

# 2014 ANNUAL REPORT ON NATIONAL SUSTAINABLE DEVELOPMENT



行政院國家永續發展委員會 編印

Published by National Council for Sustainable Development , Taiwan, R. O. C

# Chapter 1

## Annual Work Overview of National Council for Sustainable Development

### I. Holding Sustainable Development Conference

This year, National Council for Sustainable Development (hereafter referred to as NCSD) of Executive Yuan held a council meeting and a work meeting to discuss subjects related to sustainable development. An overview of and resolutions from the meetings are explained in the following:

#### 1. The 26th NCSD Meeting

The meeting was held in the afternoon of August 6, 2014 in the 1st Conference Room, Executive Yuan and presided by Premier Jiang Yi-huah. The agenda of the meeting included draft reports on the execution of two programs: (1) the “National Regional Plan” and (2) the “Environmental Education Plan”

Resolutions on Draft Report (1) “National Regional Plan” include:

1. For strategic environmental assessments (SEA) on petrochemicals, energy, and gravel collection that are not yet completed, we will ask that the Ministry of Economic Affairs speedily finishes the SEA's and report to Executive Yuan.
2. Before the legislation of the “National Land Use Planning Act (Draft)” is completed, the “National Regional Plan” will be an important policy that integrates conservation of national land and the oceans and agricultural and urban and rural development, guiding us to orderly develop our national lands and preventing destructions to the environment due to human overdevelopment. We will ask that the Ministry of the Interior continue to improve communication between Legislative Yuan and the general public such that the plan may be launched and implemented accordingly and that the prospective “National Land Use Planning Act” may complete its legislation soon.

Resolutions on Draft Report (2) “Environmental Education Plan” are as follows:

1. We will ask that the Secretariat submit the opinions regarding the continuous promotion of “Council for Promotion of Quality Outdoor Education” as suggested by the council members to council member

Chiang and ask him to coordinate and integrate resources from various councils and departments to effectively drive forth matters related to the “Council for Promotion of Quality Outdoor Education”.

2. We will ask that the Environmental Protection Administration (EPA) and various councils and departments to implement and promote this plan in compliance with the Environmental Education Act, the National Environmental Education Guidelines and National Environmental Education Action Plan, and improve cross-departmental and -disciplinary cooperation within the government and reinforce international exchange and cooperation in environmental education.

#### 2. The 38th Work Meeting

The meeting was held on May 27, 2014 in Conference Room 610 at National Development Council. Presided by Minister Kuan Chung-ming of NCSD, the agenda of the meeting covered five draft reports: (1) the “National Regional Plan”; (2) planning of “promotion of the importance of sustainable development to industries and issuance of reports on Sustainability”; (3) implementation of the “Environmental Education Plan”; (4) planning of



# for Sustainable Development

2014  
ANNUAL REPORT  
ON NATIONAL  
SUSTAINABLE DEVELOPMENT

“ projects to market and promote policies on sustainable development” ; and (5) reports on “ reactions to official outcome documents from the Rio+20 conference and implementation of the resolutions from NCSO council meetings” .

Resolutions on Draft Report (1) “National Regional Plan” include:

1. We will ask the Ministry of Interior to refer to suggestions of council members and revise relevant content in the “National Regional Plan” and improve disclosure of various information of this plan.
2. We will ask the Ministry of Interior to, in addition to communicating with local governments, strengthen communication with the general public to facilitate smooth follow-up promotion. 3. Regarding the council members' suggestions to establish a council for marine affairs, this is a subject of governmental restructuring and falls under the jurisdiction of Executive Yuan. NCSO will respond to the members' Opinions when it is appropriate.

Resolutions on Draft Report (2) “ promotion of the importance of sustainable development to industries and issuance of reports on sustainability” include:

1. We will ask the Industrial Development Bureau,

Ministry of Economic Affairs to propose a revised report at the next meeting. If assistance from other departments is needed, NCSO will facilitate summoning relevant meetings.

2. The current approach of government-promoted corporate sustainability reports is voluntary rather than mandatory. We will ask the Industrial Development Bureau, Ministry of Economic Affairs to further discuss whether the reports should be Mandated by law for long term promotion.
3. For short- and medium-term promotion, we will ask the Ministry of Economic Affairs to propose future promotion plans in respect to the accuracy verification mechanism, rewarding mechanism, and Probable governmental specifications of the corporate sustainability reports.

For resolutions on Draft Reports (3) “Environmental Education Plan” , (4) “Projects to Market and Promote Policies on Sustainable Development” and (5) “ Reactions to official outcome documents from the Rio+20 conference and implementation of the resolutions from NCSO council meetings” , we will ask the EPA and various task groups to incorporate the council members' opinions for reference for future task promotion and continuous processing.





# Chapter 1 Annual Work Overview of National Council

## II. Marketing and Promotion of Policies on Sustainable Development

### 1. Sustainable Development E-Paper

This is one of the key tasks of the “Projects to Market and Promote Policies on Sustainable Development”. The purpose of publishing this Sustainable Development E-Paper is to introduce the trend and current status of international sustainable development, promotion of domestic sustainable development and NCSd, and news of domestic sustainable development and local sustainable development. The first issue of the E-Paper, for example, contains articles on follow-up promotions after the United Nations Conference on Sustainable Development (UNCSD or “Rio+20”), relevant news on international sustainable development; progress of promotion by NCSd and task groups; relevant news on domestic sustainable development; news on promotion of local sustainable development; and special interviews with council members or experts. The E-Paper is published bimonthly, beginning in July 2014.



Website: [http://nsdn.epa.gov.tw/NCSD\\_EPAPER.htm](http://nsdn.epa.gov.tw/NCSD_EPAPER.htm)

### 2. Civic Forum on Sustainable Development

Another key task of the “Projects to Market and Promote Policies on Sustainable Development” is to achieve national participation in sustainable development and encourage the general public to assist implementation of sustainability with their actions. NCSd collaborated with the Environment Protection Administration, Executive Yuan (hereby referred to as EPA) to jointly host a “Civic Forum on Sustainable Development” on September 21, 2014 at Taipei Hero House. The forum was broadcast live through the Internet to expand participation of the general public.

The forum planned a total of ten topics to be discussed, including the various aspects of sustainable development, namely climate change and carbon reduction, land resources, biodiversity, energy and production, transportation and life, technology and assessment, urban and rural development, health and well-being, education and advocacy and green economy. Through the forum acting as an exchange platform for the citizens, this meeting generated different ideas and views. Not only it helped the general public to obtain an accurate understanding of sustainable development, communication between the general public and the government will also allow future promotion of national sustainable development to be more extensive and effective.





# for Sustainable Development

2014  
ANNUAL REPORT  
ON NATIONAL  
SUSTAINABLE DEVELOPMENT



### 3. Election of Logos for National Sustainable Development

This event is one of the key tasks of the “Project of Planning and Conceptualizing the Marketing and Promotion of Policies on Sustainable Development”. The purpose of the event is to reinforce the general public’s impression of national sustainable development by the Executive Yuan and, by having contestants design Logos that embrace the philosophies of sustainable development, to shape the imagery of NCSD promoting sustainable development. The Secretariat of NCSD held an election of Logos for NCSD from June 30 through August 15, 2014 and conducted a debriefing for the election on July 11. The election is open to individuals, companies, or organizations that are interested in this type of design. The event collected 114 pieces of design from 77 participants. The participation was quite enthusiastic.

The Logo election meeting was held on October 20, 2014 in the 1st Conference Room on the fourth Floor of EPA. Council members of NCSD were invited to attend. The jury was composed of folk members of NCSD. 12 folk members were present at the meeting. The jury had to elect the most representative Logo from among the 114 pieces. After passionate discussion among the members, four outstanding pieces were elected, which were “Be United in the Development, Hold Hands for Our Future”, “Our Joint Future”, “Sustainability, Our Joint Future”, and “Sustainable Development for Endless Life?”. We hoped to use this event to achieve the goals of sustainable development advocacy and awaken the general public’s desire to participate in the work of sustainable development.



# Chapter 1

## Annual Work Overview of National Council for Sustainable Development

### III. Assessment of Indicator System of Sustainable Development in 2013

Since 2003, NCSD has been conducting evaluation of the indicator system for sustainable development annually to monitor the effectiveness of the country's promotion of sustainable development. Each indicator authority and agency had filled in its data at the Individual Indicator Information System for Sustainable Development in Taiwan. After the Secretariat consolidated the calculations, NCSD summoned a meeting on November 24 to confirm and review the data on indicators. NCSD will release the Results on Assessment of Sustainable Development Indicator System on NCSD website in late December.



### IV. Holding Annual Selection and Celebration for National Sustainable Development Award

In 2002, the United Nations' "World Summit on Sustainable Development" encouraged all nations to actualize sustainable development by the human race through the "UN Sustainable Development Action Plan". To comply with the worldwide trend in sustainable development and encourage all industries in the nation to participate in sustainable development, NCSD has been conducting selection for winners of National Sustainable Development Award since 2004 to select all kinds of units that are outstanding in promoting sustainable development. Through the winning units' sharing of experiences, sustainable development is expanded to all layers in the society. The mission of the National Sustainable Development Award is to encourage all the people in the country to take part in the work of sustainable development. Through sharing experiences and learning, the spirit of

Sustainable development may take root in various layers and be implemented in daily life and work.

This year (2014), selection for the 11th "National Sustainable Development Award" was held. There are three stages in the selection process: "review of written materials", "on-location review", and "final selection". Eleven winning units are selected from four categories, namely education, corporate, social groups and sustainable development action plans. An award ceremony, during which Premier Jiang Yi-huah will personally present the awards, will be held in the auditorium of Executive Yuan to commend units that have been outstanding in their effort in promoting sustainable development. For information on the winning units please see Chapter Three of this annual report.



# for Sustainable Development



## V. Implementation of Sustainable Development Action Plan

After attending the United Nations “World Summit on Sustainable Development” in 2002, NCSD immediately proceeded to draft an action plan for sustainable development for Taiwan, which was passed for execution in December 2002. Taiwan finished formulating an action plan only a little over three months after the UN “World Summit on Sustainable Development”. Compared to the time used by other countries in the world, it was considered speedy. Afterwards, in addition to the annual rolling revision on

the action plan, there have been larger scale revisions in 2006, 2009 and 2013.

Each task group of NCSD fills out a report on its progress in the implementation of the action plan semiannually and submits it to the Secretariat for summary calculations. The Secretariat then releases the results on the website of NCSD for all to see. For status of implementation of the Sustainable Development Action Plan, please go to the NCSD website.

The screenshot shows the website interface for the National Council for Sustainable Development Network. The main navigation menu includes: 選單 (Menu), 永續會介紹 (Introduction), 組織 (Organization), 沿革 (History), 設置要點 (Key Points), 委員介紹 (Committee Introduction), 本會相關會議決議 (Resolutions of Related Meetings), 永續發展指標 (Sustainable Development Indicators), 本會工作分組業務 (Task Group Business), 國家永續發展誌 (National Sustainable Development Magazine), 國家永續發展年報 (National Sustainable Development Yearbook), 永續發展政策綱領 (Policy Framework), 永續發展行動計畫 (Action Plan), 本會完成文件 (Completed Documents), 其他成果 (Other Achievements), 永續發展小百科 (Sustainable Development Encyclopedia), 國內外永續發展新聞 (Sustainable Development News), 意見信箱 (Feedback Box), and 回首頁 (Home).

The main content area is titled "永續發展行動計畫之執行情形" (Implementation of Sustainable Development Action Plan) and lists a chronological list of reports from 103 to 96. The reports are categorized by year and semester/quarter:

- 103年上半年
- 102年下半年
- 102年上半年
- 101年下半年
- 101年上半年
- 100年
- 99年
- 98年下半年
- 98年上半年
- 97年第4季
- 97年第3季
- 97年第2季
- 97年第1季
- 96年第4季
- 96年第3季
- 96年第2季
- 96年第1季

At the bottom of the page, there is a link to the tracking system: 永續發展行動計畫追蹤管考資訊系統網址: <http://nsdncnplan.epa.gov.tw/login.aspx>



# 2 Chapter 2 Annual Working Group Achievements of National Council for Sustainable Development

## Energy-Conservation, Carbon Reduction and Climate Change Working Group

### 1. Building the foundation of greenhouse gas management

(1)The Environmental Protection Administration continues to promote the legislation of "Greenhouse Gas Reduction Act (draft)" in addition to passing 95 applications for pilot project reduction quota, issuing reduction quotation of approximately 37,346,000 tons of CO<sub>2</sub>e, agreeing 8 cases of registration for offset projects (the estimated reduction effectiveness is 2.69 billion tons of CO<sub>2</sub>e) as well as recognizing the 12 localized new reduction methods.

(2)Implementing the greenhouse gas recognition and examination management system. The Environmental Protection Administration has recognized 1 accreditation institute, 10 examination institutes and completed the "Technical Guide for Product and Service Footprint Traces." EPA has also completed the "Carbon Neutral Implementation and Declaration Guide" and established "Carbon Neutral Registration Management Platform" with a cumulative counseling of 8 cases reaching carbon neutral by the end of 2013.

### 2. Integrating actions of government sectors (National Development Council, Ministry of Economic Affairs, Ministry of Transportation and Communication, Ministry of Science and Technology)

(1)The National Development Council coordinated all sectors with draft proposal of action plans in 8 major fields according to the "Adaptation Policy Framework for Climate Change," which was approved by the Executive Yuan as the "Adaptation Action Plan for National Climate Change (2013-2017)" on May 22nd, 2014.

(2)The Energy Bureau of Ministry of Economic Affairs executed the promotion on Million Rooftop PVs with a target of promotion for 2014 as 210MWp. It is expected to drive development for electric component industries in domestic modules and inverters), creating an output

of NT2.1 billion and employment opportunities for 2,100 people.

(3)The Ministry of Science and Technology promoted Phase II National Energy Program (NEP-II) on January 1st, 2014, targeting development in biomass energy, hydrogen technologies, carbon capture storage (CCS) technologies, carbon reduction and clean coal technology, smart grid and advanced metering, offshore wind power generation, and geothermal power.

### 3. Promoting materialized international participation

Shin-Cheng Yeh, Deputy Ministry of the Environmental Protection Administration, led the representatives and experts in Taiwan's related industry and government agencies to attend the UNFCCC COP20/CMP10 in Lima, Peru in 2014.

### 4. Expanding public participation

In an attempt to draft the "Promotion on Green Economy Policy Framework," the National Development Council has held public "café" meeting in northern Taiwan on March 28th, 2014, and large public seminars in central and southern Taiwan on May 22nd, 23rd and 26th, respectively to collect opinions from different sectors.



# nt Network

## 5. Counseling low carbonization and greenification of industries

In cooperation with the industrial energy conservation and carbon reduction promoted by the Industrial Development Bureau, Ministry of Economic Affairs, a total of 245 companies from 11 industries have participated in the Ministry of Economic Affairs Greenhouse Gas Voluntary Reduction Agreement, with a total of 1,088 reduction measures executed and CO<sub>2</sub>e reduction of 105.6 million tons. The Architecture and Building Research Institute promotes green building mark assessment by passing 395 cases of green building marks and candidate of green building certification as of the end of September, 2014. It is estimated that about 94,070,000 kwh of electricity and 523 million tons of water can be saved with 53,700 tons of carbon reduction.

### 6. Advocating green LOHAS and promoting low-carbon transportation

(1)The "Nangan Visitor Information Center" in Matsu and "Chukou Visitor Center and Administrative Management Center" in Alishan have been awarded by the Ministry of the Interior with silver-grade and bronze-grade certification in "Green Building Mark."

(2)More than 3,000 vehicles from 600 vehicle showrooms have been audited for compulsory vehicle energy efficiency marks, indicating the implementation by companies to post or enclose energy efficiency marks with correct labeling according to the regulations. Companies are compelled to produce or import high-energy efficiency cars to reduce the overall fuel consumption and CO<sub>2</sub> emission of vehicles.



I(3)To promote low-carbon city construction in Taiwan, New Taipei City, Taichung City, Tainan City, and Yilan County have been selected to first promote total low-carbon measures.

(4)The organization of 2014 local environmental protection agencies in promoting performance evaluation on the execution of energy conservation and carbon reduction through benign competition can encourage the locality with collective promotion on carbon reduction policy advocated by the Bureau in addition to achieving the purpose of relevant effectiveness.



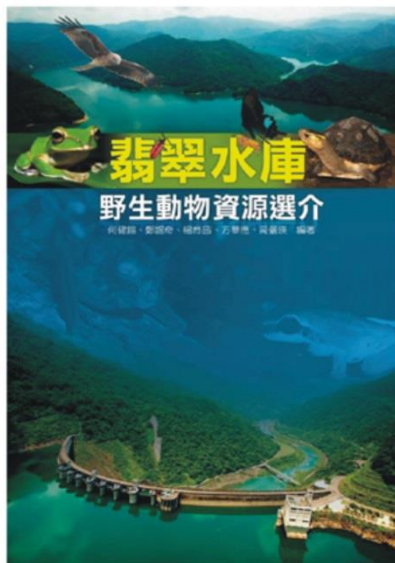
# 2

## Chapter 2 Annual Working Group Achievements of National Council for Sustainable Development

### National Land and Resources Working Group

#### 1. Water resources development, utilization, management, and conservation (Taipei Feitsui Reservoir Administration, Water Resources Agency of Ministry of Economic Affairs, Department of Irrigation and Engineering)

(1) Taipei Feitsui Reservoir Administration has been commissioned to conduct a "Feitsui Reservoir Ecological Resources Survey" between 2012 and 2013, with a total of 74 families and 325 species investigated from 6 categories, including mammals, birds, amphibian, reptiles, butterflies, and firebugs; covering 42 Taiwan endemic species, 35 Taiwan endemic subspecies and 35 protected wild animals.



 Feitsui Reservoir Wild Animal Resource Selection

(2) In cooperation with the Executive Yuan, the five major rivers including Dansui River, Daji River, Zhuoshui River, Zengwen River, and Gaoping River has undergone master plan for comprehensive management. In particular, Danshui River, Dajia River, Zhuoshui River, and Gaoping River have been submitted to the Executive Yuan for approval while Zengwen River has been reviewed by the Ministry of Economic Affairs Water Resource Agency Review Committee on a pre-meeting on September 15th, 2014.

(3) Invited civil (Taiwan Water Corporation) and industrial units in demand of water as well as the Department of Irrigation and Engineering to coordinate on the feasibility of water transfer and the amount of water required. It is estimated that as of the end of September, 2014, the residual water use from transfer to agricultural irrigation was 207,000,000 tons.

#### 2. Groundwater Conservation and Management (Environmental Protection Administration of Executive Yuan, Fisheries Agency, Council of Agriculture, Water Resources Agency of Ministry of Economic Affairs)

(1) The Water Resources Agency of Ministry of Economic Affairs subsidized the local government of underground water control zone according to "Strategies to Cope with Illegal Wells" by executing the filling of illegal wells. By the end of September 2014, a total of 469 illegal wells have been filled and three wells have received counseling on legitimate well filling.

(2) Completed the normal operation of seawater supply system for Kunlun Aquaculture Production Area in Yunlin Count (with a water supply area of 122 hectares); promoting recirculating aquaculture technology and counseling 13.8 hectares of aquaculture industries shifting towards development in water conservation. It is estimated to save 34,000 tons of water each year.



nt Network

2014  
ANNUAL REPORT  
ON NATIONAL  
SUSTAINABLE DEVELOPMENT



(1) In 2014, a total of 241 groundwater observation wells underwent well photography tests and 55 observation wells has been washed and maintained for Yulin, Zhanghua area as well as the Pingtung praire area. About 330 groundwater observation wells in Yilan, Hualian/Taitung, Miaoli, and Taichung have been commissioned to test the elevation of well top.

(2) As of September, 2014, the monitoring results show that the total ratio below the groundwater pollution monitoring standards is 92.3% (including the new items such as total phenolic acid and villiaumite) and 100% below the groundwater pollution control standards.

### 3. Sustainable management of marine resources (Construction and Planning, Ministry of the Interior)

(1) Comprehensive Sustainable Coastline Development Plan (Phase II) was approved by the Executive Yuan on February 8th, 2013 to continue with the monitoring of coastline variant nodes with immediate response to keep the coastline ratio from lowering and to restore the natural coastline landscape.

(2) In 2014, 8 municipal cities and 11 county(city) projects have been approved with grants to promote coastline land management rationalization and restoration of deteriorating coastlines through overall planning and improvement on coastline landscape.

# 2 Chapter 2

## Annual Working Group Achievements of National Council for Sustainable Development

### 4. National land and management (Construction and Planning, Ministry of the Interior, Central Geological Survey, Council of Indigenous Peoples)

(1)The "National Land Planning Act (Draft)" was the draft re-developed with revision on articles by taking consideration from all sectors in addition to calling seminars, hearing, discussion and review meetings. The draft was submitted in written to the Executive Yuan for review on November 5th, 2012. The draft underwent review operation on 6 chapters and 41 articles, which was then submitted to the Legislative Yuan for review on July 28th, 2014.

(2)The Ministry of the Interior has announced for implementation of "National Area Plan" on October 17th, 2013 to set up the "Environmentally Sensitive Area I" and "Environmentally Sensitive Area II" according to the land resource criteria, degree of sensitivity and other objective and subjective factors, in addition to developing the control principles.

(3)The national geographically sensitive areas are divided into 5 groups with completion of planning, review and announcement for national geographically sensitive areas (as of 2016).

(4)Established the forest protection patrol to guard the forests, promote local employment opportunities to aboriginal tribal residents and assist public aboriginal conservation area with land excess utilization to correct forestation, incubation and management. A total of 70 hectares of new plantation and forestation has been completed for the aboriginal conserved land with land excess utilization, 557 hectare of incubation management and 14,828 hectares under forest patrol monitoring.

### 5. National land conservation (Soil and Water Conservation Bureau, Council of Agriculture, Water Resources Agency of Ministry of Economic Affairs)

(1)A total of 25 land subsidence restoration projects were processed this year and a total of 10 hectares of subsided has been restored for 2014.

(2)10 areas of land slide water and soil conservation area have been completed with assignment project drafts with review on the benchmark values for landslide warning in 159 warning areas and the appropriateness of 159 rainfall stations in Taiwan. The reference rainfall stations from 21 counties and townships have been adjusted.

(3)The range of hills specified in Utilization and Transfer of Reserved Mountainous Land undergo 6 times of satellite monitoring. The results are handed to county and city governments for on-site investigation. The satellite monitoring results are randomly sampled with 200 sites for on-site reinvestigation and re-examined by the local government for status and accuracy.



# nt Network

2014  
ANNUAL REPORT  
ON NATIONAL  
SUSTAINABLE DEVELOPMENT

## 6. Promoting wetland ecological restoration (Construction and Planning, Ministry of the Interior)

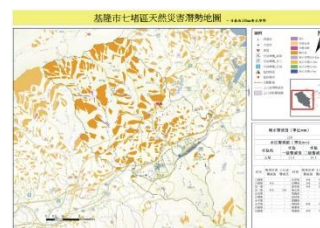
(1)The Wetland Conservation Act consists of 8 chapters and 42 articles with relevant supporting measures of 10. The Act is undergoing sub-act legislation and is promulgated by the Executive Yuan for implementation starting February 2nd, 2015.

(2)Through the collaboration of different sectors, the 2014 "Taiwan's Wetlands of Importance Plan" has approved to subsidize 17 county and city governments with the execution of 40 projects in addition to commissioning the "Wetlands Counselors Team" to carry out 40 verification project visitation and counseling operations.

## 7. Total improvement of disaster pre-warning and prevention/response capacity (National Science and Technology Center for Disaster Reduction)

(1)Assisting the Central Emergency Operation Center with intelligence judgment and preparing comprehensive intelligence judgment information using supporting system briefing templates; used by a 18 county/city disaster prevention and response professionals.

(2)Promoting "Disaster Prevention and Response Phase II Plan" by discussing the county/city and township (township, city and district) disaster prevention and response division of labor and operating mechanism, establishing (update) disaster prevention electronic map and developing the quality of relevant personnel in disaster prevention and response, in addition to upgrading the equipment in disaster response centers.





# Chapter 2 Annual Working Group Achievements of National Council for Sustainable Development

## Biodiversity Working Group

### 1. Investigation and identification of the potential marine and terrestrial biodiversity hotspots (Council of Agriculture, Executive Yuan)

The first ever "Taiwan New Year Bird Count, NYBC Taiwan" has completed the bird surveys in 122 quadrats, recording a total of 292 bird species of and 180, 954 individuals, including the known and unknown hotspots, of which the number of bird species in Nanao area is as high as 90.



Photo/ NYBC Taiwan conducted the winter bird survey in Neidong quadrat.



### 2. Designate at least 20% of marine areas within the territorial waters as marine protected areas by 2020 and implement the management (Council of Agriculture)

On March 10, the yuan-tai-jian-zi No. 1030010925 letter issued by the Executive Yuan authorized the plans to establish the Four Islands of Southern Penghu National Park, whose area is 35,473.33 hectares, and the total of marine protected areas will be approximately 30,935.27 square kilometers, accounting for 47.54% of Taiwan's 12 nautical mile territorial sea.

### 3. Construct and integrate the biodiversity information exchange mechanism as well as the databases of various types or institutions, and revise and supplement the data regularly (Council of Agriculture, Ministry of Science and Technology)

The Ministry of Science and Technology and the Forestry Bureau provided the Biodiversity Research Center, Academia Sinica, with subvention funds to set up "Taiwan Biodiversity Information Facility" (TaiBIF), "Catalog of Life in Taiwan" (TaiCOL), and "Taiwan Encyclopedia of Life" (TaiEOL) for purposes of promoting the collection and integration of data on biodiversity across departments and ministries.



Information flow diagram of TaiBIF information providers and among the databases of TaiBOL, TaiCOL, and TaiEOL.

## at Network

2014  
ANNUAL REPORT  
ON NATIONAL  
SUSTAINABLE DEVELOPMENT

#### **4. Build the national library of the original species and conduct the research, conservation and utilization of agriculture, forestry, fisheries, animal husbandry, wildlife, and microbial genetic resources (Council of Agriculture)**

The annual preservation and regeneration of the subculture of the original 136 strains (types) of the common silkworm accounts for 2-4 times, the reproduction of silkworm eggs for each strain during each silkworm rearing season around 60,000 to 100,000, and the annual number of breeding silkworm eggs up to more than 20 million.

#### **5. Complete the planning of monitoring system of terrestrial, wetland and marine biodiversity, including the identification of the monitoring location and method. (Environmental Protection Administration, EPA)**

According to the sampling and testing standard methods published by the EPA, the planning of water quality monitoring system in rivers (296 points), groundwater (431 points), reservoirs (105 points), beaches (11) and coastal waters (105 points), etc. was determined and implemented.

#### **6. Biological control of invasive species (COA, EPA)**

(1)The COA developed the emergency response plan for new invasive species and worked with local governments to conduct drills on a regular basis, establishing a long-term prevention plan for existing invasive species to minimize the economic losses and ecological impact caused by them.

(2)The COA supervised the environmental protection authorities of municipalities and counties (cities) to follow the RIFA Standard Operation Procedures promulgated by the COA and to comply with the instructions of National Red Imported Fire Ant Control Center, COA, Executive Yuan, in executing the fire ant hazard prevention, monitoring and advocacy work.

#### **7. Promote the construction of artificial wetlands and help improve the hydrological systems and the ecological quality of waters (Water Resources Agency, Ministry of Economic Affairs)**

The work regarding the "Development of National Important Wetland Conservation Action Plan", "Construction of the Habitat of Wetlands", "Construction and Restoration of the Ecological Corridor of Wetlands", "Coastal Wetlands Protection", "the Long-term Research and Monitoring on the Background of Environmental Biology and the Society", "Community Participation in THE Wetland Management", and "Education and Promotion" has been executed.

#### **8. Complete the investigation, sorting, and identification of existing Indigenous Peoples and the traditional knowledge on the biodiversity in local communities, and construct the databases in line with international standards. (Council of Indigenous Peoples, MOST)**

(1)The Council of Indigenous Peoples has established the "database management system of Indigenous Peoples' traditional knowledge on the biodiversity." It is estimated there will be a total of 4,835 pieces of information reviewed by the Project Management Center by the end of December, 2014.

(2)The MOST granted Pr. Pei Jai-chyi of National Pingtung University of Science and Technology the subvention funds to execute the study plan exploring the ways on how to establish the structure of long-term conservation for local pangolins by applying the concept of Indigenous & Community Conserved Area (ICCA) so as to identify the land tenure of hot spots of pangolin population and the land use patterns and to develop the conservation strategies for the ethnic groups.



# 2

## Chapter 2

# Annual Working Group Achievements of National Council for Sustainable Development

## Energy and Production Working Group

### 1. Promote green plants (Industrial Development Bureau, MOEA)

As of October, 2014, 16 green factory labels have been issued and 45 manufacturers passed the compliance determination of cleaning production evaluation, and the assessment work is being processed successively. The related green buildings of the certified manufacturers and their action to promote clean production reduced a total of 360,000 tons of carbon per year, saving the cost of NT\$ 1.89 billion.

### 2. Guide and assist small and medium enterprises to promote carbon reduction (Bureau of Energy, MOEA)

In 2014, 100 SMEs received the assistance in conducting the production process management improvement, greenhouse gas inventory, product carbon footprint inventory, construction requirements of energy management system and other carbon reduction related work. The personnel trainings on green energy and carbon reduction for SMEs totaled to 500 person-times and carbon reduction concept advocacy campaigns up to 80,000 person-times.

### 3. Promote the implementation of "Green Electricity Pricing Scheme" (Bureau of Energy, MOEA)

(1)The "Voluntary Green Pricing System Pilot Plan of the Ministry of Economic Affairs" was officially implemented starting from July 1; the green electricity surcharge rate is NT\$1.06 / kWh in 2014 and the ceiling of the subscription amount is 0.31 billion kWh.

(2)To make the information of green power transparent, the Bureau of Energy, MOEA, constructed the "Green Power Purchase Instant Update" website.

(3)As of October 29, the subscription amount of green power was 4,219,500 kWh and the total number of households that subscribe was 484, of which individual households were 301, and the maximum subscription

amount was 15,000 kWh; the number of corporate users was 183 and the maximum subscription amount totaled to 3.1 million kWh.

### 4. Promote the "Plan for the Construction of the Low-Carbon Island, Penghu" (MOEA, EPA)

Shin-Cheng Yeh, Deputy Ministry of the Environmental Protection Administration, led the representatives and experts in Taiwan's related industry and government agencies to attend the UNFCCC COP20/CMP10 in Lima, Peru in 2014.



The "Press Conference of the Implementation of MOEA's Voluntary Green Pricing System Pilot Plan" on June 30, 2014.



# nt Network

## 5. Promote the policy of "Million Rooftop PVs Promotion Project" (Bureau of Energy, MOEA)

(1) To expand domestic demand, the setting target for the year 2014 is 210MW, expecting to stimulate domestic industrial development in modules, converters, brackets, cables and various electric components and create more than NT \$ 20 billion of domestic output value.

(2) Accumulated to the end of 2014, the total amount of solar photovoltaic system settings will exceed 600MW, with up to 750 million kWh of annual power generation capacity and 399 000 tons of carbon reduction.

(3) The Bureau of Energy, MOEA, promoted the popularization of solar roofs, driving a cumulative total of 12 counties and cities to invite tenders for renting the roofs of public buildings with another three completing the rental points; The Bureau of Energy also pushed 11 cases of Sunshine Community, leading to its implementation and the application by local governments as well as the community cluster effect and expanding the propagation to install the system.

(4) The Bureau of Energy studied and analyzed the local self-government's law and provided the construction and management authorities of each county or city government with the recommendations so as to drive solar photovoltaic system settings.

(5) The Bureau of Energy completed the development of standards regarding the integration of solar photovoltaic system and architecture, and drove BIPV (building-integrated photovoltaic) modules to be included in the High-performance Green Building Material certification system.



➡ A visit to a factory producing CAS labeled food in 2014.



➡ A briefing on CAS to the business operators in 2014.

## 6. Increase the efficiency of employment service (Ministry of Labor)

Recruiting activities were held at 358 employment service agencies in the nation and the employment matchmaking service was enhanced via the database of job opportunities on the eJob website. In addition, combined the ibon service of 7-ELEVEN, the information of vocational training and job opportunities has been provided. As of the end of September 2014, 306,980 job seekers as well as 3,021 women seeking second chance employment have been referred and employed.

## 7. Promote the "Phoenix Micro Start-up Loan and the Program of Micro Enterprise Start-up Consultation Services" (MOL)

The Ministry of Labor (MOL) established enterprise start-up counseling mechanism, with a team of professional business advisors to provide consultations and guidance. Besides, the MOL provides Phoenix Micro Start-up Loans of up to NT\$1 million and interest on the loans will not have to be paid in the first two years.



⤴ Entrepreneurship Courses

## 8. Promote CAS Label (COA)

Currently, there are 4 CAS certification organizations approved by the COA, conducting the business regarding 16 major CAS certified categories. As of the end of September 2014, a total of 765 major items (6,128 breakdowns) from 297 manufacturing plants have been validated by CAS.

# 2 Chapter 2 Annual Working Group Achievements of National Council for Sustainable Development

## Traffic and Life Working Group

### 1. Promote the "Highway Public Transportation Development Projects" (Ministry of Transportation and Communication)

To continue the effectiveness, the MOTC promoted the "Highway Public Transportation Development Projects (2013-2016)", and since it was implemented five years ago, the carrying capacity has risen from 1.038 billion person-times in 2009 to 1.219 billion in 2013, growing by 17.36%. Also, as of the end of September 2014, it has grown 1.86% in comparison with the same period of 2013.



Bus Rapid Transit (BRT)



Universally Accessible Bus



Photo/  
President Ma inspected  
the dock of Liaoluo  
Port in Kinmen.

### 2. Continue to promote rail transport infrastructure and improve service efficiency (Ministry of Transportation and Communication)

The MOCT has been actively promoting the construction of rail-related transport, including urban railway grade separation, MRT-type rail transportation projects, upgrading rail transport services, building energy-saving stations, continuing to promote the metropolitan area mass transit systems, accelerating the high-speed railway stations in Miaoli, Changhua and Yunlin, so as to facilitate urban renewal and development.

### 3. Construct intelligent transport systems in Taiwan. (Ministry of Transportation and Communication)

In addition to the e-IOT service and the Traffic Management System of the Comprehensive Network of Freeway/Expressway constructed respectively by the Institute of Transportation and the Taiwan Area National Freeway Bureau, Taiwan Railway Administration has been promoting the Multi-Cards Electronic Ticket Verification service.

### 4. Conduct the port and harbor construction on the outlying islands and the ship acquisition and construction plan (Ministry of Transportation and Communication)

In terms of port and harbor construction plan in Kinmen, No. 1-3 Piers at Liaoluo Port area have been renovated, and the construction of new port has been successfully completed and opened for the operation, further strengthening the maritime logistics functions of Liaoluo Port on the Cross-Strait "Mini-Three-Links."

In Matsu area, the MOTC conducted the acquisition and construction plan of the new Taiwan Passenger Liner Tai Ma Lun, launched on March 3, 2014 and enabling the traffic between Taiwan and the outlying island to be smoother and more convenient.



# nt Network

## 5. Advocate road safety education (Ministry of Transportation and Communication)

The Traffic Safety Committee, MOTC, developed the "intensified action of national road safety programs" in 2014, enhanced by the national road safety system application engineering and other measures such as educational propaganda and law enforcement and combined with the engagement of central departments and ministries along with local governments. According to the statistics, from January to September 2014, the number of casualties in Fatal Traffic Accident, A 1 category, was 1,333, reducing 90 persons in comparison with that in the same period in 2014 (6.3 %).

## 6. Promote ecotourism, environmental education and environment-friendly tourism (Ministry of Transportation and Communication)

In addition to planning the natural landscape, historical monuments and other tourist-friendly space fields for national recreation, the MOTC adopted the environmental characteristics of the tourist areas to meet the promotion of environmental education, blending activities with educational entertainment and improving the awareness and meaning of national environmental education; in terms of promoting ecotourism, numerous sessions of ecotourism guidance training courses have been executed and the green building construction methods were applied to the design of tourist center.



Photo/ The "Chukou Visitor and Administration Center" in Alishan

## 7. Upgrade the capabilities of weather and seismic forecasting (Ministry of Transportation and Communication)

(1)The plan for the "Strengthening Hazardous Weather Nowcasting" has been conducted, the ensemble based typhoon forecast techniques have been developed, the operational techniques of ensemble based NWP Forecast of ETWIND have been established, and the construction of the operational processes to release the 6-hour Quantitative Precipitation Forecast during the period of typhoon alert have been completed.

(2)The Hazardous Weather Monitoring and Forecasting Systems Enhancement Project? has been conducted and the analysis of extreme weather events in the summer and the winter 2014 has been completed; the online application of Typhoon Weather Research and Forecasting (TWRF) Model, version 1.4 has been implemented ; the data buoys of Dongsha Island have been replaced; the WARNGEN's warning function of Weather Integration and Nowcasting System (WINS) has been strengthened; customized web services of Tourism Bureau, MOTC, Taiwan Railway Administration, MOTC, the New Taipei City Government, the Taoyuan County Government have been added to Quantitative Precipitation Estimation and Segregation Using Multiple Sensors(QPESUMS); the new application software (APP) providing recreational forecasts and weather information has been added to mobile devices; the English version of weather APP (Taiwan Weather app) has been developed; the phase 3 high-speed computing maintenance and operation facilities for the numerical weather forecasting system. Have been installed.



Figure/ English version of weather APP (Taiwan Weather app)



# 2

## Chapter 2

# Annual Working Group Achievements of National Council for Sustainable Development

### Urban and Rural Development Group

#### 8. Strengthen the road and bridge disaster prevention (Ministry of Transportation and Communication)

(1)The Highway Disaster Prevention Information System has been implemented, relying on the bridge and watershed management, mountain road risk management, and various early warning systems to make "warning decisions" under severe weather conditions.

(2)The seismic reinforcement work was done on 12 bridges situated at Xinhua to Tianliao and Tianliao to Yanchao sections of Freeway No. 3, and National Highway No. 10 toward Qishan.

#### 9. Drive national airports to introduce environmental management systems and carbon reduction facilities (Ministry of Transportation and Communication)

(1)The Airport Carbon Accreditation, ACA, was launched in 2009, encouraging airport members to promote energy conservation and carbon reduction.

(2)The ICAO and aviation-related agencies have been gradually setting the reduction strategies and initiatives targeting aviation greenhouse gas management.

#### 10. Promote national green consumption (EPA)

(1)To enhance the awareness of procurement staff on green products and performance assessment criteria of government green procurement (GP) and intensify the training workshops for personnel responsible for green procurement, from May to August 2014, the "education on GP and practical training" sessions have been organized, totaling eight sessions and 770 people.

(2)The operations of traditional markets, second-hand markets or creative markets were promoted, effectively activating the market unused space, so as to promote new types of business models and innovative thinking and carbon reduction and to drive business opportunities.



Photo/  
2014 Eco-Products  
International Fair  
(EPIF)  
the Exhibit Pavilion of EPA.

## Technology and Evaluation Group

### 1. Taiwan Climate Change Projection and Information Platform project (MOST)

(1) Since its setup completion in December 2012 until the end of June 2014, the Information Platform has been browsed by more than 30,000 persons.

(2) The Climate Change Information online data services and application system setup has been completed and officially launched in April 2014, and until end of June 2014, the number of registered persons is 13, and the number of information provided is 7.

### 2. Maintain and integrate the Taiwan Biodiversity Information Facility (TaiBIF) portal and conform with GBIF standards (MOST, Council of Agriculture, Environmental Protection Agency)

(1) Continue to operate the Taiwan wildlife database, Taiwan wild plant database, the biodiversity information sharing platform "Taiwan Biodiversity Network" (TBN) and the "Taiwan Breeding Birds Survey" (BBS Taiwan).

(2) Continue to entrust relevant research and academic units to conduct biodiversity surveys of artificial reef areas, fishery resources conservation areas and the three northern islands in Taiwan surrounding waters, and incorporate the aggregated data into the "Database of marine biodiversity in the waters surrounding Taiwan".

(3) All National Parks contribute to built and integrate the "National Parks Biodiversity Geographic Information System" set up by the Construction and Planning Agency, MOI, and regularly schedule maintenance and updates.

(4) Handle the "4th phase of E Government Program - Environmental Resources Database integration plan."

(5) Set up in the Dapeng Bay, Siraya and Sun Moon Lake National Scenic Areas the Lamay Island plants and intertidal biodiversity database, survey amphibian, reptile and avian natural resources and conduct ecological resources monitoring.

### 3. Promote the "Integrated Research Program on Climate Change Adaptation Technology"

(1) Complete 90% of aggregated content for the scientific report's second volume.

(2) Complete the knowledge platform test (officials) and build a list of expert advisers.

(3) Establish the assessment system for the demonstration projects for spatial information integration.

(4) Import the three groups of self-developed assessment tools into TaiCCAT to support and analyze the decision-making system, at the same time complete the adaptive capacity assessment test of the central ministries and local government.



# 2

## Chapter 2

# Annual Working Group Achievements of National Council for Sustainable Development

### Traffic and Life Working Group

#### 1. Water resources development, utilization, management and conservation (Taiwan Water Corporation)

Expedited the plan for reducing water leakage rate, until the end of 2014 756 kilometers of old and leaking pipelines are expected to be replaced, and the construction of 248 district metered area networks will be completed.

#### 2. Sewerage Development (Construction and Planning Agency, MOI)

(1) In 2014 the "5th phase of sewerage building plan (2015-2010)", a 6-year long plan to continue to promote the construction of sewerage, in order to increase sewerage spread, was proposed.

(2) Promote the recycling of effluents from public sewage treatment plants, the first demonstration case, the Fengshan water treatment plant, according to the plan's outcome, this year has already reported the case plan, which has obtained the Executive Yuan approval, and follow-up plans are expected to invest about 2.9 billion to build the recycling treatment facilities and transportation pipelines, to achieve the goal of sustainable use of resources.

#### 3. Sustainable rural and urban development (Construction and Planning Agency; Soil and Water Conservation Bureau, Council of Agriculture; Water Resources Agency, MOEA)

(1) Since the promulgation of the urban renewal regulations in 1998, there were 1,544 applications of urban renewal cases from privates, 464 of which 464 have been approved and announced to be implemented, until the end of 2014 a total of at least 147 urban renewal business plans (including the right to change plans) have been guided, approved and implemented.

(2) Since 2005, 235 urban renewal demonstration area



have been surveyed and selected, currently 63 sites are undergoing early planning operations, 34 are handling pre-investment operations and investment announcement, 25 have successfully introduced investment firms and have been implemented, 10 are being self-implemented by Government investments.

(3) Subsidize each municipality, county (city) government to handle "County (city) or townships-type urban and road landscape and human environment improvement plan outlines", "Sidewalks, bike lanes and accessibility improvement plans", "Improvement plans for school trails and cycle paths within school districts or areas", "Additional green landscaping and planting, continuous green belt construction plans" and other projects.

(4) Continue promotion in coordination with the "Rural Rejuvenation Act", up to the end of September 2014 a total of 2,198 rural communities have been trained, with 142,313 participants, and already more than 660 communities have completed the fourth training phase, and 474 rural rejuvenation plans have been proposed.

(5) Coastal environment improvement completed in 2014 was about 19.5 km, and complete environmental improvement projects on 26 major rivers was about 37 km.



# nt Network

## 4. Eco-city and green buildings (Architecture and Building Research Institute, MOI; Construction and Planning Agency, MOI)

(1) Promote Green Building Label assessment, by the end of September 2014 395 Green Building Label cases and Green Building certificate candidates have been approved, annual electricity savings are estimated to be about 94.07 million kW, water savings are about 5.23 million tons and carbon reduction is about 53,700 tons.

(2) Promote Green Building Material Label assessment, by the end of September 2014 192 Green Building Material Label cases (131 healthy, 26 rejuvenation, 34 high-performance and 1 eco-green building material) have been approved, with a product range covering more than 1,684 and more types.

(3) To enhance energy efficiency and reduce the urban heat island effect, 38 "Building energy efficiency and the Green Office Building improvement and subsidy plan" improvement projects are scheduled to be completed by the end of 2014.

(4) The "2014 green building promotion strengthening plan" subsidized a total of 18 municipalities, county and city governments, and NT Dollars 24 million in grants was allocated through the specially established competent construction authority designated by the MOI.

(5) Execute the New Taipei City Banqiao Fuzhou Affordable Housing investment promotion and building plan, and obtain the "Diamond class" Green Building Candidate Certificate for communities in April 2013, in July 2013 also obtained the "Bronze class" Smart Building Candidate Certificate, and in August 2013 received the "Diamond class" Green Building Candidate Certificate. (plans) have been guided, approved and implemented.



# 2 Chapter 2 Annual Working Group Achievements of National Council for Sustainable Development

## Health and welfare group

### 1. Execute Healthy and Friendly city promotion (Ministry of Health and Welfare)

The Health Promotion Administration jointly with the Alliance for Healthy Cities, Taiwan, organized the "6th Taiwan Healthy and Age-friendly Cities Award", selecting agencies with excellent achievements in topics related to healthy and age-friendly cities from cities and counties in Taiwan; in 2014 after the initial evaluation and re-evaluation operations, a total of 121 winners were selected.

### 2. Youth employment assistance plan (Ministry of Labor)

In order to assist youth vocational skills and employment opportunities, and help enterprises to train professional and technical personnel meeting their requirements, the Ministry of Labor is providing young people from age 15 to 18 with the relevant practical and usable trainings, including the double-tracks flagship training plan, youth employment flagship plan, industry-university cooperation training, pre-service training and other measures; by the end of September 2014 1,819 persons have make use of these training courses.

### 3. Promotion and advocacy of health care policies (Ministry of Health and Welfare)

In order to strengthen the partnership and cooperation between the health authorities and health care organizations, and to assist domestic health care organizations to provide early age-friendly services, on May 15, 2014 the Ministry of Health and Welfare has organized a workshop on "Promoting age-friendly health care work from county health bureaus in combination with health care institutions".

### 4. Execute water resources, ecological engineering and environmental ecology advocacy (Water Resources Agency, MOEA)

(1) In 2014, the Taiwan Water Company, Chia-Nan Irrigation Association, Chiayi County and Tainan City Government have been given counseling about executing ecological check works in the Southern Taiwan stable water supply improvement projects in Tseng Wen, Nanhua and Wusanto reservoir watersheds, for a total of 14 cases in 45 working areas.

(2) To promote the ecological checks in engineering projects and the concepts of ecological conservation, the Water Resources Agency, in association with the Chiayi County and Tainan City Governments, on October 16 and 17 organized a ecological check education and training course for reservoir watersheds, with training participants exceeding 60 persons.

### 5. Faraway aboriginal townships medical subsidies (Council of Indigenous Peoples)

Regarding the medical transportation problems caused by location characteristics of indigenous settlements, subsidies are granted for referral and transportation costs of medical treatments for indigenous peoples, in order to reduce transportation costs for medical treatment for indigenous people living in faraway areas. By the end of June 2014 8,468 people have benefited from this grant.



## nt Network

2014  
ANNUAL REPORT  
ON NATIONAL  
SUSTAINABLE DEVELOPMENT

### 6. Counsel about Traceability System of Agriculture (COA)

Counsel and promote 6 types of livestock Traceability systems, cumulative number of certified producers have reached 503. The Council of Agriculture, Executive Yuan is also actively supervising inspection agencies to strengthen livestock and poultry production plants (factories) tracking and checking and product testing; from January to September 2014 446 samplings have already been performed, and the qualification rate of veterinary drugs on livestock products is 99%.

### 7. Implemented Persistent Organic Pollutants quality risk assessment (EPA)

Execute the risk assessment of persistent organic pollutants (POPs) quality, in order to establish background values database on POPs in the environment, to provide as reference for risk assessments.

### 8. Promote cancer prevention plan (Ministry of Health and Welfare)

The Health Promotion Administration launched the "Friends of Cancer Navigation Plan" within the third phase of the national cancer control plan in 2014, a total of 80 hospitals joined the plan, covering about 90% of newly diagnosed patients. In addition, 61 of these hospitals have a "Cancer Resource Center." Through this plan, hospitals will gradually establish a comprehensive tumors cases management division system, reducing the percentage of newly diagnosed cancer cases going without treatment for three months; the target is to reduce from 18% in 2012 to 16% in 2014.

### 9. Set the "Drinking Water Management Focus Inspection Control Plan" (EPA)

Supervision local environment protection agencies to strengthen the implementation of water quality sampling and testing of direct water supply from tap water system, reviewing potable water treatment agents in water purification plants, auditing and sampling tap water quality and fixed equipment for continuous supply of drinking water in public and private places, etc.; water quality pass rate exceeded 99%.





# 2

## Chapter 2

# Annual Working Group Achievements of National Council for Sustainable Development

### Education and advocacy groups

#### **1. Promote national knowledge and cognition of sustainable development, enhance the citizens' environmental quality (Ministry of Education, Ministry of Science and Technology, Ministry of Culture, Ministry of Interior, Ministry of Economic Affairs, Environmental Protection Agency, Council of Agriculture, Ministry of Health and Welfare, Hakka Affairs Council)**

(1) To promote national knowledge of sustainable development, and enhance the environmental quality of our citizens, the EPA has encourage 81 community colleges in 22 counties and cities all over Taiwan to offer courses related to environmental education and sustainable development, by September 30, 2014, a total of 501 courses have been offered, with a cumulative environmental education program up to 956 hours.

(2) To enhance the adaptability of foreign and mainland spouses to living in Taiwan, official budget provision has been allocated, and grants has been established so that local governments can support foreign spouses to successfully adapt to our living environment. In 2014 grants have supported local governments to organize a total of 213 counseling sessions on adapting to life in Taiwan for foreign spouses, and by September 2014 about 2,704 persons have benefited from these sessions.

(3) To assist Taiwan enterprises to promote CSR Report, in 2014 the Industrial Development Bureau has counsel a total of 40 companies in 7 systems about writing sustainability reports/ basic reports, provided consulting on sustainability report and spacing analysis services to 20 companies, in order to accelerate Taiwan's CSR Report issuing.

(4) Counsel municipalities, county (city) government to promote low-carbon communities projects, and in cooperation with local governments, continue to counsel and assist 91 demonstration communities to promote low-carbon measures.

(5) The Ministry of Education and the Health Promotion Administration have been promoting since 2013 important issues in the health promotion in schools project, including oral health, vision care, healthy body postures, Tobacco Control, national health insurance, sex education (including AIDS prevention), etc..

(6) The Hakka Affairs Council has been subsidizing domestic non-governmental organizations, public and private schools at all levels to organize Hakka language and cultural activities; by the end of October 2014, grants have been allocated to 83 cases of language education activities, 566 schools organizing Hakka life school projects and 58 agencies handling the implementation of Hakka language accessibility in official places projects.

#### **2. Integration of government, private, business and school resources to promote sustainable development (Ministry of Education, Ministry of Science and Technology, Ministry of Economic Affairs, Environmental Protection Agency, Council of Agriculture)**

(1) The Ministry of Education's energy savings campus counseling group in 2014 has cumulated a total of counseling in 24 schools, and has provided energy counseling reports to facilitate schools in conducting subsequent carbon reduction related works.

(2) Execute the "Subsidies for local governments to establish environmental education support groups project", assist local governments to build a complete environmental education workforce, plan an environmental education program in line with the local characteristics of the counties/cities, implement and promote this program.

(3) Allocate grants to establish two Energy Technology Regional Education Centers and 21 energy science and technology education promotion primary and secondary schools, integrate the local county and city governments resources to jointly promote the energy technology promotion program.

(4)The MOST assisted in the joint collaboration between industry (Delta Electronics Foundation) government (National Taiwan Science Education Center, Ministry of Education) and academia (University of Taipei, Southern Taiwan University of Science and Technology) in launching the "Science Education touring cars", including two "3D low-carbon mobile movie theater", a "Low-carbon energy mobile museum" and a " Low-carbon living resources action vehicle", since July 26, 2011 to September 30, 2014, have toured 158 locations in Taiwan, with up to 225,216 visitors.

(5)The EPA continues to organize 4 seed trainings for green network platform users every year, for a total of 400 trainees.

### 3. Strengthen Social Education Centers and mass media, advocate sustainable development and environmental protection issues (Ministry of Education)

(1)Advocate and encourage schools to choose local seasonal ingredients, and through permanent and temporary exhibitions, other media advocacy and relevant education activities, provide the public information about the rich land and sea biodiversity in Taiwan and advocate environmental conservation concepts.

(2)The MOST allocate grants to produce and broadcast movies and programs related to alternative energy, reducing carbon emissions, climate change, ecological and geological and other environmental education, contents covering themes like energy technology, carbon footprint, carbon reduction, insect ecology, food safety, radiation investigation and detection, global warming, etc.

(3)Produce promotional videos, advertisements and other advocacy pamphlets on low-carbon and sustainable homes, and use channels such as internet resources and various medias for advocacy to enhance public awareness on energy conservation.

(3)Produce promotional videos, advertisements and other advocacy pamphlets on low-carbon and sustainable homes, and use channels such as internet resources and various medias for advocacy to enhance public awareness on energy conservation.

(4)Through diverse channels, the Health Promotion Administration has been advocating on healthy diet and healthy shopping to the public, including 9,700 copies of the "Healthy body postures coaching manual for schools", the Chinese revised version and English version of the "Exercises for Healthy Life Manual", obesity prevention website and the "0800-367 -100 "free consulting service phone line and others.

(5)The Council of Agriculture's has set up the Virtual Museum of Taiwan Agriculture website, providinf the complete "2014 Eco Film Festival", "LOHAS Village", "Fun Taiwan Rediscovered" and other ecological video materials.

### 4. Promote researches and international cooperation on sustainable development education (Ministry of Education, Ministry of Science and Technology, Environmental Protection Agency)

(1)Allocate grants to organize the environmental education and sustainable development related "2014 Society for Risk Analysis - Asia Symposium", participants and guests speakers have published papers and discussed about risk management, environmental risks, disaster risk, food safety, industrial safety and chemicals management, nanotechnology perception and assessment, social risks and other major issues.

(2)Allocate 15 grants for sustainability, environmental education activities related popular science projects, organized for object including preschoolers, students of all ages, people from all walks of life, teachers, etc., for a total of 7,335 persons.

(3)By October 2014 there are 95 environmental education facilities, 22 environmental education organizations and an environmental education staff of 3,023 persons.





# 3

## Chapter 3 Annual Working Group

### Chinese Culture University

#### Brief introduction

Chinese Culture University is located in the proximity of the protected area of Taipei City, next to Yangmingshan National Park, a barrier-free campus. Based on the education philosophy of the founder Mr. Chang-Chi-Yun, the school holds onto the motto-"modesty and persistence" to manage the school, hoping to compile the excellence of occidental and oriental ethics and traditions, and pass them to future generations, to propagate the concept of empathy and unselfishness.

#### Current status on sustainable development activities

In order to get rid of the limits of traditional sustainable development, Chinese Culture University integrates all interior professional resources into one force, to promote intersectional cooperations, develop related internet software, and combine with environmental education, restoration, observation and experiments to realize various sustainable development strategies and activities through diverse action plans (for example: school policy development, space management and sustainable development education program planning).

Being a local educational leader, the school shall be responsible and contributive to the region. Hence, based on the concept of "being a leader", the students from different departments of Chinese Culture University participate in the activities held by the communities, secondary and elementary schools nearby, to educate and help people to make the campus a center of sustainable development in the surrounding.

Based on this strategy, Chinese Culture University assists the neighboring communities to promote the concept of sustainable development, for example:

- Highlight the ecological and cultural diversity.
- Establish local partnership (strategic alliance with Yangmingshan National Park).
- Animate local green economy opportunity (help and assist communities next to Yangmingshan to participate in the competition of "The International Awards for Livable Communities").
- Involve in service learning system, and cooperate with volunteer organizations in certain activities (assist

"Yangmingshan Home for Disabled" to develop art and gardening psychotherapy).

- Connect international concepts and global environmental issues with Yangmingshan local culture (e.g.: organize international planning and design workshop and international charity activities), to improve the achievement of Yangmingshan sustainable development education network.

#### Fulfillment or Vision

Chinese Culture University has limited lands, and is confronting the impact of low birth rate in superior education, thus there might be conflicts and competition between different departments. Therefore, the main issue of the school is how to integrate the resources and forces, and use them in local areas to improve its soft powers. The role plays the Chinese Culture University shall not be limited in individual campus, but to become the new center of the region and local communities.

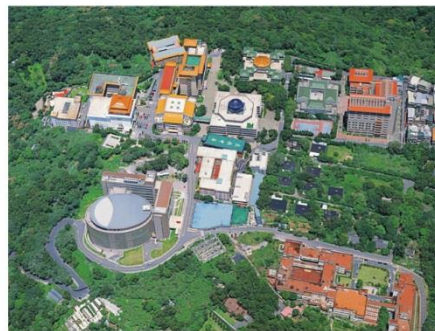


Image : Barrier-free campus.  
(Photo by Chinese Culture University)



## Yong-Fu elementary school in Daxi village, Taoyuan County

### Brief introduction

The surface of Yong-Fu elementary is nearly 3 hectare. The school is surrounded by mountains and trees, thus the main issue here is how to coexist with the Nature. On May 22, 2004, the appearance of collard scops owls, like the angel of peace delegated by the Nature, inspired the school, and connected the school with local habitants in emotions, time and space.

The observation the growth of collard scops owls has enlightened the holistic education concept of the school, which is practiced in the "Owl educational diagrams", covering the ecology, art, mathematical sciences, languages, character education and reading. Based on it, the education programs are developed.

### Current status on sustainable development activities

Based on the concept of sustainable development trip, the school uses four main courses—create the environment, prepare the nutrition, try to fly and to explore the world, and capability review—to construct four main education themes, nine key programs, and thirty lessons. The objective is to help students to develop the characters of owls, such as concentrative, insightful, active and persistent. Through different materials and programs prepared and developed by teachers, emphasizing both the experience and the practice, to integrate these plans with academic programs and to design other potential programs through thematic, integrative and interactive pedagogic methods.

Concerning the performance of students:

- The achievement rate of these four themes and nine programs increases year after year, which means a favorable result.
- The school has participated in mountain cleaning activities, and the involvement of parents has planted the concept of eco protection in children's mind.
- They continue to do local ecological investigation, develop sustainable development activities and environmental education programs, and give lessons to schools and private organizations inside and outside of Taoyuan County, to demonstrate the fulfillment of Yong-Fu elementary school in sustainable and


environmental education.

- They integrate our plans with local cultures and sustainable environmental education programs, to plant the seed of local culture of Wutuku in children's mind.

### Fulfillment or Vision

Beside the "Owl School Strategic Alliance program", in future, they will improve the connection with other schools and communities. They will develop a local specific sustainable school, and make children work out and manage the programs, introduce to the communities and public the ecology and stories of each sites in Yong-Fu elementary school, to make the school a place where children can develop their talents and make ecological trips. Furthermore, they will extend our programs to places outside of our campus, and improve the capability and knowledge of our teachers and employees in sustainable development and environmental education, in order to help students, parents and people of Taoyuan County to have a profound understanding of local ecology and cultures. They will continue the sustainable development activities, environmental education programs, training courses and promotion events, to share our experiences with others. They will save energy and reduce carbon emissions in our daily life to protect and cherish our environment.



 Image : Diverse learning programs help children to have a wonderful childhood. (Photo by Yong-Fu elementary)

## Chapter 3

# Annual Working Group

### Rui-Gan elementary school in Rui-Fang district, New Taipei City Brief introduction

#### Brief introduction

In 1998, Rui-Gan elementary school established the first ecological village in the campus, and there were already 15 kinds of frogs, 2 types of toads, more than 60 sorts of butterflies, dragonflies and fireflies were found here thanks to the rich environmental resources. Thus, tree frog, butterfly and firefly were called the three treasures of Rui-Gan. Every year, the school will hold ecological courses guided by experts, develop integrated ecological programs about frogs, conduct educational programs concerning the field, mountains, bushes, wetland and oceans, organize events of frogs, insects, butterflies and fireflies, and help people to discover the mountains in Rui-Fang. These activities attract many students inside and outside of the school and habitants to discover the ecology. The famous stage of the school in form of tree frog brings the name of "frog school" to it.

#### Current status on sustainable development activities

Rui-Gan elementary school has taken many actions to promote sustainable development:

- Make the campus a diverse ecological space. Replace the cement wall by hedge, and use green architectures to survive together with the environment.
- Establish the rain recycle facilities and systems in the whole campus to supply water for the toilettes and the 1st ecological village in the campus.
- Encourage students and teachers to use recyclable tableware, and forbid the usage of disposable tableware in the campus.
- Recycle the resources and reduce the volume of garbage. The whole school uses one big garbage bag every week, which was rated "excellent" by the Environmental Protection Department of New Taipei city.
- Encourage students to have environmental friendly handicrafts and toys.
- Review the result of sustainable environmental education, complete and review the sustainable development actions, thus the performance of sustainable environmental education of Rui-Gan elementary school improves each and every year.

Also, the school contributed in below events:

- Work with the communities to organize Double Ninth festival activities to honor the elderly.
- Organize mountain climbing tour and promote family education concept.
- Help to supply meals to elderly in Gang-Ping-Li, and assist the recycling in the community.
- Make a file for students in needs, and offer them assistances in living and study, such as free tuition, free lunch, free extension classes, free after school associations and free tutor services.
- Cooperate with the communities to take care of elderly, and offer scholarship to students of the community.
- Help students and people of the communities to have positive experiences by participating in the activities held by the associations or communities.

#### Fulfillment or Vision

The ecology is the hometown of our spirit, and the wild animals and plants are the aborigines there. The school starts from the ecology in the campus, and make the ecological village an example to above concept. Through sustainable development, it creates a living environment where the school and people in the community can live together. In future, they will keep on integrating the communities with the other 6 schools nearby Rui-Fang Mountains, to develop Rui-Fang mountains discovery programs and Rui-Fang mountains ecological trips, to make Rui-Fang village an education center of sustainable development.



Image : the tree frog stage which combines with local characteristics. (Photo by Rui-Gan elementary school)



## Taiwan Semiconductor Manufacturing Company Limited (Plant 12) Brief introduction


### Brief introduction

Taiwan Semiconductor Manufacturing Company Limited (TSMC) was established in 1987, is the first and largest professional semiconductor manufacturer in the world. The chairman Mr. Morris Chang once mentioned: "TSMC believes that sustainable development, morality and integrity are key matters of the continuous growth of a company. These characters not only help us to fulfill our social responsibility, but also to win our customers' trust and reinforce our employees' recognition toward our company, and help to create a better social and natural environment. Among the top international enterprises, TSMC was again named "Semiconductors and Semiconductor Equipment Industry Group Leader" by the "Dow Jones Sustainability Indices (DJSI). They are strongly inspired by this recognition, which incites us to make further promotion about sustainable development in our company."

### Current status on sustainable development activities

Plant 12 is the first 12-inch wafer factory of TSMC. This plant imported the concept of green building, and has won 5 awards of "Leadership in Energy and Environmental Design "(LEED) from U.S. Green Building Council, and 5 EEWB awards from Taiwan Green Building Council, and it is also the first semiconductor plant which has won the LEED Platinum Certification, environmental protection and so on.



 Image : The retaining wall built with ecological engineering method. (Photo by TSMC)

In order to carry out the environmental information disclosure of our products, they established QC 080000 Hazardous Substance Management System, to ensure that our products meet the requirement of international standards and our customers' demands concerning hazardous substances. They unselfishly disclose the keys of our success, and submit to the government's policies to organize various activities. At the same time, they offer trainings on water and electricity conservation technologies in industries, and act as the bridge between industries and the authority.

### Fulfillment or Vision

Being the largest semiconductor manufacturing company, TSMC was named "Semiconductors and Semiconductor Equipment Industry Group Leader" by the "Dow Jones Sustainability Indices (DJSI) in 2013 and 2014. In 2014, TSMC won the first prize of "Corporate Social Responsibility Award" from the Common Wealthy Magazine. TSMC understands that the more powerful the company is, the more influence and responsibility it has toward the society. TSMC hopes to set up a good example to the society by its performance, and become a support to the public.

The objective of TSMC's environmental protection policy is to "achieve the targets of environmental sustainable development, and be a global example company in environmental protection", at the same time, they will "submit to regulations, improve the usage of resource, prevent the pollutions, manage the environmental risks, promote the concept of environmental protection, build a green supply chain and fulfill our social responsibility". In future, they will keep our philosophy to work hard to improve and achieve our goals in three aspects-environmental protection, economic growth and social responsibility.



# 3 Chapter 3

## Annual Working Group

### Innolux Corporation

#### Brief introduction

Innolux Corporation, a TFT-LCD panel supplier, is dedicated in the research and development of TFT-LCD panel manufacturing technology and process, and committed to enhancing life's visual pleasures and to developing aesthetically designed display products. The company believes that besides the profits, the source of live of a sustainable company is the characters. Therefore, the company remains humble and realistic, and makes every effort to be an excellent and honest company.

#### Current status on sustainable development activities

Innolux Corporation contributes a lot in sustainable development activities, covering three aspects-society, economy and environment protection. For example, they established CSR (Corporate Social Responsibility) department and CSR committee, organized "CSR regulation management system", reinforced the management of regulations, risks and commitment concerning CSR, and manage the risk of company by interior management system. They publish CSR report every year since 2008 and completely disclose relative information of our company. In economic aspect, they launched "65-inch Quad Full HD Slim Type and Narrow Bezel TV Module" and won the "Taiwan Excellence Gold Award" in 2013. Our automatic team won "National Industrial Innovation Award" by the "One Stop Shopping Service" concept. Furthermore, the company has successively won the "Award of International Trade" for 4 years.

Moreover, the company actively creates a friendly working environment, to bring benefices to employers and employees. For example, from May 2011 to 2012 the accession rate of the shortage of disabled employee allowance is 1.22%, which makes Innolux the number one in the industries. In 2014, the plants in Taiwan have recruited about 400 disabled employees. In 2009, they had a "Family Mart and Fund for Children and Families convenience store" in Zhu-Nan plant, and became an enterprise which cooperated with social welfare organizations. In 2013, they extended this partnership to Tainan plant, and had the Fund for Children and Families to operate the convenience store, and offered job opportunities to single mothers and teenagers in shelters.

#### Fulfillment or Vision

In future, the company will try to facilitate the co-existence and harmony between a "sustainable environment" and a "humanist society". Concerning the environment, with the concept of "L.O.V.E. World", they will carry out a green life, green production, green production chain and green ecology, to use our influence and power to focus on the general sustainable environment issues. Concerning the society, based on spirit of "S.M.I.L.E harmony", they will achieve the goals to make a safe, spiritual and physical balanced, social responsible, employee welfare oriented and friendly working environment, to improve the harmony and co-existence between human beings and the environment.



Image : "Beach clearing event-Go for environmental protection".  
(Photo by Innolux Corporation)



Image : Volunteers inspect the corals reefs underseas. (Photo by TEIA)

## Taiwan Environmental Information Association

### Brief introduction

Taiwan Environmental Information Association (TEIA) is a non-profit organization, and its main objective is to establish a harmonic relationship between human being and the Nature through the exchange of environmental information, the promotion of environment trust, the concerns about the environment, and the participate in relative activities. The association believes that with sufficient information and understanding, people can use their rationality to take concrete actions on this issue. The association devotes itself to emphasize the benefices of the actual and future generations, provide true and complete information, and offer creative and productive action plans to the public. It acts as the window of environmental information, to integrate the efforts and forces of different sources, and to speak for the environment.

### Current status on sustainable development activities

TEIA believes that only through the disclosure and generalization of information, with the participation of the public, that they can protect the environment and the Nature, improve the harmony between human being and the Nature, and achieve the goals of sustainable development.

The association has established firstly the Environmental Information Center in 2000, besides supporting the realization of e-newsletter, it also organized the foundation of a database of historical environmental events in Taiwan. There are more than 19,000 people visit the web site of Environmental Information Center (<http://e-info.org.tw>) every day, the highest record was 45,000 visitors in one day, and the web site tends to become the main global Chinese environmental information portal. Moreover, there are in total more than 100,000 subscribers of various types of environmental information e-newsletter, which makes the association an influential organization in the transmission of environmental information.

Furthermore, the association supports the operation of web sites, the web site set-up, and e-newsletter delivery for more than 50 private organizations. It also

participates in many web sites and database installation projects and relative research projects, and organizes relevant events and seminars, to make the environmental information exchange more popular and profound.

Environment trust is another objective of the association, because trust has always been the method to integrate the social forces in many countries, a powerful tool to conserve the natural and cultural assets. Recently, the political environment in Taiwan becomes mature, and the participation of the public becomes an important element in environmental protection and natural preservation. The association hopes to take advantage of this opportunity, to promote environment trust in certain events, such as the trust projects of Changkang villang in Taitong, Tongyuping and Xiyuping in Penghu, Yonglai in Yangmingshan, and Zhuoshui River northern shore wetland, and the white dolphins protection project, and also the trust of Nature Valley environmental education base in Xinchu commissioned in 2014. TEIA was established in 2000, an information and media explosion era, and an epoch of dilemma of developing material civilization or protecting of environmental resources. The association thinks it's the responsibility of all citizens to integrate environmental information, environmental education and environmental trust, in order to protect our precious forests, oceans and wetlands. This is also a key point to achieve the goals of sustainable development.

### Fulfillment or Vision

In future, TEIA will continue to increase the power of environmental information, to improve the public's environmental awareness, represent the value of lands, and create the connection between habitants and the lands. They will create the harmony between human beings and the Nature to improve the environmental awareness of citizens. Through the promotion of environmental information exchange and environment trust, they hope to encourage more people to pay attention to our environment and to participate in relative activities, and build a harmonic connection between human beings and the Nature.



# 3 Chapter 3

## Annual Working Group

### Taiwan Aboriginal Tribes Revitalization Foundation

#### Brief introduction

Taiwan Aboriginal Tribes Revitalization Foundation (TATRF) was established in May, 1999. The organization aims to:

- Help aborigines to develop business in culture, education and art relative domains through the practice of various plans and activities.
- Develop talented labor forces through tribal cultural and educational events.
- Promote the research, publication and promotion of Taiwan aboriginal culture studies.
- Improve international cultural exchanges and cooperation.
- Preserve the aboriginal cultures.

#### Current status on sustainable development activities

Currently the main work of the foundation is to cumulate tribal cultural education knowledge by promoting tribal culture relative actions, and to develop digital database (digital documentation) in order to document the customs, habits, culture, materials, tribes, language, craftsmanship and regulations of tribes, and share these information with public. They hope to provide a more convenient way to study aboriginal cultures, and to actively participate in tribal ecology and business development. They have been helping aboriginal farmers in Renai village in Nantou County since 2011 to develop organic farming, and introduced agricultural technology which benefits the ecology and farmers in tribes, to improve the development of tribal agriculture.

Also, by investigating the traditional tribal architectures and living space, depending on the traditional knowledge and memory of elders, through the field investigations, interviews and the participation of the tribes, they work with them to build up a traditional cultural living space which is recognized by the tribes. Through the realization of construction projects, they preserve the precious building skills, culture and knowledge, and pass them to future generations.

#### Fulfillment or Vision

In future, besides to maintain the digitalization of visible and invisible cultural assets of the tribes, which will facilitates the confirmation, filing, research, preservation, protection, promotion, heritage and revitalization of tribal cultures, the foundation will also fulfill the goal to pass on the aborigine's traditional cultures to tribes, to help the members to know about their history and the tribes again, so that they will have a stronger recognition of their origins and participate more actively in the public affairs of the tribes.

Moreover, to exactly preserve the aboriginal traditional craftsmanship, arts and cultures, they will use the digital technology to keep and pass on the tribal information. They will revitalize the tribal culture, unify the tribal members, promote local specialties, and create job opportunities to facilitate the economic and social development of the region. Also they have established a digital database to conserve relative information. Start from environmental protection, they integrate all resources, such as the ecology and characteristics of tribes and villages, covering local society, economics, culture, history, environment and ecology, to keep the durability of local cultures, and incite the youth to come back to their tribes, so that they can rediscover their cultures and pass the history to the next generation.



Image : Traditional events-annual festival.



## Forestry Bureau, Council of Agriculture Executive Yuan

(Set water terraces and wetland ecosystem restoration and conservation plan into action)

### Brief introduction

Forestry Bureau is the central authority promoting biological diversity, bearing the responsibility for conserving wildlife and their habitats. Besides designating wetlands with precious ecological value as various types of protected area to conserve wildlife and their habitats, in recent years, due to the conflict of environmental development and conservation, Forestry Bureau also positively considers the conservation of water terraces and other shallow mountain wetland ecosystem where near forest. Forestry Bureau makes efforts on preserving precious water terraces and ecological environment between with conservative value of ecology, landscape and culture, in order to properly protect and conserve the rare wetland species.

### Current status on sustainable development activities

For the general public, wetlands are considered as non-use value land, water terraces are gradually abandoned mostly due to old farmers' dying and inconsistent economic situation; but in fact, wetlands own multi-function of ecological conservation, economic production, water retention and flood suppression, stabilizing coast, tourism and recreation, research and education, and so on. When Forestry Bureau promotes ecology conservation work, they are often asked how to balance people's livelihood. Therefore, "Satoyama Initiative" was past by the general assembly of Convention of Biological Diversity, as the vision of realization of "harmony with nature".

Forestry Bureau also selected several "water terraces or wetland ecosystem" as trial cases. Initially, a team planned and executed the cases and led farmers to observe and implement, and then gradually let farmers lead to test and provide income. According to the description of Ba-ian residents, before the plan was implemented, tourists are rare. But right now, the plan is gradually getting people's attention, and households participate in farmer's market. The revenue differs about ten times. Thus, using the way of sustainable management to manage land and natural resources, in addition to balancing biodiversity conservation and sustainable resource usage, can improve farmers' livelihoods and quality of life more.

### Fulfillment or Vision

To achieve Aichi Biodiversity targets, the vision of "in harmony with nature," water terraces of Taiwan farmland ecosystem and related small drainages, low walls, and rural areas belong to the environment of agricultural biodiversity, traditional knowledge preservation and environmental development of rural communities discussed in "Satoyama Initiative." In addition to owning important function of detention basin, water conservation, and giving birth to an aquatic flora and fauna diversity, value of landscape, recreation and cultural heritage are also included. Forestry Bureau hopes to use this demonstration plan to promote agricultural reform in Taiwan and the way of sustainable use to manage land and natural resources conservation and reconstruct "social - ecological - production landscape" shaped by human interaction with nature to achieve the vision of biodiversity conservation and resource sustainable use.

Our country now has had four groups to join "The International Partnership for the Satoyama Initiative (IPSI)" to become a member. In fact, in the country, there are many farmers and groups who also implement the concept of "Satoyama Initiative." Forestry Bureau hopes they can take the lead role. In the future, more units and organizations will be integrated to jointly advocate or support eco-friendly farming methods, to create Taiwan's own "Satoyama Initiative," constructing knowledge exchange platform, providing academic research and practical experience, and aspiring the ability for those who are willing to participate in to accomplish biodiversity conservation, restoration and wise use, maintain ecosystem services and healthy islands, and promote the general welfare.



# 3 Chapter 3

## Annual Working Group

### Department of Information and Technology Education, Ministry of Education

(Campus network deployment and experimental plan for disaster prevention)

#### Brief introduction

Since 2011, Ministry of Education has promoted "Campus network deployment and experimental plan for disaster prevention." After four-year efforts, the counselee schools have turned from unfamiliarity and rejection to concept change now, so that disaster prevention education is no longer a "business." All the schools can systematically implement disaster prevention education and specific exercises; teachers and students are no longer strangers and fear for disasters, but more react without confused manners. Education itself is a long and difficult road, especially disaster prevention education is related to the safety of everyone. Ministry of Education will continue to expand and promote the campus disaster prevention plan and incorporate climate change to adapt issues of education, so that the concept of climate change and disaster prevention will be integrated into all levels of school teachers and students and the community in daily life, to deepen knowledge of teachers, students, and the public, improve disaster prevention ability, and thus create a safe sustainable home.

#### The current situation of promoting sustainable development

The target to promote "campus network deployment and experimental plan for disaster prevention" is to build disaster prevention campus, taking disasters identify, risk communication, disaster adaptation and self-help capacity as core concepts to educate teachers and students to own disaster prevention literacy and safety awareness, implement school disaster prevention and enhance campus security environment, build campus as bases for regional disaster prevention and community disaster stronghold, and construct an campus networks of effective disaster prevention. For this reason, in this project, the six major structures, "establishment of developing and supporting mechanisms, development and promotion programs, teacher training, experimental promotion, learning promotion, promotion effectiveness evaluation," are operated and continued by phases.

#### Promotion achievement or vision blueprint

From the global disaster prevention and education activities, "Disaster prevention starts from school," promoted by the United Nations International Strategy for Disaster Reduction Secretariat (UNISDR) on June 15, 2006, they can see that only through deepening the roots of education and training teachers and students the proper disaster prevention attitude, when disaster comes, teachers and students will have the right strain and minimize the damage. Looking to the future, Ministry of Education will continue through the implementation of the disaster prevention and relief education to build safe campus and then extend to the community to provide sustainable and secure environment.



Image : Vice President and kindergarten children did common sense for disaster advocacy.



## Taiwan Area National Freeway Bureau

(State Road eco-friendly environment restoration)

### Brief introduction

Since the construction of State Highway 1, National Freeway Bureau is deeply aware of the tremendous impact of construction causing a large area of excavation slope on ecology and landscape. To accelerate the restoration of the natural environment, eco-green way was adopted, the natural environment such as natural rain forests which can closure rain, conserve moisture, reduce topsoil erosion, reduce or block the wind, fire, diseases and other external pressures were shaped, which can reduce costs of expensive green conservation and also becomes a good green background for highway landscape. For years, repopulation has been successful with adjacent series with nearby forests. Under circumstances of increasing surrounding development, road greenbelt has become animal shelters, and both sides of the road have become an ecological corridor greenbelt.

### Current status on sustainable development activities

Since 2007, because National Geographic Channel filmed crow butterflies, it highlighted the problem of road mortality. National Freeway Bureau has began to care about the impact of road on animals, providing the initiative that national highway makes way for Butterfly Trail and also led to the passion of ecological engineering staff willing to work hard. They put aside our professional persist, face to face to communicate and learn with conservation experts, step by step to cheer each other for how to balance for the environmentally friendly, or to make way for animals to go home safely. When monitor screens appear animals leisurely pass through, they shouted cheerfully, "we made it!"

National Freeway Bureau cooperated with the National Council for Sustainable Development to execute biodiversity group action plan, strategic projects of "reducing change and deterioration for habitat loss and land use, as well as non-sustainable use of water resources," across the original action plan, integration of biodiversity and other related work to launch a series of "State Road eco-friendly environment repopulation" plan, jointly promoted by a professional ecology team and Bureau's working group. Making use of roll

management and management of immediate research feedback shows action force. The important strategy includes formulating State Road sustainable development strategies, designating State Road ecologically sensitive mileage cum hierarchical management approach, building basic ecology database, deteriorating environmental restoration, preserving biodiversity evidence, making State Road slope greenbelt become shallow mountain plant species source database, combining civil forces to create habitat and so on.

### Promotion achievement or vision blueprint

Taiwan's narrow lands and dense population making high pressure on biodiversity conservation; therefore, there will be many spaces worthy of our continuing efforts in the future. Given the rich and unique ecological resources surrounding state highway, in the hope to provide passers fast, comfortable and safe roads, but also to provide security crossing roads for animals to forage and breed. State Road is not only bring people to the convenience of transportation, creating beautiful life for human, it should also provide animals and plants which live together with a safe shelter. Road sustainable management provides a friendly environment, from new construction, implement to conservation, road life cycle is carried out. National Freeway Bureau will enhance sustainable connotation for Taiwan transportation with times, continuing merging major national construction with environmental ecology, creating socio-economy, and making efforts for shallow mountain biodiversity conservation, hoping for the community to participate in cooperation to let State Road greenbelt become shallow mountain conservation corridors.



Image : Multifunctional across bridge of Tung-Shiau No. 1 and Taiwan hare and tigers using the channel.



# 3

## Chapter 3 Annual Working Group

### Council of Indigenous People, Executive Yuan

(Indigenous tribes vitality plan)

#### Brief introduction

Through implementation of indigenous tribes vitality plan, Council of Indigenous People makes more dreams of aboriginal tribes come true and also allows more young people to be willing to return to the tribal for services. These are cultural heritage and development forces of aboriginal tribes. To continue past experience, tribe sustainable development is set as the goal to continually help each tribe to find the most suitable development model in their own culture, not only to achieve development goals, but also to lay the autonomy foundation for future aboriginal tribes.

#### The current situation of promoting sustainable development

Since the promotion of this project, started from aboriginal traditional culture, knowledge and values, aboriginal tribal culture promotion, industrial development, and environmental construction are carried out. In the 250 tribes which has promoted related energy tribe plans, above 30% tribes is still promoting tribe building work, among which, Tanayiku tribe, located in Alishan Township, Chiayi County, has received Presidential Yushan Award; Piyaway tribe, located in Fusing Township, Taoyuan County, has become non partition highlights community of Tourism Bureau; Alang Tongan tribe, located in Nantou County, got annual National Sustainability Award in 2014. There are more than 50 percent of the tribes continuing participation of rural regeneration plan of Soil and Water Conservation Bureau. It can be seen that this project really can help start the dreams of sustainable development for aboriginal tribes.

Through investment of full-time staff, the chances for aboriginal youth to return home for services are not only provided, the establishment of tribal conferencing platform also allows tribe building not only a proposal of the team itself, but public affairs of tribes. Then through accompaniment, counseling and assistance of professional counseling team commissioned by Council of Indigenous People, tribes are finding their own development direction step by step and gradually establishing a foundation for sustainable development of the tribe. Meanwhile, since 2014, Council of Indigenous

People has counseled each tribe to build autonomic website. Until now, 29 autonomic websites have been completed by tribes, and they are also further results of promoting tribal self-development.

#### Promotion achievement or vision blueprint

To promote the sustainable development of tribes, since 2006, Council of Indigenous People has promoted the related plans for aboriginal tribe building. Tribal collective force is used to be in response to tribe plight, gradually reducing tribal dependence on government or external resources; through sound tribal organizations, the foundation of indigenous autonomy is established. Meanwhile, tribal traditional culture is re-promoted, a variety of resources are combined, tribal economic sectors are developed, employment opportunities are promoted. Council of Indigenous People approved the local government to subsidize tribes to handle indigenous tribal energy plan and commissioned a professional team to do coaching and training. Most importantly, through the core spirit of tribal energy plan, the tribal council decided tribal reconstruction and development direction, so that the tribe can make out of their own way that is a part of tribal culture and sustainable economic development.



 Image : Tribal energy plan of Council of Indigenous People, in-depth travel.





# 4 Words from Our Members

## Institute of Food Science and Technology, National Taiwan University

Sun, Lucy - Lifetime Distinguished Professor

In recent years, many food safety scandals have caused widespread public concern regarding food safety. Food safety has an impact on the individual's right to life, and for this reason, the government's laws and regulations concerning food safety are strict. For example, ingredients in food products must be fresh and not recycled. With increased public awareness of food safety, we must now strive for a greater recognition of the relationship between our diet and sustainable development. In this interview, newly admitted member of the Commission on Sustainable Development Professor Sun Lucy calls on the people of Taiwan to make small changes to their diet and pay attention to food safety in order to reach the goal of sustainable development.

### Strengthen food safety in Taiwan by establishing a source management system and product traceability regulations

In the past, food safety management has been mainly undertaken by downstream manufacturers. In other words, most importance has been attached to food safety management at the first line of contact between food products and consumers (B to C). However, there are fewer regulations in place concerning the connection between upstream manufacturers and the actual production of food (B to B). The food safety scandals of the past few years all originated from the upstream manufacturers of raw materials and ingredients, and their effects were widespread. For this reason, the government intends to establish a registration system for suppliers of raw materials and ingredients. This is a step in the right direction, and should be applauded.

However, it would be impossible for the government to directly manage and control each one of the many raw materials that go into food products. Therefore, instead of getting involved in management, the best method would be for the government to establish a set of regulations, and allow manufacturers to manage themselves. Through regular random inspections, the government would be able to guarantee food safety. With the aforementioned registration system, once these regulations have been established, when purchasing raw materials and ingredients, mid- and downstream manufacturers can check whether or not the ingredient in question has been registered online.

### The first step in establishing sustainable development is carbon footprint labeling on food products

The U.S. and many European countries have begun labeling products with information about carbon dioxide emissions. Taiwan operates similar carbon dioxide footprint labeling systems for electrical equipment and gasoline, but not for food products. I believe that carbon dioxide emission labels on food products would have a significant impact on Taiwanese consumers' awareness of food safety and diet. Especially given that Taiwan's grain self-sufficiency rate is only 33%, with almost 70% of the grain and other food coming from abroad, when it comes to food, our notion of sustainability should focus on green consumption. This means encouraging people to eat locally sourced food, and stimulating domestic production and cultivation, in order to increase the proportion of green transportation and green purchasing, and reduce energy consumption and carbon dioxide emissions.





As well as encouraging green consumption, the government should encourage citizens to eat more white meat (chicken, pork, and fish), more fruit and vegetables, more cereals and grains, and less red meat (beef and lamb). This kind of diet not only benefits the health of the individual, it is also more environmentally friendly. Producing one portion of red meat creates more than four times more carbon dioxide emissions than producing one portion of white meat. Furthermore, the environmental impact of red meat is even greater in Taiwan, since almost all of the country's red meat is imported. For this reason, Committee Member Sun recommends that people prepare meals without meat, or with white meat, on a regular basis (once a week, say). By gradually changing our dietary habits in this way, we can enjoy a more balanced diet while simultaneously reducing carbon dioxide emissions.

### The progress of food technology and grain security

Taiwan is surrounded by the ocean, and enjoys correspondingly abundant fishery resources. With the influence of global population growth, the deep-sea fishing industry has become subject to limitations. The government has begun to promote near-shore fish farming, and with improved technology, considerable achievements have been made in the development of this industry. Moreover, many Taiwanese people harbor incorrect notions about genetically modified (GM) food products, which we should strive to expel. GM food products were developed chiefly in order to solve the problems caused by plant diseases and pesticides, and in order to increase yields. GM crops are also both drought-resistant and heat-resistant. With an ever-increasing population, GM crops are necessary to ensure global food security by 2050.

In the age of the Internet and advanced information technology today, different interpretations of food safety and information about food products have proliferated, and erroneous assumptions about food safety (particularly with regards to oil) have accumulated. The government and industry experts have an obligation to provide the public with correct information, and should not allow misinformation to circulate unchecked. For example, we should have no doubt whatsoever about the fact that GM food products undergo strict examination, experimentation, and analysis before they can be sold. Among the public, however, there is a widespread belief that organic products are superior to GM products, despite the fact that with current technology, organic yields are both more costly to produce, and too small to meet the needs of the entire populace.

### "There's no such thing as a free lunch." This also applies to food safety

It is important that Taiwanese people have a sound understanding of food safety. The idea that there is no such thing as a healthy, delicious, and cheap product also applies to food safety. For many products, absolute safety is impossible; demanding very high standards or zero tolerance is unrealistic and, in any case, the human body possesses its own toxin-expelling mechanism. Changing dietary habits and stagnant wages have not stopped people from desiring delicious food. The recent food safety scandals have been caused by producers' attempting to satisfy consumers' tastes while keeping costs low. Therefore, I urge Taiwanese people to put their health first, and return to the fundamentals of food: by producing and consuming local food, as well as preparing simple meals, we can restore the safety of our food, and slowly attain our goal of sustainable development.



# 4 Words from Our Members

## Business Council for Sustainable Development of Taiwan

Lee, Tongliang - Chairman

As time goes on, the world increasingly faces problems caused by excessive development, climate change, and weak corporate governance, including a widening wealth gap, an oil crisis, a grain crisis, and water scarcity. Combined, these global crises exert a critical influence on our lives, worsening problems such as unemployment, poverty, and economic and social unrest. Since industrial growth is related to economic development and entails the consumption of natural resources and environmental protection, our industrial development strategy should consider both economic and environmental factors, and thereby pursue a balance between economic prosperity and environmental protection.

### The meaning of corporate social responsibility

Corporate social responsibility (CSR) is an ethical theory or a value system that chiefly refers to behavior by which businesses contribute to society. Underpinned by the idea of sustainable development, it suggests that businesses should be responsible to all stakeholders and not just their shareholders. Currently, there is no clear consensus on the definition of corporate social responsibility. Among the various definitions, a relatively formal one was set forth by the World Business Council for Sustainable Development (WBCSD) in September 1998. At a conference held in The Netherlands, 60 business and non-business participants together proposed the following definition: Corporate social responsibility is the continuing commitment by business to contribute to economic development, in accordance with ethical standards, while improving the quality of life of the workforce and their families as well as of the community and society at large.

### Actively investing in sustainable development

The Business Council for Sustainable Development of Taiwan is a global network partner of WBCSD. Its purpose is to advocate for a sustainable development model that promotes both economic growth and environmental protection. In so doing, the group hopes to integrate the goals of a low-carbon lifestyle, a healthy society, and sustainable environmental protection. By going out into society and leading all members of the community to participate

the group aims to promote a healthy, happy, and low-carbon lifestyle.

A committee member of the Sustainable Development Commission, Lee Tongliang is the current chairman of the Business Council for Sustainable Development of Taiwan. For a long time he has worked to promote ideas of sustainable development and social responsibility in business. In 2010, with the advocacy of Chairman Li, the group launched the One Movement Together campaign and associated activities, calling on businesses and organizations for support and cooperation, and encouraging every member of society to change one thing in their lives to help create a healthy and low-carbon lifestyle. This year, in 2014, following the achievements of 2013's Light Up Our Community Together project, we will once again collaborate with the Taipei City branch of the China Youth Corps on the Light Up Our Community Together campaign. This year's activities will focus on five main areas: spreading community art and culture, supporting community volunteer services, supporting youth volunteer services, supplementing environmental education for disadvantaged students, and encouraging community health campaigns. At the same time, it will enlarge the scope of action for community groups. As well as Taipei City, we will hold activities in New Taipei City, Taoyuan County, and Taidong County.

### Transforming the economic model

encouraging individual action as a starting point, we advocate the transformation of the economic model on which our lifestyles depend on. In 2008, the United Nations proposed the Green New Deal, in an attempt to encourage countries around the world to transform their





Economies into green or low-carbon economies. In the process of transforming into a green economy, three important elements must be closely integrated. Firstly, the government must create a conducive policy environment. Secondly, industry must focus on innovative research and development. Thirdly, the financial sector and the capital market must pursue responsible investment and establish the long and short-term investments required for the emerging green economy. It is clear that on the road towards a green economy, businesses must play a critical role.

Regardless whether undertaken by government or business, when it comes to developing a green or low-carbon economy, there must be systematic thinking. More specifically, the turning point in the development of the country or individual business should be considered from the perspective of the value chain. Looking from Taiwan's past experience of economic development, we believe that as a part of the 21st Century's trend of green economic revolution, Taiwan has established a good foundation for the knowledge economy. However, it still lacks a set of concrete, explicit, sturdy, clearly stratified, and comprehensive policy measures. In the future, we look forward to the development of green industries, which will certainly create prosperous and sustainable development in Taiwan. Below are Mr. Li's proposed ideas for sustainable development in business:

1. Pressure on environmental and energy resources as well as from climate change are directly spurring

a revolution in energy technology and are indirectly promoting innovation in many other Industries. Countries around the world are gaining a new and exciting awareness of low-carbon and green technology.

2. In an age of continually rising energy and natural resource prices, and with the necessary trend of curbing greenhouse gases, electronic products are being developed that consume less energy and require lower standby power. The improvement of such products and the development of new ones will have an impact on the market, and open up new areas for development and competition.

3. Combining the design concepts of energy technology, low-consumption electronic products, and green building materials, green construction has already become the objective for new building technology and management. Taiwan, of course, cannot ignore the building industry's integration of green *intelligence* with technology, and the huge commercial opportunities contained within.

4. Businesses should produce transparent, accurate, and third party-verified sustainability reports (also known as corporate social responsibility reports). This is key to accelerating the achievement of sustainable development in business.

5. In addition to providing effective economic incentives and regulations, in order to create an environment that actively encourages innovation and help businesses perform competitively in green industries, the government must be sensitive to discern and respond to changes in the external environment and provide more comprehensive information more quickly.





# 4 Words from Our Members

## Institute of Economics, Academia Sinica

Shaw, Daigee - Research Fellow

In the 1980s, environmental issues received continuous attention from many countries, and sustainable development gradually became a focus. In 1993, the United Nations established the United Nations Commission on Sustainable Development to direct, supervise, and assist countries in promoting sustainable development. In 1997, Taiwan established National Council for Sustainable Development within the Executive Yuan (hereafter referred to as the Sustainability Council). Subsequently, in November 2002, the Legislative Yuan passed the Basic Environment Act, which granted legal status to the Sustainability Council, making it a statutory body. However, despite increased awareness of environmental issues across Taiwan, excessive importance is still attached to economic development. Therefore, whether or not the country is taking a healthy road to sustainable development still awaits further study. In this special report, Shaw Daigee, committee member of the Sustainability Council, hopes to provide the Sustainability Council with guidance on future policymaking:

### Global Sustainable Development Still Has a Long Way To Go

With the gradual onset of global warming and extreme weather, the UN and countries around the world have produced policy recommendations and action plans for sustainable development, particularly in the areas of energy saving and carbon reduction. The 2007 Nobel Peace Prize was awarded to the UN's Intergovernmental Panel on Climate Change (IPCC) and the former U.S. vice president Al Gore, in recognition of their efforts to awaken people around the world to the importance of sustainable development. As for Taiwan, one of the four award categories established by the Tang Prize Foundation is dedicated to the field of sustainable development. This year, in the first ever list of award recipients, the Prize in Sustainable Development was awarded to the Godmother of Sustainable Development, Dr. Gro Harlem Brundtland. This is further evidence to suggest that sustainable development is receiving a high degree of international recognition.

If the current development model persists, economies will continue to grow, and populations will continue to increase, but - unfortunately - the environment will bear a correspondingly heavier load. Taking rising temperat-

ures a phenomenon that is easily grasped by Most people as an example: by 2050 global temperatures are predicted to rise between three and six degrees, taking the earth closer to an irreversible tipping point. We have already reached a stage in which we must reevaluate the methods and policies by which we promote sustainable development.

### Reevaluating the Objectives and Orientation of Sustainable Development

Taiwan's current sustainable development policies operate on a tripartite model, simultaneously considering environmental, economic, and social factors, in the hope that each will complement the others. However, in the past decade, in economic, environmental, and social development, Taiwan has gradually begun to face a bottleneck. We should reevaluate the core significance of the definition of sustainable development. Put simply, sustainable development refers to development in the present that does not damage the rights and interests of future generations. From this, we can ascertain that sustainable development is primarily concerned with intergenerational fairness and justice. The economic benefits of the aforementioned tripartite sustainable development model are mostly enjoyed by the present population, but the costs of environmental pollution and exhaustion of natural resources will be borne by later generations. That is to say nothing of the social problems created by an uneven distribution of the fruits of economic growth.

Recent efforts at sustainable development by both the government and civil groups have involved many policies and action plans. However, policymakers have failed to consider whether or not each policy or objective conflicts with others. Both the connections between each policy or plan and the correct sequence in which issues should be tackled and should be comprehensively planned. In order to intergenerational fairness and justice in sustainable development, we should amend the misleading notion of tripartite development. Sustainable development should be planned according to the fundamental principle of not damaging the rights and interests of future generations. In other words, our sustainable development model should be structured in concentric circles, not as a

triangle. In this model, the largest circle represents our limited environmental resources, the smaller circle within it represents social justice, and the innermost circle represents economic development. Only this type of developmental model can deliver intergenerational fairness and justice.

### Establishing a Platform for Exchange Among Members of the Sustainability Council

Currently, the Sustainability Council is composed of members from government departments, academia, and civil groups. The main task at the annual council meeting is to pass resolutions on reports submitted by each working group. An overall survey of past council composition reveals that the members came from many different fields, consistent with the objective of diversity. However, on account of their diverse backgrounds, each member has a different understanding of sustainable development, making it difficult to build a consensus. The overall work of the council is unavoidably constrained by the subjective views of its members, based on their particular field of expertise. Each year, the newly appointed members also need to learn from the experiences of their predecessors. Therefore, I recommend the establishment of a platform for regular exchange among members of the Council for Sustainable Development, or for discussions among old and new members. This will help old members pass on experience to new ones, and make the work of promoting sustainable development run more smoothly.

### Establishing a Platform for Exchange Among Members of the Sustainability Council

We should restore the original core meaning of sustainable development by ensuring that future government policies and development plans will consider how to provide future generations with enough resources and do not plunder their resources. We must preserve resources and opportunities for the next generation, and not burden them with waste and debt. Finally, to prevent intergenerational fairness and justice from becoming a mere slogan, it should be made into a concrete system. Such a system should be modeled after the Gender Equality in Employment Act, which protects women's rights. A comprehensive mechanism for promoting the rights and interests of future generations should be established, such as a Council on Future Generations in both the Executive Yuan and Legislative Yuan. This council would evaluate whether or not policies and developmental plans indeed deliver intergenerational justice and fairness, and their impact on sustainable development, and guard against the prioritizing of the present population's economic benefits. Only this way can we achieve real sustainable development.

