

2022

Annual Report on National Sustainable Development



National Council for Sustainable Development,
Executive Yuan



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Sustainable development is a universal value. To align itself with this global pursuit and keep abreast of international trends, Taiwan has developed its own Sustainable Development Goals (SDGs) taking into reference the United Nations SDGs. To this end, the National Council for Sustainable Development (NCSD) was established under the Executive Yuan in 1997, and Taiwan's own SDGs were formulated in December 2018, and the indicators were set in July 2019. To adapt to changes in the relevant laws and institutions and to effectively increase the achievement rate of the indicators, the first rolling review of the Taiwan SDGs was conducted. The review findings were presented to the 34th NCSD Council Meeting on July 29, 2022 and were subsequently approved by the Executive Yuan. Currently, the Taiwan SDGs include 18 goals, 143 targets, and 337 indicators.

To actively promote national sustainable development, the NCSD holds regular meetings to strengthen inter-ministerial communication and collaboration. By creating a website, publishing the results of the government's annual work on sustainable development, and holding the National Sustainable Development Awards, the NCSD aims to increase public awareness of the importance of sustainable development and to encourage public participation. In addition, the NCSD conducts regular follow-ups on the results its efforts toward the targets and indicators, so as to achieve sustainable development.

This Annual Report aims to provide a comprehensive summary of Taiwan's sustainable development efforts in 2022. Its primary purpose is to enhance the understanding of Taiwan's sustainable development efforts among both the local population and the international community. The Report also aims to inspire active participation from different sectors of society, ultimately contributing to the advancement of national sustainable development. This Report covers the tangible achievements made in 2022, including an overview of the NCSD's annual work (Chapter 1), efforts toward Taiwan's SDGs and their results (Chapter 2), and the 2022 National Sustainable Development Awards (Chapter 3). Finally, the Report concludes with an outlook on the future direction of sustainable development work in Taiwan.

Sustainable development requires collaborative efforts from all. Through the publication of the Annual Report on National Sustainable Development, we hope that the public and the international community will have a better understanding of the efforts put forth and the results achieved by Taiwan in its pursuit of sustainable development. This will help raise public awareness, and in turn, increase public participation.



In 2022, the NCSD convened the 34th Council Meeting to review Taiwan's SDGs, discuss the revision of indicators, and outline Taiwan's pathway to net-zero. In addition, progress on the resolutions from the 33rd Council Meeting was presented and the Second version of "Taiwan's Voluntary National Review" was approved.

In addition, the Council convened three working conferences (Working Conference No. 53 to 55). In the 53rd Working Conference, a report was presented on the "Review of Taiwan's Sustainable Development Goals and Revision of Indicators" and the "Government's Promotion of Ecosystem and Biodiversity Sustainable Development." There were discussions on Taiwan's pathway to net-zero by 2050 and the initial draft of the Second version of "Taiwan's Voluntary National Review." The 54th Working Conference discussed the annual review of Taiwan's sustainable development goals and the "National Climate Change Adaptation Action Plan (Year 2023-2027)." The 55th Working Conference continued discussions on Taiwan's pathway to net-zero, which was raised during the 53rd Working Conference. The discussions further elaborated the 12 key strategies, and a decision was made to initiate a review and assessment mechanism. Additionally, there would be a continued emphasis on public participation and communication to facilitate a rolling review to further drive Taiwan's sustainable development.

I. Convene the 34th NCSD Council Meeting

The 34th NCSD council meeting was held on July 29, 2022 at the First Conference Room of the Executive Yuan and was presided over by Premier and NCSD Chairman Su Tseng-chang. The meeting included four reports and one extempore motion. The major resolutions are as follows:

1. Report 1: Progress on the Action Items and NCSD Affairs since the Previous (33rd) Meeting

Resolution:

(1) Regarding the implementation of the resolutions

from the 33rd Council Meeting and the state of council affairs: Item 1 is to be controlled by the NCSD Secretariat; items 4 and 5 have been removed from the control list; items 2 and 3 are included in today's report and will be handled in accordance with the meeting's resolutions.

(2) Regarding the views offered by the council members on Nature-based Solutions and the two important tasks scheduled for the second half of the year, namely the National Sustainable Development Awards and the Voluntary National Report, we kindly request NCSD Executive Kung Ming-hsin to oversee the progress of these tasks, and the NCSD Secretariat to effectively communicate and collaborate with the working groups to ensure completion of the tasks.

2. Report 2: Taiwan's SDGs and Review of the Indicators

Resolution:

(1) Regarding the comments and questions raised by council members on this report, we kindly request the relevant government agencies to further consult with the council members to find solutions.

(2) We kindly request the NCSD Secretariat and working groups to reexamine the appropriateness of the goals and indicators based on feedback provided by attending council members, and to ensure rigorous oversight and assessment so as to formulate overarching goals for sustainable development.

1. In 2019, the government established 336 indicators. Due to legislative amendments, policy adjustments, budget allocations, and other factors, amendments were proposed for 129 indicators. Some indicators have been successfully implemented and their targets achieved ahead of schedule. This include Indicator 4.2.1, which measures the percentage of children under age of two who have access of public and quasi-public educare services. The target was initially set

to reach 92% by 2030, but by the end of 2021, it had already reached 92.92%. If the target were simply to be adjusted to 93% by 2030, it might be too easily achieved, necessitating a readjustment.

2. Additionally, some indicators may not be sufficiently aligned with their intended goals. For instance, Indicator 4.7.7, which measures the number of visitors to the human rights Historical Sites of Injustice, was originally intended to increase public awareness on the history of Taiwan's human rights through an increase in visitor numbers. However, in addition to simply using "number of visitors" as an indicator, it is necessary to explore better methods and other approaches to ensure that the public understands the injustices and hardships of the past, so as to achieve more tangible results.

3. Report 3: Taiwan's Pathway to Net-Zero

Resolution:

The more extreme the weather, the more severe the challenges the world faces. For this reason,

President Tsai Ing-wen announced on April 22, 2021 that net zero emissions by 2050 is not only a global goal but also a national objective. The President on the same day also requested the Executive Yuan to work toward meeting this objective. While the current report has received positive feedback from attending council members, there is still room for improvement in the formulation of overall goals and strategies. We kindly request relevant government agencies to maintain ongoing dialog with council members, so that Taiwan's pathway to net-zero can become more concrete. At the same time, efforts toward net zero must be accelerated to demonstrate the government's commitment.

4. Report 4: Voluntary National Review (VNR)

Resolution:

Taiwan will present its second Voluntary National Review (VNR), which will help Taiwan keep abreast with international trends and facilitate experience sharing. The VNR will also show that although it is not a member of the United Nations, Taiwan continues to actively participate in global sustainability efforts and is also able to make significant contributions.



▲ Figure 1-1 The 34th NCSD Council Meeting

The VNR covers five areas: economy, society, environment, government governance, and global partnerships. It provides concrete evidence of Taiwan's commitment to sustainable development and universal values. For instance, in 2019, Taiwan became the first in Asia to legalize same-sex marriage and it ranked highest in Asia for gender equality. During the pandemic, Taiwan achieved its highest economic growth in 11 years in 2021. Faced with the global pandemic, Taiwan collaborated with like-minded countries to donate masks and vaccines, thus creating a virtuous cycle. All these efforts underscore Taiwan's ongoing commitment to sustainable development.

Taiwan's second VNR will highlight its efforts toward sustainable development. After review and approval, the report will be published on the Internet and will serve as important source of information both in Taiwan and abroad. We kindly request the NCSD Secretariat and its working groups to refer to the recommendations from different government agencies and council members to make the necessary revisions, so as to ensure the robustness of the report.

5. Extempore Motion: The Formosan sika deer population at the Kenting National Park is increasing and thus affecting the ecosystem and other agricultural activities. An action is requested on this issue to ensure sustainable development.

Resolution:

Ensuring sustainable development requires addressing and resolving issues. While there was a need to restore the Formosan sika deer population in the past, ecological restoration is not without limitations and can at times become a burden to the environment. We kindly request the relevant authorities to determine the desirable sika deer population size before it becomes a burden to the environment. Furthermore, we kindly request the relevant authorities to formulate and announce to the public measures for population control. If there are alternative

recommendations or better approaches, please consider and adopt them.

II. Convene Working Conferences Nos. 53 to 55

1. 53rd Working Conference

The 53rd working conference was held on May 27, 2022, in Conference Room No. 610 of the National Development Council, and was chaired by NCSD Executive Kung Ming-hsin. The agenda featured three reports and two discussion items, resulting in the following resolutions:

- (1) Report 1: Progress on the Action Items and NCSD Affairs Based on the Resolutions of the Previous (52nd) Conference

Resolution:

1. We would like to thank all working groups and task forces for their proactive efforts in promoting sustainable development and for carrying out rolling adjustments based on the recommendations of the council members.
2. Please have the NCSD Secretariat continue to look into relevant issues such as the interrelatedness of sustainable development goals and NbS, as recommended by the council members.

- (2) Report 2: Taiwan's Sustainable Development Goals and Review of the Indicators

Resolution:

1. Please have the working circles and working groups review the indicators revisions as per recommendations from the council members. This includes assessing whether the indicators are aligned with international trends and consistent with Taiwan's national needs, setting of challenging targets for

2030, and looking into indicators mentioned by the council members. These indicators include Indicator 4.7.7, which measures the number of visitors to the human rights Historical Sites of Injustice during the period of martial law and Indicator 16.7.1, which pertains to the birth registration rate. In addition, as per recommendations from the council members, please consider revising the names of Type B indicators and setting the 2030 target values for Type D indicators.

2. Please have the NCSD Secretariat compile the above review of the indicator revisions and present it for approval at the 34th Council Meeting.
3. To facilitate achievement of indicator targets, the NCSD Secretariat and working groups should conduct ongoing reviews, track progress, and, if necessary, the working groups should propose remedies for tasks that are lagging behind. Reports should be submitted to the Working Conferences if necessary.

(3) Report 3: Government's Promotion of Ecosystem and Biodiversity Sustainable Development

Resolution:

1. Please have the Goal 15 Working Group look into the international trends on biodiversity conservation and, in line with the Taiwan SDGs and government policies, collaborate with the different government agencies to jointly promote biodiversity and protect local habitats and ecology.
2. Please have the Goal 15 Working Group provide the full text of the 2020 National Biodiversity Report and make it publicly available on the NCSD website.

(4) Discussion 1: Draft of Taiwan's Pathway to Net-Zero

Resolution:

1. The draft serves as a basis for dialogue on net-zero transition, and will be revised accordingly based on input from all parties. We appreciate the suggestions provided by the council members regarding the draft. Please have the Environmental Protection Administration (now renamed as the Ministry of Environment) incorporate the input into the draft and present it at the 34th council meeting.
2. The relevant government agencies are currently implementing the 12 key strategies of the net-zero pathway. As per suggestions by the council members, guidelines for businesses to adapt the net-zero emissions policy are being developed jointly by the Ministry of Environment and the Ministry of Economic Affairs. These 12 key strategies are expected to be announced by the end of the year and will include the following:



▲Figure 1-2 The 53rd Working Conference

incentive mechanisms, human resource allocation, budget, and assessment pathways. The responsible government agencies will then carry out tasks related to 2050 net-zero transition.

(5) Discussion 2: Draft of the Voluntary National Report

Resolution:

We would like to thank the council members for their valuable input. Please have the NCSA Secretariat and all working groups revise the draft VNR based on the council members recommendations and present it for approval at the 34th council meeting.

2. 54th Working Conference

The 54th working conference was held on November 4, 2022, in Conference Room No. 610 of the National Development Council, and was chaired by NCSA Executive Kung Ming-hsin. The agenda featured one report, two discussion items, and one extempore motion, resulting in the following resolutions:

(1) Report 1: Progress on the Action Items Based on the Resolutions of the Previous (53rd) Conference

Resolution:

1. We would like to thank all working groups and task forces for their proactive efforts in promoting sustainable development. The review and revision of Taiwan's SDG indicators, as per the directives of the NCSA Chair, have also been successfully completed. After the revisions are approved by the Premier, they will be included in monitoring and assessment processes of next year. In the future, we ask the working circles to increase oversight, and the working groups to convene meetings as needed to review progress on the indicators and propose measures for improvement.

2. The NCSA Secretariat has uploaded the VNR and other relevant promotional materials to the NCSA website. We encourage all working groups and task forces to leverage these materials as appropriate when promoting SDGs-related activities or in media communications. Additionally, if any working or task force has produced information or multimedia materials that can contribute to the promotion of SDGs, please share them with the NCSA Secretariat. This joint effort will help enhance the visibility of NCSA's efforts in promoting SDGs.

3. To highlight the government's commitment to the net-zero pathway and to implement its goals in various stages, the Climate Change and Net-Zero Transition task force is currently formulating action plans for the 12 key strategies. We kindly request the relevant government agencies to carefully review the issues of concern of the different stakeholders. Additionally, we kindly request the relevant agencies to increase communication to the public and present the results of their work to the NCSA for review by the council members.

(2) Discussion 1: Annual Review of Taiwan's SDGs 2021

Resolution:

1. We kindly request the relevant ministries to consider the input provided by the NCSA council members and the Department of Transportation, Environment, and Natural Resources and make the necessary revisions. Specifically, we kindly request the Ministry of Transportation and Communications to review the reasons for the delay in Indicator 9.3.3, which relates to the proportion of railway stations with barrier-free elevators, and propose improvement measures.
2. While it is true that as of 2021, work on 44



▲Figure 1-3 The 54th Working Conference

SDGs indicators was delayed, our efforts improved compared to 2020. This positive trend demonstrates our commitment to sustainable development and our progress toward the 2030 goals. It's essential to continue our efforts in this direction.

3. To ensure that we meet the targeted indicator achievement rates, we kindly request the NCSO Secretariat and the relevant working groups to conduct ongoing reviews and assessments of our progress, including reporting to the working conferences when necessary.

(3) Discussion 2: National Climate Change Adaptation Action Plan (Year 2023-2027)

Resolution:

1. We kindly request the Environmental Protection Administration (now renamed as the Ministry of Environment) to consider the input provided by council members and make necessary revisions to the National Climate Change Adaptation Action Plan. Furthermore, we ask the Ministry to collaborate with relevant government agencies to conduct a comprehensive review of the action plan, and if necessary, extend the reporting deadline until the end of November this year.
2. In response to the recommendations by council members, we kindly recommend that, in addition to integrating NbS as a core component of the action plan, each sector should review the relevance and reasonableness of the proposed revisions. If necessary, each sector should coordinate with the Ministry of Environment for further confirmation.
3. Given the public's interest in reviewing the achievements of the second phase of the Climate Change Adaptation Action Plan (Years 2018-2022), including budget assessment and capacity-building, we kindly request the Ministry of Environment to work with the relevant sectors to organize a presentation session and to explain the results of the adaptation efforts. This will help enhance public, business, and organizational involvement.
4. We kindly recommend that the Ministry of Environment includes climate change risk analysis into next year's research plan and carry out comprehensive analysis based on different scenarios. Additionally, we request all government agencies to begin planning for areas that have not been fully inventoried. We propose the establishment of a national-level research center. In the proposed amendment to the Organic Act

of the Executive Yuan, the creation of a national-level environmental research center has been recommended as part of the re-organization of the Ministry of Environment. Once the amendment is passed, the new research center should be able to enhance and consolidate existing research capabilities.

(4) Extempore Motion

Council members have asked about Taiwan's participation in the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27) and relevant planning. The Ministry of Environment has explained the planning of the relevant activities in connection with Taiwan's participation in COP27.

3. 55th Working Conference

The 55th working conference was held on December 12, 2022, in Conference Room No. 610 of the National Development Council, and was chaired by NCSD Executive Kung Ming-hsin. The agenda featured one report and one discussion item, resulting in the following resolutions:

- (1) Report 1: Report on the Action Items Based on the Resolutions of the Previous (54th) Conference

Resolution:

Noted.

- (2) Discussion 1: 12 key strategies for Taiwan's 2050 Net-Zero Transition

Resolution:

1. We appreciate the concrete recommendations provided by the council members. We kindly request heads of the respective responsible agencies to consider these input and make the necessary changes. Please provide the council members with the updated content before its public release.
2. The 12 key strategies are expected to be



▲Figure 1-4 The 55th Working Conference

announced to the public by end of this year and will serve as an important basis for dialogue as Taiwan moves toward net-zero by 2050. We kindly request the Ministry of Environment and the National Development Council to explain the carbon reduction and economic benefits associated with these strategies. In pursuit of the 2050 net-zero target, government agencies responsible for these strategies have allocated budgets for their implementation. We request these agencies to include detailed budget planning information in their documents. Apart from government planning and policy implementation, cooperation from businesses and the public is essential. We request that all agencies responsible for these strategies support government efforts during each phase of implementation and be prepared to address public concerns

during mandatory enforcement or future adjustments.

- Following the launch of the 12 key strategies, a monitoring and assessment mechanism will be put into action. We request the relevant government agencies to actively promote these strategies, maintain robust communication with stakeholders, and expand public participation. These efforts will facilitate ongoing reviews and improvements, thus fostering a new momentum for Taiwan's sustainable development.

III. Review of the Sustainable Development Goals

The NCSG has conducted a review of the SDGs that included an annual review, which is aimed at assisting the central and local government agencies in preparing the VNR. In 2022, the Annual Review

on Taiwan's Sustainable Development Goals was published. The purpose of this report was to help the government agencies responsible for the individual goals and indicators report their annual data for use in the annual review report. The report included an overview of the progress on the individual goals, major policies of the year, major achievements, and outlook for the coming year. These data are then compared with the monitoring and assessment roadmap to assess the progress of each SDG and for continuous follow-up. In 2022, several cities and counties, including Kaohsiung City, Tainan City, Taoyuan City, and Lienchiang County, submitted Voluntary Local Review (VLR) reports, providing reviews of the progress of sustainable development work in their respective regions. Additionally, New Taipei City released its Voluntary Local Review on Sustainable Education, linking SDGs with different education policies.



▲Figure 1-5 Annual Review Report on Taiwan's Sustainable Development Goals



Sustainable development has always been a priority in Taiwan. In response to the United Nations' 2030 SDGs and to align with global sustainable development actions and international trends, while also taking into account local development needs, the government drafted the Taiwan SDGs in 2016, which were approved during the 31st NCSD council meeting in 2018. Taiwan subsequently established a set of indicators for these goals in 2019, and started rolling review of the SDGs in 2022, which included the revision of 161 indicators.

Currently, the Taiwan SDGs include 18 goals, 143 targets, and 337 indicators. The NCSD has established 17 working groups, each aligned with one of the 18 SDGs. Additionally, there are also the Nuclear-Free Homeland Promotion Task Force and the Climate Change and Net Zero Transition Task Force. This chapter provides an overview of the annual progress made toward Taiwan's SDGs, highlighting policies, regulations, and measures that have been implemented by each working group and special task force for the respective SDG.

GOAL 1

Strengthen social care services and economic security for the disadvantaged

1. Enhancing the self-support rate of the financially vulnerable; Constantly promote social assistance to take care of low-income households and middle-low-income households and to relieve those in need of emergency aid or disaster relief and assist them in achieving self-sufficiency.

In 2022, the self-reliance rate for low-income and middle-low-income households was 15%. Assistance was provided to 44 cases, totaling NT\$35,001,785.

2. Protecting the financially vulnerable.

The Ministry of Health and Welfare is committed to safeguarding the economic security and well-

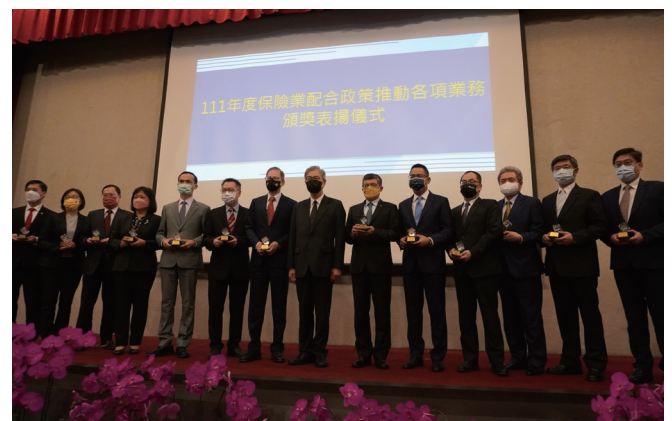
being of the economically disadvantaged. The Ministry has provided cost of living subsidies to eligible middle-low-income elderly citizens, disadvantaged children and youth, and individuals with disabilities. A total of 195,902 low-to-moderate-income elderly citizens received subsidies totaling more than NT\$16,134,518,000. A total of 108,754 disadvantaged children and youth received subsidies totaling more than NT\$2,433,135,000, while a total of 349,782 individuals with disabilities received subsidies totaling more than NT\$22,074,230,000.

3. Assisting individuals from low-income households and middle-low-income households who have the ability to work to find jobs.

Public employment service agencies provide one-stop employment services to individuals from low-income and middle-low-income households, offering employment counseling, job referrals, and vocational training opportunities to enhance their employability. In 2022, job registration assistance was extended to 22,844 individuals and a total of 17,588 individuals were referred jobs, achieving a job placement rate of 76.99%.

4. Basic insurance protection for disadvantaged and minority groups.

In 2022, the Financial Supervisory Commission set a target of 1.2 million insured individuals for micro-insurance policies. By the end of the year, the total number of insured individuals reached 1,531,000, surpassing the target.



▲Figure 2-1 2022 awards ceremony for the promotion of insurance businesses in line with government policy and for fair customer services in the insurance sector

5. Optimizing the coverage of all citizens, particularly the vulnerable, in the insurance systems, such as the Labor Insurance, the National Health Insurance, and National Pension; enrich the long-term care system; Enhanced resource deployment and service provision; and constantly providing living assistance for the senior citizens, children, and youth in the vulnerable group.

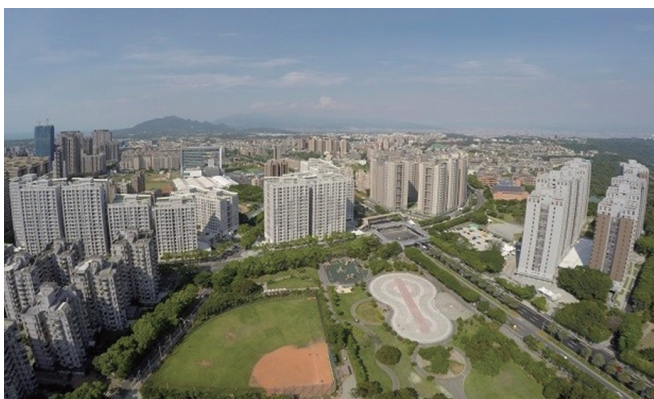
In 2022, a total of 526,413 disbursements were made to the indigenous peoples, amounting to NT\$1,998,485,900. The average monthly disbursement count was 43,868.

6. Increasing the proportion of subsidized rent households and social housing households of potential demand of disadvantaged families households:

As of the end of December 2022, there were a total of 71,112 social housing households throughout Taiwan, and 57,233 households have participated in the social housing leasing and management scheme. To share tangible economic benefits with



▲ Figure 2-2 2022 Global Health and Welfare Forum in Taiwan: A presentation on the pension system and economic security for the unemployed elderly



▲ Figure 2-3 Universiade Athletes Village public housing in New Taipei city

the tenants, the government has provided additional subsidies to both tenants and landlords to create a win-win situation. The government has helped economically disadvantaged individuals apply for housing, and has continued to promote policies to ensure an orderly and healthy rental market. Additionally, the central government has launched an annual NT\$30 billion program running from 2022 to 2025 to help 500,000 renting families reduce their cost of living.

GOAL 2

Ensure food security, eradicate hunger, and promote sustainable agriculture

1. Improving the agricultural production environment and enhancing the resilience of local farms to realize sustainable development in the agricultural industry

- (1) Relevant government agencies jointly launched the “Inter-regional Agri-Industry Plan and Highlights in Agri-Villages Plan” to integrate rural resources and link the agricultural industry chain. The goal was to help rural communities maintain infrastructure and improve their production environment. In 2022, a total of 418 environmental improvement projects were carried out in 36 regions across Taiwan. Additionally, 285 projects covering agricultural production technology were also implemented.
- (2) The “Agri-Village Business Management Assistance Program” was initiated to help businesses in farming communities operate independently and transform into companies or cooperatives. The goal was to help improve business operations and increase innovative capabilities to help create stable and efficient operational models. The program provided guidance to 188 rural community businesses, generating a total production value of NT\$460 million, 495 job opportunities, and an increase of NT\$241 million in investments. Furthermore, it facilitated the return of 303 young individuals

to rural communities to engage in farming or contribute to industry development.

2. Encouraging the loans for youths establishing agricultural businesses and engage in agricultural operations to improve the employment structure in agricultural communities and achieve sustainable agriculture:

From the Youth Entrepreneurship in Agriculture Program, interest-free loans of NT\$5 million for five years are provided to the top 100 young farmers, while interest-free loans of NT\$2 million for five years are provided to other young farmers. In addition, a more flexible loan system has been implemented, which allows applicants facing difficulties in loan applications to be referred to the Agricultural Bank of Taiwan for further assistance. Other improvement measures include an online loan application platform and a dedicated helpline for loan consultations. In 2022, a total of NT\$4.7 billion in loans was disbursed, which benefitted 2,780 young farmers.

3. Promoting pipeline irrigation facilities to improve water utilization rate and quality of agricultural products:

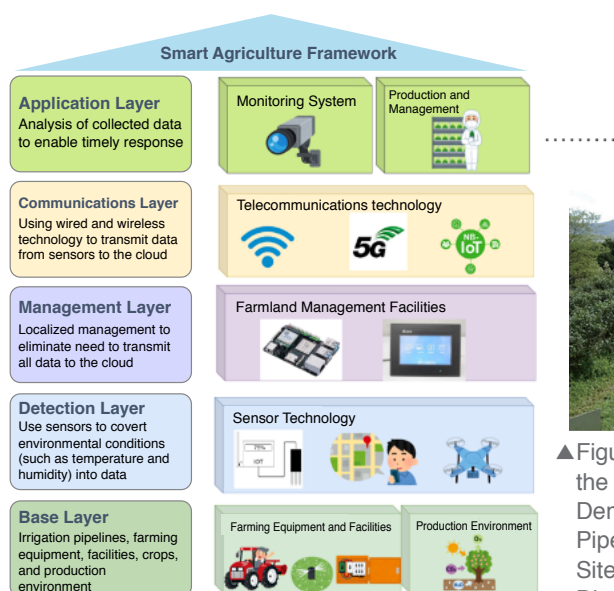
In 2022, a modern greenhouse was built at the Agricultural Engineering Research Center, and a demonstration site for outdoor smart irrigation was set up at Wenshan Farm in Xindian District, New Taipei City. These facilities will be open for on-site visits in the future, allowing farmers to gain insights into smart irrigation equipment and technology,

thus increasing their willingness to adopt pipeline irrigation systems and other emerging technologies.

4. Promoting food traceability, organic farming, and agricultural and food products traceability system to achieve the percentage of agricultural area adopting sustainable practices.

(1) Promotion of the food traceability certification: To alleviate the costs associated with certification, the Council of Agriculture (now renamed as the Ministry of Agriculture) has offered subsidies to cover expenses related to product inspections, the salaries of information registration officers, purchase of the necessary computers for group certification, and purchase of barcode readers. Additionally, environmental subsidies are provided to those who have passed traceability certification, encouraging farmers to actively participate in the certification system. Training has been provided for production traceability counselors to enhance their capacity to support the traceability system. The information systems required for product traceability have also been optimized, and relevant training sessions have been conducted to guide Taiwan's agricultural and food industry toward sustainable practices. As of the end of 2022, the total area of crops that had received traceability certification reached 79,330 hectares. This represents a 4.98 times increase compared to 2018 when only 15,938 hectares were covered. The traceability system has alleviated the burden on water resources, soil, and the environment. Environmental sustainability can thus be achieved through good practice in agricultural production.

(2) Promotion of organic and environmentally friendly farming: By the end of 2022, a total of 13,545 hectares of farm lands had passed organic certification. There were 46 environmental-friendly farming organizations that had successfully obtained accreditation, and the registered area for environmentally-friendly farming was 5,863 hectares. These achievements are among the best in the Asia-Pacific region.



▲ Figure 2-4 System diagram of the Smart Pipeline Irrigation Demonstration Site (left); Smart Pipeline Irrigation Demonstration Site at Wenshan Farm in Xindian District, New Taipei City (right)



▲ Figure 2-5 President Tsai Ing-wen inspects the Anjia Food Bank in Taoyuan City (left); a section of the Taoyuan City Food Bank (right)

(3) Promotion of a labelling system to allow consumers to look up complete records of production: The purpose of the traceability system is to establish a self-management and product safety responsibility framework for producers. It allows consumers to promptly access producer information and separate domestic products from imported ones. The traceability system enhances the image of Taiwan's agricultural products, highlighting their quality and traceability to gain consumer trust. As of the end of 2022, the total area covered by the traceability system reached 64,520 hectares.

5. Conducting whole grain and unrefined cereal cooking competitions to enhance the culinary skills of foodservice personnel in preparing healthy and nutritionally balanced meals:

The government has organized cooking competitions focused on whole grains and unrefined cereals for the foodservice sector. These competitions are open to nutrition experts, culinary students, and professionals. The primary objective is to enhance their knowledge of whole grains and unrefined cereals while improving their culinary skills. These competitions aim to identify recipes that provide healthy and balanced nutrition. The selected recipes can then be used as references for school lunch menus, promoting healthy eating habits and nutritional balance among students.

6. Promoting the National Food Bank policy in cities, municipalities, and counties

(1) Food banks are operated using various models, including physical warehousing, food vouchers, resource matching, food-saving kitchens, and

food-saving refrigerators. In 2022, a total of 69 projects were implemented throughout Taiwan, with a combined 236 physical distribution points established by municipal and county (city) governments.

- (2) In 2022, the Ministry of Health and Welfare provided subsidies using proceeds of Taiwan Lottery to support a total of 36 projects by county and city governments and non-governmental organizations. The total subsidy amount was approximately NT\$20,572,434.
- (3) In 2022, food banks provided food and other items to economically disadvantaged individuals to support their basic living needs, benefiting over 2.71 million people.

GOAL 3

Ensure promote healthy lives and promote well-being for all at all ages

1. Promoting reproductive health:

To ensure comprehensive prenatal care and safeguard the health of both mother and baby, the prenatal examination service was expanded from 10 to 14 prenatal check-ups starting July 1, 2021. Between the 24th and 28th weeks of pregnancy, screening for gestational diabetes and anemia were added. The number of routine ultrasound examinations was increased from one to three to reduce pregnancy-related risks. The maternal mortality rate decreased from 16.0 per 100,000 live

births (28 individuals) in 2019 to 14.0 per 100,000 live births (22 individuals) in 2022.

2. Reducing neo-natal and under-5 mortality rate.

- (1) In 2022, 10 hospitals implemented the “Enhancing Pediatric Healthcare Program for 2021-2024,” as approved by the Executive Yuan. This program aimed to enhance pediatric healthcare and resources and establish maternal and infant medical centers for high-risk pregnancies and neonatal intensive care.
- (2) In 2022, subsidies were provided to 14 hospitals to offer 24-hour pediatric emergency medical services and intensive care for serious illnesses.
- (3) To improve the quality of care for children with rare and severe conditions, facilitate transfer of critically ill children, and offer professional diagnosis, six specialized teams for rare and severe conditions, two critical care transfer teams, and one platform for diagnosing difficult diseases were established in 2022.
- (4) A center for the distribution of hard-to-access essential clinical medications and medical items for children was set up in 2022. A list of managed items was established, including 31 medications and 47 medical items.
- (5) In 2022, promotion of the nationwide home care program for infants with low (including very low) birth weight was expanded. The enrollment rate for infants with birth weights of $\leq 1,500$ grams was 98.2%, and for infants with birth weights greater

than 1,500 grams but less than 2,500 grams, the enrollment rate was 98.7%.

3. Increasing coverage of alcohol and substance use disorder treatment services.

- (1) In 2022, drug addiction treatment subsidies were provided to a total of 13,884 individuals, and alcohol addiction treatment subsidies were provided to 3,146 individuals. As of the end of 2022, 6,476 individuals were still undergoing opioid substitution treatment. In addition, methadone treatment facilities are encouraged to provide medication dispensing services at facilities other than the initial registration site. By the end of 2022, 21 counties and cities and 64 facilities had participated in this program. Over the past three years, 13 additional satellite medication dispensing points for substitution treatment were established to facilitate treatments.
- (2) Since 2018, six demonstration centers for treatments of drug and substance abuse were established. By the end of 2022, a network of 104 addiction medical services had been established to enhance the capacity for addiction treatment and intervention. The network included local hospitals, clinics, psychological therapy/counseling centers, social work offices, and private organizations,
- (3) As of the end of 2022, there were a total of 202 psychiatric hospitals, 148 of which were designated as addiction treatment institutions by the Ministry of Health and Welfare (accounting for 73.3% of the total).

4. Implementing the 4th National Cancer Prevention Program (2019 to 2023)

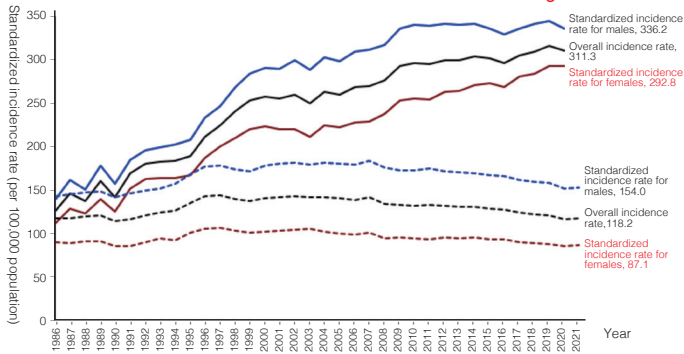
- (1) The overall standardized cancer mortality rate decreased from 132.7 per 100,000 population in 2012 to 118.2 per 100,000 population in 2021, representing a 10.9% reduction.
- (2) In 2022, approximately 4.35 million people received screening services for cervical cancer, breast cancer, colorectal cancer, and oral cancer through contracted healthcare providers and local health bureaus. Improvements to the screening services are ongoing, and positive cases are tracked for further diagnosis. Over



▲Figure 2-6 The “Enhancing Pediatric Healthcare Program for 2021-2024” as approved by the Executive Yuan

Standardized Incidence Rates and Mortality Rates of Cancers

■ The standardized incidence rates are fluctuating



Note: 1. Source of incidence rate data: Ministry of Health and Welfare
2. Source of death rate data: Department of Statistics, Ministry of Health and Welfare
3. Age standardization rate (per 100,000 population) was calculated using the global population in 2000.
4. Starting 2008, IDC-10 was used to calculate the number of deaths. Since 2019, the 2016 version of IDC-10 has been used.

▲ Figure 2-7 Trends in age-standardized incidence and mortality rates for all cancers

50,000 cases of precancerous lesions and cancer were detected, leading to early diagnosis and treatment. The National Lung Cancer Early Detection Program was launched on July 1, 2022 to offer low-dose computed tomography (LDCT) lung cancer screening every two years for high-risk groups, those with a family history of lung cancer, and heavy smokers. By December 2022, this program had provided services to approximately 23,000 individuals.

(3) Subsidy was provided to 89 hospitals for the establishment of cancer resource centers. Some 62 of these hospitals obtained quality certification, covering 90% of the cancer patients. The 5-year survival rate increased from 50.2% before certification (2010-2014) to 61.5% (2016-2020).

5. Improving the drug review process and completing the number of drug reviews that meet International Council for Harmonization of Technical Requirements for Pharmaceuticals for Human Use (ICH) standards to satisfy the needs of the citizenry:

To safeguard the people's rights to medication, improvements to the drug review process have been ongoing. In 2022, reviews of 98 new drugs (including biopharmaceuticals) and 288 generic drug were completed. The number, totaling 386 cases, meets the ICH standards for pharmaceutical regulations.

GOAL 4

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

1. Actively developing public childcare centers and continuing to promote the quasi-public childcare center system:

As of December 2022, there were 150 community public childcare centers and 235 privately-run infant care centers, collectively providing care for 12,264 children under the age of 2. The capacity for public childcare services has been progressively expanded yearly. In addition, there were 22,582 childcare providers (with a signing rate of approximately 91.76%) and 893 childcare centers (with a signing rate of 97.81%) that had signed agreements with local governments, offering care for 83,690 children under 2 years old.

2. Expanding the supplies of public and quasi-public educare services:

From 2017 to 2022, there was an increase of 3,092 public childcare centers, providing approximately 70,000 additional educational opportunities. In the 2022 academic year, the public childcare centers were able to admit more than 257,000 children. Additionally, 1,859 private childcare centers joined the quasi-public system, offering affordable childcare and education services to over 214,000 children. In total, there are now 4,848 public and quasi-public educare services, which account for approximately 68.8% of the total



▲ Figure 2-8 A public childcare center in Panchiao District in New Taipei City

and represent an increase of around 29.8% since 2016. These institutions provide more than 470,000 affordable enrollment opportunities, which is an increase of over 280,000 compared to 2016.

3. Establishing diverse lifelong learning paths, such as community colleges, providing various learning opportunities for adults, and offering people and multi-ethnic groups continuous educational services to enhance adult participation in lifelong learning

- (1) Establishing a comprehensive system for learning for the elderly: In 2022, there were a total of 370 Active Aging Learning Centers across towns and cities in Taiwan. Resources for senior learning were expanded to reach 2,727 villages, and 113,101 learning sessions were conducted.
- (2) Promoting family education: In 2022, different family education activities were organized, including 4,763 sessions of parenting education and activities and 1,831 sessions of marriage education and activities.
- (3) Building intelligent services for lifelong learning: The Ministry of Education promoted the “Intelligent Services for Lifelong Learning – Technological Innovation Service Project at National Community Education Institutions” to use innovative facilities, cross-discipline value-added service network, and expand collection of resources to assist community colleges. In 2022, grants were approved for 12 detailed plans from 10 institutions.
- (4) Enhancing the quality of public library services: In 2022, 21 local governments received subsidies for a total of 95 public libraries to update their facilities and equipment. These subsidies supported various activities, including the promotion of diverse reading, professional training courses for librarians and volunteers, and purchasing collections. In 2022, subsidies were approved for 22 counties and cities, benefiting a total of 472 public libraries.

4. Enhancing youth’s obtainment of information and communications technology (ICT) skills, and increase the opportunities of youth to gain relevant professional techniques and vocational skills:



▲Figure 2-9 “Programming Learning for University Students” results presentation

In line with the 108 national curriculum guidelines (starting year 2019), Information Technology has been designated as a required subject in high schools by the Ministry of Education, and 100% of senior secondary schools are offering this course. During the first semester of the 2022 academic year, 75.07% of undergraduate students in universities and colleges took programming-related courses. In 2022, a total of 5,421 unemployed individuals received training, and 4,165 young people and 4,894 youths participated in vocational training courses related to ICT.

5. Ensuring disadvantaged groups obtain education at all levels as well as vocational training, including persons with physical or mental disabilities, indigenous peoples, and disadvantaged children.

- (1) In 2022, there were 38 schools that were reviewed and approved by 11 municipal and county (city) governments to provide experimental education for 10 indigenous ethnic groups. The schools included 32 elementary schools, three junior high schools, two combined elementary and junior high schools, and one high school.



▲Figure 2-10 Schools are linked to labor affairs resources, where vocational assessors arrange for students with disabilities to experience actual work at convenience stores

- (2) To enhance the employment preparedness of college and university students with disabilities, career transition workshops and case study workshops were held in northern and southern Taiwan. Additionally, grants were allocated to six higher education institutions to develop school-based counseling services to help students with disabilities transition into the workplace.
- (3) In 2022, the K-12 Education Administration under the Ministry of Education provided career transition services to a total of 2,538 individuals. Additionally, 7,689 internship participants received workplace counseling, and 9,056 individuals received phone and online counseling services. Some 1,364 individuals were successfully placed in internships in 955 workplaces. Another 329 individuals received assistance in securing employment in 372 workplaces.
- (4) Efforts are ongoing to promote diverse pre-employment training and job training to the unemployed. Full subsidies, including training fees, were granted to specific individuals, including persons with disabilities and indigenous peoples. In 2022, these efforts helped 28,924 unemployed individuals from vulnerable populations participate in pre-employment training.

6. Enhancing sustainable museum management and promote cultural equality to boost public engagement at museums and local cultural halls:

In 2022, through the “Museum and Local Cultural Halls Development Program” and the “Ministry of Culture Subsidy Program for Museum Promotion,” the government has continued to enhance museum professional capabilities and link local cultural halls with local resources. The efforts aim to attract visitors to museums and participate in activities, thus promoting cultural equality. In 2022, the participation rate in museums and local cultural halls was approximately 41%.

GOAL 5

Achieve gender equality and empower all women and girls

1. Advocating gender equality to the citizenry through diverse channels

- (1) In September to October 2022, text advertisements conveying messages such as “Boys and girls are precious; The Health Promotion Administration encourages gender-equal birth practices” were run on the FTV News website. The ad linked to the Health Promotion Administration (HPA) website featuring video on anti-gender screening. In addition, Sanlih E-Television ran the promotional video “Happy pregnancy is happiness - Both boys and girls are precious,” which reached 4.8 million views.
- (2) In October 2022, the HPA Mammy Care Facebook page organized a “Baby girls and



▲Figure 2-11 Promotional video “Happy pregnancy is happiness - Both boys and girls are precious” on Sanlih E-Television

baby boys are both precious as long as they are healthy” lucky draw. The event generated approximately 590 comments and was shared around 491 times, reaching about 6,535 people. Additionally, in October, the HPA posted a news release on its official website titled “Good pregnancy: Both girls and boys are equally good; Birth gender ratio is becoming more balanced” to promote gender equality and advocate the concept that both baby girls and baby boys are equally precious.

2. Reducing the proportion of marriage registration of women under the legal age for marriage

(1) To safeguard the rights of youth to sound physical and mental development, the Household Registration Information System has incorporated an automatic age-checking mechanism for marriage registration applicants. In cases where the male is under 18 years old or the female is under 16 years old, which is non-compliant with the stipulations of the Civil Code, marriage registration will not be allowed to prevent marriage of anyone below the minimum age of marriage. In addition, in accordance with the amendment to Article 980 of the Civil Code, which took effect on January 1, 2023, the legal marriage age for females was raised to 18 years. The age-check mechanism in the Household Registration Information System was updated accordingly to prohibit marriage registration for males and females under 18 years old after the effective date of the amendment.

(2) In 2022, the ratio of females aged 20 to 24 with a marriage record before turning 16 years old was 0.012%, achieving the target of reducing the figure to below 0.019% during that year. The percentage at age of 20 to 24 women who had marriage record before age 18 was 0.341%.

(3) In 2022, the Ministry of the Interior included gender equality and the prohibition of marriage below the legal age in its practical training courses for civil registration personnel to promote a socially inclusive and gender-equal society.

3. Increasing the percentage of female police officers:

To encourage women participation in law enforcement, the “Regulations Governing the Promotion and Transfer of Police Personnel” stipulate that in municipal and county (city) police departments, at least one of the positions of captain and deputy captain in the Women’s and Children’s Protection Division must be held by a female officer. As of the end of 2022, the percentage of female police officers (ranked not lower than Police Officer Rank 4) was 14.82% of the total police force.

4. Increasing the percentage of female managers in listed companies:

To encourage businesses to promote women to managerial positions, the Financial Supervisory Commission (FSC) first clarified the definition and scope of the term “manager” in 2019. Starting from 2020, the FSC requested the Taiwan Stock Exchange and the Taipei Exchange to collect and establish gender-based statistics of managers in listed and OTC companies based on the 2019 definition. As of the end of 2022, there were



▲Figure 2-12 Ring the Bell for Gender Equality at the Taiwan Stock Exchange



▲Figure 2-13 Ring the Bell for Gender Equality at the Taipei Exchange

a total of 30,510 managers in listed and OTC companies in Taiwan. Among them, 9,792 were female, accounting for approximately 32.09% of all managers. This represents a continuous increase compared to the end of 2020 (29.4%) and the end of 2021 (31.16%).

5. guiding and encouraging women to be enterprise representatives:

The Ministry of Economic Affairs has promoted the Women Entrepreneurship Flying Geese Program, which offers customized and integrated services for female entrepreneurs at different stages of their business startup and who have different needs. The goal is to create a female-friendly business startup environment, so as to enhance women's economic power and competitiveness. In 2022, the program provided training to 2,293 female entrepreneurs and consultation services to 94 female entrepreneurs. Additionally, 10 winners were selected for the Women Entrepreneurship Award.



Ensure environmental quality and sustainable management of environmental resources

1. Setting up the Water Resources Master Plan to stabilize water supply:

The Executive Yuan approved the "Basic Plan for Water Resources Management in Taiwan Region" on August 6, 2021. In accordance with the Basic Plan, relevant government agencies will continue to enhance management of water resources, reservoir dredging, reduction of water leakage in the tap water system, promote diverse water sources, strengthen regional water resource allocation, and promote the use of reclaimed water and desalinated water. The efforts aim to strengthen water resource management from the sources to the end-users, increase water supply resilience and safety, and meet the national water demand until the year 2036.

2. Building the systems of sanitary sewer and sustainable development

(1) According to the "Sewage and Wastewater Treatment Plant Phase Six Construction Plan (2021-2026)" as approved by the Executive Yuan, the Construction and Planning Agency (now renamed as the National Land Management Agency) under the Ministry of the Interior and local governments will continue to promote sewage pipeline construction and connection. In 2022, the central government allocated a budget of NT\$11.3429 billion, and as of the end of December 2022, the number of households taking over public sanitary sewers reached a total of 3,749,618, representing a 41.31% served rate of public sanitary sewer and 68.72% of population served by waste water treatment plants. In 2022, the Ministry of the Interior completed 182,472 user connections, surpassing the national annual target of 130,000 connections.

(2) The "Sewage and Wastewater Treatment Plant Phase Six Construction Plan" provides subsidies to projects related to sewage sludge reduction in public sewage treatment plants, one-year functional testing and operation of reuse facilities, sludge reuse case reviews, and product verification. For sludge reduction, by the end of 2022, a daily reduction of 85.5 tons had been achieved, with a reduction efficiency of 32%. Regarding reuse, permits for lightweight aggregates at the Tainan Rende Plant and auxiliary fuel at the Hualien Plant had been approved. The carbonization project at the Yilan Plant is ongoing, and the plant has a daily sludge receiving capacity of 26.67 tons.



▲ Figure 2-14 Reclaimed water plant in Anping, Tainan



▲Figure 2-15 Promoting beach cleanup activities

3. Salute to the Seas: Through collaboration with the private sector, outstanding results in beach and coastal cleanup were achieved:

The central and local governments have actively worked together on the “Salute to the Seas - coastal cleanup project”. Tasks include routine cleaning, immediate response cleaning, and emergency cleanup to ensure that the entire 1,988 kilometers of Taiwan’s coastline remains clean. Since 2020, both central government agencies and local authorities have allocated human resources and funds for coastal cleaning. From 2020 to the end of 2022, over 179,000 tons of waste have been removed islandwide. Private entities have also been contracted to regularly monitor the current amount of coastal waste. During this period, both the total weight and volume of coastal waste on the main island of Taiwan and its outlying islands have steadily decreased from 2,294 tons in 2019 to 967 tons in 2022. The amount of overall coastal garbage dropped by nearly 60%, underscoring the effectiveness of coastal cleanliness and maintenance efforts.

4. Increasing water efficiency in industries

(1) The government has improved the industrial water recycling rate through measures such as water conservation in the construction industry, diversification of water sources, strategies to increase water efficiency, and comprehensive water resource management. In addition, the government also provides guidance to promote water conservation and implements water use and management plans to increase water use



▲Figure 2-16 Workshop for improving water efficiency

efficiency in industrial areas. The overall water recycling rate in industrial areas increased from 46.0% in 2002 to 73.6% in 2022. The ultimate goal is to achieve 75.0% by 2031 as per the “Action Plan to Ensure Stable Water Supply for Industries.”

(2) In 2022, the government achieved significant milestones in promoting water resource management and conservation. It provided water-saving counseling for 61 companies and provided in-depth counseling for five of them, tailoring optimized water-saving solutions. The government also initiated a water resource integration project, facilitating the use of reclaimed water from industrial wastewater treatment plants or nearby industries, guiding industries to use alternative water sources and potentially saving up to 3.3 million tons per year. In response to industry needs, the government conducted two training sessions for water management personnel, three on water use declaration, one on water-saving counseling, and an exchange and observation event for businesses demonstrating outstanding water-saving practices. The government also participated in the promotion of water management concepts and dissemination of water-saving technical know-how at the theme pavilion at the International Water Week. These efforts represent significant progress in water resource management and conservation.

5. Enhancing management of industrial waste recycling for proper reutilization:

The Ministry of the Environment has taken steps to track the flow of waste and reused products. On December 15, 2022, the Environmental Protection Administration amended the “Regulations on the Reuse of Industrial Wastes” to regulate the use of eight types of reused products: base or sub-base gravel materials for pavement construction, materials for construction fill, pellets for road construction, bricks, cement products, precast concrete, controlled low-strength fill materials, and asphalt concrete. The amendment specifically prohibits the use of the above products in environmentally sensitive areas. It also requires compliance with environmental use dissolution standards and testing frequencies, limits the target markets for sales, and mandates that equipment used for the transportation of reused products be equipped with GPS devices. Moreover, the entire transportation process should be recorded and reported to the ultimate usage destination, ensuring effective tracking and management of reused products until their final destinations.

6. Improving air quality:

The Ministry of the Environment supervises local governments and relevant central government agencies in implementing the air pollution control plan from 2020 to 2023 as approved by the Executive Yuan. This plan covers four key areas: fixed pollution sources, mobile pollution sources, fugitive pollution sources, and comprehensive management. The ongoing efforts are aimed toward achieving sustained improvement in air quality, and the results of the efforts are as follows:

- (1) The national annual average concentration of fine particulate matter (PM_{2.5}) in 2022 was 12.4 $\mu\text{g}/\text{m}^3$, meeting the target of improvement to below 15.5 $\mu\text{g}/\text{m}^3$.
- (2) The percentage of days with air quality rated as “good” or “normal” (AQI \leq 100) for PM_{2.5} nationwide was 97.3% in 2022, meeting the target of achieving over 96%.
- (3) The percentage of days with air quality categorized as “unhealthy” (AQI>100) for PM_{2.5} nationwide was 2.7% in 2022, meeting the goal of reducing it to below 4%.



▲Figure 2-17 Unveiling of the Single Service Window for Taiwan Geothermal Power, which signals a milestone in Taiwan’s geothermal power generation

GOAL 7

Ensure access to affordable, reliable, sustainable, and modern energy for all

1. Amending the stipulations on geothermal power in the Renewable Energy Development Act to expedite geothermal power generation

- (1) The “Regulations on Encouragement of Geothermal Power Generation Demonstration” were announced on May 20, 2022. These incentives cover activities such as geological, geophysical, and geochemical surface surveys, drilling and casing, and capacity testing. The Regulations offer a maximum incentive of NT\$100 million per project and are capped at 50% of the exploration costs incurred by the operator.
- (2) The amendment to the “Renewable Energy Development Act” added a dedicated chapter for geothermal energy. It stipulates the obligation of geothermal operators to provide exploration data to enhance the overall knowledge of domestic geothermal potential and assist in the development of geothermal resources in Taiwan.
- (3) The “Single Service Window for Taiwan Geothermal Power” has been created to facilitate inter-agency coordination on regulatory issues and guide operators in expediting the establishment of geothermal facilities. It also serves as a source of geothermal development information and handles regulatory inquiries.

2. Increasing the proportion of clean fuel power generation to achieve zero emissions in electricity generation

- (1) In 2022, the power generation mix of Taiwan Power Company (Taipower) was 43.4% for natural gas and 8.6% for renewable energy, accounting for 52% of the total power generation. This marks a 3.2-percentage-point increase compared to 2021 (48.8%), indicating improved effectiveness of clean fuel power generation.
- (2) Following the successful operation of its first offshore wind farm in 2021, Taipower overcame various challenges, including the COVID-19 pandemic and extreme weather, to complete preliminary seabed drilling and surveys, as well as wind farm design for the second offshore wind farm project. In November 2022, construction of the onshore electrical room began, with plans to install 31 units of 9.5MW wind turbines offshore, with a total installed capacity of 294.5MW. The project is expected to be completed by 2025, with an annual generation capacity of 1 billion kilowatt-hours.

3. Offshore wind power installation to exceed 1 GW a year

- (1) The promotion of offshore wind power in Taiwan follows a three-stage policy: Demonstration Incentive Program, Zones Application for Planning, and Zonal Development. The demonstration stage, which includes two wind farms with a combined capacity of 237.2 MW, has been completed. The potential sites are currently being developed.
- (2) Construction of four offshore wind farms began along Taiwan's western coast in 2022, but global



▲ Figure 2-18 With collaboration between the government and the private sector, a total of 188 offshore wind turbines have been installed

supply chain disruptions due to the COVID-19 pandemic and geopolitical challenges affected progress. However, the government continued to support companies in overcoming these difficulties, resulting in an addition of over 1GW in installed capacity within a single year. As of the end of 2022, a total of 188 offshore wind turbines have been installed.

4. Promoting biogas power generation for sustainable energy

- (1) To accelerate biogas power generation in county and city governments, the government in 2013 announced the "Incentive Program for Biogas Power Generation System." The program aims to use diverse biomass resources, such as animal waste, food waste, and wastewater, to produce biogas for electricity generation. As of 2022, nine projects with a total installed capacity of 2,005 kW have been approved.
- (2) The Dafong Farm has collaborated with the Yunlin County government to take part in the subsidy program to install a 250-kW biogas power generation unit that converts pig farm wastewater into energy. In 2022, biogas power generation exceeded 1.25 million kilowatt-hours, reducing approximately 630 metric tons of carbon dioxide emissions annually. This initiative not only creates a source of sustainable energy but also reduces greenhouse gas emissions, achieving a triple-win outcome for the environment, energy, and the industry.

5. Solar-Powered campuses for a brighter learning experience

- (1) The Bureau of Energy under the Ministry of Economic Affairs has promoted solar power on school campuses through the "Solar Power Installation Program for Campuses." Starting with the formulation of implementation measures and standard contracts, the Bureau carried out an inventory of campuses with assistance from Taiwan Power Company and the Photo-voltaic Generation System Association (PVGSA). The aim was to ensure structural safety, waterproofing, thermal insulation, and seismic reinforcement. By the end of July 2022, a total installed capacity of approximately 324 MW was completed.



▲ Figure 2-19 Solar panels at Sindong Elementary School in Tainan City

- (2) Installing solar photovoltaic systems on school rooftops is expected to generate 410 million kilowatt-hours of electricity annually, which is 1.57 times the energy consumption of newly installed air conditioning systems (260 million kilowatt-hours). The income from selling surplus electricity can be reinvested into local governments and schools to support energy education, utility bills, and property maintenance.
- (3) By installing solar power facilities in school campuses, schools not only become energy self-sufficient but can also generate stable income. This approach helps build safer and more comfortable learning environments while instilling the concept of environmental sustainability into the students' daily lives, making it an ideal energy education tool.

6. Yearly improvement in energy efficiency

- (1) To promote energy transformation, the Executive Yuan approved the Taiwan SDGs in 2019. With the year 2015 chosen as the base year for energy intensity, the annual improvement target is set at 2% from 2016 to 2030. Through promoting energy-saving regulations over the years, offering guidance on energy-efficient technologies, and developing energy-saving technologies, Taiwan achieved an annual average energy intensity improvement of 3.55% from 2016 to 2022.
- (2) Through measures such as equipment and appliance energy efficiency management, vehicle energy consumption management, and industrial energy-saving regulations, the share of

final energy use covered by mandatory efficiency policies increased from 36% in 2016 to 40% in 2021.

GOAL 8

Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all

1. Facing global economic slowdown, Taiwan demonstrates resilience

- (1) In 2022, the ongoing pandemic and the outbreak of the Russia-Ukraine war resulted in worldwide energy and food crises. Many countries adopted tight monetary policies to combat inflation, while China implemented a zero-COVID policy in face of the pandemic. These led to a weakened end-demand. In response, Taiwan implemented the following measures: a new round of stimulus measures, controlling oil and electricity prices at the source, promoting the development of six core strategic industries, and implementing a program to encourage investment in Taiwan.
- (2) In 2022, Taiwan's economic growth rate was 2.35%. While lower than the pre-pandemic rate of 3.06% in 2019, it was still significantly better than other major economies. Taiwan's real GDP in 2022 grew by 12.73% compared to 2019, outperforming South Korea (6.05%), the United States (5.14%), the Eurozone (2.37%), Japan (-0.16%), and the United Kingdom (-0.35%).

2. Enhancing employment skills and ensuring work environment safety and health

- (1) Impacted by the pandemic, the unemployment rate reached 4.80% in June 2022. However, as the situation improved, the government initiated a new round of stimulus measures to assist affected businesses and individuals. Additionally, the Ministry of Labor conducted different pre-employment training programs, benefiting 45,865 individuals in 2022, helping them acquire



▲Figure 2-20 Youth Career Summer Camp conducted by the Taipei-Keelung-Yilan-Hualien-Kinmen-Matsu Regional branch of the Workforce Development Agency under the Ministry of Labor

job skills. The unemployment rate eventually dropped to 3.52% by December 2022.

(2) To address the different needs of the young at different stages of development, the government has launched different training programs. Vocational training was introduced into schools for in-school youth, while professional skills training and job-oriented training were provided for out-of-school youth. In 2022, the training programs benefitted 43,600 young people. The government also launched employment and technical skill transfer programs, integrating career counseling, vocational training, and job matching to enhance youth skills and prepare them for the job market. In 2022, 206,770 young people found employment through these programs.

(3) With regards to occupational health and safety, the Ministry of Labor formulated the “Occupational Safety and Disaster Reduction Strategies” in 2022. The strategies aimed to improve health and safety management capabilities of businesses and improve efforts to prevent workplace disasters. In 2022, 169,000 workplace health and safety inspections were conducted, leading to a decrease in the fatality rates of occupational injuries per 1,000 workers and occupational disability, injuries and illnesses rate per 1,000 workers, which dropped to 0.022 and 2.247 respectively.

(4) To encourage businesses to invest in occupational health and safety, build a high-quality work environment, and realize the concept

of “decent work,” the Ministry of Labor launched the “Occupational Health and Safety Sustainable Development Plan” in 2022. This plan introduced the GRI 403 Occupational Health and Safety Reporting Guidelines, which included qualitative and quantitative basic and advanced indicators as well as industry best practices, providing businesses with a framework for advancing occupational health and safety practices. In 2022, the Ministry analyzed sustainability reports submitted by 588 publicly listed companies in Taiwan for 2019, thus establishing a baseline for disclosing performance related to occupational health and safety. The baseline will serve as the foundation for the ongoing promotion of the “Occupational Health and Safety Sustainable Development Plan.”

3. Assisting small and medium-sized enterprises (SMEs) in green innovation transformation for enhanced sustainability

(1) In 2022, the government selected and provided guidance to 67 SMEs, assisting them in innovative applications such as redesign, green innovative technologies, green design, and circular economy. These initiatives helped SMEs integrate into domestic and international supply chains. In addition, the government helped businesses to embrace energy-saving and carbon-reduction early, as well as understand global environmental trends. The government provided guidance on applicable carbon reduction methods and resources, this enabling SMEs to align with the international trend toward net-zero.



▲Figure 2-21 Assisting small and medium-sized enterprises (SMEs) to develop an energy-saving and carbon-reduction mindset, understand global trends, and proactively address challenges

(2) The government launched the “Green Sustainable ESG Financing Guarantee” program to offer additional guaranteed financing of up to NT\$100 million and a guarantee ratio of up to 95% to SMEs with ESG-aligned operations or cases that allocate funds to green expenditures. In 2022, the program assisted SMEs within the green industry in obtaining NT\$114.2 billion in financing.

4. Encouraging financial technology (fintech) innovation to enhance competitiveness

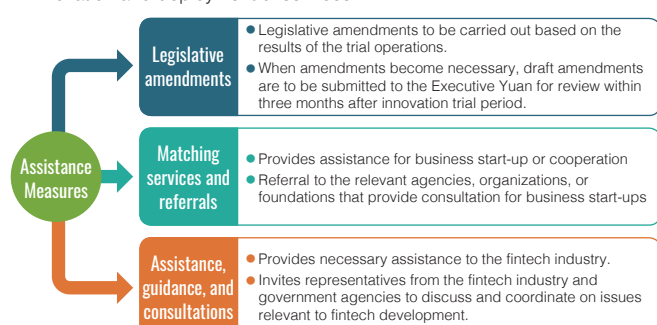
(1) The Financial Supervisory Commission(FSC) has expedited Fintech innovation and experiment mechanism through parallel tracks of “Fintech Sandbox Experiments” and “Business Trials.” In 2022, the FSC received 29 applications for fintech sandbox experiments. The FSC also encouraged insurance companies to develop new-type insurance products and processed 21 product submissions for review, surpassing the expected goals.

(2) Furthermore, financial institutions were invited to discuss an integrated plan for non-cash payments. In 2022, non-cash payment transaction amounted to NT\$6.17 trillion, with 5.458 billion transactions, representing a 15.49% increase compared to 2021. Financial institutions have actively cooperated in this initiative.

Dual Track of “Fintech Sandbox Experiments” and “Business Trials”

Fintech innovation and experimental mechanism (Oversight sandbox)

- Using legislation to promote the fintech innovation and experimental mechanism: The Financial Technology Development and Innovative Experimentation Act was implemented on April 30, 2018.
- Multiple channels to obtain guidance and services: Consultation and assistance, oversight inquiries
- During the experimental period, business can obtain regulations on the relevant permits and penalties free of charge, so as to facilitate fintech innovation and deployment of services.



▲ Figure 2-22 Financial technology innovation and experiment mechanism

GOAL 9

Build affordable, safe, environmentally friendly, resilient and sustainable transportation

1. Promoting the growth of passenger volume of bus.

(1) Due to the COVID-19 pandemic, people were less willing go outdoors and use public transportation. In 2022, the percentage of passenger volume of bus was 837 million passenger trips, a slight increase of 5.7% compared to 2021 when it was 792 million passenger trips. In line with the Executive Yuan policy to encourage the use of public transportation, a public transportation ticketing system was developed for commuting both to work and to school. Additionally, discounted bus prices were offered to encourage the use of public transportation to tourist attractions. The two measures aimed to promote the development of public transportation islandwide.

(2) To lower the age of urban bus fleets and improve accessible transportation services for persons with disabilities, the government has continued to provide subsidies to counties and cities for the purchase of barrier-free buses. In 2022, the proportion of barrier-free vehicles in urban passenger transportation increased to 72.25%, a 2.43-percentage-point increase compared to 2021, which was then 69.82%.



▲ Figure 2-23 Subsidizing counties and cities to purchase barrier-free large buses

(3) In 2022, the Happy Bus Program was implemented in 152 townships with a total of 399 routes, including 59 routes in remote areas, to provide basic transportation services in remote areas and improve access to public transportation. The islandwide coverage rate of buses in remote areas reached 90.39% by the end of 2022, an increase of 0.61 percentage points compared to 2021, when it was 89.78%.

2. Continuously promoting railway transport construction projects and improving relevant services

(1) Affected by the COVID-19 pandemic, Taiwan Railways (TRA) served 170 million passenger-trips in 2022, a decrease of 26.68% compared to the base year of 2015. However, there was a slight increase of 9.89% compared to 2021 when it served 155 million passenger-trips.

(2) TRA achieved 100% stepless accessibility of its train carriages. Platform renovation was completed at 136 railway stations, and 56.43% of all platforms in 241 railway stations are now on the same level as the train ramps. In 2022, TRA completed the installation of barrier-free elevators in four stations, including the Tsaochiao Station, bringing the total to 177 stations with accessibility features by the end of 2022, covering approximately 98% of TRA's total passenger service. The elevator projects are now fully contracted, and efforts will be made to achieve the goals on schedule.

(3) In 2022, high-speed rail ridership continued to be



▲ Figure 2-24 Work was completed to elevate the passenger platform at Tsaochiao Station

affected by the COVID-19 pandemic, resulting in a decline in passenger volume from April to June. However, the annual passenger volume increased by 7.12% compared to the 2015 base year, reaching 54.16 million passenger-trips. As the pandemic stabilizes, the ridership is expected to recover, and in 2023, the target is 64.45 million passengers. Taiwan High Speed Rail will continue to promote tourism by offering travel packages, enhancing connections to local transportation systems to provide seamless connectivity, promoting Taiwan as a destination for foreign tourists, and introducing multiple discount programs for commuters, students, and TGo members to increase passenger volume and overall ridership.

3. Enhancing road traffic safety:

In 2022, the Ministry of Transportation and Communications (MOTC) proposed a multi-faceted approach with 21 measures to improve road safety.

(1) Improved follow-up and assessment: The MOTC releases data on accidents and fatalities each month. Starting from 2022, the ministry has reinstated supervisory roles for each county and city. An action team to improve road safety was established to provide guidance and assistance to counties and cities with lower safety performance.

(2) Infrastructure upgrades: In 2022, improvements were made to a total of 1,331 road intersections, and the ministry plans to continuously monitor and review the effectiveness of these improvements.

(3) Supervisory reforms: In the area of motorcycle driver training, 26,103 people participated in training in 2022, resulting in a 12.6% reduction in violations compared to those without training, and a 35% decrease in risk. Additionally, through collaboration between the MOTC and the Ministry of Labor, efforts were made to improve management and safety of delivery personnel.

(4) Zero tolerance for drunk driving: Legislative amendments were enacted to increase penalties for drunk driving, including confiscation of vehicles for first-time offenders causing serious

injuries or fatalities, extending the cumulative period of license suspension for repeat drunk driving and refusal to undergo alcohol tests to 10 years, and raising penalties for passengers traveling with the drink driver.

- (5) Legislative amendments for more stringent punishments: Legislative amendments include the regulation of micro-electric vehicles, prioritizing pedestrians (motor vehicles must yield to pedestrians), implementation of a violation point system, increased penalties for unlicensed driving, and penalties for aggressive tailgating.
- (6) Enhanced enforcement: A total of 265 technology enforcement devices were installed at road intersections and were fully operational starting October 1, 2022. Speed limit enforcement in 45 road sections was restored, resulting in a decrease of 192 accidents and 64 fewer casualties.
- (7) Educational initiatives: In addition to promoting Road Safety Month in September 2022, the MOTC collaborated with the Ministry of Education to establish a five-stage traffic safety training module. The efforts covered curriculum promotion, trainer capacity building, teaching material development, and monitoring mechanisms. The purpose was to ensure that traffic safety education starts from an early age. Furthermore, the MOTC, the Ministry of Education, and the Ministry of Health and Welfare worked together to expand information dissemination on “Road Safety Teachers.”



▲Figure 2-25 Students at a motorcycle training school

GOAL 10

Reduce inequality within and among countries

1. promoting social security measures to take care of the financially vulnerable and constantly improving income distribution.

The government is actively promoting poverty alleviation measures and programs to support the economically disadvantaged. It also focuses on enhancing employability, fostering wage growth, and improving tax fairness to balance income distribution. According to data on household income and expenditure from the Directorate-General of Budget, Accounting and Statistics, the Gini coefficient of per household disposable income in 2022 was 0.342, achieving the goal of maintaining the Gini coefficient of per household disposable income at no more than 0.35.

2. Improving the competitive advantage of indigenous peoples and individuals with disabilities in employment and promoting gender equality

(1) To enhance employment and improve the economic well-being of indigenous peoples, the Council of Indigenous Peoples actively collaborates with other government agencies to improve employment programs for the indigenous peoples. According to an employment survey, the gap in unemployment rates between indigenous peoples and the general population decreased from 2.23 percentage points in 2009 to 0.14 percentage points in December 2022. The average income of indigenous peoples increased from NT\$24,729 in 2009 to NT\$33,145 in December 2022, with an overall income growth of over NT\$8,000.

(2) The Ministry of Labor is proactive in assisting individuals with disabilities seek employment through employment services, vocational rehabilitation services, and measures to eliminate job obstacles through job redesign. In 2022, they promoted employment for 21,145 persons with



▲Figure 2-26 On December 6, 2022, the Council of Indigenous Peoples held a ceremony to commend exemplary employers for employing indigenous peoples exceeding the mandatory employment quota. The ceremony publicly recognizes organizations that have made significant contributions to promoting stable employment among indigenous peoples

disabilities, achieving an employment placement rate of 78.41%.

(3) In order to strengthen gender equality and eliminate employment discrimination, the Ministry of Labor conducts outreach and educational campaigns on relevant laws and regulations through the “Employment Equality Network.” By December 2022, this outreach had reached approximately 2.4 million individuals.

3. Establishment of a 24/7, year-round 113 hotline for public reporting and assistance:

The Ministry of Health and Welfare set up the 113 hotline, which operates 24/7, to receive reports on domestic violence, sexual abuse, as well as cases requiring protection of children, the youth, the elderly, and people with disabilities. The hotline also provides counselling for victims of sexual harassment and referrals for re-complaint cases. In addition, the hotline provides services such as text message reporting for the hearing impaired, online dialog, and interpretation services for foreigners. In 2022, the hotline received 110,194 calls, among which 92,030 were consultations. The percentage of reporting through 113 hotline by people accounted for 83.5% of the total calls.

4. The percentage of amended legislations and administrative measures which previously violated Convention on the Rights of Persons with Disabilities (CRPD):

A total of 372 priority legislative and administrative measures related to CRPD were reviewed. By the end of 2022, 360 (97%) had been amended, and 12

(3%) were still under review. For the second phase, a list of 90 legislative and administrative measures was reviewed, and by the end of 2022, all of them (100%) had been amended.

5. Hosting the 2022 University Social Responsibility (USR) Expo:

The Ministry of Education held the 2022 USR Expo at the Songshan Cultural and Creative Park on November 19 and 20, 2022. The event, themed “Universities Lighting the Way, Converging Intelligence for Sustainability,” showcased the results of the implementation of the USR Program over the past five years. The event also invited scholars from Japan and Israel who had been promoting USR to share their international perspectives. In addition, there was a Sustainable Universities Forum, where university presidents who had made outstanding contributions to USR were invited to share their experiences. The expo attracted a total of 15,120 visitors and 133,000 online participants.



▲Figure 2-27 USR Principal investor Su Yu-long, convener Tsai Mei-ling, legislator Wu Hsi-yao, Minister Pan Wen-Chung, Director Yang Yu-hui, and Director Chu Chun-chang pose for a picture at the 2022 USR Expo launch event

6. Connecting the resources to invest in social innovation and encouraging the responsible consumption and production:

The Small and Medium Enterprise Administration under the Ministry of Economic Affairs has been promoting the Buying Power Procurement Incentive. This initiative encourages collaboration across various sectors to procure goods and services from social innovation organizations and jointly carry out projects. To achieve this, the ministry organized matching meetings, seminars, and pop-up stores to create marketing and cooperation opportunities. Award-winning entities came from government agencies, state-owned enterprises, retail, catering, financial services, and the e-commerce sectors. Together, they worked to drive sustainable social innovation development. By 2022, cumulative procurement reached NT\$2.87 billion.

7. Advancing the 2021-2022 Anti-Exploitation Action Plan:

At the end of December 2020, the Ministry of the Interior formulated the 2021-2022 Anti-Exploitation Action Plan in collaboration with other government agencies, proposing strategies to prevent human trafficking. The ministry announced the “Guidelines for Handling the Reentry Expenses of Trafficking Victims without Work Permits” to facilitate the investigation of facts in criminal cases and provide opportunities for victims to testify. In addition, the ministry also referenced the ILO and the Guidelines for Identifying Human Trafficking Victims from the Ministry of Justice and formulated the Inspection Checklist for Suspected Exploitation of Foreign Seafarers. This checklist serves as an essential document for frontline personnel to identify labor exploitation and initiate investigations into human trafficking cases. To enhance the capabilities of frontline law enforcement personnel, two training sessions were held separately on July 29 and October 25, 2022, with a total of 222 participants.

8. Creating a friendly environment for residence and talent attraction

(1) Amendments to the “The Regulations Governing Employment Gold Card Permit for Foreign Special Professionals” were implemented on November 8, 2021. These amendments allow

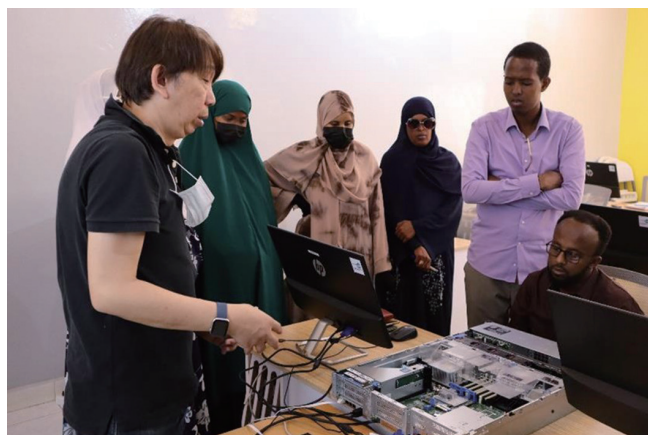
applications for direct extension and a maximum of one-year extension for job seeking. From January to December 2022, a total of 2,644 employment gold cards were issued.

(2) On July 1, 2022, the National Immigration Agency launched the trial system for online residency application for foreign professionals and their dependents. This online service allows foreign professionals who have obtained work permits from the Ministry of Labor, along with their dependents, to apply for Alien Resident Certificates online. From July to December 2022, 1,574 foreign professionals (including their spouses) applied for this service.

(3) On June 13, 2022, amendments to the “Regulations on Entering Taiwan and Residence Permit Applications for Hong Kong and Macau Residents” were announced. The amendments allow specific talents, professionals, and students a maximum of one-year extension of residency for the purpose of job seeking, and allow individuals who obtained their master’s and doctoral degrees in Taiwan and have worked and resided in Taiwan to apply for permanent residency, with the duration of their current residency in Taiwan counted as part of the continuous stay requirement.

9. Promoting the number of foreign technical cooperation projects:

As of the end of 2022, the Taiwan International Cooperation and Development Fund (ICDF) carried out 79 foreign technical cooperation projects.



▲ Figure 2-28 Somaliland Government’s E-Governance Capacity Enhancement Program

These include the Paraguay Small and Medium-sized Enterprise Capacity Building Project, Central American Regional Banana Yellow Leaf Disease Control Program, Paraguay Paddlefish Breeding Project, Healthcare Enhancement Program for Expectant Mothers and Babies in Eswatini, Typhoon Haiyan Recovery Support Program in Southern Leyte, the Philippines, and the Somaliland Government's E-Governance Capacity Enhancement Program.

GOAL 11

Make cities and human settlements inclusive, safe, resilient and sustainable

1. Spatial planning and management

- (1) The drawings of the spatial plan for special municipalities and counties (cities) have moved to the public exhibitions and hearing phase. Through information disclosure and public engagement, the government aims to understand public expectations and recommendations regarding spatial planning. These inputs will be taken into consideration in subsequent reviews.
- (2) Continuing to advance the overall planning of rural areas: In 2022, the government completed the draft for the overall planning for three rural areas: the Hsinwu and Kuanyin districts in Taoyuan City and Hukou Township in Hsinchu



▲ Figure 2-29 Land use public hearings conducted by municipal and county governments (Photos: Jiuru Township, Pingtung City, and Changchi Township sessions)

County. An additional 29 cases in Taichung City are currently in progress, including the Hsinshu District, among others. To effectively assist county and city governments to resolve issues, the National Land Management Agency under the Ministry of the Interior established an advisory group to expedite rural area planning.

- (3) In municipal or county (city) Spatial Plans, the government identified approximately 808,000 hectares agricultural land that were suitable for food production and should be preserved. This aligned with the national spatial planning target of 740,000 to 810,000 hectares for the total area of agricultural land. In the third phase of the drawing of the national spatial plan from 2021 to 2025, the Ministry of Agriculture will continue to prioritize agricultural resource allocation using guidance and review mechanisms. The ministry will guide municipalities and counties (cities) to prioritize high-quality agricultural lands within areas designated for agricultural development.
- (4) Revitalizing the land area of idle industrial areas: Within the industrial zones under the supervision of the Ministry of Economic Affairs, a total of 251.29 hectares of land were declared idle from 2018 to 2022. As of the end of September 2023, 247.8 hectares were activated, accounting for 99% of the previously idle land area.

2. Protecting Taiwan's cultural heritage and natural heritage

- (1) In 2022, the Ministry of Culture invested a total expenditure of NT\$1,929,532,126, averaging NT\$82.94 per capita, for the maintenance and protection of Taiwan's cultural heritage and natural heritage. The ministry continued its restoration plan for tangible cultural assets through projects such as surveys, research, education, documentation, and promotion. The ministry also continued its work to preserve, maintain, and revitalize intangible cultural assets. In response to global extreme weather and to realize tangible disaster prevention, the ministry also initiated programs for environmental monitoring, 3D digital preservation, and the management and maintenance of nationally designated cultural assets.



▲Figure 2-30 Staff members of the Jianshi Township Office in Hsinchu County clears out invasive plants

(2) In 2022, the government invested NT\$101,926,855, averaging NT\$4.38 per capita, for the preservation, restoration, and reutilization of cultural assets in Hakka communities. These include historical sites, historical buildings, architectural clusters, and folk cultural relics. With the investment, the government completed preservation and reutilization work on eight major sites in Hakka communities, including the ancestral temple of the Hsie Family in Tianxin, Miaoli City, which was built by the Hsie family who had migrated from Tingchou, China in 1932. The temple incorporates decorative styles from Hakka, Japanese, and Western cultures, using mud walls with bricks and bamboo weaving techniques. The temple holds cultural value and is an important part of the collective memory of the Tingchou Hakka migration.

(3) In 2022, the Council of Indigenous Peoples continued the survey and conservation plan for ancient indigenous sites, ecology, and environment. The project focused on cataloging, organizing, and maintaining traditional cultural sites, ancient paths, and trails in indigenous regions. The tasks completed included the survey and documentation of 62 sites in tribal cultural heritage areas and traditional migration routes, covering a total length of 4,026 kilometers. The project also focused on resource maintenance to ensure sustainable development. To this end, the tasks, which covered an area of 4,131 hectares, included preservation of tribal settlements and mountain and river resources, reforestation, and clearing of invasive species and plants. The goal was to simultaneously preserve indigenous

traditional culture and natural ecological resources.

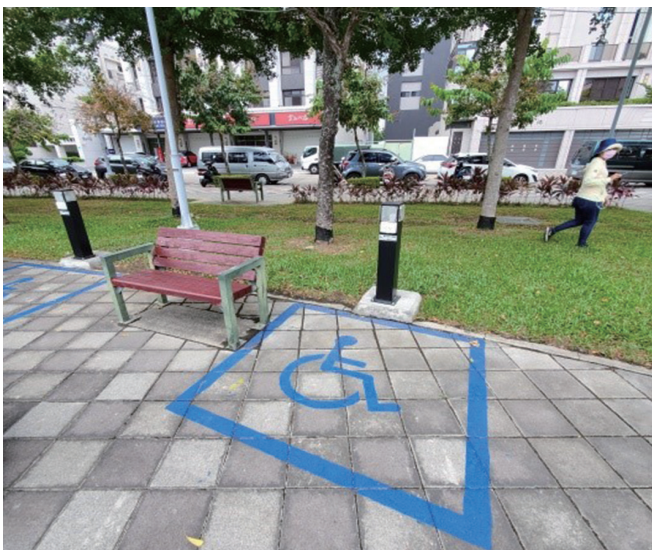
3. Promoting urban renewal and social housing development:

To accelerate urban and rural development and urban renewal, the government relaxed the floor area ratio incentive for mid-to-high-rise buildings that existed before floor area ratio control was put in place. It also prioritized assisting high-risk cases with urgent renewal needs. As of the end of 2022, there were 1,053 approved urban renewal business plan. Of the government-led urban renewal cases, 17 projects underwent the preliminary public selection processes, 78 projects completed public selection, and another 24 projects were in the initial planning and evaluation stage. In March 2017, the Executive Yuan approved the Social Housing Development Program, with the goal of completing 200,000 social housing units in eight years. As of the end of December 2022, there were 71,112 completed government-built social housing units, with 24,067 units available for immediate occupancy. Since 2007, the government has provided rental subsidies to over 1.04 million households. In addition, the NT\$30 billion rental subsidy program implemented in 2022 had approved subsidies for 260,000 households by the end of 2022.

4. Enhancing public space safety and increasing green public facilities

(1) To provide friendly and barrier-free recreational spaces for the public, the National Land Management Agency under the Ministry of the Interior continued its project to ensure that urban parks are barrier-free. The project, which is to be implemented in two-year phases, helps local governments with the evaluation and improvement of barrier-free environments. In 2022, on-site inspections of 39 parks from 13 local governments were completed, and the inspection items included access points, pathways, auxiliary facilities, and signage.

(2) The Ministry of Health and Welfare printed posters, stickers, and pamphlets to increase awareness on anti-sexual harassment and assault, explain the rights of sexual harassment victims, and outline the preventive measures



▲Figure 2-31 Friendly and safe green public facilities at the Hsiehe Park in Taichung City

to be taken by venue owners to prevent sexual harassment. The ministry also printed a booklet to explain the sexual harassment complaint investigation procedures. These printed materials aimed to promote sexual harassment prevention and lay out the responsibilities of venue owners.

- (3) In addition, the ministry used its Facebook page to increase awareness on sexual harassment prevention, which includes promoting respect of every person's gender identity and respect of appropriate boundaries in interpersonal interactions. The Facebook page also contains information on the complaint mechanism for sexual harassment incidents.

5. Promoting reduction at the source, resource recycling, and improving municipal waste disposal or treatment capacity to achieve pollution and waste reduction goals

- (1) The government announced restrictions on the use of single-use beverage cups, guidelines for waste reduction at the source in off-shore island convenience stores, guidelines for the promotion of environmental-friendly night markets, and guidelines for the use of reusable beverage cups. Drafts for "Restrictions on the Use of Packaging for Internet Shopping" and "Restrictions on the Use of Single-Use Lodging Supplies" are forthcoming.
- (2) In 2022, the amount of municipal waste recycling reached 5,955,515 metric tons, including

1,432,838 metric tons of publicly announced recyclable waste products and containers and 4,517,677 metric tons of other recyclable items. In addition, 36 reviews of subsidy programs for local governments to establish resource recycling facilities and sub-categorization plants were completed. Two design plans and 18 engineering projects were approved. In addition, there was also the expected amendment to the "Scope of Responsibility for Disposal of Products or their Packaging Containers by Operators" to include plastic liners and foam covers in publicly announced recyclable waste.

- (3) To maintain stable operations of large-scale incineration plants islandwide, the government upgraded incineration facilities and reduced shutdowns due to malfunctions. In addition, the government assisted counties and cities with insufficient incineration facilities and processing capacity to establish their own treatment facilities. These include the Taoyuan City Biomass Energy Center, the reopening of the Taitung County Incineration Plant, the Hualien County Cement Kiln, and the Hsinchu County High-Efficiency Heat Treatment Facility. The government also continued its promotion of reduction at the source and recycling in offshore island areas.

GOAL 12

Ensure sustainable consumption and production patterns

1. Promoting green production in industries and increasing green competitiveness

- (1) Enhancing the Green Factory label system and developing specific industry categories for clean production assessment: To encourage manufacturers to apply for Green Factory label and increase industry visibility, the Ministry of Economic Affairs on November 23 held the "10th Anniversary Achievement Presentation of Green Factory Label." The event aimed to acknowledge



▲ Figure 2-32 10th Anniversary Achievement Presentation of Green Factory Label

exemplary practices and sustainable achievements of certified companies. In addition, to ensure fairness and objectivity of the Green Factory assessments, the assessment criteria now include ISO standards and international best practices. The criteria also align with significant government policy adjustments, such as the applicability of the Green Building Label, promotion of Green Factories for industries primarily engaged in outdoor operations, and ongoing development of clean production assessment systems for specific industry categories such as the textile industry.

- (2) Encouraging upstream and downstream industries to actively engage in resource circulation: The Resource Circulation Administration of the Ministry of Environment organized the 2022 Excellence in Resource Circulation Business Summit, which featured an award ceremony honoring outstanding circular businesses and an exhibition featuring the circular industry. A total of 27 companies were recognized for their contributions, and representatives from these companies were invited to share their accomplishments. The Circular Industry: Starting from Taoyuan exhibition was a collaborative effort between the Resource Circulation Administration, the Taoyuan City Government Department of Environmental Protection, and local waste and reuse processing companies, all of which collectively built Taoyuan's resource circulation industry chain. The exhibition included presentations and speeches on topics such as the utilization of



▲ Figure 2-33 Vice President of the Executive Yuan Cheng Wen-tsang (Taoyuan City mayor at that time) (second from left) and administrative deputy minister of the Ministry of Environment Shen Chih-hsiu (deputy minister at that time) (third from left) visit the Circular Industry Exhibition

Solid Recovered Fuel (SRF), green finance, and emerging issues in the green transition. It also included a site visit to the Taoyuan Paper Mill of Cheng Loong Corporation, providing insights into the production and application of Solid Recovered Fuel (SRF).

- (3) Increasing the balance of loans by domestic banks to the green energy and renewable energy sectors: On January 28, 2022, the Financial Supervisory Commission announced the Incentive Program for Domestic Banks to Execute Loans to the Six Core Strategic Industries, which includes financing to the green energy and renewable energy sectors and other core strategic industries. The program will run from April 2022 to the end of December 2024, and will be implemented in three phases. By the end of December 2022, the total loan extended under this program had reached NT\$2.4483 trillion.
- (4) Broadening the scope of listed companies required to prepare and file Corporate Social Responsibility (CSR) reports: To motivate listed (and OTC) companies to fulfill their corporate social responsibilities and report their CSR practices and their impacts, the Financial Supervisory Commission has broadened the scope of companies required to prepare CSR reports. The capital threshold was incrementally lowered from NT\$10 billion to NT\$5 billion and further to NT\$2 billion. As of the end of 2022, a total of 318 listed (and OTC) companies were obligated to publish sustainability reports.



▲Figure 2-34 Framework for promoting circular resource

2. Actively promoting resource circulation and reuse to create a generation of zero-waste, sustainability, and resource circulation

- (1) Formulating strategies for resource circulation and zero waste: In response to the National Development Council's goal of achieving net-zero emissions by 2050, the Resource Circulation Administration of the Ministry of Environment has proposed key strategies for Zero Waste Resource Circulation. These strategies cover four main areas: green design for waste reduction at the source, reuse of energy and resources, the development of a comprehensive circular network, and innovative technologies and systems. The strategies aimed to achieve sustainable consumption and production, increase efficiency in the use of resources, and add value to waste processing.
- (2) Issuing guidelines for reviewing the Resource Recycling Network Waste Clearance Plans: To achieve zero waste resource recycling, the Resource Circulation Administration developed the Resource Circulation Network and Waste Clearance Plan to help businesses. Under this plan, businesses, upon obtaining consent from the central competent authority, are encouraged to establish a circular network that includes businesses from other sectors. This circular network helps increase the willingness of businesses within the network to enhance waste

processing and promote resource circulation. It also allows businesses in both the source and receiving ends to implement independent audits and improve waste management. This process contributes to waste reduction and resource circulation within industries.

- (3) Implementing eco-friendly practices and enhancing the disposal or reuse of aquaculture waste: The Fisheries Agency under the Ministry of Agriculture focused its efforts on major oyster and clam aquaculture areas and supported local governments in establishing temporary waste storage sites for aquaculture waste in coastal and aquaculture production areas. The agency also facilitated the disposal or reuse of aquaculture waste to protect the natural environment in fishing villages and aquaculture areas. In 2022, 21 aquaculture waste temporary storage sites handled approximately 17,000 metric tons of wastes and reused 6,000 metric tons. The total amount of waste processed was approximately 23,000 metric tons.
- (4) Assisting manufacturers in reusing waste: The Science Park Bureau under the National Science and Technology Council actively supports manufacturers in the science parks to reduce waste and promote reuse. The bureau organizes the selection of businesses recognized for their outstanding waste reduction and resource circulation efforts to publicly acknowledge their efforts. In addition, businesses are able to share their experiences and set benchmarks for others. In 2022, this initiative encouraged companies within the science parks to achieve industrial waste recycled proportion of 93.4%, which included conversion of wastes into resources.

3. Implementing a low-carbon green consumption model to enhance national green consumption:

To assist businesses in calculating their carbon footprints, the Ministry of Environment added 73 new carbon footprint emission factors to its online Carbon Footprint Information Platform for use by the industry sectors. The EPA also announced 53 new carbon footprint product categorization rules and updated 13 existing ones. This encouraged businesses to

apply for Carbon Footprint Label products and Carbon Footprint Reduction Label products. In total, 93 Carbon Footprint Label products and 7 Carbon Footprint Reduction Label products were certified. Additionally, to motivate businesses to fulfill their corporate social responsibilities, the Low-Carbon Product Awards for 2022 were presented. A total of six businesses received awards, including one recipient of the Special Award, three recipients of the Excellence Award, and two recipients of the Merit Award. The total cash reward amounted to NT\$1.1 million.

GOAL 13

Take urgent action to combat climate change and its impacts

1. Advancing the greenhouse gas periodic regulatory goals:

In recent years, the government has been actively promoting energy transition and reduction of greenhouse gas emissions. As a result, the government in 2020 achieved significant progress with a 1.88% reduction in greenhouse gas emissions compared to the 2005 base year; the reduction amount was close to the first-phase greenhouse gas regulatory goal of 2%. To address climate change mitigation and adaptation, the Ministry of Environment implemented amendments to the Greenhouse Gas Reduction and Management Act on February 15, 2023; the act was also renamed to the Climate Change Response Act. The new act includes the 2050 net-zero emissions target, establishes the responsibilities of the different government agencies, introduces just transition measures, enforces more stringent emissions control measures, and provides better incentive mechanisms to promote reductions. In addition, the Act introduces the collection of carbon fees for dedicated use, includes climate change adaptation chapters, incorporates carbon footprint and product labeling management schemes, and enhances information disclosure and public engagement mechanisms.

2. Enhancing climate change adaptation capabilities

- (1) The National Climate Change Adaptation Action Plan (2018-2022) included capacity building and strategies in eight key areas: disasters, vital infrastructure, water resources, land use, oceans and coasts, energy supply and industry, agricultural production and biodiversity, and health. Seventeen government agencies, including the Ministry of Environment, developed 125 adaptation action plans in these areas. These actions aimed to improve the overall ability to respond to climate change and enhance the effectiveness of adaptation efforts.
- (2) The National Adaptation Achievements Report for 2021 was released online on December 26, 2022 on the Taiwan Adaptation Platform (TAP).

3. Promoting education on climate change

- (1) To enhance climate change literacy among middle and high school students, the Environmental Protection Administration organized the High School Climate Change Learning Camp to enable high school students to design their own climate action plans. The camp was held in conjunction with the 2022 Taiwan Climate Action Expo (TWCAE).
- (2) Subsidies were provided to higher education institutions for climate change education. A total of 126 teaching activities involving 1,579 students received subsidies. The Climate Change Innovative Competition was also held in 2022, with 94 teams participating, 31 of which advanced to the finals. The competition covered



▲Figure 2-35 High school climate change learning camp



▲Figure 2-36 Winners of the Climate Change Innovative Competition

a wide range of areas that reflect the diverseness of climate change issues, and received positive feedback from the judging panel.

(3) Training camps and climate change model design competitions were held to enhance climate change understanding among teachers at primary and secondary schools. These activities were focused on 2050 Net-Zero Emissions and were aligned with SDGs and climate change mitigation and adaptation strategies.

(4) Chongxue Elementary School in Tainan City, Zhongshan Elementary School in Taipei City, and Minzu Experimental Junior High School in Taipei City were the winners of the Innovative Integrated Climate Change Education Demonstration Schools. These schools were asked to develop four climate change education modules and conduct one teaching demonstration for other schools to observe and learn from.

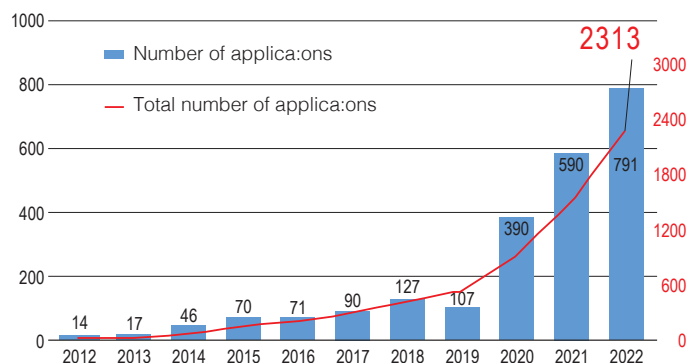
4. Promoting the Low Carbon Sustainable Homeland Certification and Rating Program:

In 2022, the participation rates of counties and municipalities, townships, and villages were 100%, 94%, and 66%, respectively. A total of 1,223 villages, 143 townships and towns, and 22 counties and municipalities obtained certification. In recent years, the number of villages at the bronze/silver levels has steadily increased, indicating the integration of low-carbon awareness and actions into people's daily lives.

5. Establishing scientific capacity-building and service for climate change adaptation

(1) In 2022, the Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP website: <https://tccip.ncdr.nat.gov.tw/>) of the National Science and Technology Council gathered data from 2,040 research projects, and the number of visits to the website reached 2.32 million, surpassing the annual target.

(2) Several promotional activities were conducted to promote the TCCIP platform, including the 2022 Taiwan Geosciences Assembly (TGA) held in June at the Nangang Exhibition Center, the 2022 Asia-Pacific Forum and Exposition for Sustainability held in August at the World Trade Center Exhibition Hall I, the presentation of results of the TCCIP Project organized by the National Science and Technology Council and the workshop on IPCC AR6 WGII in September, and the 2022 TWCAE in October. The activities



▲Figure 2-37 Number of applications at the TCCIP platform as of the end of 2022



▲Figure 2-38 National Science and Technology Council Deputy Minister Lin Minn-Tsong at the 2022 Asia-Pacific Forum and Exposition for Sustainability

aimed to raise awareness and showcase the platform's services and achievements to a wider audience.

GOAL 14

Conserve and sustainably use the marine ecosystems, and prevent the degradation of marine environment

1. Formulating the Marine Conservation Act and amending the Marine Pollution Control Act

(1) In December 2021, the Ocean Conservation Administration of the Ocean Affairs Council submitted a draft of the Marine Conservation Act to the Executive Yuan for review. After three review meetings convened by the Executive Yuan in 2022, the draft was submitted to the Executive Yuan Council for approval, after which it was to be submitted to the Legislative Yuan for deliberation. In addition, drafts of relevant subsidiary legislation were also proposed to facilitate implementation of the Marine Conservation Act once it is officially enacted.

(2) On November 30, 2021, the Ocean Conservation Administration submitted a draft amendment of the Marine Pollution Control Act to the Executive Yuan for review. After four review meetings convened by the Executive Yuan in 2022, the draft was submitted to the Executive Yuan Council for approval, after which it was to be submitted to the Legislative Yuan for deliberation. In addition, draft amendments of relevant subsidiary legislation were also proposed to facilitate implementation of the Marine Pollution Control Act once it is officially enacted.

2. Conserve at least 10% of coastal and marine areas

(1) The scope of coastal zones, which includes shore land area, average high tide line, and offshore area, was amended on April 8, 2022, in

accordance with Article 5 of the Coastal Zone Management Act.

(2) In April 2022, the Kenting National Park Headquarters, Underwater Photography Association, and Taiwan Coral Reef Society organized the Kenting Coral Reef Ecological Conservation Month. Activities included underwater waste clean-up, an art exhibition featuring sea waste, and online broadcasts



▲ Figure 2-39 Lee Chung-wei, former minister of the Ocean Affairs Council, engages in a discussion with environmental groups on the Ocean Conservation Act and drafts of related regulations



▲ Figure 2-40 The scope of coastal zones as of April 2022



▲Figure 2-41 Beach cleanup to protect coastal ecosystems

of coral spawning. These activities aimed to engage the public, raise awareness of the coral reef ecosystems, and emphasize the importance of ocean and coral reef conservation.

- (3) As part of the Salute to the Seas Coastal Cleanup Project, the Taijiang National Park Headquarters conducted a coastal cleanup in Annan District in 2022. In total, 108.1 kilometers of coastline were cleaned, removing 617.1 metric tons of coastal waste to maintain habitat quality.
- (4) Dongsha Atoll National Park: In October 2022, stationed units on Dongsha Island organized an island-wide beach cleaning event with approximately 247 participants. A total of around 17 metric tons of garbage were collected, including about 3 metric tons of recyclable waste and about 14 metric tons of non-recyclable waste.
- (5) South Penghu Marine National Park: Within the waters of South Penghu Marine National Park, 15 mooring buoy facilities and four navigational buoy markers were installed for use by vessels used in water recreational activities. These measures helped prevent anchoring damage to coral reef ecosystems, ensuring marine conservation.

3. Reducing marine debris:

Since 2009, the Fisheries Agency of the Ministry of Agriculture has assisted local governments and local fisheries associations in removing discarded fishing nets in artificial or natural reef areas. This initiative aims to increase fish congregation in nearshore reef areas, enhance nearshore fishing productivity, and reduce marine debris. In 2022,

a total of 56.9 metric tons of discarded fishing nets were removed from reef areas. Additionally, subsidies were provided to local governments for the removal of marine debris from the ocean surface and seabed. In 2022, 5,327 vessels took part in the cleanup efforts, marking a 15.1% increase from the previous year. A total of 3,637 divers participated, reflecting a 19.6% increase and resulting in the removal of 1,902 metric tons of marine debris, an increase of 18.5% from the previous year.

4. Establishing National Ocean Database Bank

- (1) The online National Ocean Database Bank and Sharing Platform was officially launched on May 30, 2022 for the public to access, browse, and query data. Minister without portfolio Chang Jing-sen of the Executive Yuan presided over the ceremony via video conference, with former deputy minister of the Ocean Affairs Council Tsai Ching-piao, Ocean Conservation Administration director general Huang Hsing-wen, and former president of the National Academy of Marine Research Chiu Yong-fang as witnesses.
- (2) A ceremony and explanatory meeting were held in conjunction with the launch of the database and sharing platform to foster interaction with data users and other local entities responsible for marine-related databases.
- (3) A total of more than 30 entities compiled over 100 data sets, amounting to more than 2.9 billion pieces of data, including ocean physics, chemistry, biological ecology, ocean meteorology, topography, and other marine-related data. The entities included Academia Sinica, the Ministry of the Interior, the National Science and Technology Council, the Ocean Affairs Council, the Ministry of Agriculture, and the Ministry of Environment, among others. In 2022, additional data was collected from the Salute to the Seas Coastal Cleanup Project of the National Academy of Marine Research, foreign satellite remote sensing data, marine cultural data, topography and water depth data from maritime projects of the Ministry of the Interior, and offshore wind environmental impact assessment data from the Ministry of Environment.

GOAL 15

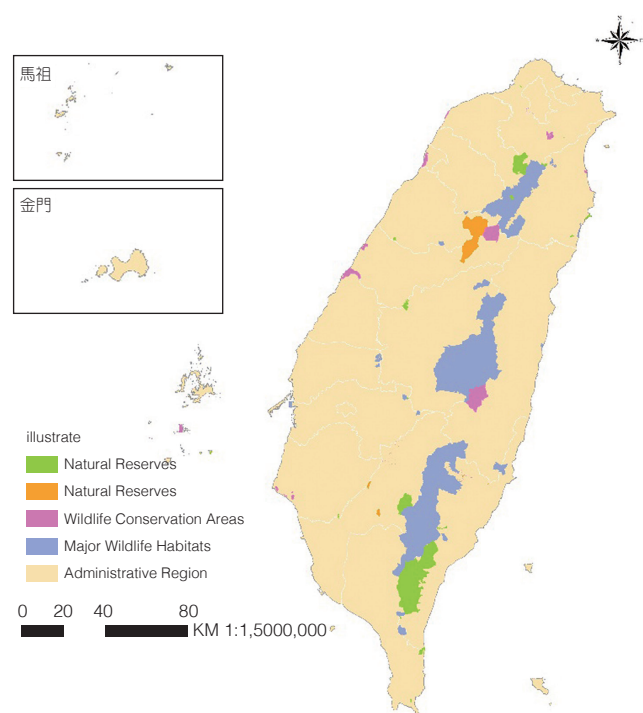
Conserve and sustainably use terrestrial ecosystems to ensure the persistence of biodiversity and prevent land degradation

1. Maintaining natural assets and improving the management of nature reserves

(1) To manage nature reserves for biodiversity preservation, the Forestry Bureau (now renamed as the Forestry and Nature Conservation Agency) of the Ministry of Agriculture has established a total of 88 conservation areas and reserves. These included 22 natural reserves, 21 wildlife conservation areas, 39 major wildlife habitats, and 6 nature reserves. These areas are managed in accordance with the Cultural Heritage Preservation Act, the Wildlife Conservation Act, and the Forestry Act. The bureau regularly patrols these areas, combats poaching and illegal logging, and conducts surveys, research, conservation, and restoration activities for rare animals and plants. These efforts aim to maintain the integrity of habitats and ecosystems across the island. In 2022, a budget of NT\$80,586,000 was allocated for these purposes, which represented an average per capita expenditure of NT\$3.48, surpassing the initial target of achieving an average per capita expenditure of NT\$3.4 for 2022.

(2) In 2022, the Urban and Rural Development Branch of the National Land Management Agency under the Ministry of the Interior announced plans for the conservation of one international wetland and 33 national important wetlands, and approved plans for the conservation of 10 regional important wetlands. The plans for Linyuan Manmade Wetland and Banping Lake Wetland, Guanshan Manmade Wetland, and Neilliao Wetland were approved and announced in 2022.

2. Integrating resources from public and private sectors to promote the endangered



▲ Figure 2-42 The Forestry and Nature Conservation Agency has established a total of 88 conservation areas and reserves. These include 22 natural reserves, 21 wildlife conservation areas, 39 major wildlife habitats, and 6 nature reserves

species conservation:

The Forestry and Nature Conservation Agency has integrated resources from both the public and private sectors to develop a conservation plan, which focuses on research and habitat restoration for 22 endangered species. In 2022, population surveys showed increased distribution for Chinese river otters and eastern grass owls. The bureau implemented a program to revive the populations of the endangered Chinese box turtle and the yellow pond turtle, releasing a total of 1,194 individuals into their natural habitat. In addition, the bureau also collaborated with the Central Region Water Resources Branch of the Water Resources Agency under the Ministry of Economic Affairs and the Third River Management Branch to restore the habitat for the *Squalidus banarescui* in the braided tributaries on both the south and north banks of the Wu River. Additionally, a documentary film titled "The Death of a Taiwanese Black Bear: The Chronicles of 711/568" was produced to provide insight into the process of rescuing and releasing a wounded wild black bear from Tongmao Mountain on two occasions.



▲Figure 2-43 The Taichung Wildlife Conservation Society, in collaboration with the Central Region Water Resources Branch of the Water Resources Agency and the Third River Management Branch, works to restore the habitat for the *Squalidus banarescui* in the braided tributaries on both the south and north banks of the Wu River

3. Promoting reforestation with Forest Stewardship Council (FSC) certification:

The FSC offers an international forest certification scheme that ensures forest products originate from well and responsibly managed forests. The Forestry and Nature Conservation Agency has adopted FSC's standards and principles for sustainable forest management as part of its long-standing policy. In 2022, the management offices of Pingtung, Chiayi, and Tongshi Forest obtained FSC certification. This achievement led to a cumulative certified area of 272,860 hectares in state-owned forests.

4. Promoting crop rotation with high water-use efficiency and laser soil leveling to effectively utilize rainwater for irrigation and enhance irrigation efficiency:

In 2022, the Taiwan Agricultural Research Institute of the Ministry of Agriculture implemented the Program to Promote Technology Decision Support System for Precision Management of Agricultural Water Resources. The program uses soil hydraulic parameters and data on crop water requirements collected at the different experimental stations to increase water-use efficiency in water-scarce regions along the southwest coast. Additionally, the program encourages crop rotation with high water-use efficiency (dryland crops-rice-dryland crops) and the use of laser soil leveling technology. These practices not only enhance rainwater utilization



▲Figure 2-44 Audit at Tongshi Forest by the Forest Stewardship Council (FSC)

for irrigation but also improve overall irrigation efficiency. Furthermore, a demonstration on the use of laser soil leveling technology for water management of dryland crop cultivation, specifically red onions, was also conducted in Hsuechia District in Tainan City.

5. Implementing Payments for Ecosystem Services (PES) for endangered species important habitats, and collaboration with the public in conservation efforts:

To encourage public engagement in conservation efforts that also support their livelihoods and environmental protection, the Forestry and Nature Conservation Agency under the Ministry of Agriculture in 2021 implemented the PES program for endangered species and important habitats. The program covers endangered species such as the leopard cat, eastern grass owl (*Tyto longimembris*), Chinese river otter, pheasant-tailed jacana, and important habitats including paddy fields, rice terraces, terrestrial fish ponds, and private protected forests. In 2022, 10 counties and municipalities participated in this program, resulting in the eco-management of agricultural and habitat land covering 700 hectares. The efforts led to the creation of 412 habitat sites, with 74 community groups forming patrol teams to protect shallow mountain environments. In September, the Taiwan black bear was added to the PES program to promote conservation awareness for the black bear.

6. Conducting biodiversity conservation and monitoring:

Under the plan to improve river basins under the jurisdiction of the central government, there were 66 projects that required eco-inspection in 2022, and eco-inspection of all 66 projects were completed. In 2022, the government also provided grants to local governments to support eco-inspection work for the years 2023 to 2024.



Promote peaceful and inclusive societies, provide access to justice for all and build effective, accountable inclusive institutions

1. Sustained crackdown on crime during the pandemic:

In 2022, the National Police Agency of the Ministry of the Interior conducted six nationwide anti-crime operations in collaboration with the Taiwan High Prosecutors Office. These operations led to the dismantling of 310 criminal organizations, arrest of 2,103 suspects, seizure of ill-gotten gains amounting to NT\$63,706,782, and confiscation of 319 firearms. On July 22, 2022, minister Hsu Kuo-yong presided over the press conference for the Second Nationwide Synchronized Anti-Crime Operation. Minister Hsu highlighted the government's achievements and commitment in combatting organized crime, emphasizing that the government's resolve in law enforcement cannot be challenged.

2. Enforcing the anti-money laundering (AML) policy and reducing the sources of illegal money:

On December 28, 2021, the Ministry of Justice announced the draft amendment to the Money Laundering Control Act. After the public consultation period ended on March 1, 2022, the ministry, on May 3, May 18, September 13, October 18, and December 7, 2022, invited relevant bar associations, the Judicial Reform Foundation, the Financial Supervisory Commission, as well as experts and scholars to participate in discussions and review the

proposed amendments. The major revisions include stricter penalties for money laundering involving proceeds of unlawful activity totaling not less than NT\$100 million. It also introduces criminal penalties for using virtual assets or third-party payment tools in money laundering, includes penalties for maintaining dummy accounts, and imposes additional criminal liabilities on organizations involved in collecting and managing accounting records for illicit purposes.

3. Ensuring the well-being of children and youth in stable home environments:

In accordance with Article 54-1 of the Protection of Children and Youths Welfare and Rights Act, the police in 2022 conducted visits to 5,385 children whose parents were either convicted drug offenders or wanted criminals. In 262 of these cases, it was determined that the children were not receiving appropriate care, and the police reported these cases to social welfare agencies. Additionally, a total of 807 cases involving families in need of assistance were reported to social welfare agencies to provide the necessary support and aid.

4. Improving treatment services in children and youth protection and improving the quality of case closure:

To enhance the quality of treatment services and case closure, social workers involved in children and youth protection are required to use the Structured Decision-Making Model (SDM) risk assessment and reassessment tools to determine if the risk level of a case has been reduced to a medium-to-low level, at which point the case can be closed. Otherwise, continued treatment services need to be provided in accordance with the risk level. For more complicated cases, local governments are required to convene decision-making meetings following the procedures on children and youth protection outlined by the Ministry of the Interior. These meetings gather experts, scholars, and network units to review the appropriateness of case closure. According to statistics from the Ministry of the Interior, 5.48% of the cases that had been closed in 2022 were re-reported.

5. Strengthening transparency of justice:

To address the issue of victims not having sufficient access to information in criminal

proceedings, an Information Platform for Victims in Criminal Proceedings was launched in all district prosecutors' offices on July 1, 2022. The platform provides victims with information on the progress of cases related to homicides, severe injuries, robbery, kidnapping, extortion, and sexual assault. Victims can receive notifications and access information about the case's progress online, thus saving time. By December 2022, the platform had received a total of 496 applications for information.

6. Increasing corruption conviction rates:

From January to December 2022, the district prosecutors' offices handled 386 corruption cases that led to prosecutions. As of January 2023, the corruption conviction rates charges was 100%, with 54 convictions and zero acquittals. In addition, the cumulative corruption conviction rates cases from July 2009 to December 2022 was 77.4%.

7. Achievements of the government open data initiative in 2022

(1) As of December 2022, the Government Open Data Platform provided over 55,000 data sets, with a total of over 100 million views and over 18 million downloads. Data sets that are in machine-readable, structured, and open formats meet the gold standard, and accounted for 88% of all data sets. On December 9, 2022, the Government Open Data Awards was held to showcase the results of efforts by different government agencies to promote open data and improve data quality.

(2) The Government Open Data Platform continues to provide data with high application value, including data on the business operations of listed companies, the Chinese Standard Interchange Code, data on town boundaries, contracted medical institutions for vaccines, traffic data, and tourist attractions for use by the private sector and industries.

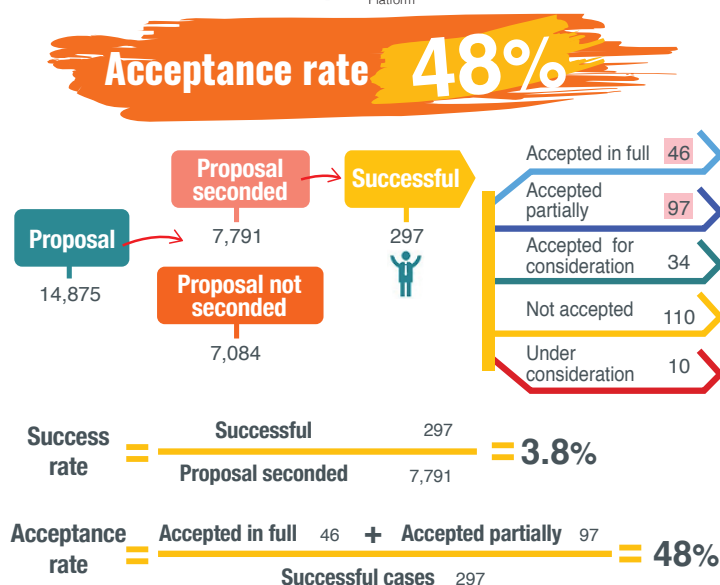
8. Openness, transparency, and participation:

As of the end of December 2022, there were 14,875 suggestions raised on the Online Public Policy Participation Platform, out of which 297 proposals became official cases, resulting in a 48% acceptance rate. The online platform provides cross-domain collaborative services to enhance



▲Figure 2-45 The Government Open Data Awards on December 9, 2022 (Left: Central government group; Right: Local government group)

Online Public Policy Participation Platform



Statistics time: until December 31, 2022

▲Figure 2-46 Suggestions raised on the Online Public Policy Participation Platform in 2022

online participation in public policy. By the end of December 2022, 21 counties and cities had applied for using the platform, and 16 counties and cities had officially launched the platform services.

9. Implementing birth registration, formulating guidelines for online birth data reporting, and cross-agency reporting of newborn birth data:

To ensure effective birth registration, the Ministry of the Interior has developed guidelines for online reporting of birth data. Newborn birth data, provided by the Health Protection Administration of the Ministry of Health and Welfare, are transmitted online to local household registration offices for verification and control. In 2022, the HPA received and transmitted 143,737 newborn birth reports to local household registration offices. These birth data were subsequently verified and registered in accordance with the Household Registration Act and the relevant operational guidelines, resulting in a 100% birth registration rate.

GOAL 17

Establish diversified partnerships and work together to advance the vision of sustainability

1. Implementing ing eco-friendly technology transfer, promotion, education and expansion plans:

In 2022, the International Cooperation and Development Fund carried out projects related to the transfer, education and expansion of eco-friendly technologies. The compensated projects had a total value of US\$125 million, while the non-compensated projects amounted to NT\$520,575,189. For instance, the Climate-Resilient Agriculture Enhancement Project in Saint Kitts and Nevis focused on improving climate change adaptation in agriculture. Through the use of an agricultural information platform, the project helped reduce the impact of extreme weather conditions on farming, thereby laying the groundwork for sustainable agriculture.

2. Providing specialized healthcare training to foreign medical personnel:

In 2022, the Ministry of Health and Welfare, through the Taiwan International Healthcare Training Center (TIHTC), commissioned online training courses in healthcare that included healthcare management and national health insurance; emergency medical care and burn and scald management; and digital healthcare. A total of 83 foreign healthcare professionals participated in these courses.

3. Achievements of medical cooperation projects with diplomatic allies:

In 2022, the International Cooperation and Development Fund recorded 124 scholarship recipients pursuing public health and medical-related degree programs in Taiwan, accounting for 23% of the total awardees. In addition, training was provided to 12,914 healthcare personnel in diplomatic ally countries, achieving the goal of capacity building through the following cooperation programs: Health Information Management Efficiency Enhancement Project in Paraguay (Phase II), Maternal and Infant Care Improvement Project in the Kingdom of Eswatini (Phase II), Maternal and Infant Care Improvement Project in Somaliland, Capacity Building Project in Saint Kitts and Nevis for the Prevention and Control of Metabolic Chronic Diseases, Project for Strengthening Medical Imaging System in Belize, Emergency Medical Response Improvement Project in Haiti, Public Health and Emergency Medical Response Improvement Project in Saint Vincent and the Grenadines, Health



▲ Figure 2-47 Members of the technical team to Saint Kitts and Nevis explain the use of the agricultural information platform to local farmers

Information Management Efficiency Enhancement Project in Somaliland, and Preparatory Phase of the Maternal and Infant Care Improvement Project in Guatemala (Phase II).

4. Offering Taiwan Fellowship to help diplomatic allies nurture talents in different disciplines:

The Taiwan Fellowship Program is a long-standing initiative. Since its establishment in 2004, more than 3,000 students from diplomatic allies have come to Taiwan to study. In the 2022 academic year, there were 237 Taiwan Fellowship recipients, and a new student orientation and welcoming event was held on November 18. Foreign ambassadors were also invited to attend the event. Deputy Minister of Foreign Affairs Tien Chong-kuang delivered a welcoming speech, and scholarship recipients shared their experiences of life and study in Taiwan. Approximately 500 students attended the event.

5. Projects to assist developing countries to improve water and sanitation systems:

In 2022, the International Cooperation and Development Fund (ICDF) helped developing countries carry out water and sanitation improvement projects. For instance, in collaboration with the relief organization CARE Haiti, the ICDF, through the Haiti Earthquake WASH Assistance to Affected Communities and Households, provided assistance to 2,812 earthquake-affected households in three communities in Grand'Anse province, which was one of the severely affected areas. The ICDF conducted 32 community health awareness activities to disseminate information on hygiene



▲ Figure 2-48 A local residents receives her personal hygiene package and material exchange vouchers through the Haiti Earthquake WASH Assistance to Affected Communities and Households

habits and awareness, as well as on COVID-19 prevention and vaccination. Essential supplies for repairing home water storage facilities were distributed to 375 affected households, including items such as soap, water purifiers, and water buckets, along with related technical guidance. In addition, the ICDF helped the communities build community water treatment and supply facilities and re-established 20 community water resource management committees. Clean water was also provided to the communities throughout the project period.

6. Implementing technical cooperation on Aid for Trade projects:

In 2022, the ICDF allocated a budget of NT\$138,027,440 for technical cooperation on Aid for Trade projects. For instance, the project in Paraguay to strengthen capacity for commercial production and operation of orchids laid the foundation for the butterfly orchid industry in Paraguay by improving production techniques, increasing domestic butterfly orchid production, and reducing trade deficits caused by flower imports. Additionally, also in Paraguay, the Project to Strengthen Capacity to Support Development of Micro-, Small and Medium-sized Enterprises (MSMEs) organized a national competition for micro and small enterprises and assisted the garment industry in adopting digital design and online 3D virtual display technology, thus enhancing the sales and export competitiveness of the clothing industry. Furthermore, in Guatemala, the Project for the Revitalization of Crafts and Youth Entrepreneurship in Antigua and Surrounding Municipalities in Sacatepéquez provided guidance to 94 micro handicraft producers, generating approximately 1,811,400 GTQ (Guatemalan quetzal), with a 23% increase in turnover.

7. Active participation in trade and environment initiatives and discussions:

In 2022, Taiwan attended three meetings of the Committee on Trade and Environment (CTE) and eight meetings of the Trade and Environmental Sustainability Structured Discussions (TESSD) at the World Trade Organization (WTO). Discussions involved issues related to the circular economy, environmental goods and services, and climate measures. Taiwan also participated in the Asia-

Pacific Economic Cooperation (APEC) meetings on accelerating the phasing out of inefficient fossil fuel subsidies, environmental goods trade policy dialogue, and the update of APEC list of environmental goods to Harmonized System (HS) 2022. Taiwan had previously worked on the update of APEC environmental goods to HS 2017 and has revised its plan for updating to HS 2022, which is publicly available on the APEC official website.

8. Deepening partnerships to foster a green environment:

The International Environmental Partnership (IEP) program, jointly promoted by the Environmental Protection Agency of the U.S. and the Ministry of Environment of Taiwan, continued to advance projects in 2022 despite the ongoing pandemic. These projects included the Global Environmental Education Partnership (GEEP), Asia-Pacific Mercury Monitoring Network (APMMN), and International E-Waste Management Network (IEMN). They facilitated government-to-government and public-private partnerships through working meetings, workshops, and annual conferences. The goal was to strengthen connections and promote the exchange of information and experiences to acquire data, technology, as well as information on regulations, management structures, and practical experience needed for environmental governance. Besides supporting pollution prevention in developing countries, the program also contributed to the sustainable development of green recovery in a post-pandemic world.

GOAL 18



Build a nuclear-free homeland

1. Promoting the decommissioning of nuclear plants by law

(1) On April 28, 2022, Taiwan Power Company completed the installation of the first dry abrasive cleaning facility at the waste treatment site of Nuclear Power Plant 1. After the decontamination plan is reviewed and approved by the Atomic

Energy Council (now renamed as the Nuclear Safety Commission), the procurement of the second cleaning facility will be planned.

(2) The environmental impact assessment (EIA) for the decommissioning of Nuclear Power Plant 2 was reviewed and approved at the 425th EIA meeting on August 10, 2022. The plan was subsequently announced on August 24, 2022.

(3) On January 3, 2022, the Ministry of Environment held a meeting to define the scope of environmental impact assessment for the decommissioning of Nuclear Power Plant 3. Taiwan Power Company carried out environmental monitoring and prepared the initial draft of the EIA report based on the conclusions of that meeting.

2. Completed the relevant operational guidelines for the relocation of the Lanyu storage site to facilitate the relocation process

(1) In June and December of 2022, the Nuclear Safety Commission invited the Ministry of Economic Affairs and the Council of Indigenous Peoples to a meeting to discuss follow-up actions to be taken after fact-finding investigations at the Lanyu nuclear waste storage site. The three agencies will jointly oversee Taiwan Power Company's preparatory work and dialog with the local community for the relocation of nuclear waste from Lanyu.



▲ Figure 2-49 Screenshot of the video conference meeting in June 2022 to discuss the relocation of the Lanyu storage site



▲ Figure 2-50 Review meeting of “National Preliminary Safety Demonstration Report on Final Disposal of Nuclear Fuel After Use” in December 2011

(2) In response to Taiwan Power Company’s planning of container vessels for the transport of waste barrels, the Nuclear Safety Commission in June 2022 announced the Safety Guidelines for the Maritime Transport of Low-Level Radioactive Waste (LLW).

3. Promoting the legislation of "Sites for Establishment of High-Level Radioactive Waste Final Disposal Facility" to help nuclear plants to complete decommissioning:

In December 2022, the Nuclear Safety Commission held a meeting to review the Preliminary Report on the Safety of the Final Disposal of Spent Nuclear Fuel submitted by Taiwan Power Company. The report and the review on the report have been made publicly available online to ensure information transparency.

4. Implementing social communications and enhancing awareness education on the selection of low-level radioactive waste disposal sites, low-level waste management contingency plans (interim storage), and nuclear waste treatment

(1) In 2022, the government initiated the Working Plan for Social Dialogue during Low-Level Waste Site Selection and the Working Plan for Social Dialogue for Low-Level Waste Storage Contingency Plan (Interim Storage). The efforts included print advertisements, brochures, quick reference guides, short videos, virtual tour of the low-level waste repository at Nuclear Plant 1 and the volume reduction center at Nuclear Plant 2, desk calendars, and other promotional materials. A total of 491 visits and briefing sessions were

held. Additionally, the government also organized educational campaigns on nuclear waste in schools. Different online platforms including the website “Nuclear Plant Backend Operations” and “A Home for Nuclear Waste” Facebook page were also launched, reaching approximately 280,000 individuals.

- (2) The government convened two meetings of the National Participation Committee and based on the recommendations of the committee members, added a section on “Public Concerns on Nuclear Waste Management” on its official website. Details of the nuclear plant decommissioning and waste disposal were also revised and the information presented online in a more people-friendly, informative format.
- (3) In May 2022, the Nuclear Safety Commission conducted parallel environmental monitoring operations in Lanyu. Representatives from the Council of Indigenous Peoples, Taitung County Government, Lanyu Township Office, local tribal councils, local environmental organizations, and Lanyu residents were invited to participate, reinforcing public involvement and third-party verified sampling and analysis. On May 25, 2022, an inspection visit was organized to the Nuclear Plant 1 decommissioning and dry storage facility. Invitations were extended to the New Taipei City Government, Shimen District Office, local leaders, community representatives, environmental groups, and others to enhance public understanding of the decommissioning and the safety controls of dry storage.



▲ Figure 2-51 Interactive educational games enable people of all ages to learn about nuclear power plant decommissioning and nuclear waste treatment

(4) The government held three science outreach exhibitions. An exhibition area dedicated to decommissioning nuclear waste was set up to transform professional content into easily comprehensible information for the public. Exhibition items were converted into videos and shared online through the Nuclear Safety Commission Facebook page. In addition, the government also organized an online learning camp to allow participation for those who could not physically attend, thereby expanding the scope of outreach.

Climate Change and Net Zero Transition Task Force

1. Announcing the 12 key strategies for net-zero transition:

In response to the global trend toward net-zero, President Tsai Ing-wen on Earth Day, April 22, 2021, announced Taiwan's commitment to achieve Net-Zero Transition by 2050. Subsequently, the Executive Yuan immediately began planning and facilitating social dialogue. In March 2022, Taiwan announced its 2050 net-zero pathway. In December of the same year, Taiwan revealed its 2030 phased goals and explained the concrete actions and measures behind the 12 key strategies. Prior to the release of these plans, 87 social dialogue sessions and meetings were conducted to gather inputs from various sectors. On April 21, 2023, the Executive Yuan approved the action plans for the 12 key strategies, which will drive the net-zero transition forward. The government will continue to engage in external communication and gather inputs from stakeholders as part of the ongoing review and improvement process.

2. Advancing the key strategy on wind and solar PV

(1) Wind power: The promotion of offshore wind power in Taiwan follows a three-stage policy: demonstration first, then establishment and improvement of transportation and storage facilities. As of the end of 2022, the demonstration phase was completed with two

wind farms consisting of 188 wind turbines and a total installed capacity of 237.2 MW.

(2) Solar power: The Bureau of Energy at the Ministry of Economic Affairs implemented the Solar Panel Installation Program in School Campuses and focused on developing guidelines for implementation and standardized contracts. After a comprehensive review by Taiwan Power Company and the Taiwan Photovoltaic Industry Association, approximately 324 MW in capacity was approved for installation. The approval excluded school buildings with structural safety concerns as well as those in need of waterproofing, insulation, and seismic reinforcement. All installations were completed by the end of July 2022.

3. Advancing the key strategy on hydrogen energy

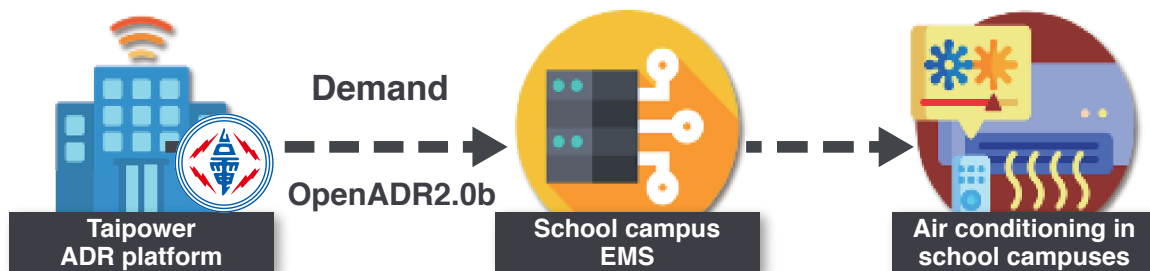
(1) Power generation application: Taiwan Power Company signed a memorandum of understanding (MOU) with Siemens Energy to collaborate on hydrogen blending technology. This partnership aims to conduct a demonstration project using hydrogen blending in the existing gas turbines at the Hsinta Power Plant in Kaohsiung. The goal is to achieve 5% of power generation through hydrogen blending by 2025.

(2) Industrial application: China Steel Corporation established the first pilot plant that uses hydrogen for the reduction of CO and CO₂ into methanol, methane, carbon solids, and other high-value chemical products.

4. Advancing the key strategy on innovative energy

(1) The government amended the Renewable Energy Development Act to include a dedicated chapter on geothermal energy. Concurrently, it established the Single Service Window for Taiwan Geothermal Power to streamline inter-agency coordination on regulatory matters, thus enhancing the overall understanding of geothermal energy potential in Taiwan.

(2) The Ministry of Economic Affairs announced the Incentive Program for Biogas Power Generation System in 2013. This program was designed



▲Figure 2-52 Participation in the Automated Demand Response (ADR) platform

to encourage biogas power generation, thereby promoting energy self-sufficiency and the increased use of biomass sources and wastewater facilities to generate biogas and electricity. By the end of 2022, there were nine approved cases with a total installed capacity of 2,005 kW.

5. Advancing the key strategy on power systems and energy storage

- (1) Implemented the Advanced Metering Infrastructure (AMI) Smart Meters to encourage the public to change their electricity consumption behavior. By the end of December 2022, the number of smart meters installed reached 2.108 million.
- (2) Introduced the Automated Demand Response (ADR) platform, which uses information technology to transmit electricity-saving signals to user energy management systems, allowing for automated air conditioning control without the need for traditional manual operation, thereby achieving automated electricity savings.

6. Advancing the key strategy on energy saving and efficiency:

The energy conservation plan was drafted in July 2022. Subsequently, three social dialogues were held on topics related to overall energy conservation, as well as energy-saving initiatives in the industry, commercial, and residential sectors. Feedback and suggestions from industry representatives and the public were collected to improve overall strategic planning.

7. Advancing the key strategy on carbon capture, utilization, and storage (CCUS):

On December 28, 2022, the National Science and



▲Figure 2-53 Social dialogue on Carbon Capture, Utilization, and Storage

Technology Council (NSTC), in collaboration with the Ministry of Economic Affairs and the Ministry of Environment, organized a social dialogue to discuss key strategies for CCUS. The dialogue included representatives from various government agencies, businesses, academic and research experts, and civil society organizations. It aimed to gather input from various sectors and build consensus on CCUS.

8. Advancing the key strategy on carbon-free and electric vehicles:

Multiple government agencies have jointly developed actionable plans based on three core strategies: Electrification, Infrastructure, and Transition. The goal is to create an EV-friendly environment, promote widespread use, and facilitate deployment of carbon-free electric vehicles.

9. Advancing the key strategy on resource recycling and zero waste

- (1) Plastic circulation: On November 3, 2022, the Guidelines for the Use of Recycled Plastic Packaging for Non-Food Products were developed.



▲ Figure 2-54 Social dialogue on natural carbon sink conducted by the Ministry of Agriculture and other relevant agencies

- (2) Textile circulation: Development of automatic textile material identification and sorting equipment with the capacity to sort 1,100 to 1,350 pieces per hour at an accuracy rate of 99%.
- (3) Biomass circulation: Inventory of material flows from agriculture, food manufacturing, household biomass production, and reuse; coordinating inter-agency and promotion of anaerobic digestion in six major areas.
- (4) Chemicals circulation: Assistance to industries in establishing liquid crystal extraction and recycling systems; addition of common chemical codes and issuance of operational guidelines for the review of waste cleanup plans in resource circulation networks.
- (5) Electrical and electronic products: Organized the E-Waste Recycling Exhibition to help businesses and the public better understand resource recycling and circulation.

10. Advancing the key strategy on carbon sinks:

At a strategic meeting held on February 9, 2022, the Ministry of Agriculture announced its commitment to achieve net-zero ahead of schedule by 2040. On November 18, 2022, the Council of Agriculture organized a social dialogue on natural carbon sink to collect input and develop the action plan for natural carbon sequestration.

11. Advancing the key strategy on green lifestyle:

The Ministry of Environment and other relevant

government agencies jointly developed the draft of the Key Strategy for Net-Zero Green Lifestyle, focusing on aspects of food, clothing, housing, transportation, education, entertainment, and shopping. Multiple dialogs were conducted, including three social dialogues and three coffeehouse events on Net-Zero Green Living. The goal was to use competitions and assessments to disseminate information on green living and encourage public involvement.

12. Advancing the key strategy on green finance:

The action plan for green finance implemented by the Financial Supervisory Commission (FSC) includes the Green Finance Action Plan and the Sustainable Development Guide Map for TWSE- and TPEX Listed Companies. In 2022, a Sustainable Finance Alliance and a Financial Industry Net Zero Working Platform were created, and guidelines were developed to determine the scope of sustainable economic activities. These will guide the financial industry and businesses toward sustainable development through green finance.

13. Advancing the key strategy on just transition:

Drawing from international experiences, the government developed a just transition mechanism tailored to Taiwan's needs. A Crossing-Ministerial Taskforce on Promoting Just Transition was established to optimize resource allocation and ensure synergies among strategies. The task force worked to enhance communication and coordination between government agencies and local governments. In addition, a Just Transition Committee was also organized discussion forums and public hearings with involvement from central agencies, local governments, and social groups to gather opinions from all stakeholders to ensure public involvement.



I. National Sustainable Development Awards

The National Council for Sustainable Development (NCSA) has organized the National Sustainable Development Award (NSDA) to recognize organizations that have demonstrated outstanding commitment in promoting sustainable development. This award aims to encourage public involvement, foster a deeper understanding of sustainable development within local communities, integrate sustainable practices into people's daily lives, and ultimately realize the national vision of sustainable development. To facilitate widespread engagement across all sectors and ensure alignment with Taiwan's SDGs and the 2050 net-zero target, the application process for the 2022 awards was conducted online. The number of awards was also increased to acknowledge and celebrate contributions from different sectors.

II. National Sustainable Development Award Selection Results

Selection of the 2022 awardees was carried out in accordance with the guidelines established by the NCSA. The awards aim to honor exceptional

achievements in the following areas of sustainable development: Education, Business, Civic Organizations, and Government Agencies. Awards were presented in each of these four above categories. A panel of experts on different areas of sustainable development was chosen by the NCSA to form the judging committee, and the award selection process involved a rigorous three-phase process. The first phase consisted of a review of the submitted documents against the selection criteria, followed by the second phase, which involved presentations by the applicants and Q&A sessions. In the third phase, jury members during the second phase convened to evaluate the outcomes and determine the winners in each category.

In 2022, NCSA conducted campaigns to promote the awards, and a total of 134 entities submitted their applications during the three-month application window. The number of applicants was more than twice the number from the previous year. Meetings were held between June 16 to October 11 for each of the three phases of the selection process, and the list of 52 award recipients was announced on November 9. The awards ceremony was held on December 14 at the International Convention Center of the National Taiwan University Hospital. Premier and NCSA chairman Su Tseng-chang presided over the ceremony and handed out the awards.

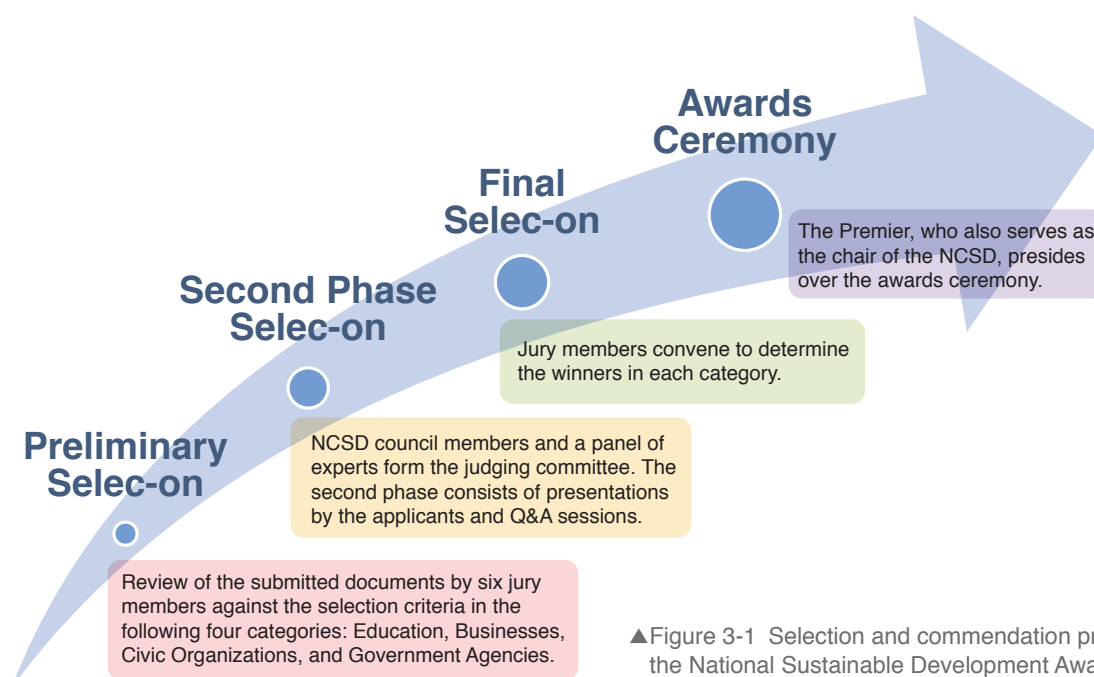


Table 3-1 Winners of the 2020 National Sustainable Development Award

Category	Recipients	Category	Recipients
Education (10 awardees in all)	Chung Yuan Christian University	Civic Organizations (6 awardees in all)	Taitung County East Coast Indigenous Community Cooperative
	National Central University		Taiwan Reforestation Association
	National Kaohsiung University of Science and Technology		Tao-Mi Eco Village, Puli Township, Nantou County
	National Yunlin University of Science and Technology		Hsin Kang Foundation of Culture and Education
	National Chi Nan University		Qishan Tangchang Community Development Association, Qishan District, Kaohsiung City
	Feng Chia University		Taipei Veterans General Hospital
	Pingxi Elementary School, Pingxi District, New Taipei City	Government Agencies (11 awardees in all)	North Coast and Guanyinshan National Scenic Area Headquarters under the Tourism Bureau of the Ministry of Transportation: Public-Private Partnership - International Sustainable Tourism Island Project
	Hemu Elementary School, Jhongpu Township, Chiayi County		Soil and Water Conservation Bureau of the Council of Agriculture (now renamed as the Agency of Rural Development and Soil and Water Conservation, Ministry of Agriculture): Storing Water in Agricultural Land, Preserving Soil on Slopes - Enhancing Resilience in Slope Land Soil and Water Conservation Project
	Mingdao High School, Taichung City		Department of Water Resources of the Taoyuan City Government: No More "Thirst" in Taiwan, Taoyuan Water Resource Circular Economy and Smart Water Conservation Project
	Huei-Ming School for Blind Children, Taichung City		Public Works Bureau of the Kaohsiung City Government: Sustainable Architecture Strategies in Subtropical Regions, the "Promote Kaohsiung House Program"
CTBC Financial Holding Company	Water Resources Bureau of the Kaohsiung City Government: BTO Project for the Kaohsiung Coastal Sewage Treatment Plant and Effluent Recycling		
China Airlines	Ministry of Education: Environmental Education Policy Promotion Project		
Chunghwa Telecom	New Taipei City Government: Wugu Landfill Environmental Improvement Project		
Yuanta Financial Holding Company	Ninth River Management Branch of the Water Resources Agency under the Ministry of Economic Affairs: Public-Private Partnership for the Revitalization of Bie River		
Pacific Sogo Department Stores	Water Resources Bureau of the Taichung City Government: Public-Private Partnership for Sustainable Development at Tongta River		
Kaohsiung Plant, Advanced Semiconductor Engineering Inc.	Economic Development Bureau of the Tainan City Government: Solar City 3.0 - Sustainable Development toward Net Zero		
Impact Hub Taipei	National Health Insurance Administration, Ministry of Health and Welfare: NHIC E-Card: Infinite Value and Convenience in Your Hands		
Giant Manufacturing Co.			
Mega Financial Holding Company			
Taiwan Cooperative Financial Holding Co.			
Give-Circle Co.			
Asia Cement Corporation			
Hotai Motor Co.			
Kao (Taiwan) Corporation			
ChipMOS Technologies Inc.			
Sunfan Technology Enterprise Co.			
First Commercial Bank			
Fubon Financial Holding Company			
Momo			
Yang Ming Marine Transport Corporation			
Innolux Corporation			
Yulon Motor Co.			
Fwusow New Industry Co.			
Greenvines			
Land Bank of Taiwan			

Education



Business



Civic Organizations



Government Agencies



▲ Figure 3-2 Recipients of the 2022 National Sustainable Development Awards in each of the four categories: Education (top left), Business (top right), Civic Organizations (bottom left), and Government Agencies (bottom right)

III. About the Recipients



Chung Yuan Christian University

Sustainability achievements: Chung Yuan Christian University is deeply committed to the core values of holistic education, which revolve around respect of nature and human dignity; the pursuit of harmony among the universe, humans, matter, and the self; and the wise use of technology and knowledge of the humanities for the benefit of all. Faced with challenges both internal and external, university president Dr. Lee In-Ming, who took office in 2021, recognizes the importance of sustainable campus governance. During the university's 70th anniversary, Dr. Lee announced the inclusion of the United Nations Sustainable Development Goals (SDGs) into campus governance going forward. Using 2022 as the benchmark year, the university has systematically reviewed the 18 sustainability indicators and will continue to promote sustainable development and formulate action plans in 2023.

Award highlights: As a responsible member of the higher education community, Chung Yuan Christian University continues to innovate all areas of sustainability through effective campus governance. The university has implemented full-scale energy management to create a low-carbon, green campus. It has long been committed to University Social Responsibility (USR) and is active in integrating industry and academic resources both domestic and abroad, and in forming strategic partnerships. The university is the first in Taiwan to receive the Higher Education Sprout Project certification from the Ministry of Education.

Vision blueprint: In March 2022, the university published its first Sustainable Development Report, announcing its target to achieve net-zero emissions

by 2049. The university also unveiled its future vision for sustainable development in four areas: 1) In the economic domain, it aims to be a university promoting industrial innovation. 2) In the area of social development, it aspires to become a benchmark university in social responsibility. 3) In the area of environmental protection, it aims to create an environmentally sustainable green university. 4) In the area of campus governance, it seeks to optimize governance practices to become a model university.

National Central University

Sustainability achievements: In addition to its commitment to green procurement, the development of friendly spaces, and community engagement courses, the USR team at National Central University also spearheaded local environmental education initiatives and cultural restoration efforts. Through remote tools and collaborations with partner universities, the USR team established cross-national and cross-regional research communities, thereby creating a diverse foundation for global sustainable development for both nature and the humanities.

Award highlights: The university's development is centered around "Establishing a Sustainable Ecological System and Fulfilling University Social Responsibility." The goal is to shape a blueprint for the sustainability of the ecology, lifestyle, and production: 1) Ecological revitalization: Through community participation, the USR team promoted air quality monitoring in communities and collaborated with partner universities in Southeast Asian to establish an Asian air pollution monitoring network. The team also worked with the Office of Coast Administration and Construction and the Central Weather Administration to set up observation stations along the coast, using real-time data to track and predict pollution dispersion and disasters. 2) Lifestyle revitalization: The student-led community "Central Creators" guided local high school students in designing board games for local revitalization, eventually applying for a grant from the Hand in Hand program of the Taoyuan City Department of Education. The university led the local community to collectively address social issues, extending their knowledge into

action. 3) Production revitalization: The USR team combined specialized courses to build a record of sea-related activities such as fishing and salt production. It also collaborated with the Taoyuan Department of Hakka Affairs to organize an exhibition at the Yongan Conch Cultural Experience Park. Through design and practical courses, the team further develop cultural and creative brands to convey the cultural values of the coastal community.

Vision blueprint: In response to Taoyuan's cultural diversity, the university not only promotes a resilient urban-rural climate action plan but also integrates its internal and external networks to realize a vision of sustainability governance that is inclusive, innovative, and ethical.

National Kaohsiung University of Science and Technology

Sustainability achievements: To ensure sustainability in its school policies, campus facilities, and long-term development, the National Kaohsiung University of Science and Technology (NKUST) has formulated five core sustainability values: Foresight, Organization, Responsibility, Communication, and Expansion. The university incorporated SDGs into its medium and long-term plans and established a dedicated unit to research trends, develop strategies, and regularly review sustainability investments. The university also stressed interdisciplinary collaboration between the industry, academia, and research, using technological expertise, suitable communication channels, policies, services, and guidance to safeguard the interests of vulnerable groups and empathize with stakeholders. This approach facilitated resource sharing within the local community. Furthermore, the university developed digital platforms to foster inclusive communication and share outcomes with the local community.

Award highlights: In the area of administration, the university established the Office of Sustainability Development, which is responsible for conducting research on sustainability trends, promoting policies and providing consultations, formulating sustainability strategies, and engaging in domestic and international

exchanges. To execute these strategies, the university implemented organizational changes at the university level to encourage collaboration and communication across different units. Additionally, the university used digital technology to ensure efficient integration of resources and improve administrative efficiency. To carry out assessments, all university departments worked together, following the PDCA (Plan-Do-Check-Act) methodology to identify challenges and inadequacies. In addition, dedicated departments such as the Office of Operations Management performed regular assessment to strengthen resource integration. This comprehensive approach enabled the university to effectively address sustainability challenges in the future.

Vision blueprint: 1) Commitment to becoming a carbon-neutral university by 2028. 2) Cultivating sustainability talents. 3) Enhancing sustainable university governance. 4) Taking root in the local community while expanding on a global scale.

National Yunlin University of Science and Technology

Sustainability achievements: National Yunlin University of Science and Technology (YunTech) emphasizes university sustainability governance, firmly believing that implementing education is the key to achieving sustainability goals. Planning and management are carried out by its sustainability and social responsibility committee. Every year, the committee releases sustainability reports, financial plans, and reports on academic fund performance for disclosure and management improvements. YunTech leverages the expertise of its departments and organizes interdisciplinary teams to strengthen sustainability development issues.

Award highlights: The university places a strong emphasis on the cultivation and application of knowledge on sustainability. In 2021, YunTech initiated 52 sustainability projects that involved 8,777 students, and established 93 bases for collaboration within the local community. In 2020, the university started sustainability education with 22 courses, and in 2022

expanded its offerings to include online courses on the UN SDG 17. A total of 1,962 students enrolled in the courses.

Vision blueprint: In the future, YunTech's vision is to inspire distinctive abilities and expand effective influence. The university aims to create a comprehensive sustainability portfolio for all teachers and students, establishing strategies for active participation in teaching, research, and community service to achieve the 2030 SDGs. YunTech seeks to break the boundaries of learning and use its academic resources to fulfill its mission.

National Chi Nan University

Sustainability achievements: National Chi Nan University (NCNU) is committed to Taiwan's SDGs. It has launched 23 sub-projects in five main areas, namely: strengthening innovative teaching, developing unique features, enhancing public higher education, fulfilling social responsibility, and sustainable institutional operation. In particular, the university focused on university governance, regional development, and international actions to address Taiwan's SDGs, showcasing results through quantifiable data.

Award highlights: The core of NCNU's innovation revolves around "Deepening the connection with the local Shuishalian region, expanding to Southeast Asia, and advancing toward the SDGs." For over 20 years since the massive earthquake in September 21, 1999, the university has been dedicated to its mission of deepening connections with local communities. It is committed to a need-oriented learning approach based on local issues and demands, which is a foundation of the university's uniqueness. Aiming to cultivate future talent capable of interdisciplinary and sustainable approaches, the university takes on the responsibility of driving sustainable local development and expanding its international perspective by caring for the local communities. In keeping with sustainable development trends, NCNU is committed to addressing issues and taking concrete actions to realize global localization.

Vision blueprint: In 2022, NCNU established a sustainable development committee to respond to sustainable development trends. This committee positions the university within the SDGs framework by identifying issues, seeking innovative technologies and competencies, and ensuring that students and faculty understand that global challenges equal global opportunities. The university aims to apply sustainability concepts to future research projects and campus development planning. The university has initiated its own net zero carbon emission policy, and is expected to achieve its target by 2043.

Feng Chia University

Sustainability achievements: Feng Chia University (FCU) announced its commitment to reaching 8% in renewable energy consumption by 2030 and achieving net-zero carbon emissions by 2041. The university has developed a carbon reduction plan and a decarbonization timetable. FCU has set Z-BAR (Zero carbon emission, Biotope, Aging health, Regional revitalization) as the focus of its social responsibility and has formulated a sustainability blueprint.

Award highlights: The university's Building Small Libraries project leveraged the architectural knowledge and resources of the university, enterprises, and alumni to establish a learning support system for children in rural communities. This initiative created functional facilities that meet the educational needs of local areas. Currently, FCU has either built or is planning to build 21 small libraries. Through the International Project on Green Energy Synergy and Sustainability, the university opened schools in Tongshi district in Taichung City to assist young farmers improve their competencies and add value to their agricultural products. The project helps create local brands based on the local culture and ecology, and promotes green energy technology to the global community.

Vision blueprint: FCU aims to achieve its sustainability goals through the following approaches: 1) Quality education: Achieving sustainable behavioral changes in students and faculty through high-quality education. 2) Industry collaboration: Establishing

replicable models for knowledge transfer in collaboration with industries. 3) Global common good: Expanding FCU's sustainability impact internationally. 4) Sustainable commitment: Developing a clear path to reach net-zero carbon emissions.

Pingxi Elementary School, Pingxi District, New Taipei City

Sustainability achievements: Pingxi Elementary School realizes sustainability through universality, inclusiveness, participation, integration, and transparency. The school operates as a hub to create a ripple effect by collaborating with parents within the community, forming strategic alliances, and partnering with other schools to establish a contribution platform. This platform provides accessible curriculum for teaching and experiential learning opportunities for all, making sustainability visible. The school integrates environmental, social, and economic issues into its curriculum and implements them through dialogues with partners. The goal is to identify common goals and strategies to align with subject-specific teaching.

Award highlights: Pingxi Elementary School has received numerous accolades in outdoor education and environmental education. Initiatives such as “Taking a Railway Time Machine to Explore the Secrets of the Centennial Mountain Town Pingxi” earned the Silver Award for Teaching Excellence from the Ministry of Education, the Outstanding Outdoor Education Award,



▲ Figure 3-3 Recipients of the 2022 National Sustainable Development Awards in Education: Pingxi Elementary School, New Pingxi District, New Taipei City

and the Silver Award for Outstanding Summit Climbing. In its efforts to give back to the community, the school implemented several projects, including the creation of public space at Kongyuan Street, beautification of public restrooms at Nanshan Li, art projects at Wangku Station, and greening projects in the community. All these projects have garnered media attention and community appreciation. In the economic domain, the school garnered awards including the Best Team Award for the STEAM (Science, Technology, Engineering, Mathematics, Art) Global Award Program, was recognized for its active promotion of science education in New Taipei City, finished second place in a food and agriculture education competition, and won the Best Elite Award.

Vision blueprint: Pingxi Elementary School is committed to integrating internal and external resources to expand environmental education; improving environmental education quality and applying for certification while maintaining the passion toward environmental education among teachers and students; increasing exchanges with partners to ensure sustainability; having a positive impact on others; and fostering collaborative learning, sharing, and well-being to achieve sustainable development goals.

Hemu Elementary School, Zhongpu Township, Chiayi County

Sustainability achievements: Founded in sustainable development principles and driven by expectations of parents and the community, Hemu Elementary School dedicated seven years to complete its Technology and Innovation for Local Care, Building a Sustainable Future program. This program demonstrates how technology and innovation can contribute to local well-being and create a sustainable blueprint for a healthy lifestyle. Guided by the 12-Year Basic Education program, the school actively cultivates literacy among students using a macro perspective that focuses on educational vision, key curriculum contents, educational value, and practical actions. The goal is to instill in children the ability to take initiative, interact, and work toward the common good, thereby laying the foundation for sustainable development.

Award highlights: Hemu Elementary School has made significant progress in creating a sustainability-focused environment based on scientific thinking. This includes participating in school capacity-building, enhancing competency-based teaching, promoting diverse knowledge, cultivating physical fitness and skills, and creating a friendly campus. The school has also nurtured students' civic action capabilities by encouraging them to identify and solve problems innovatively. Through food and agricultural education, the school connects students with their hometowns, turning the campus into a community garden. Hemu Elementary School has successfully promoted environmental and energy education, becoming the base for energy education in Chiayi County. It advocates a low-carbon lifestyle and good habits for environmental sustainability and a healthy life.

Vision blueprint: In the future, the school's vision for sustainable development will focus on the following: a humanistic curriculum that integrates local culture and emphasizes food and agricultural education to foster community well-being; technological literacy that promotes hands-on activities to use technology to enhance information literacy; and a commitment to environmental sustainability to nurture environmental education ambassadors and practical life skills. The goal is to develop students into world citizens who use technology and innovation to care for their local communities.

Mingdao High School, Taichung City

Sustainability achievements: Mingdao High School has established a Sustainable Development Promotion Committee to formulate action plans to achieve sustainable development goals. The Committee integrates the efforts of the school's administrative departments, support systems, external resources, professional learning communities (PLCs), and student special interest groups (SIGs) to achieve sustainable development objectives. Within this framework, the Committee's work is focused on the following: teacher and curriculum development, student-centered explorations and activities, and campus environment and infrastructure.

Award highlights: Two key innovations stand out. First, the school shared how teaching teams have incorporated SDGs into the curriculum, with examples from geography, natural science, and civic education classes to demonstrate the lesson plans. Second, the school demonstrated how students explored and used practical activities to integrate sustainable development goals into their daily learning. The goal was to cultivate sustainability literacy using shared reading, participation in organized activities and communities, and involvement in the Goals Project. These two highlights showcase Mingdao's significant achievements in Target 4.7, education for sustainable development.

Vision blueprint: Going forward, the school will continue to focus on the 169 targets and 232 indicators related to the SDGs with the aim of guiding students in transitioning from participants to advocates. Additionally, the school plan to gradually develop a Voluntary Review Report for SDGs in Primary and Secondary Schools and collaborate with partner schools to formulate a set of indicators applicable to primary and secondary schools, leading to it vision of "Think Globally, Act Locally, Connect Everybody."

Huei-Ming School for Blind Children, Taichung City

Sustainability achievements: Huei-Ming School for Blind Children focuses on the three main areas of Taiwan's SDGs: education, society, and environment. The school integrates these goals into daily life and school teaching by engaging parents, teachers, students, alumni, and social resources. This goal is to assess the feasibility of using special education to foster a sustainable environment for children with visual impairments.

Award highlights: Huei-Ming School for Blind Children is the only private special education school among 28 such schools in Taiwan. The school serves students with visual impairments, including preschool children and primary/secondary school students with moderate to severe physical and mental disabilities. Since its establishment 50 years ago, the school has

relied on public donations to provide free services to its students. The school has established partnerships with other schools, communities, and businesses to support visually impaired education and assistive technology. It has pioneered the separation of education for students with visual impairments and students with multiple disabilities, vocational training, and international exchanges in education for the visually impaired. The school is also the first special education school in Taiwan to demonstrate microgrids.

Vision blueprint: The school's vision for the future includes the following: 1) Joint growth for teachers and students, fostering an understanding of sustainability issues, and moving toward systemic sustainable development by progressing from the campus to the society-at-large toward. 2) Aspiring to become a pioneer in promoting SDGs in special education. 3) Expanding efforts to involve the community in understanding sustainability and promoting SDGs. 4) The school overarching goal is to make Hui-Ming School for Blind Children a model for national sustainable development education in alignment with its founding mission.



CTBC Financial Holding Company

Sustainability achievements: In line with the United Nations Sustainable Development Goals (SDGs), CTBC Financial Holding Company has set a sustainability strategy that includes the following three pillars: Responsible Operations, Sustainable Growth, and A Connected Society. Through low-carbon and sustainable transition, the company actively implements sustainable operations such as carbon inventory and disclosure of its investment and financing portfolios, as well as a poverty alleviation program to help disadvantaged families. The goal is to promote a low-carbon economy and inclusive finance to realize sustainable business practices.

Award highlights: CTBC Financial Holding Company published the industry's first Climate Risk Assessment Report, which used the Task Force on Climate-related Financial Disclosures (TCFD) framework to analyze and disclose climate-related financial risks and opportunities. The company is also one of the first financial institutions in Asia to complete carbon footprint accounting of financial activities using the Partnership for Carbon Accounting Financials (PCAF) methodology. This underscores its leadership in conducting climate risk assessments.

Vision blueprint: Early 2022, the CTBC Financial Holding Company board of directors formally incorporated the target of achieving net-zero by 2050 into its long-term development blueprint. The company will assist its investment targets and financing clients in low-carbon transition and ensure a just transition while adhering to sustainable development goals.

China Airlines

Sustainability achievements: China Airlines has long supported the United Nations and Taiwan's Sustainable Development Goals, committing to reach net-zero by 2050. The company continues to promote eco-friendly flights through its ECO Travel carbon offsetting platform. It has introduced the new-generation fuel-efficient A321neo aircraft and incorporated Sustainable Aviation Fuel (SAF) into their operations. Despite the global impact of the pandemic, China Airlines delivered the most COVID-19 vaccines, rapid tests kits, and medical supplies within Taiwan. The company used its cargo fleet of 21 aircrafts to set unprecedented records, ensuring the economic lifeline between Taiwan and the world.

Award highlights: China Airlines became Taiwan's first airline to publicly sign and adopt the TCFD, and released the world's first TCFD report for the aviation industry in both Chinese and English. On May 4, 2022, CAL responded to the SkyTeam Alliance's Sustainable Flight Challenge by operating a sustainable demonstration flight, incorporating nearly a hundred environmental carbon reduction initiatives.

Vision blueprint: In the future, China Airlines will continue to actively promote Environmental, Social Governance(ESG) sustainability, commit to sustainable corporate operation, and pledge to create value for stakeholders. The company will continue to address climate issues and work toward their goal of achieving net-zero by 2050.

Chunghwa Telecom

Sustainability achievements: In 2021, Chunghwa Telecom restructured its Sustainability Development Committee with a vision focused on green low-carbon, digital empowerment, integrity and transparency. The company has responded to the global trend of low-carbon transition and established environmental requirements for suppliers to jointly build a low-carbon supply chain. Together with the Chunghwa Telecom Foundation (CHTF), the company has been assisting and caring for rural and diverse groups.

Through high-quality high-speed ICT services, the company has helped students in these areas access various educational resources. Additionally, it provides 5G private networks and wireless technology for emergency medical care, realizing its goal of being an enabler of the digital economy.

Award highlights: 1) To ensure transparency in disclosing climate-related risks and opportunities, Chunghwa Telecom became the world's first telecom operator to pass the conformity check for the TCFD Recommendations on climate-related financial disclosure at the highest level. 2) The company has introduced industry-leading childcare benefits and reduced the daily working hours by one hour for employees with children under the age of three. It has also established workplace childcare centers in six municipalities. 3) For 10 years, Chunghwa Telecom has dedicated its efforts to underserved regions. It has launched projects such as Read with You, Good Digital Neighbors, Digital Empowerment Incubation Program in Lanyu, and the Junyi School of Innovation in Taitung. The goal is to create a robust system for assisting students in remote areas.

Vision blueprint: In line with the government's net-zero pathway, Chunghwa Telecom plans to shut down its 3G network in June 2024, which is expected to result in an energy savings of about 100 million kWh per year. It will also accelerate phase-out of old and energy-consuming equipment and use data-driven smart networks to conserve energy. The company has set a target to reduce carbon emissions by half by 2030, promote the use of green energy for ICT data centers (including the IDCs), achieve the Renewable Energy 100 (RE100) target by 2040, and reach net-zero by 2050.

Yuanta Financial Holding Company

Sustainability achievements: Yuanta Financial Holding Company has implemented a five-year sustainability development strategy focusing on corporate governance, customer interests, employee care, environmental sustainability, and social welfare. The company has adopted the UN SDGs as its

blueprint, while setting its own sustainability goals and integrating ESG principles into its operational strategy. Six functional teams carry out sustainability work according to their responsibilities, tracking the results of ESG projects every quarter to effectively implement the company's sustainable development policies.

Award highlights: Yuanta Financial Holding Company attaches great importance to global climate change and carbon reduction issues. The company actively advances TCFD initiatives and uses Internal Carbon Pricing (ICP) to internalize the external costs of greenhouse gas emissions to reduce the group's carbon emissions. As a result, the company made the Carbon Disclosure Project(CDP) Climate Change A List and ranked first in the world in the financial category of the Dow Jones Sustainability Index (DJSI) in 2021. Its efforts in sustainability management have been recognized by domestic and international organizations.

Vision blueprint: Moving forward, Yuanta Financial Holding Company will continue to collaborate with regulatory authorities on sustainability development policies and lead the way as an industry pioneer, guiding companies toward low-carbon transition. The company will work with stakeholders, including suppliers and customers, and will engage in cross-industry collaboration to promote sustainability and create a better future for generations to come.

Pacific Sogo Department Stores

Sustainability achievements: Pacific Sogo is a non-publicly listed company that has independently published corporate sustainability reports for eight consecutive years. The company has defined carbon footprint Product Category Rules (PCR) for the domestic retail service industry, taking a leading role in environmental efforts within the department store industry. It was the first department store to discontinue the use of disposable and melamine tableware in all their stores, leading a trend of green consumption.

Award highlights: In 2022, Pacific Sogo officially became a member of the Energy Productivity 100% (EP100) initiative, becoming the first company in the

Asia-Pacific retail industry to do so. The company has committed to improve energy productivity by 50.52% by 2028, using 2018 as the base year. It has developed the "SOGO Sustain Good Things are Easy to Choose" identification system for the sustainable selection of suppliers, partnered with brand counters to introduce sustainable products, and encouraged customers to care for the environment through their consumption.

Vision blueprint: Net-zero has become a common goal for businesses both domestic and international. Faced with immediate climate risks, Pacific Sogo has joined international initiatives, identified climate risks, and worked with stakeholders, including suppliers, contractors, customers, employees, and consumers, in response to the government's net-zero target by 2050.

Kaohsiung Plant, Advanced Semiconductor Engineering Inc.

Sustainability achievements: The Kaohsiung Plant of Advanced Semiconductor Engineering Inc. ASE Kaohsiung has integrated sustainable development methodologies into its operational strategies to enhance the company's ESG performance. The company established a Sustainable Development Committee as the highest decision maker responsible for ESG planning and operations. The committee is chaired by the company president and convenes bi-weekly to discuss sustainability issues and review progress and future prospects every six months. The ASE Kaohsiung also promotes carbon reduction, safety activities, and competitions to instill awareness in all employees.

Award highlights: In response to climate change risks, the ASE Kaohsiung built the first large-scale reclaimed water treatment plant in Taiwan to improve water use efficiency. In 2021, the plant achieved a water reuse rate of 3.27 times per unit of water. Green factory initiatives, including source-level design improvements and the promotion of circular economy practices, are essential for achieving climate transition. In 2021, the ASE Kaohsiung implemented 232 projects, resulting in a carbon reduction of nearly 23,500 tons of

CO₂ equivalent. In addition, employees are considered the most important asset at the plant. For this reason, the plant provides a healthy and safe working environment. It has an employee clinic and established a mask factory to provide free masks to employees during the pandemic. The plant has also nurtured over a thousand technology talent, thus enhancing the value of its workforce.

Vision blueprint: Sustainability affords endless possibilities, and it benefits both the self and the other. In line with international carbon management trends, the ASE Kaohsiung has set a net-zero target for office areas by 2030 and the plant by 2050. The plant continues to carry out carbon reduction initiatives, fulfilling its sustainability commitments and exerting influence in the industry chain and society.

Impact Hub Taipei

Sustainability achievements: Impact Hub Taipei has formulated a comprehensive sustainability strategy with a focus on fostering synergy between economic growth, social progress, and environmental protection. The strategy involves all stakeholders in Taiwan's social innovation ecosystem. Specifically, the company plans to implement and achieve sustainability goals through services provided by Impact Hub Taipei.

Award highlights: Impact Hub Taipei has created a robust network of social innovation ecosystem through the integration of software and hardware, and it has established benchmarks for innovation. 1) Space innovation and operation: Impact Hub Taipei and NPO Hub Taipei. 2) Incubation and acceleration: Programs include the Youth Innovation Promotion Program jointly organized with the Tzu Chi Foundation, Sustainable Entrepreneurship Program (SEP), Innovation for Wellbeing organized by PCA Life Assurance, Mama's Dream GO program, and the 2030 Impact Accelerator. 3) Corporate sustainability advisory services: Projects include the Carrefour Impact Store and sustainability workshops. 4) Global community network initiatives: Events include Asia Pacific Social Innovation Summit (APSIS), Impact Sontier Lab (IF Lab), and GenZ Lab (Z Generation Lab).

Vision blueprint: In the future, Impact Hub Taipei will continue to expand its influence through dialogs across the island and further develop its sustainable incubation and acceleration services. By the end of 2025, Impact Hub Taipei aims to connect Taiwan with the world by becoming a consultant for social innovation and corporate sustainability. In addition to facilitating international partnerships and assisting both local and international organizations to conduct research on social innovation and sustainability strategies, it also aims to implement relevant projects and measure their social impact. Impact Hub Taipei is currently conducting research on impact investing, with the hope of connecting a wider range of stakeholders and creating a continuous cycle of goodness. The goal is to transform Taiwan into a model of sustainable cooperation in the Asia-Pacific region.

Giant Manufacturing Co.

Sustainability achievements: The Giant Group's ESG manifesto is Cycling for a Better Future, which covers three areas: innovative low carbon living, transitioning to a circular value chain, and promoting diversity and inclusion.

Award highlights: Innovating low carbon living focuses on providing low-carbon services, promoting green production, engaging in responsible procurement, and advocating for climate public welfare. Transitioning to a circular value chain includes promoting product services (expanding ride-sharing services and leasing models), establishing a circular supply of resources and materials, improving resource efficiency, and extending the product lifespan. Promoting diversity and inclusion focuses on encouraging diverse cycling, building the best employer brand, deploying a diverse and dispersed supply chain, and promoting diverse learning.

Vision blueprint: Giant Group CEO Liu Yuon-chan stated, "In the next 50 years, Giant will continue to regard sustainable development as its responsibility. There is only one Earth, and building a sustainable future is a shared responsibility. Let's work together!"

Mega Financial Holding Company

Sustainability achievements: Mega Group has established a Sustainability Development Committee under the Mega Financial Holding Company board of directors. The committee includes directors from the financial holding company and presidents of subsidiary companies. There are five working groups responsible for coordinating and planning sustainability efforts across the group. Each subsidiary has established an ESG execution team to implement projects. This top-down approach consolidates resources and efforts across the group, ensuring that the concepts of ESG penetrate every part of the group and have a positive impact on the financial industry's sustainable development.

Award highlights: To enhance the group's climate risk management, Mega Financial Holding Company led its subsidiary companies in formulating climate risk management standards. It has optimized the process of responsible lending and, in 2022, published the TCFD independent report, earning the highest-level certification from the British Standards Institution (BSI). Furthermore, Mega Bank issued a zero-carbon credit card for the first time in 2021 and further lessened the card's environmental impact by transitioning to pollution-free materials. Mega Group conducts annual supplier assessments and organizes sustainability meetings to promote responsible consumption and production, thereby creating a sustainable value chain.

Vision blueprint: In February of the fiscal year 2022, the board of directors approved the Sustainability Development Strategy Blueprint. The blueprint extends from the vision down to detailed strategies in the form of a pyramid. In June, the board formulated the group Environmental Sustainability Roadmap, which focuses on building an environmental management system certification, setting resource consumption targets, establishing an information system, and expanding greenhouse gas inventories as its main objectives. This roadmap sets milestones until 2030 to realize environmental sustainability, guiding the group toward the vision of becoming a model of financial industry sustainability in Asia-Pacific.

Taiwan Cooperative Financial Holding Co.

Sustainability achievements: Taiwan Cooperative Financial Holding Co. (TCFHC) implements sustainability based on the 3As: Active, Agile, innovAtion. In 2019, the company established the Sustainable Operations Committee led by the TCFHC chairman, with active participation from the presidents of its subsidiaries. A dedicated Sustainability Office was established to outline a sustainability development blueprint for the group. Six execution teams were established to set short-, medium-, and long-term goals to achieve the sustainability vision from the top down.

Award highlights: 1) To promote a culture of innovation for sustainable development, TCFHC has since 2018 organized annual camps to encourage creative thinking. In 2019, the company established the CoLAB innovation lab to enhance cross-departmental cooperation in response to market trends and customer needs. 2) In 2021, TCFHC became the first publicly owned financial holding company in Taiwan to establish a dedicated sustainability office under the Sustainable Operations Committee. This office is responsible for creating a sustainability development blueprint for the group. 3) As opposed to other banks that signed the Equator Principles (EPs), TCFHC in March 2022 became the first financial institution in Taiwan to sign the EPs as a financial holding company. This commitment extended to its subsidiary companies, deepening their commitment to sustainable finance.

Vision blueprint: TCFHC will continue to monitor domestic and international sustainability trends and cultivate sustainability talent. The company aims to take a more proactive approach to integrate ESG into its corporate DNA, leverage its financial influence, and collaborate with stakeholders to promote sustainability.

Give Circle Co.

Sustainability achievements: Give Circle focuses on achieving environmental sustainability through material circulation. In addition to developing a material circulation platform app, which is provided to

the public and social welfare organizations for free, the company also organizes fun environmental education activities to make sharing a part of the people's daily lives.

Award highlights: Building on its platform, Give Circle has developed innovative fee-based services for materials circulation. The company regards sustainability development goals as part of its core business rather than charitable projects. The goal is to ensure sustainable business operations and encourage more businesses to participate in materials circulation. Through corporate mobilization and advocacy, even busy professionals can easily engage in climate action.

Vision blueprint: Give Circle envisions every household having a shared resource manager. It aims to enable every business, using Give Circle's software and hardware services, to participate in materials circulation in their preferred way and reduce carbon emissions from the source.

Asia Cement Corporation

Sustainability achievements: Asia Cement is committed to achieving net-zero and sustainability through concrete actions. Faced with the trend toward carbon reduction, the company actively embraces change despite the inherent high carbon emissions of traditional cement manufacturing. It is the first cement company in Taiwan to use life cycle assessment to examine the carbon footprint of its products, from raw materials and processes to the final product. Asia Cement consistently innovates its technical processes to accomplish what was once deemed impossible.

Award highlights: Asia Cement uses high-temperature rotary kilns as a key driver of the circular economy and has completed Taiwan's first cement kiln waste heat recovery and power generation equipment. The company also uses alternative fuel and raw materials to reduce the consumption of natural resources. Furthermore, it has introduced a range of low-carbon cement products, contributing to a low-carbon industry chain. These efforts have allowed Asia Cement to surpass the Science-based Targets Initiative



▲ Figure 3-4 Asia Cement Corporation is a recipient of the National Sustainable Development Awards

(SBTi) annual set targets for carbon reduction for two consecutive years. In addition to carbon reduction, the company also focuses on energy conservation, having obtained ISO 50001 Energy Management System certification. It has developed an internal carbon pricing mechanism as a tool for emissions reduction management. Looking forward, Asia Cement plans to build a 3.7 MW solar power generation system in 2023 and will research carbon capture and reuse technologies to achieve net-zero emissions by 2050.

Vision blueprint: Asia Cement fulfills its commitment to coexist and prosper with local communities. The company has built an ecological park and is promoting environmental education. It has formulated solutions for achieving net-zero emissions in the cement industry, leveraging positive corporate values and creating a vision for sustainable development.

Hotai Motor Co.

Sustainability achievements: 1) Established the Sustainability Development Committee directly under the board of directors, holding meetings at least twice a year to review annual sustainability policies and ensure the execution of ESG tasks. 2) Applied for the different major sustainability awards, such as the National Sustainable Development Awards and the Taiwan Corporate Sustainability Awards, and conducted rigorous annual performance reviews with inputs from external experts.

Award highlights: 1) Yoxi mobility service campaign: Yoxi provides transportation services to address the medical and educational needs of children living in remote or economically disadvantaged areas. In 2021, Yoxi provided over a thousand trips in New Taipei City, and by the end of 2022, it will work with the Social Affairs Bureau in Taichung City to expand its services. The goal is to add two more cities every year. 2) Taiwan Wildlife Conservation Program: In 2021, Hotai Motor Co. launched the initiative to become the first automaker to incorporate animal hotspots into its vehicle app. In 2022, the company joined 152,000 car owners to collectively protect rare species native to Taiwan and will continue to expand the warning coverage. The program also donated Taiwan's first mobile animal rescue vehicle, providing prompt medical care for wild animals to save precious lives. 3) Shared mobility services: The leading shared car and scooter brand, iRent, offers an environmentally friendly vehicle fleet, with almost 90% of the vehicles being eco-friendly models. The service has accumulated a total mileage of 330 million kilometers, equivalent to circumnavigating Taiwan 300,000 times.

Vision blueprint: In addition to reviewing existing goals and setting future goals, the Sustainability Development Committee will follow the carbon reduction blueprint laid out by Toyota, its mother company. It aims to reduce carbon emissions by 3% annually, which is equivalent to 1,300 tons, and will collaborate with professional consultants to establish a sustainability blueprint for Hotai Motor Co. to move toward sustainability objectives.

Kao (Taiwan) Corporation

Sustainability achievements: The Kao Group officially announced its ESG strategy Kirei Lifestyle Plan in 2019. This strategy includes three major themes: making every day better, providing thoughtful choices for the society, and making the world healthier and cleaner. The strategy not only focuses on the individual but also aims for the greater good of the society and the world. To fully implement ESG locally, Kao (Taiwan) has developed a systematic ESG management framework that drives its overall business

operations from the top down.

Award highlights: Kao (Taiwan) has five key sustainability achievements: 1) A systematic ESG management framework that allows ESG to be locally implemented from the top down. 2) A focus on local manufacturing and using green product life cycles to promote environmental sustainability. 3) Exerting influence on the society through education at the grassroots. 4) Promoting circular economy, from beach cleaning to education, with a public commitment to using at least 25% recycled plastic by 2025. 5) Prioritizing employee well-being and creating a happy workplace unique to Kao employees.

Vision blueprint: Since 2021, Kao has helped address challenges in three major areas: ecology, life, and lifestyle. Work is carried out through its five new business areas: Life Care, Cosmetics, Health and Beauty Care, Health and Home Care, and Chemicals. The goal is to transform Kao into a company that safeguards life in the future.

ChipMOS Technologies Inc.

Sustainability achievements: ChipMOS Technologies (ChipMOS) Inc. uses a top-down approach in management with the board of directors acting as the highest decision-maker and reviewing progress quarterly. The company's Sustainable Development Committee implements relevant plans to build a sustainable culture and instill awareness among its employees, ensuring that sustainability goals are integrated into daily business operations.

Award highlights: In 2014, ChipMOS initiated systematic energy-conservation measures, introduced the ISO 50001 standard for energy management, and applied for the energy management demonstration subsidy program. The company has shifted from its initial mindset of focusing on singular and partial improvements to a comprehensive energy audit using big data analysis. The audit includes energy-consuming equipment and extends energy-conservation measures to the production process, focusing on source control to create synergistic results. The company has received awards for

its environmental efforts, and it shares its energy management experiences with the industry to continue to expand its influence.

Vision blueprint: ChipMOS adopts a steady approach to sustainable development. By building a strong foundation for its action plans, the company continues to deepen its commitment to ESG. It initiates strategic actions in accordance with its medium and long-term sustainability goals, participates in external awards and CDP questionnaires, identifies areas of improvement, and adjusts its direction and plans according to overall trends to achieve sustainable operations

Sunfan Technology Enterprise Co.

Sustainability achievements: Guided by the principles of circularity and zero waste in forest management, Sunfan Technology has been exploring the possibilities of reusing pruned timber. Using modern equipment and efficient process classification, the company has successfully transformed hundreds of tons of pruned timber from school campuses and orchards into ReWood woodwork, biochar, and natural wood vinegar cleaning products. The company has built a forest ecosystem consisting of seven industries and more than 30 companies, while also creating a youth development workstation at Hukou, which has attracted 650 students and participants.

Award highlights: The ReWood concept provides innovative solutions based on both the circular economy and local revitalization. It offers a possibility for the development of forestry in Taiwan by planting trees and reducing carbon emission despite climate change. In just one year, Dawoko has reused 600 tons of forestry materials, thereby reducing carbon emission equivalent to one month's worth of carbon capture in Daan Forest Park. The company also provides innovative methods for producing woodwork, charcoal, and wood vinegar. It has an annual revenue exceeding NT\$10 million and a portfolio of more than 100 innovative products and services. Additionally, through open education, Dawoko has engaged 650 participants in the Hukou youth development

workstation, creating a positive impact on ecological sustainability and local revitalization.

Vision blueprint: The company aims to develop a replicable model that addresses climate change and ensures the sustainability of forests. The challenges faced by climate change and sustainable forestry are universal, and the ecological and commercial models put forward by Dawoko take inventories of local emissions and link forestry clusters to benefit the ecosystem. The company uses its influence and provides technical support to help forestry development in Taiwan through education and practical implementation. The goal is to demonstrate the effectiveness of circular approaches in forest-based industries and showcase the value of ReWood forest recycling to the world.

First Commercial Bank

Sustainability achievements: 1) The bank established an ESG promotion framework comprised of six dedicated teams to implement sustainability action plans and measures. 2) It adopted the EPs, formulated sustainable lending and investment policies, introduced sustainable performance-linked credit projects, and offered preferential interest rates to enterprises contributing to sustainable development. 3) In line with the national net-zero policy, the bank actively plans to adopt Science-based Target (SBT) and has achieved green building certification for its self-owned buildings. It has also extended this practice to its overseas offices. 4) The bank offers friendly pregnancy arrangements for female employees and a fair and safe work environment, and has incorporated gender equality into its core businesses.

Award highlights: 1) In 2021, the bank was first in market share of loans to small and medium enterprise for 12 consecutive years. 2) From 2019 to 2022, it received the Giant Award of the National Enterprise Environmental Protection Award from the ministry of environment for four consecutive years. 3) From 2018 To 2021, it received a Leadership score for the CDP climate change questionnaire for four consecutive years.

Vision blueprint: 1) Expand investments in and increase loans to sustainable, green energy, and low-carbon industries. 2) Keep abreast of international trends, strengthen ESG risk management, and incorporate it into product review standards. 3) Continuously improve the compensation system for employees and establish a fair career advancement pathway while enhancing gender equality and empowering women.

Fubon Financial Holding Company

Sustainability achievements: In 2015, Fubon Financial Holding Company initiated ITS ESG Visioning Blueprint. In 2021, the company engaged in extensive dialog with eight major stakeholders to better understand the sustainable trends that concern them. Subsequently, the company revamped its visioning blueprint by adopting four new strategies: decarbonization, digitalization, empowerment and connection. These strategies align with the UN SDGs and Taiwan's own Sustainable Development Goals. The company has set 20 targets for 2025, which are being implemented across the entire company and its business units. Through quarterly tracking, the company continues to drive innovative actions in line with sustainable development goals.

Award highlights: Fubon Financial Holding Company is committed to keeping abreast with international trends and sustainability guidelines. The company has received positive results in international sustainability ratings, including the DJSI, CDP, Morgan Stanley Capital International (MSCI), and Sustainalytics ESG. It has participated in international organizations such as TCFD Supporter, World Economic Forum (WEF), PCAF, Asia Investor Group on Climate Change (AIGCC), and Climate Action100+. In 2022, the company passed the SBTi review and became a member of the RE100 initiative, thus becoming one of the ESG benchmark companies in Taiwan.

Vision blueprint: In line with the low-carbon strategy, Fubon Financial Holding Company has embarked on a five-year Run for Green plan. The plan uses the company's unique resources in sports to

promote green competitions and tree-planting. The plan also includes commitment to SBT and RE100 to realize green operations. These efforts complement the company's role in the financial sector to exert green financial influence. In the future, the company aims to integrate financial technology and inclusive finance, aspiring to help create a sustainable living ecosystem using both financial and non-financial resources.

Momo

Sustainability achievements: Recognizing the increasing climate change challenges, Momo is actively involved in the TCFD Climate-Related Financial Disclosures. This initiative identifies potential risks and seizes opportunities for future low-carbon operations. In line with the net-zero target by 2050, the company has adopted SBT to clearly establish decarbonization pathway and goals. It has also started projects related to human rights and sustainable supply chains, leveraging its e-commerce platform to work with suppliers in achieving sustainable operations.

Award highlights: Momo practices green logistics and packaging. The company uses 100% recycled paper pulp in its cardboard boxes, and the weight of packaging materials decreased by 7.5% compared to the previous year. The company also implemented other initiatives, such as deployment of a green fleet, reusable bags, and boxes. Other efforts include enhanced order bundling, eliminating supplier nodes, and offering multiple pick-up options to customer. The efforts have resulted in a reduction of more than 70 tons of carbon emissions annually. Momo has also launched a Green Life Pavilion to promote green products and encourage consumers to embrace green consumption concepts.

Vision blueprint: To facilitate sustainable management, Momo has elevated its Sustainable Development Committee to a functional committee during its 7th board meeting on July 27, 2022. The committee is responsible for formulating the annual plan and strategies for sustainable development, as well as for tracking and reviewing the results. The company aspires to become the number one ESG green e-commerce in Taiwan.

Yang Ming Marine Transport Corporation

Sustainability achievements: Firstly, Yang Ming Marine Transport is focused on its core shipping operations, promoting energy efficiency, and reducing emissions. Starting from its core container shipping business, the company has improved energy efficiency in its fleet operations and achieved a continuous reduction in carbon intensity through measures such as retrofitting existing ship engines, reducing loads and optimizing other vessel types, and continued ship replacements. The company is also committed to building digital and smart ships to provide convenient digital services in cargo booking and delivery. Additionally, it uses artificial intelligence (AI) to better detect hazardous goods, so as to ensure the safety of personnel, vessel, and cargo. Secondly, Yang Ming is dedicated to talent development and marine culture education at the grassroots to ensure prosperity of the community. To promote sustainable shipping, the company collaborates with maritime academies to cultivate maritime professionals at the grassroots and expand employment opportunities for young people. Recognizing the importance of instilling marine culture education from a young age, Yang Ming has established the Yang Ming Oceanic Culture and Art Museum to revitalize historical buildings, showcase the history of shipping, and conduct activities to promote maritime culture in elementary and middle schools.

Award highlights: Yang Ming is a pioneer in the Asian container shipping industry, being the first to use LNG (Liquefied Natural Gas) dual-fuel container vessels. This move aligns with the company's long-term goal of gradually transitioning its fleet operations toward net-zero emissions.

Vision blueprint: Yang Ming plans to expand its use of AI in fleet management, build a smart maritime center to develop smart containers, vessel virtual reality, and digital twin. These advancements will be used in future training, scenario simulation, and resource and energy management systems. The goal is to optimize energy efficiency, reduce carbon emissions, and ensure more resilient and sustainable operations in face of climate risks.

Innolux Corporation

Sustainability achievements: In 2021, Innolux created a positive net impact of nearly NT\$760 billion. The most substantial impact came from purchasing and product sales, with a notable increase in value within both the upstream supply chain and downstream industries. The company engages in constructive dialogs with its internal and external partners to identify solutions that simultaneously address multiple sustainable development goals.

Award highlights: Innolux uses the XYZ Digital Transformation Strategy to leverage advanced technologies such as the Internet of Things (IoT), big data, and AI to implement intelligent digital systems throughout its processes. In addition, the company also emphasizes human rights protection. Since 2021, all employees have enjoyed a zero-pay policy and comprehensive life care, thus contributing to a mutually beneficial environment.

Vision blueprint: In the future, Innolux will remain committed to its transformation and value leap philosophy. The company will enhance its framework for managing sustainability impact, identify opportunities to reduce environmental impact, and enhance societal well-being. It will also focus on supply chain transformation, circular economy, and the development of green products to increase its impact on sustainability. In doing so, the company will be able to consolidate its industry leading position and create more positive value for the society.

Yulon Motor Co.

Sustainability achievements: In the area of environmental sustainability, Yulon Motor Co. has installed 10.9MW in solar power in 2022. The energy generated from this solar installation is equivalent to the total energy consumption of its entire plant. The company has successfully implemented energy-saving and carbon reduction measures, achieving a 30% energy savings in the manufacturing process per vehicle compared to 2007. It has also formed strategic partnerships to develop the Luxgen n7

electric crossover. In the area of social participation and inclusive growth, Yulon Motor Co. has integrated resources of its business groups and collaborated with non-governmental organizations (NGOs) and vulnerable groups to promote the Taitung Southlink Happy Wheel project. This initiative uses Luxgen V7 to address the insufficient transport capacity for remote medical services, creating a social value of NT\$15.79 in Social Return on Investment (SROI). In the area of corporate governance, Yulon Motor Co. has consistently ranked among the top 5% of listed companies in the corporate governance assessments conducted by the Financial Supervisory Commission (FSC) for eight consecutive years. The company has also received favorable evaluations from third-party organizations such as FTSE Russell and Commonwealth Magazine.

Award highlights: Yulon Motor Co. has incorporated an energy management system into its process equipment to implement process improvement through the following areas: reduction of abnormal electricity use, optimization of specification parameters, and implementation of systematic management. This approach balances production efficiency and carbon reduction benefits. The company has leveraged the synergy created by research and development and the industry ecosystem, providing comprehensive electric vehicle solutions for global customers. It has realized the concept of CAAS (Car as a Service), promoting ride-sharing and service sharing in line with circular economy concepts. This approach has brought significant benefits and sustainable impact to society.

Vision blueprint: In addition to manufacturing mobility tools, Yulon Motor Co. also aspires to create more mobile values. The company strives to fulfill its obligations as a responsible corporate citizen, contributing to protecting Taiwan and the global environment. In the future, Yulon Motor Co. will continue to assess climate change risks and develop opportunities to map out the optimal pathway and strategies for sustainable development. The goal is to deepen communication and trust with stakeholders through the following measures: Achieving a 50% reduction in carbon emissions by 2030, and reaching net-zero by 2050. 2) Completing 20.2MW in solar

power installations by 2025, with green energy accounting for 170%. 3) Fully electrifying all vehicles within the factory by 2030. 4) Participating in EV100 and RE100 initiatives.

Fwusow New Industry Co.

Sustainability achievements: For over a century, efforts of Fwusow New Industry in Taiwan have been focused on upholding its original visions, passing on its corporate philosophy, and pioneering new horizons. In response to changing times and policy developments, the company has in recent years focused on ESG development. To usher in a new era of sustainable development, the company's goals are focused on the following five main areas: developing green business, promoting the circular economy, transitioning to a digital factory, implementing corporate governance, and creating a friendly workplace. The goals contribute to the company's mission of ushering in a new era of sustainable development.

Award highlights: Fwusow has built an innovative agriproduct circular economy model. The company purchased large quantities of domestic crops for its production to reduce carbon emissions from production activities, boost the local economy, and promote land sustainability. In doing so, the company has become the first food company in Taiwan to receive the BS 8001 Circular Economy certification. It also actively implements a variety of energy-saving and carbon reduction measures. These include conducting greenhouse gas inventories, implementing an energy management system, updating process equipment, adopting TCFD recommendations, and applying for product carbon footprint certification.

Vision blueprint: Fwusow's vision for sustainable development is to develop green business and usher in a new era. The foundation has been laid with the establishment of an agriproduct circular economy. In the future, the company aims to expand the scale of the circular economy while continuing efforts in energy conservation and carbon reduction through business model adjustments and innovative product designs. Furthermore, to transition to a digital factory,

the company will continue to use AI technology to assist in corporate transformation, so as to achieve automated production, zero emissions, and sustainable operations.

Greenvines

Sustainability achievements: In the company's full range of 22 products, 99.6% of the ingredients come from natural sources. For its packaging materials, Greenvines has partnered with Spring Pool Glass, Taiwan's largest glass recycling plant, to manufacture bottles using 50% recycled glass, which is rare in the industry. In 2022, bottles of the entire product line of shower and cleansing products are made from 100% recycled plastic material, reducing carbon emissions per bottle by 69.9%. Greenvines has also collaborated with the Plastic Industry Development Center to manufacture Taiwan's first shampoo product to receive the Recycled Marine Debris Product Label.

Award highlights: Greenvines became the first company in Taiwan to support the purchase of public interest carbon credits and use green energy in its Taipei office. The company is also the first to jointly organized the 21 Days of Green initiative with the Taiwan Environmental Information Association for six consecutive years, accumulating over 220,000 green actions. The company also joined the 1% for the Planet global network and has pledged to donate 1% of its annual sales to environmental organizations. The company is using concrete action to demonstrate its commitment to environmental sustainability.

Vision blueprint: In 2019, Greenvines joined 533 B Corps globally to commit to achieve net zero by 2030. In 2021, the company obtained ISO 14064 certification for quantifying and reporting greenhouse gas emissions. It completed organizational and product carbon inventories and also announced its plan to achieve Credible Net Zero by 2025. To achieve this, the company has formulated a pathway using 1% change toward green products, focusing on the following: In the bottle (product ingredients), On the bottle (packaging), and Around the bottle (environment).

Land Bank of Taiwan

Sustainability achievements: To keep abreast with international trends toward sustainable development, the Land Bank of Taiwan has incorporated sustainable development goals into its operational strategies and core businesses. Through the establishment of the Sustainable Development Committee, the bank formulated its Environmental, Social, and Corporate Governance (ESG) Promotion Plan and reports ESG implementation results to its Board of Directors each year. The bank is proactive in realizing the UN SDGS and Taiwan's sustainable development goals.

Award highlights: The Land Bank of Taiwan has signed international initiatives such as TCFD and the EPs, established an ESG credit mechanism, integrated the ESG checklist into investment and product review, issued sustainable development bonds, accelerated greenhouse gas inventories, and made plans to obtain green building certification and establish solar energy branches. The bank has been recognized for its fair customer treatment and has achieved tangible success in promoting sports. In addition, it has enhanced corporate governance, strengthened information security management, and followed Global Reporting Initiative(GRI) and Sustainability Accounting Standards Board(SASB) standards to improve ESG-related disclosures.

Vision blueprint: To develop the ESG promotion blueprint and strategy, the Land Bank of Taiwan follows international sustainable development guidelines to review its annual performance and direction for future development. The bank actively engages with stakeholders to leverage its financial influence and establish sustainable partnerships. The ultimate goal is to create shared value and achieve its vision for sustainability.



Taitung County East Coast Indigenous Community Cooperative

Sustainability achievements: In Taitung City, the kakawasan indigenous community promotes the harmonious coexistence between man and nature, which is a philosophy handed down through the generations. Their lifestyle centers around the three core elements of sustainable development: life, production, and ecology. These elements are also at the core of the development of the Taitung County East Coast Indigenous Community Cooperative, which has used shell ginger leaves and recycled straw to develop industry within the community.

Award highlights: The cooperative uses innovative expressions of traditional, natural materials used by indigenous peoples to realize the circular relationship between maomah, urip, and kawas (work, life, soul in the Amis language). This approach preserves biodiversity and promotes work toward Sustainable Development Goals (SDGs) within the community. It allows the concept of sustainable development to take root, be handed down to future generations, and be used to enrich traditional culture. In line with the 2050 net-zero target, the cooperative focuses on the use of shell ginger leaves and recycled straw to develop sustainable products in the industries.

Vision blueprint: The Taitung County East Coast Indigenous Community Cooperative uses the community name kakawasan as a brand name for its shell ginger leaf hats, which was selected as one of the V-Select 100 outstanding agricultural products by the Council of Agriculture (now renamed as the Ministry of Agriculture). The cooperative took part in the 2022 Kaohsiung Show held at the Kaohsiung Exhibition Center from September 29 to October 2, 2022. The exhibit provided a good opportunity for the public to get up close and personal with the cooperative's efforts

in environmental sustainability, local revitalization, and social innovation.

Taiwan Reforestation Association

Sustainability achievements: The Taiwan Forest Rehabilitation Association focuses on plant ecology to promote education of the popular sciences and lead social actions. The actions connect the public, organizations, businesses, academia, and government agencies to jointly work on forest rehabilitation in Taiwan's shallow mountains and ecological greening in urban areas.

Award highlights: The association's sustainability and innovation is founded on plant ecology and focuses on transforming academic research into social applications. During this process, the association formulates greening blueprints for resilient cities, guides effective resource allocation in corporate social responsibility, establishes criteria for ecological afforestation, and cultivates professionals in forest rehabilitation.

Vision blueprint: Moving forward, the association will promote the integration of Taiwan's native forest ecology into the curriculum of primary and secondary schools. This will enable schools to use local forests as a framework for campus greening, so that campus will become linked with the surrounding forest ecology. This approach also contributes to the restoration of local biodiversity. Appropriate teaching contents can help shape contemporary social values, thus facilitating the successful rehabilitation of shallow mountain forests and coastal forests.

Tao-Mi Eco Village, Puli Township, Nantou County

Sustainability achievements: By adhering to the four core values of using ecology as the foundation, focusing on the industry to develop practical applications, enabling culture to take root, and ensuring local autonomy, the Tao-Mi Eco Village in Puli Township, Nantou County has actively pursued sustainability through 10 key strategies: identifying



▲Figure 3-5 Tao-Mi Eco Village is a recipient of the National Sustainable Development Awards in the Civic Organization Category

ecological advantages, long-term involvement of experts and scholars, building an ecological environment, talent development, developing industries to attract visitors, building the excellent Tao-Mi brand, enhancing experiential education, increasing youth participation, leveraging online media to increase exposure, and sharing experiences through publications.

Award highlights: Following the devastation caused by the massive earthquake on September 21, 1999, the Taomi community inventoried its resources and decided on a development model that incorporated eco-tourism into the local tourism industry. This approach was guided by three strategic principles: educational learning, mindset change, and practical action. It integrated, internalized, and applied eco-knowledge to the ecology, production processes, and people's daily lives. To date, the community has achieved tangible results and has become a model of economic development for other rural areas in Taiwan.

Vision blueprint: The key strategies for the sustainable development of Taomi community include cross-organizational governance and lifelong learning focused on ecological ethics. Established in 2015, the Tao-Mi Eco Village Development Association has played a vital role in integrating resources for community development. Through education and practice, the association has solidified the unique and irreplaceable ecological local features.

Hsin Kang Foundation of Culture and Education

Sustainability achievements: The Hsin Kang Foundation of Culture and Education is focused on addressing and resolving issues and thus inspiring local residents to contribute their time and resources for sustainability. The foundation uses a collaborative structure that involves its directors and secretaries, along with volunteer participation, to realize its goals. It has created a work-learn model for sustainable operation, which includes nurturing talents, building organizations, taking healthy actions, and achieving tangible results. The foundation's success effectively serves as a model for advocating its own principles.

Award highlights: The foundation enhanced its soft power through international exchanges. These included exchanges with Gifu City in Gifu Prefecture, Japan, as well as exchanges in talent development, culture promotion, industrial development, environmental sustainability, and agricultural economics. The foundation has also established a sustainability platform and formed partnerships with other non-profit organizations. Through its newsletters, the foundation introduces small-scale farmers and good eateries to highlight travel experience that focuses on cultural exploration and engagement. Using this approach, the foundation connects with local partners, disseminates knowledge, and shares experiences with would-be travelers. This not only creates unique and positive experiences but also fosters mutual benefits with local businesses.

Vision blueprint: Moving forward, the foundation's vision include: promoting long-term sustainability, enhancing interpersonal interactions through emotional attachments, expanding one's social circle dialogue beyond one's comfort zone, achieving goals together through concerted efforts, building a sense of belonging through shared experiences, and establishing interactive networks.

Qishan Tangchang Community Development Association, Qishan District, Kaohsiung City

Sustainability achievements: The association implements sustainability plans and uses its own financial resources to give back to the elderly in the local community. It proactively markets local industries to promote eco-friendliness, promotes healthcare services to create a healthy society, and establishes a team on sustainability to disseminate environmental education.

Award highlights: The association has contributed to sustainable development through the following measures: establishing direct sales venues to promote diversified industry development, integrating local resources for sustainable tourism, creating a youth innovation platform to increase employment opportunities, developing unique cultural and creative products, promoting green markets, encouraging resource recycling, establishing long-term care stations at local communities, promoting preventive care to help ensure health of the local population, establishing physical goods banks to provide short-term basic necessities and daily supplies to those in need, promoting volunteer training, developing training materials for environmental and agricultural education, developing sustainable environmental education board games, establishing water and land environmental patrol teams, as well as implementing green procurement, disaster prevention, and rescue education activities.

Vision blueprint: In line with its vision for sustainability, the association's short-term plan includes the integration of virtual and physical sales channels, setting up direct sales venues in collaboration with local small-scale farmers, and promoting cross-industry cooperation with travel agencies. In the medium term, the association plans to drive and empower surrounding communities to promote rural development and establish Qitang Agriculture Innovation Park as a center for industry integration and tourist information. In the long term, the goal is to expand connections to greater Kaohsiung and further to greater southern Taiwan, establishing a gateway for sales and cooperation.

Taipei Veterans General Hospital

Sustainability achievements: The Taipei Veterans General Hospital has established a cross-department sustainability team to promote work in different areas. In the area of social welfare, the hospital provides comprehensive healthcare to patients with rare diseases and assists the underprivileged to prevent them from falling into poverty due to illness. In public health, the hospital actively promotes health and well-being aligned with health promotion goals of the World Health Organization (WHO), cultivates talent, provides tiered medical services and patient referrals, and offers international medical humanitarian services. In addition, the hospital advocates patient-centered care, creates a gender-friendly workplace, provides diverse-friendly spaces and services, and has established a patient-centered accessible environment. In the area of environmental sustainability, the hospital's green buildings provide a soothing atmosphere and green natural surroundings. It also implements energy conservation and carbon reduction measures.

Award highlights: The hospital has obtained the Symbol of National Quality (SNQ) label for its advanced deployment to expand testing capacity during the pandemic. It has supported screening and community testing missions, including work on the Wuhan charter flight, the fleets of friendship to allied countries, the Genting Dream cruise ship, Moscow Ballet troupe, as well as the cluster infection incidents at Taoyuan General Hospital, KYEC Electronics, and Taipei agricultural products wholesale market. During the pandemic, the hospital stationed emergency outpatient clinics at the Chiang Kai-shek Memorial Hall to relieve congestion in hospital emergency rooms and provide reassurance to the public.

Vision blueprint: The hospital is committed to the long-term promotion of sustainability, and has formulated short, medium, and long-term plans across departments to promote hospital ESG and contribute to Taiwan's sustainable development. The hospital intends to expand smart technology management to its branch hospitals and increase domestic and international cooperation. To achieve sustainable

development goals, the hospital will focus on quality medical care, fostering innovation, nurturing talent, promoting social welfare, and promoting environmental sustainability.



North Coast and Guanyinshan National Scenic Area Headquarters under the Tourism Bureau of the Ministry of Transportation:

Public-Private Partnership - International Sustainable Tourism Island Project

Sustainability achievements: In 2015, the North Coast and Guanyinshan National Scenic Area Headquarters took over the management of Heping Island Park. Since then, the headquarters has carried out environmental resource assessments, conducted comprehensive planning, and improved public facilities and the landscape. It has invited the participation of private organizations in operation and management. Its efforts are guided by four core values: facility reduction, environment first, international standards, and visitor convenience. These values drive the development of tourism in the scenic area and aim to continually create quality landscapes and enhance the quality of public facility services.

Award highlights: The North Coast and Guanyinshan National Scenic Area Headquarters introduced environmental education tours and stationed environmental education personnel on Heping Island. Additionally, it commissioned private organizations to oversee park operations to obtain ISO sustainable activities certification, becoming the first in Taiwan to do so. Through public-private cooperation, the headquarters has contributed to local development and enhanced environmental education, thus transforming Heping Island Park into a sustainable tourism destination.

Vision blueprint: Heping Island Park obtained environmental education certification on October 20, 2022, and it now has a comprehensive environmental education program. The future visions of the park are as follows: 1) To become the first geological park in

Keelung City. 2) To continue to work with the local community to promoting sustainable tourism. 3) To obtain certification as one of the world's top 100 green tourism destinations.

Soil and Water Conservation Bureau of the Council of Agriculture (now renamed as the Agency of Rural Development and Soil and Water Conservation, Ministry of Agriculture):

Storing Water in Agricultural Land, Preserving Soil on Slopes - Enhancing Resilience in Slope Land Soil and Water Conservation Project

Sustainability achievements: The Bureau uses three strategies to enhance the sustainable use of water resources and improve the agricultural environment: activating and adding value to key farm ponds (engineering methods), providing multiple subsidies for agricultural land water conservation (subsidies), and cultivating resilient slope lands (adaptation methods). These three major strategies aim to create a slope land environment that is able to hold water, ensure soil conservation, and is resilient to achieve the sustainable development goals (SDGs).

Award highlights: In line with the above policies, the Agency of Rural Development and Soil and Water Conservation (ARDSWC) implemented 143 pond activation projects in Yuanshan Township and other regions in Yilan County. These projects increased water storage by approximately 1.83 million cubic meters, supplying irrigation water to an area of 27,000 hectares. In addition, the Bureau used its subsidy program to help farmers build a total of 1,649 storage ponds and excavated ponds to address water shortage issues in sloped farmlands. The projects helped maintain approximately 1,100 hectares of farm lands.

Vision blueprint: Soil and water conservation is a long-term endeavor. The ARDSWC actively supports the goal of achieving net-zero emissions by 2040 set by the Ministry of Agriculture. The Bureau has set carbon reduction targets and is using Nature-based Solutions (NbS) to accelerate climate change adaptation. It adopts natural solutions and applicable

methods to promote carbon reduction and conserve water, thus achieving the goal of net-zero emissions and sustainable development.

Department of Water Resources of the Taoyuan City Government:

No More "Thirst" in Taiwan, Taoyuan Water Resource Circular Economy and Smart Water Conservation Project

Sustainability achievements: In addition to the reclaimed water project of the Water Resource Recycling Center, Taoyuan City uses a smart water management system to gain real-time access to farmland information and remotely control the supply of water to help agricultural production and conserve water. In addition, the project uses effluent water to supplement irrigation to increase water use efficiency, alleviate regional water shortages, and indirectly promote responsible fertilization and eco-friendliness.

Award highlights: Taoyuan City was the first in Taiwan to use effluent water as a source for irrigating rice fields, greenhouse crops, and hydroponic vegetables. It also improved the Israeli drip irrigation system and developed a low-cost smart water management system. The project is a forward-looking model for sustainability, environmental protection, smart technology, and water conservation. It can be used as a reference and model for promoting sustainable water resource development in all counties and cities in Taiwan.

Vision blueprint: In the future, the project can lead all water resource centers in Taiwan in using effluent water for agricultural purposes as a emission reduction and adaptation measure. The total volume of 36.5 million tons of effluent water per year can be used to supply 10,000 hectares of rice paddies islandwide. This reduces the use of 3,000 tons of nitrogen fertilizer, equivalent to an annual reduction of 20,000 tons of carbon emissions. The use of discharged water can ensure stable water resource management, address climate change, realize energy efficiency, and reduce carbon emission. Ultimately, it can also contribute to achieving the 2050 net-zero target.

Public Works Bureau of the Kaohsiung City Government:

Sustainable Architecture Strategies in Subtropical Regions, the “Promote Kaohsiung House Program”

Sustainability achievements: The Kaohsiung City Government launched the “Promote Kaohsiung House Program” in 2012. The program includes three major pillars, four indicators, and 12 policy tools. Through mandatory and incentive-based methods, it aims to mitigate the negative impacts caused by environmental issues on residential environments. Through cross-sector integration and support measures, the project encourages the transformation of both new and old buildings into green buildings, thus enhancing disaster resilience, beautifying landscapes, enhancing building functionality, and increasing livability.

Award highlights: Over the past decade, the “Promote Kaohsiung House Program” has improved building safety and disaster resilience. Through designs such as vertical forests (landscape balconies), transformation of illegal structures, and green energy facilities, the program has achieved an annual carbon reduction of 1.38 million metric tons. This is equivalent to the carbon sequestration of 13.8 million trees. The program’s policies and achievements have led to visits and opportunities for exchanges with other cities in Taiwan and established Kaohsiung as a model for green and sustainable cities, forming a basis for dialog in international urban diplomacy.

Vision blueprint: In the future, the “Promote Kaohsiung House Program” will focus on health, epidemic prevention, and housing for all ages. Kaohsiung City will continue to create a livable urban environment. The city’s industries will integrate artificial intelligence with advanced green energy for remote office work, cloud-based home equipment, technology property management, smart flood control, and energy conservation. These initiatives will revitalize Kaohsiung’s industries and facilitate transition to a green economy.

Water Resources Bureau of the Kaohsiung City Government:

BTO Project for the Kaohsiung Coastal Sewage Treatment Plant and Effluent Recycling

Sustainability achievements: The BTO Project for the Kaohsiung Coastal Sewage Treatment Plant and Effluent Recycling covers three major areas: the environment, economy, and social sustainability. It is the first project in Taiwan to use an integrated approach to plan and construct sewage treatment and effluent recycling facility. The project holds significant value as a pioneering model in promoting water resource sustainable development, and can serve as a reference for future projects in other counties and cities.

Award highlights: The project’s special features include: 1) The use of augmented reality (AR) technology in conjunction with 3D models and Building Information Modeling (BIM) technology to reduce the possibility of duplicate construction and resource wastage. 2) The establishment of an educational park focused on water resource regeneration. The project obtained a silver-level candidate certificate for green building during its construction period. 3) The building of flood detention facilities to mitigating flooding in low-lying industrial areas near the coast. 4) The advanced sewage testing center has a database of sewage treatment technology for use by the relevant authorities. 5) The planning of relevant environmental education programs and the establishment of localized gender-friendly facilities to ensure resilience of the water resource.

Vision blueprint: The project currently produces 33,000 tons of reclaimed water daily. The goal is to increase daily reclaimed water supply to 60,000 tons, maximizing the project’s efficiency. The project enables Kaohsiung to further advance its leadership in Taiwan’s water resource recycling, become a model city for stable water supply, and contribute to the development of sustainable water resources.

Ministry of Education:

Environmental Education Policy Promotion Project

Sustainability achievements: In order to incorporate environmental education into the 12-year national education curriculum and realize learning objectives directed toward sustainable development, the Ministry of Education is actively promoting medium to long-term plan of its New-generation Environmental Education Development (NEED) policy. The plan is to be achieved through seven strategies: strengthening policy support systems, enhancing teachers' professional competence, promoting high-quality curriculum development, optimizing learning and training environments, encouraging youth environmental action, creating local sustainable solutions, and establishing international partnerships. In addition, there are five major environmental education learning themes. The plan will lead to the development of teaching demonstrations, teacher capacity-building, and student practical competitions. These measures effectively implement SDG 4 and enhance the sustainability literacy and international perspectives of students and teachers.

Award highlights: This project aligns with national development policies by integrating human and material resources across different fields. It is implemented at the school level through local environmental education guidance groups.



▲ Figure 3-6 Water Resources Bureau of the Kaohsiung City Government: BTO Project for the Kaohsiung Coastal Sewage Treatment Plant and Effluent Recycling

Vision blueprint: The Ministry of Education's future sustainable development strategies include: 1) Instilling environmental sustainability literacy in primary and secondary schools: By using interdisciplinary, cross-disciplinary teaching approaches, this strategy enhances the exploratory and practical learning of the curriculum guidelines of the 12-year basic education, using a holistic approach of balancing environmental awareness and economic and social considerations. This approach aims to improve students' independent critical thinking skills. 2) Innovative transformation of school campuses for sustainability: School campuses are starting to install solar panels and energy management systems. Schools are also encouraged to plant native tree species on campuses to realize carbon neutrality and sustainable circular campuses. 3) Nurturing university-level sustainable net-zero talents: This is achieved by integrating resources from schools, businesses, and the private sector to provide new generation environmental education. This approach will help enhance the core competencies necessary for college students to carry out sustainable development work.

New Taipei City Government:

Wugu Landfill Environmental Improvement Project

Sustainability achievements: New Taipei City is not only the first in Taiwan and the tenth globally to publish a Voluntary Local Review (VLR), it also takes concrete actions to create a zero-carbon future. The Wugu Landfill Environmental Improvement Project is an example of using SDG indicators, such as circular economy, energy transition, ecological conservation, and smart resilient urban-rural concepts, directly to major public policies, resulting in successful outcomes.

Award highlights: Driven by the spirit of "Leave No One Behind," New Taipei City Government promotes sustainable policies that prioritize the well-being of the local community. It guides local businesses toward sustainable operations, combats illegal practices, and establishes genuine partnerships. These actions demonstrate that sustainable development is not merely a slogan or a future goal, but a present-day reality.

Vision blueprint: In the future, the city government will continue to integrate and advance the 81 established indicators and targets under the guidance of the Healthy City and Sustainable Development Committee convened by the mayor. Through clear goals and the integration of the sustainable spirit in policy development, the city government will strive to move closer to its objectives of implementing new practices for New Taipei City, transforming the city into one that is conducive for better living, and creating a better New Taipei.

Ninth River Management Branch of the Water Resources Agency under the Ministry of Economic Affairs:

Public-Private Partnership for the Revitalization of Bie River

Sustainability achievements: In an effort to remediate Bie River and rekindle the memories of local residents associated with the river, the Ninth River Management Branch of the Water Resources Agency developed a revitalization plan for Bie River. This plan included short, medium, and long-term strategies. Through large and small-scale meetings, the agency reviewed issues, reached consensus with the meeting participants, allocated resources, and took action to address the problems.

Award highlights: By using NbS in response to climate change, innovative solutions were proposed. Through a cross-sectoral governance platform, resources from different entities were integrated to address systemic issues.

Vision blueprint: The cross-sectoral governance platform and collaborative learning model have already been replicated in the Mafo River and Mugua River in Hualien, yielding positive results. The plan for the future is to continue to carry out basin improvement and adaptation projects. This will include fostering consensus and addressing issues related to waterway risks, land flooding, blue-green networks, and waterfront integration. The goal is to categorize problems, develop strategies, and resolve problems.

Water Resources Bureau of the Taichung City Government:

Public-Private Partnership for Sustainable Development at Tongta River

Sustainability achievements: The Public-Private Partnership for Sustainable Development at Tongta River project focuses on Tongta River in Taichung City. This river flows adjacent to communities, industrial areas, and the Tunghai commercial district. Due to wastewater discharge, water quality had deteriorated quickly over the years. The Water Resources Bureau of the Taichung City Government thus initiated a project to remediate the polluted river. Using strategies of seamless environmental integration, sustainable development, ecological restoration, and environmental improvement, the project also aligns with the United Nations SDGs 3, 4, 6, 11, 13, 15, and 17.

Award highlights: The project has the following features and highlights: 1) Collaborative efforts among governmental agencies for land acquisition, water pollution prevention and control, and cross-sectoral integration of administrative operations, in particular the public-private collaboration with Tunghai University. 2) Establishment of on-site water treatment and the creation of an eco-friendly green network to revive the residents' collective memory of a clean waterway. 3) Use of gravity-driven water supply for energy generation and carbon reduction. 4) Promotion of environmental education and the establishment of the Tongta River water culture and environmental education center. 5) Deployment of smart environmental monitoring and use of the Internet of Things (IoT). 6) Local community involvement and the recognition of contributions from eco-businesses. As a result, the project significantly improved water quality, conserved energy, reduced carbon emission, and offered opportunities for environmental education. In addition, measures were also taken to ensure sustainability of the environment. These measures included in situ water treatment, ecological restoration, environmental education, and school-led environmental maintenance.

Vision blueprint: With the goal of creating a blue-ribbon waterside in Taichung, the Water

Resources Bureau will continue to implement plans for water quality improvement and water landscape development. The projects will incorporate ecological concepts and revive the residents' collective memory of clean waterways into the environmental landscape. The goal is to elevate mere water resource development into water culture development, thus transforming Taichung into a City of Water Culture.

Economic Development Bureau of the Tainan City Government:

Solar City 3.0 - Sustainable Development toward Net Zero

Sustainability achievements: In line with national sustainable development goals and the 2050 net-zero transition, the Tainan City Government has proactively promoted the development of renewable energy. In 2019, the city government initiated its solar city project using the abundant sunlight in Tainan and a well-developed solar energy industry chain to build both rooftop and ground-mounted solar panels. As of the end of October 2022, the installed capacity on file exceeded 3.7 GW, which was the highest in Taiwan.

Award highlights: In the area of administrative innovation, the city government established the Green Energy Industry Accelerated Promotion Center. The center was the first to introduce a joint review system to accelerate the development of renewable energy through inter-agency collaboration. With its vision of developing a sustainable and livable city, the city government has strategically linked its policies with the Taiwan's SDGs by formulating concrete action plans that balance green economy, energy transition, industrial development, and sustainable homeland.

Vision blueprint: The Tainan city government will continue to drive innovation within the green economy by focusing on the following four areas: energy conservation, energy storage, energy innovation, and system integration. It will instill the notion of sustainable energy in the lives of local resident and progress gradually toward the 2025 objective of achieving a nuclear-free homeland, thereby promoting environmental sustainability and social equity.

National Health Insurance Administration, Ministry of Health and Welfare: NHIC E-Card:

Infinite Value and Convenience in Your Hands

Sustainability achievements: The National Health Insurance Administration (NHIA) implements measures and programs in line with Taiwan's sustainable development goals. By looking after the disadvantaged, ensuring the health and well-being of people of all ages, and fulfilling the government's commitment, it is the mission of the NHIA to enhance the quality of healthcare services for all people. The NHIA aims to enhance the overall value of government agencies, create a society where healthcare is accessible to all, and promote environmental and resource sustainability by strengthening information security management and integrating resources across different domains.

Award highlights: The NHIA uses the National Health Insurance (NHI) database to create the NHI MediCloud System, allowing healthcare providers to access health and medical-related data such as patients' medical records, prescription history, lab results, and other records. This system helps prevent duplicate prescriptions and enhances patient safety. The NHIA also provides a My Health Bank app to give individuals access to their health data, enabling them to take more ownership of their health, practice self-care, and make informed healthcare decisions. As of November 30, 2022, this service has been used by 10.82 million people. The NHI Express app, which contains My Health Bank, has been downloaded 22.11 million times.

Vision blueprint: Taiwan has entered an era of value-added use of medical, health, and healthcare records. As part of the government's smart healthcare efforts, the NHIA uses information and communication technology to improve the quality and efficiency of healthcare services. Using data analysis and high-speed 5G technology, the NHI card has evolved from a paper card to an IC chip card and further into a virtual card. Its functions have also expanded from a simple medical ID to identity verification services,

and it is advancing toward virtualization. In the future, virtual NHI cards will promote open applications and industrial development, so that people seeking medical attention will have more options and more convenient access to medical services, thereby ushering in a new era of healthcare.



Sustainable development has always been highly regarded in Taiwan. The Taiwan Sustainable Development Goals were approved in December 2018 and the indicators were set in July 2019. Since then, the National Council for Sustainable Development (NCSO) has actively collaborated with relevant government agencies to promote sustainable development. In response to amendments to the relevant laws and regulations, as well as increase the achievement rate of the indicators, 34th NCSO Council Meeting on July 29, 2022 resolved to amend the indicators. This marked the completion of Taiwan's first rolling review of the Taiwan Sustainable Development Goals.

The current report covers the progress made toward Taiwan's Sustainable Development Goals and the Taiwan 2050 Net Zero Emission policy. Through council meetings and working sessions conducted by the NCSO, discussions took place on issues including sustainable development of the ecosystem and biodiversity, national climate change adaptation plan, and the Taiwan 2050 net zero pathway. The NCSO gathered expert opinions, including Nature-based Solutions (NbS) and climate change risk analysis. Furthermore, the NCSO completed the first rolling review of the Taiwan Sustainable Development Goals, which demonstrated the government's commitment to sustainable development. Additionally, the organization of the National Sustainable Development Awards and active participation of government agencies, educational institutions, businesses, and civic organizations reflected the shared awareness, practice, and commitment of Taiwan's society to the Sustainable Development Goals.

In the year of recovery after the pandemic, Taiwan continued to face challenges, including the resurgence of the pandemic, the outbreak of the Russia-Ukraine war, global inflation, and China's

zero-COVID policy. The government took measures, such as launching a new wave of economic stimulus, advancing the development of six core strategic industries, implementing the Invest in Taiwan program, improving employment skills and workplace safety, supporting green innovation for small and medium-sized enterprises, encouraging fintech innovation, and enhancing Taiwan's competitiveness. Furthermore, to improve road safety, the Ministry of Transportation and Communications proposed several road safety improvement measures, including regulatory reform, a zero-tolerance policy for drunk driving, legislative amendments to increase penalties for traffic violations, enhanced law enforcement, and promoting traffic safety education. Improvements to road environments and the implementation of technology enforcement successfully reduced accident rates, fatalities, and injuries. Additionally, the Council of Agriculture (now renamed as the Ministry of Agriculture) implemented significant measures on the conservation of natural assets, preservation of ecosystem diversity, water resource management, and the protection of endangered species. Specific measures included the management of natural conservation areas, wetland conservation, and FSC sustainable forest management.

There are 151 countries¹ worldwide that have declared their commitment to net-zero carbon emissions. For its part, Taiwan announced its own 2050 Net Zero Emission Pathway in March 2022. This pathway outlines the trajectory and action plan toward achieving net-zero emissions by 2050, and it includes four major strategies: Energy Transition, Industrial Transition, Lifestyle Transition, and Social Transition. These strategies are supported by two governance foundations: Technology Research and Development and Climate Legislation. Additionally, it includes twelve key strategies that offer specific action plans in critical areas such as energy, transportation, and

¹ Source: <https://zerotracker.net/>; date accessed: September 15, 2023

lifestyle transition. The goal is to promote technological advancements, research, and innovation in these fields and guide the green transition of industries. To achieve net-zero emissions by 2050, the National Development Council, together with the Environmental Protection Administration (now renamed as the Ministry of Environment), the Ministry of Economic Affairs, the Ministry of Transportation and Communications, the Financial Supervisory Commission, the Ministry of Labor, the Ministry of the Interior, the National Science and Technology Council, and the Ministry of Agriculture, jointly organized a press conference December 28, 2022 to officially announce the Phased Goals and Key Strategies for Net Zero Transition and explain specific actions and measures for the Twelve Key Strategies. In addition, a forum on the action plans for Taiwan net zero transition key strategy was also held, where relevant government agencies and experts were invited to promote dialogue among the different sectors.

Promotion of the 2030 Sustainable Development Goals is dependent on close collaboration between the government, businesses, academia, and private organizations. In particular, achieving 2050 Net Zero Transition is a task that requires collective efforts. To realize these goals, the government will continue to strengthen collaboration with the private sector through sound policy measures, technological advancements, and active public participation. Together, we will focus on the supply side, manufacturing, use, and the environment to build a green future that is sustainable, safe, fair, and just.

