

# World News



## Coral damage predates global warming

## World tourism body focuses on Africa

The ways tourism can promote prosperity, sustainable development and poverty reduction were among the main topics at the recent World Tourism Organization (WTO) Conference on Tourism, Peace and Sustainable Development in Luanda. The conference was attended by representatives of some 40 countries, including over 20 tourism ministers.

The African Union and the New Partnership for Africa's Development (NEPAD) were cited as visionary mechanisms for African integration and renaissance. NEPAD is actively developing an African tourism framework. Conference participants strongly supported an initiative for collaboration between the WTO and NEPAD. Africa's ecotourism products were seen as having major potential for African integration. The issue of the increase in airline service to African destinations was addressed, particularly the need for more regional flows and better service.

Shortly after the Luanda conference, the WTO's executive council decided at a meeting in Madrid that Secretary-General Francesco Frangilli should use "this historic opportunity to reinforce the World Tourism Organization" by inviting non-member states to become members. Among countries missing from the list of its 140 members are the United States, the United Kingdom and Australia.

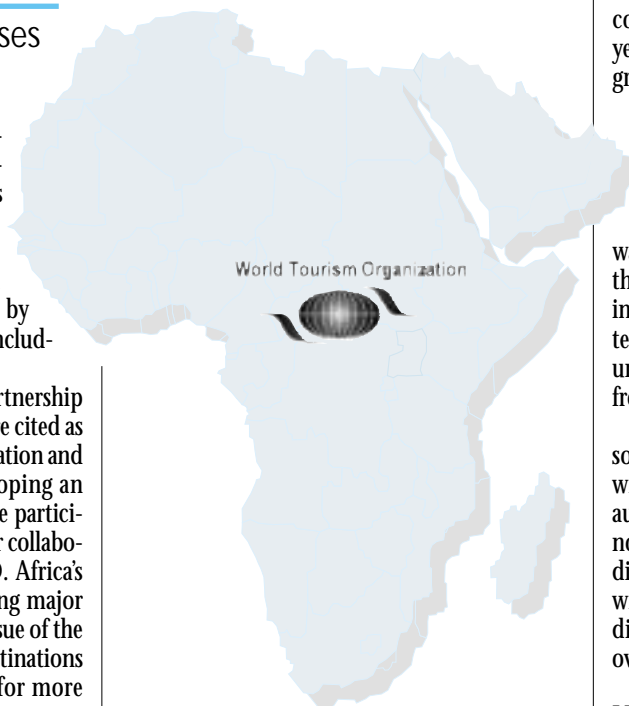
The WTO's role will be substantially increased when it becomes a specialized agency of the United Nations – if, as expected, its general assembly and that of the UN give their approval this autumn.

For more information, contact: Rok V. Klannik or Alla Peressolova, Tél. +34 91 567 8191 or 8193, Fax: +34 91 567 8218, E-mail: comm@world-tourism.org, Internet: www.world-tourism.org. ◆

## The role of mega-consumers

Corporations, international organizations, universities and other large bodies spend billions of dollars every year on goods and services – often representing more than the annual GDP of some countries. According to a new study from the Worldwatch Institute, they are key to the shift towards a more environmentally sustainable world.

Worldwatch Research Associate Lisa Mastny, who wrote the study *Purchasing Power*, says



"While environmentalists have worked for decades to win the hearts and minds of individuals," mega-consumers have far greater effects on the future of the planet through "their enormous and often environmentally devastating purchases of everything from gas-guzzling vehicle fleets to cancer-causing cleaning supplies." However, by "investing in everything from energy-efficient lighting to organic food, growing numbers of businesses, government agencies, hospitals, and other organizations are not only creating safer and healthier workplaces, but are also saving money."

For example, government purchasing is credited with stimulating the increase in the amount of recycled paper to the level of standard office supply in many European countries. Analysts associate improvement in the environmental performance of Japanese electronics products with Japan's pre-eminence in the field of green purchasing of computers and other high-tech products.

In the developing world, growing consumer demand will make it increasingly important to strengthen local markets for environmentally sound technologies – from renewable energy to non-chlorine bleached recycled paper. However, Mastny points out that institutions can help spread green purchasing in developing countries by using their own procurements to strengthen local green markets.

For more information, contact: lmastny@worldwatch.org or see www.worldwatch.org/press/news/2003/07/24. ◆

In a few decades the world's coral reefs could be almost completely destroyed unless human exploitation stops now, says a study in *Science* magazine. John Pandolfi (a paleoecologist at the Smithsonian's National Museum of Natural History in Washington, D.C.) and his colleagues have compiled records reaching back thousands of years covering the status and trends of seven major groups of reef creatures.

They have found that destruction of the reefs began while humans were still hunter-gatherers. All reefs were badly damaged long before the recent outbreaks of coral disease and bleaching that some attribute to global warming. "Regardless of the severity of increasing threats from pollution, disease and coral bleaching, our results demonstrate that coral reef ecosystems will not survive for more than a few decades unless they are promptly and massively protected from human exploitation."

According to another study in the same issue, some reefs which are more resilient than others will change rather than disappearing entirely. The authors of that study say that "We can be certain nonetheless that the projected increases in carbon dioxide and temperature over the next 50 years will substantially and very rapidly exceed the conditions under which coral reefs have flourished over the past half-million years."

Earlier this summer, researchers from Britain's University of East Anglia reported in the Internet version of *Science* that coral had declined by about 80% in some parts of the Caribbean, a loss from which it may take many decades to recover.

A few days after the latest reports appeared, Brazil's National Petroleum Agency withdrew from auction more than 160 blocks near the Abrolhos Archipelago – the south Atlantic's largest coral reef. The agency's Web site said it was heeding a recommendation by the government environmental agency, Ibama, following a request from the environmental group Conservation International.

For more information, contact: John Pandolfi, Smithsonian Institution, PO Box 37012 NHB MRC 121, Washington, D.C. 20013-7012, USA, Tel: +1 202 357 2406, Fax: +1 202 786 2832, E-mail: pandolfi.john@nsmh.si.edu. ◆



In a few decades the world's coral reefs could be almost completely destroyed.

## The cost of overfishing

A controversial article in the prestigious international journal *Nature* claims that only 10% of all large fish – including open ocean species like tuna, swordfish and marlin as well as large ground-fish such as cod, halibut, skate and flounder – are left in the sea. The article says industrial fishing can reduce any newly discovered fishery by 90% in just 10-15 years.

Lead author Ransom Myers, of Dalhousie University in Canada, says that “Since 1950, with the onset of industrialized fisheries, we have rapidly reduced the resource base to less than 10% – not just in some areas, not just for some stocks, but for entire communities of these large fish species from the tropics to the poles.”

Co-author Boris Worm, of Dalhousie University and the University of Kiel in Germany, adds that “These are the mega-fauna, the big predators of the sea, and the species we most value. Their depletion not only threatens the future of these fish and the fishers that depend on them, it could also bring about a complete reorganization of ocean ecosystems, with unknown global consequences.”

Myers and Worm sent their findings to top fisheries scientists for review. “We found there was acceptance of the overall pattern of rapid depletion of communities,” Myers says, “but there was more controversy when it came to the current status of individual species, particularly with respect to tuna.” Managers of some fisheries consider the findings difficult to accept.

The solution would be simple yet extremely hard to put into effect. Recovery requires overall reduction in the percentage of fish killed each year. This means reducing quotas, cutting subsidies, reducing by-catch and creating networks of marine reserves.

The research was part of a project on pelagic long-lining supported by the Pew Charitable Trusts, the Deutsche Forschungsgemeinschaft, and the National Sciences and Engineering Research Council of Canada.

*For further information, contact: Ransom A. Myers, Dalhousie University, Halifax, Nova Scotia, B3H 3J5, Canada, Tel: +1 902 494 1755, Fax: +1 902 494 3736, E-mail: ransom.myers@dal.ca. ♦*

## Energy study targets home appliances

Electrical appliances are the fastest growing energy users after automobiles in OECD countries, according to a new study by the International Energy Agency (IEA). *Cool Appliances: Policy Strategies for Energy-Efficient Homes* concludes that home appliances account for 30% of OECD electricity use and 12% of greenhouse gas (GHG) emissions. It predicts that under current policies their energy demand will to grow 13% by 2010 and 25% by 2025.

Additional efficiency gains of up to 30% could be made if the least-life-cycle cost for appliances were made the minimum efficiency performance standard starting in 2005. By adopting such standards, IEA countries could save some 322 million tonnes of CO<sub>2</sub> a year and 642 TWh of electricity by 2010. In terms of GHG emissions, this would be the equivalent of removing over 100 million cars from the roads and could achieve up to 30% of IEA countries’ targets under the Kyoto Protocol. The study notes that higher costs of more efficient appliances would be offset by savings in running costs.

*For further information, contact: Fiona Davies, Tel: +33 (0) 1 40 57 65 50, E-mail: fiona.davies@iea.org, Internet: www.iea.org/books. ♦*

## The Global Compact: 53 countries, 1000 companies

Over 1000 companies are participating in the UN Global Compact. They are working with international labour, civil society organizations and other

stakeholders to advance nine principles in the areas of human rights, labour and the environment.

The Global Compact’s latest annual report, an overview of operations in the July 2002-July 2003 fiscal year, points out that over half these companies are from the developing world. The Global Compact was launched in 14 countries during that fiscal year. The United Nations Industrial Development Organization (UNIDO) became the fifth core agency. It is responsible for SMEs. The other four core agencies are OHCHR, ILO, UNDP and UNEP.

*For further information, contact: Gavin Power, +1 212 963 4681, powerg@un.org. ♦*

## Growth threatens European environment

The state of the environment across Europe has improved in several respects during the past decade. However, much of this progress is threatened by economic growth, as governments have not yet made significant progress towards decoupling environmental pressures from economic activity. This is the assessment by the European Environment Agency (EEA), contained in its latest report on the environment in Europe. Two earlier assessments were published in 1995 and 1998.

The new report covers 52 countries, including for the first time the whole Russian Federation and 11 other countries in eastern Europe, the Caucasus and Central Asia. The greatest progress continues to be made with respect to “end-of-pipe” measures, or as a result of recession and restructuring. “We know from the past that these gains will be lost again if economic growth continues to be based on traditional, environmentally damaging activities [which are] still prevalent, rather than on more sustainable, eco-efficient options,” says Gordon McInnes, EEA Interim Executive Director.

While highlighting wide differences among European regions, the report confirms that policies, when properly developed and implemented, have led to significant improvements in the environment and to lower environmental pressures. For example, substantial reductions have been achieved in emissions of ozone-depleting substances, in acidifying emissions to air, and in emissions to water from point sources such as factories.

Policies to curb waste have made no significant headway, and pressures on some natural resources, especially fish stocks, topsoil and land, are still increasing. Emissions to water from diffuse sources such as agriculture remain a problem.

Human health is threatened by a range of environment-related factors. Generation of hazardous waste is increasing across Europe. The quality of drinking water remains a concern throughout the region, while exposure to particulate matter is now the greatest threat to human health from air pollution in western European cities.

The full report is available at [http://reports.eea.eu.int/environmental\\_assessment\\_report\\_20](http://reports.eea.eu.int/environmental_assessment_report_20)



Only 10% of all large fish (including tuna, above) are left in the sea.

03 10. For further information, contact: Tony Carritt, Tel: +45 33 36 71 47, Fax: +45 33 36 71 98, [information.centre@eea.eu.int](mailto:information.centre@eea.eu.int). ◆

### Other European news

The European Commission has issued a communication on integrated product policy (IPP) highlighting the importance of life-cycle thinking and the efforts of the UNEP/SETAC Life Cycle Initiative. "Life-cycle data needs to be made more accessible," it says. To this end the Commission will launch a coordination initiative involving both ongoing data collection efforts in the EU and existing harmonization initiatives. This initiative will act as a European link to the ongoing UNEP Life-Cycle Initiative.

The Commission outlined its strategy for reducing the environmental impact caused by products, along with actions to stimulate continuous improvement in the environmental performance of products throughout their whole life cycle. It will also initiate work to identify which products have the greatest potential for environmental improvement, and to cooperate with industry, business and consumers to green these products.

See <http://europa.eu.int/comm/environment/ipp/ippcommunication.htm>.

Earlier the Commission announced that the final Action Plan for Environmental Technologies would be adopted by the end of 2003. This plan is intended to increase the impact of such technologies on the environment, the economy, employment, natural resources and quality of life. The Commission has also:

- ◆ introduced stringent new regulations for chemicals to curb the effect of toxic substances on humans and the environment. Chemical producers must register and test for safety some 30,000 substances, at an estimated cost of up to EUR 7 billion in the first ten years.

- ◆ taken 11 EU Member States to court for failure to implement new regulations on approval of GM crops, which were supposed to be in effect from October 2002. In a separate ruling, however, the Commission said local and national governments could not ban planting of such crops by farmers. Meanwhile, the European Parliament approved a bill to require labelling of all genetically modified food.



In ministerial action, EU economics and finance ministers backed a proposed directive on a framework for the taxation of energy products. This directive (which would enter into force on 1 January 2004) would, among other things, reduce competitive distortions that result from differences in tax rates among countries and from the fact that until now only oil has been subject to EU tax legislation, with coal, natural gas and electricity exempted. The directive would also increase incentives to use energy more efficiently, and would allow EU countries to offer companies tax incentives in return for specific undertakings to reduce CO<sub>2</sub> emissions. ◆

## WTO says weather could get worse

In a statement considered unusual for the World Meteorological Organization (WMO), the UN-affiliated scientific body says recent assessments indicate that the number and intensity of extreme weather and climate events may increase as global temperatures continue to warm due to climate change.

The WMO statement was issued at the beginning of Europe's hottest summer in decades – or, in some areas, even centuries. The WMO also noted that the United States had 562 tornados in May, a record for a single month and a considerable jump from the previous record of 399 in June 1992.

Other parts of the US had unusually wet and cold conditions for well over a month. India experienced a severe pre-monsoon heat wave. Heavy rainfall in Sri Lanka, caused by a tropical cyclone, exacerbated already wet conditions, resulting in flooding and landslides.

The WMO points out that monthly and annual temperature averages have been rising gradually over the last 100 years, but in recent years the number of extreme events has grown.

For further information, contact: Carine Richard-Van Maele, Tel: +41 22 730 83 14/5, Fax: +41 22 730 80 27, E-mail: [ipa@gateway.wmo.ch](mailto:ipa@gateway.wmo.ch), Internet: [www.wmo.ch](http://www.wmo.ch). ◆

### Other climate change news

A study funded by NASA and the US Department of Energy concludes that the Earth has become greener in the past 20 years, as plants find it easier to grow due to climate change. Presented in an article in *Science*, the study shows that extra water, heat and sunlight in areas where one or more of those factors may have been lacking allows plants to flourish in places where their growth had previously been limited.

See [www.gsfc.nasa.gov/topstory/2003/0530earth-green.html](http://www.gsfc.nasa.gov/topstory/2003/0530earth-green.html).



The European Union is getting farther away from meeting its commitment to make substantial cuts in greenhouse gas (GHG) emissions under the Kyoto Protocol, Environment Commissioner Margot Wallstrom announced. She cited a report by the European Environment Agency.

The European Parliament has approved the world's first international emissions trading system.

See [http://europa.eu.int/comm/environment/index\\_en.htm](http://europa.eu.int/comm/environment/index_en.htm).



GHG emissions in the most industrialized countries will increase by 17% in this decade (a setback after near stabilization in the 1990s), according to the secretariat of the UN Framework Convention on Climate Change. "These findings clearly demonstrate that stronger and more creative policies will be needed," said Joke Waller-Hunter, UNFCCC Executive Secretary.

See <http://unfccc.int>.



British industry reduced CO<sub>2</sub> releases to the atmosphere by 13.5 million tonnes in 2002, almost three times above target, the Department for Environment, Food and Rural Affairs reported. Most of the cuts were in the steel sector.

See [www.defra.gov.uk](http://www.defra.gov.uk). ◆

## Commitments at the World Water Forum

Some 24,000 people from 182 countries attended the third World Water Forum in Kyoto, Shiga and Osaka, Japan – over three times the number expected. More than 100 new commitments were made.

The climate theme accounted for more than 20 commitments, while 13 concerned gender issues. Global agreements included the following:

- ◆ Japan's Ministry of Land, Infrastructure and Transport backed the establishment of the International Flood Network (IFNet), which is to launch a Global Flood Warning System project with the capacity to create precipitation maps covering the Earth every three hours, thus improving flood warnings worldwide.

- ◆ The World Water Council committed to working with a consortium of international financial institutions, UN agencies, international NGOs and research institutions to develop a programme in which the benefits of sound water management would be identified and governments provided with the tools and analysis they need to consider such benefits in priority setting, planning, development, management and budgeting for the water sector.

- ◆ UN-HABITAT and the Asian Development Bank agreed to set up a capacity building programme, so that Asian cities can better secure and manage investments to aid the poor and help the region meet the Millennium Development Goals of halving the proportion of people without safe drinking water and basic sanitation by 2015.

- ◆ A broad consortium of organizations, including UNEP, committed to continue building bridges between climate activities and the water sector, and to develop actions to help countries cope better with the effects of climate change. These organizations will form an "International Water and Climate Alliance".

The forum's final statement said that while increasing water use efficiency through developments in science and technology and improved demand management are essential, these alone may not be sufficient to meet the growing demand for water in most developing regions and particularly in cities. "All options to augment the available water supply, including increased storage through the use of groundwater recharge and dams, need to be considered, ensuring that all those who will be affected will also benefit." In addition, "The recommendations from the World Commission on Dams (2002) can be used as a reference. A wider adoption of good practice is required in order to avoid the environmental and social costs and risks of the past."

For more information, contact: World Water Council, Les Docks de la Joliette, Atrium 10.3, 10 Place de la Joliette, 13002 Marseille, France, Tel: +33 (0) 4 91 99 41 00 Fax: +33 (0) 4 91 99 41 01 Internet: [www.worldwatercouncil.org](http://www.worldwatercouncil.org), E-mail: [wwc@worldwatercouncil.org](mailto:wwc@worldwatercouncil.org) ◆

## Study confirms ozone depletion rate is down

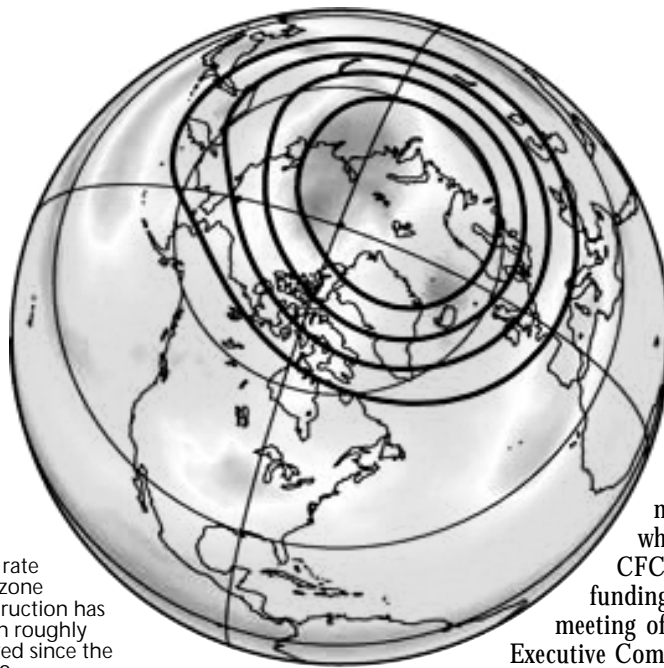
An analysis of 20 years of NASA satellite observations has provided the first evidence that the rate of ozone depletion in the Earth's upper atmosphere is decreasing. "This is the beginning of a recovery of the ozone layer," says Professor Michael Newchurch of the University of Alabama in Huntsville, who led the ozone trend analysis team. "We had a monumental problem of global scale that we have started to solve."

The rate of ozone destruction 35 to 45 kilometres above the Earth has been roughly halved since the 1980s. It is now around 3-5% per decade, Professor Newchurch and his colleagues report. The increase in ozone-depleting chlorine levels has also begun to slow. Still, it could be at least a decade

The rate of ozone destruction has been roughly halved since the 1980s.

before ozone levels actually begin to recover.

Meanwhile, the Multilateral Fund for the Implementation of the Montreal Protocol, the most successful multilateral environmental agreement concluded to date, has allocated a further US\$ 100 million to halt production and consumption of ozone-depleting substances in India, Mexico, North Korea, and Trinidad and Tobago.



These and 21 other developing countries are to use the money to help their industries phase out ODS.

India alone will receive US\$ 52 million to completely phase out carbon tetrachloride production and consumption. About US\$ 32 million will go to Mexico, which has agreed to phase out CFC production. In all, the funding committed at the 40th

meeting of the Multilateral Fund's Executive Committee will result in the phasing out of around 12,000 tonnes of consumption and about 9000 tonnes of production of ozone depleting substances.

For further information, contact: Multilateral Fund for the Implementation of the Montreal Protocol, 1800 McGill College Avenue, 27th Floor, Montreal Trust Building, Montreal, Quebec, Canada H3A 3J6, Tel: +1 514 282 1122, Fax: +1 514 282 0068, Internet: [www.unmfs.org](http://www.unmfs.org) ◆

# Industry Updates

## New target for Australian fuel consumption

The Australian automobile industry, represented by the Federal Chamber of Automotive Industries, has announced a "very challenging" target of reducing fuel consumption of new passenger cars by around 18% by 2010, to 6.8 litres per 100 kilometres from the 2001 level of 8.28 litres.

FAI Chief Executive Peter Sturrock said the target "will require our efforts to be right at the cutting edge, in line with other leading international agreements for reducing fuel consumption and vehicle emissions... We will need to introduce sophisticated new engine and fuel system technologies to many of the vehicles sold in Australia. Continued improvement of Australian fuel quality is essential if this is going to be possible.

"Car buyers will also need to play their part. We can only succeed if consumers are prepared to support these new technologies as they become available in the Australian market."

For further information, contact: [peter.sturrock@fcai.com.au](mailto:peter.sturrock@fcai.com.au) and [www.autoindustries.com.au](http://www.autoindustries.com.au). ♦

## Johannesburg exchange requires GRI compliance

As of 1 September 2003, companies listed on the Johannesburg Securities Exchange will have to comply with codes established in 2002 by the second King Report on Corporate Governance for South Africa. SocialFunds.com reports. The codes address key corporate governance issues, such as director independence, and require that the Global Reporting Initiative (GRI) Guidelines on social and environmental performance be adhered to.

For further information, contact: [www.socialfunds.com](http://www.socialfunds.com). ♦

## Mining companies pledge to avoid heritage sites

Members of the International Council on Mining and Metals (ICMM) – 15 of the largest companies in the sector – have signed an undertaking to recognize World Heritage properties as "no-go" areas as a result of talks with IUCN – The World Conservation Union.

The ICMM pledged "not to explore or mine in World Heritage properties" and to take all possible steps to ensure that operations are not incompatible with the values of World Heritage sites. The mining companies' statement said they recognized the role of properly designated and managed protected areas in conservation strategies and the importance of national and global protected area systems, and were committed to working with IUCN to strengthen the system of protected area categorization.

For further information, contact: [www.icmm.com](http://www.icmm.com). ♦

## Major UK polluters just don't learn

Higher fines and more prosecutions are not stopping major British companies from committing environmental crimes, the UK Environment Agency noted when releasing *Spotlight on Business Environmental Performance 2002*, its fifth annual report on good and bad environmental behaviour by businesses in England and Wales.

Repeat offenders make up 20% of the new list of poor performers, even though fines increased by 36% and prosecutions by 13%. The agency pointed out that the average fine per prosecution is still a relatively low £8744. Utilities, oil companies and waste management firms were among the signifi-

cant repeat offenders from 2001. The agency said many of the companies concerned claimed to be leaders in corporate social responsibility.

There was good news as well, however. Serious pollution incidents caused by businesses decreased (by 21%, from 1854 in 2001 to 1468 in 2002), as did emissions of key pollutants.

The full report can be downloaded from the Environment Agency's Web site. Hard copies are also available.

For further information, contact: [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk). ♦

## US mining industry reduces harmful releases

The latest Toxics Release Inventory from the US Environmental Protection Agency reports that metal mining releases more toxic chemicals than any other industry, though the amount of emissions is declining. The TRI for 2001 showed hard-rock mining for metals like copper, silver and gold accounting for 45% of all releases. But the industry also had the largest absolute decrease from 2000, by 602.5 million pounds or 20%. ♦

## Oil companies endorse Asian air dialogue

Air pollution kills almost half a million Asians every year, and motor vehicles are major contributors to the problem. The Clean Air Initiative for Asian Cities (CAI-Asia), a programme supported by the World Bank and the Asian Development Bank, and 12 major regional and national oil companies have begun a Dialogue for Cleaner Fuels in Asia to identify issues regarding cleaner transport fuels and implications for the refining industry. CAI-Asia described the process as the first regional effort on such a scale.

Petroleum Public Company, BP, ChevronTexaco, ExxonMobil, Indian Oil, Pakistan State Oil, Petron, PTT, Shell, Showa Shell Sekiyu, Singapore Petroleum and Thai Oil announced that they had endorsed the Singapore Statement, which commits them, among other things, "to working with key stakeholders, including governments, academia, civil society, and equipment/vehicle manufacturers, to contribute to the identification of sources of pollution, as well as the formulation of solutions, particularly those designed specifically to reduce emissions from mobile sources."

For further information, contact: [Charles Melhuish at cmelhuish@adb.org](mailto:Charles.Melhuish@cmelhuish@adb.org). ♦

## US paint industry to warn of lead risks

The National Paint and Coatings Association, a US industry group, has reached an agreement with state attorneys general to establish a national information programme on the risks of exposure to lead dust during remodelling or renovation of buildings that may contain old lead-based paint. The campaign will include consumer paint product warnings, point of sale information, and education and training.

The NPCA represents manufacturers producing over 90% of US consumer paints. The agreement calls for an interim product sticker programme, followed by permanent product labelling. Starting 30 September 2003, manufacturers will also distribute point of sale consumer information. Free training will be offered to contractors and to state and local officials. Lead in consumer paints was banned in the US in 1978. ♦

## Brazil remains aluminium can recycling leader

Brazil recycled 87% of all aluminium cans used in the country in 2002, the Associação Brasileira do Alumínio (ABAL, the Brazilian Aluminium Association) has calculated. This figure, which translates into 9 billion recycled cans, means that for the second year in a row Brazil is the world champion in aluminium can recycling among countries where such recycling is not mandatory. The former leader was Japan, which now holds the No. 2

spot with 83%. Sweden, where such recycling is required by law, is in the overall top spot with 90%

The activity is essentially based on market economics, without fiscal incentives or government subsidies; from collection to transformation nearly 2000 companies are estimated to be involved. ABAL reports that some 150,000 people in Brazil earn their living exclusively by collecting aluminium cans.

*For further information, contact: Neusa Freitas, neusafreitas@abredpagina.com.br, www.abal.org.br.◆*

## First comprehensive e-waste industry report

The International Association of Electronics Recyclers has published the first comprehensive report on the electronics recycling industry. The figures, mostly from the US, are in many cases considerably higher than in previous forecasts. Among the highlights:

The US industry comprises more than 400 companies with estimated total annual revenue of over \$US 700 million and more than 7000 employees. The industry processes over 1.5 billion pounds of electronic equipment annually, including more than 40 million units of computer equipment. The process yielded around 900 million pounds of recyclable material.

Judging by projected growth and obsolescence rates for various types of consumer electronics, some 3 billion units will be scrapped over the rest of this decade – an average of about 400 million units a year. This figure includes about 200 million TVs currently in use. Usage and trends from all sectors indicate that about 1 billion units of

computer equipment will become potential scrap between now and 2010.

Collectively, the enormous volumes of end-of-life electronics from all sectors will translate into a four- or fivefold capacity increase in the electronics recycling industry by the end of the decade.

The IAER report also features an industry directory and a guide to services and programmes in electronics recycling.

*For further information, contact: info@iaer.org.◆*

## GHG protocol for aluminium sector

The International Aluminium Institute has published a new Aluminium Sector Greenhouse Gas Protocol. It is an addendum to the GHG protocol of the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI). This tool will “help to improve still further on the reliability and consistency of the calculation and reporting of GHG throughout the aluminium sector,” says Robert Chase, Secretary-General of the IAI. “It will be of value for internal company use as well as for reporting to the public and to specific audiences such as governments and special interest groups.”

*For further information, contact: www.world-aluminium.org/environment/climate.◆*

## Other e-waste industry news

The World Resources Institute announced at its sixth Sustainable Enterprise Summit that the US office supply retailer Staples had joined the WRI Green Power Market Development Group. Staples Inc. announced two chainwide recycling pro-

grammes for cell phones, PDAs, pagers and rechargeable batteries.

*See www.thegreenpowergroup.org and www002.staples.com/products/centers/recycle/hsr.asp#2.*



After a report by US activist groups, the Silicon Valley Toxics Coalition and the Computer Take-Back Campaign, strongly criticized Dell for using a computer recycling company relying on prison labour, the Texas-based company switched recyclers. *Corporate Strategies for Electronic Recycling: A Tale Of Two Systems* describes differences in e-waste recycling strategies between Dell and Hewlett-Packard. Dell's use of a government-linked recycler employing federal prison inmates was a key reason the report ranked HP first.

*See www.svtc.org.◆*

## Banks adopt development guidelines

Ten leading banks from seven countries (including members of the UNEP Finance Initiatives) have adopted the Equator Principles, a code of conduct developed by banks and the International Finance Corporation, the development arm of the World Bank, requiring them to verify that, for all loans of \$50 million or more, the projects they finance meet environmental and social impact standards.

ABN Amro, Barclays, Citigroup, Credit Lyonnais, Credit Suisse, HVB, Rabobank, Royal Bank of Scotland, WestLB and Westpac, the original supporters, have since been joined by Dresdner Bank, ING, MCC and Royal Bank of Canada.

*For further information, contact: www.equator-principles.com.◆*

# UNEP FOCUS



## Report urges governance reform to halt environmental damage

A major new report from UNEP, the United Nations Development Programme (UNDP), the World Bank and the World Resources Institute (WRI) calls for fundamental changes in how decisions are made concerning the world's natural resources. *World Resources 2002-2004: Decisions for the Earth - Balance, Voice, and Power* maintains that only through such basic changes can the world arrest accelerating environmental deterioration and address global poverty.

The report urges governments to include the public in decisions that affect ecosystems, and to integrate environmental impacts into economic decision-making. Public access to information from government, business and non-governmental organizations (NGOs), it says, is a prerequisite for improved environmental performance.

Statistics in the report show an overwhelming human dependence on rapidly deteriorating ecosystems. For instance, one out of every six humans depends on fish for protein needs, yet 75% of the world's fisheries are overfished or at their biological limit. Nearly 41% of the world's people live in water-stressed river basins. Some 350 million people depend directly on forests, but global forest cover is dwindling, and 46% of what was there in pre-agricultural times is now gone.

*World Resources 2002-2004* shows that when constituencies for the environment and for the poor have a voice, the resulting decisions are more likely to promote ecological sustainability, social equity and lasting conflict resolution.

UNDP, UNEP, the World Bank and WRI have committed to work for improved environmental governance through the Partnership for Principle 10, in collaboration with the European Union, IUCN - the World Conservation Union, the governments of the United Kingdom, Chile, Hungary, Italy, Mexico, Sweden and Uganda, and NGOs from around the world. (Principle 10 of the 1992 Rio Declaration calls for increased public participation in decision making affecting the environment.)

Government representatives of 20 African countries, mainly Anglophone, met recently at UNEP headquarters in Nairobi to discuss ways to enhance implementation of Principle 10, in a workshop that was also attended by representatives of international NGOs and of WRI's Access Initiative.

*World Resources 2002-2004* is the tenth in a series of biennial reports on global environment and development issues published since 1984. It

can be ordered in hard copy from WRI's Web site at [www.wri.org](http://www.wri.org), or downloaded in PDF from the same site.

*For more information, contact: Robert Bisset, UNEP Spokesperson for Europe, Tel: +33 (0) 6 22 72 58 42 (mobile), E-mail: [robert.bisset@unep.fr](mailto:robert.bisset@unep.fr)* ♦

## UNEP actions on Iraq conflict

Immediately after the US-led coalition entered Iraq, UNEP began taking steps to ensure that information about the effects of the conflict on the environment would be widely disseminated.

UNEP's Post Conflict Assessment Unit has released a desk study of the environment in Iraq, providing a rapid overview of key environmental issues in the context of the conflict. It draws on sources such as media, government and NGO reports for a preliminary assessment of the most pressing environmental challenges facing those involved in the post-conflict humanitarian relief and reconstruction effort.

The study is available at <http://postconflict.unep.ch> and on a special section of the UNEP Web site called Conflict and the Environment in West Asia (Iraq, Kuwait and the Gulf Region) at [www.unep.org/Documents/Default.asp?DocumentID=307](http://www.unep.org/Documents/Default.asp?DocumentID=307), where a comprehensive collection of information, statistics, assessments and other documentation can be found.

The desk study stresses the need for urgent measures to address humanitarian issues, such as restoring the water supply and sanitation systems, eliminating any pollution hot spots, and cleaning up municipal and medical waste sites to reduce the risk of disease spreading.

Meanwhile, UNEP studies released at the World Water Forum in Kyoto shortly after the Iraq conflict began show that Iraq's Mesopotamian marshlands are continuing to disappear at an alarming rate. Of the 10% of the marshlands left in 2000, one-third disappeared in the following two years, the studies report, with many endangered species, such as the sacred ibis and African darter, barely hanging on.

The UNEP report indicates there is still a last chance to reverse the wetlands' desiccation and at least partially restore them, making the area once again suitable for wildlife and the ancient culture of their inhabitants, known as the Marsh Arabs.

Also during the conflict, UNEP monitored events in an effort to identify potential environmental risks. It reported on the effects of smoke from burning oil wells and other sites, as well as increased plankton productivity in the Shatt Al Arab estuary and surrounding waters. Phyto-

plankton blooms, tentatively linked to nutrients draining into the Gulf in raw sewage from Basra and discharges from the unusually large number of ships in the area, can lead to large die-offs of fish.

In addition, UNEP recommended that sites targeted with weapons containing depleted uranium (DU) be assessed as soon as conditions permit. UNEP-led field studies of sites struck by DU ordnance in the Balkans in the 1990s were the first international field assessments of how DU behaves in the environment.

"Although our assessments to date, under conditions prevailing in the Balkans, have concluded that DU contamination does not pose any immediate risks to human health or the environment, the fact remains that depleted uranium is still an issue of great concern for the general public," said UNEP Executive Director Klaus Toepfer. "An early study in Iraq could either lay these fears to rest or confirm that there are indeed potential risks, which could then be addressed through immediate action."

*For more information, contact Nick Nuttall in Nairobi, Tel: +254 2 62 3084, +254 733 63 2755 (mobile) or [nick.nuttall@unep.org](mailto:nick.nuttall@unep.org); or Michael Williams in Geneva, Tel: +41 22 917 8242/8196/8244, +41 79 409 1528 (mobile) or [michael.williams@unep.ch](mailto:michael.williams@unep.ch)* ♦

## New initiative to fight environmental crime

Customs officers around the world are getting extra backup in the battle against the multibillion-dollar illegal trade in ozone-depleting substances (ODS), toxic chemicals, hazardous waste and endangered species. UNEP is spearheading an initiative to help tackle environmental crime, one of the most profitable and fastest-growing areas of international criminal activity.

The focus is on training border guards to better spot and catch traffickers in "environmental commodities." The main tool is a new Web site maintained by UNEP DTIE's OzonAction programme. The initiative will also work to improve coordinated intelligence gathering, information exchange, guidance (such as codes of best practice) and training among the organizations involved.

Those organizations, in the initial phase of the project, are UNEP, Interpol, the World Customs Organization and the secretariats of multilateral environmental agreements that have trade provisions, such as the Basel Convention on the Transboundary Movements of Hazardous Wastes and their Disposal, the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) and the Montreal Protocol on Substances that Deplete the Ozone Layer, all administered by UNEP.

Many already collaborate on training and information exchange, but the Green Customs project hopes to harmonize efforts so that customs officers receive training that covers all relevant environmental agreements.

Thomas L. Sansonetti, Assistant Attorney General of the Environment and Natural Resources Division of the US Justice Department, commented when the initiative was launched that in 2000 the US government estimated that crime syndicates worldwide earn US\$ 22-31 billion a year from hazardous waste dumping, smuggling of banned hazardous substances, and exploiting and trafficking of protected natural resources.

"When it comes to law enforcement and customs training around the world, we urgently need a more coordinated international response to strengthen the domestic capacity of countries to tackle this problem," he said. "The UNEP-led Green Customs initiative can provide an effective training package for strengthening domestic institutional capacity on environmental crime and enforcement of multilateral environmental agreements."

Illegally traded ODS, which cost much less than CFCs that are legally recycled or obtained from limited existing stocks, are estimated to total 20,000 to 30,000 tonnes annually.

For further information, contact Robert Bisset (see above). ♦

## Water scarcity theme of World Environment Day

Lebanon, whose symbol is the cedar tree celebrated since the days of the Phoenicians, hosted the 2003 World Environment Day. It was the first time in the 30-year history of the awareness-raising event that the main celebrations were held in the Arab world.

The theme was "Water – Two Billion People are Dying for It!" This deliberately jarring reference to one of the world's most pressing environmental issues also recalled that 2003 is the International Year of Freshwater.

Secretary-General Kofi Annan said: "One person in six lives without regular access to safe drinking water. Over twice that number – 2.4 billion – lack access to adequate sanitation. Water-related diseases kill a child every eight seconds." The international community, he noted, had set "measurable, time-bound commitments" at the Millennium Summit and the World Summit on Sustainable Development to provide safe water and sanitation. "These targets must be met and surpassed if the Millennium Development Goals of reducing child mortality, combating malaria, eradicating extreme poverty and hunger, empowering women and improving the lives of slum dwellers are to be achieved."

Klaus Toepfer, Executive Director of UNEP, also said that "Trees, forests and water are inextricably linked. So it is fitting that a country whose national flag is the majestic cedar tree is hosting this year's World Environment Day celebrations."

In a report launched on World Environment Day, UNEP noted that many of the world's groundwater reservoirs, upon which two billion people depend for drinking water and irrigation, are under increasing stress. Among the highlights of the report:



Photo from "Freshwater, Our Treasure in Crisis," DTIE IETC exhibition for World Environment Day in Shiga, Japan

♦ In the US state of Arizona, 400 million cubic metres of groundwater – roughly double the amount being replaced by rainfall – is abstracted annually.

♦ Almost one-fifth of the water in the huge Ogalla/High Plains Aquifer in the US has been removed, and the water table has fallen by up to 30 metres in some places.

♦ Some cities in very dry regions like the Arabian Gulf can no longer use their groundwater because of pollution and have become heavily dependent on desalinated coastal water. Paradoxically, some of these areas are literally becoming waterlogged: water from leaking mains and, especially, from overwatering of gardens becomes trapped in the ground, damaging basements and deforming pipes.

Also on World Environment Day, the World Economic Forum, known for its annual meetings in Davos, Switzerland, joined with UNEP in an initiative to promote public-private partnerships that would improve the management of watersheds "from the summit to the sea." Participants in the initiative include businesses, NGOs, international organizations and governments. The aim is to improve the quality and quantity of water for both business and communities by sharing best practices and forming partnerships to maintain and manage water and watersheds.

As always, the day's celebrations included the presentation of UNEP's Global 500 Awards. This year's winners:

♦ Serge Antoine, who played active roles in France's adoption of a new form of regional planning, its setting up of regional natural parks (similar to biosphere reserves), the establishment of a French ministry devoted to environment, and the founding of UNEP;

♦ The Bangladesh Environmental Lawyers Association, set up by a group of young lawyers in 1991 and considered a pioneer in public interest environmental litigation, having filed 38 cases to date (12 decided in their favour, the rest pending);

♦ Annelisa Kilbourn, British founder of SOS Rhino, who worked in Asia and Central Africa. She died in a plane crash in Gabon in November 2002 while conducting research into the Ebola virus and western lowland gorillas;

♦ Bindeshwar Pathak of India, founder of the Sulabh International Social Service Organization and developer of the technology for a twin-pit, pour-flush toilet. A million devices, known as the

Sulabh Shauchalaya, have been produced;

♦ Najib Saabi of Lebanon, founder of *Al-Bia Wal-Tammia* (Environment and Development) magazine, which has made environmental concerns known to a wide Arab-reading public and become a regional environmental advocacy forum, with a circulation of 38,500 in 22 countries;

♦ Boureima Wankoye, president of Achats Service International, which introduced the mass plantation of gum arabic for export to Europe in the drylands of Niger. This effort not only helped rehabilitate degraded land, but also provided a profitable, income-generating activity for more than 6000 rural families;

♦ The Women Environment Preservation Committee, a non-profit waste management organization established in 1992 by a group of women from Lalitpur, Nepal, in response to growing awareness of the pressures from waste pollution on the environment in the Kathmandu Valley;

♦ Youth Category: Salle Pedagogique des Zones Arides, a programme in Beni Abbes on the edge of the Sahara in Algeria. Its young members surveyed water management in households and set up a small experimental lagoon system.

For more information, contact: *Eric Falt, Director of UNEP's Division of Communications and Public Information, Tel: +254 20 62 3292 or +254 733 68 2656 (mobile), E-mail: eric.falt@unep.org. Groundwater and its Susceptibility to Degradation: A Global Assessment of the Problem and Options for Management is available at www.earthprint.com or can be downloaded at www.unep.org/DEWA/water/groundwater.* ♦

## Geothermal electricity plan for eastern Africa

A plan to dramatically increase the amount of clean electricity generated from largely untapped reservoirs of hot rocks in eastern Africa's Rift Valley region has been drawn up at a conference at UNEP headquarters in Nairobi. During Eastern African Geothermal Energy Week, government energy experts, scientists, engineers and members of the private sector set a "challenging yet achievable target" to develop 1000 MW of geothermal capacity by 2020, equivalent to the electricity needs of several million people.

Kenya, which pioneered geothermal energy in the region, generates 45 MW of electricity from this source and was cited as an example by the delegates: "Geothermal power has proven very reliable. Kenya has used geothermal energy for power generation for 22 years at greater than 97 per cent availability." It was emphasized that geothermal energy is not vulnerable to droughts (unlike hydropower) or price fluctuations (unlike oil-fired power plants).

The meeting was part of a UNEP-implemented Global Environment Facility project called Joint Geophysical Imaging Methodology for Geothermal Reservoir Assessment. This project supports some of the key environmental goals of the New Partnership for African Development

and is designed to be a blueprint for other regions in Africa.

*For more information, contact Nick Nuttall (see above).* ◆

## UNEP and Finland strengthen cooperation

Finland and UNEP have signed new agreements strengthening their cooperation in areas including pollution prevention, climate change, air quality monitoring and education. The accords are with the Finnish Environment Institute (covering water, wildlife, climate change, waste, chemicals and environmental information systems), the Finnish Meteorological Organization (climate change, including helping developing countries improve their ability to model the likely impacts of global warming) and the University of Joensuu (to encourage the exchange of ideas, information technology and staff and students between higher education institutions in developed and developing countries, and to promote global sustainable development).

*For more information, contact Nick Nuttall (see above).* ◆

## Young environmentalists meet

Young people from around the world converged on Dubna, Russia, in late August to share their enthusiasm for a greener world and draw up action plans geared towards an environment-friendly future. The Tunza International Youth Conference on 25-27 August took its name from a Kiswahili word meaning "to treat with care or affection." It was the latest step in a growing UNEP campaign to harness the enthusiasm, creativity and vision of young people. Some 150 persons between ages 15 and 24, from more than 60 countries, took part in the conference. Events included the launch of a UNEP State of the Environment Report prepared by and for young people.

*For more information, contact: Theo Oben, Head of UNEP's Children and Youth Unit, Tel: +254 2 62 3262, E-mail: theodore.oben@unep.org.* ◆

## Protocol on GMO trade comes into force

The Cartagena Protocol on Biosafety entered into force in September, 90 days after Palau became the 50th country to ratify the treaty. Adopted in January 2000 by the parties to the Convention on Biological Diversity, the protocol sets out the first comprehensive regulatory system for assuring the safe transfer, handling and use of genetically modified organisms (GMOs), with a specific focus on movement across national borders.

The pact features one set of procedures for GMOs that are to be intentionally introduced

into the environment, and one for GMOs that are to be used directly as food or feed or for processing. Both are designed to ensure that recipient countries get the information they need to make informed decisions about whether to accept GMOs. Governments will exchange information through a clearinghouse and base their decisions on scientifically sound risk assessments. Where scientific certainty is lacking, a government may base its decision on a desire to avoid or minimize potential adverse effects.

With funding from the Global Environment Facility, UNEP is overseeing a US\$ 38.4 million project helping up to 100 developing countries build the scientific and legal skills needed for evaluation of the health and environmental issues surrounding imports of "living modified organisms" (LMOs), as they are known under the protocol.

The first meeting of the parties to the protocol will take place in the first quarter of 2004 in Kuala Lumpur, Malaysia.

*For more information, contact Michael Williams (see above) or see [www.biodiv.org/biosafety](http://www.biodiv.org/biosafety)* ◆

## UNEP Division of Technology, Industry and Economics (DTIE) HIGHLIGHTS

### Marrakech meeting on consumption and production

Agreement has been reached at an international gathering in Marrakech on mapping out a 10-year plan for revising consumption and production patterns and turning international commitments on sustainable behaviour into reality. The resulting "Marrakech Process" will be used to develop and implement the long-term plan, which world leaders agreed to at the 2002 Johannesburg Summit in a move to accelerate the shift towards lifestyles that promote social and economic development for all.

The International Expert Meeting on a 10-Year Framework of Programmes for Sustainable Consumption and Production brought more than 100 participants from 54 countries to Morocco. UNEP DTIE's work on cleaner production and sustainable consumption was welcomed and supported by the participants. They recommended that more National Cleaner Production Centres be established and that, as suggested by an Asia-Pacific regional meeting, the NCPC services be expanded to include consumption.

Consumers International and UNEP were encouraged to further promote the sustainable consumption elements of the UN Guidelines for Consumer Protection. The Advertising Initiative supported by UNEP DTIE should be broadened to include education, communications and market research, the participants said. They also suggested implementing integrated product policy approaches through international programmes such as the UNEP/SETAC Life-Cycle Initiative,

and exploring the potential role of international figures such as pop stars and football players in raising awareness.

The Marrakech Process will involve expert task forces and regional meetings. Meanwhile, the UN is to prepare a report on international activities needed to address problems related to waste, transport, construction, water and sanitation.

Bas de Leeuw of UNEP's Sustainable Consumption team noted the importance of regional processes and said that "fighting against poverty and creating meaningful jobs" should be high on the agenda. "The framework should allow each country to follow its own path, according to its own needs and priorities," he said.

Experts at the earlier Asia-Pacific regional meeting in Yogyakarta, Indonesia, concluded that coherent, integrated policies on sustainable consumption and production must be adopted if the region, which is expected to become the world's main manufacturing hub in the next ten years, is to address the challenge of alleviating poverty and increasing the quality of life for all its people.

Shafqat Kakakhel, UNEP Deputy Executive Director, said in opening the Yogyakarta meeting that "It is clear that the Earth's natural ecosystems will not cope" if Asia adopts "the style of industrialization and overconsumption seen in Europe or North America."

The event was organized by UNEP DTIE and the Indonesian government in cooperation with the United Nations Development Programme and the UN Department of Economic and Social Affairs.

The Johannesburg Plan of Implementation calls for the development of a ten-year framework of programmes supporting regional and national initiatives to promote sustainable consumption and production patterns.

The report of the Marrakech meeting, organized by the UN Department of Social and Economic Affairs in cooperation with UNEP (including UNEP DTIE), will be presented to the 12th session of the Commission on Sustainable Development and UNEP's Governing Council in February 2004. Another global review meeting of experts will be held in 2005.

*For more information, contact: Bas de Leeuw, head of UNEP DTIE's Sustainable Consumption programme, at [sc@unep.fr](mailto:sc@unep.fr). Full reports from Marrakech are available at [www.iisd.ca/linkages/sd/sdscp/sdvol87num1.html](http://www.iisd.ca/linkages/sd/sdscp/sdvol87num1.html).* ◆

### Helping governments with assessment and planning

The Economics and Trade Branch (ETB) of UNEP DTIE is launching an initiative on "Capacity Building for Integrated Assessment and Planning for Sustainable Development." The initiative aims to build on existing experiences and approaches for integrated assessment and planning, balancing environmental, social and economic objectives, and relating them to poverty alleviation and sustainable trade promotion. The

intention is to identify best practices and approaches as well as areas requiring improvement. The initiative will focus on the sustainability concerns of broad-based strategic planning, with emphasis on the agriculture sector. Projects will be carried out in eight countries in Latin America, Africa, the Asia-Pacific region, and eastern and central Europe.

The initiative responds to two UNEP Governing Council decisions: one related to helping governments integrate environmental considerations in the design and assessment of macroeconomic policies and mutually supportive trade and environment policies; the other on developing a strategy for actions on poverty alleviation in the Johannesburg Plan of Implementation.

Countries have been invited to submit a preliminary overview of planned (strategic) planning processes related to poverty reduction, environment and trade, then identify one key strategic planning process to submit as a candidate for a pilot case to be supported by UNEP. The country studies will each be led by a national institution.

*For more information, contact: Hussein Abaza, Chief, Economics and Trade Branch, 15, chemin des Anémones, CH-1219 Châtelaine/Geneva, Switzerland, Tel: +41 22 917 8179, Fax: +41 22 796 9240, E-mail: hussein.abaza@unep.ch, Internet: www.unep.ch/etu/index.htm.* ◆

#### Other ETB news

The latest companies joining the Finance Initiatives of UNEP's Economics and Trade Branch include:

- ◆ Insurance Australia Group, Australia and New Zealand's leading general insurer;
- ◆ Calvert Group, which offers one of the world's largest families of socially screened mutual funds;
- ◆ Garant, based in Vienna and owned by the Russian insurance group Ingosstrakh.

Contact: [jacob.malthouse@unep.ch](mailto:jacob.malthouse@unep.ch).



The United Nations Fund for International Partnerships has approved US\$ 150,000 in seed funding for a new Sustainable Energy Finance Initiative, formed early in 2003 by the UNEP Finance Initiatives and UNEP Energy (both part of DTIE), along with the Basel Agency for Sustainable Energy (BASE), a UNEP collaborating centre. The aim is to increase international investment in clean energy systems.

Contact: [scott.flemming@unep.ch](mailto:scott.flemming@unep.ch).



UNEP FI, UNEP Energy and BASE have collaborated to produce the Financing Sustainable Energy Directory, a comprehensive on-line listing of lenders and investors in the sustainable energy sector.

See [www.fse-directory.net](http://www.fse-directory.net). Contact: Virginia Sonntag-O'Brien at [virginia.sonntagob@energy-base.org](mailto:virginia.sonntagob@energy-base.org).



A new version of the GHG Indicator developed by UNEP FI is available online for download. The improved automated version will assist users with tasks ranging from data entry to calculations. The

#### New UNEP DTIE Web sites

- ◆ [www.greener-driving.net](http://www.greener-driving.net)
- ◆ [www.uneptie.org/ozonaction/customs/home.htm](http://www.uneptie.org/ozonaction/customs/home.htm)

See Web Site Highlights for more information.

GHG Indicator makes it possible to convert information on energy use into estimated GHG emissions. It is based on the UNEP Guidelines for Calculating Green House Gas Emissions for Businesses and Non-Commercial Organisations, which provide a step-by-step approach with easy-to-use worksheets. The Indicator can be used at various levels of an organization.

See [www.uneptie.org/energy/act/ef/GHGIN/index.htm](http://www.uneptie.org/energy/act/ef/GHGIN/index.htm). ◆

#### "Shopping for a Better World" movement spreads

From the catwalk to the consumer, the world's leading fashion designers and retail giants could play a major role in saving the planet. Executive Director Klaus Toepfer said in introducing UNEP's new "Shopping for a Better World" initiative in Brussels at the opening of the European Commission's Green Week.

The programme (see *Industry and Environment*, Vol. 26, No. 1) aims to influence the US\$ 7 trillion global retail industry. One aspect of this drive is to forge partnerships with people from the fashion world in the hopes of bringing environmental messages to a new and increasingly influential audience.

"Consumers, especially the young, are often confronted with the seemingly contradictory choice of wanting to help the planet and the hedonistic desire to buy the latest 'must-have' brands," said Toepfer. "But what can be more modern, more fashionable, than caring about our planet? By working with the retail and fashion industry we can help change attitudes towards consumption, and ultimately people's actions."

One of the first partners is the award-winning, Web-based global fashion magazine Lucire. Its founding publisher, Jack Yan, emphasized that "Fashion magazines should not only communicate the labels and their offerings, they should also give the industry insight into what's hot and what's not. In our joint effort with UNEP, Lucire will champion those who understand sustainability, bringing them the consumer demand that they deserve. At the same time, we will be able to send a signal back to the fashion industry that this is what today's society desires."

"The retail sector can influence suppliers to produce in a more sustainable manner – raising questions of resource and energy use for example," Toepfer emphasized. "The sector is also in a unique position to help the public to adopt more environmentally friendly lifestyles and purchasing habits by providing customers with an appropriate choice."

New research shows that 63 million people in the United States (30% of the adult population) make purchasing decisions based on personal, social and environmental values. *Understanding the LOHAS Market: Identifying the LOHAS Consumer & Business and Branding Opportunities*, a report from Natural Business Communications (LOHAS stands for "lifestyles of health and sustainability"), says the LOHAS consumer is characterized by a proven willingness to pay more for LOHAS products and services (80% are willing to spend up to 20% more) and a high degree of influence, being almost three times as likely as the general population to teach others about the benefits of such related products and services.

*For more information, contact: Robert Bisset, UNEP Spokesperson for Europe, Tel: +33 1 44 37 76 13 or +33 6 22 72 58 42 (mobile), E-mail: robert.bisset@unep.fr; Internet: www.uneptie.org/sustain (see also www.lucire.com); and LOHAS Journal, 360 Interlocken Blvd., Suite 350, Broomfield, CO 80021, USA, Tel: +1 303 222 8283, Fax: +1 303 440 7741, E-mail: info@lohasjournal.com, Internet: www.naturalbusiness.com.* ◆

#### APELL meeting on environmental emergencies

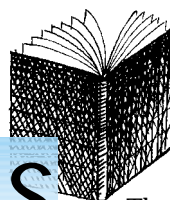
UNEP and the UN Office for Co-ordination of Humanitarian Affairs recently hosted a meeting of more than 100 senior experts in Geneva on aspects of prevention and response to environmental emergencies. The meeting included the seventh "global dialogue" on the future of UNEP's Awareness and Preparedness for Emergencies at Local Level (APELL) programme. It brought together representatives from countries, industries, academic and professional bodies as well as key intergovernmental bodies.

Participants strove to ensure that emergency preparedness draws on the widest possible information and field resources and that the UNEP and OCHA programmes are appropriately linked to other industrial and governmental programmes. They reviewed progress in using APELL nationally and globally, exchanged lessons, recommended future applications and strengthened the partnership of governments, associations and experts contributing to this work. A separate meeting reviewed progress in applying APELL in the mining sector, where several serious accidents have occurred in recent years.

APELL was launched by UNEP and major industrial and governmental partners in 1988 to make local communities better prepared to confront dramatic accidents such as the one in Bhopal in 1984. Communities close to industrial facilities are often the first to be affected by accidents. APELL can also help communities prepare for natural disasters such as earthquakes, hurricanes and floods.

*For further information, contact: Fritz Balkau, Chief, Production and Consumption Unit, E-mail: fbalkau@unep.fr; Internet: <http://www.uneptie.org/pc/apell/home.html>.* ◆

# Books & Reports



The Earth Policy Reader

The second major publication from Lester R. Brown's Earth Policy Institute (following the groundbreaking *Eco-Economy: Building an Economy for the Earth*) examines the economic costs of "ecological deficits" generated by growing pressures on countries' "natural support systems". Part 1 focuses on desertification in China, food security and the climate challenge, while Part 2 presents 12 eco-economic indicators. The third section reprints several of the "Eco-Economy Updates" published by the institute since it was founded in May 2001.

L. Brown, et al. (2003). *Earthscan Publications Ltd.*, 120 Pentonville Road, London, N1 9JN, UK. Tel: +44 20 7278 0433, Fax: +44 20 7278 1142, E-mail: earthinfo@earthscan.co.uk, Internet: www.earthscan.co.uk. Pbk., 303p. ISBN 1-85383-970-1

The Greening of Business in Developing Countries: Rhetoric, Reality and Prospects

This book and the one discussed below compile material that originated in an international research programme on business responsibility for sustainable development, under the auspices of the United Nations Research Institute for Social Development (UNRISD). Three main issues are addressed: the extent to which the "greening of business" is a reality in the developing world, whether environmental responsibility on the part of large corporations actually contributes significantly to sustainable development, and what combination of measures is most likely to help companies in developing countries improve their environmental practices. Includes essays and case studies.

P. Utting, ed. (2002). *UNRISD*, available from Zed Books Ltd., 7 Cynthia Street, London N1 9JF, UK, Tel: +44 207 837 4014, Fax: +44 207 833 3960, E-mail: sales@zedbooks.demon.co.uk, Internet: www.zedbooks.demon.co.uk. Pbk., 312p. ISBN 1-84277-089-6.

Voluntary Approaches to Corporate Responsibility: Readings and a Resource Guide

The essays and resource guide that make up *Voluntary Approaches to Corporate Responsibility* were prepared as part of a project by UNRISD, under the above-mentioned research programme, to study the potential of voluntary initiatives aimed at promoting corporate environmental and social responsibility. The first essay is on corporate codes of conduct, the second on regulating business via multi-stakeholder initiatives. The resource guide provides a bibliography and Web sites. This book is published by the United Nations



## General

Eco-Service Development: Reinventing Supply and Demand in the European Union

Eco-services – environmentally oriented leasing, renting, pooling and sharing – involve "selling" the use of a product rather than selling the product itself. This approach is closely related to what UNEP calls "product service systems". It offers considerable potential as regards the need to develop environmentally sound marketing and consumption patterns. The authors, who are from research institutes in Germany, the Netherlands,



Austria and Spain, maintain that this concept can also promote innovation, business creation and added value. The study, which originated with a European Union project, reviews the state of the field in the authors' home countries and explores options for market participants, potential barriers, and the instruments best suited to promoting the concept.

S. Behrendt, et al. (2003). *Greenleaf Publishing Ltd.*, Aizlewood Business Centre, Aizlewood's Mill, Nursery Street, Sheffield S3 8GG, UK, Tel: +44 114 282 4375, Fax: +44 114 282 3476, E-mail: info@greenleaf-publishing.com, Internet: www.greenleaf-publishing.com. Hbk., 216p. ISBN 1-874719-44-6.

How to Establish and Operate a Cleaner Production Centre

Cleaner production centres continue to spring up around the world, many with the help of the Programme for National Cleaner Production Centres run by UNEP and the United Nations Industrial Development Organization (UNIDO). This new electronic publication offers in-depth training for those who are establishing a cleaner production centre or who would like to do so.

(2003). *UNEP DTIE*. Available at [www.unep-tie.org/pc/cp/library/training/cdgpac/start.htm](http://www.unep-tie.org/pc/cp/library/training/cdgpac/start.htm).



Status Report: Cleaner Production in Latin America and the Caribbean

The latest regional status report from UNEP's cleaner production programme covers conferences, national and regional activities, roundtables and other forums, and country approaches in the Latin America and Caribbean region. This report, produced by the Environment Agency of the State of São Paulo, Brazil (CETESB), also covers successful initiatives, barriers in the region and relevant Internet resources.

(2002). *UNEP*. Available from *CETESB*, Av. Professor Frederico Hermann Jr., 345 Alto de Pinheiros, São Paulo, Brazil, Tel: +55 11 30 30 60 00, Fax +55 11 30 30 64 02, Internet: [www.cetesb.sp.gov.br](http://www.cetesb.sp.gov.br). Pbk., 68p. ISBN 92-807-1821-5.

Acta Universitatis Carolinae: Environmentalica, Vol. 16, Nos. 1-2

This volume of the Environmentalica series, published by Charles University in Prague, includes articles from experts in the Czech Republic, China, New Zealand and Germany. All the articles have been translated into English.

(2003). *Charles University Press*, Ovocny trh 3, 116 36 Prague 1, Czech Republic, Tel: +420 224 491 276 or 224 213 489, Fax: +420 224 212 041, E-mail: [cupress@cuni.cz](mailto:cupress@cuni.cz), Internet: <http://cupress.cuni.cz>. Pbk., 117p. ISSN 0862-6529.

An Introduction to Corporate Environmental Management: Striving for Sustainability

Intended for use as a textbook or sourcebook, this introduction to the relationship between management and environmental issues has four main sections. The first is an overview; the second discusses success factors and fields of action. Part 3 looks at strategic environmental management and Part 4 covers concepts and tools. Stefan Schaltegger and Roger Burritt, authors of *Contemporary Environmental Accounting*, along with Prof. Schaltegger's German-textbook writing partner, Holger Petersen, have organized the material so as to encourage readers to apply their own views, experiences and ideas before planning how to use the information in the book and other resources.

S. Schaltegger, et al. (2003). Available from *Greenleaf Publishing Ltd.* (see above). Pbk., 384p. ISBN 1-874719-65-9.

Non-Governmental Liaison Service as part of its Development Dossier series.

(2002). UNRISD, available from NGLS, Palais des Nations, CH-1211 Geneva 10, Switzerland, Tel: +41 22 917 2076, Fax: +41 22 917 0432, E-mail: [ngls@unctad.org](mailto:ngls@unctad.org), Internet: [www.unrisd.org](http://www.unrisd.org). Pbk., 211p.

 The 21st Century NGO: In the Market for Change


SustainAbility's seventh survey of the NGO landscape is the first to be supported by a wide consortium of NGOs, as well as public and private sector partners. Published in cooperation with UNEP DTIE and the UN Global Compact, *The 21st Century NGO* is addressed to a mixed readership, mainly NGOs and their funders but also people in the business community who want to better understand what tomorrow's NGOs and their agendas will be like. Among the issues covered are globalization, the civil society boom and NGO governance. Recommendations are made for NGOs and for businesses interested in working with them.

(2003). SustainAbility Ltd., 20-22 Bedford Row, London WC1R 4EB, UK, Tel: +44 20 7269 6900, Fax: +44 20 7269 6901, E-mail: [foskett@sustainability.com](mailto:foskett@sustainability.com), Internet: [www.sustainability.com](http://www.sustainability.com).

Unfolding Stakeholder Thinking 2: Relationships, Communication, Reporting and Performance

The second of two volumes on "stakeholder thinking" examines major new topics increasingly being discussed by academics and in the corporate world. As before, the editors, an international team of academics, have put together a broad collection of essays. The first section focuses on building successful stakeholder strategies, with companies considered as the key entity in stakeholder relationships. Part 2 deals with emerging approaches to the assessment, measurement and reporting of business in society and in stakeholder relationships. For information about the first volume of *Unfolding Stakeholder Thinking*, see *Industry and Environment*, Vol. 26, No. 1.


J. Andriof, et al., eds. (2003). Greenleaf Publishing Ltd. (see above) Hbk., 296p. ISBN 1-874719-53-5.

 Evaluation of Environmental Impacts in Life Cycle Assessment

The latest volume in the life cycle assessment series of UNEP DTIE's Production and Consumption Branch was produced in collaboration with the US Environmental Protection Agency. It essentially reports on two international expert workshops organized with the US EPA and the Centre of Environmental Science at Leiden University in the Netherlands. It also contains an introduction to the workshop topics and lists further resources.

(2003). UNEP. Available from EarthPrint Ltd., PO Box 119, Stevenage, SG14TP, UK, Tel: +44

1438 748 111, Fax: +44 1438 748 844, E-mail: [orders@earthprint.com](mailto:orders@earthprint.com), Internet: [www.earthprint.com](http://www.earthprint.com). Pbk., 93p. ISBN 92-807-2144-5.

 Studies of EIA Practice in Developing Countries: A Supplement to the UNEP EIA Training Resource Manual

This compendium of case studies examines various approaches to environmental impact assessment and strategic environmental assessment in developing and transition economies. All the case studies were prepared by EIA specialists from the countries concerned. The book is particularly aimed at EIA centres and training institutions in the regions from which the studies are drawn. The case studies can be incorporated into training materials to add relevance and realism, reviewed collectively for examples corresponding to training topics in the EIA training resource manual, or used as references for the development of further case studies.

(2003). UNEP. Available from EarthPrint Ltd. (see above). Pbk., 310p. ISBN 92-807-2298-0.

 Conventions and Coral Reefs

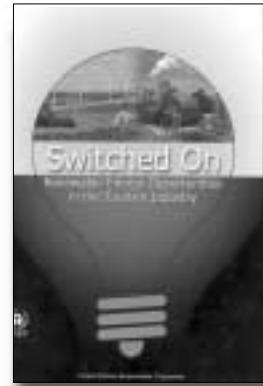
The Coral Reef Unit of UNEP's World Conservation Monitoring Centre and the WWF Coral Reefs Advocacy Initiative has produced this guide to multilateral environmental agreements (MEAs) and other programmes, partnerships and networks relevant to the protection and conservation of coral reefs, in the context of the Plan of Implementation from the World Summit on Sustainable Development held last year in Johannesburg. From the Stockholm Convention on Persistent Organic Pollutants through the World Heritage Convention to the UNEP Regional Seas conventions and action plans, this booklet describes each programme's work, the issues it affects that are related to coral reefs, its related activities, the need for future work, and the marine protected areas involved.

(2003). UNEP WCMC and WWF. Available in hard copy from Jerker Tamelander at UNEP ([jerker.tamelander@unep.org](mailto:jerker.tamelander@unep.org)) or download in PDF at [www.unep.ch/conventions/cru](http://www.unep.ch/conventions/cru). Pbk., 18p.

Energy

 Switched On: Renewable Energy Opportunities in the Tourism Industry

The European Environment Agency estimates that tourism is responsible for 5-7% of European emissions of carbon dioxide, the main greenhouse gas linked to global climate change. And most of the areas at greatest risk from global warming are prime tourism locations: small islands, coastal areas, wetlands. This linkage illustrates the potential importance of clean energy for the tourism



industry, one of the world's largest and fastest-growing sectors. The UNEP DTIE tourism programme has produced this report in order to explore the advantages and limitations of renewable energy forms in tourism, discuss the technologies and energy sources available for heat, electricity and transport, and offer a "how-to" guide for companies in the sector.

(2003). UNEP. Available from EarthPrint Ltd. (see above). Pbk., 56p. ISBN 92-807-2330-8.

Energy, the State, and the Market: British Energy Policy since 1979

What began as study of the market approach to energy introduced after Margaret Thatcher became the British Prime Minister in 1979 has emerged as a report on the continuing ramifications of that approach under the Conservatives and during the first term of Tony Blair. This book dwells chiefly on the political, social and economic effects of energy privatisation. Later chapters also discuss the growth in importance of environmental considerations and how environment now affects energy policy formation in Britain.

D. Helm (2003). Oxford University Press, Great Clarendon Street, Oxford OX2 6DP, UK, Tel: +44 1865 556767, Internet: [www.oup.co.uk](http://www.oup.co.uk). Hbk., 457p. ISBN 0-19-926203-9.

Climate change/air pollution

Building Owners Save Money, Save the Earth: Replace Your CFC Air Conditioning Chiller

This brochure from the US Environmental Protection Agency explains the environmental and financial reasons to replace CFC air conditioning chillers with new, energy-efficient equipment. A partnership of international organizations (including UNEP, UNDP and the World Bank), governments, manufacturers, NGOs and others have endorsed the brochure on the grounds that it helps eliminate uncertainty and underscores the wisdom of replacing CFC chillers. It helps building owners understand the rationale for replacing/upgrading chillers and undertaking energy efficiency steps that can result in cost savings.

(2002). EPA. Available in PDF at [www.unep-tie.org/ozonation/library/tech/main.html](http://www.unep-tie.org/ozonation/library/tech/main.html). 10p.

**UNEP** Planning, Designing and Implementing Policies to Control Ozone Depleting Substances under the Montreal Protocol: A Handbook on Policy Setting at the National Level

Experience has shown that a strong national policy framework is vital to reduction and phase-out of ozone-depleting substances (ODS). This handbook from UNEP DTIE's OzonAction Programme aims to guide those responsible for



planning, formulating and implementing such frameworks. It is designed for flexibility, focusing on general ODS management rather than providing model laws or regulations.

(2003). UNEP. Available from EarthPrint Ltd. (see above). Pbk., 119p. ISBN 92-807-2311-1.

**Industry sectors**

**UNEP** Mining, Environment and Development: United Nations Documents Relating to the Mining and Minerals Industry

The United Nations Conference on Trade and Development has jointly produced with UNEP DTIE a CD-ROM and Internet-based compilation of documents on mineral resources, mining and sustainable development. The documents cover such topics as health and safety, voluntary initiatives, recycling and reuse, information access, training and education, and small-scale mining. The most up-to-date version of the compilation is on the Internet.

(2003). UNEP and UNCTAD. Download at [www.mineralresourcesforum.org](http://www.mineralresourcesforum.org). CD-ROM available from UNEP DTIE Production and Consumption Branch, 39-43 quai André-Citroën, 75739 Paris, France, Tel: +33 (0) 1 44 37 14 41, Fax: +33 (0) 1 44 37 14 74, E-mail: [unep.tie@unep.fr](mailto:unep.tie@unep.fr).

**UNEP** A Practical Guide to Good Practice: Managing Environmental and Social Issues in the Accommodations Sector

Hoteliers are the main target audience of this handbook produced by the Tour Operators Initiative for Sustainable Tourism Development (supported by UNEP DTIE) and the US-based Center for Environmental Leadership in Business. The

booklet gives basic information on issues such as energy management, waste management and chemical use, along with resources and brief case studies pertaining to each issue. It can be downloaded in PDF at the Tour Operators Initiative Web site.

(2003). Available from UNEP DTIE Tourism Programme, 39-43 quai André-Citroën, 75739 Paris, France, Tel: +33 (0) 1 44 37 14 41, Fax: +33 (0) 1 44 37 14 74, E-mail: [unep.tie@unep.fr](mailto:unep.tie@unep.fr); Internet: [www.toinitiative.org](http://www.toinitiative.org). Pbk., 24p.

**Environmentally Sustainable Buildings: Challenges and Policies**

The final report of the OECD Sustainable Buildings Project, which ran from 1998 to 2002, analyzes the environmental impacts of the building and construction sector, along with the main policy instruments related to CO<sub>2</sub> emissions, waste management and indoor air pollution in the sector. The analysis covers a range of instruments, including building regulations, energy taxes and environmental labelling.



(2003). OECD. Available from OECD Publications, 2 rue André-Pascal, 75775 Paris Cedex 16, France, Tel: +33 (0) 1 45 24 82 00, E-mail: [sourceoecd@oecd.org](mailto:sourceoecd@oecd.org); Internet: [www.sourceoecd.org](http://www.sourceoecd.org). Pbk., 195p. ISBN 92-64-19825-3.

**Chemicals, pollution and accidents**

OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response: Guidance for Industry (including Management and Labour), Public Authorities, Communities and other Stakeholders

This is the second edition of the OECD's main publication on preventing chemical accidents, carrying out emergency planning for those accidents that do happen, minimizing accidents' effects and performing follow-up actions such as clean-up, reporting and investigation. It covers potential technological and natural disasters as well as sabotage. A new section of "Golden Rules" highlights the primary roles and responsibilities of the main stakeholders involved.

(2003). OECD. Available from OECD Publications (see above). Pbk., 209p. ISBN 92-64-10181-0.

**UNEP** IPCS Concise International Chemical Assessment Documents

Four new monographs have been published in this series from the International Programme on Chemical Safety, sponsored by UNEP, the International Labour Organization and the World Health Organization. Each includes abstracts in French and Spanish:

Document 44, Silver and Silver Compounds: Environmental Aspects. Pbk., 36p. ISBN 92-4-153044-8.

Document 45, Ethylene Glycol: Human Health Aspects. Pbk., 38p. ISBN 92-4-153045-6.

Document 46, Carbon Disulfide. Pbk., 42p. ISBN 92-4-153046-4.

Document 47, Arsine: Human Health Aspects. Pbk., 29p. ISBN 92-4-153047-2.

(2002). IPCS/WHO, CH-1211 Geneva 27, Switzerland, Tel: +41 22 791 3592, Fax: +41 22 791 4848, E-mail: [ipcsmail@who.int](mailto:ipcsmail@who.int), Internet: [www.who.int/pcs](http://www.who.int/pcs).

**Water**

**IETC Freshwater Management Series**

UNEP DTIE's International Environmental Technology Centre launched a new series in November 2002. The numbers available so far in the Freshwater Management Series are:

1. Biosolids Management: An Environmentally Sound Approach for Managing Sewage Treatment Plant Sludge (2002). Pbk., 14p. ISBN 92-807-2166-6.

2. Phytoremediation: An Environmentally Sound Technology for Pollution Prevention, Control and Remediation (2002). Pbk., 13p. ISBN 92-807-2167-4.



3. Proceedings of International Symposium on Building Partnerships between Citizens and Local Governments for Sustainable Lake Management (2002). Pbk., 157p. ISBN 92-807-2168-2.

5. Guidelines for the Integrated Management of the Watershed: Phytotechnology and Ecohydrology (2002). Pbk., 188p. ISBN 92-807-2059-7.

7. Phytotechnologies: A Technical Approach in Environmental Management (2003). Pbk., 48p. ISBN 92-807-2253-0.



## Web Site Highlights


**Sustainable Development Online**  
<http://sd-online.ewindows.eu.org>

This section of the European Environment Agency's EnviroWindows site provides descriptions of and links to hundreds of Web sites covering the broad subject of sustainable development. Sustainable Development Online is continually updated and each site listed has been visited by a researcher. The information is organized into folders: Enterprises, Networks, Events, Tools and Training.

**World Summit on the Information Society**  
[www.itu.int/wsis](http://www.itu.int/wsis)


Results of the second meeting of the preparatory committee for the World Summit on the Information Society (WSIS) are now available on the Internet. The summit, to be held in Geneva on 10-12 December 2003 and in Tunis on 16-18 November 2005, is aimed at ensuring equal access by both developed and developing countries to the potential of new information and communications technolo-

gies. A draft declaration and plan of action are available on the Web site. The Global e-Sustainability Initiative, supported by UNEP DTIE, is contributing to the preparations for the summit.

 **UNEP Greener Driving**  
[www.greener-driving.net](http://www.greener-driving.net)

With a combination of videos and comic strips starring the cheeky Green Car, along with easy to understand tips, the Green Driving cam-

paign begun in 2002 by UNEP and several automakers (*Industry and Environment*, Vol. 25, No. 3-4) has launched a new Web site.


 **Green Customs**  
[www.uneptie.org/ozonation/customs/home.htm](http://www.uneptie.org/ozonation/customs/home.htm)

Aimed at customs officers, this site offers information and training materials intended to help officials combat illegal trade in "commodities of environmental concern": ozone-depleting substances, hazardous waste and endangered species. It is supported by the World Customs Organization, Interpol, the secretariats of CITES and the Basel Convention, UNEP DTIE's OzonAction Programme, UNEP's Ozone Secretariat and the UNEP Divisions of Environmental Conventions and Environmental Policy Implementation. The site includes a link to a new OzonAction video, *Nothing to Declare: Good Customs to Save the Ozone Layer* (in English, French or Spanish). At the Web site, interested organizations and customs officers themselves can find information such as lists of training events, environmental trainers and training presentations.

10. *Managing Urban Sewage (2003)*. Pbk., 14p. ISBN 92-807-2296-4.

Nos. 1, 2 and 10 are short introductory guides intended for decision makers.

Available from IETC, 2-110 Ryokuchi koen, Tsurumi-ku, Osaka 538-0036, Japan, Tel: +81 6 69 15 45 81, Fax: +81 6 69 15 03 04, E-mail: [ietc@unep.or.jp](mailto:ietc@unep.or.jp), Internet: [www.unep.or.jp](http://www.unep.or.jp) (the exceptions are Nos. 5 and 7, available from Earth-Print - see above).

 **International Source Book on Environmentally Sound Technologies for Wastewater and Stormwater Management: Abridged Version**

No. 20 in IETC's Technical Publication Series is a summary of the 2002 publication compiled in collaboration with Australia's Murdoch University Environmental Technology Centre and reviewed in *Industry and Environment*, Vol. 25, No. 2.

(2002). Available from IETC (see above). Pbk., 37p. ISBN 92-807-2099-6.

 **Lakes and Reservoirs: How to Involve the Public in Protecting Them from Degradation**

The IETC Short Series on Lakes and Reservoirs is aimed at the general public. No. 4 in the series maintains that public participation in freshwater management and conservation is essential if lakes,

rivers and watersheds in general are to survive as natural assets capable of sustaining humanity.

(2002). Available from IETC (see above). Pbk., 27p. ISBN 92-807-2244-1.

**Social Issues in the Provision and Pricing of Water Services**

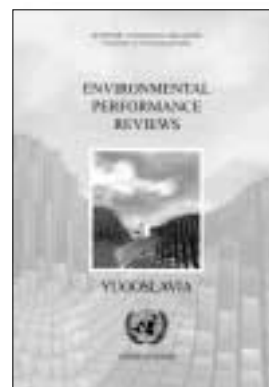
This study is the culmination of an OECD project on water pricing carried out in the context of work on links between the environmental and social aspects of sustainable development. It focuses on affordability of water services and the measures aimed at resolving affordability problems. The book also examines various models of water utility ownership and management to see how they address environmental and social safeguards. It includes a major case study from Mexico concerning the transition from one level of water service provision to another.

(2003). OECD. Available from OECD Publications (see above). Pbk., 211p. ISBN 92-64-09991-3.

## National/regional

**Environmental Performance Reviews: Yugoslavia**

Since 1995, the Committee on Environmental Policy of the United Nations Economic Commission for Europe (UNECE) has published envi-



ronmental performance reviews of countries with economies in transition, helping them establish baseline conditions and making recommendations. The present volume (completed shortly before the Federal Republic of Yugoslavia changed its name to Serbia and Montenegro) discusses the framework for environmental policy and management; pollution and natural resource management; and economic and sectoral integration, including chapters on energy, agriculture, transport and tourism. Kosovo is covered in a separate section.

(2003). UNECE. United Nations Sales Section, DC2-0853, New York 10017, USA, Fax: +1 212 963 3489, E-mail: [publications@un.org](mailto:publications@un.org) or [Palais des Nations, 1211 Geneva 10, Switzerland](mailto:Palais des Nations, 1211 Geneva 10, Switzerland), Fax: +41 22 917 0027, E-mail: [unpubli@unog.ch](mailto:unpubli@unog.ch), Internet: [www.un.org/Pubs/sales.htm](http://www.un.org/Pubs/sales.htm). Pbk., 259p. ISBN 92-1-116839-2, ISSN 1020-4563.