



***Asian Civil Engineering Coordinating Council
Taipei Declaration on Sustainable Development
June 26, 2007***

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.

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.

亞洲土木工程聯盟 台北永續發展宣言

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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