



For a Better Quality of Life

**THE ASIAN CIVIL ENGINEERING COORDINATING COUNCIL**

Presidents' Communiqué

for the

5<sup>th</sup> Civil Engineering Conference in the Asian Region

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Further to the 4<sup>th</sup> CECAR Taipei Declaration of 2007 we, the representatives of our respective Societies re-commit to the aims and objectives of the Asian Civil Engineering Coordinating Council and draw attention to the world wide benefits of promoting sustainable communities.

The theme of CECAR5 is “Innovative Community Building” and within its program engineers are providing a diversity of presentations related to their role in that objective. These include Climate Change and Coastal Management; Water Management; Innovative Construction; Sustainable Infrastructure; Transportation and Road Safety; Disaster Reduction and Recovery; Waste Management; Bridges and Infrastructure; Building Applications; Structural Health Monitoring and Sustainability Issues in Structures.

We believe that infrastructure of the future must be environmentally, economically and socially sustainable – the triple bottom line.

Some aspects of particular relevance demand our attention.

**Sustainable Water Use** - *“Water is essential for life on earth—yet it is a threatened and undervalued resource”* [International Institute for Sustainable Development (IISD)].

Policies must be developed that promote water consumption patterns, including better irrigation practices, that reduce our ecological footprint while meeting the needs of all people to enjoy a good quality of life. A requirement for an Environmental Impact assessment, that addresses the triple bottom line approach to sustainable development, should be made compulsory for all projects relating to water resource development. Water reuse is increasingly becoming recognized as a viable water source in national strategies and plans, even in countries where water is relatively abundant. The planning, technical, institutional, and socio-economic setting in which water reuse is practiced varies from country to country.

In urban cities, rainwater, stormwater and other alternative water sources (particularly waste water) remain a relatively untapped resource and one that has the potential to significantly supplement consumer water supplies now and well into the future. A comprehensive sustainable urban water savings program is recommended to capitalize on community awareness / support and to realize the potential of rainwater and other water sources as supplementary urban water. Such an approach has the potential to not only save water but to also positively impact consumer attitudes and beliefs, leading to long term behavioral change.

The use of reclaimed water is an essential component of Integrated Water Resources Management (IWRM) and sustainable development not only in dry and water-deficient areas, but in water-abundant regions as well. New water sources are increasingly more expensive to maintain, requiring high capture, conveyance, and pumping costs. Reclaimed water is often an economically viable alternative.



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**Sustainable Transport** - There is a need to engage the public, in addition to government, in issues of transportation demand and application, including the use of more renewable energy sources, using deliberative methodologies and innovative technologies for more efficient movement in urban areas.

Though situations may differ from one city to another, economic growth tends to be coupled with increased car ownership and traffic volumes. This growing factor continually undermines the benefits yielded by each step of technological progress in the field of energy efficiency, emissions or noise of road vehicles.

In order to influence travel behavior it is imperative that the future needs of a community are considered and captured through good quality planning and the introduction of innovative transportation technologies before infrastructure is put in place. An important strategy is to emphasize the role of public transportation. This is essential, especially in densely inhabited Asian Mega cities.

**Energy Conservation in Communities** - In order to promote energy conservation it is necessary to improve energy conservation-related systems, develop human resources, and diverse energy-saving appliances and facilities including community infrastructure. Sustainable technologies need to be integrated more vigorously in all aspects of our cities in conjunction with the beneficial design of urban development.

Innovation in energy technology for conservation and generation is needed in all fields of construction, industrial, commercial and household infrastructure of each country. It is expected that the market size of energy-saving systems and facilities in Asian countries will substantially expand with future economic growth. Asian countries expect those who have energy-saving technology to share it with them. Responding to such expectations will contribute to energy innovation in Asia and a deepening of business exchange between countries.

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Prof Ching-Lung Liao	<i>President Chinese Institute of Civil and Hydraulic Engineers</i>
Prof Doug Hargreaves	<i>President Engineers Australia</i>
Mr Davy Sukamta	<i>President Indonesian Society of Civil and Structural Engineers</i>
Er Sohan Swamy	<i>President Institution of Civil Engineers India</i>
Prof Kenji Sakata	<i>President Japan Society of Civil Engineers</i>
Prof Kyung Soo Chon	<i>President Korean Society of Civil Engineers</i>
Dr Erdene Ganzorig	<i>President Mongolian Association of Civil Engineers</i>
Dr Jamie Pacanan –	<i>President Philippines Institute of Civil Engineers</i>
Prof Pham Hong Giang	<i>Vice President Vietnam Federation of Civil Engineering Associations</i>
Mr Paul Mitchell	<i>Chair Asian Civil Engineering Coordinating Council</i>

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