

103年
國家永續發展年報



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





目錄

前言

第一章 國家永續發展委員會年度工作概況

第二章 永續會各工作分組年度工作簡介

氣候變遷與節能減碳分組
國土資源分組
生物多樣性分組
能源與生產分組
交通與生活分組
科技與評估分組
城鄉發展分組
健康與福祉分組
教育與宣導分組

第三章 103年國家永續發展獎

教育永續發展獎
中國文化大學
桃園縣大溪鎮永福國民小學
新北市瑞芳區瑞柑國民小學
企業永續發展獎
台灣積體電路製造股份有限公司(十二廠)
群創光電股份有限公司
社團永續發展獎
社團法人台灣環境資訊協會
財團法人台灣原住民部落振興文教基金會
永續發展行動計畫獎
推動水梯田暨濕地生態系統復育及保育(行政院農業委員會林務局)
防災校園網絡建置與實驗計畫(教育部資訊及科技教育司)
國道生態友善環境復育(交通部臺灣區國道高速公路局)
原住民族部落活力計畫(原住民族委員會)

目錄

第四章 永續會民間委員專訪

附錄一

附錄二

前言

台灣因地狹人稠、自然資源有限、天然災害頻繁、國際地位特殊等因素，致對永續發展的追求，比其他國家更有迫切性。為因應全球永續發展趨勢，行政院於86年8月以台八十六環字第33137號函核定成立「行政院國家永續發展委員會」(以下簡稱永續會)；91年12月總統頒布實施「環境基本法」，該法第29條賦予永續會法定位階。

本年報彙整永續會及民間103年推動永續發展的重要成果，包括103年工作概況(第一章)、永續會各工作分組年度工作簡介(第二章)、103年國家永續發展獎(第三章)及永續會民間委員專訪(第四章)等。永續會組織架構及委員名單，詳列於年報附錄。

永續發展貴在共同參與，藉由「國家永續發展年報」之發行，期望國人及國際人士能更了解我國推動永續發展的過程及成果，並希望能藉此提升全民對永續發展的認知，進而共同參與國家的永續發展工作。

第一章

國家永續發展委員會年度工作概況

壹、召開永續發展會議

本年度行政院國家永續發展委員會（以下簡稱永續會）分別召開委員會議與工作會議，研商永續發展相關議題，會議概況及決議說明如下：

一、第26次委員會議

會議於103年8月6日下午在行政院第一會議室舉行，由永續會江主任委員宜樺主持，議程包括二項報告案：（一）「全國區域計畫」規劃；（二）「環境教育計畫」推動情形。

報告案（一）「全國區域計畫」之決議包括：

1. 尚未完成政策環境影響評估之石化、能源、砂石採取等三項目，請經濟部在半年內儘速完成政策環境影響評估後報院。
2. 於「國土計畫法（草案）」立法完成前，「全國區域計畫」為整合國土保育、海洋維護、農業發展及城鄉發展之重要政策，以引導我國國土有秩序地發展，防止人為過度開發對環境所造成的破壞，請內政部持續加強與立法院及民眾之溝通，俾使計畫落實推動執行，以及未來「國土計畫法」可以早日完成立法。

報告案（二）「環境教育」之決議如下：

1. 請秘書處會後將委員建議之「持續推動『優質戶外教育推動委員會』」意見提交本院蔣政務委員，並請其協調整合各部會資源，以有效推動「優質戶外教育推動委員會」相關事務。
2. 請環保署及各部會依環境教育法、國家環境教育綱領及國家環境教育行動方案落實推動本計畫，並強化政府跨部門及跨領域之合作，加強環境教育國際交流與合作。

二、第38次工作會議

會議於103年5月27日在國家發展委員會610會議室舉行，由永續會管執行長中閔主持，議程包括五項報告案：（一）「全國區域計畫」規劃；（二）「促進產業重視永續發展並發行永續報告書」規劃；（三）「環境教育計畫」推動情形；（四）「永續發展政策行銷推動專案」規劃；（五）「Rio+20大會產出文件之因應及本會委員會議決議之執行情形」報告。



行政院國家永續發展委員會 第26次委員會議

報告案（一）「全國區域計畫」之決議為：
：

1. 請內政部參照委員意見修正「全國區域計畫」相關內容，並加強本計畫各項資訊揭露。
2. 請內政部除與各地方政府溝通外，亦務必加強與民眾溝通，以利後續順利推動。
3. 有關委員所提成立海洋事務委員會之建議，屬政府組織改造議題，為行政院層級事務，本會將於適當時機反應委員意見。

報告案（二）「促進產業重視永續發展並發行永續報告書」之決議為：1. 請經濟部工業局於下次會議提出修正報告，若需其它部會協助，本會可協助召開相關會議。2. 目前政府推

動企業永續報告書之作法係採取自願性提出而無強制性，長期推動是否考慮立法強制推動，請經濟部工業局再研議。3. 在短中期推動上，請經濟部就企業永續報告書之正確性驗證機制、獎勵機制及政府可訂定之規範，提出未來推動規劃。

報告案（三）「環境教育計畫」、報告案（四）「永續發展政策行銷推動專案」與（五）「Rio+20大會產出文件之因應及本會委員會議決議之執行情形」等議案之決議，請環保署及各工作分組，將委員意見納入未來工作推動參考並持續辦理。





貳、永續發展政策行銷推廣

一、發行永續發展電子報

本項工作為「永續發展政策行銷推廣專案」重點工作之一，發行永續發展電子報之目的是：介紹國際永續發展趨勢與現況、我國永續發展推動情形、永續會推動情形、國內永續發展資訊及地方永續發展情形等。以第1期為例，電子報內容包括：聯合國永續發展大會(Rio+20)後續推動情形；國際永續發展相關資訊；本會及工作分組推動情形；國內永續發展相關資訊；地方永續發展推動資訊；及永續發展委員或專家專訪，電子報採雙月刊方式發行，自103年7月起發行。



網址：http://nsdn.epa.gov.tw/NCSD_EPAPER.htm

❶ 發行永續發展電子報

二、辦理永續發展公民論壇

本項工作為「永續發展政策行銷推廣專案」重點工作之一，為落實永續發展之全民共同參與，鼓勵民眾以行動落實永續，永續會與行政院環保署（以下簡稱環保署）於103年9月21日，在台北市國軍英雄館共同舉辦「永續發展公民論壇」，並進行網路直播，擴大民眾參與。

本次論壇共規劃十項討論議題，內容包括永續發展各面向，分別為氣候變遷與節能減碳、國土資源、生物多樣性、能源與生產、交通與生活、科技與評估、城鄉發展、健康與福祉、教育與宣導及綠色經濟等。本次會議藉由公民論壇交流平台，激盪出不同的想法與觀點，讓民眾對永續發展有正確的理解外，也可透過民眾與政府的交流溝通，使未來國家永續發展推動更加全面有效。



❷ 辦理永續發展公民論壇



辦理永續發展公民論壇

辦理永續發展公民論壇

三、舉辦國家永續發展標誌(LOGO)徵選活動

本活動係「永續發展政策行銷推廣規劃構想專案」重點工作之一，其目的在強化民眾對於行政院國家永續發展印象，藉由參賽者設計符合永續發展理念的標誌，型塑我國國家永續發展委員會推動永續發展的意象。永續發展委員會秘書處於本(103)年6月30日至8月15日止，辦理國家永續發展委員會標誌(LOGO)徵選活動，並於7月11日舉辦徵選說明會，開放對該項設計有興趣之民眾、公司或團體參加，本次活動共有77人投稿，114件作品，參與情況相當踴躍。

LOGO評選會議於10月20日邀集國家永續發展委員會委員會、於環保署4樓第1會議室召開，評審委員由永續發展委員會委員組成，當天共有12位民間委員出席。評審委員需從114件作品中選出最具有代表性的標誌，經各委員熱烈的討論之後，共計遴選出4項優秀得獎作品，分別為「齊心發展攜手未來」、「我們共同的未來」、「永續，我們共同的未來」以及「永續發展，生生不息」等4件作品，期望藉此活動達到宣導永續發展目標，喚起民眾共同參與永續發展工作。



國家永續發展標誌(LOGO)徵選活動



參、評量2013年永續發展指標系統

永續會自92年起，每年進行永續發展指標系統評量作業，以檢視國家永續發展推動成效。指標各主政機關於103年7月起至「台灣永續發展個別指標資訊系統」填寫數據資料，秘書處彙總計算後，於11月24日召開指標數據確認及檢討會議，並於12月下旬將「2013永續發展指標系統評量結果」公布於永續會全球資訊網站。



1 永續發展指標系統

肆、辦理年度國家永續發展獎評選及表揚

西元2002年聯合國「永續發展世界高峰會」通過「聯合國永續發展行動計畫」，鼓勵各國以行動落實人類的永續發展。永續會為順應全球永續發展趨勢，鼓勵國內各界參與永續發展行動，自93年起辦理「國家永續發展獎」評選作業，選拔各類永續發展推動績效卓著單位，藉由得獎單位的經驗分享，將永續發展擴展至社會各層面。「國家永續發展獎」舉辦的宗旨，係鼓勵全民以行動參與永續發展的工作。藉由經驗分享與學習，將永續發展精神深植於

社會層面，並落實於日常工作及生活中。

本(103)年度係舉辦第11次「國家永續發展獎」的選拔，評選過程經「書面初審」、「實地複審」及「決選」等3階段，分別自教育類、企業類、社團類及永續發展行動計畫等4大類，選出11個獲獎單位，於行政院大禮堂舉行頒獎典禮，由江宜樺院長親自頒獎，表揚永續發展績效推動卓著單位。永續發展獎獲獎單位之介紹，詳見本年報第三章。



1 永續發展獎

伍、執行永續發展行動計畫

永續會參加91年聯合國「永續發展世界高峰會」後，即著手研擬我國永續發展行動計畫，並於91年12月通過實施。我國在聯合國「永續發展世界高峰會」後3個多月，即完成永續發展行動計畫，與世界其他國家相較，係屬快速。嗣後永續發展行動計畫除每年做滾動式修正外，亦分別於95年、98年及102年進行較大

幅修正。

永續會各工作分組每半年填報其行動計畫執行情形，並送秘書處彙總，後續秘書處公布於永續會全球資訊網站，周知社會各界。永續發展行動計畫執行情形，詳閱永續會全球資訊網站。



The screenshot shows the homepage of the National Council for Sustainable Development Network. The main header is '行政院國家永續發展委員會全球資訊網' (National Council for Sustainable Development Network). The right side features a butterfly and a flower. The left sidebar has a '選單' (Menu) with links like '永續會介紹', '組織', '沿革', '設置要點', '委員介紹', '本會相關會議公報', '永續發展指標', '本會工作分組業務', '國家永續發展獎', '國家永續發展年報', '永續發展政策綱領', '永續發展行動計畫', '本會完成文件', '其他成果', '永續發展小百科', '國內外永續發展新聞', '意見信箱', and '回首頁'. 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 years from '103年上半年' down to '96年第1季'. Below the list is a link to the '永續發展行動計畫追蹤管考資訊系統網址'.

● 永續發展行動計畫



第二章 永續會各工作分組年度工作執行成果

節能減碳與氣候變遷分組

一、建構溫室氣體管理基礎

- (一) 環保署持續推動「溫室氣體減量法（草案）」立法工作，並通過95件先期專案減量額度申請，並核發減量額度約3734.6萬公噸 CO₂e，同意8件抵換專案註冊申請（預估計入期內減量成效為 269萬公噸CO₂e），並認可12項本土化新減量方法。
- (二) 落實溫室氣體認查驗管理制度，環保署累計認可 1家認證機構、10家查驗機構，並完成「產品與服務碳足跡查證技術指引」。完成「碳中和實施與宣告指引」並建置「碳中和登錄管理平台」，至102年底已累計輔導8案例達成碳中和。



二、整合政府部會作為(國發會、經濟部、交通部、科技部)

- (一) 依據「國家氣候變遷調適政策綱領」，國發會協調各部會研提 8大領域之行動方案，並經行政院103年5月22日核定「國家氣候變遷調適行動計畫(102-106年)」。
- (二) 經濟部能源局執行陽光屋頂百萬座政策推動，103年推動目標為210MWp，預期帶動國內模組、變流器等電力組件產業發展，創造產值210億以上及 2,100人就業機會。
- (三) 科技部於103 年1月1日推動第二期能源國家型科技計畫(NEP-II)，以生質能源、氢能技術、碳捕存技術 (CCS)、減碳淨煤技術、智慧電網與先進讀表、離岸風力發電、地熱發電等為主軸發展。

三、推動實質國際參與

環保署葉欣誠副署長率國內相關產官學研各界代表與專家，赴秘魯利馬參加 103年聯合國氣候變化綱要公約第20次締約國大會暨京都議定書第10次締約國會議(UNFCCC COP20/CMP10)」。

四、擴大公民參與

國發會為研擬「推動綠色經濟政策綱領」，於103 年3月28日於北部舉辦公民咖啡館會議，5月22、23、26日辦理中部、東部、南部大型公民座談會，徵求各界意見。

五、輔導產業低碳綠化

經濟部工業局推動產業節能減碳， 103年度參與經濟部溫室氣體自願減量協議之11行業計245家廠商，共執行1,088 件減量措施，總計二氧化氮減量105.6萬公噸；內政部建築研究所推動綠建築標章評定，103年度截至9月底通過 395案綠建築標章及候選綠建築證書，預估每年約可省電 9,407萬度、省水523萬噸及減碳5.37萬噸。

六、宣導綠色樂活，推動低碳運輸

- (一) 馬祖「南竿遊客中心」及阿里山「觸口遊客服務中心暨行政管理中心」已獲內政部分別頒發「綠建築標章」銀級及銅級認證。
- (二) 強制性車輛能源效率標示103 年度累計稽查600家以上車輛展示間、 3000輛以上車輛，落實廠商依規定張貼或檢附能源效率標示及標示的正確性，並促使廠商生產或進口高能源效率的汽車，降低車輛的整體燃料消耗與CO2排放。
- (三) 為推動我國低碳城市建設，評選出新北市、台中市、臺南市及宜蘭縣等 4 個城市，優先全面推動各項低碳措施。
- (四) 辦理 103 年地方環保機關推動節能減碳執行績效評比，透過良性競爭的方式，激勵地方共同推動本署減碳政策，並達成相關具體效益之目的。

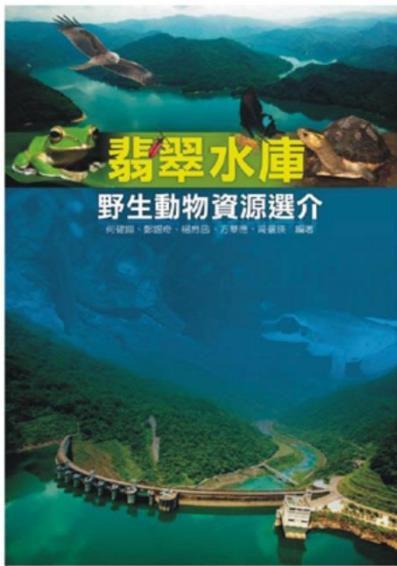


2 第二章 永續會各工作分組年度工作執行成果

國土資源分組

一、水資源開發、利用、管理及保育 (台北市翡翠水庫管理局、經濟部水利署、農田水利會)

(一) 翡管局101至102年委託執行「翡翠水庫生態資源調查」結果，已調查哺乳類、鳥類、兩棲類、爬蟲類、蝴蝶及螢火蟲類6類野生動物總計74科325種，涵蓋42種臺灣特有種、35種臺灣特有亞種以及35種保育類野生動物。



① 翡翠水庫野生動物資源選介

(二) 配合行政院指定之5大重要河川流域-淡水河、大甲溪、濁水溪、曾文溪及高屏溪辦理流域整體治理綱要計畫，其中淡水河、大甲溪、濁水溪及高屏溪部份均已報院核定，曾文溪部份已於103年9月15日經經濟部水資源審議委員會會前會議審議。

(三) 邀請民生(自來水公司)及工業需水單位等相關單位與農田水利會協商調用水量之可行性及所需之調用水量，預估截至103年9月止調度農業灌溉節餘用水量約2.07億噸。

二、地下水資源之保育與管理 (行政院環保署、農委會漁業署、經濟部水利署)

(一) 經濟部水利署補助地下水管制區之地方政府依「違法水井處置策略」執行違法水井處置填塞，103年度9月底共填塞違法水井469口，輔導合法水井填塞計3口。

(二) 完成雲林縣下崙養殖漁業生產區海水統籌供應系統正常運作中(供水面積 122 公頃)；推廣循環水養殖技術，輔導13.8 公頃養殖產業朝向節水發展，預估每年可節水3.4萬噸。



(三) 103 年度辦理雲彰地區及屏東平原地區

地下水觀測站共 241 口地下水觀測井井體攝影檢測及約 55 口觀測井之井體清洗維護工作，並委託辦理宜蘭、花東、苗栗、台中地區約 330 口地下水觀測井井頂高程檢測。

(四) 截至 103 年 9 月底，監測結果低於地下水

污染監測標準的總比率為 92.3 % (包含新增測項總酚、氯鹽)，低於地下水污染管制標準比率為 100%。

三、海洋資源之永續經營

(內政部營建署)

(一) 永續海岸整體發展方案（第二期）業奉行政院 102 年 2 月 8 日核定，將持續監控海岸線變異點，即時處理因應，以維持自然海岸線比例不再降低，並回復海岸自然風貌。

(二) 103 年度核定補助 8 直轄市、縣(市) 11 項計畫，以整體規劃改善海岸景觀，促進海岸土地管理合理化，復育劣化海岸。

2 第二章 永續會各工作分組年度工作執行成果

四、國土規劃與管理（內政部營建署 、經濟部中央地質調查所、原住 民委員會）

- (一) 「國土計畫法（草案）」經內政部參酌各界意見重新研修條文草案，並召開座談會、公聽會、研商會及審查會後，於101年11月5日函送行政院審查，並完成全案6章41條文審查作業；於103年7月28日函送立法院審議。
- (二) 內政部於102年10月17日公告實施之「全國區域計畫」，已依土地資源條件、敏感程度等主觀及客觀因素劃設「環境

敏感地區第1級」及「環境敏感地區第2級」，並訂定其管制原則。

- (三) 全國地質敏感區規劃分5批完成全國地質敏感區之劃定、審議及公告（截至民國105年止）。
- (四) 成立山林守護隊巡守山林，促進原鄉部落居民在地就業機會175人，並協助公有原住民保留地超限利用地改正造林、撫育及管理等工作，目前共計完成原住民保留地超限利用地改正造林新植造林70公頃，撫育管理557公頃，山林巡查監測14,828公里。





五、國土保育（農委會水保局、經濟部水利署）

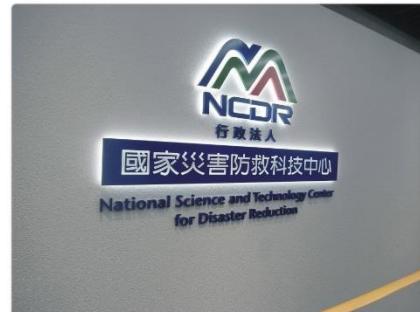
- (一) 本年度辦理 25 件崩塌地復育工程，103 年度已完成復育崩塌地面積約 10 公頃。
- (二) 完成 10 區土石流特定水土保持區劃定計畫草案，並檢討全國 159 處警戒分區土石流警戒基準值及檢討 159 處雨量站適宜性，共調整 21 個鄉鎮區之參考雨量站。
- (三) 針對全省山保條例所列之山坡地範圍，進行一年 6 次之衛星監測，並將結果交由各縣市政府進行現場調查，而每年針對衛星監測成果，隨機抽取 200 點，進行現況複查，複驗地方政府查報狀況及正確性。

六、推動濕地生態復育（內政部營建署）

- (一) 濕地保育法全文共計 8 章 42 條，相關配套辦法共計 10 項，刻正辦理子法立法作業，並於行政院訂定 104 年 2 月 2 日施行。
- (二) 103 年度「國家重要濕地保育計畫」透過相關部會分工合作，核定補助 17 個縣市政府執行 40 項計畫，並委託「濕地顧問團」進行各核定計畫訪視與輔導作業，計 40 處。

七、全面提升災害預警及防救能力 (國家災害防救科技中心、消防署)

- (一) 協助中央災害應變中心情資研判作業，於應變期間以輔助系統簡報模版製作情資研判綜整資訊，計有 18 縣市災害防救專業人員使用。
- (二) 推動「災害防救深耕第 2 期計畫」，於執行期間檢討縣市與鄉（鎮、市、區）之災害防救分工與運作機制、建置（更新）防災電子圖資及培育相關人員災害防救素養等工作，並充實災害應變中心設備。



第二章 永續會各工作分組年度工作執行成果

生物多樣性分組

一、陸域及海域生物多樣性可能的熱點進行調查及確認 (行政院農業委員會)

首次舉辦「臺灣新年數鳥嘉年華」完成 122 個樣區的鳥類調查，共記錄 292 種鳥類、180,954 隻個體，包括已知熱點及未知熱點，其中南澳地區的鳥類物種數高達 90 種。



「臺灣新年數鳥嘉年華」於內洞樣區調查冬季鳥類

二、2020 年前，至少將領海範圍內 20% 海域劃設為海洋保護區，並落實管理(農委會)

行政院 3 月 10 日院臺建字第 1030010925 號函核定澎湖南方四島海洋國家公園計畫，其面積為 35,473.33 公頃，我國海洋保護區海域面積合計約 30,935.27 平方公里，佔臺灣 12 處領海面積之 47.54%。

三、生物多樣性資訊交換機制與各類或各機構資料庫之建置與整合，並定期增修補充 (農委會、科技部)

由科技部與林務局補助中研院生物多樣性中心建置「臺灣生物多樣性資訊入口網 (TaiBIF)」、「臺灣物種名錄 (TaiCOL)」及「臺灣生命大百科 (TaiEOL)」以推動跨部會生物多樣性資料的蒐集與整合為目標。



「TaiBIF 資料提供者，以 TaiBOL、TaiCOL、TaiEOL 等資料庫間資料流動關係圖

四、建構國家生物種原庫，進行農、林、漁、牧、野生生物、微生物遺傳資源研究保育及利用 (農委會)

全年保存及繼代繁殖更新家蠶種原136個品系(種)2至4次，每個蠶期每品系繁殖蠶卵約60,000至100,000粒，全年繁殖蠶卵數量高達2,000萬粒以上。

五、完成陸域、濕地與海洋生物多樣性監測系統之規劃，包括監測地點與方式之確定(環保署)

依環保署公告之採樣及檢測標準方法，確定103年度執行河川(296點)、地下水(431點)、水庫(105點)、海灘(11處)及近岸海域(105點)等環境水體之水質監測系統之規劃。

六、入侵種生物防治 (農委會、環保署)

- (一) 農委會研擬新入侵生物緊急撲滅計畫，並聯合地方政府定期演習。並建立已入侵生物長期防治計畫，將入侵種造成之經濟損失及生態衝擊降至最小。
- (二) 督導直轄市及縣(市)環保機關依行政院農業委員會訂頒之紅火蟻標準作業程序，配合行政院農業委員會、國家紅火蟻防治中心指示辦理紅火蟻危害案件防治、監測與宣導工作。

七、推動人工濕地之建構，協助改善水文系統及水域生態品質 (經濟部水利署)

辦理「擬定國家重要濕地保育行動計畫」、「濕地棲地環境營造」、「濕地生態廊道建構及復育」、「海岸濕地防護」、「背景環境生物與社會長期調查研究及監測」、「社區參與濕地經營管理」、「教育推廣」等工作。

八、完成現有原住民族及地方社區傳統生物多樣性知識調查整理鑑識並建置資料庫，並與國際接軌 (原民會、科技部)

- (一) 原住民族委員會已建置「原住民族生物多樣性傳統知識資料庫管理系統」。預估截至103年12月底由專管中心審核「原住民族生物多樣性傳統知識」共計4,835筆資料。
- (二) 科技部補助屏東科技大學裴家騏教授執行計畫，研究探討如何運用原住民及社區保育區(ICCA)概念建立當地穿山甲族群長期保育的架構，以協助辨識穿山甲分佈熱點的土地權屬及利用型態，並訂定族群的保育策略。



2 第二章 永續會各工作分組年度工作執行成果

能源與生產分組

一、推動綠色工廠(經濟部工業局)

截至 103 年 10 月已核發 16 張綠色工廠標章標章及通過 45 家廠商清潔生產評估系統符合性判定，並陸續辦理審查中。獲證廠商相關綠建築及清潔生產推動作為合計每年可減碳 36 萬噸，節省成本達新台幣 18.9 億元。

二、輔導中小企業推動節能減碳 (經濟部能源局)

103 年度協助 100 家中小企業進行生產製程管理改善、溫室氣體盤查、產品碳足跡盤查或能源管理系統建置要求等節能減碳相關工作。完成中小企業綠色環保、節能減碳人員培訓，共計 500 人次，節能減碳觀念宣導計 8 萬人次以上。

三、推動「綠色電價制度」辦理情形 (經濟部能源局)

- (一) 於 7 月 1 日正式實施「經濟部自願性綠色電價制度試辦計畫」，103 年綠電附加費率為 1.06 元/度，可認購之總量上限為 3 億 1,000 萬度。
- (二) 為使綠電資訊透明化，經濟部能源局建置「綠電認購即時資訊網」。
- (三) 截至 10 月 29 日止，綠電認購量為 421 萬 9,500 度，認購戶數總計 484 戶；其中個人戶數為 301 戶，最大認購量為 1 萬 5,000 度，企業用戶為 183 戶，最大認購量總計 310 萬度。



103 年 6 月 30 日「經濟部自願性綠色電價制度試辦計畫實施記者會」

四、推動「建置澎湖低碳島專案計畫」 (經濟部、環保署)

- (一) 補助設置太陽光電系統 1.56MW、太陽能熱水器 1,800 平方公尺。
- (二) 設置 LED 路燈 5,309 盞、補助節能家電 12,028 臺 (9,079 臺節能冷氣機、2,949 臺節能電冰箱)、設置智慧電表 605 戶 (高壓用戶 105 戶及低壓用戶 500 戶)。
- (三) 環境綠化造林面積 150 公頃。
- (四) 漏水率降至 24.73%、雨水回收 2,500 噸、垃圾分選廠處理量每日達 50 噸。

- (五) 補助電動機車3,430輛(個人879輛，法人2,422輛及政府機關129輛)、充電柱612座、全面使用B2生質柴油。
- (六) 澎湖縣政府訂定「澎湖縣低碳建築設計準則」，並於102年6月1日起發布施行。

五、推動「陽光屋頂百萬座計畫」政策(經濟部能源局)

- (一) 為推動擴大內需，103年推動設置目標為210MW，預期帶動國內模組、變流器、支架、電纜及各項電力組件等產業發展，創造內需產值達新臺幣200億元以上。
- (二) 累計至103年底，太陽光電系統總設置量將突破600MW，年發電量可達7.5億度，減碳39.9萬公噸。
- (三) 推動普及設置陽光屋頂，累計推動12縣市辦理公有屋頂出租招標，另有3縣市完成出租要點；另推動陽光社區達11案，促進地方政府設置應用以及社區群聚效應，拓展系統普及設置。
- (四) 研析各縣市地方自治法規，提供各縣市政府建管單位建議，推動太陽光電系統設置。
- (五) 完成制定太陽光電與建築整合之標準規範，推動BIPV(建築整合型太陽光電系統)模組納入高性能綠建材標章認定範圍。

六、擴大就業服務效能(勞動部)

運用全國358個就業服務據點辦理徵才活動，及運用全國就業e網求職求才資料庫，加強辦理就業媒合服務。此外，結合7-11超商ibon通路提供求職求才與職業訓練資訊。103年截至9月底推介求職就業人數30萬6,980人、推介二度就業婦女求職就業人數3,021人。

七、推動「微型創業鳳凰貸款及創業諮詢輔導服務計畫」(勞動部)

勞動部建立創業諮詢輔導機制，成立專業顧問團隊，提供諮詢輔導。此外，提供最高100萬元微型創業鳳凰貸款，並提供2年免利息之措施。



1 創業研習課程

八、推動優良農產品標章(農委會)

目前農委會認證之優良農產品驗證機構共4家，辦理16項目之產品驗證業務。迄103年9月底止，計有297家生產廠之765大項(6,128細項)產品通過CAS驗證。



2 第二章 永續會各工作分組年度工作執行成果

交通與生活分組

一、推動公路公共運輸提昇計畫 (交通部)

交通部為延續成效，推動「公路公共運輸提昇計畫(102-105年)」，截至目前執行5年以來，載客量自98年之10.38億人次、成長至102年之12.19億人次，成長17.36%。另103年截至9月為止，相較於102年同期成長1.86%。



① 公車捷運系統 (BRT)



① 通用無障礙大客車

二、持續推動軌道運輸建設及提升服務效能(交通部)

積極推動軌道運輸之相關建設，包括執行都會鐵路立體化、捷運化之軌道運輸工程，提升軌道運輸服務，打造節能車站，持續推動大都會區大眾捷運系統，加速推動高速鐵路在苗栗、彰化及雲林設站，以促進都市更新發展。

三、建構全臺智慧型運輸系統 (交通部)

由交通部運輸研究所及臺灣區國道高速公路局分別辦理交通服務e網通計畫及建置高快速公路整體路網交通管理系統外，另臺灣鐵路管理局亦推行「臺鐵多卡通電子票證」服務。

四、進行離島地區港埠建設及船舶購建計畫(交通部)

在金門地區港埠建設計畫方面，料羅港區整建第1至3號碼頭，及新碼頭興建工程，都已先後順利完成，並開放營運使用，進一步強化料羅港在兩岸小三通海運物流方面的功能。

在馬祖地區部分，辦理購建新臺馬輪計畫，並已於103年3月3日辦理下水活動，讓離島與本島的交通更為順暢及便利。



① 馬總統視察金門地區料羅港區碼頭

五、宣導道路交通安全教育(交通部)

交通部道路交通安全督導委員會103年擬定「全國道安扎根強化行動」，經全國道安體系運用工程、教育宣導及執法等各面向措施之強化，結合中央各部會署及地方政府投入。依據統計，103年1至9月A1類(指事故發生造成人員當場或24小時內死亡)道路交通事故死亡人數為1,333人，較102年同期減少90人(6.3%)。

六、推廣生態旅遊、環境教育及友善旅遊環境(交通部)

規劃自然景觀、人文史蹟等友善旅遊空間場域供國民育樂遊憩外，並依各旅遊區環境特性，配合推動環境教育，將活動寓教於樂，提高國民環境教育之認知與內涵；在推廣生態旅遊上，辦理多場次生態旅遊解說培訓課程，在旅遊中心設計上亦採用綠建築工法。



阿里山「觸口遊客服務中心暨行政管理中心」

七、提升氣象預報及地震測報能力 (交通部)

- (一) 執行「強化災害性即時天氣預報」計畫，發展系集颱風預報技術，建置系集預報颱風風速預報作業技術，完成發布颱風警報期間6小時定量降雨預報建置作業化流程。
- (二) 執行「災害性天氣監測與預報作業建置計畫」，完成分析2014年夏季及冬季之極端氣候事件分析；天氣研究與預報颱風模式(TWRF)1.4版之上線作業；東沙島資料浮標更換作業；天氣資料整合暨即時預報系統(WINS)之WARNGEN警示功能強化；劇烈天氣監測系統(QPES UMS)新增交通部觀光局、交通部臺灣鐵路管理局、新北市政府、桃園縣政府之客製化網頁服務；新增行動裝置應用軟體(APP)供育樂氣象與天氣資訊查詢資料；發展英文版氣象APP(Taiwan Weather app)；數值預報系統高速運算電腦第3期相關維運設施增設及配置。



英文版氣象APP (Taiwan Weather app)

第二章 永續會各工作分組年度工作執行成果

交通與生活分組

八、強化公路、橋梁防災系統 (交通部)

- (一) 執行公路防災預警機制，於劇烈天候下藉橋梁流域管理、山區道路風險管理以及各項預警系統做「預警決策」。
- (二) 於103年9月完成國道3號新化田寮段、田寮燕巢段及國道10號旗山支線等12座橋梁之耐震補強工作。

九、推動我國航空業站導入環境管理系統及節能減碳設備(交通部)

- (一) 於2009年推出「機場碳認證計畫」(Airport Carbon Accreditation, ACA)，鼓勵會員機場推動節能減碳。
- (二) 國際民航組織及航空相關單位，已陸續針對航空溫室氣體管理設定減量策略及措施。



● 2014年國際綠色產品展(EPIF)-
環保署展覽館

十、推動全民綠色消費(環保署)

- (一) 103年5月至8月提升採購人員對環境保護產品及機關綠色採購績效評核標準之認知，及加強辦理綠色採購專責人員講習訓練課程，辦理「綠色採購實務教育訓練」，共8場次達770人。
- (二) 推動傳統市場二手市集運作或創意市集運作，有效活化市場閒置空間，藉以促進新型態經營模式及創新與節能減碳思維，並帶動商機。

科技與評估分組

一、臺灣氣候變遷推估與資訊平台建置計畫(科技部)

- (一) 自101年12月資訊平台建置完成起至103年6月底止，資訊平台瀏覽人數超過30,000人次。
- (二) 氣候變遷資料線上資料服務與申請系統建置完成，並於103年4月正式上線，截至103年6月底止，註冊人數13人，完成資料提供件數7件。

二、維護及整合台灣生物多樣性資訊國家入口網(TaiBIF)及與GBIF接軌(科技部、農委會、環保署)

- (一) 持續運行野生動物資料庫、野生植物資料庫、生物多樣性資料分享平台「台灣生物多樣性網絡」(Taiwan Biodiversity Network, TBN) 和「臺灣繁殖鳥類大調查(BBS Taiwan)」。
- (二) 持續委託相關研究及學術單位，進行臺灣周邊海域的人工魚礁區、漁業資源保育區及北方三島海域之生物多樣性調查，並將資料彙整後納入「台灣週邊海域海洋生物多樣性資料庫」。
- (三) 各國家公園管理處配合內政部營建署建置之「國家公園生物多樣性地理資訊系統之建置與整合，定期維護更新資料。
- (四) 辦理「第四階段電子化政府計畫-環境資源資料庫整合計畫」。
- (五) 於大鵬灣、西拉雅與日月潭國家風景區分別建置小琉球植物及潮間帶生物多樣性資料庫、調查兩棲爬蟲類與鳥類資源與進行自然生態資源監測。

三、推動「氣候變遷調適科技整合研究計畫」

- (一) 完成科學報告第二冊90%之彙整內容。
- (二) 完成知識平台測試(官方人員)與專家顧問團名單建置。
- (三) 建立示範計畫整合空間資訊評估系統。
- (四) 將3組自行研發之評估工具匯入TaiCCAT 支援決策系統並加以分析，同時完成中央部會與地方政府之調適能力評量測試。



2 第二章 永續會各工作分組年度工作執行成果

城鄉與發展分組

一、水資源開發、利用、管理及保育 (台灣自來水公司)

加速辦理降低自來水漏水率計畫，至103年底預計汰換舊漏管線756公里，建置完成248個分區計量管網。

二、污水下水道發展 (內政部營建署)

- (一) 103年度提出「污水下水道第五期建設計畫（104至109年度）」之6年計畫，以持續推動污水下水道建設，提升污水下水道普及率。
- (二) 推動公共污水處理廠放流水回收再利用，首例示範案鳳山溪污水處理廠已於今年度根據規劃成果提報個案計畫獲行政院同意，後續預計投入約29億元興建再生處理設施及輸送管線，達到永續資源利用的目標。



三、城鄉永續發展（內政部營建署、農委會水保局、經濟部水利署）

- (一) 自87年都市更新條例發布實施以來，民間申辦更新案件計1,544案，其中464案已核定公布實施，累計至103年底至少已輔導147案都市更新事業計畫（含權利變換計畫）核定實施。
- (二) 自94年起已勘選235處都市更新示範地區，目前63處刻正辦理先期規劃作業，34處辦理招商前置作業及公告招商，25處已成功引進廠商投資實施，10處由政府投資自行實施中。

- (三) 補助各直轄市、縣（市）政府辦理「全縣（市）或鄉鎮市型市區道路景觀與人本環境改善綱要計畫」、「人行道、自行車道及無障礙環境改善計畫」、「學區或區域內通學步道、自行車道改善計畫」、「植栽綠美化增設、連續性綠帶設置計畫」等項目。
- (四) 配合「農村再生條例」持續推動，截至103年9月底合計培訓農村社區2,198個、參與人數142,313人，已有660個社區完成四階段培訓，474個提出農村再生計畫。
- (五) 103年度完成海岸環境改善約19.5公里，及完成26條重要河川環境景觀改善工程約37公里。

四、生態城市綠建築（內政部建築研究所、內政部營建署）



- (一) 推動綠建築標章評定，103年度截至9月底通過395案綠建築標章及候選綠建築證書，預估每年約可省電9,407萬度、省水523萬噸及減碳5.37萬噸。
- (二) 推動綠建材標章評定，103年度截至9月底通過綠建材標章192件（131件健康、26件再生、34件高性能與1件生態綠建材），產品種類涵蓋1,684餘種。
- (三) 為提升節能效益及降低都市熱島效應，103年底預定完成38案「建築節能與綠廳舍改善補助計畫」改善工程。
- (四) 「103年度加強綠建築推動計畫」總計獎助18個直轄市、縣市政府及經內政部指定之特設主管建築機關辦理，計撥付2,400萬元之獎助款。
- (五) 辦理新北市板橋浮洲合宜住宅招商投資興建計畫，並於102年4月取得「鑽石級」之社區類候選綠建築證書，102年7月取得「銅級」候選智慧建築證書，102年8月取得「鑽石級」候選綠建築證書。



2 第二章 永續會各工作分組年度工作執行成果

健康與福祉分組

一、辦理健康城市及友善城市推廣 (衛福部)

國民健康署與臺灣健康城市聯盟共同辦理「第6屆台灣健康城市暨高齡友善城市獎項評選」，遴選出國內縣市推動健康城市與高齡友善城市相關議題成果優良之單位，103年度經過初評及複評作業，共121個入選獲獎。

二、協助青年就業計畫(勞動部)

勞動部為協助青少年職業技能及就業機會，並協助企業培育符合所需之專業技術人才，提供15歲至18歲之青少年相關務實致用訓練，包括雙軌訓練旗艦計畫、青年就業旗艦計畫、產學訓合作訓練及職前訓練等措施，2014年度截至9月底已訓練1,819人。

三、推廣健康照顧政策與宣導 (衛福部)

為強化衛生局所與健康照護機構的夥伴合作關係，協助國內健康照護機構在服務提供上及早邁向高齡友善，2014年5月15日辦理「縣市衛生局結合健康照護機構推動高齡友善健康照護工作」工作坊。

四、辦理水資源、生態工程與環境生態宣導(經濟部水利署)

(一) 103年度輔導自來水公司、嘉南農田水利會、嘉義縣政府及臺南市政府於曾文、南化及烏山頭水庫集水區之南部穩定供水整治工程共14件45個工區，辦理生態檢核工作。

(二) 為推廣工程生態檢核及生態保育概念，

水利署分於10月16日及17日，假嘉義縣政府及臺南市政府，辦理水庫集水區工程生態檢核教育訓練，參訓人次達60人次以上。

五、補助偏鄉原住民醫療(原民會)

針對原鄉區域特性所造成的就醫交通障礙，補助原住民轉診、就醫之交通費用，減輕偏遠地區原住民就醫交通費負擔。103年截至6月底受益計8,468人次。

六、輔導農產品產銷履歷制度 (農委會)

輔導推動禽畜產品產銷履歷制度6種類，通過驗證家數累計503家。另行政院農業委員會積極督導驗證機構加強家畜禽生產廠(場)追蹤查驗與產品檢驗，103年1至9月已抽驗畜禽產品446件，動物用藥檢驗合格率達99%。

七、執行有機污染物品質風險評估 (環保署)

辦理持久性有機污染物(POPs)品質風險評估，建立環境中POPs之背景值資料庫，供進行風險評估之參考。



八、推動癌症防治計畫(衛福部)

國民健康署於103年第三期國家癌症防治計畫中推出「癌友導航計畫」，共有80家醫院加入本計畫，約涵蓋9成新診斷之病人。此外，其中61家醫院設有「癌症資源中心」。透過這項計畫，醫院將逐步全面建立腫瘤個管師制度，降低癌症新診斷個案3個月未治療比率，目標為由101年的18%降至103年16%。

九、訂定「飲用水管理重點稽查管制計畫」(環保署)

督導地方環保局加強執行自來水系統直接供水水質抽驗、自來水事業淨水場飲用水水質處理藥劑查核、稽查抽驗自來水水源水質及公私場所飲用水連續供水固定設備等，水質合格率達99%以上。



2 第二章 永續會各工作分組年度工作執行成果

教育與宣導分組

一、增進全民永續發展知識與認知、提升公民環境素養

(教育部、科技部、文化部、內政部、經濟部、環保署、農委會、衛福部、客委會)

- (一) 環保署為增進全民永續發展知識，提升公民環境素養，鼓勵全國22縣市81所社區大學開設環境永續發展教育相關課程，截至103年9月30日止，共計開設501門課程，累計辦理達956小時環境教育課程。
- (二) 為提升外籍與大陸配偶在臺生活適應能力，爰編列公務預算，經由補助各地方政府辦理外籍配偶生活適應能力，使其順利適應我國生活環境。103年度補助各地方政府共辦理213場次之外籍配偶生活適應輔導課程，截至103年9月底受益人次約2,704人次。
- (三) 工業局為協助我國企業推動CSR報告書，於103年度輔導7體系共40家廠商撰寫永續報告書/基礎報告，提供20家廠商永續報告書諮詢與間距分析服務，以加速我國CSR報告書發行。
- (四) 輔導直轄市、縣（市）政府推動低碳社區計畫，並與地方政府合作，繼續輔導與協助91個示範社區推動低碳措施。
- (五) 教育部與國民健康署於102年度推動健康促進學校計畫之重要議題包括口腔保健、視力保健、健康體位、菸害防制、全民健保、性教育(含愛滋病防治)等。
- (六) 客家委員會補助國內民間團體及公私立

各級學校辦理客家語言文化活動，截至103年10月底止，計補助83語言教育活動、566校辦理客語生活學校計畫及58個單位辦理推行公事客語無障礙環境計畫。

二、整合政府、民間、企業及學校資源，推動永續發展

(教育部、科技部、經濟部、環保署、農委會)

- (一) 教育部校園節能輔導團於103年累計輔導24家學校，並提供節能輔導報告，俾利學校後續執行節能減碳相關工作進行。
- (二) 辦理「補助地方政府成立環境教育輔導小組計畫」，協助地方政府建置完整環境教育工作團隊，規劃符合縣市在地特色之環境教育計畫並落實推動。
- (三) 補助成立2個能源科技教育區域中心及21個中小學能源科技教育推動學校，整合地方縣市政府資源，共同推動能源科技推廣計畫。
- (四) 科技部促成產（台達電子文教基金會）官（教育部所屬臺灣科教館）學研（臺北市立大學、南臺科技大學）三方合作推出「科學教育巡迴車」，包括兩部「3D低碳行動電影院」、「低碳能源行動博物館」與「低碳生活行動資源車」，自100年7月26日至103年9月30日止，全台服務158個據點，參觀民眾達225,216人次。
- (五) 環保署每年持續辦理4場次綠網平台使用種子培訓會，計400人。

三、強化社教館所與大眾媒體，宣導永續發展與環保議題(教育部)

- (一) 宣導鼓勵學校選用當地當季食材，並透過常設展、臨特展、其他廣宣媒介及相關教育活動提供民眾臺灣陸域及海域豐富的生物多樣性資訊及宣導保育觀念。
- (二) 科技部補助製播替代能源、節能減碳、氣候變遷、生態地質等環境教育相關影片節目，內容涵蓋能源科技、碳足跡、節能減碳、昆蟲生態、食品安全、輻射偵檢、全球暖化等主題。
- (三) 製作低碳永續家園宣傳短片及製作廣告稿等文宣，並運用網路資源及各媒體通路等管道進行宣導，提升民眾節能意識。
- (四) 國民健康署透過多元管道對民眾宣傳健康飲食與健康採購，包括「學校健康體位教戰手冊」9,700本，「健康生活動起來手冊」中文版改版及英文版製作，肥胖防治網站及「0800-367-100」免費諮詢服務專線等。
- (五) 農委會資訊中心建構農業虛擬博物館網站，完整提供「2014生態電影節」、「樂活農村」及「繽紛台灣再發現」等系列生態環境影音教材。

四、推動永續發展教育相關研究與國際合作 (教育部、科技部、環保署)

- (一) 補助辦理環境教育永續展相關「2014風險分析學會-亞洲研討會」，與會講者與來賓分別針對風險治理，環境風險，災害風險，食品安全，工業安全與化學品管理，奈米技術之感知與評估，社會風險等重大議題進行論文發表及討論。
- (二) 補助15件永續、環境教育相關科普活動計畫，辦理對象包含學齡前兒童、各年齡層在校學生、社會人士、教師，總人數為7,335人。
- (三) 截至103年10月環境教育設施場所為95處，環境教育機構為22家、環境教育人員3,023人。



3 第三章 103年國家永續發展獎得獎

一、中國文化大學

簡要介紹

中國文化大學位處台北市保護區周邊，比鄰陽明山國家公園，是座無圍牆的大學校園。辦學秉持創辦人張其昀先生之教育觀念，以「質樸堅毅」為校訓，期望承東西之道統，集中外之精華，能發揚推己及人之無私教育觀念。

推動永續發展工作的現況

文化大學為跳脫傳統永續發展的框架，以整合校內各專業能力為主軸，推動跨領域合作方式，發展周邊網絡之軟體，結合環境教育、復育、觀測實驗參與等方式，並透過多元行動方案(如學校政策與空間管理及永續發展教學)，落實不同的永續發展策略與行動。

身為區域之教育龍頭，對於應負的責任須有所貢獻，該校採「大手牽小手」的觀念，由各系所大學生、研究生參與周邊社區、中小學等單位之活動，進行引導輔教工作，將校區建構為周邊環境永續發展教育的核心。

並以此作為區域發展之策略，透過扶持周邊社區網絡，傳播永續發展之觀念，如注重生態與人文多樣性、建立地方夥伴聯盟(與陽明山國家公園管理處策略聯盟合作)；帶動地方綠色經濟機會(輔導陽明山周邊社區參與國際宜居社區競賽)；投入服務學習之機制，參與社服團體之伙伴工作(協助陽明山教養院推動藝術治療、園藝治療)；將國際思維、全球環境議題與陽明山的在地文化進行結合(國際規劃設計工作坊以及國際關懷工作的推動)等，強化陽明山永續發展教育網絡的實踐。

推動成果或願景藍圖

雖然文化大學的校地資源侷限，且台灣高等教育正面對少子化的衝擊，教育單位間不可避免地將有多項競爭，因此如何整合資源與能量，並將其投入並擴大在地之軟實力，勢必成為突破之關鍵所在。未來所扮演之功能，不再侷限於個別校區，更應以身作則成為社區地方之新核心。



❶ 無圍牆之校園環境（文化大學 提供）



二、桃園縣大溪鎮永福國民小學

簡要介紹

永福國小佔地將近3公頃，是一所被山與樹環繞的學校。如何與大自然彼此共生共存是一大課題，伴隨著2004年5月22日那天領角鴞的出現，猶如大自然派來的和平使者般，為該校帶來一絲曙光。也由於領角鴞的出現，在時間與空間上，將永福國小與當地居民彼此間的情感連結在一起。

藉由觀察領角鴞代代成長的歷程，啟發了該校以「貓頭鷹學習圖像」中的生態、藝文、數理語文、品格與閱讀等全人教育觀，來規劃課程教學。

推動永續發展工作的現況

該校採用永續發展的旅程概念，以「營造環境—培育養分—試飛探索—能力檢核」4段歷程架構永福的4個課程主軸、9項核心課程與30個教學單元，培養學生具有專注、覺察、行動、堅毅等貓頭鷹素養。透過老師精心設計的各項教材與教學設計，強調體驗與實踐的教學模式，有計畫地應用主題式、融入式與活動式三種不同的方式與正式課程結合，並設計潛在課程的學習。

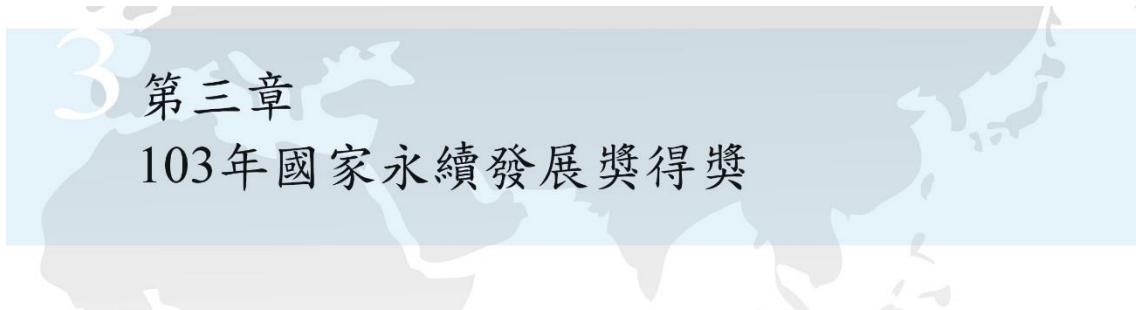
而學生學習成效方面，建構在四心四力等課程目標上之9大課程，其學習達成率逐年提高，顯示教學成效；參與淨山環保等社區活動，因社區民眾家長的參與，為孩子小小的心靈扎下深深的生態種子；持續進行地方生態調查，規劃永續發展與環境教育活動，並擔任縣內外學校及民間團體的講師，推廣永福的永續與環教經驗成果及生態遊學；結合在地文化與永續環教活動，在深厚的烏塗窟傳奇裡，在孩子青澀的心靈埋下厚實的文化根苗。



多元課程培養孩童快樂成長（永福國小 提供）

推動成果或願景藍圖

未來除持續發展貓頭鷹學校策略聯盟外，將深化學校社區結合，發展在地特色永續學校，並讓孩子們合作規劃、經營管理各個學習角落，向社區及社會大眾解說永福校園及社區的動植物生態及景點故事，使永福更成為孩子展能及生態遊學的舞台。另外，延伸校內到校外的課程，提升轄內教職人員永續發展與環境教育素養及環教能力，並提升本縣學生、家長及民眾對於在地生態人文之深度認識的角度來切入，辦理永續發展與環境教育研習、課程教學及宣導活動，進行經驗分享與對話，並能實踐節能減碳等關懷、愛護環境於生活上。



三、新北市瑞芳區瑞柑國民小學

簡要介紹

瑞柑在民國87年建立全國第一座校園生態村，由於擁有豐富的生態資源，在此已發現了15種蛙類和2種蟾蜍，以及超過60種的蝴蝶、蜻蜓和螢火蟲，因此樹蛙、蝴蝶和螢火蟲被列為瑞柑三寶。每年該校都會固定辦理專家導覽的生態課程、發展以蛙為主題的生態統整課程、進行山林田野、溼地與海洋教育課程、蛙鳴蟲飛蝶舞賞螢光、瑞芳山系大探索等活動，吸引不少校內外學生和社區民眾一起進行有趣的生態探索活動。而該校有名的樹蛙司令台，更讓其具有「青蛙學校」之美譽。

推動永續發展工作的現況

瑞柑國小為推動永續發展工作，採取許多措施，如營造在地多樣性校園生態空間，運用環保綠籬取代水泥圍牆，採行與環境共生共利的綠建築設施；建置全校雨水回收設施及系統，以供應全校廁所及第一生態村用水；推動環保餐具及禁止免洗餐具進入校園；落實資源回收與垃圾減量，全校師生一星期才使用一個大垃圾袋，並獲新北市環保局評定資源回收成效績優；推行環保手工藝與童玩；每年進行永續校園環境教育執行成果檢視，落實永續發展的行動與檢討等，也因此讓瑞柑的永續環境教育行動一年比一年更進步。

此外，學校亦與社區共同辦理重陽敬老活動、社區登山活動及家庭教育宣導活動；協助及參與柑坪里老人供餐活動、社區資源回收工作；針對學校弱勢學生列冊建檔，進行生活與學習的協助（如享有免學費、免午餐費、免費的補救教學、課後社團以及社區的課後伴讀）；與社區合作關懷社區老人生活，並提供獎學



金鼓勵社區學生就學；透過全員參與的社團與社區活動，讓學生和社區民眾都有成功的高峰經驗。

推動成果或願景藍圖

生態是人類心靈的故鄉，野生動植物是這裡的原住民。該校將以瑞柑生態為起點，生態村為範圍，永續發展為方法，打造學校和社區居民與生態共存共榮的生活環境。未來持續整合瑞芳山系周遭的社區與6所學校，共同發展瑞芳山系自然探索方案與瑞芳山系生態旅遊路線，打造瑞芳成為永續發展的學習中心。



1 結合在地特色的樹蛙司令台（瑞柑國小提供）

四、台灣積體電路製造股份有限公司(十二廠)

簡要介紹

台積公司成立於民國76年，是全球第一家也是最大的專業積體電路製造服務公司。該企業的張董事長忠謀提到：「台積公司相信永續發展、道德與誠信正直是企業長期成功的關鍵基礎。這些特質不僅能讓我們妥善落實企業社會責任，同時也有助建立客戶信任、強化員工對公司的向心力以及塑造一個更好的社會與自然環境。道瓊永續指數從全球頂尖企業中，再次評選台積公司為半導體及半導體設備產業組的領導企業，對這樣的肯定，我們深受鼓舞，同時也將激勵我們更進一步全面推動企業永續發展。」

推動永續發展工作的現況

台積電晶圓十二廠是台積公司第一座12吋半導體晶圓製造廠。該廠導入綠建築的觀念曾榮獲5座美國LEED綠建築認證建築物及3座台灣EEWH綠建築認證，並獲得全球第一座LEED白金級認證晶圓廠之榮耀。

為落實產品環境資訊揭露，建立產品有害物質管理系統QC 080000，確保產品均符合國際法規及客戶對有害物質之相關要求。並無私分享成功關鍵，配合政府政策辦理多項活動，同時舉辦多次產業節水技術訓練課程及產業節能省電技術訓練課程，擔任產業界及政府間的溝通橋樑。

另外，維護職場兩性平等及勞工照顧方面，不遺餘力；並透過員工自發參與的志工服務，多面向投入生態、節能、教育、環保等多項公益活動。

推動成果或願景藍圖

台積公司身為全球最大的專業積體電路製造服務公司，曾於2013、2014年連續兩年榮膺道瓊永續指數「半導體及半導體設備產業組」的領導企業，並於2014年獲得天下雜誌「企業公民獎」首獎。該企業深知，當企業規模愈大，對社會的影響與責任也愈大，也期望能夠藉由自身的經營，以建立永續典範，並成為社會向上的力量。

該企業之環保政策係以「致力於達成環境永續發展，成為世界級之環保標竿企業」為目標，同時以「遵守法規承諾、強化資源利用及污染預防、管控環境風險、深植環境保護文化、建構綠色供應鏈、善盡企業社會責任」為達成目標之策略，未來也將持續秉持理念，且抱持改善的精神，以達到環境保護、經濟發展與社會美好「三贏」的積極目標。



运用生态工法建造的挡土墙（台积公司提供）

3 第三章 103年國家永續發展獎得獎

五、群創光電股份有限公司

簡要介紹

群創光電公司為TFT-LCD液晶面板供應商，致力於TFT-LCD技術研發與產品製作，以提升人類視覺享受的境界與成就高科技的美學發展。該企業相信除了追求經營利潤外，內在的人本特質才是企業延續運作的命脈，故始終維持一貫穩健踏實的作風，並盡其所能以成為優秀企業品德的公司為目標。

推動永續發展工作的現況

群創光電對於永續發展工作投入許多心力，並囊括社會、經濟及環保三大層面，如於2010年成立CSR專責部門及CSR委員會組織，建構「CSR法規要求管理系統」，強化掌握CSR規範、風險與遵循，並透過內部控制制度掌握公司風險。亦從2008年迄今每年發行CSR報告書，完整揭露公司資訊；在經濟方面，於2013年推出「65吋超高解析度薄型窄邊框液晶電視模組」，頒獲「台灣精品金質獎」殊榮，而自動化團隊以「觸控一條龍」，更獲得2013年國

家產業創新獎之「創新領航獎」，並且該企業已連續4年榮獲金質獎殊榮。

另外，積極營造友善職場，創造勞資雙贏，如從2011年5月身障進用不足額至2012年進用率達1.22%，為業界之冠，2014年台灣廠區任用約400位。並且2009年竹南廠區引進「全家家扶便利超商」，在竹科與公益團體和超商合作的企業，於2013年更延伸至台南廠區，由家扶中心進廠經營，提供就業機會予包括單親媽媽、安置機構少年等。

推動成果或願景藍圖

未來，該企業將朝向致力實現「永續環境」與「人文社會」的和諧對話及共生發展。在環境面向，以「L.O.V.E. 地球樂」的理念，積極實現綠生活、綠生產、綠產鏈、綠生態，發揮企業影響力，關懷整體地球環境永續議題；在社會面向，以「S.M.I.L.E.和諧樂」的理念，實現安全文化、身心平衡、社會關懷、全方位員工生活照顧、友善職場環境，並不斷提升人文和諧與共生共榮。



2013年「攜手淨灘-Go環保」活動（群創光電 提供）

六、社團法人台灣環境資訊協會

簡要介紹

台灣環境資訊協會為一個公益組織，主要藉由環境資訊的交流與環境信託的推動，關懷環境、參與行動，以建構「人」與「自然」之間的和諧關係。該協會相信，一旦具有充分的資訊與瞭解，人們必能運用理性，展現其具體作為。該協會力求在兼顧當代及後世福祉的前提下，主動提供真實而全面的資訊、創新且富建設性的行動方案，並肩負起環境資訊窗口的任務，匯集各方力量，共同為環境發聲。

推動永續發展工作的現況

台灣環境資訊協會深信，唯有資訊通公開與普及，並透過大眾參與，方能實踐環境保護和自然保育，促進人與自然和諧，達到永續發展的目的。

該協會自2000年以來，首先成立環境資訊中心，除支援電子報資料數位化外，並進行台灣環境事件的歷史紀錄整理工作，同時著手規劃各類的環境資料庫。環境資訊中心網站 (<http://c-info.org.tw>) 每日平均的瀏覽人次已超過1萬9千人，單日最高4.5萬人次瀏覽量，以朝向全球華人環境資訊的入口網站為目標。另外，所發行的各種形式環境資訊系列電子報，訂戶已超過10萬人次，在環境保護的資訊傳遞上，已成為影響力最大的單位之一。

此外，本會亦支援超過50個民間團體網站平台、網站建置、電子報寄送等各項服務，並參與各項網站暨資料庫建置計畫、研究專案舉辦相關活動、講座等，深化環境資訊交流普及之工作。

環境信託的推展是該協會成立的另一項宗旨。由於信託一直以來是世界各國廣納社會力

量，共同保存自然與文化資產的利器。近年來台灣政治社會逐漸成熟，民間參與成為環境保護與自然保育工作上重要的一環，該協會盼藉由此契機積極推動國內的環境信託，如在台東成功、澎湖東西嶼坪、陽明山雍來、濁水溪口北岸濕地信託行動，保護瀕危的白海豚，以及2014年接受委託管理的新竹自然谷環境教育基地信託。

推動成果或願景藍圖

台灣環境資訊協會誕生於新千禧年，在一個知識與媒體爆炸的時代，也是一個人類物質文明發展與環境資源兩難的時代。該協會認為結合環境資訊、環境教育以及環境信託，守護台灣珍貴的森林、海洋和濕地，是我們每一位的責任，也是落實永續發展的關鍵。

未來，環境資訊協會將持續致力於擴大環境資訊的力量，幫助提升民眾的環境意識；重現土地的價值，建立與土地的連結；建立人與自然的和諧關係，藉此提升全民環境意識等方面，並希望藉由環境資訊的交流與環境信託的推動，使更多人關懷環境參與行動，建構「人」與「自然」的和諧關係。



珊瑚礁體檢志工於澎湖東嶼坪進行水下監測行動（環境資訊協會 提供）

3 第三章 103年國家永續發展獎得獎

七、財團法人台灣原住民部落振興文教基金會

簡要介紹

台灣原住民部落振興文教基金會成立於民國八十八年五月，係透過各項計劃執行與活動辦理，協助發展原住民文化、教育、藝術等事業，並透過部落文化教育相關工作推動，積極培養原住民發展人才，促進台灣原住民文化之學術研究、出版與推廣事宜，增進國際交流與合作，以保存、凝聚原住民文化為宗旨。

推動永續發展工作的現況

目前主要的工作係「藉由推動部落文化教育相關工作，累積部落教育文化知識，發展數位化資料建置工作(數位典藏)，記錄部落的風俗習慣方面、社會文化方面、物質文化方面、族群語言及工藝形制等，正確傳達傳統文化多元且豐富面相，與廣大社會一般大眾分享，並提供學術研究更便利的使用管道，並積極參與原鄉部落生態與產業的發展，並於100年度至今輔助南投縣仁愛鄉農友推廣有機農業，引進兼具生態及部落農友生計的農業技術，提升部落農業產業的發展。

同時，藉由調查部落傳統建築與生活空間，倚重耆老們的傳統知能與記憶，盡其所能在

田野調查、訪談過程及族人參與中，一同建構出族人所認同的傳統居住文化空間，並透過實際興建計畫，將珍貴的建築技術及生活文化知識保留下並傳承發揚。

推動成果或願景藍圖

未來除了持續針對部落有形及無形文化資產所進行的數位化工作，有著確認、建檔、研究、保存、保護、宣傳、弘揚、傳承和振興的特別意義，真正達到落實原住民族傳承自有傳統文化的精神，讓部落族人藉由了解部落歷史，重新了解部落並增進族群對自屬文化之認同，進而積極參與部落公共事務。

另為落實原住民傳統技藝、文化等方面保存，並融入數位化科技，以永續維護及傳承。因此在振興部落文化及凝聚向心力，以發揮地方特色，並創造就業機會及促進產業、社會發展，以及建立典藏資料庫等發展。結合各方資源，如部落、村里社區等在地生態與特色，並以保育為出發點，兼顧當地社會、經濟、文化、歷史、環境、生態等面向。在維護當地文化之永續性，使部落青年返鄉，適得其所，並找回共同的文化，以及傳承歷史。



① 傳統祭儀-年祭活動

八、行政院農業委員會林務局

(推動水梯田暨濕地生態系統復育及保育計畫)

簡要介紹

林務局為推動生物多樣性工作之中央主管機關，負有保育野生動物及其棲息環境之責，除將具有珍貴生態價值之濕地，劃設為各類保護區域，以保育野生動物及其棲息環境外，近年因開發與環境保育衝突，林務局更積極的思考緊鄰森林範圍的水梯田等淺山濕地生態系保育工作，著力於保存具有生態、景觀與文化保存價值之珍貴水梯田與埤圳生態環境，使其受到妥善的保護，以保育棲息其中之珍稀濕地物種。

推動永續發展工作的現況

對一般大眾而言，濕地被認為無利用價值之土地，水梯田也多因老農凋零與不符經濟效益的情況下而陸續棄耕；但事實上，濕地具生態保育、經濟生產、保水抑洪、穩定海岸、觀光遊憩、研究教育等多元功能。林務局在推動生態保育工作時，也常被詢問如何兼顧人民的生計，所以當「里山倡議」在生物多樣性公約大會通過，作為實現「與自然和諧共生」願景。

林務局也選擇幾處「水梯田或濕地生態系統」做為試行案例，初期由團隊規劃並執行，帶領農戶觀摩並偕同執行，再逐步由農戶帶領，進行測試並提供收益；據八煙居民敘述，計畫執行前遊客稀少，與現今漸得民眾關注，家戶參加農民市集營收差異約有十倍之多。由此可見，以永續利用的方式來管理土地和自然資源，除可達到兼顧生物多樣性維護與資源永續利用，更能提高農民的生活品質與生計。

推動成果或願景藍圖

為實現生物多樣性愛知目標「與自然和諧共生」願景的重要工具，臺灣農田生態系之水梯田與相關之水圳、埤塘與農村，即屬於里山倡議近年討論農業生物多樣性保育、傳統知識保存以及鄉村社區發展之環境，除具有滯洪及水資源涵養，與孕育水生動植物多樣性之重要功能外，尚具有景觀、遊憩及文化傳承之價值。林務局希望透過這個示範計畫，帶動台灣農業改革，推動以永續利用的方式來管理土地和自然資源保護與重建人類與大自然互動所形塑的「社會-生態-生產地景」，達到兼顧生物多樣性維護與資源永續利用的願景。

我國現已有4個團體加入「里山倡議國際夥伴關係網絡(IPSRI)」成為會員，其實在國內還有許多也在實行「里山倡議」理念的農民與團體，林務局希望起帶頭作用，未來能整合更多單位與團體，共同倡導或支持友善生態農法，創建台灣自己的「里山倡議」，建構知識交流平台，提供學術研究和實務經驗，對有志參與夥伴進行能力培育，共同完成生物多樣性保育、復育和明智利用，維護生態系統服務，維繫健康的島嶼，增進全民的福祉。



3 第三章 103年國家永續發展獎得獎

九、教育部資訊及科技教育司

(防災校園網絡建置與實驗計畫)

簡要介紹

教育部自 100 年起推動「防災校園網絡建置與實驗計畫」，歷經 4 年的努力，受輔導學校從陌生、排斥，到如今觀念的轉變，使防災教育工作不再是「業務」，各校皆能有系統的具體落實防災教育及演練，學校師生對於災害不再陌生與畏懼，更能有著不慌、不亂的應變作為。教育本身就是一條漫長又艱辛的路，尤其防災教育更是關係到每個人的生命安全，本部將持續擴大推動防災校園建置，並納入氣候變遷調適教育議題，使氣候變遷及防災觀念融入各級學校師生與社會大眾日常生活中，深化師生及民眾知識，提升抗災能力，進而營造安全永續的美好家園。

推動永續發展工作的現況

防災校園網絡建置與實驗計畫之推動目標為建置防災校園，以災害識覺、風險溝通、災害調適及自救能力為核心概念，教育師生具備

防災素養與安全意識，落實學校防災作為及提升校園安全環境，建置學校為地區性防災校園基地及社區防災據點，以建構有效的防災校園網絡。為此，本計畫分別擬定運作與支援機制建立、課程發展與推廣、師資培育、實驗推動」、學習推廣、成效評估等 6 大推廣架構，分階段持續進行。

推動成果或願景藍圖

從聯合國教科文組織和國際減災戰略秘書處於 2006 年 6 月 15 日發起「防災從學校開始」的全球防災教育活動，我們可以得知，唯有透過教育的深化與扎根，培養師生正確的防災態度，當災害來臨時，師生具備正確的應變作為，方能將損傷減至最低；展望未來，本部將持續透過落實災害防救教育工作，建置安全的校園，繼而推廣至社區與社會大眾，提供永續與安全的環境。



宜蘭縣東興國小結合社區演練幼童收容情形



副總統與幼兒園學童做防災常識宣導

十、交通部臺灣區國道高速公路局

(國道生態友善環境復育)

簡要介紹

國道高速公路局自國道1號興建以來，深知施工所造成的大面積開挖邊坡，對生態與景觀帶來極大的衝擊，為加速自然環境復育，採生態綠化方式進行，塑造如天然林般具有截流雨水、涵養水分、減少表土流失、減輕或阻隔風、火、病害等外來壓力衝擊的自然環境，減少昂貴的綠化養護成本，亦成為公路景觀的良好綠色背景。多年來復育有成，與鄰近之森林串連，在周邊開發逐漸增加情形下，道路綠帶反成了動物們的庇護場所，道路兩側綠帶儼然成為生態廊道。
推動永續發展工作的現況

自2007年開始，因國家地理頻道拍攝了紫斑蝶，凸顯了道路致死問題，高公局開始關心道路對動物的影響，提出了國道讓蝶道的創舉，也引發了工程人員願意為生態而努力的熱情，我們放下各自專業的堅持，與生態保育專家面對面溝通、學習，一步一步印地為工程如何兼顧環境友善，或打造一條讓動物安全回家的路而相互打氣，當監視器畫面出現了動物悠哉通過的畫面，驚聲歡呼，我們成功了！

本局配合行政院國家永續發展委員會生物多樣性分組行動計畫「減少棲地喪失、土地利用的改變與劣化，以及非永續的使用水資源」策略項目，跨越原行動計畫，整合生物多樣性相關工作，展開一系列之「國道生態友善環境復育」計畫，由專業生態團隊與局內工作小組共同推動，以滾動式管理，研究成果立即回饋經營管理，展現行動力，其重要策略如擬訂國道永續經營策略、劃設國道生態敏感里程暨分級管理辦法，建置基礎生態資料庫、劣化環境

復育、生物多樣性證據保存、國道邊坡綠帶成為淺山植物種源庫、結合民間力量共同營造棲地等。

推動成果或願景藍圖

臺灣地狹人稠，生物多樣性保育的壓力高，未來還有許多值得我們繼續努力的空間，鑑於國道周邊豐富且獨特的生態資源，希望在提供用路人快捷、舒適與安全道路的同時，也能提供動物們安全穿越兩側覓食、繁衍的廊道。國道不只是帶給人們便利的交通，創造人類的美好生活，亦提供了共同生活的動植物一個安全庇護的場所，道路的永續經營是提供友善環境的作為，從新建、施工到養護落實於道路生命週期中。本局將與時俱進提升臺灣交通運輸的永續內涵，持續為國家重大建設融合環境生態，創造社會經濟而努力，並為淺山生態系生物多樣性保育盡一份心力，企盼社會各界共同參與合作，讓國道綠帶成為淺山保育廊道。



通霄一號多功能跨越橋及利用通道的台灣野兔及石虎



十一、行政院原住民族委員會

(原住民族部落活力計畫)

簡要介紹

原民會透過原住民族部落活力計畫的推行，讓更多的部落圓夢，更能讓更多部落青年願意回部落服務，這些都是原住民族部落的文化傳承與發展的力量。延續過往的經驗，以部落永續發展為目標，繼續讓各部落可以在自己的文化中找到最適合的發展模式，不僅僅達到發展的目標，更是為未來原住民族部落的自治奠定基礎。

推動永續發展工作的現況

本計畫推動以來，從原住民的傳統文化、知識與價值出發，推動原住民族部落的文化復振、產業發展與環境營造，250個曾推動過活力部落相關計畫的部落中有30%以上仍在推動部落營造的工作，其中嘉義縣阿里山鄉山美部落曾獲得總統玉山獎，桃園縣復興鄉比亞外部落成為交通部觀光局的不分區亮點社區、南投縣眉溪部落獲得103年度國家永續發展獎。有超過50%的部落持續參與農委會水保局的農村再生計畫。由此可知，本計畫確實做為原住民族部落永續發展的圓夢起步金。

透過專職營造員的投入，不僅提供了原住民青年回鄉服務的機會，透過部落會議平臺的建立，讓部落營造不僅是提案團隊本身的提案，而是部落的公共事物。再透過原民會委託的專業輔導團隊的陪伴、輔導與協助，部落正一步一步腳印地找到部落自己的發展方向，逐步建立起部落永續發展的基礎。同時，自103年開始，原民會輔導各部落建置自主性網站，至今已完成了29個由部落自主網站，也是推動部落自主發展的進一步成果。



① 原民會活力部落-深度旅遊

推動成果或願景藍圖

為促進部落永續發展，原住民族委員會(下稱原民會)自95年起推動原住民族部落營造相關計畫，以部落集體力量因應部落困境，逐步降低部落對政府或外在資源的依賴，透過健全部落組織，奠定原住民族自治基礎，同時復振部落傳統文化，並結合各式資源，發展部落經濟產業，促進就業機會。原民會透過核定地方政府補助部落辦理原住民族部落活力計畫，並委託專業團隊進行輔導與培力。最重要的是，透過部落活力計畫的核心精神部落會議決定部落重建與發展的方向，讓部落走出一條屬於自己部落文化永續與經濟發展的活路。





食品安全管理制度建構與永續發展之意涵

台灣大學食品科技研究所 孫璐西終身特聘教授

近年來因個案廠商食品安全問題，引起社會輿論對食品安全問題普遍關注。食品安全關係到每個人生命權，因此政府對於食品安全之法令規範是相當嚴格，比如說食品的原料必須是新鮮的，不是回收的。而在重視食安的情形下，我們更應對於飲食方式與永續發展有更進一步的認知，以下透過本屆新任永續會委員孫璐西教授之專訪，提醒國人重視食安與飲食方式的小小改變，就可以達到永續發展的效果。

建立源頭管理與生產履歷制度，強化我國食品安全

過去對於食品安全的管理主要集中在下游廠商為主，也就是說，對於與民眾第一線接觸的食品廠商管理較為重視(B to C)，但是對於上游廠商與廠商間(B to B)目前較少規範。有鑑於近來的食品安全事件，皆出現在上游料源廠商，其造成的影响層面大，因此政府有意建立供應食品原料的廠商登錄系統，此方向是正確的且值得肯定。

然而食品原料多，政府無法全數掌握與管理。因此，最好的方式不是政府介入管理，而是由政府建立各項制度，並由廠商自主管理，政府再透過定期抽檢方式，以確保食安。誠如前述提及的登錄系統，一旦建立好了，相關中下游廠商就可以在購買原料的同時，查詢相關原料是否已上網登錄於該系統。

食品碳足跡標籤是建立永續發展之初步措施

歐美國家已著手建立食品二氣排放之標示，我國雖然已具有相關耗電設備或是汽油建立二氣排放標示制度之經驗，但尚未能

應用在食品上。我國食品若亦能標示二氣排放量，相信對於國人的食品安全與飲食認知將產生重要的影響。尤其，我國的糧食自給率約只達三成三，將近七成的糧食或食物來自於國外，而食品之永續發展理念，應該朝向綠色消費方式進行，鼓勵在地飲食及在地生產與養殖，以提高綠色運輸及綠色採購比例，減少能源消耗與二氣排放。

除了前述鼓勵綠色消費外，政府應該提倡國人多吃白肉(雞、豬、魚)，少吃紅肉(牛、羊)，多吃蔬果與五穀雜糧，這不只是對國人健康有益，同時也對於環境友善。因為生產一單位紅肉所排放的二氣為白肉四倍之多，且我國牛肉幾乎全數來自進口，如此對環境衝擊更大。因此，孫委員建議國人可以定期(如每週)安排一餐素食或是只供應白肉，從生活中逐漸改變飲食習慣，一方面均衡飲食，一方面減少二氣排放。



糧食安全與食品技術之演進

我國四面環海，漁業資源相對較豐富，在全球人口成長影響下，遠洋漁業的發展已開始受到限制，政府目前開始推動近海養殖漁業發展，透過相關技術之改進，各項漁產品發展已有相當成果。還有國人對於基因改造食品存有不正確的認知，進而對其排斥。其實基因改造食品，其發展原因主要係為解決植物的病蟲害與農藥問題，且為提高其產量，基因改造作物具有耐旱、耐熱特性，為因應2050年國際的糧食安全與人口持續成長，基因改造作物是有其必要性的。

在當今網路世代中，在資訊相當發達的情形下，對於各種食品安全與食品知識的吸收與解讀不同，造成對食品安全或是油品的不正確知識的累積，政府與產學界有義務提供正確的知識，不應積非成是，例如基因改造產品需經嚴格

的審查與相關實驗數據檢測分析後才准上市，不容許有任何的疑慮。而民眾普遍認為，相較於基改食品，有機產品是比較好，但就目前的技術層面來看，其產量並不足以供應全民所需，且投資成本較高。

天下沒有白吃的午餐， 食品安全也是

對於食品安全，國人應存有正確的認知，「天下沒有又好吃又便宜的產品。」食品安全亦同，各項產品的安全標準，並不存在絕對安全，但是若要求超低的標準或零檢出，那也是不切實際的，而且人體本身具排毒機制。在改變飲食方式且薪資未相對提升的情況下，民眾追求美食的同時，廠商為滿足消費者口味與降低成本，才會造就現在的食安事件。因此，呼籲國人飲食應以健康為主，並回歸到食品之基本面，透過在地生產、簡單料理，這樣才能重拾食品安全，也慢慢達到永續發展的目標。





取得環境與經濟平衡，建立企業永續發展思維

中華民國企業永續發展協會 李棟樑 理事長

隨著時代的演變，全球已面臨過度發展現象，氣候變遷以及公司治理弱化等面向所產生的問題，諸如貧富差距、石油危機、糧食危機以及水資源匱乏等。當這些全球性危機結合在一起，將嚴重影響著我們生活，造成失業、社會經濟不安定及貧困等問題更加惡化。由於產業的成長攸關經濟發展，亦涉及到自然資源的耗損及生態環境的保護層面，因此產業發展的策略應同時考量經濟與環境的因素，於持續追求經濟繁榮與環境保護之間取得平衡。

企業社會責任的意涵

企業社會責任 (Corporate Social Responsibility, 簡稱CSR) 為一種道德或意識型態的理論，主要係指企業對社會做出貢獻的行為，並且建立在永續發展的基礎上，即企業的經營須對所有的利害關係人(stakeholders)負責，而不只是對股東(stockholders)負責。目前企業社會責任的定義，並無一致接受的定論，其中較為正式的定義，是由世界企業永續發展協會(WBCSD)在1998年9月荷蘭舉行的會議，邀集60個企業界及非企業界意見團體共同提出：「企業社會責任是企業承諾持續遵守道德規範，並為經濟發展做出貢獻的同時，致力改善員工及其家庭、當地社區、整體社會的生活品質」。

積極投入永續發展

中華民國企業永續發展協會身為 WBCSD 的聯盟夥伴之一，其宗旨為倡議經濟成長與環境保護兼顧的永續發展模式，期望綜合低碳生活、健康社會與環保永續的目標，用走入社會、

帶動全民參與的方式，推展健康低碳樂生活。本屆永續發展委員李棟樑委員，為現任中華民國企業永續發展協會理事長，長期推動企業永續發展與社會責任觀念。自民國99年起，在李理事長的提倡下，發起「全民一起1運動」系列活動，號召企業或團體支持及響應與共襄盛舉，鼓勵社會中每一個人改變生活中的1件小事，以共同創造健康與低碳的生活。今(103)年比照102年「1起把社區亮起來」專案的執行成果，再次與救國團臺北市團委會合作共同推出「社區1起亮起來」活動。本年活動著重於5大面向：推廣社區藝術文化、支持社區志工服務、支持青年志工服務、輔助弱勢學生體驗環境生態教育及鼓勵社區健康運動。同時也擴大社區團體的執行範圍，除了臺北市外，尚涵蓋新北市、桃園縣及臺東縣等縣市。



經濟模式的轉換

除全民透過自身開始做起外，我們賴以為生的經濟模式亦應進行轉換。聯合國於2008年提倡綠色新政（Green New Deal），嘗試帶領各國將經濟模式轉型為綠色經濟或低碳經濟。在整個轉型邁向綠色經濟的過程中，需要三個重要元素的密切搭配，首先為政策環境的建構，此為政府重要的角色；其次是研發創新，這為產業界的強項；三為責任投資，意謂著在重新建構綠色經濟下的基礎建設所需要的長短期投資，這是金融業與資本市場的功能。由此看來，邁向綠色經濟的道路上，企業界實在扮演著關鍵性的角色。



系統性的思考方向

不論政府或企業，對於綠色經濟或低碳經濟的發展必須要有系統性的思考，亦即從價值鏈的角度去思考國家或個別企業發展的契機。從以往我國經濟發展的經驗觀察，在21世紀綠色經濟革命的大趨勢中，相信臺灣已為知識經濟作好基礎的建設，但仍待建立一套具體、明確、結構紮實、層級分明與配套完整的政策措施。未來綠色產業的發展，絕對能為臺灣的永續發展，創造可以期待的榮景。以下為李員對企業永續發展所提供的幾個思考方向：

- 一、環境資源、能源與氣候變遷的壓力，將直接促使能源科技的革命，也間接促進各產業的創新，使各國對發展低碳的綠色科技有了嶄新的認知。
- 二、在能源與資源價格持續上揚的年代，以及溫室氣體管制的必然趨勢，各國的耗電產品，均朝低耗能與低待機電力的方向。產品的改良及新技術的開發皆將衝擊既有的市場，更會涉及新市場的開發與競爭優勢。
- 三、結合能源科技、低耗能用電製品、綠建材的設計概念，綠建築已成為建築新科技與管理的目標，我國自當不能忽視建築產業之綠色「智慧」技術結合，所隱藏的巨大商機。
- 四、企業編製透明、正確，且經第三方驗證的永續報告書（或稱企業社會責任報告書）是加速達成企業永續發展的關鍵。
- 五、除了提供有效的經濟誘因及法規，創造一個能積極鼓勵創新的環境，政府更必須對外在環境的變動有敏銳的觀察力與反應力，提供更完整與快速的資訊，協助企業在綠色產業競爭中脫穎而出。



重新思考永續發展意涵，衡平跨世代之權益

中央研究院經濟研究所 蕭代基 研究員

在上世紀的80年代，環境議題持續受到各國關注，永續發展漸成為焦點，聯合國在1993年初設置「聯合國永續發展委員會」，以為督導及協助各國推動永續發展工作。我國亦於民國86年成立「行政院國家永續發展委員會」（以下簡稱永續會），另於民國91年11月，立法院三讀通過「環境基本法」，賦予永續會法定位階，並由原任務編組提升為法定委員會。然而，我國的環境議題雖有改善，但在過度重視經濟發展的情形下，國家整體的永續發展是否朝更健康的道路邁進，有待進一步探討，以下為永續會委員蕭代基委員之專訪，透過委員之意見，期能提供永續會未來政策推動參考：

全球永續發展仍有甚大進步空間

因地球暖化及極端氣候日漸頻仍，聯合國及各國對於永續發展乃至於節能減碳皆訂定相當多的推動策略或行動方案，2007年諾貝爾和平獎更頒發給聯合國「跨政府氣候變遷小組」(IPCC)及美國前副總統高爾，以彰顯其喚醒世人重視永續發展的努力。我國唐獎基金會設置四個獎項中包括永續發展獎，在今年第一屆得獎名單，頒發永續發展獎予素有「永續教母」的格羅·哈萊姆·布倫特蘭(Gro Harlem Brundtland)女士，在在證明永續發展受到國際高度重視。然而，觀察近三十年來各國推動永續發展之狀況，可以發現其永續發展政策還是以經濟發展為主，只是採用比較注重環境保護與社會公平的方式發展經濟。可惜的是，依現有的模式發展，經濟將持續成長，人口持續增加，但是環境負荷也隨之加重，以大家較易瞭解的溫升現象為例，2050年地球溫度較目前將提

高30C至 60C，此已瀕臨環境可負荷的臨界點，現階段已到了要重新檢視永續發展推動方式與策略的階段。

重新考量永續發展目標與定位

當前我國所規劃的各項永續發展政策係採用三腳鼎立的模式，也就是同時要考量環境、經濟、社會等構面，希望能兼顧與相輔相成，但過去十年來，不論經濟、環境或社會之發展，我國已逐漸面臨瓶頸。我們應該重新檢視「永續發展」定義之核心意義，簡單而言，永續發展就是當代的發展應不損及後代的權益，由此可知永續發展首重跨世代之公平正義。前述三腳鼎立的永續發展模式，其經濟利益大都由當代人所享用，但環境污染成本與資源耗竭卻由後代所承擔，更不用說，當代經濟成長果實分配不均所造成的社會問題。

目前的永續發展，不論是政府或民間，都推動非常多的策略與行動方案，但是沒考量到各項策略或目標是否有衝突性。每項行動計畫是不是有關聯性，是不是有先後順序，都應該要有全盤的規劃。為落實永續發展的跨世代的公平正義，我們應改正三腳鼎立發展的迷思，永續發展應該以不損及後代權益的基本原則規劃，也就是永續發展模式應該是同心圓，而非等三角，也就是說在環境資源限制的大圓圈下，裡面的小圓圈是社會公平，最內圈才是經濟發展，唯有這種發展模式，才能兼顧跨世代的公平正義。

建構永續會委員交流平台

當前永續會委員之組成，以政府部門、學者專家及社會團體為主，每年的年度委員會議，主要任務在於議決各工作分組的相關報告案。綜觀歷年的委員組成，永續委員來自各界不同領域，目的在於考量其多元性。然而，也因為多元化背景，各委員對於永續發展的解讀各有不同，較難有一致的看法，不免囿於自我專業的主觀。每屆的新任委員也需要經驗傳承。因此建議設定期的永續發展委員交流平台或是新舊委員之座談等，將有助於經驗傳承，使得永續發展工作推動更加順暢。傳播永續發展的正確觀念，比各自為政來得重要。

研議照顧後代權益之機制

我們應回歸永續發展原來的核心意義，未來政府政策與開發計畫之規劃與推動，都應該考量到如何提供後代足夠的資源，不去掠奪他們的資源，我們要留給下一代是資源與機會，並不是物質與負債。

最後，跨世代的公平正義不是口號，應該將其化為具體制度。應師法「性別工作平等法」對於婦女權益的相關保障作法，建立完整的後代權益促進機制，例如於行政院與立法院都設置後代委員會，未來的各項政策與開發計畫，都應納入跨世代權益考量，評估其對永續發展之衝擊與對跨世代公平正義之影響，而不是仍以當代的經濟效益評估為主，唯有如此，才能達到真正的永續發展。



附錄一

行政院國家永續發展委員會組織圖



附錄二

行政院國家永續發展委員會第16屆委員名單

政府部門委員

姓名	職稱	姓名	職稱
毛主任委員治國	行政院 院長	陳委員 保基	農業委員會 主任委員
管委員兼執行長 中閭	國家發展委員會 主任委員	魏委員 國彥	環保署 署長
鄧委員 振中	經濟部 部長	林委員 慈玲	內政部 次長
葉委員 匡時	交通部 部長	邱委員 淑媞	衛福部國民 健康署 署長

民間委員

學者專家		社會團體代表	
姓名	職稱	姓名	職稱
李玲玲	台灣大學生命科學院 生態學暨演化生物學研究所 教授	余範英	余紀忠文教基金會董事長
邵廣昭	中央研究院生物多樣性 研究中心 研究員	李棟樑	中華民國企業永續發展協會 理事長
吳再益	台灣綜合研究院院長	林俊興	祐生研究基金會 董事長
林建元	中國文化大學環境設計學院 教授	周春娣	環保媽媽環境保護基金會 董事長
孫璐西	台灣大學食品科技研究所 終身特聘教授	宮榮敏	中華民國 化學工業責任照顧協會 常務理事
馮正民	交通大學交通運輸研究所 教授	陳士章	台灣原住民族人文關懷協會 理事長
楊鏡堂	台灣大學機械系 終身特聘教授	張楊乾	台達電子基金會 副執行長
蔣本基	台灣大學 環境工程學研究所 特聘教授	劉麗珠	自行車新文化基金會 執行長
蕭代基	中央研究院經濟研究所 研究員	賴榮孝	中華民國荒野保護協會 理事長
鄭守夏	台灣大學 健康政策與管理研究所 教授兼所長	駱尚廉	台灣環境管理協會 榮譽理事長

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 Effective 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





“ 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 NCSD 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. NCSD 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, NCSD 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 NCSD 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 for Sustainable Development

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

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.





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.





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.

行政院國家永續發展委員會全球資訊網
National Council for Sustainable Development Network

中文 | EN


選單

- [永續會介紹](#)
- [組織](#)
- [沿革](#)
- [設置要點](#)
- [委員介紹](#)
- [本會相關會議決議](#)
- [永續發展指標](#)
- [本會工作分組業務](#)
- [國家永續發展獎](#)
- [國家永續發展年報](#)
- [永續發展政策綱領](#)
- [永續發展行動計畫](#)
- [本會完成本件](#)
- [其他成果](#)
- [永續發展小百科](#)
- [國內外永續發展新聞](#)
- [意見信箱](#)
- [回首頁](#)

永續發展行動計畫之執行情形

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	
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

永續發展行動計畫追蹤管考資訊系統網址：
<http://nsdnacplan.epa.gov.tw/login.aspx>

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 CO₂e, agreeing 8 cases of registration for offset projects (the estimated reduction effectiveness is 2.69 billion tons of CO₂e) 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 caf" 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 CO₂c 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 CO₂ 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.



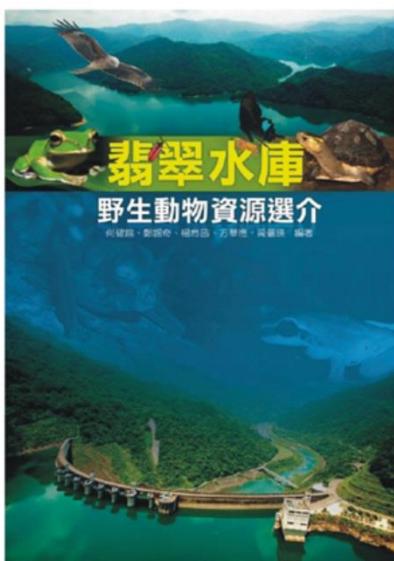
Chapter 2

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 County (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



(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 country(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.





it Network

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

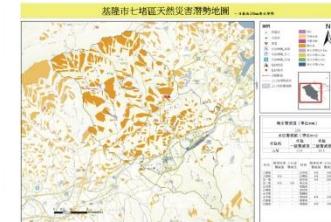
(1)The Wetland Conservation Act consists of 8 chapters and 42 articles with relevant supporting measures of 10. The Act is undergoing sub-act legislation and is promulgated by the Executive Yuan for implementation starting February 2nd, 2015.

(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 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.



2 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.



13

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.



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

nit Network



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.



nit 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.

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 Liaolu
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 Liaolu 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 Liaolu 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 azardous Weather Monitoring and Forcassing 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



Network

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.



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 obtain's 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.



nit 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 Bangjiao 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 made 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.





nit Network

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.

nt Network

2014
ANNUAL REPORT
ON NATIONAL
SUSTAINABLE DEVELOPMENT

(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, providing 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 mains 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' 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-Gang 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-Gang 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 EEWH 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.

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 benefits 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 benefits 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 counseled 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.

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 forces 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.



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.



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.



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.

