## Water Days highlights challenges and best water management practices in the region

Following Dubai Green and Abu Dhabi Green in 2008. Sesam Business Consultants and Green Technologies FZCO organised 'Water Days' as part of a series of training workshops on sustainability for 2009 in the UAE.

Held from 6th to 7th July, 2009 at Dubai Knowledge Village, this modular training workshop was envisaged to provide a complete knowledge understanding in the local and international perspective of the water issue, status, challenges the best sustainable management principles. The event comprised a conference,



Armen Vartanian director of Ecoventure, talking on Carbon Footprint of Water and Wastewater in the UAE

director of ENPARK, said: "Water is one of this region's valuable resources. and how it is consumed is something that must be taken seriously by everyone. As



Markus Stebich from Rhode Kellermann Wawrowsky, presenting on Sustainable Water Use in the Hospitality Industry.

of this precious resource for future generations."

Among the speakers who attended the event, was Armen Vartanian from Ecoventures, who discussed water's carbon footprint in the GCC and cited measures to reduce the region's water carbon footprint.

He said that water is a heavy substance at 3.8 kilos to the gallon and therefore a significant amount of energy is required whenever it is moved, treated, heated or pressurized. Wastewater, therefore, "constitutes the largest

municipal energy cost, and the energy inputs of a typical water-use cycle can be broken down into five basic stages beginning from source and conveyance, to treatment to distribution, enduse and finally to wastewater treatment."

As one of the measures to reduce the water carbon footprint. Armen therefore noted that "we can turn to gray water to reduce energy use through an increasingly popular method called drain water heat recovery. This method uses a heat exchanger to recover heat from the hot water used in showers, bathtubs, sinks, dishwashers. clothes washers. The energy used for water heating can be reduced by 30 percent or more with these devices, with an expected payback ranging from 2.5 to seven years."

In his presentation, titled 'Today's Challenges Water Management in the UAE', Mohamed A. Raouf,



training workshop, open debate and project tours for all the participants and attendants.

The event was sponsored by the Canadian University in Dubai, and organized in cooperation with Enpark, the Dubai Chamber of Commerce and Industry and Epoc Messe Frankfurt. Guided by the principles of re-duce, reuse and re-cycle, Water Days concentrated on integrating sustainable water and waste water management.

Commenting about this event, All Bin Towaih, the executive

Dubai continues to grow, the water requirements of the emirate will rise exponentially. Consequently, as responsible individuals we must be very conscious of our consumption patterns."

"This conference is a great tool to empower organizations and individuals in the region to seek better and more efficient ways to utilize water conservation. It is hoped that conferences such as these will shed more light on how we can ensure the preservation





Attendees giving full attention to the speakers

the program manager of Environment Research at the Gulf Research Center in Dubai, stated the GCC region faces various environmental challenges.

He cited Integrated Water Resources Management (IWRM), multi-user participatory systematic process for the sustainable development, allocation and monitoring of water resources use in the context of social, economic and environmental objectives; as a way forward.

He noted two major factors which explain the high demand for fresh water - rapid population growth and urbanization, citing desalination and the reuse of treated wastewater to be among the most successful alternatives in the region.

A. Raouf, however, said that one of the

biggest management problems that the region is facing is that water scarcity issues are currently being addressed only through an increase in supply, rather than through demand management, sectoral allocation, pricing techniques or other appropriate institutional arrangements.

He therefore concluded by recommending three environmental management approaches which can be used to curb the challenges of water management in the UAE. They included

Command-And-Control Instruments (CAC), which are prescribed behaviors based on legislative and mandatory regulations that "command" polluters to "control" specific activities. They are always implemented through directives from regulatory authorities like government.

Other environmental management approaches that were recommended include the Market-based Instruments (MBI), which generally operate through establishing prices for environmental services via a market; and Persuasive Measures which are used to offset environmental market failures by internalizing environmental awareness responsibility individual decision-making.

Markus Stebich from German-based Rhode



During one of the conferences

Kellermann Wawrowsky (RKW) discussed about the roles and responsibilities of the designer and the operator in the sustainable water use in the hospitality industry. He stated that with hospitality being a concept that is deeply rooted in every major culture, the guest expectations are always high; posing a challenge to either meet or change them.

"The hospitality industry is one of the major consumers of water, which, on a per capita (per guest) rate, it is among the highest on a global scale. The water used by the guests, however, is directly only about 10 percent of the total used by hotels. The majority is used for cleaning, laundry, landscaping, cooling, leakage etc." This paradigm needs to be changed, without compromising the visitor expectations.

## City Waste 2009 to integrate strategic waste management in the Middle East

The Middle East's rapid growth over the past years has brought about significant waste management challenges to the region. In response to these challenges, IQPC is set to organise City Waste 2009, as a platform to discuss and share strategies on the increasing quantities of generated waste as well as the need for innovative waste management solutions. The event will be officially inaugurated by the UAE Minister for Environment & Water, H.E. Dr. Rashid Ahmad Bin Fahad, and will take place from 11th to 14th October 2009 at the Arjaan Hotel in Dubai, UAE.

Mohammed the director of Waste Management Department, Dubai Municipality, will provide a keynote presentation on strategic insights into the Clean Up the World Campaign. He will reveal new waste systems and upcoming green technologies that are being utilised by the municipality, such as vacuum waste collection systems, underground storage facilities and underground compactors for commercial districts.

City Waste 2009 will feature speakers from Dubai Municipality, Abu Dhabi Municipality, The Government of Aiman, the Arab Urban Development Institute and Institution of Civil Engineers UK. They will be joined on the agenda by a host of international waste experts from the private sector.

Commenting on the summit, Mark Siddorn, the director of Environmental and Waste Management, Tatweer Real Estate & Zoning (TREZ), said: "This inaugural event will be an excellent tool for the Gulf region. City Waste 2009 covers interesting and relevant topics which will no doubt facilitate great knowledge sharing at a time when environmental sustainability is on everyone's mind."