



Major Environmental Policies

August 2024

1. Green Point Program Celebrates One Millionth Member, Additional Prizes Offered

“Every point you collect is something you do for the Earth!” On 23 July 2024, the Ministry of Environment (MOENV) held a press conference to announce **“A New Milestone – One Million Green Point Members”**. In addition to awarding a million Green Points to the **“one millionth registered member”**, the MOENV announced the beginning of the **“Celebrating the One Millionth Member”** festival. Several Green Point distributors matched the effort with premium discounts to show their gratitude to members who have been adopting environment-friendly practices.

The MOENV pointed out that the one millionth member just joined Team Taiwan, which practices net-zero green life through green consumption and public transportation. Thanks go to the joint efforts of the public, distributors, green service providers and government departments involved. On average there has been one member registered every four minutes, and a green product sold every seven seconds.

The MOENV's statistics indicate that 70% of the one million registered members are still using the Green Point app, and 50% remain active members. In terms of participation, 66.9% of Green Points are awarded for using public transportation, while green consumption and environmental actions account for nearly 40% each. Among the active members, 12% purchase green products every month, and most of these members are in Hsinchu City and New Taipei City. In the previous year, 33.7% of members have taken environmental actions, with most of these members in Kaohsiung City and Penghu County. Most active members who take public transportation to collect Green Points are in Taipei City and New Taipei City. This shows that Green Point collection has become a part of daily life for many people, as they start a new net-zero green life buying green products, taking public transportation, and participating in charity events for environmental protection.

Dr. Peng Chi-Ming, Minister of Environment, referred to the story of making "stone soup", in which everyone contributes a little to jointly make progress from scratch. “I believe this pot of stone soup will be delicious as long as it goes in the right direction and everybody plays a part in it.” He believed that it would not be difficult to work together for a net-zero green life, thanks to the government's investment of resources and now with over a million members signed up.

Minister Peng said that he often opens the Green Point app to check his account. The continuous accumulation of a few green points collected every time he took public transportation has produced results. The MOENV's statistics show that Green Points have incentivized an increase of economic benefits by a factor of 18.1 times for members and point distributors.

Minister Peng said that the MOENV will continue to encourage more companies to partner with the MOENV through distributing Green Points, to accelerate progress together. Currently, most members are females aged 31-50 and males 41-50. The MOENV will continue promoting the Green Point system to young people, hoping they will adopt more net-zero green practices under the Green Point incentive program to build a new way of life together.

Among Green Point distributors, the retailer Leezen has been selling organic fruits and vegetables

for 26 years, now offering about 800 organic and environment-friendly products."The meals you eat are the most direct opportunity to practice environmental protection." A discussion with the MOENV about how green points is collected from buying organic fruits and vegetables led to Leezen joining the Green Point collection system at the end of 2023. Leezen's own members enthusiastically embraced becoming Green Point members, and the coupons provided by Leezen have become popular to collect for credit redemption.

"Net-zero green life includes you and me." Thirteen distributors -- RT-Mart, Aimai, E-Life Mall, Tsann Kuen, Hi-Life, FamilyMart, 7-ELEVEN, Simple Mart, Leezen, ET Mall, EP-Life, PChome and Super Point -- that are part of the Green Point collection system were present to celebrate the one millionth Green Point member registration. E-Life Mall, Tsann Kuen, 7-ELEVEN, FamilyMart, Hi-Life, Leezen, Simple Mart and Aimai rolled out a number of discount packages, encouraging shoppers to choose green products bearing environmental protection labels and carbon footprint labels.

The MOENV also announced that new and old members may take advantage of the "Celebrating One Millionth Member" event from 23 July to 31 August. There will be opportunities to win an Apple Watch SE (GPS) 44mm, green sustainable trips, bonus Green Point awards and many more, by collecting Green Points, registering accounts with distributors and taking specified actions. The MOENV explained that all Green Points are accumulated automatically once the simple step of setting up an account is done. All are welcome to become a member, be informed of Green Point discounts, choose green products, and live a net-zero green life.

The MOENV expressed that Green Point collection will continue to expand green shopping services for Green Points and incentivize more environment-friendly actions to guide the public towards living a net-zero green life. One simple action, however small, can make a big difference in the world if multiplied. The MOENV also sincerely invites more people to join in Green Point collection, act to protect the environment and contribute to a good future for the Earth. Everyone is welcome to download the Green Points APP and become a member, to "Go with the green points and live a net-zero life!"



Minister of Environment, Dr. Peng Chi-Ming awarded one million Green Points to Mr. Peng, the 1 millionth registered Green Point member.



Minister Peng and Green Point collection partners

2. Textile Circulation Alliance Established to Weave a Sustainable Future

To promote the circulation of textile resources and stay in line with international trends, the Resource Circulation Administration of the Ministry of Environment (MOENV) established the

"Textile Circulation Alliance" and held its founding conference on 16 July 2024. The "Sustainable Fashion Mark" was issued to alliance members who comply with the "Textile Circulation Guidelines for the Franchise Apparel Industry and Department Store Retailing Industry" for consumers to identify.

There are currently 66 members in the Textile Circulation Alliance, comprising those in the up-, mid- and downstream textile circulation industry chain such as raw material producers, brand manufacturers, department stores, the material circulation processing industry, and industrial, governmental, academic and research sectors. Alliance members are moving toward green design, circular procurement, sustainable consumption, smart sorting, recovered fiber certification, and industrial innovation through communications, mutual matchmaking, and strategies such as integrating the latest research on textile circulation at home and abroad, to improve the development of Taiwan's textile circular economy model.

Dr. Chih-Hsiu Shen, Deputy Minister of Environment, pointed out that the textile industry is a major industry worldwide, producing 4% of global greenhouse gas (GHG) emissions. In recent years, the fast fashion trend has increased the frequency of people replacing old clothes with new ones, generating a large amount of post-consumption waste. The international community is working to improve circulation of materials from the fashion industry. For example, the EU's "2030 Strategy for Sustainable and Circular Textiles" requires industry players to achieve "textile to textile" (T to T) from design to recycling, and regulates the use of digital passports for information disclosure.

Textiles are included in the eight strategies for "resource circulation with zero waste" as a key action item for Taiwan's 2050 net-zero carbon emission path. The Resource Circulation Administration is working hard to promote textile circulation in order to reach the 80% circulation rate target, and assisted with establishing the Textile Circulation Alliance, to take inventory based on the textile life cycle of companies throughout the up-, mid- and downstream of Taiwan's textile manufacturing industry, including brand labels, department stores and recycling industries. After studying consumer behavior, policies such as circular procurement guidelines and public and private sector procurement regulations have also been put forward one after another to guide the actions of industry players.

In addition, in order to guide the concept of environment-friendly design and cultivate talent, and stay up to date on the latest environmental regulations and policies, academic, research and government units were invited by the Textile Circulation Alliance to the event [SPECIFY: WHICH EVENT AGAIN?] and to establish an industry-government-university-research communication platform. The alliance has six goals in mind: promoting green textile designs, circular textile procurement, encouraging innovation in the textile industry, promoting sustainable consumption behavior, establishing a verification mechanism for recovered fibers, and providing guidance on the establishment of smart sorting facilities. All members will work together to promote work related to textile circulation.

Members were invited to the signing ceremony to launch the establishment of the Textile Circulation Alliance. , and Members who joined the Sustainable Fashion Alliance were presented the "Sustainable Fashion Mark" in accordance with the "Textile Circulation Guidelines for the Franchise Apparel Industry and Department Store Retailing Industry Textile Circulation Guidelines for the Franchise Apparel Industry and Department Store Retailing Industry" in recognition of the efforts of brand names and department stores in textile circulation. Benchmark companies were invited to share their insights on the future trends and challenges of a circular economy for textiles, as well as

share practical experience in sustainable textile circulation.

Dr. Lai Yingying, Director General of the Resource Circulation Administration, pointed out that this alliance connects the entire "textile ecosystem" from raw material production, brands, department stores to circulation industries. The alliance will provide a communication platform through regular meetings or workshops, communicate and interact with all parts of society, continue to listen to what people have to say about the promotion of textile circulation, shape the textile circulation supply chain network, establish an important communication channel between enterprises and governments, work together to promote textile circulation, and produce social media posts, videos or electronic publications to present the achievements of alliance members.

Dr. Lai pointed out that some of the fastest ways to achieve textile circulation are functional clothing made of a single material which are designed to be easily disassembled for more uniform procurement of recovered materials. Services like circular procurement, renting instead of buying, and exchange are other textile circulation issues. In the future, not only the textile industry will continue to call for the support and response of more industrial, governmental, academic and research units, but similar alliances will also form in the food, electronics and circulation processing industries to enhance Taiwan's industrial competitiveness in the international market on the basis of sustainable resource use.



Vice Deputy Minister Shen (6th from left), Director General Lai (7th from left) and members of the Sustainable Fashion Alliance

3. MOENV and Fo Guang Shan Buddha Museum Unveil Environmental Educational Facility and Permanent Exhibition

To promote the concept of net-zero green life and environmental education, on 19 July 2024 the Ministry of Environment (MOENV) held the unveiling ceremony of the Front Hall of Fo Guang Shan Buddha Museum as an environmental education facility and the opening ceremony of the permanent exhibition, "Environmental Protection Miracles in the Dusts of Life". Speakers at the

ceremony invited the public to live a net-zero green life together and do one's part for the planet through simple changes in daily habits.

As part of its hard work promoting net-zero green living in daily life the Ministry of Environment (MOENV) cooperated with the Buddhist organization Fo Guang Shan to install the permanent exhibition of "A Green New Era - Environmental Protection Miracles in the Dusts of Life" on the second floor of the Front Hall of Fo Guang Shan Buddha Museum in Kaohsiung. The exhibition will be ongoing until 30 November 2025. The exhibits display six aspects of life, "Zero-waste low-carbon diet (food)", "Environment-friendly green fashion (clothing)", "Healthy and energy-efficient green buildings (housing)", "Low-carbon transportation network (travel)", "Sustainable sightseeing and leisurely travel (recreation)" and "services instead of purchases (purchasing)", to lead the public to environment-friendly daily practices. The changes in one person's daily actions may seem insignificant, but the environment will have a chance to change for the better if everyone does a little more.

In addition, the Fo Guang Shan Buddha Museum was certified by the MOENV as an environmental education facility on 23 April 2024. On 19 July 2024, Minister of Environment Dr. Peng Chi-Ming, abbot of Fo Guang Shan Master Xin Bao, and Kaohsiung City Mayor Chen Chi-Mai together unveiled the museum as an environmental education facility. The site has rich natural ecological resources and a Buddhist botanical garden. It follows the concept of the founder of Fo Guang Shan, Master Hsing Yun, of "environmental protection and heart protection" , , combining the Buddhist idea of compassionate care and environmental protection with environmental protection behaviors. The museum helps the public understand the relationship between the natural environment and human activities, thereby encouraging low-carbon and environment-friendly behaviors and habits in daily life.

Minister Peng said that it is better to start a net-zero green life from an early age. Every child is a future minister of environment. He hoped that the exhibition and environmental education activities motivate people to follow the concepts of net-zero green life in their daily lives. All are invited to join the ranks of net-zero green living, leaving a beautiful pure land for the next generation, and working together for the goal of Taiwan's 2050 net-zero emission.



The Ministry of Environment and Fo Guang Shan unveil the exhibition “Environmental Protection Miracles in the Dusts of Life”.



Dr. Peng, Minister of Environment (right), Master Hsinpao and Master Ru Chang share experiences of net-zero green living.

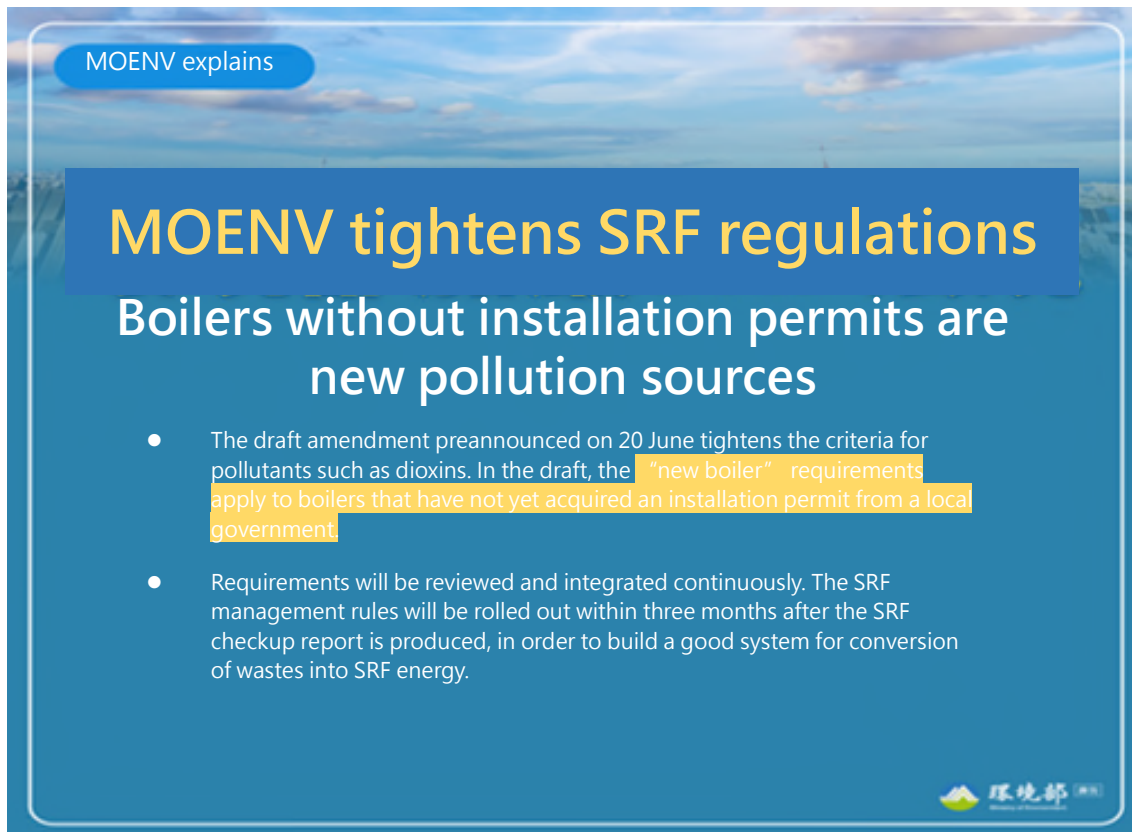
4. MOENV Tightens Fuel Regulations for Boilers Without Valid Installation Permit

The regulations applicable to the three power plants operating on solid recovered fuel (SRF) in Taoyuan City caused quite a stir recently. The Ministry of Environment (MOENV) stated that these power plants are stationary pollution sources subject to the *Air Pollution Control Act* (hereinafter referred to as the APCA) that require a permit to operate. The APCA specifies that the three SRF power plants need an installation permit from the Taoyuan City Government before establishing pollution sources. The MOENV pointed out that the "Emission Standards for Air Pollutants from Boilers" preannounced on 20 June 2024 were tightened in response to public concerns about emissions of dioxins and other pollutants. The "New Boiler" regulations apply to boilers that have not yet acquired an installation permit issued by the local government as required by law.

The MOENV explained that it is necessary for the competent environmental protection authorities to keep a track of how pollution sources operate and the characteristics of their pollution emissions. Article 24 of the APCA specifies that public and private premises possessing stationary pollution sources shall apply for permits for installation, operation and fuel use prior to installation or modification, and the facilities shall not start operating as permitted until they are approved in a test run, functional test or other review procedure to confirm the fuel use complies with applicable criteria and air pollution controls are in place at the facilities, for the ultimate purpose of pollution prevention. In order to avoid confusion in terms of applicability, the MOENV will add the purposes of the APCA to the applicable objects of the draft "Emission Standards for Air Pollutants from Boilers", making it clear that boilers that have not obtained an installation permit shall be identified as newly installed boilers.

In addition, combustible general industrial wastes in Taiwan go through screening, crushing and mixing to be turned into SRF based on development trends in advanced jurisdictions such as European countries and Japan, to be used as boiler fuel and reducing CO₂ emissions. Regarding past concerns about management and matters, on 22 March 2024 the MOENV amended the "Technical Guidelines and Quality Specifications for the Manufacturing of Solid Recovered Fuels" (固體再生燃料製造技術指引與品質規範) strengthening the review system and management regulations. The "SRF Operation Checkup Consultation Group" was also established to diagnose problems and provide suggestions for improvements via factory visits, inspections and counseling. The checkup report will be ready in September 2024.

The MOENV will continue to review and integrate relevant regulations, propose SRF management measures within three months after the completion of the checkup report, and discuss better management through the use of digital tools. Subsequently, the MOENV will examine the dynamics and benefits of SRF operations, and expect to produce a white paper on SRF before the end of 2024. In the medium and long term, the MOENV will help the industry develop an alliance of its own, establish comprehensive self-regulatory mechanisms from manufacturing to use, build a good environment for conversion of wastes into SRF energy sources, reduce public concerns and maintain environmental quality.



MOENV tightens SRF regulations

5. MOENV Preannounces Draft Amendment to “Regulations of Fine Determination under Water Pollution Control Act”

To clarify the amount of fines for violations of the *Water Pollution Control Act*, on 3 July 2024 the Ministry of Environment (MOENV) preannounced amendments to “Regulations of Fine Determination for Water Pollution Control Act” Keys to the amendment include ___ the violation patterns and calculation criteria for pollution caused by inappropriate collection and treatment of wastewater at camping sites, increased fines for discharge of wastewater (sewage) at specified distances from water bodies, or coasts by food industry operators and other processes that do not meet the regulatory scale of enterprises covered by the Act, bypass discharge and first-time serious violations within three years to which reducing fines are not be applicable, and clarification on penalties for polluting water bodies due to omissions and inadequate contingency measures.

The MOENV further explained the four key points in the amendment to the Regulations. First, the failure to properly collect and treat wastewater generated by camping sites is listed as a polluting act in response to the "prohibition of acts that cause water pollution" announced last year, which took effect on 1 March 2024. Therefore, the violation patterns and fine calculation criteria have been added. Secondly, it has been heard of discharge of high-concentration wastewater from food manufacturing, fermentation, and slaughtering processes that have not reached the scale of the notified stipulated control level for enterprises, and the penalty calculation points and the violation penalty base have been increased to deter illegal activities.

Furthermore, the amendment excludes the circumstances of reducing fines, because violations such as bypassing discharges are inconsistent with the legislative intent of reducing fines. The reduced fines are not applicable to a violation that is serious or punishable by suspension of work for not having a permit document and that is the first within 3 years. Finally, water body pollution caused by negligence of factory operators are often fined for an amount based on "failure to take emergency response measures in accordance with regulations." However, the "failure to take emergency response measures in accordance with regulations" can be either "failure to take emergency response measures" or "Insufficient emergency response measures taken". The culpability is different between both cases and, therefore, the penalties should be different.

The MOENV stressed that this amendment incorporates the practical needs of law enforcement within the scope of fines authorized by the current Water Pollution Control Act. The determination of fines is specified as the basis for the MOENV and local environmental protection bureaus to determine fines and improve the efficiency of law enforcement and administration. The information related to the release of this amendment is provided in the attached file, which is available for download at the Executive Yuan Gazette Online at <http://gazette.nat.gov.tw/egFront/> three days after the release date.

6. Ministries of Environment, Labor, and Health and Welfare Hold Seminar on Adaptation to Extreme Temperatures

Public concern is rising about extreme temperatures and other impacts due to climate change, making climate adaptation a priority topic. The Ministry of Environment (MOENV) invited the Ministry of Health and Welfare and the Ministry of Labor to jointly hold the "Seminar on Countermeasures for High Temperatures due to Climate Change" on 31 July 2024 in Taipei City. Experts, scholars and relevant agencies were invited to discuss topics such as high temperature warnings, urban cooling, and adaptations to safeguard human health. Dr. Peng Chi-Ming, Minister of Environment, participated in the entire seminar. The comments of all participating experts were included in the discussion of adaptation plans, with improvements and solutions expected to be proposed next year.

Minister Peng stressed that average annual temperatures worldwide are likely to rise by 0.5°C to 2°C compared to today, based on the current global warming trend and progress in carbon reduction. Now, the MOENV, Ministry of Health and Welfare, and Ministry of Labor have taken the lead on measures to protect people from extreme temperatures. More ministries and agencies are expected to join the effort to create a resilient homeland that integrates "disaster prevention, adaptation, and net-zero living".

Minister Peng said that extreme heat is the most important indicator when dealing with climate change. Adaptation and response strategies will require modifications over time. In the future, more ministries and agencies will be included in building a sound system to protect domestic security and all walks of life including residents and workers. Dr. Jih-Haw Chou, Deputy Minister of Health and Welfare, said that besides causing discomfort, extreme heat can be adverse to human health in many ways, such as worsening cardiovascular and heart disease, kidney problems, diabetes, and even psychological disorders. The Ministry of Health and Welfare will endeavour to educate the public on how to effectively face heat exhaustion and avoid heat-related health problems. The Ministry of Labor's Director-General, Dr. Tzou Tzu-Lien, noted that many workers at private companies and

government-operated businesses have considered taking leave due to high temperatures. The Ministry of Labor is currently looking at international research on the topic, examining preventive and risk-reduction measures, and formulating amendments to occupational safety and health facility regulations. In particular, businesses have been asked to provide more shading when temperatures reach the highest danger level, and rest areas to protect workers and citizens from heat-related problems.

The United Nations World Meteorological Organization (WMO) pointed out that June 2024 was the hottest June on record, with monthly climate records set for 13 consecutive months. The "National Scientific Report on Climate Change 2024" published by the MOENV and the National Science and Technology Council on 8 May also pointed out that there will be seven months of summer in Taiwan and temperatures will be as high as 36°C for up to 75 days if greenhouse gas emissions cannot be effectively controlled to curb global warming. Extreme heat increases the urban heat island effect and exacerbates heat-related health conditions. It may even increase the risk of fatal respiratory and cardiovascular episodes, and directly or indirectly cause adverse psychological conditions.

The seminar topics discussed covered two major issues: extreme heat warnings and urban cooling, and; adaptation to maintain health.

On the topic of extreme heat warnings and urban cooling, Chief Hong Ching-Shan of the Central Weather Administration, under the Ministry of Transportation and Communications, said that scientific evidence shows global warming is bringing higher temperatures. He explained the threats posed by extreme heat and the need to prepare and make adaptations based on long-term climate trends. Dr. Lin Tzu-ping, Distinguished Professor at the Department of Architecture of National Cheng Kung University, shared his insights on how to assist the government to: develop urban cooling strategies and management strategies based on climate change research; use information systems to identify gaps in adaptation measures and strategies, and; establish public-private collaborations for social justice as temperatures rise, or "climate justice". Commissioner Wang Yu-fen, of the Taipei City Government's Department of Urban Development, shared Taipei City's experience in promoting urban cooling programs for climate justice.

On the topic of adaptation to maintain health as temperatures rise, Professor Chang-fu Wu from the College of Public Health of National Taiwan University shared his thoughts on how communities can plan for adaptation through climate change risk assessment. Deputy Director Lung Shih-Chun of the Research Center for Environmental Changes of Academia Sinica introduced high temperature adaptation strategies for health and the digital tools available to help. Finally Chief Chang Kuo-Ming of the Occupational Safety and Health Administration, Ministry of Labor, explained a few actions that can be taken at workplaces to guard against heat-related hazards.

The seminar was a joint effort across various fields and departments for the purpose of increasing understanding of feasible strategies and what the government has been doing to combat extreme heat. The MOENV stated that adaptation to extreme heat and climate change requires not only cooperation across central government ministries and departments, but also joint promotion with local governments. For the first time, local governments are required to propose local climate change adaptation and implementation plans by the end of October 2024. The comments of experts gathered in this seminar will be provided to local governments to help them develop adaptation strategies, tailored to local conditions, for facing extreme heat issues.



The “Seminar on Countermeasures for Adaptation to High Temperatures due to Climate Change” was hosted jointly by Minister of Environment Peng Chi-Ming, Deputy Minister of Health and Welfare Jih-Haw Chou, and Ministry of Labor Director-General Tzou Tzu-Lien.



Minister Peng with seminar speakers



The seminar venue and attendees

7. MOENV Holds 4th Carbon Fee Rate Review Committee Meeting

The MOENV held the fourth Carbon Fee Rate Review Committee meeting in the afternoon on 5 July 2024. The commission members engaged in discussion on the effects of CO₂ reduction and the impacts of different fee rate scenarios per the resolutions made in previous meetings. The participating members all believed unanimously that the carbon fees in different rate scenarios have insignificant impacts on the macroeconomy (with GDP as an example) and consumer price index (CPI). However, the members requested MOENV to assess in greater details impacts on individual industries, the results of which will be evaluated in the next meeting for a more comprehensive development of carbon fee rates.

The MOENV has come up with two carbon fee scenarios based on the preannounced draft of the *Regulations Governing Collection of Carbon Fees* (碳費收費辦法); a general one in which high risks of carbon leakage are not considered, and another one in which the same risks are considered for several industries. An assessment was conducted on the impacts on macroeconomy at the fee rate ranging from NT\$100 to 1,000/ton. The MOENV pointed out that the simulation proposed in the meeting was based on different fee rates and not finalized, only provided for reference. The participating members were encouraged to suggest more rates for further impact assessments. Under the general scenarios, impacts from the simulated fee rate range proposed this time (between NT\$100 to 1,000/ton) will fall between 0.04% and 0.4% on GDP and between 0.0269% and 0.2687% on CPI. Under the scenarios in which a 20% discount is provided for industries of high risks of carbon leakage, the impact is between 0.018% and 0.181% on GDP and between 0.0121% and 0.121% on CPI. Full discussions among the participating members concluded that the impacts on the macroeconomy is not significant. The next meeting will focus on impacts of different fee rate scenarios on individual industries.

In addition, the participating members suggested that the fee rates should be adjusted in stage in order to provide collection targets of carbon fees better reduction incentives and predictable reduction costs. Other suggestions include first setting mid- and long-term target rates (for 2030 for example) and then the initial fee rates and those for individual stages. As such, the members requested the MOENV to study similar practices in other countries and report the findings in the next meeting for review and Finally, regarding reduction results, the MOENV explained that Taiwan's carbon fee collection system specifies that a premium fee rate is applicable to collection targets provided that they reach reduction goals set by their proposed voluntary reduction plan. The purpose is to motivate industries to achieve substantial reductions via economic incentives and to ensure collection targets achieve reduction results estimated by the designated reduction goals. The draft *Designated Greenhouse Gas Reduction Goals for Entities Subject to Carbon Fees* (碳費徵收對象溫室氣體減量指定目標) specifies two reduction rates; one is industry-specific based on the science-based targets (SBT), and the other technical benchmark-specific. The MOENV's preliminary estimation indicates collection targets' total emissions lowered between 23% and 31% in the target year (2030) compared with those in 2022, assuming that all entities subject to carbon fee collection have proposed their own voluntary reduction plans and achieved the designated reduction goals. The Climate Change Administration (CCA) has established a section for the Carbon Fee Review Commission. Information concerning this meeting is available at the CCA's website at <https://gov.tw/dBw.discussion>.



The MOENV holds the fourth Carbon Fee Rate Commission meeting

8. Stage Play Premiered and on Tour as Environmental Education for Kids

The "Little Carbon Detector's Adventure" of IF'Kids Theater Studio premiered at Taipei Children's Amusement Park on 27 July 2024. The joyful and educational performance received laughter from parents and children in the audience. The MOENV stated that family-friendly stage plays are always a good tool of environmental education for children. Carefully selected scripts and actors' subtle performances easily help children understand environmental protection and cultivate

awareness. This tour started in Taipei and will continue on in nine counties including Tainan and Penghu. Seats are limited, so Those interested are encouraged to register for tickets quickly at the designated website.

The MOENV stated that the script of "Little Carbon Detector's Adventure" was adapted from three winning works in previous environmental education picture book competitions. They include " Little Carbon Detective of Ocean - Return to Good Times" by Penghu County, "Nini's Last Wish" by Hualien County and "Poco's Adventure" by Hsinchu County. Environmental protection topics such as climate change, emission reduction, cherishing energy, recycling and waste reduction were incorporated in the plays. Audience are able to follow the footsteps of the protagonists and enjoy the interesting story, and children can learn correct knowledge on environmental protection during the adventurous journey along the protagonists, thereby improving their environmental literacy.

Attending the premiere, the MOENV Minister Peng Chih-Min mentioned that environmental protection concerns everyone and that no one can stay out of it. Therefore, environmental education should start from an early age, and family-friendly stage plays are a good tool. Actors' rich body languages, stimulations from lighting and sound effects, and funny and interesting plots all draw children's attention and allow them to learn about seemingly complex environmental issues while they are relaxed and laughing. This plants the seeds of environmental protection in the mind of children, which in turn affects families, changes society, and improves the environment.

After the premiere, the tour will visit Tainan City, Penghu County, Hualien County, Yunlin County, Nantou County, Hsinchu County, Kaohsiung City, Changhua County, and Taichung City with one performance at each place. Tickets are available online by registration two to three weeks before the performance, and each person is limited to four tickets. For the performance schedules, locations and ticket registration, please visit: <https://reurl.cc/mMgRK9>.



The MOENV Minister Peng, Tsai Meng-Yu, Director General of Department of Environmental Protection, Director Chao Tzu Chiang of IFKids Theater Studio, and the cast



Minister Peng Director Chao Tzu Chiang of IFKids Theater Studio launch the premiere with the cast



Minister Peng and the audience have fun together

9. Regulations Announced for Trading, Auctions, and Transfers of Reduction Credits

The MOENV promulgated the *Regulations Governing Trading, Auctions, and Transfer of Greenhouse Gas Reduction Credits* (溫室氣體減量額度交易拍賣及移轉管理辦法) according to

Article 25 of the *Climate Change Response Act* (氣候變遷因應) so as to have more targets exposed to reduction incentives. Aiming to establish an open and transparent trading market in Taiwan for voluntary reduction, the promulgation encourages proactive reductions and has started a new page for carbon pricing in Taiwan.

The MOENV pointed out that the legislation aims toward open transparency in trading, auctions, cancellations after use of domestic reduction credits. Other purposes include allowing the public to easily review industries' specific reduction status, and avoiding speculations, operations involving other commercial interests, or trading disputes. The regulations specify requirements in various stages regarding reduction credits, such as holding, trading or auctions, completions of trading deals, cancellations after use. Effective on 15 August 2024, there are a total of 38 articles. Key points of the regulations are as follows:

(1) Government management against frauds

A trading platform will be set up by the MOENV-commissioned Taiwan Carbon Solution Exchange for enterprises to trade or auction reduction credits. Regular private entities are prohibited from providing platforms to conduct brokerage, consignment or trading of reduction credits. The centralized management of reduction credit trading market will help improve trading security and prevent enterprises from scams.

(2) Open transparency against green-washing

Credit units are expressed in tons of CO₂e. Each unit is coded to provide identification information such as types of credit, types of project and monitoring periods, ensuring the validity of credits during acquisitions, transfers after trading or auctions, and cancellations after use. Also, relevant trading and auction information are made public on the trading platform for public viewing and inquiries, thus effectively preventing green-washing. Such information include project names, reduction measures, quantity of reduction credits, credit codes and monitoring periods, trading prices, and the names of buyers and sellers.

(3) Diversity and flexibility

The regulations specify three trading methods, by fixed price, negotiations, and auctions. Enterprises can choose the most favorable trading method based on the nature of its reduction credits, sales strategies, and profits. However, preliminary projects are reduction measures before the *Climate Change Response Act* was promulgated. The resulting credits can only be traded by negotiation, but trading or auction is not available at the Taiwan Carbon Solution Exchange. The goal is to ensure Taiwan's actual reduction results.

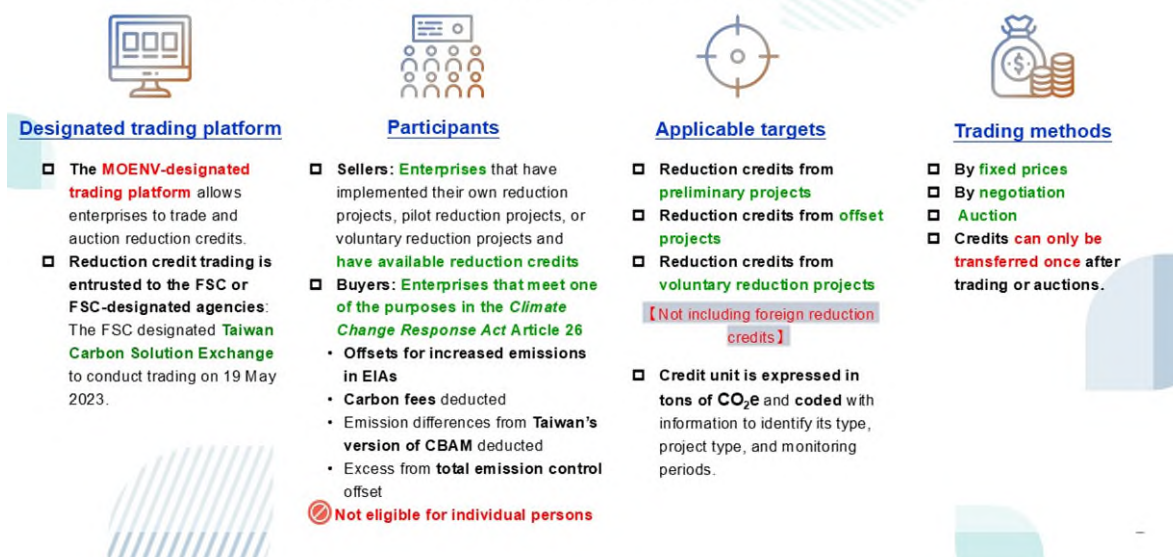
(4) Stability ensured for supply and demand

Sellers allowed for trading or auction are enterprises that have implemented their own offset projects, preliminary projects or voluntary reduction projects and have available reduction credits. Buyers are enterprises that meet one of the purposes specified in the *Climate Change Response Act* Article 26, such as carbon fee payments, offsets for increased emissions in EIAs, or any other MOENV-approved purposes, and individual persons are not eligible buyers. Furthermore, once traded or auctioned, reduction credits will be transferred by the MOENV and transferred once ONLY to ensure market stability.

The MOENV indicated that carbon fee collection, which has received lots of attention lately, is the key to carbon pricing, and promotion of voluntary reduction trading system is an important assisting

measure. The open and transparent trading market allows enterprises and governments to make their reduction credits available for others for carbon fee reductions, offsets and relevant environment statements. Establishment of the reduction credit trading market will help Taiwan implement the carbon pricing system and achieve the goal of net-zero transition.

Key Points of the Regulations Governing Trading, Auctions, and Transfers of Greenhouse Gas Reduction Credits



Key points of the Regulations Governing Trading, Auctions, and Transfers of Greenhouse Gas Reduction Credits

10. Forum Held to Discuss Digital Technology and Carbon Management in Supply Chain

Carbon footprint verification (CFV) is fundamental in carbon reduction, and the use of digital tools enables more efficient control of sources and emissions and review of reduction possibilities in response to climate changes. Therefore, the MOENV invited Professor Noboru Koshizuka of University of Tokyo to conduct a speech on application of digital technology on carbon management within the supply chain and relevant experiences. There were also discussions on the topic among experts from industry, governmental and academic sectors so as to provide new thinking for future carbon management within industries. More than 130 people participated in the event either in person or online.

The MOENV-held forum, Digital Technology and Climate Change: New Visions of Supply Chain Management started with Professor Noboru Koshizuka of University of Tokyo giving a speech on "Challenges of Green x Digital Initiative Using Emerging Technologies in Japan". Professor Koshizuka shared his experience and insights of Tokyo's net-zero emission strategies, green/digital initiatives, promotion of smart city, and establishment of data exchange platforms for verification of emissions under Scope 3. The MOENV Minister Peng Chih-Ming presided the following discussions together with Director General Leu Jang-Hwa of Administration for Digital Industries (ADI) of the Ministry of Digital Affairs (MODA); Director Fan Chien-Te of Taiwan Climate Institute; Grace Liu, CSO of Acer; Ku Hsiu-Hwa, CSO of AUO; and Deputy Director Deng Tung-Po of Open Data Alliance. The discussion centered on issues facing the Scope 3 CFV industry and possible applications of digital tools.

Minister Peng mentioned that digital development and green growth should go hand in hand for sustainable development. Therefore, the MOENV and the MODA should work closely on digital and green transition so as to more efficiently achieve set goals regarding net-zero emissions or waste disposal. Agreeing with Minister Peng, the ADI Director General Leu added that net-zero emissions are one of the ADI's main tasks in facilitating digital development and that the Net-Zero Cooperation Office has been established under the Department of Democracy Network specifically for this task. Next, both the CSOs of Acer and AUO shared their experiences within the industries and mentioned the importance and difficulty of collecting supply chain data and that digital tools can do a lot in this aspect. Data quality and verification capacity are important factors for considerations when it comes to data exchange. Deputy Director Deng of Open Data Alliance then said that Internet of Things (IoT) can be used in data collection. Finally, Director Fan of Taiwan Climate Institute stated that the Scope 3 data covers extensive fields and is highly complicated. As a result, it is important that the government agencies promote data exchange based on respective authorities and responsibilities.

Thanks to the development of digital technology, there are digital tools available for efficient CFV and management of supply chain in Taiwan and abroad. Minister Peng stated that the forum was just the beginning and that there are many more discussions and cooperations to come. It is essential to use digital tools properly and complete Scope 3 verification effectively, setting the foundation for carbon reduction and moving toward the net-zero goal.



Minister Peng and the forum participants



Minister Peng, Professor Noboru Koshizuka of University of Tokyo (left) and the ADI Director General Leu (right)



The forum, Digital Technology and Climate Change: New Visions of Supply Chain Management, in progress

11. Hotels Urged to Reduced Plastics in Order to Achieve Sustainable Travel

The MOENV's Resource Circulation Administration (RCA) held a press conference and also a forum, Less Plastic Bottles for a Better Travel, on 30 July 2024. Director General Chou Yung-Hui of the Tourism Administration (TA) of the Ministry of Transportation and Communication (MOTC), Emile Sheng, Chairman of FDC International Hotels Corporation, and youth representative He Ching-Yang (Afu), band leader of Soda Green, were invited to discuss with the MOENV Minister Peng Chih-Ming and shared experiences of environmental protection and plastic reduction. There were 60

enterprisers in hospitality and drinking water supply attending, jointly promoting plastic reduction in the hotel industry. is the event emphasized that plastic-reducing accommodation will become mainstream in the future and also the new trend that shows personality and emotions.

The MOENV announced the oncoming subsidies to encourage hotels to reduce use of bottled water and also introduced the RCA's four recycling mascots. It is hoped to promote the concept of resource circulation with the mascots' cute, retro, and eye-catching 2.0 design as well as calling on hotels and citizens to change their existing travel style by neither providing nor using single-use supplies and bottled water. At the same time, it was also a reminder that the *Targets and Measures for Restricting Single-Use Lodging Supplies* (一次用旅宿用品限制使用對象及實施方式) will be in effect on 1 January next year. It is estimated to reduce 2,300 metric tons of plastic and approximately 3,000 metric tons of carbon emission every year.

Minister Peng talked about the four Aliens, the recycling mascots, that were popular across Taiwan and led the public to begin sorting garbage when the EPA was first established. Today with the rising generation of garbage, the MOENV reintroduced the 2.0 version of Dr. Blue, Red Pepper, Golden Rat, and Emerald Frog to help the public adapt to challenges including the ban on single-use plastic cups, effective on 1 September, and the Global Plastics Treaty next year.

Minister Peng pointed out that the 2024 Paris Olympics centered on sustainability, highlighting carbon and plastic reduction as the future. The MOENV introduces resources and funds via assistance in terms of subsidies and facilitation for participation in order to encourage enterprises to gradually transition and create a new culture of environmental protection. He particularly emphasized the MOENV's active cooperation with the TA to make environmental protection one of the features of Taiwan's tourism.

Using Siaoliuqiu as an example of the long-term cooperation between the MOENV and the TA, Director General Chou of the TA mentioned that local young people on the island use the "beach currency" mechanism to encourage tourists to reduce wastes, emissions and plastics through accommodation discounts and other incentives. He pointed out that, with the global advocate on low-carbon emissions and plastic reduction for hotel brands, the TA will double the number of hotels certified with the Green Mark within a year by helping enterprises to obtain the Green Mark so as to win the support of local and international tourists.

In addition to encouraging specialty B&Bs, Director General Chou said that the TA will set key performance indicators (KPIs) for each county and city to motivate improvements for general hotel enterprisers as well as a corresponding budget as he predicts an rise in the cost of the tourism industry. Moreover, he pointed out that sports events and exhibitions are part of the carbon reduction campaign besides hospitality industry. In recent years, participants in sports events such as marathons and cycling have begun to consciously try to reduce wastes.

Fleur de Chine (FDC), a five-star hotel alongside the beautiful Sun Moon Lake, has been actively participating in local and international sustainability evaluations in recent years, and even taking the initiative in carbon footprint verification. "Environmental protection is neither convenient nor cheap," said Chairman Emile Sheng. The tourism industry is seeking a balance between attentive service and carbon reduction. FDC often had to deal with employees' doubts and concerns in the early stages of internal communication, with questions such as "How can a five-star hotel not provide these items?". Starting from 2018 and 2019, an initial attempt was made not to provide bottled waters on one floor. Instead, sparkling water machines were installed in the hallways, and

hotel rooms had glass bottles of sparkling water with the filling time marked, reminding guests to fill it up themselves if needed. He recalled thousands of critiques online left by customers because of not automatically providing toothbrushes and other amenities. However, he found that 90% of online opinions responded negatively in 2022 and then 40% expressed support in 2023.

Afu, Soda Green's band leader, mentioned that he loves vacationing at FDC, taking his kids to fill their own water bottles and biking around the lake to enjoy the surrounding mountainous views. Soda Green once held a zero-waste music festival, and Afu believes that the plastic reduction culture should start from more exposure to the nature, expressing one's true color, and creating one's unique rituals. When having a reusable beverage cup that speaks of one's own style, one no longer aspires to use single-use paper or plastic cups like others. He even thinks that hotels that believe in sustainability and practice plastic reductions with their own styles will be supported by young consumers who share the same beliefs.

【 Restrictions on single-use amenities take effect in 2025 】

"Small bottles instead of big ones for four items; Preparing one's own for six items," Explained the RCA Director General Lai Yingying. In response to the global tourism's plastic reduction initiative, the RCA has formulated the Targets and Measures for Restrictions of Single-Use Lodging Supplies, which will take effect on 1 January 2025 and apply to tourist hotels, hotels, guesthouses, and other lodging enterprises. For four types of liquid cleaning and skincare products such as shampoo, conditioner, shower gel and lotion, large bottles are to replace small one; and six types personal hygiene products including combs, toothbrushes, toothpaste, razors, shaving foam and shower caps will only be provided upon request. However, this does apply to auxiliary facilities, service facilities and business facilities outside of guestrooms, such as SPA and swimming pool. It is hoped to achieve source reduction by replacing small bottles with large ones" and encouraging preparation of one's own supplies so that one can practice environmental protection while traveling.

【 Six tips to replace plastic bottled water 】

Besides announcing restrictions on single-use items in advance, some local hotels follow many foreign hotels and take initiatives to replace plastic bottled water with glass bottled ones and install drinking dispensers. The glass bottles will be recycled, rinsed and refilled by the suppliers once used by the tenants. Minister Peng encouraged hotel enterprisers to carry out plastic reduction measures based on existing facilities, security concerns, costs, and demand of service quality. Plastic reduction can begin from conference halls and guestrooms, followed by swimming pools, fitness centers, playgrounds and other recreational areas, cutting down single-use plastic bottled water. Recommended plastic reduction measures include (1) water in glass bottles or aluminum cans; (2) installation of water dispensers and sparkling water machines; (3) water kettles and cold water containers in guestrooms; (4) reusable containers, such as glasses and porcelain cups; (5) rental of reusable cups for outings; and (6) promotion of preparing one's own containers with more plastic-free choices for consumers.

【 Subsidies available to encourage enterprises to take action 】

The RCA stated that reducing single-use plastic supplies and bottled water does not compromise hotels service quality and hence called on the public to show their support by choosing environment-friendly hotels . To urge more enterprises to select "repeated use" over "single-use and disposable",

the RCA is setting incentives and subsidization measures; namely, a subsidy program for hotels on a local level and a trial program for refilling system on a regional level. The hope is to cut down use of plastic bottled water via public-private collaboration and cross-sector cooperation and thereby lower damages and pollutions to the environment.

The RCA calls on hotel enterprisers to adjust service models for a gradual transition and believes that consumers are willing to support the transformation. It is hoped that the public and businesses will answer to the government's plastic reduction policy and have the awareness of "prepare one's own supplies, use repeated, and use less". Through sustainable travels in which plastic reduction actions, such as via bringing one's own supplies and refusing plastic bottled water, are taken can one contribute to environmental protection while traveling.



The MOENV, the TA, the RCA and band leader of Soda Green call on hotel enterprisers and citizens to start plastic reduction



(From right) The MOENV Minister Peng, Director General Chou Yung-Hui of the MOTC's TA, Chairman Emile Sheng FDC International Hotels Corporation, and He Ching-Yang (Afu), Soda Green's band leader share and talk about plastic reduction in the hotel industry



The MOENV, the TA, the RCA, and band leader of Soda Green in a group photo with hotel enterprisers, public and private associations, and refilling equipment enterprisers to support the "Less Plastic Bottles for a Better Travel" campaign