



# 亞洲高峰會 *Acecc* 台北永續發展宣言 簽訂十週年

陳振川 / 中國土木水利工程學會 前理事長、國立臺灣大學土木系 特聘教授

亞洲土木工程聯盟 ACECC 成立於 1999 年，中國土木水利工程學會 CICHE 是創始會員國，並於 2007 年六月主辦第四屆亞洲土木工程國際會議 4th CECAR，特別選定 Sustainability 為主軸，「Working for Asian Sustainability」為大會主題，並利用此國際土木盛會籌辦亞洲高峰會，並決定制定前瞻重要之「台北永續發展宣言」。ACECC 主席陳振川特於 2006 年 10 月成立專案小組，由張陸滿教授（召集人）、林正芳教授及林郁真教授（執行秘書）等人組成，歷經八個多月研擬及深入討論，終於在 2007 年 6 月 26 日中午由 41 位各國土木工程界會長、前會長及各界高層代表人 41 位於當時世界最高樓台北 101 共同簽署，這是世界土木工程界歷史上重要一刻。該等宣言以美、中（詹穎雯教授譯）、日文（JSCE 譯）等在世界

流傳，記得在訪問澳洲工程師學會 EA 時，進入大門，正面對的就是一幅大型的台北永續發展宣言，令人感動。

唐獎首屆永續發展獎得主，也是公認的永續發展教母 Gro Harlem Brundtland 女士所召集之聯合國世界環境與發展委員會於 1987 年發佈永續發展的定義：「發展除為滿足當代的需求，並須不損及後代滿足其自身的需要」，為實現共同未來的契諾，則我們的生存發展需要以環境的保育存續為根本，重視社會接納與分配正義，進而追求經濟效率的提升。面對全球暖化氣候變遷及天災頻率及強度持續增加下，UN 及世界在推動永續發展之步調不敢停滯，終於在 2015 年於 COP21 通過巴黎協定 Paris Agreement，177 國於 2016 年 4 月 22 日簽署（增至 195 國），並於 2016 年 11 月 4 日生效。

The rapid social progress and advancements in science and technology have enhanced man's abilities to improve our quality of life. However, these abilities have not in all cases been used in harmony with the environment. In fact, man's continuous exploitation of the earth's resources is degrading our environment and ecosystem. This outcome, together with the impacts of climate change, is worsening in a way that requires us to take immediate action for a sustainable future.

Asia is the largest continent and has approximately 60% of world population. Currently, Asia generates around US\$18 trillion GDP. Abundant human and natural resources, improved manufacturing ability, and huge markets have made Asia the fastest growing economy on earth. Nevertheless, this fast growth places excessive demand on natural resources and strains the earth's environment and ecosystem. In addition, Asia is constantly experiencing floods, landslides, air and water pollution, earthquakes, tsunamis, typhoons and man-made disasters. With these facts, having sustainable development in Asia is necessary.

Civil Engineers shall be ethical, compassionate, and knowledgeable of the vision of sustainability that will lead humanity and the environment to coexist harmoniously. Civil Engineers must play an active role in balancing Asian infrastructure needs and protecting our environment. Civil Engineers must put forward a proposal for countermeasures against imminent climate change due to global warming and the consequential disasters. Moreover, Civil Engineers must address the critical issues of humanity and social systems, such as caring for the disadvantaged, developing human resources, providing clean water and air, food and shelter for all, and providing protection from natural and man-made hazards.

 *Jenn-Chuan Chen Chair, ACECC	 *Lung-Bin Hsu Mayor, Taipei City Government	 *William Marzison President, ASCE	 *Yeong Bin Yang President, CICHE	 *Roko Harjito National President, EA	 *Davy Sukarta President, EI-Indonesia
 *S. L. Swamy President, IICE(India)	 Chung-Yih Lin Deputy Mayor, Taipei City Government	 *Kuo-Chun Chang Chairman of CE Dept. of NTU	 *Pi-Yu Lin Vice President, Tzu Chi Foundation	 *Ming-Teh Wang Secretary General, ACECC	 *Dennis Martenson Immediate Past President, ASCE
 *Brian O'Donnell Chairman Civil College, EA	 *Peter Godfrey National Vice President, EA	 *Steve Finlay Past Chairman Civil College, EA	 *F. X. Supariono Vice President, EI-Indonesia	 *Masanori Hamada Immediate Past President, JSCE	 *Hiroshi Mitani Past President, JSCE
			 *Primitivo C. Cal Immediate Past President and Chair, International Affairs Committee, PICE	 *Angel Lazaro, Jr. Past President, PICE	 *Willy T. Go 1st Vice-President, PICE

今天，ACECC 簽署滿十年，我們看到土木工程師的責任似乎更重，不論人們的食衣住行育樂、防救災及重建、能源及城鄉發展如何增加抗災韌性及調適氣候變遷，並努力節能減碳，均是工程師重要職務。行政公共工程委員會曾在本人指導下，經行政院通過於 2008 年 11 月發佈永續公共工程節能減碳白皮書，推動永續公共工程。在綠建築方面（特別在公有建築物）也有規定及相當進展，各領域也搭配政府推動節能減碳政策往前推展。

在此宣言簽署滿十週年前夕，本會和美國工程學會於 6 月 15 日合辦 2017 CICHE-ASCE Joint Seminar，美國 ASCE 會長 Norma Jean Marttei 特別提出 ASCE's Sustainability Initiative: 5-Year Road Map to Sustainability 之報告，弟也奉邀請發表 Sustainability & Innovation: Speaking from Post-Disaster Typhoon Morakot Reconstruction Experience in Taiwan，分享我們將永續落實於災後重建執

行的經驗。

我們相信永續發展推動是永無止盡，工程師們也要以此為念，共同努力落實於我們執行業務中，也企盼能呼應簽署宣言時的呼籲各國土木工程界能制定 Road Map，而依循行動以奉獻永續發展。

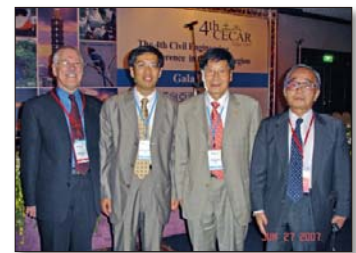
以下為亞洲土木工程聯盟台北永續發展宣言之內容及條文，非常適合現代需求而值得我們共同學思：



各國理事長共同持永續發展宣言合影



← 美國 ASCE 會長及代表們合影



→ ACECC 主席和日本及韓國前主席與澳洲 EA 理事長合影

## Engineering Coordinating Council on Sustainable Development

The rapid social progress and advancements in science and technology have enhanced man's abilities to improve our quality of life. However, these abilities have not in all cases been used in harmony with the environment. In fact, therefore, we, representatives of our respective civil engineering organizations, commit to improve the quality of life through use, innovation and discovery of appropriate technologies to meet the needs of diverse Asian populations and cultures. We also commit to work together for protecting and enhancing the environment, inspiring optimism, and creating a sustainable Asia as part of a sustainable world.

In keeping with the foregoing commitments, we hereby agree to take the following actions:

- 1) Develop short and long term strategies for achieving sustainable development.
- 2) Continue to improve the quality of life, and at the same time, protect and enhance our environment and ecosystem.
- 3) Conserve natural resources and use renewable materials.
- 4) Reduce the causes of global warming while mitigating and adapting the effects of climate change.
- 5) Encourage participation in the formulation and implementation of public policies and promote a transparent system of good governance.
- 6) Develop capacity building and transfer of knowledge of environmentally-friendly technologies.
- 7) Extend the service life of newly constructed infrastructure and advance renewable technologies for existing infrastructure and facilities.
- 8) Ensure the preservation of cultural values and heritage in the pursuit of solutions.
- 9) Encourage broad involvement in education and in research and development.
- 10) Develop the means for protecting against and mitigating the impacts of disasters and hazards.

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Co-chair, Asian Summit Task Force

June 26, 2007

宣言



## ***Asian Civil Engineering Coordinating Council Taipei Declaration on Sustainable Development***

June 26, 2007 Taipei 101, Taiwan

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Therefore, we, representatives of our respective civil engineering organizations, commit to improve the quality of life through use, innovation and discovery of appropriate technologies to meet the needs of diverse Asian populations and cultures. We also commit to work together for protecting and enhancing the environment, inspiring optimism, and creating a sustainable Asia as part of a sustainable world.

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For a Better Quality of Life

## 亞洲土木工程聯盟 台北永續發展宣言

2007年6月26日 Taipei 101, 台北市

在科學技術與社會發展的快速推動下，人類的能力不斷提昇，也大幅改善了生活水準。然而，人類的許多行為非但未能與環境和諧共存，更恣意的對地球開發並蹂躪自然環境和生態系統。此一發展趨勢與全球氣候變遷的雙重影響下，生態環境問題不斷地惡化，我們應當立即採取行動，以確保未來之永續發展。

亞洲的面積居全球之冠，總人口數佔了全世界的百分之六十，生產總值（GDP）更高達十八兆美金。由於其豐富的人力和自然資源、精進的製造能力以及巨大的市場，將亞洲造就為全世界經濟發展最為迅速的區域。然而，經濟的快速成長欲也造成自然資源的過量使用，為自然環境和生態系統帶來破壞。此外，亞洲也經常承受各種災害的侵襲，如洪水、山崩、水汙染、空氣污染、地震、海嘯、颱風，以及其他人為災難等。綜觀亞洲的種種現象，說明了永續發展在亞洲之必要性。

土木工程師們除了悲天憫人的胸襟外，亦應深諳環境倫理，具備與大自然共存共榮的願景。因此，土木工程師應當在亞洲的公共建設與環境保護上扮演更積極的角色，以取得兩者間的平衡，土木工程師除了應當針對全球暖化所造成的氣候變遷以及各種天災規劃相關因應措施，更應當深思如何解決人類社會中的關鍵議題，例如關懷弱勢、開發人力資源、提供全人類清淨的水、空氣、食物和庇護居所，以及保護人類免於天災與人為災難的侵襲。

因此，我們願意承擔提升生活品質的責任。我們將透過使用、創新與開發的方式找出符合亞洲多元族裔與文化需求的適當技術。我們將共同努力來保護和改善我們的環境，進一步創造樂觀與永續發展的亞洲。

為達成前述的承諾，我們同意採取下述的幾項行動：

- 1) 發展達成永續發展之長期與短期策略
- 2) 在持續改善人類生活品質的同時，能兼顧環境品質和生態系統的保護與提昇
- 3) 節約自然資源並使用再生資源
- 4) 減少造成全球暖化的成因、減緩氣候變遷的速率以及調適氣候變遷所造成的影響
- 5) 鼓勵參與公共政策之形成與落實，促進管理體系之透明化
- 6) 開發並應用對環境友善之技術
- 7) 提高新建基礎建設的使用年限；開發延長既有工程設施之更新技術
- 8) 在追求環境問題對策的同時，能確保文化價值與文明資產的保存
- 9) 鼓勵工程師在教育、研究與發展上的參與
- 10) 開發足以抗衡災難衝擊的保護方法