實績與數據矩陣) According to MOENV statistics for 2020 to 2025, a total of 8,442 beach clean-up operations were completed and approximately 362,000 metric tons of waste were cleaned up, decreasing plastic waste on beaches by about 50.8% in 2025 compared to 2019. The OAC stated that in 2025, 3,641 metric tons of marine debris were cleaned and removed in campaigns such as the Clean Ocean Alliance and Clean Ocean Actions, for which the OAC also actively recruited private forces to assist in cleaning up. From 2020 to the end of 2025, an environmental protection fleet totaling 6,665 vessels was recruited to collect marine debris, and 6,089 divers were recruited to remove underwater debris.

The OAC established a systematic monitoring architecture in 2020 spanning seawater and bioindicators at the estuaries of Taiwan's major rivers, strategically intercepting pollutants before they disseminate into open marine ecological networks. Furthermore, to synchronize with global scientific standards, Taiwan's authenticated marine microplastic data is regularly uploaded to the "Atlas of Ocean Microplastics (AOMI)" global open database, an international repository commissioned by the Ministry of the Environment of Japan. Concurrently, the OAC actively promotes the circular upcycling of marine debris into high-value resources. By founding the Marine Debris Recycling Coalition—which seamlessly connects commercial recyclers, brand manufacturers, and research institutions, Taiwan has successfully developed and commercialized 66 distinct commercial products manufactured from recycled marine waste.

Looking ahead, the MOENV and the OAC will intensify their collaboration to co-develop analytical testing technologies, build comprehensive environmental baselines, harness multi-sectoral resources to maintain terrestrial and marine cleanliness, and foster localized environmental stewardship within the next generation. Complementing these efforts, the National Health Research Institutes (NHRI) and the National Science and Technology Council (NSTC) have dedicated resources to conduct comprehensive human exposure risk assessments regarding microplastics. Meanwhile, MOENV is actively evaluating preventative policies surrounding circular packaging design, drinking water contaminants of emerging concern (CECs), and microplastic emissions derived from vehicular tire wear. Through these progressive, multi-dimensional strategies, Taiwan continues to optimize its frameworks to protect public health and its ecological environments.

MOENV Minister Peng (4th from right) and OAC Minister Kuan (4th from left) and other officials at the press conference.

9. Resource Circulation Administration of the Ministry of Environment and Taoyuan Inter-national Airport Corporation Sign MOU on *"Promoting Plastic Resource Circulation"*

On 15 May 2026, the Resource Circulation Administration (RECA) of the Ministry of Environment (MOENV) and Taoyuan International Airport Corporation (TIAC) officially signed a Memorandum of Understanding (MOU) on *"Promoting Plastic Resource Circulation"* in response to the global trend of reducing plastic and implementing the transformation into a re-source-circulating society. The ceremony was witnessed by Deputy Minister Shen Chih-Hsiu of the MOENV and Secretary-General Shen Hui-Hung of the Ministry of Transportation and Communications (MOTC). The MOU was signed by Director-General Lai Ying-Ying of the RECA and General Manager Fan Hsiao-Lun of TIAC. Professor Chang Tien-Chin, Chair Professor of the Department of Environmental Engineering at Chung Yuan Christian University, and representative entities of the Airport Service Alliance were also invited to participate in the landmark event. It is hoped that this collaboration will deeply integrate the concepts of plastic reduction and resource recycling into TIAC's daily management and operations, demonstrating the determination and concrete actions of cross-ministerial, cross-agency, and multi-sectoral cooperation to promote the transformation to resource recycling, thereby creating a pioneering green model for sustainable aviation hubs.

I. Deepening the Plastic Resource Circulation Initiative Through Three Core Strategic Pillars

Taoyuan International Airport serves as Taiwan's premier aviation gateway. Passenger traffic has rebounded rapidly in the wake of the COVID pandemic, reaching 47.8 million passengers in 2025. Coupled with the large volume of shift-service

and operational staff on duty daily, the airport constitutes a highly intensive and continuously operating ecosystem for both living and working. Regarding environmental achievements, TIAC was awarded Level 4 Airport Carbon Accreditation (ACA) by Airports Council International (ACI) in 2025, marking it as the first airport in Taiwan to attain this milestone. The airport continues to advance proactively toward Level 5 certification, establishing a robust demonstration foundation for low-carbon transformation and circular management.

Secretary-General Shen Hui-Hung of the MOTC remarked that Taoyuan Airport is not only an important gateway for passengers traveling to and from Taiwan, but also a place where many workers spend their daily life and provide services. The promotion of plastic reduction at the source, enhanced recycling, and sustainable management at this location will yield substantial and highly visible results, projecting a clear narrative of Taiwan's sustainability milestones to international travelers. Secretary-General Shen pointed out that resource circulation is not just a policy slogan, but a tangible manifestation of a mindful culture and sustainable lifestyle. The initiative aims to reduce single-use waste, optimize sorting processes, alleviate the operational burdens on frontline staff, and encourage travelers, employees, and airport stakeholders to participate in environmental efforts, thereby driving a comprehensive sustainability transition at the nation's prime gateway.

The RECA and TIAC reached a consensus after several rounds of technical discussions, structuring their framework around three major pillars for plastic materials: "source reduction," "enhanced recycling," and "circular reuse," while emphasizing "immediate execution and active employee engagement" to roll out concrete measures. For " source reduction", Taoyuan Airport will initiate actions by reducing single-use disposable tableware across food courts under its jurisdiction, encouraging employees to bring their own reusable utensils for takeout, and adopting circular, reusable lunch boxes for institutional catering and conferences. For " enhanced recycling," the backend waste-sorting workflows were optimized through rigorous on-site process inspections and comprehensive waste inventory audits. Existing plastic resource recycling categories were expanded to capture a wider array of polymer types, such as High-Density Polyethylene (HDPE) milk bottles and detergent containers. Official statistics from January and February of 2026 indicate that the volume of collected recyclable plastics has increased significantly by 126% compared to the corresponding period last year. For " circular reuse", the RECA will serve as an expert consultancy and matchmaking intermediary, providing TIAC with standardized reference guidelines for airport resource circulation, assisting in linking with validated downstream upcycling networks, and providing follow-up technical counseling to participating stakeholders. Moving forward, the Airport Service Alliance will leverage its network to systematically disseminate re-source-recovery methodologies and circular engineering experiences across the airport environment, optimizing the collective benefit of airport resource circulation and institutionalizing a long-term collaborative mechanism between the RECA and TIAC.

II. Sharing Taiwan's Circular Prowess Globally: Green Living Exemplified at the Nation's Gateway.

Deputy Minister Shen Chih-Hsiu of the MOENV pointed out that Taiwan has established a globally acclaimed, comprehensive recycling framework through the closely-knit synergy of consumers, local municipal cleaning fleets, commercial recycling processors, advanced reprocessing technologies, and a robust trust fund mechanism since the launch of the "Four-in-One Recycling Program" in 1997. This legacy holds significant value for international knowledge transfer. As Taiwan's primary international gateway, TIAC can leverage the institutional capacity of the Airport Service Alliance and its workforce of approximately 38,000 employees to firmly embed resource recycling, plastic reduction, and circular reuse into daily airport operations. This will not only allow domestic and international travelers to experience Taiwan's green lifestyle first-hand but also expand its macro demonstration effects. Looking ahead, by compounding plastic resource circulation frameworks onto the existing ACI ACA Level 4 foundation, Taiwan is poised to sculpt a flagship "Green Airport" paradigm capable of replication across other transportation and transit sectors.

III. Aligning Shared Visions for a Net-Zero Circular Future

MOENV has been deeply committed in recent years to formulating tailored plastic reduction frameworks calibrated to the operational profiles of diverse public venues. As Taiwan's preeminent international gateway, Taoyuan Airport carries massive passenger volume and profound spatial influence, serving as a critical demonstration crucible for promoting resource circulation and low-carbon industrial transformation. The signing of this MOU ensures that the tripartite strategies of "source reduction, enhanced recycling, and circular reuse" are deeply institutionalized into daily airport infrastructure activities. This will not only strengthen carbon emission management across the supply chain, particularly within Scope 3 parameters, but also demonstrate to the international community Taiwan's steadfast determination to implement resource circulation—from domestic daily lives to large-scale public transit nodes—as we march together toward the goal of net-zero emissions.

Director-General Lai Ying-Ying of the RECA stated that she envisions Taoyuan Airport as the primary catalyst, where cross-departmental cooperation and resource integration will systematically accelerate sustainable consumption and circular initiatives. By deepening the active participation of both airport personnel and international passengers, this partnership aims to crystallize an iconic "Green Airport" identity. Every traveler crossing this border will witness Taiwan’s absolute resolve in spearheading a green transformation, positioning TIAC as a national benchmark for resource circulation that will progressively scale to other national transit and logistical hubs in the future.

Officials from the MOENV, MOTC, RECA and Taoyuan Airport

Director General Lai Ying-Ying of the RECA and General Manager Fan Hsiao-Lun of Taoyuan Airport signing the MOU

The signing ceremony for the MOU on Promoting Plastic Resource Circulation

Executive Secretary Shen Hui-hung of the MOTC speaking after witnessing the MOU signing

Deputy Minister Chih-Hsiu Shen of the MOENV speaking after witnessing the MOU signing

10. Technology-Driven Enforcement and Cross-Border Alliance: EMA Convenes *"Northern Taiwan Prosecutors, Police, and Environmental Authority Conference"* to Deploy Smart Fencing Against Thousands of Tons of Illegally Buried Waste

Determined to uphold environmental justice and stringently penalize Eco flouting violations, the Northern Center of Environmental Management under the Environmental Management Administration (EMA), Ministry of Environment (MOENV), convened the *"2026 Northern Taiwan Prosecutor-Police-Environmental Authority Strategic Enforcement Conference"* on 27 May 2026 at the MOENV's Rear Building Conference Center. The meeting reflected the expanded scale of regional joint defense, bringing together core protection forces from the prosecutors' offices and environmental protection agencies of the nine local governments in northern Taiwan, the Seventh Special Police Corps of the National Police Agency under the Ministry of the Interior, and the Environmental Management Administration. The departments in attendance held in-depth conversations on emerging forms of environmental crimes and how to fight such crimes with technology for stronger deterrence, cross-departmental information sharing and a more comprehensive defense line for protecting the homeland.

I. **Presenting key evidence:** Revealing "how chemical plants illegally dumped thousands of tons of waste"

A major highlight of this conference featured a keynote presentation by Prosecutor Lai Ying-Yu of the Taiwan Taoyuan District Prosecutors Office. She elucidated

a shocking judicial case that has sent shockwaves through the industry, entitled: "Unveiling a Long-Buried Secret of a Chemical Company: The Case of Illegally Burying Thousands of Tons of Industrial Waste Within a Factory's Raft Foundation."

During the meeting, Prosecutor Lai provided an in-depth analysis of the latest trends in environmental crimes and how they are becoming more organized and covert. She detailed how her office, through collaborative efforts among the environmental, prosecutorial, and police departments, using front-end big data investigations, detailed evidence collection and judicial warrants, successfully uncovered the egregious act of a chemical company hiding thousands of metric tons of waste deep within its factory. This case not only demonstrated the meticulous investigative strategies employed by law enforcement agencies but also highlights the crucial importance of cross-departmental intelligence sharing in combating environmental crimes.

II. **Technological defense upgrade:** First “intelligent fence against illegal dumping” in Taiwan

Smart technology has become a powerful tool for protecting the environment in response to increasingly sophisticated methods of circumventing the law. The Environmental Management Administration shared at the meeting its nationwide "Smart Fence for Illegal Dumping" system, which is being developed and under active construction. The core advantages of this technological defense include:

i. Precise early warning for waste disposal: Sharing the application of smart fencing in illegal waste dumping cases, providing the most forward-looking early warning prompts for waste disposal cases to law enforcement officers from the procurators, police and environmental protection departments.

ii. Nationwide dynamics monitoring: The Environmental Management Administration plans to build a nationwide system network to expand the coverage of technological monitoring in high-risk areas.

iii. Building cross-departmental collaboration: effectively build and enhance collaboration among environmental inspectors and police for practical implementation through the advancement of innovative law enforcement tools and technology.

III. **Declaring and upholding environmental justice:** Building a sustainable Taiwan where people "dare not, cannot, and do not want to" engage in environmental violations

Deputy Minister Chih-Hsiu Shen of the MOENV, concurrently serving as the Acting Director-General of the EMA, emphasized at the meeting that environmental crimes not only devastate the environment, but can also cause irreversible harm to national security and public health. The government has zero tolerance for illegal acts, and prospective criminals should not take chances.

The "Prosecutor-Police-Environmental Authority Joint Platform" will continue to be

deepened, combining big data analysis and digital forensics technology to give environmental crimes nowhere to hide. The government will continue to build a detailed environmental protection system that ensures that people "dare not, cannot, and do not want to commit crimes" through strict law enforcement and legal education, and will resolutely uphold national laws intended to leave a clean and green environment for future generations.

Attendees of the 2026 Northern Taiwan Prosecutors, Police and Environmental Protection Business Exchange Meeting

Deputy Minister Chih-Hsiu Shen of the MOENV (center) heads a panel

The 2026 Northern Taiwan Prosecutors, Police and Environmental Protection Business Exchange Meeting in progress

Environmental Management Administration officials make a presentation on the smart fence system against illegal dumping

11. Talent Recruitment Online: *"Green Collar Information Platform"* Receives $630,000$ Pageviews in First Year

The *"Green Collar Talent Information Platform"*, engineered by the National Envi-

ronmental Research Institute (NERI) specifically tailored for job seekers and corporate professionals, redefines traditional government websites by shifting away from rigid regulatory pronouncements to prioritize intuitive user experience (UX). It has transformed into a vital digital portal that seamlessly integrates "career navigation, course anti-fraud verification, and instant official certificate downloads." The platform has sparked a green-collar trend in just one year since its launch and accumulated nearly 630,000 pageviews from more than 100,000 visitors, showing that it has become a must-visit website for people looking for green careers.

Dr. Shuen-Chin Chang, President of NERI, pointed out that big data analytics from the platform reveal that this wave of "green-collar fever" has transcended geographical boundaries, flourishing dynamically across all sectors of Taiwan. In terms of web-browsing preferences, users' click patterns are highly concentrated on practical application portals. The top three most visited pages were: "Net Zero Green Collar Talent Training Courses and Value-Added Courses", "Ministerial Courses for Green Collar Training", and "Certification and Examination Information", suggesting that users are seeking career transformation rather than just browsing.

The platform interface has been specially optimized for mobile devices so as to cater to the fragmented learning habits of people today. Statistics show that, among the 170,000 clicks, as many as 54% of users chose to browse on mobile phones, followed by 45% on desktops and 1% on tablets, allowing people such as office workers to stay informed of the latest carbon reduction business opportunities anytime, anywhere, whether commuting or taking a lunch break.

The platform's most popular feature is undoubtedly the seamless integration of "Official Qualification Credential Verification and Download" system. The public may register for the "Cultivation Alliance" or formal courses offered by 37 colleges and universities across Taiwan through the platform at https://ulvis.net/iTs8. After completing the training and passing the NERA’s exclusive test, trainees may download the official qualification certificate issued by the MOENV online. This nationally approved certificate becomes a powerful asset for job seekers who wish to demonstrate their qualifications to prospective employers.

In its first year, the *"Green Collar Talent Information Platform"* received nearly 630,000 page views from over 100,000 visitors.