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## Water Congress Draws Thousands to Melbourne

### Water Wisdom

*Teach your children that the rivers are our brothers and sisters, and henceforth give the rivers the kindness you would give any brother or sister.*

Adapted from Chief Seattle, Chief of the Dwamish Tribe (1854)

The second World Water Congress held in Melbourne, Australia (April 7 to 12, 2002), was a significant event for water professionals, with over 2800 delegates from 75 countries attending. UNEP IETC played an important role in the conference, partnering with the International Water Association Foundation in sponsoring the Track for Developing Areas. The outcome and a message from the track will be brought to the 3rd World Water Forum to be held in Kyoto in March 2003.



Melbourne participants, from left, Professor Goen Ho, Mr. Piet Odendaal, Dr. Vicente Santiago and Mr. Michael Dunn.

Dr. Vicente Santiago, Chief of the UNEP IETC Water Programme, presented the keynote address at the opening of the track. In his message, Dr. Santiago emphasised the importance of integrated water management globally, particularly in developing countries and countries with economies in transition. He also stressed the need for the global community to develop management practices, tools and technologies to assist decision-makers in these countries. Water supply and sanitation in these countries have

been recognised as inadequate with dire needs existing in urban and peri-urban poor communities. IETC Senior Advisor Mr. John Neate acted as rapporteur for the track and drafted a message for the World Water Forum.

At the Congress, Mr. Piet Odendaal from South Africa launched UNEP IETC's latest publication, *Environmentally Sound Technologies for Wastewater and Stormwater Management - An International* (Continued on back page)

## Promoting Environmental Management in China

UNEP IETC continued to strengthen its commitment to the People's Republic of China with a meeting in May that introduced the concept of environmental management systems (EMS). Managers from several industrial parks participated, sharing lessons and experiences.

Industrial estates in China are large parcels of land that are earmarked for specific industries and businesses. They benefit from well-managed network-infrastructure services that provide social services, including hospitals, schools, housing and shopping areas. Such comprehensive planning has made these industrial estates "mini-cities" catering to as many as half a million people or more. As a result,

they are also prime targets for environmentally-friendly planning and management practices, and the creation of "eco-industrial parks."



Image courtesy of Pudong New Area People's Government, Shanghai

UNEP IETC, in partnership with the International Federation of Consulting Engineers (FIDIC), its Chinese counterpart, the China National Association of Engineering Consultants (CNAEC), and local institutions, organised the EMS training session

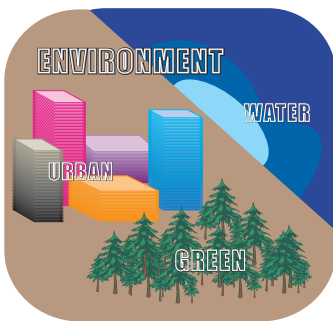
based on the UNEP/ICLEI/FIDIC "Urban Environment Management - Environmental Management System Training Resource Kit." More than 80 engineers, managers and consultants from various parts of China attended the 5-day programme, held in Shanghai.

### Inside INSIGHT:

Water Congress Meets	1
Building Eco-cities in China	1
Sustainable Principles	2
Building CEE Networks	2
maESTro II Launched	3
Eutrophication Workshop	3
3rd World Water Forum	3
New Initiatives	4
Operationalising APREN	4
New Publication	4

## Principles for Sustainable Cities Endorsed

UNEP IETC and the Environment Protection Authority of Victoria recently held an international charette (3-5 April 2002) in Melbourne, Australia, which was instrumental in developing the Melbourne Principles for Sustainable Cities, now known as the Melbourne Principles. The Melbourne Principles for Sustainable Cities, as endorsed by the participants of the charette, are intended to guide thinking and help build a vision of environmentally healthy and sustainable cities.



*...Recognise and build on the characteristics of cities including their human, cultural, historic and natural systems...*

The 10 Melbourne Principles are:

- Provide a long term vision for cities based on sustainability;
- Empower people and foster participation and inter-generational equity;
- Recognise and build on the characteristics of cities including their human, cultural, historic and natural systems;
- Build on the characteristics of ecosystems;
- Achieve long-term economic and social security;
- Expand and enable cooperative networks to work towards a common sustainable future;
- Enable communities to minimize their ecological footprint;
- Enable continual improvement, accountability and transparency;
- Require effective demand management and appropriate use of environmentally sound technologies for cities; and,
- Recognise the intrinsic value of biodiversity and natural ecosystems and their protection and restoration.

At UNEP IETC, the Melbourne Principles will provide the basis for pursuit of "Cities As Sustainable Ecosystems" (CASE), an IETC initiative. CASE is a new way of thinking about sustainable cities, and because of its potential for binding critical elements of sustainability within and for a city, it is expected to enable UNEP IETC to engage cities within an integrated sustainability framework.

The visionary, all-inclusive quality of the Melbourne Principles will be excellent guideposts for CASE. In addition, as part of the CASE initiative, UNEP IETC will invite exemplar cities from developed, developing and emerging economies to sign on to the Melbourne Principles.

The charette was part of Australia's contribution to the regional preparations for the World Summit on Sustainable Development to be held in Johannesburg in August 2002, and participants included urban managers and planners from developing countries in Asia Pacific.

## Building Networks in Central and Eastern Europe

In May, UNEP IETC expanded its key mandate — environmentally sound technologies — to the Central and Eastern European Region (CEE) by holding an experts' workshop in Szentendre, Hungary. The Regional Environmental Centre hosted the meeting, which brought together more than 40 experts and professionals working in the region on the issue of environmentally sound technologies. The theme of the workshop was energy efficiency.



Discussions centered on energy scenarios in the participants' countries, and the technologies and support systems that would enable them to meet the energy demands of their respective citizens. Attention also focused on the issue of renewable energy and ways to make it more viable, both technologically and financially.

On the final day, a lively brainstorming session concluded with support for the creation of a "CEE Regional Initiative on Environmentally Sound Technologies." Participants outlined the needs and justifications for such an initiative, and noted potential activities and programmes that could be implemented through a regional initiative.

## maESTro II to Succeed maESTro

As part of our ongoing support for IETC's Environmentally Sound Technology database, the maESTro database available on-line has been redesigned to better serve users with improved content and interface. The new EST database will be renamed maESTro II to reflect this important step. maESTro II has been augmented with additional features that will enable users to access ESTs, as well as other relevant information, in order to identify and select the most appropriate ESTs for a particular need. Major tasks undertaken include:

- ▶ The contents of maESTro have been reviewed to focus on IETC's mandate.
- ▶ A more intuitive navigation and search interface has been created. Any information is accessible within three clicks.
- ▶ Contents have been categorized to facilitate easier understanding of technologies.



As always, IETC is committed to collecting and disseminating EST information and to improving the quality and user-friendliness of the maESTro database. Visit maESTro II: <<http://www.unep.or.jp/maestro/>>

## Latin America Hosts Workshop on Eutrophication Management



The majority of lakes and reservoirs in Latin America suffer eutrophication due to nutrient loading — phosphorous, nitrogen, silica and organic matter — originating from point and non-point sources. Eutrophication leads to degraded water quality and reduced biodiversity, and on occasion can cause algae blooms (cyanobacteria) that produce potent toxins, known as microcystins. These toxic compounds have been found to cause acute liver damage in cattle, even at very low concentrations, and there are reports of people dying due to the toxin in drinking water.

Eutrophication is closely tied to the interaction between society and aquatic ecosystems. As a result, awareness of numerous factors is fundamental to understanding the eutrophication process, its control and prevention. These include economic development, awareness and participation by citizens in the protection and rational use of water resources, cultural issues, legal and institutional aspects, as well as managerial and technological approaches.

In general, training activities related to eutrophication management fail to consider these factors in combination, leading to unsatisfactory results. In response to this problem, IETC has produced a comprehensive reference book and a student guide that take a comprehensive view of the problem of eutrophication. Regional workshops in Africa and Southeast Asia have already been undertaken using these publications, and the need to undertake a workshop in Latin America has increased as eutrophication has become more apparent in the region's water bodies.

To this end, in April, IETC and the National Institute of Water (INA) of Argentina ran a training workshop on eutrophication management for the Latin American Region. Thirty national experts on freshwater resources management were trained using IETC publications translated into Spanish by INA. In addition, the training included a special session on modeling using Pilot Version 2.0 (PAMOLARE) produced by IETC, the University of Kyoto and the International Lake Environment Committee (ILEC).

## UNEP IETC to Act as Focal Point for 3rd Water Forum

In mid-April, in cooperation with other organisations — including UNESCO, the International Water Association, the International Council for Local Environmental Initiatives, Shiga Prefecture and the International Lake Environment Committee (ILEC) — UNEP IETC registered four proposals with the Secretariat of the 3rd World Water Forum (WWF3) for sessions to be held in Kyoto, Osaka, and Shiga, Japan, next March. As the focal point for UNEP, UNEP IETC will be co-convenor of the session, "The Future

of the World's Lakes, Principles for Action: Development of World Lake Vision." The conveners are ILEC, Shiga Prefecture, and others, based on the results of the 9<sup>th</sup> World Lake Conference held last November in Shiga, Japan. UNEP IETC has now begun accelerating its efforts to prepare for WWF3.



## VISIT US ON THE WEB

<http://www.unep.or.jp/>

UNEP IETC  
Email: [ietc@unep.or.jp](mailto:ietc@unep.or.jp)

*Established by UNEP in 1994, the International Environmental Technology Centre (IETC) is an integral part of the Division of Technology, Industry and Economics (DTIE). It promotes the use of environmentally sound technologies (ESTs) for sustainable development of cities and freshwater basins in developing countries and countries with economies in transition.*

Osaka Office  
2-110 Ryokuchi Koen Tsurumi-ku  
Osaka 538-0036 Japan  
Phone: (81-6) 6915-4581  
Fax: (81-6) 6915-0304

Shiga Office  
1091 Oroshimo-cho Kusatsu-city  
Shiga 525-0001 Japan  
Phone: (81-77) 568-4581  
Fax: (81-77) 568-4587

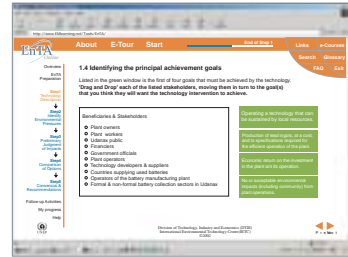
## New Initiatives



**EnTA-online:** EnTA (Environmental Technology Assessment), the generic methodology for technology assessment is now available online as IETC's first e-learning module.

EnTA-Online is an interactive e-learning package designed to increase dissemination, aid promotion, and facilitate the use of environmental technology assessment. The ultimate aim is to increase the uptake of environmentally sound technologies (ESTs).

The package has been designed using state-of-the-art content based on established EnTA methodology. Interactive activities and a case study are used to facilitate the understanding of EnTA. Constructive feedback and a flexible approach that reflects the user's competencies and interests assist in the learning process.



More information on EnTA online:  
<<http://www.unep.or.jp/>>

## “Operationalising APREN”: New Information System in the Works

In recent years, policy-makers have recognised the urgent need to improve the acquisition, formatting and dissemination of information on the development, promotion and transfer of ESTs, both within and among Asia-Pacific countries. In response to this need, IETC UNEP-ROAP (Regional Office for Asia-Pacific) and the Asian Institute of Technology (AIT) recently held a regional workshop in Bangkok, Thailand, for local governments.



Bangkok participants sharing information on APREN.

in Jakarta (1998) and Bangkok (2001), participants this spring recommended the formation of an interim task force to develop a proposal for the establishment of an Asia Pacific Regional Environmentally Sound Technology Information Systems Network (APREN).

The Bangkok workshop, held in March, also offered participants a chance to understand and comment on IETC's new development: ESTIS. (See: INSIGHT March 2002). Ways

Based on discussions and recommendations made at the 1st and 2nd UNEP IETC - Global Environment Centre Foundation (GEC) International Seminars on EST-IS held

to operationalise ES TIS at the country level were discussed, and participants were given a hands-on session on how to use ESTIS, with an introduction and discussion of the new system.

## Publications



Last March, UNEP IETC, in cooperation with Sumida City, Japan, and a citizens' group, People for Promoting Rainwater Utilisation, published a Booklet on Rainwater Harvesting and Utilisation. For more information on this publication, please e-mail UNEP IETC: [ietc@unep.or.jp](mailto:ietc@unep.or.jp)

## Melbourne World Water Congress

*(Continued from front page)*

**Source Book.** The Source Book is intended to provide information on technologies and decision support tools that can help decision-makers in developing countries overcome wastewater and stormwater management problems.

Following the launch, Professor Goen Ho, Managing Consultant and Editor of the book, conducted a workshop based on the abridged version of the International Source Book, and Professor John Hay, IETC Senior Advisor, presented a workshop on Environmental Decision Support Tools for Water Supply Management. IETC also participated in the exhibition at the World Water Congress as one of 245 international exhibitors, and received many inquiries from professionals working in developing countries and elsewhere.