Meeting Minutes of the 4th Meeting of the Presidential Office National Climate Change Committee

Date: Thursday, April 24, 2025, 4:00 PM

Location: Reception Hall, Office of the President

Chair: Convener Lai Ching-te

Recorder: Ministry of Environment (MOENV)

Attendees: Deputy Convener Cheng Li-chiun (鄭麗君) (on leave), Deputy Convener James C. Liao (廖俊智), Deputy Convener Tung Tzu-hsien (童子賢), Advisor Lee Yuan-tseh (李遠哲) (on leave), Advisor Eugene Chien (簡又新)

Committee Members: Liu Chin-ching (劉鏡清) (on leave), Wu Cheng-wen (吳誠文), Liu Shyh-fang (劉世芳), Chuang Tsui-yun (莊翠雲) (on leave), Kuo Jyh-huei (郭智輝), Chen Shih-kai (陳世凱), Chen Junne-jih (陳駿季), Peng Jin-lung (彭金隆), Paul Peng (彭双浪), Lai Po-szu (賴博司), Terry Tsao (曹世綸), Tseng Wen-sheng (曾文生), Sophia Cheng (程淑芬), Lydia Hsiao-mei Lin (林筱玫) (on leave), Shih Shin-min (施信民), Lee Ken-cheng (李根政), Ho Tsung-hsun (何宗勳), Chao Chia-wei (趙家緯), Chen Hui-ping (陳惠萍), Huang Pin-han (黃品涵), Su Huey-jen (蘇慧貞), Lin Tze-luen (林子倫), Chou Kuei-tien (周桂田), Tseng Chung-jen (曾重仁)

Non-voting Participants: Secretary-General to the President Pan Men-an (潘孟安), Executive Secretary Peng Chi-ming (彭啓明), Deputy Executive Secretary Chang Tun-han (張惇涵), Presidential Office Spokesperson Karen Kuo (郭雅慧)

I. Chair's Remarks

Today is the fourth meeting of the National Climate Change Committee. First, I would like to once again thank all of the advisors and committee members for your active participation over the past

several months. The valuable suggestions you have provided allowed us to propose new emissions reduction targets at the last meeting as we continue to move toward our vision of net-zero emissions by 2050.

The day before yesterday was Earth Day, and I was in this same room to meet and exchange ideas with many friends from environmental protection groups. I am very grateful to these forerunners and partners for their efforts and contributions to protect this land, Taiwan.

Amidst global climate change and the reshaping of international trade patterns, extreme weather disasters occur frequently around the world and requirements for carbon reduction in international supply chains continue to expand. The government of the United States has also recently proposed new tariff policies that present Taiwan's industries with many challenges.

We have observed that as many industries are facing increased uncertainty in their operations, the private sector has adopted a wait-and-see attitude regarding carbon reduction and environment, social, and governance (ESG) efforts. In response, the administrative team is actively assessing the situation and continuously adjusting strategies; it will definitely support our industries.

However, regardless of how the external environment changes, green transition and sustainable development are the cornerstones of long-term national prosperity. We must remain committed to resilient and forward-looking strategies to promote the transition to low-carbon models and sustainable development for domestic industries, build comprehensive green supply chains, enhance the international competitiveness of our industries, and bolster our national strengths.

The government will work with the private sector to turn crises into opportunities, and actively address the challenges of climate change and net-zero transition. This will allow Taiwan's economy to continue

transitioning and progressing and remain committed to moving toward low-carbon and sustainable models. This will also keep the nation on the path forward and make Taiwan stronger, better, and more resilient.

At today's meeting, the MOENV will deliver a report on responding to ongoing changes and seizing opportunities for green transition, and the Financial Supervisory Commission (FSC) will report on financing for the green and energy transition to support Taiwan's net-zero efforts. Those reports will explain how the administrative team is strengthening climate governance and execution, as well as how they are assisting various sectors to face challenges, align with international standards, seize opportunities, and jointly move toward a new low-carbon and sustainable future.

The government will steadily implement a carbon pricing system and align with international standards to avoid foreign tariff penalties on high-carbon industries, which will ensure a competitive advantage for exports. We will also carefully plan a Taiwan version of the CBAM to maintain reasonable and fair domestic competition.

The government will assist enterprises, especially small- and medium-sized enterprises (SMEs), by providing carbon reduction tools such as carbon footprint verification and ESG disclosure, and will gradually compile a product carbon footprint digital database and support export enterprise efforts to meet international requirements. At the same time, we will drive resource integration and promote the circular economy and industry internationalization to create a Green Taiwan brand.

In promoting net-zero transition, the financial sector plays a crucial role. By designing diverse investment and financing tools and financial products, and incorporating ESG factors into credit assessments, the financial sector can lead the way for enterprises and the public to take climate risks seriously. At the same time, it can support the

development of low-carbon industries, thereby driving society as a whole to take sustainable action.

Taiwan is a major financial market in Asia. On a solid foundation in ESG and sustainable finance, we must leverage our financial market, contributing Taiwan's wisdom and strength to achieve the global net-zero transition.

At the last meeting, I mentioned that strengthening social communication and climate change education are very important. Currently, the Executive Yuan, MOENV, and central government agencies have launched a series of social communication meetings regarding the proposed flagship carbon reduction projects for six major sectors, namely energy, manufacturing, transportation, residential and commercial, agricultural, and environment. At these meetings, representatives are invited from industry, government, academia, research institutions, and civil society groups to actively engage in dialogue and forge a consensus through collaborative thinking about climate solutions.

In addition, the MOENV is collaborating with colleges and universities to establish an alliance to foster professionals in the net-zero and green-collar sectors. To this end, it will set up separate training centers in the north, central, southern, and eastern regions to expand capacity to train green-collar professionals. I also hope that, in addition to lectures given on university campuses, online courses on climate and net-zero topics can be designed specifically for high school students and teachers.

Because we cannot leave anyone behind on the path to net-zero, we must actively engage in dialogue with young people and gradually prepare them to enter emerging green sector jobs to empower the nation and lay the foundation for Taiwan's sustainable future.

Let's work together with the financial sector, industry, and all sectors of society to promote an orderly transition, achieve our vision for net-zero emissions by 2050, and leave a prosperous and sustainable homeland for future generations. Thank you.

II. Confirmation of the Meeting Agenda

Decision: Meeting agenda confirmed.

III. Confirmation of the Minutes of the Third Committee Meeting

Decision: Minutes of the third committee meeting confirmed.

IV. Report Items (Omitted)

1. **Status report on items listed in the third committee meeting** (Presented by Executive Secretary Peng Chi-ming)
2. **Progress report on Responding to Ongoing Changes and Seizing Opportunities for a Green Transition**

   (Presented by Minister of Environment Peng Chi-ming)
3. **Progress report on Financing for the Green and Energy Transition to Support Taiwan's Net-Zero Efforts**

   (Presented by FSC Chairperson Peng Jin-lung)

V. Discussion Items (in speaking order)

Committee members are invited to comment on report items 2 and 3. Written opinions will be included in the meeting minutes.

(1) Committee Member Remarks (Non-government)

1. Committee Member, Tseng Chung-jen

Taiwan's limited green energy supply should be taken into consideration in the promotion of electrification in high-temperature, carbon-intensive industries. Under Taiwan's

energy plan, by 2050, renewable energy is projected to account for 60% to 70% of power generation. However, as electricity will constitute half of total energy consumption, renewable energy will only account for 30% to 35% of overall energy, with the rest dependent on imported zero-carbon energy. Full electrification would require converting imported zero-carbon fuels into electricity, incurring a 50% efficiency loss. For high-temperature, carbon-intensive industries such as steel and petrochemicals, directly burning imported zero-carbon energy sources for heat is more efficient. Therefore, not all industrial processes are suited for electrification; this should be given greater consideration in policy planning.

The green transition finance report could explore ways to help the public embrace carbon reduction. For instance, in the past, waste sorting was promoted through financial incentives. Once citizens internalized this mindset, businesses followed suit. I suggest referencing Korea's Eco Mileage System, where citizens earn points for reducing carbon emissions, redeemable for goods. Similarly, the DO Black card in Sweden, which tracks carbon footprints in real time, helps people understand the amount of carbon generated by consumption. Such initiatives could help foster widespread carbon reduction awareness.

2. Committee Member, Chou Kuei-tien

The new tariff policies by President Donald Trump's administration in the US require careful consideration in regard to their impact on vulnerable groups. A survey by the National Taiwan University (NTU) Risk Society and Policy Research Center and World Vision Taiwan indicates that nearly 60% of respondents, whose energy expenditures

exceed 10% of their income, face energy poverty. With subsidies, the percentage of those facing energy poverty drops to about 36%, highlighting the importance of subsidies for vulnerable groups. Furthermore, over 20% of respondents are unaware of government energy efficiency subsidies, and among those aware, 22% cannot afford to upgrade to energy-efficient appliances. The administrative team should enhance outreach to ensure vulnerable groups understand these policies. It should also consider establishing a climate and social impact fund, using surplus tax revenue for social redistribution to prioritize the needs of vulnerable groups and affected industries.

A survey by the NTU Risk Society and Policy Research Center last year found that up to 84% of carbon-intensive industries with annual revenues over NT$5 million had limited understanding of green finance, with only 3% engaging in climate-related discussions with financial institutions. A survey this year of carbon-intensive industries with annual revenues over NT$100 million showed that 13% engaged in such discussions, suggesting that SMEs still need to improve their understanding and application of relevant policies. The administration should promote climate-related engagement between financial institutions and industries and encourage financial institutions to actively educate businesses about the importance of climate-related discussions and green loans, fostering the development of green finance.

3. Committee Member, Shih Shin-min

The energy information platform should incorporate key international data, such as materials from United Nations Framework Convention on Climate Change meetings, the

International Energy Agency's Net Zero by 2050 Roadmap, and global energy development forecasts, to serve as a more comprehensive reference.

To prevent the term "carbon credit" ("carbon rights" if translated literally from Chinese) from causing the misconception that companies are entitled to emit carbon, I suggest adopting the more neutral term "emission allowance" from the Climate Change Response Act. In future discussions, terms such as "carbon allowance trading" or "carbon allowance management" would be more appropriate.

Promoting resource recycling and the circular economy is crucial. However, given Taiwan's limited land and dense population, the added value must be assessed to determine if it can offset environmental costs such as pollution, water consumption, and energy consumption. To promote resource recycling effectively, systemic changes are needed. For example, numerous types of plastic waste are currently not included in the recycling system. Expanding the list of recyclable items could encourage greater participation from resource recycling businesses.

4. Committee Member, Huang Pin-han

The administration has planned multiple meetings to facilitate social communication, which is commendable. However, no meetings have been arranged for the energy and manufacturing sectors, which are critical for carbon reduction. Subsequent meetings should address flagship project priorities, progress, and administrative processes and inventories in detail, with multiple sessions held to ensure more thorough discussion.

Considering that while putting net-zero into practice, most

industries encounter issues related to technology, costs, and regulations, which may not be suitable to address through public dialogue platforms, I suggest leveraging the National Development Council's Six Major Regional Industries and Living Perimeters to connect industrial clusters with communities and integrate central and local resources. Besides enhancing water and power supply, human resources, and employment, net-zero carbon reduction policies should be further integrated into these efforts.

To expand international participation, beyond climate governance, I suggest incorporating national security and geopolitical perspectives and jointly discussing net-zero and climate issues with the Office of the President Whole-of-Society Defense Resilience Committee to respond to current tariff challenges. Australia's upcoming parliamentary election is likely to see the Labor Party, which supports net-zero development, in the lead, potentially creating new opportunities for Taiwan to foster diverse economic, trade, and international agreement cooperation in the Asia-Pacific. The US is an important ally of Taiwan; nevertheless, Taiwan should actively pursue diverse cooperative partnerships.

The financial sector requires industry data when planning carbon reduction pathways or holding discussions. At present, financial institutions primarily collect data through client interactions. Considering the extensive industry engagement experience of the Industrial Development Administration (IDA) of the Ministry of Economic Affairs (MOEA), it is suggested that the IDA strengthen cooperation with the FSC to urge industries to provide carbon emissions data.

5. Committee Member, Su Huey-jen

Social communication is an important function of this committee. Today's reports exhibited both depth and breadth, and were well-executed. In the face of tariff pressure from the US, we must not abandon ESG values. The government should, in a simple and concise manner, explain to different sectors Taiwan's efforts over the years and how to leverage technological advantages, integrating tariffs and ESG values, to create distinct niches and open up new markets, enabling the public to recognize the achievements of past efforts.

It is requested that the government realistically address the issues of talent flow and shortages. In the past, when the government promoted new programs, it estimated the relevant talent needs while noting the loss of talent in other fields. Firstly, rather than increasing specific talent through school-based programs, I suggest investing the same resources in the industrial sector for talent empowerment. Secondly, the application of digital and AI tools should not only be presented in individual reports, but should also be reflected in assisting industrial restructuring, enhancing the ability of existing talent to meet next-stage challenges, and ascertaining the actual talent needs of various industries. Therefore, I suggest swiftly, directly, and pragmatically integrating digital capabilities for talent empowerment, which not only can promote industrial development opportunities, but also stabilize talent flow.

6. Committee Member, Chen Hui-ping

The government's proposal of NDC 3.0 and initiation of social communication for the flagship carbon reduction projects for six major sectors are commendable, as they help promote

public-private collaboration to achieve goals. Facing global political and economic challenges, the government should firmly uphold net-zero transition goals, boost private-sector and corporate strength, and build national resilience. The independent movements initiated by the US private sector during President Trump's first and second terms, namely "We Are Still In" and "America Is All In," demonstrate that net-zero transition momentum in the private sector remains significant, and this momentum should be further valued and enhanced in turbulent times.

Recently, some enterprises have transformed ESG pledges and slogans into practical strategies, implemented through a focus on corporate resilience or risk management. This may be viewed as another practice for enterprises to return to the core of sustainable operations.

Regarding the FSC's report, while it demonstrates initiatives in utilizing diverse sustainability tools, I believe the supervision and governance mechanisms for transition finance must be further strengthened. Since transition finance primarily targets high-emissions industries that can obtain financing through voluntary carbon reduction plans, cautious evaluation is advisable. Furthermore, this report seems to not adequately address the supervisory governance of transition finance or the mechanisms for handling unfulfilled carbon reduction commitments. It is suggested that the FSC establish comprehensive oversight, penalties, and verification mechanisms for regulating transition finance, particularly to prevent greenwashing.

In addition to financial instruments such as the Task Force on Climate-related Financial Disclosures (TCFD) and the Taskforce on Nature-related Financial Disclosures (TNFD),

there is also the Taskforce on Inequality and Social-related Financial Disclosures framework, scheduled for piloting next year. I suggest that financial instruments also support financial solutions for a just transition through financial mechanisms, simultaneously promoting a just transition for carbon reduction and social inclusivity.

7. Committee Member, Terry Tsao

The preliminary structure of the energy information platform has been completed, which is highly significant for providing transparent, complete information and building social consensus. I suggest that, after being tested by members of this committee, the platform be opened for second-phase testing by friendly or like-minded groups, allowing more diverse groups to participate and enhancing the completeness of the platform's information.

Regarding Taiwan's key and strategic resources mentioned in the green transition report, several are critical metals used in the high tech and semiconductor manufacturing industries. The industrial sector can provide support in the circular economy.

Regarding energy conservation and carbon reduction in the manufacturing industry, some semiconductor manufacturers suggest mechanisms, such as providing flexibility in depreciation periods (e.g., extending from 5 to 7 years) for certified energy-saving or low-carbon equipment, to encourage industry adoption. The manufacturers believe that such institutional incentive measures can promote industry use of energy-saving and carbon-reducing equipment under the premise of not causing significant loss to the government.

Regarding the lagging progress in green electricity, at a recent

symposium for green electricity suppliers and users, participating global corporations and Taiwanese semiconductor manufacturers, although open to the low-carbon concept, nevertheless expressed concerns about the progress of Taiwan's green electricity development. The industrial sector understands that the government seeks to restructure Taiwan's industrial planning through this opportunity; however, it expects renewable energy progress, such as solar power and offshore wind power, to meet originally set targets to fulfill societal expectations.

8. Committee Member, Lai Po-szu

Through its green and transition finance action plan, the FSC encourages banks and insurance companies to incorporate businesses' voluntary carbon fee reduction plans and voluntary reduction projects as a priority in investment and financing assessments. This will help enhance industrial carbon reduction, thereby strengthening momentum to assist industries' net-zero transition. To encourage the financial sector to support industrial carbon reduction, I recommend integrating the MOEA's deep energy saving measures and incorporating loans to enterprises that adopt the energy service company (ESCO) business model as an incentive in financial evaluations.

The amendment to Article 10-1 of the Statute for Industrial Innovation includes energy conservation and carbon reduction as investment tax credit items, which will enhance incentives for enterprises to invest in carbon reduction technologies and equipment, strengthen their ability to address net-zero transition, and maintain industrial competitiveness.

In addition to developing diverse energy sources and ensuring power supply security, solutions for maintaining affordable electricity prices while considering industrial competitiveness are also crucial for energy transition. In recent years, the international situation and President Trump's tariffs have impacted traditional industries, especially those that export to the US and rely on electricity, such as the hand tool machinery and plumbing hardware industries. The Manufactures United General Association of Industrial Park of R.O.C. supports the MOEA in securing budget subsidies for Taiwan Power Company to stabilize electricity prices, with the aim of creating a triple-win scenario for industry, livelihoods, and society.

Renewable energy is key to net-zero transition. However, its implementation cannot be achieved overnight. Considering the gradually growing demand for green energy from industrial supply chains and SMEs, I recommend establishing a transitional energy strategy, such as developing diverse energy sources while ensuring stable power supply, considering the use of natural gas to replace coal before renewable energy is fully deployed, along with enhanced social communication.

9. Committee Member, Paul Peng

In the past two years, due to the stigmatization of solar power, many large-scale projects have come to a complete halt. Legitimate businesses are facing severe operational difficulties, resulting in significantly delayed progress in solar power installation. This may potentially lead to green energy shortages and supply chain contraction.

Facing the global trend of green and digital twin

transformation, the role of the Ministry of Digital Affairs (MODA) in the core of green growth strategy should be strengthened to actively achieve net-zero targets through digital empowerment. Although the MODA has organized related activities such as international hackathons, its comprehensive support for green transition strategy still requires strengthening. The MODA should clearly define its role in the net-zero pathway and allocate resources, making use of digital technologies such as IoT, AI, and blockchain in applications including energy tracking, carbon emissions prediction, data transparency, and supply chain carbon reduction to drive green growth.

The FSC's promotion of sustainability initiatives helps enhance ESG transparency and align with international standards. However, SMEs face various difficulties in the transition process. Firstly, compiling sustainability reports, conducting greenhouse gas inventories, and obtaining third-party assurance will increase operational and compliance costs. The lack of green-collar talent, sustainability committee operations, and ESG expertise also restricts enterprises' response capacity. Secondly, the absence of a shared platform hinders SMEs' ability to effectively conduct carbon inventories, particularly in collecting and integrating scope 3 data, which is complex and challenging, further increasing implementation costs, greenwashing risks, and external assurance pressures. Although the FSC has planned to phase in relevant measures, considering SMEs' limited resources and response capacity, the government should provide greater support to assist them in achieving net-zero and sustainable goals.

10. Committee Member, Lee Ken-cheng

The establishment of the energy information platform by the MOENV is commendable. Going forward, in addition to enhancing its content, I suggest adopting proactive dissemination strategies and conducting in-person public dialogue to effectively leverage the platform's functions.

Public communication meetings for various flagship carbon reduction projects have begun, and multiple issues have been thoroughly discussed at sessions for sustainable green living and the residential and commercial sectors. Citizens and professionals have also actively participated online, and the initial results are commendable. To focus on concrete actions and consensus, I suggest that, after each sector's first round of meetings, issues requiring in-depth dialogue be compiled and public communication continue to be organized, so as to promote greater public-private collaboration and build consensus on sustainable transition among citizens.

Facing tariff challenges, the government is commended for its commitment to maintaining net-zero targets and regarding them as transition opportunities. To prevent carbon-intensive industries from facing trade penalties, the government will adopt supportive measures in the short term. However, in the long term, it remains necessary to promote the low-carbon transition of carbon-intensive industries. These may conflict, and I suggest conducting more concrete and integrated strategic discussions.

The strengthening of key material resource recycling from a national strategic perspective is commendable. It is hoped that the circular economy can address Taiwan's growing waste issue. Due to the expansion of Taiwan's semiconductor

industry, per capita hazardous industrial waste output has increased. There is an urgent need to reduce waste output through the circular economy, targeting closed-loop recycling. The Gaoping River pollution incident revealed that the handling of hazardous industrial waste by Taiwan's semiconductor and tech industries needs to be improved. Therefore, I suggest incorporating the reduction in volume of hazardous industrial waste output as a specific target in national strategy.

Regarding the criteria for determining major hazards mentioned in the FSC report, the term "material enforcement" is used in the relevant regulations, differing from the term "severe circumstances" used in environmental laws and regulations. The FSC should clearly define whether the "material enforcement" it refers to is equivalent to the "severe circumstances" specified in environmental laws and regulations.

11. Committee Member, Chao Chia-wei

Public communication for the flagship carbon reduction projects has begun, but planning for the energy and manufacturing sectors is absent. Considering that these carbon reduction action plans are critical to public confidence in NDC 3.0, I suggest that the MOEA promptly propose detailed plans.

The purpose of establishing the energy information platform should be to facilitate large-scale public communication, not merely to have a website where the government stacks up information. Regarding political parties' proposal for a referendum on extending the Third Nuclear Power Plant's service life, which will shape the overall energy transition discussion, I recommend assessing how the information

platform can effectively respond and fulfill its role.

The MOENV is commended for proactively addressing international changes and proposing a green transition plan. However, facing tariff challenges, the government appears inclined to expand oil and gas purchases, necessitating careful evaluation of potential conflicts with net-zero goals and trade benefits. A preliminary analysis suggests that, compared to purchasing natural gas from the US, purchasing electric vehicles better balances bilateral trade and promotes net-zero transition. I suggest considering net-zero goals in future trade negotiations. Additionally, this green transition plan focuses on key raw materials. It is recommended that subsequent planning aligns with the goals of resource recycling and zero-waste strategies, such as achieving a 5% recycled material usage rate from electric vehicles and energy storage batteries by 2030 to establish clear policy signals.

Industrial transformation is a key element of the green transition plan. Taiwan's major carbon-emitting industries will widely enter a process replacement cycle in the next decade, coinciding with the NDC 3.0 planning cycle. Reinvestment in process advancement can promote industrial low-carbonization. Given the limited support from current measures such as the Green Growth Alliance and carbon pricing/trading pilots, I recommend drawing on international experience and strengthening mechanisms to create demand for near-zero raw materials. For example, the Ministry of the Interior (MOI) is planning a low embodied carbon building rating label system, which can guide the low-carbon transition of the cement and steel industries. A comprehensive public procurement mechanism for near-zero raw materials must be planned to establish clear market signals. Taiwan will

reference Japan's Green Transformation pilot system to initiate carbon trading by the end of next year. However, in designing the system, careful consideration should be given to the impact of Taiwan's carbon credit oligopoly on carbon pricing levels to avoid only benefitting speculators and failing to promote substantive reductions.

I have two recommendations concerning the green and transition finance action plan. Firstly, the technical screening criteria in the Taiwan Sustainable Taxonomy currently deem enterprises with carbon emissions below the industry average as sustainable. This fails to incentivize leading businesses, so I suggest that the FSC revise the criteria. Secondly, the guidelines for drafting transition plans differ from international priorities. Domestic guidelines lack consistency in asset allocation and transition, as well as corporate climate policy advocacy. I suggest adopting revisions to effectively guide industrial low-carbon transition and obtain resources.

12. Committee Member, Ho Tsung-hsun

On May 17 this year, Taiwan will become a nuclear-free homeland. Calls to restart nuclear power plants are rising again, and opposition parties have proposed amending laws to extend the service life of power plants and initiated a referendum. Although the government and enterprises' concerns regarding electricity consumption and national security are understandable, Taiwan must not overlook the suffering of the people of Lanyu (Orchid Island) on the nuclear energy issue. They have already endured over 40 years of nuclear waste pollution; however, their voices are not heard in this nuclear energy discussion. I respectfully present a video (omitted) featuring two Lanyu elders to convey their appeals

to the president and committee members present, and hope for the prompt resolution of Lanyu's nuclear waste issue.

13. Committee Member, Sophia Cheng

Recently, there have been differing views on sustainable development globally, but the Asia Investor Group on Climate Change continues to expand, with new investors joining monthly. I recently attended the AVPN Northeast Asia Summit in Japan, where discussions addressed human-centered solutions, blended finance, and impact investment. This highlights Japan's proactive leadership in Asia's emission reduction targets, while the cases in the MOENV's report also demonstrate Taiwan's commitment to sustainable development.

In energy development, geothermal and small hydropower have had successful commercial cases. Future resource allocation should prioritize supporting industrial development over just academic subsidies, and expanding all-weather clean baseload power will help advance the nuclear-free homeland initiative. Geothermal and small hydropower are substantive green energy sources, and new technologies such as hydrogen energy hold potential. Public-private collaboration is essential to assist existing enterprises in expanding and drawing in more businesses to participate. Reportedly, Taiwan Power Company is assessing businesses that qualify but are constrained by funding or regulations. If the public sector can assist in overcoming these barriers, it will establish a successful model and attract private funding.

Financial institutions often adopt a wait-and-see attitude toward green finance and sustainability projects with uncertain success and returns. Local venture capital and

private equity funds prioritize late-stage and pre-IPO phases, while early-stage development projects lack resources and require active pursuit of funding. The private sector is more active in pursuing scalable, commercial, and self-liquidating projects. For example, ESCOs, small hydropower, and geothermal power generation could consider cooperation or joint ventures with financial institutions to bridge funding gaps. Additionally, blended finance is emerging in the Asian market and can also be an option for advancing green projects.

Energy planning should be centered on the 2030 and 2035 targets. Short-term targets (1 to 3 years) should prioritize initial efficiency to ease performance pressure. Furthermore, given the varying learning curves for energy projects, short-term targets should be more flexible, allowing pragmatic development paths to be set for different energy types based on their individual characteristics to ensure mid- and long-term target achievement.

Regarding strategic materials, Taiwan lacks a developed battery industry and relies on imports. Meanwhile, China has pledged significant resources to support circular economy development, which may impact the international flow of strategic materials. Therefore, when seeking international partners, if cooperation with Japan is possible, sending Taiwan's processed black mass to Japan for further processing and partnering with companies like Panasonic, which supplies Tesla batteries, could result in the establishment of a Taiwan-Japan-US cooperation model. I suggest the government adopt an Asia-Pacific industry chain perspective, monitor upstream and downstream industry dynamics, and formulate more effective strategies.

Many technologically leading climate tech startups and

transition enterprises in Taiwan often fail to attract financial investment due to inadequate operational and financial planning. International funds often lure in Taiwanese startups under the guise of cooperation, causing talent and technology outflow. Some foreign enterprises' R&D centers in Taiwan also require the utilization of local talent. Domestic capital, on the other hand, tends to favor overseas investment, offering limited support to local startups. To support the development of sustainable low-carbon technologies and enterprises in Taiwan, strategic support is urgently needed to attract investment. Consideration should also be given to how to effectively foster the growth of local funds and enterprises, aiding their expansion into the Asia-Pacific market, to create new industrial development opportunities.

14. Committee Member, Lin Tze-luen

This meeting's reports were highly strategic. In particular, the analysis of supply chain restructuring was extremely valuable. Furthermore, the preliminary actions on sustainable aviation fuel by the Ministry of Transportation and Communications (MOTC) hold significant strategic importance for international aviation and demonstrate this committee's effectiveness in advancing policy progress.

The international community remains optimistic about the nation's economic prospects, primarily because Taiwan plays a pivotal role in global supply chains. I suggest strengthening Taiwan's unique strategic initiatives in net-zero transition and other areas, such as concentrating resources on guiding hidden champions in various fields. Just as COVID-19 once brought opportunities to Taiwan, the current international landscape may present other opportunities for Taiwan to rise.

Taiwan's green finance has been evolving since 2022, with its direction closely aligning with international trends. Nevertheless, emerging green energy industries such as geothermal energy, small hydropower, hydrogen energy, energy storage, and virtual power plants commonly encounter financing challenges. I suggest exploring mechanisms similar to the Coalition of Movers and Shakers on Sustainable Finance or a regulatory sandbox within the current legal framework to enable innovative business models to secure funding, thereby fostering sustainable growth in green finance.

15. Committee Member, Tseng Wen-sheng

Regarding the nation's electricity emission factor target, it is projected to decrease to approximately 0.44 kg CO_2e/kWh this year, marking the largest reduction in recent years. The government will also further accelerate the reduction of the electricity emission factor.

Regarding green hydrogen power generation, Taiwan Power Company has collaborated with Academia Sinica to develop decarbonized hydrogen burning technology. Although green ammonia has potential, cost considerations keep countries in the evaluation phase, and Taiwan Power Company will monitor cost reduction trends. However, directly using the hydrogen generated from decarbonized hydrogen burning for power generation would be even more effective. Additionally, geothermal is gaining global attention. CPC Corporation already has drilling capacity, while Taiwan Power Company introduces technology through international partnerships. Solar and wind power equipment currently have lifespans of about 20 to 25 years, whereas hydropower and geothermal equipment can serve as long-term energy assets. Taiwan

Power Company is collaborating with domestic small-scale operators to provide a platform and assist them with financing.

The MOEA's Geological Survey and Mining Management Agency has publicly disclosed locations in Taiwan with geothermal potential and a database, spanning from the Datun Volcano Group in the north to the Yilan Plain, Guishan Island (Turtle Island), and Yuanshan excavation area. This indicates that the northeast power grid has geothermal potential. Other tracking points are mostly hot spring outcrops, such as Guanziling, Tainan. Currently, geothermal energy extraction is mainly concentrated in Hongye, Jinlun, and other areas in eastern Taiwan. Both Taiwan Power Company and Academia Sinica believe the northeast power grid region holds the greatest extraction value, making it a priority for active development.

(2) Government Representative Remarks

1. Executive Secretary, Peng Chi-ming

Thank you to all committee members for your valuable insights. As Committee Member Su Huey-jen noted, amid the tariff nightmare, Taiwan leverages innovative technology, guided by ESG values, to identify new markets and opportunities. This is precisely what we aim to achieve through this meeting: to anchor Taiwan within the global net-zero trend and affirm Taiwan's commitment to advancing net-zero transition to the international community.

To address the lack of continuity in integrated activities, the government is drawing on the experiences of Korea and Sweden, planning to promote a systematic carbon reduction mechanism and encouraging nationwide participation.

I also thank the committee members for their feedback after

testing the energy information platform. The MOENV will promptly revise and release it publicly. Given that energy issues are highly prominent, there have been overly simplistic arguments, for instance, that using nuclear energy prevents electricity price increases. We hope to enable effective communication through the platform.

Regarding feedback from committee members on issues such as electric vehicles and the circular economy, administrative agencies will take them into consideration. The MOENV will work closely with the MOEA and the National Science and Technology Council to promote circular economy initiatives, demonstrating the government's commitment to cross-ministerial cooperation and advancing related tasks.

Regarding regulations on whether certain key materials are considered industrial products or waste, this is a pressing issue requiring resolution. Relevant regulations have been drafted and will be discussed with legislators promptly. Previously, the low value of resource recycling products caused market challenges for precious metals, rare earths, and innovative recycled products. We hope to address industry bottlenecks through legislative amendments.

The legislative process for subsidiary laws under the Climate Change Response Act is actively progressing. Furthermore, if cap and trade is implemented in the future, the carbon exchange will better highlight its market value.

The nation's net carbon emissions in 2023 decreased by 4.64% compared to 2005, a significant improvement over the previous period's 1.77% reduction. We project that the carbon reduction rate will continue to grow, and the government will continue its efforts.

2. Committee Member, Peng Jin-lung

The valuable insights and guidance provided by committee members on green transition finance are also priorities for the FSC. To foster a carbon reduction mindset among all citizens, the FSC will strive to promote accessible green finance products to encourage public participation. To address SMEs' challenges in green finance awareness and transition, communication will be enhanced across enterprises, from large to small. Assistance will be provided by organizing multiple briefings and using tools such as automated sustainability reports for listed and OTC-listed companies. Additionally, listed and OTC-listed companies will be encouraged to drive their supply chain partners to carry out transition and carbon inventories, leading by example.

Moving forward, green investment and financing will be enhanced through discussion, and the financial sector will be encouraged to apply its expertise to guide enterprises in their transition and ensure funding availability. Regarding the suggestion to include high-performing projects in sustainability evaluations, the FSC will prioritize assisting SMEs and actively encourage the banking sector to enhance lending support for SMEs.

The FSC is collaborating with the MOEA, MOENV, and other government agencies to build a database for carbon emissions and physical risks. International initiatives such as the TCFD and TNFD are under active study. Furthermore, regarding whether the term "severe circumstances" used in FSC regulations aligns with "material enforcement" in environmental regulations, the FSC will consult with the MOENV to align definitions and ensure greater clarity and precision.

Regarding committee members' concern that transition and green finance standards are not rigorous enough, the FSC has issued the Taiwan Sustainable Taxonomy and is promoting it through encouragement, adopting a phased approach of establishing a foundation before seeking improvement. As for concerns about insufficient resources for transition plans, guidance tools such as the recommended contents for transition plans have been issued, and outreach will be strengthened moving forward.

Regarding financing challenges for green energy, the primary reasons are the financial sector's limited understanding of emerging fields and risk concerns. The FSC is working closely with relevant government agencies, providing guidance through investment and financing seminars and other means to enhance the financial sector's expertise, and actively promoting mechanisms such as the Coalition of Movers and Shakers on Sustainable Finance to seek improvements.

3. Committee Member, Wu Cheng-wen

The key to transformation for SMEs lies in integrating net-zero transition with digital transformation. The government has provided relevant subsidies for enterprises, enabling them to integrate net-zero transition targets by adopting AI for industry. The Executive Yuan is currently promoting Smart Taiwan 2.0, with smart cities being one of its points of focus. Enterprise data is protected by developing sovereign AI, which entails keeping data in Taiwan. Cloud services are made available for SMEs, and digital transformation that adopts AI and net-zero transition efforts are simultaneously engaged, facilitating the future development of smart cities and the precise utilization of human resources to assist in enterprise transformation.

In the future, assistance for industrial transformation will no longer target individual firms but will be used to promote virtual integration. Systematic transformation will be conducted, taking industrial chains as units, so as to enhance overall industrial efficiency and value while offsetting transformation costs and strengthening enterprise competitiveness.

The Executive Yuan has proposed the Six Major Regional Industries and Living Perimeters regional governance plan. Using the example of the Southern Taiwan Silicon Valley, the Shalun Smart Green Energy Science City will be employed as a demonstration site for new energy. Smart grids will be established, and on-site verification of energy efficiency will be conducted. The success cases will be promoted widely and enterprises encouraged to adopt them, while verification for net-zero transition, digital transformation, and smart transformation of various sectors will be carried out simultaneously.

4. Committee Member, Liu Shyh-fang

Regarding the standards for installing solar photovoltaic systems on buildings, the MOI has already announced that buildings with a roof area of 1,000 square meters or more will be prioritized. It is estimated that once the standards are fully implemented, 170,000 kilowatts of electricity can be generated annually, which is equivalent to the power consumption of 50,000 households. In addition, efforts are underway to accelerate deployment of charging facilities for electric vehicles in apartment buildings by revising electricity safety guidelines and lowering the threshold for convening management committee meetings.

The MOI has launched the net-zero building design and carbon reduction flagship project, promoting lifespan extension for old residential buildings, net-zero transition for social housing, as well as green buildings and smart buildings. An investment of NT$25.5 billion is expected over the next 10 years. Furthermore, the third phase of the greenhouse gas reduction action plan for the residential and commercial sectors was submitted to the MOENV for review in April.

The Architecture and Building Research Institute of the MOI and the FSC discussed in 2021 the technical screening criteria for substantial contributions to the environment and proposed reference standards for determining sustainable economic activities. Economic activities of construction, building, and real estate operators that comply with the technical screening criteria will be eligible for incentives.

The MOI is actively collaborating with financial institutions. In 2020, it engaged in discussions with Standard Chartered Bank to allow buildings with green building labels of gold level or higher and candidate green building certificates to be accepted as loan collateral and be eligible for preferential mortgage rates. Standard Chartered Bank also became the nation’s first foreign bank to offer green building mortgages. Currently, similar collaborations are being negotiated with HSBC and DBS Bank to encourage homebuyers to consider green buildings.

The MOI has also reached a consensus with the Public Construction Commission of the Executive Yuan that going forward, all new public buildings will fully incorporate the requirements for net-zero emissions and green building labels to promote energy-saving and carbon-reducing buildings and advance environmental sustainability.

5. Committee Member, Kuo Jyh-huei

Regarding the issue raised by committee members of insufficient renewable energy, plans are in place to increase solar power by 5.72 GW by 2026 (including agricultural and rooftop systems, aiming for a target of 20 GW). Offshore wind power has been reassessed, with unrealized portions of Phases 3-1 and 3-2 consolidated into Phase 3-3, and the Phase 3-1 targets expected to be connected to the grid per schedule from next year until 2028. In addition, geothermal power, small hydropower, and hydrogen energy are being advanced. Geothermal power is projected to reach 1.2 GW by 2030, small hydropower will be developed towards modularization, and hydrogen energy continues to be researched by the Industrial Technology Research Institute. Energy is a key issue in public communication. Moving forward, the MOEA and the MOENV will jointly expand efforts to communicate with the public.

Regarding waste, the industrial parks under the MOEA are currently promoting zero-waste centers, with the aim that all of each park's industrial waste will be processed within that park.

To promote energy conservation and carbon reduction, the MOEA has adopted a dual-track strategy: expand diverse development of green energy externally and implement ESCO mechanisms internally. Regarding the promotion of ESCOs, in response to US tariffs, the Executive Yuan has agreed to an additional NT$5 billion in funding to assist businesses in saving 8% to 12% on electricity costs through methods such as upgrades to replace aging equipment and lease-to-own arrangements. For state-owned enterprises, in alignment with FSC policy, plans are in place to issue sustainability bonds.

Regarding the application of AI in smart manufacturing, the MOEA will establish experimental factories through 11 entities to provide various sectors with opportunities for AI practice. The goal is to assist businesses in using AI devices within three to four months, which will reduce manufacturing and waste treatment costs.

The Executive Yuan has allocated a budget of NT$100 billion to subsidize Taiwan Power Company. After approval by the Legislative Yuan, the company's financial situation can improve, easing their pressure in supporting micro-, small-, and medium-sized enterprises. I sincerely request the support of all committee members on this.

The MOEA has completed an inventory of sites with potential for geothermal energy extraction across Taiwan. However, many locations with extraction value are located in indigenous areas, requiring coordination with local tribes. Additionally, some sites with potential are located within national parks, which may be subject to legal restrictions. These issues will be submitted to the Executive Yuan for deliberation.

6. Committee Member, Chen Shih-kai

Regarding the progress in vehicle electrification and decarbonization, the subsidy target for electric buses this year is 1,404 vehicles, with a cumulative total possibly reaching 4,676 vehicles. The current penetration rate has reached 35%, which meets the annual target. For electric passenger cars, the current cumulative total is 6,940 vehicles, with a market share of about 7.9%; it is expected to achieve the annual target market share of 10%. For electric motorcycles, the current market share is only 4.7%, falling short of the annual target of 20%, meaning there is more work to be done.

Toward the building of a net-zero green living low-carbon transportation network, the promotion of T-PASS has increased the usage of public transport by about 20%, showing good results. T-PASS 2.0 is currently being promoted to encourage more public participation. In addition, the MOTC and the MOI are working together to improve the pedestrian environment and continue to promote improvement in the cycling environment (a budget of NT$5.7 billion has been allocated from 2024 to 2027 to roll out the second phase of the Integrated Technical Planning and Evaluation of Upgrading and Diversifying Island Round Cycling Routes). Progress is also being made on shared cars and motorcycles, and joint efforts with the MOI are being made to continue improving the pedestrian environment.

In maritime transport, route adjustments may lead to extended voyages and increased fuel consumption. These challenges will be overcome through measures such as slow steaming and route planning, while adhering to the carbon reduction targets of the International Maritime Organization. In addition to the provision of traditional fuels, port facilities are also considering the use of diverse energy sources such as liquefied natural gas. The Taiwan International Ports Corporation is currently evaluating international trends and coordinating the planning of commercial port locations to facilitate investments in alternative fuel bunkering facilities.

The aviation sector has been less affected by international changes, with limited impact on domestic freight and passenger transport. Furthermore, with support from the Energy Administration of the MOEA on the production side, Taiwan has for the first time fueled national airlines with sustainable aviation fuel. The goal is to use 5% sustainable

aviation fuel by 2030, which is consistent with international targets.

To achieve the full electrification of urban buses, bus operators are encouraged to purchase electric buses. In addition to subsidies from the MOTC and MOENV, the FSC has also coordinated with financial institutions to provide bus operators with preferential loans, and these efforts will continue. Furthermore, the MOTC has jointly released the Taiwan Sustainable Taxonomy with the FSC, MOENV, and other relevant agencies. They are also promoting the Environmental Ship Index incentive program to attract more clean ships to call at ports in Taiwan.

7. Committee Member, Chen Junne-jih

The Ministry of Agriculture (MOA) has completed Carbon Footprint Product Category Rules for 15 major agricultural products and developed digital inventory tools. In the second half of this year, it will cooperate with two major retail channel operators to label the carbon footprints of agricultural products, enhancing consumer awareness of products' carbon emissions.

Regarding the circular economy, in the past, surplus agricultural materials were mostly recycled within farms. Since last year, the MOA has begun emphasizing cross-industry utilization, cooperating with the textile and construction industries to transform surplus agricultural materials into raw materials, such as pineapple fiber for clothing and oyster shells for building materials. The efforts have resulted in businesses setting up factories and making inquiries. In addition, regional resource recycling centers continue to be established to collect, recycle, and reuse surplus

agricultural materials.

The second edition of the Taiwan Sustainable Taxonomy has incorporated standards for supporting activities related to natural carbon sinks and biodiversity conservation. It encourages enterprises to cooperate with the MOA through ESG methods to carry out natural resource conservation and carbon sequestration in the progression towards net-zero transition.

The Irrigation Agency of the MOA, which manages irrigation systems across Taiwan, has established 10 small hydropower plants with a capacity of approximately 26 MW using irrigation canals. Additionally, there are two micro hydropower plants. In the future, it will continue to inventory potential locations and cooperate with the Energy Administration of the MOEA and the MOENV to develop small hydropower.

(3) Deputy Convener Remarks

1. Deputy Convener, Tung Tzu-hsien

As we face international disruptions due to climate change issues, I recommend that Taiwan maintain a steady pace and a firm stance, with no changes to its net-zero targets. The US is a major ally of our country, but it does not represent the whole world. Only a quarter of Taiwan's exports go to the US, and there are still three-quarters going to other markets. In particular, countries in the European Union are firm in their stance toward net-zero transition. Taiwan should not be wavering in the face of recent changes. Taking electric vehicles as an example, last year, consumption in the US accounted for only 7.6% of global sales, meaning it is not the main consumer market. Taiwan's development of electric

vehicle components and finished products should not be limited to 7.6% of the market. Instead, it should seize the opportunity to explore the markets that make up the other 92.4%.

Global carbon emissions increased rather than decreased from 2023 to 2024. However, Taiwan's carbon reduction rate from 2005 to 2023 is second in Asia, behind only Japan. Nevertheless, Taiwan also has eight locations that rank among the world's top 500 sources of carbon emissions. Mai-Liao Power, for example, is ranked among the top 200 global carbon emitters. This indicates that the country and society have not fully integrated energy policy knowledge.

Facing net-zero challenges, Taiwan must work hard and make choices. If the Second and Third Nuclear Power Plants could be exempted from decommissioning, they could contribute to Taiwan's net-zero transition, emissions reduction, energy security, and national resilience, also minimizing the likelihood of needing to restart thermal power plants due to nuclear power plant shutdowns.

2. Deputy Convener, James C. Liao

With President Trump's negative policies towards renewable energy and his active promotion of fossil fuels, the development of renewable energy in the US may be limited, as the prices of natural gas and petroleum are expected to remain relatively low. I have three suggestions for maintaining good trade relations with the US while proceeding with net-zero transition:

First, geothermal energy is a renewable energy that President Trump values, a stance which he shares with former President Joe Biden's administration, and it is a renewable energy the US is actively developing. Taiwan can seize this opportunity

to negotiate trade with the US and introduce its advanced geothermal extraction technology through procurement or the engineering, procurement, and construction model, thereby accelerating geothermal development in Taiwan. Furthermore, Taiwanese electronics companies with factories in the US can be encouraged to invest in geothermal power plants in the US, acquire their equity, or purchase their energy, gradually leading to acquisition and introduction of those technologies. Geothermal energy is a direction which Taiwan and the US can actively develop through cooperation, and that will contribute to net-zero transition.

Secondly, agricultural states in the US abound in corn, which can be used to produce large quantities of ethanol. At present, Taiwan uses methyl tert-butyl ether (MTBE), which is carcinogenic, as a gasoline additive. Taiwan may consider importing bioethanol from the US to replace MTBE, which would also increase procurement from the US and help balance the trade deficit.

Finally, given US expectations for Taiwan to increase investment, consideration could be given to investing in industries that are conducive to Taiwan's net-zero transition, such as the research and development of green ammonia. Given Taiwan's energy scarcity and insufficient supply of green hydrogen, green ammonia appears to be a more viable option for the future. Taiwan can enhance its methane pyrolysis technology or collaborate with the US, utilizing US natural gas to produce green hydrogen, which is then converted into green ammonia before being transported back to Taiwan, thereby supporting Taiwan's net-zero transition.

(4) Advisor, Eugene Chien

In promoting energy conservation and carbon reduction, if the focus is solely on energy conservation, the effect will be about 55%. To compensate for this, the circular economy will play a key role. Given that Taiwan has limited resources, implementing a high-value circular economy will significantly reduce carbon emissions. This is the pathway many countries are using to advance their net-zero transition. Therefore, I suggest that the MOENV clearly enhance the tangible outcomes of the circular economy in energy conservation and carbon reduction. Furthermore, combining energy conservation and carbon reduction with the carbon pricing mechanism will produce even stronger market incentives.

Taiwan's GDP accounts for only 0.7% of the global total, yet in an S&P survey of companies worldwide with excellent ESG performance, Taiwanese companies accounted for up to 9%, and 10.6% according to the Dow Jones Sustainability Indices, behind only the US and Japan. This highlights the leading position of large Taiwanese enterprises in sustainable development. The Taiwan Institute for Sustainable Energy has long held ESG competitions, attracting numerous enterprises with a combined revenue of NT$36 trillion, demonstrating that large Taiwanese enterprises are on the right track with ESG. S&P also pointed out that compared to Western countries, Taiwan has made significant progress in ESG, and this progress has extended to SMEs. In summary, international changes present an excellent opportunity for Taiwan to surge ahead of the pack, and Taiwan's ESG level can be expected to rank among the global leaders.

Lastly, three aspects of carbon reduction efforts still require attention:

The Climate Change Response Act was promulgated on February 15, 2023, but only 12 out of the 28 related pieces of subordinate legislation have been completed. To facilitate policy implementation, the revision of those pieces of subordinate legislation should be accelerated to enhance the legal framework.

The Taiwan Carbon Solution Exchange was established in 2023, but its trading volume remains low. Consideration should be given to establishing a system that effectively promotes substantial carbon trading to promote Taiwan's carbon reduction plans.

Taiwan has a high level of electrification, but the proportion of fossil fuel-based power generation is relatively high. The electricity carbon emission factor should be reduced as soon as possible to decrease society's overall carbon emissions and accelerate the carbon reduction process.

(5) Secretary-General to the President, Pan Men-an

Developing a circular economy requires alignment with global industry trends. However, Taiwan's current industrial regulations have shortcomings. I recommend improving relevant regulations by promoting a circular economy. For example, lithium batteries are a key resource in Taiwan with recycling potential, and tungsten, which is refined from scrap metal, is an important strategic material and raw material for the aerospace industry. However, they lack clear classification as either industrial products or waste; thus, the competent authorities should clarify. The MOENV and the MOEA should collaborate to take inventory of resources and integrate relevant regulations to facilitate compliance by businesses. This will promote the reuse of waste,

retain critical resources for circulation within Taiwan, and further enhance the nation's competitiveness.

(6) Convener, Lai Ching-te

1. Responses to committee members' concerns

   To accelerate the promotion of climate change initiatives, the MOENV can plan to invite the committee members to give lectures at universities on behalf of the committee on the information we share here.

   Regarding the difficulties in green energy financing, I request FSC Chairperson Peng and Minister of Environment Peng to engage in deliberation and cooperation, assessing whether to provide assistance through the MOENV, and propose establishing relevant loan mechanisms to the FSC so as to facilitate financial institutions' support for green energy development.

2. Consolidated response

   Thank you to the committee members, both deputy conveners, and the advisors for your valuable input today. I also thank Minister Peng and Chairperson Peng for their reports today, and the heads of all ministries and agencies for their responses.

   I will now provide my consolidated directive on the valuable input put forward by the committee members today and the two briefings:

   First, the government must serve as a strong supporter for enterprises implementing the digital and net-zero twin transition and assist impacted industries by providing project-based guidance measures. We must continue refining net-zero policies and concrete measures, encourage

enterprises to transition to carbon reduction practices, guide funding toward sustainable infrastructure, promote research and development of low-carbon technologies, align with international sustainability disclosure standards, promote the carbon pricing system, and implement new national emission reduction targets.

Therefore, I request that the MOENV work with the MOEA, the Ministry of Labor (MOL), the Ministry of Education, and other relevant agencies to continue expanding green-collar talent training, provide re-employment and green-collar job transition opportunities for impacted workers, and provide investment from a green growth fund to develop innovative net-zero technologies, thereby injecting new momentum into Taiwan's green growth. In other words, we will not change our net-zero transition goals due to new political circumstances.

Second, through public-private partnerships, we will make Taiwan a forerunner of the circular economy and create a Green Taiwan brand. I request that the MOEA, MOENV, and other relevant agencies collaborate with industry associations to promote high-value resource recycling, and recycle and retain rare and precious metals within Taiwan. Meanwhile, by integrating labels, standards, and data traceability, we will promote the export of technologies and systems, and use the circular economy as an industry upgrade strategy to counter international carbon tax and non-tax barriers, thereby strengthening overall supply chain resilience and independent development capability. Therefore, I request the MOENV to proceed with legislative amendments as soon as possible.

Third, we must establish criteria for determining key

supportive economic activities and foster the establishment of professional assessment institutions. We must expedite the development of said criteria for renewable energy, low-carbon technologies, and deep energy saving as well as provide a list of enterprises and products for external reference. We must also establish professional assessment institutions to assist with technical viability assessments for industrial transformation. Also, incentive measures or risk-sharing mechanisms should be put forward to increase the willingness of the financial sector to participate in investment and financing.

Fourth, we must build a carbon emissions database of industries step by step and plan carbon reduction pathways to guide enterprises in carbon reduction. For enterprises to implement carbon reduction, they must first understand their own carbon emissions status and their position compared to their peers. Meanwhile, stakeholders such as the financial sector can be leveraged as well to drive carbon reduction.

Therefore, I request the MOENV, MOEA, and FSC to establish a carbon emissions database of industries and carbon reduction pathways as a crucial foundation for driving transition. Furthermore, through rewards and incentive mechanisms, we should encourage enterprises to provide carbon emissions data and assist funders and enterprises in identifying, disclosing, and tracking the status of transition activities to guide enterprises in carbon reduction and set goals and strategies.

Financial impact is also a crucial engine for promoting net-zero and sustainability among industries. I request the FSC and relevant agencies to stay abreast of domestic and international net-zero transition trends, strengthen the

resilience of industries as a whole in response to climate change risks, and actively promote financing for the green and energy transition as a catalyst for the sustainable development of Taiwan.

In addition, I would like to extend my appreciation to the Executive Yuan for their coordination and integration, enabling government agencies to plan and move forward with the items listed in the third committee meeting. I believe that results will gradually become apparent in the short term. Moving forward, I request the Executive Yuan and relevant agencies to continue promoting, tracking, and supervising the implementation as well as report the results to the public at the next meeting.

Lastly, I request that the administrative team incorporate all the input from today's meeting into considerations for improving green and transition policies, and provide assistance to enterprises and the general public wherever it is needed. Let us work together towards a green and sustainable future. Thank you.

VI. Extempore Motions

Proposal: Climate engagement strategies for the government's four major funds should be included in the green and transition finance action plan. (Proposed by Committee Member Chao Chia-wei and three other committee members)

1. Description of Committee Member Huang Pin-han's Proposal

2. Committee Members' Remarks

(1) Committee Member, Peng Chi-ming

Considering that the funds of the MOTC, MOL, Ministry

of Finance, and other relevant agencies have varied purposes, uses, and natures, further discussion can be conducted on the issue.

(2) Committee Member, Sophia Cheng

The four major funds of the government participate in Taiwan's sustainable investment survey and possess a foundation for sustainable investment. The Bureau of Labor Funds of the MOL has drafted a social responsibility investment policy and is actively engaging with enterprises. The Veterans Affairs Council also began discussions last year. It is recommended that units exchange experiences to facilitate the simultaneous adoption of the relevant policies by the four major funds.

(3) Committee Member, Chen Shih-kai

Chunghwa Post Co., Ltd. continued to conduct climate risk management and disclosure in its 2023 climate-related financial disclosure commitment, ensuring that its operational activities and investment business achieve the 2050 net-zero emissions goals. If the committee members have other suggestions for improvement in this regard, please share them so that they can be conveyed to the proper agencies for action.

3. **Resolution:** Considering the different natures of the four major funds, it is requested that the lead agency relay the committee members' opinions to the four major funds for reference.

VII. Chair's Closing Statement

Net-zero transition is at the core of future development for major countries worldwide. Despite the US announcing its withdrawal from the Paris Agreement and introducing new tariff policies,

which have led to economic impacts and raised concerns about potential shifts in the enforcement of climate policies, I want to emphasize that the transition to net-zero emissions by 2050 is and will remain unchanged as Taiwan's goal.

We also recognize that many industries face increased uncertainty in their operations due to recent significant changes in international trends and thus have adopted a wait-and-see attitude regarding carbon reduction and ESG efforts. I would like to reiterate that the government will serve as a strong supporter for industries, enabling transformation and helping them find new opportunities for Taiwan amidst this crisis.

At the previous meeting, we proposed new emission reduction targets, demonstrating our commitment and responsibility to the world. Next, we must implement these targets through action. I request that the administrative team continuously refine such strategies and measures, while also strengthening public dialogue and communication to build consensus. By deepening public-private partnerships, we are ensuring that Taiwan's carbon reduction targets for 2030, 2032, and 2035 will be reached on schedule.

Finally, as this meeting ends, I extend my appreciation to everyone – those from government agencies, citizens, industry representatives, experts, and scholars – for your contributions. Your diverse and open discussions in the four meetings convened over this past year have resulted in constructive directions and outcomes. Through this committee, with reports every three months, the public can also gain a better understanding of the government's measures and efforts.

I want to emphasize once again that we need the understanding and support of society. Only by uniting the strengths of all sectors

can we respond to the challenges presented by climate change and net-zero transition and enable climate action to move towards the next more proactive phase. Let us work together to build a Green Taiwan brand and make greater contributions to the world. Thank you.

VIII. Meeting End Time： 7:50 p.m.