

Industry and Environment is a quarterly review published by the United Nations Environment Programme Division of Technology, Industry and Economics (UNEP DTIE), Tour Mirabeau, 39-43 quai André-Citroën, 75739 Paris Cedex 15, France. Tel: +33 01 44 37 14 50; Fax: +33 01 44 37 14 74; E-mail: unep.tie@unep.fr; <http://www.unep.tie.org>

Director

Jacqueline Aloisi de Lardere

Editorial Board

Tore Brevik

Michael Chadwick

Ossama El-Kholy

Claude Fussler

Nay Htun

Ashok Khosla

William H. Mansfield III

Haroldo Mattos de Lemos

Walter Retzsch

Léon de Rosen

Sergio C. Trindade

Editorial Staff

Françoise Ruffe

Elizabeth Purl

John Smith

Thalia Stanley

Editorial Policy

The contents of this review do not necessarily reflect the views or policies of UNEP, nor are they an official record. The designations employed and the presentation do not imply the expression of any opinion whatsoever on the part of UNEP concerning the legal status of any country, territory or city or its authority, or concerning the delimitation of its frontiers or boundaries.

The non-copyrighted contents of this review may be reprinted without charge provided that **Industry and Environment** and the author or photographer concerned are credited as the source and the editors are notified in writing and sent a voucher copy.

Industry and Environment welcomes for possible publication feedback from readers, news on their sectors of activity, or articles. The editors cannot guarantee publication nor return of unsolicited manuscripts, photographs and artwork. Manuscripts which do not conform to the conventions and standards of the review may be returned for revision.

Subscriptions

Industry and Environment is subject to an annual subscription fee of US\$ 60.00. See back page for order form. Upon application to the Director, submitted on letterhead, the annual subscription charge may be waived for government, educational and non-profit organizations in developing countries who are unable to remit payment.

This review is printed on 100% chlorine free paper.

◆ Urban environmental management

- 3 Editorial
- 4 Facts and figures
- 12 Habitat's experience in Local Agenda 21 worldwide over the last ten years: approaches and lessons learned – *by Raf Tuts and Eleanor Cody*
- 16 Local Agenda 21s: the cities of Ilo in Peru and Manizales in Colombia – *by David Satterthwaite*
- 18 Achieving sustainable urban development: from brownfields to environmental management – *by Debra Mountford and Carlo Pessa*
- 22 Using planning to enhance the urban environment – *by James C. Schwab*
- 24 The role of the International Environmental Technology Centre (IETC) in urban environmental and freshwater management
- 26 Tanzania's Sustainable Cities Programme – *by Batilda Burian*
- 29 Stockholm partners up – *by Astrid von Schmeling*
- 32 Management and conservation of water resources in urban areas – *by Sven Erik Jørgensen*
- 34 Sustainable management of Japan's Lake Biwa-Yodo River water system – *by Masahisa Nakamura*
- 36 Challenges of providing drinking water for urban and peri-urban slums from groundwater resources in hard rock terrain in India – *by S.D. Limaye*
- 38 Le nouveau schéma d'assainissement de la Concession d'Agua Argentinas : un outil contribuant à résoudre la problématique environnementale de la ville de Buenos Aires – *by Michel Trousseau and Julio Hermida*
- 43 Energy management in practice: communities acting to protect the climate – *by Nancy Skinner*
- 49 Building networks of energy-efficient cities: some practical experiences in Europe and Brazil – *by Lutz Mez*
- 50 Intelligent building = green building – *by Rob Moul*
- 54 Urban energy management initiatives in Malaysia – *by Abdul Hameed Bin Mohamed Mydin*
- 59 Sustainable utilities: new opportunities for sustainability through liberalization and privatization – *by Ernst ten Heuvelhof and Helen Stout*
- 62 Transforming post-industrial areas as an urban environmental policy tool (Katowice, Poland) – *by Justyna Gorgon*
- 65 "What a waste": solid waste management in Asia – *by Daniel Hoornweg*
- 71 IPIECA: playing an active role in urban air quality management – *by Alison Hawkes and David Mansell-Moullin*
- 76 Community planning for disasters: UNEP's APELL programme
- 77 Des villes et de leur patrimoine : origines et conditions de préservation – *by Georges S. Zouain*
- 79 La Alhambra y Granada: turismo y sostenibilidad – *by Miguel Angel Troitiño Vinuesa*
- 81 "Measuring up?": implementing EMS in urban areas – *by J. Bilodeau*
- 84 ECOBUDGET – local authority spending within natural limits – *by Martin Enderle and Volker Stelzer*

◆ Other topics ◆ Autres sujets ◆ Otros tópicos

- 89 Balanced plant nutrition may help reduce pesticide use by improving tea plants' resistance to fungal diseases – *by Jianyun Ruan, Xun Wu and Rolf Hårdter*

◆ Tourism Focus ◆ Tourisme ◆ Turismo

- 91 Roteiros de Charme Associação de Hotéis (Brazil): combining hospitality and environmental consciousness – *by Helenio Waddington*

◆ News ◆ Actualités ◆ Actualidades

- 95 World News
- 97 Industry Updates
- 99 UNEP Focus
- 102 Books and Reports
- 109 Web Site Highlight

Urbanization: meeting environmental challenges

Urbanization has been the dominant demographic trend during the last half century. Urban environmental management (or UEM) therefore presents increasingly complex challenges. In 1950, some 750 million people lived in urban areas; today there are close to three billion. UEM addresses urban inhabitants, their leaders, and the whole range of responsible officials. It also considers the many sustainability issues faced by urban society - issues that have been highlighted by the UN Habitat conferences. And UEM concerns industry, for instance when it provides urban services or operates in urban areas.

Urban environmental management is about coping with urban problems sustainably. As cities have grown to enormous size, their inhabitants' consumption and production patterns have generated environmental stresses beyond those due to limitations on the land, water and other natural resources required to feed, clothe and shelter them. In addition, there is a need for schools, health facilities, transport and jobs, as well as open spaces in which to enjoy nature, including clean air and water.

Those most negatively affected by the impact of overstressed and overstrained urban resources, especially in developing countries, are the urban poor, who are unable to compete for scarce resources or protect themselves from harmful environmental conditions. Urban poverty is accompanied by many health and environmental problems related to lack of access to basic services (e.g. sanitation, solid waste collection, transport, electricity).

UEM is about factories, offices and households consuming fewer resources to obtain the same goods and services. It is about efficient energy use, for instance through the introduction of efficient, reliable and comfortable mass transit systems, less polluting fuels, and more energy-efficient household appliances, lighting, air conditioning and heating; and it is about producing less waste and promoting recycling. In short, UEM is about respecting nature.

UEM is also about respecting others' right to enjoy nature's bounty. It is about protecting everyone, including the economically and socially disadvantaged, from the harsh impacts of an overstressed environment. It is about social equity and justice with regard to natural resources use. The essence of sustainable development, especially in urban settings, is that no one has the right to abuse or misuse finite natural resources. There is a right to sustainable use, which implies respect for subsequent generations' right to benefit from these resources as well.

UEM is about participation. It is about the obligation of public authorities to engage citizens — the most potent urban stakeholders — in managing resources and addressing environmental concerns. It is about urban managers' duty to ensure that air, soil and water are protected, and to keep citizens informed, consult with them, and defend their interests.

UEM can help avoid urban environmental crises by anticipating the impacts of environmental emergencies. It is therefore a survival kit for urban areas that want to shape events rather than being overtaken by them. Urban environmental management is all this and much more. But it is definitely not about deciding to "wait and see".

The urban areas now practising UEM, and institutionalizing its principles and processes, will be the best prepared to cope with increasing environmental pressures from many different sources.

This issue of *Industry and Environment* highlights a number of UEM tools and instruments. It cannot present them all: for instance, legal, administrative and financing instruments are not included. These instruments would be a good topic for a follow-up issue. ◆