

UNITED NATIONS ENVIRONMENT PROGRAMME



UNEP

**DIVISION OF TECHNOLOGY, INDUSTRY AND ECONOMICS
2000 ACTIVITY REPORT**

UNEP AND ITS DIVISION OF TECHNOLOGY, INDUSTRY AND ECONOMICS

UNEP's priorities, as adopted by the fifth special session of the Governing Council, are: environmental monitoring, assessment, information and research including early warning; enhanced coordination of environmental conventions and development of environment policy instruments; freshwater; technology transfer and industry; and support to Africa. In liaison with other UNEP Divisions, the Division of Technology, Industry and Economics (DTIE) has developed its approach and focused its activities on these priorities.

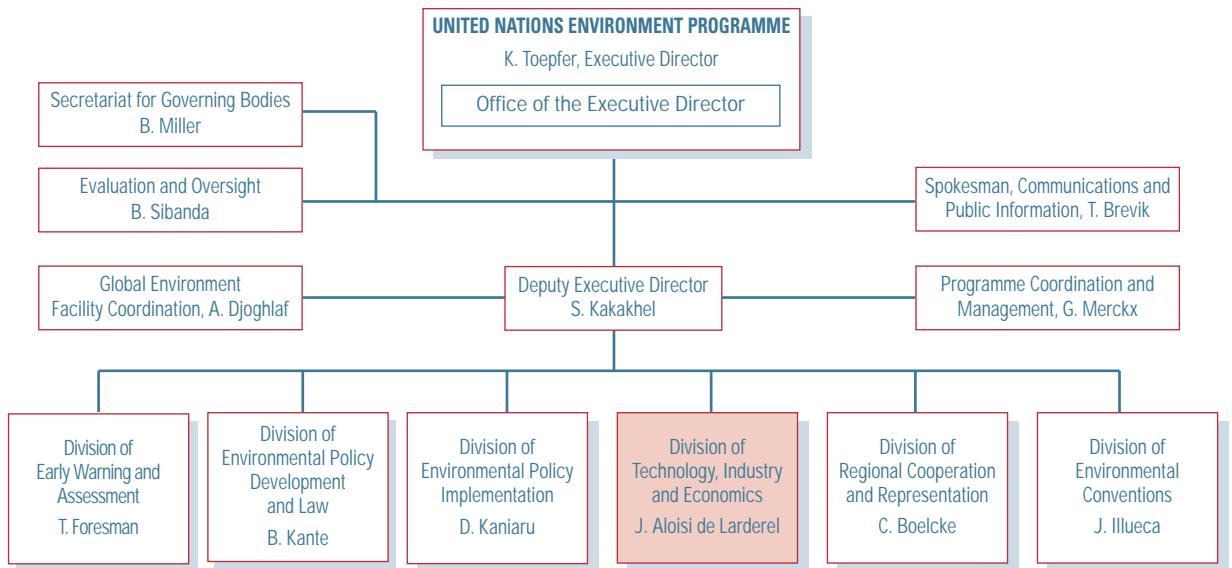
- **The mission of UNEP DTIE**

is to encourage decision makers in government, industry and business to develop and adopt policies, strategies and

practices that are cleaner and safer, use natural resources more efficiently, reduce pollution risks to human beings and the environment, and enable implementation of conventions.

- **The UNEP DTIE approach**

is to improve knowledge and to raise awareness about environmental issues related to industry and technology, to build international consensus on policies, codes of practice and economic instruments, to exchange information on means to implement those responses, to strengthen capabilities and to demonstrate environmentally sound practices.



- **The UNEP DTIE strategy**

is to work as a catalyst. UNEP DTIE develops and promotes partnerships through voluntary initiatives. It focuses on facilitating the effective and integrated implementation of existing conventions and multilateral environmental programmes. It also promotes the adoption and transfer of environmentally sound technologies and management practices by business and industry in all parts of the world.

- DTIE is result oriented and demand driven

The structure of UNEP DTIE

The Division, with the Division Office in Paris, consists of one Centre and four Units, located in Paris, Geneva and Osaka.

International Environmental Technology Centre

Promotes the adoption and use of environmentally sound technologies with a focus on the environmental management of cities and freshwater basins, in

developing countries and countries in transition.

Production and Consumption Unit

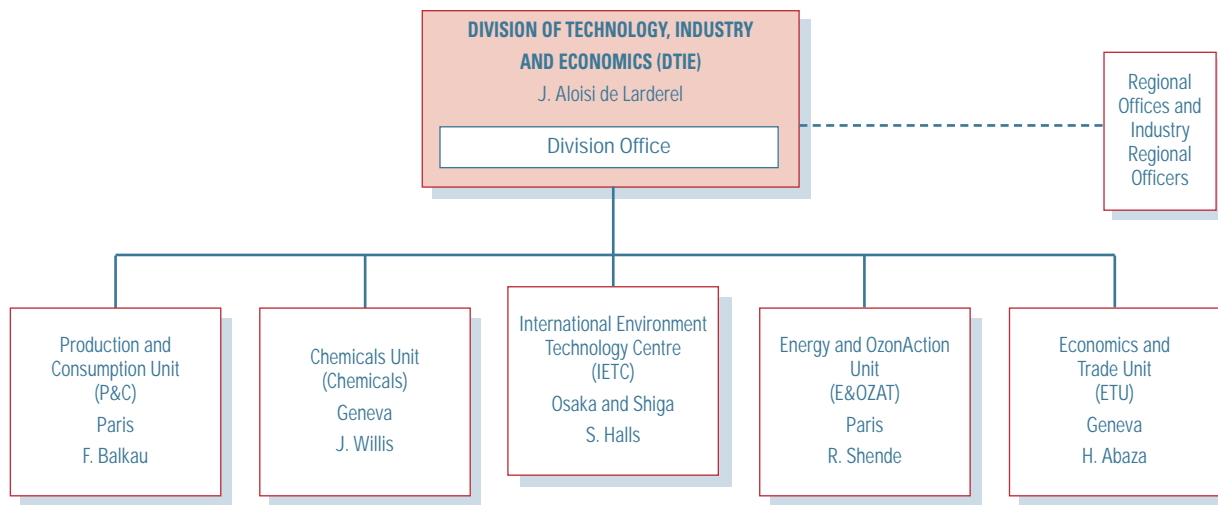
Promotes re-engineering of production and consumption patterns to improve resource efficiency through cleaner technology products and services, and environmental management systems.

Chemicals Unit

Promotes sustainable development by catalysing global actions and building national capacities for the sound management of chemicals and the improvement of chemical safety worldwide, with a priority on Persistent Organic Pollutants (POPs) and Prior Informed Consent (jointly with FAO, the Food and Agriculture Organization of the United Nations).

Energy and OzonAction Unit

Supports the phase out of ozone-depleting substances in developing countries and countries with economies in



'A greater commitment by the private sector should be pursued to engender a new culture of environmental accountability through the application of the polluter-pays principle, environmental performance indicators and reporting, and the establishment of a precautionary approach in investment and technology decisions. This approach must be linked to the development of cleaner and more resource efficient technologies for a life-cycle economy and efforts to facilitate the transfer of environmentally sound technologies.'

Malmö Ministerial Declaration
31 May 2000

My vision of UNEP is a vision [...] that not only speaks strongly on behalf of the environment, but which goes well beyond speaking and is truly capable of catalyzing action. It is a vision of UNEP which, by working closely with governments, other United Nations agencies, the non-governmental community, the business and the private sector and the trade unions brings about real and measurable improvements to the capacity of the natural resource base to support a decent quality of life.

Klaus Toepfer
UNEP Executive Director

transition to ensure the implementation of the Montreal Protocol; promotes good management practices, the use of renewable energy technologies and energy efficiency, and supports the Climate Change Convention. Works closely with the UNEP/Risø Collaborating Centre on Energy and Environment (UNCCEE).

Economics and Trade Unit

Enhances the capacities of countries to integrate environmental considerations into development planning and decision making. Promotes the use and application of assessment and incentive tools for environmental policy and helps improve the understanding of linkages between trade and environment and the role of financial institutions in promoting sustainable development.

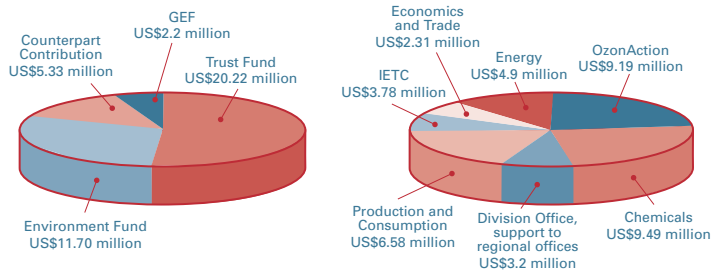
Division Office

- coordinates UNEP DTIE activities and ensures liaison with headquarters and other UNEP Divisions;
- promotes Outreach activities; and
- coordinates regional delivery of UNEP DTIE activities.

There are industry officers in four of the six UNEP Regional Offices: Africa (ROA), Latin America and the Caribbean (ROLAC), Asia and the Pacific (ROAP), and West Asia (ROWA)), and ozone Regional Network coordinators in ROA, ROWA, ROLAC and ROAP.

UNEP DTIE's funding

The Division's total funding of US\$39.45 million comes from four main sources (below left). Allocation of the funds is shown below right.



OUTREACH

The Global Compact

UNEP, together with the United Nations Office of the High Commissioner for Human Rights, the United Nations Development Programme (UNDP) and the International Labour Organization (ILO), are core agencies in UN Secretary-General Kofi Annan's Global Compact. It calls on business worldwide to promote nine basic principles in relation to human rights, labour standards and environmental protection. The environmental principles require business to:

- support a precautionary approach to environmental challenges;
- undertake initiatives to promote greater environmental responsibility; and
- encourage the development and diffusion of environmentally-friendly technologies.

UNEP developed the environment components of the Global Compact's new web site (www.unglobalcompact.org) and participated in meetings with business, labour and NGOs to discuss the implementation of the Compact. UNEP actively contributed to the 26 July High-Level Meeting on the Global Compact in New York, in which more than 60 CEOs and Business leaders took part.

DTIE also contributed to the Millennium Business Award for Environmental Achievement, presented for the first time in 2000 to 12 companies by the International Chamber of Commerce as a contribution to the Global Compact and in collaboration with UNEP.

The Global Reporting Initiative

The goal of the Global Reporting Initiative (GRI, <http://www.globalreporting.org>) is to establish a common framework for voluntary reporting of the environmental, economic and social performance of an organization. The GRI seeks to elevate enterprise-level sustainable development reporting to the same level of credibility, comparability and consistency as financial reporting, and to develop and advocate greater stakeholder awareness and use of such reports. The GRI is convened by the Coalition for Environmentally Responsible Economies (CERES) and UNEP. It released its revised *Sustainability Reporting Guidelines on Economic, Environmental and Social Performance* in June 2000; financial support received in 2000 by UNEP from the

Today, more than ever, there is a global appreciation of the fact that to ensure an acceptable quality of life for ourselves and our children we must act as responsible stewards of our air, water and our land.

But much remains to be done. [...] In the next

25 years,

environmental problems will be even more complex.

[...] We must work industry by industry,

community by community to prevent pollution, rather than clean it up after the fact. And we must involve those who have to live with the consequences of environmental decisions, to ensure that they have every opportunity to be a partner in making those decisions. I am confident that UNEP will play its part in meeting this vital challenge for humanity.

Kofi Annan

Secretary-General of the United Nations



Industry and Environment review

The 2000 *Industry and Environment* review featured *Urban environmental management* (Vol. 23, No. 1–2, a double issue), *Sustainable energy* (Vol. 23, No. 3), and *Sustainable mobility* (Vol. 23, No. 4).



The *Efficient Entrepreneur 2001 Calendar* and *Guidebook* is available in English, French and Spanish

United Nations Foundation (UNF) is being used to design a permanent, independent host institution that will become the steward of the GRI process. The 2nd GRI International Symposium held in Washington DC in November 2000 addressed fundamental questions as to the role and responsibility of business in a global world: To whom and in what form are corporations accountable? How does such accountability link to a new definition for the 'license to operate' in the 21st century? Regional or national briefings on GRI were held in Europe and Asia.

Engaging Stakeholders

UNEP, jointly with SustainAbility, published 2 new reports as part of the Engaging Stakeholders series: *Life and Science - Accountability, Transparency, Citizenship and Governance in the Life Sciences Sector*, and *The Global Reporters*, the first international survey of corporate sustainability reporting. This benchmark survey evaluates how well companies report on their economic, social and environmental performance.

Other activities

Major companies in the global telecommunications market, involving operators and suppliers, agreed on the creation and expansion of the Global Telecom Initiative (GTI) at two meetings, held in Paris (hosted by DTIE) in February and in Montreal (hosted by Bell Canada) in October 2000. Building on existing North American and European environmental charters, the GTI aims at the development of a global forum dealing with sustainable development issues in the sector.

UNEP hosted the annual UNEP Consultative Meeting with Industry Associations, Paris 21–22 September, where UN officials and representatives from 45 associations met to discuss, among other things, the global environment agenda and preparations for Rio+10. The event was preceded by a workshop on voluntary initiatives attended by 35 representatives of industry, governments, labour, environmental groups and academic institutions with the objective of reviewing lessons learnt, and to discuss the steps needed to ensure that voluntary initiatives become an effective tool for sustainability.

Assistance to small and medium-sized enterprises

UNEP DTIE prepared and launched, with the Wuppertal Institute for Climate, Environment and Energy, *The Efficient Entrepreneur 2001 Calendar and Guidebook* to help small and medium-sized businesses improve their environmental and economic performance through a month-by-month programme.

INTERNATIONAL ENVIRONMENTAL TECHNOLOGY CENTRE (IETC)

The International Environmental Technology Centre (IETC) is supported by the Global Environment Centre Foundation (GEC) in Osaka, Japan, and the International Lake Environmental Committee Foundation (ILEC) in Shiga, Japan. With offices in both Osaka and Shiga, IETC assists developing countries and countries with economies in transition to use environmentally sound technologies (ESTs) to address urban environment and freshwater management issues. Current areas of focus are water resource management, including groundwater and water use efficiency; sewage; solid waste; wastewater and stormwater; air quality management; environmental management systems and energy efficiency in cities; sustainable building and construction; and several demonstration projects of ESTs.

IETC is advised by an International Advisory Board composed of senior experts from all parts of the world bringing various perspectives. This Board met in November 2000 and advised on IETC's priorities and activities for the next 5 years. IETC's strategy revolves around improving access to quality information on ESTs, and capacity building to improve the ability of decision-makers in the field of water and urban environmental management to use that information.

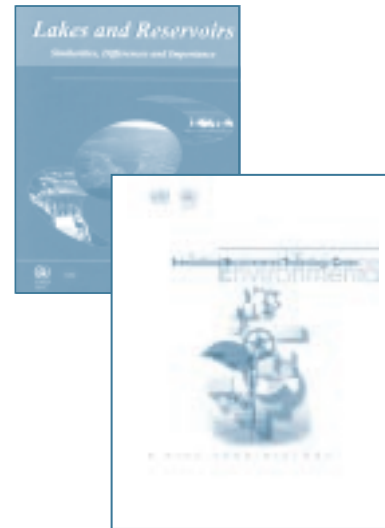
Urban environment management

Wastewater and stormwater management

A Regional Workshop on Sustainable Management of Wastewater and Stormwater was held in Rio de Janeiro for five days in March. The workshop was primarily designed to review the draft *International Source Book on ESTs for Wastewater and Stormwater Management* as well as to test the training modules on the same subject. The source book and training modules are expected to be published in early 2001.

Air quality management for cities

In April, an International Round Table was held in Cairo with 25 experts from different parts of the world to examine IETC's proposed project on air quality management for cities. The proposed project, which intends to respond to climate change issues, is focused on documenting and disseminating technologies that



The first in the new Short Report series and the IETC Five-Year Report (above) and the cover and flier for the new maESTro CD-ROM (below)



would reduce greenhouse gas emissions (GHGs) from vehicles and promote energy efficiency in urban transport systems. The Round Table endorsed IETC's proposal but with a recommendation to include alternative transport systems in the study. IETC will produce two monographs on environmentally sound technologies that are now being applied in cities and which reduce GHGs and promote energy efficiency in urban transport systems.

Emergency response mission to the Philippines

On the aftermath of the Payatas disaster in the Philippines in July and on instruction from the Executive Director, IETC sent an emergency response mission to the Philippines to make an investigation of the impact on the environment of the dumpsite collapse and to determine what possible assistance UNEP could extend over the short and long term. The mission helped the Government develop a National Integrated Waste Management Strategy which considered not only solid waste but also the integrated planning and management of wastewater, stormwater and toxic, hazardous waste because of the interrelatedness of these different types of waste and the mixed nature of waste in the Philippines. The mission also submitted a short list of priority projects and activities that UNEP could undertake to support the Government in the area of waste management.

The Regional Integrated Waste Management Strategy

To maintain the momentum of technical assistance (TA) that has been extended to the Philippines by way of emergency response mission and to include other countries in the Asia Pacific region in TA coverage, IETC has drafted a Regional Integrated Waste Management Strategy for Asia Pacific (RIWMS). The strategy plans to launch a regional campaign in Asia in 2001 to sensitize governments to avoid and reduce waste, to reuse materials and to recycle. The campaign will use environmental education, communication and capacity building as the main vehicles to promote sound waste management, and it will be launched and implemented at the sub-regional level.

Trenchless technologies

Following the technical roundtable on trenchless technologies in Katowice, Poland, in 1999, IETC began a new phase in promoting these technologies for the repair and rehabilitation of water and sewage pipelines in urban areas. Innovative methods are needed because deteriorated water and sewage pipelines cause water shortages, energy inefficiencies, poor water quality and groundwater



The remodelling IETC *Insight*

contamination. In association with the International Society for Trenchless Technology, IETC will compile a non-technical publication on available options and sound practices, and assess the preferred options for disseminating the information. A pilot training seminar for decision makers in local authorities and managers of utilities will be organized in Cairo, Egypt, in February 2001.

Freshwater management

During 2000, the sub-programme on freshwater was focused more towards the sustainable management of watersheds and freshwater resources in general.

Phytotechnologies and ecosystem management

This is a new programme/activity that encompasses phytotechnologies — technologies for the recuperation and control of pollutants in water and soil by using plants — coupled with the principles and application of ec hydrology to increase the resilience of ecosystems in managed watersheds. IETC participated in a UNESCO-IHP Meeting in September 2000 where the Steering Committee on Phytotechnologies and Phytoremediation was established by IETC to provide guidance and advice on the development of the programme/activity.

A numerical model to forecast eutrophication in lakes and reservoirs was prepared in conjunction with the International Lake Environment Committee Foundation (ILEC), the University of Kyoto and the Royal Danish School of Pharmacy. A Students Guide version of *Planning and Management of Lakes and Reservoirs: An Integrated Approach to Eutrophication* was finalized with the support of the University of California at Santa Barbara and a number of international experts. The guide was tested in Naivasha, Kenya, through a Training Workshop for African Countries.

Public awareness and environmental education

A series of booklets related to the management of lakes and reservoirs was designed. The first volume entitled *Lakes and Reservoirs, Similarities, Differences and Importance* has been produced with the support of ILEC and the Environmental Agency of Japan. Five thousand copies have been printed in English and Japanese. A second volume entitled *Watershed, Water from the Mountains to the Sea* is being prepared and is expected to be published in 2001.

Shiga Environmental Citizenship Programme

The Shiga Environmental Citizenship Programme, which is an initiative of the IETC, is now in its second year. Two Student Seminars and two NGO symposia have been organized as preparatory activities for the 9th World Lake Conference that will be held in Shiga in November 2001. The Student Seminar in October included international students from Argentina, Australia, Canada, India, Italy, Poland, Romania and Thailand and the United States. The main theme of the seminars and symposia was 'Building Partnerships between Citizens and Government in the Management of Lakes and the Water Ecosystem'.



Volume 10, *Environmentally Sound Management of Lake Erhai and Xier River Basin*, and Volume 14, *Technical Workbook on Environmental Management Tools for Decision Analysis*, of IETC's Technical Publication Series

Lakes and reservoir management

The Technical Publication *Environmentally Sound Management of Lake Erhai and Xier River Basin* was published. This is the result of a project undertaken in China with the support of the China International Center for Economic and Technical Exchange, the University of Peking and the Local Government of the Dali Prefecture in China. The project looked at the characteristics of the area, identified and assessed the environmental problems. The report was published in Chinese and English.

Freshwater augmentation

The final volume of the series on 'Alternative Technologies for Freshwater Augmentation' for West Asia was finalized. It is expected to be published in mid-2001. This volume looks at the different technologies used in countries of the Arabic Peninsula (and some in the Middle East) to increase freshwater supplies from rain, groundwater, desalination and recycling.

Cross-cutting activities

EMS for cities and local authorities

The first outline of the forthcoming UNEP/FIDIC/ICLEI *Urban Environmental Management: Environmental Management System (EMS) Training Resources Kit* was developed with four city representatives from Central and Eastern Europe at a meeting held in Heidelberg, Germany, in November 2000. The kit will consist of a modular 'train the trainer' package designed to help implement EMSs in urban areas. It will be pilot tested in different regions to assess its adaptability and its effectiveness in assessing the benefits, design and implementation of an EMS at local level.

Regional consultation in the Mekong River Basin Area

The protection of freshwater resources from pollution from urban-based activities is part of IETC's urban environmental management concerns. In this regard, Regional Consultations were held in November in Phnom Penh and Bangkok in order to develop a consensus on ways and means of raising awareness of ESTs, determining priority development issues that have water quality impacts, and identifying key issues for which pilot or demonstration projects could be developed.

PRODUCTION AND CONSUMPTION

Part of UNEP's mission is to encourage technologies, practices and behaviour that are less polluting and make more efficient use of natural resources. The Production and Consumption Unit works under the broad title of 'cleaner and safer production, and sustainable consumption' to emphasize that the entire life cycle of a product or service needs to be addressed in order to achieve sustainable development and poverty alleviation. The Unit undertakes studies, and promotes improved technologies and environmental management tools, and helps to apply these to key industry sectors in resource development and manufacturing.

Cleaner production

Highlights from the cleaner production programme in the year 2000 included:

- under the joint UNEP/UNIDO (United Nations Industrial Development Organization) umbrella, new National Cleaner Production Centres (NCPCs) began operation in Ethiopia, Kenya and Mozambique, bringing the total number to 19;
- the Sixth High-level International Seminar on Cleaner Production (CP6) was held in October, Montreal, in association with an international Pollution Prevention Summit hosted by the Canadian Government;
- 14 high-level signing ceremonies for the International Declaration on Cleaner Production were held in 12 countries, bringing the number of senior signatories from industry and government to 223;
- Regional Roundtables were held in association with other partners in Rome, July, for the Mediterranean Region, and in Nairobi, August, for the African Region;
- implementation of the project 'Strategies and mechanisms for promoting cleaner production investment in developing countries' continued under a Trust Fund from the Government of Norway, including training in financial engineering in Tanzania, Viet Nam and Zimbabwe, and the design of four training programmes following an Expert Group Meeting on Training Services to Promote Cleaner Production Investments, Cambridge, July.

Focus on Africa

Production and Consumption launched the African Roundtable on Cleaner Production and Sustainable Consumption, which will be run and managed on an on-going basis by representatives from five regions in Africa.

PRODUCTION AND CONSUMPTION

New web site for cleaner production financing



UNEP has started a four-year project to help financial institutions understand the importance of cleaner production and help cleaner production experts develop credit-worthy investment proposals. The project's web site came on line in 2000:

<http://www.financingcp.org/>

'We no longer have to prove the effectiveness of Cleaner Production. It is well established now. The task ahead of us is to integrate Cleaner Production into day-to-day decision-making process. Cleaner Production has to find its place in various cross-cutting issues.'

Klaus Toepfer
UNEP Executive Director
Sixth High-level Seminar on Cleaner
Production, October 2000, Montreal



Safer production (APELL)

The APELL programme (Awareness and Preparedness for Emergencies at Local Level) continued its work on promoting emergency preparedness. Extensive liaison was undertaken with natural disaster agencies to encourage the adoption of APELL as a mechanism for preparedness for earthquakes, floods and other natural disasters. The application of APELL to a number of sectors, notably transport and mining was begun. In particular:

- *TransAPELL*, a technical handbook on APELL in transport, was published based on a text prepared by the Swedish Rescue Services Agency;
- continued support was given to APELL in Africa, and national seminars were held in India, Jordan and Qatar;
- networks were strengthened in Argentina, Colombia, South Africa and Thailand;
- technical support was given to the UNEP/OCHA assessment team in Romania following the cyanide spill from the Baia Mare gold mine, February;
- inputs and assistance were given to the ProVention Consortium on disaster prevention and mitigation;
- a special seminar was held in Brussels in May on emergency response and safety at mine sites, and work began on an *APELL Handbook for Mining*.

Sustainable consumption

Activities aimed at promoting more sustainable patterns of consumption in community and industry were strengthened, in particular by:

- a series of events at EXPO 2000, Hanover, Germany, June-October, including celebrations of World Environment Day on 5 June, and workshops organized with Carl Duisberg Gesellschaft (CDG) and the Stockholm Environment Institute (SEI);
 - two global surveys on consumption patterns, including one on youth behaviour which was carried out with UNESCO and Consumers International;
 - developing the Advertising and Communication Initiative and taking the first steps to establish an advisory committee;
 - distributing information on consumption in a special issue of *Industry and*
-

Environment review and through a new list-serve web-based newsletter;

- promoting business involvement in sustainable consumption, focusing on the use of tools such as life cycle assessment and concepts such as product/services development (on which an expert meeting was held in Paris in June); and
- strengthening strategic alliances with NGOs, including Consumers International, UNEP's Youth Advisory Council (YAC) and other youth organizations.

Environmental management in industry sectors

Work continued to promote the application of cleaner and safer production methods in several sectors. There was intensive follow-up to the Baia Mare incident (see box on right). In addition:

- *Sustainable Development and the Future of Mineral Investment* was published jointly with the Metal Mining Agency of Japan and the Colorado School of Mines;
- the Offshore Oil and Gas Environment Forum (OEF, www.natural-resources.org/offshore) was used to provide support to a series of meetings on environmental practices in the offshore oil and gas industries, held in Stavanger, Norway, in June;
- the Sustainable Agri-food Production and Consumption Forum (www.agrifoodforum.org), a web-based information system on key environmental issues in the sector and good practice and case studies, was brought on-line and demonstrated at the 8th Session of the CSD in New York in April;
- Sustainability and the agri-food industry was discussed in a special double issue of the *Industry and Environment* review, and a report on *Mineral Fertilizer Distribution and the Environment* was published jointly with the International Fertilizer Association;
- guides on cleaner production assessment for dairy, fish and meat processing were published with sponsorship from the Danish government;
- work continued on developing information and guidance documents for the environmental management of industrial estates, including an information source document and a training kit; and

The Baia Mare incident

There was extensive follow-up to the cyanide spill at a gold mine in Baia Mare, Romania. The Minerals Resources Forum web site (www.natural-resources.org/environment) was upgraded to provide on-line assistance and information about the pollution and its origins. An international workshop for mine regulators on Environmental Regulation for Accident Prevention in Mining, Tailings and Chemicals Management was held with the Australian Government in Perth, Australia, October 2000. Following an inaugural workshop with the International Council on Metals and the Environment (ICME) in Paris in May, work is proceeding with several industry and NGO partners on a voluntary industry code for the use of cyanide in gold mining. Together with the International Commission on Large Dams (ICOLD), a review of engineering design concepts was begun and work began on the compilation of a publication on the lessons learned from past tailings accidents. A review of the role of financial institutions in improving environmental practices in mining was started with the World Bank and the Mining Minerals Sustainable Development initiative.

Publications 2000

TransAPELL

Sustainable Development and the Future of Mineral Investment

Industry Sector Guides on Cleaner Production Assessment in Dairy, Fish and Meat Processing

Environmental Management in Industrial Estates in China

Mineral Fertilizer Distribution and the Environment

ICPIC on CD-Rom

Cleaner Production: A Guide to Sources of Information (3rd edition)

Financing Cleaner Production: Study on Past Investment Practices

Investment and Environment Outlook: Guatemala, Nicaragua, Tanzania, Viet Nam, Zimbabwe

CD-Rom: *Compendium of Institutions Promoting Investment and Financing in Cleaner Production*



Extract from one of the 16 case studies in *Good Practice in Sustainable Tourism*

- a regional workshop on Environmental Technology Assessment of Battery Recycling Technologies was held in Manila, Philippines, 22–25 February, in joint sponsorship with CDG and the International Lead Management Centre.

Tourism

A UNEP Coordinating Meeting on Tourism was held in Paris in January. A comprehensive tourism strategy is being prepared to link various initiatives, including support to conventions related to tourism.

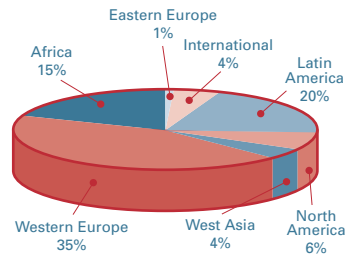
The Tour Operators' Initiative for Sustainable Tourism Development, developed in cooperation with the World Tourism Organization (WTO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO), was launched in Berlin in March and signed by 20 major tour operators. The Initiative (www.toinitiative.org) published *Good Practice in Sustainable Tourism*, a collection of 16 case studies which were distributed at the London Travel Market, one of the world's largest tourism events, in November.

UNEP joined WTO in organizing a conference in Hainan, China, on Sustainable Tourism in the Islands of the Asia-Pacific Area, with support from the Chinese government, in December. A Conference on Sustainable Tourism in the Islands of the Mediterranean region was held in Capri in May.

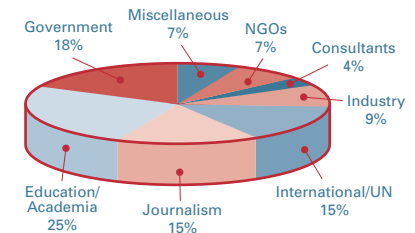
Information services

During the year, the Unit responded to nearly 2000 queries, broken down by region and type of enquirer as shown below.

Queries by region



Queries by type of enquirer



CHEMICALS

UNEP Chemicals is the focus for all activities undertaken by UNEP to ensure the sound global management of hazardous chemicals. Its main goals are to catalyse action to promote chemical safety by providing countries with information on hazardous chemicals; by helping countries build up the capacity to produce, use and dispose of chemicals safely; and by supporting actions that reduce or eliminate chemicals risks. To achieve these goals, UNEP Chemicals works closely with governments, UN bodies, intergovernmental organizations, academia and NGOs.

During 2000, progress was made in the following areas:

Assessment

- implementing a project co-financed under the GEF for regionally based assessment of persistent toxic substances;
- implementing a GEF PDF-B to develop a project to assess national management needs for persistent toxic substances;
- began the establishment of a global Persistent Organic Pollutants (POPs) monitoring network;
- work with WHO and ILO in the International Programme on Chemical Safety (IPCS) which, among other things, develops hazard assessments of chemicals and supports the establishment of poison control centres.

Environmental information

- operating a clearinghouse of information on POPs and the Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade;
- maintaining a global network of 431 government-designated focal points;
- participating in the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) Coordinating Group on Pollutant Release and Transfer Registers (PRTR), and supporting national PRTR development;
- producing a bibliography of technical documents designed to help developing countries and countries with economies in transition manage chemicals safely;

Focus on Africa

UNEP Chemicals undertook a project in 2000 to enhance the use of the Internet to improve chemical safety in Africa by providing country focal points with computers, software, databases, Internet access and training.

US\$5 million project on persistent toxic substances

UNEP Chemicals began a US\$5 million project to assess persistent toxic substances in all regions of the globe.

Results of the project, planned to run for two years, will contribute to future priority-setting by the Global Environment Facility (GEF), which gave final approval for starting the project in July 2000. In the long term, the project's outcomes should serve to guide international action to protect human health and the environment from persistent toxic substances.

The assessment will complement the work being done in conjunction with the global treaty on the list of 12 persistent organic pollutants (POPs) which was agreed late in 2000 (see page 17).

UNEP Chemicals Online

Information on environmentally sound management of chemicals is available on the following web sites:

UNEP Chemicals:
www.chem.unep.ch/chemicals/

Rotterdam Convention:
www.pic.int

Persistent Organic Pollutants:
www.chem.unep.ch/pops/
(with reports from negotiations and information on alternatives as well as other relevant information)

Code of Ethics on the International Trade in Chemicals:
www.chem.unep.ch/ethics

Pollutant Release and Transfer Register:
www.chem.unep.ch/prtr



- delivering information products through the Chemicals CD-ROM (see bottom left illustration) and hard copy; and
- establishing web sites for information exchange on chemicals management.

Coordination and Conventions

- provided the interim secretariat for the Rotterdam Convention on the PIC Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, jointly with FAO;
- provided the secretariat for the global legally binding instrument on POPs;
- participated in and advised members of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) together with the World Health Organization (WHO), the ILO, UNIDO, FAO, the United Nations Institute for Training and Research (UNITAR) and the Organization for Economic Cooperation and Development (OECD); and
- co-chaired (with FAO) the IOMC Coordinating Group on Unwanted Stocks of Obsolete Pesticides and Other Chemicals.

Capacity building

Chemicals Unit organized a series of regional workshops in the following areas:

- POPs awareness raising;
- national implementation of the Rotterdam Convention on PIC;
- identification of sources of dioxins and furans and methodologies to reduce and/or eliminate their release to the environment;
- identification, management and disposal of polychlorinated biphenyls (PCBs) (with the Basel Convention Secretariat);
- integrating IPM (Integrated Pest Management) and IVM (Integrated Vector Management) to reduce reliance on POPs pesticides (with FAO and WHO); and
- strengthening national chemicals legislation and regulation.

UNEP Chemicals also provided catalytic financing for limited follow-up demonstration projects and case studies on chemical management. With the World Bank, it supports delivery of Canadian \$20 million for country-based projects for

The POPs Agreement

In the early hours of the morning of 10 December 2000 in Johannesburg, South Africa, 122 governments agreed to the text of a global legally binding instrument on persistent organic pollutants (POPs). This is a comprehensive, landmark treaty, initially beginning with 12 POPs. When the Convention comes into force, the POPs Review Committee will consider additional candidates for the POPs list on a regular basis. This will ensure that the treaty remains dynamic and responsive to new scientific findings.

There are strong control measures in the treaty, balanced by an appropriate financial mechanism. This will help developing countries and countries with economies in transition meet their obligations to minimize and eliminate POPs. Both funding and technical assistance will be provided.

The 12 initial POPs include eight pesticides (aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, mirex, and toxaphene), two industrial chemicals (PCBs and hexachlorobenzene, which is also a pesticide), and two unwanted by-products of combustion and industrial processes (dioxins and furans).

Of all the pollutants released into the

environment, POPs are among the most dangerous. They are highly toxic, causing death, disease and birth defects, among humans and animals. Specific effects can include cancer, allergies and hypersensitivity, damage to the nervous system, reproductive disorders and disruption of the immune system.

POPs can last for years or decades before breaking down. They circulate globally through a process known as the 'grasshopper effect'. POPs released in one part of the world can, through repeated cycles of evaporation and deposition, be transported through the atmosphere to regions far from the original source.

In addition, POPs concentrate in living organisms through bioaccumulation. POPs are readily absorbed in fatty tissue, where concentrations can become magnified by up to 70 000 times background levels. Fish, predatory birds, mammals, and humans are high up the food chain and so absorb the greatest concentrations. POPs can be found in people and animals living in regions such as the Arctic, thousands of kilometres from any major POPs source.

Most of the 12 chemicals are subject to an immediate ban. However, a health-related

exemption has been granted for DDT, which is still needed in some countries to control malarial mosquitoes. Similarly, in the case of PCBs, which have been widely used in electrical transformers and other equipment, governments may maintain existing equipment in a way that prevents leaks until 2025 to give them time to arrange for PCB-free replacements. Although PCBs are no longer produced, hundreds of thousands of tonnes are still in use in such equipment. In addition, a number of country-specific and time-limited exemptions have been agreed for other chemicals.

Governments agree to reduce releases of furans and dioxins, which are accidental by-products and thus more difficult to control, 'with the goal of their continuing minimization and, where feasible, ultimate elimination'.

Other national measures required under the treaty relate to reporting, research, development, monitoring, public information and education.

UNEP provided secretarial services for the negotiation and is designated as secretariat for the Convention. It will be adopted and signed in Stockholm, Sweden, during 22–23 May 2001.

Videos on POPs

In conjunction with the Television Trust for the Environment (TVE), UNEP Chemicals has produced three videos on POPs. The first, *Toxic POPs*, deals generally with the problem of POPs. It lasts 25 minutes and is available in English, French and Spanish.

The other two videos are in the form of a news release about the successful conclusion of the POPs treaty negotiations (*POPs Treaty Negotiations: the toxic 12 and beyond*). They are available in English in a short (3:04 minutes) and a long (6:38 minutes) version.



POPs reduction and/or elimination.

Databases maintained during 2000

- UNEP IRPTC Database, PC version 2.0 (1996), 10 diskettes/CD-ROM and Instruction Manual (100 000 records on safety data on more than 9000 chemicals);
- POPs Alternatives Reference Database Expert System (Internet version, May 1998; Windows version, December 1998);
- Internet Database of Country-Specific POP Data (Survey Results), October 1998;
- Internet-based IRPTC Legal File (1998/99).

New publications in 2000

- *International Activities Related to Chemicals*, print and Internet;
- *Country Case Studies on Persistent Organic Pollutants*, print and Internet;
- *Proceedings: Workshop on Management of POPs for the SADC Region*;
- Report of UNEP/FAO/Global IPM Facility: *Termite Biology and Management Workshop*;
- *Proceedings of the Workshop on Sustainable Approaches for Pest and Vector Management and Opportunities for Collaboration in Replacing POPs Pesticides*;
- *Proceedings of the Regional Workshop on Management of POPs*;
- *Proceedings of the Workshop on the Management of PCBs and Dioxins/Furans*;
- *Proceedings of the Sub-Regional Awareness Raising Workshop in Africa on the Rotterdam Convention on PIC*;
- *Proceedings of the Sub-regional Workshop on Identification and Management of PCBs and Dioxins/Furans*;
- *Press Coverage: Fourth Round on Talks on Treaty on Persistent Organic Pollutants*;
- *Survey of Currently Available Non-Incineration PCB Destruction Technologies*
- *Master List of Actions on the Reduction and/or Elimination of the Releases of POPs, third edition*;
- *OECD/UNEP Screening Information Data Sets, Vol. 6, Nos. 1 and 2.*

ENERGY AND OZONATION

OZONE

The OzonAction Programme enables developing countries to meet their commitments under the Montreal Protocol on substances that deplete the ozone layer. Capacity building services that empower the National Ozone Units include an information clearinghouse and regional networking. The programme is funded mainly by the Multilateral Fund of the Montreal Protocol; it also receives funding from the Global Environment Facility, the Government of Sweden and the Government of Finland.

Information clearinghouse

In 2000, the OzonAction Programme helped developing countries move towards compliance with the Montreal Protocol through the provision of policy assistance, case studies and awareness materials. Highlights included:

Assistance for methyl bromide phase out

- published *Case Studies on Alternatives to Methyl Bromide: Technologies with Low Environmental Impact*, comprising 18 case studies that illustrate non-chemical techniques successfully used to replace methyl bromide applications;
- developed *A Strategic Framework to Control Methyl Bromide Growth in China* with the Chinese State Environmental Protection Administration;
- published the proceedings of a workshop held in Rome in 1999, *Methyl Bromide Alternatives for North African and Southern European Countries*.

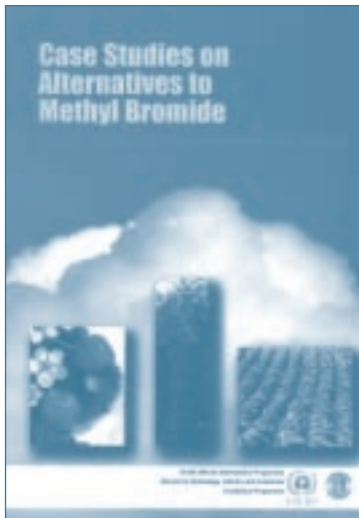
Awareness raising activities for new target groups

- organized special workshops in the International Millennium Children's Conference on the Environment in the United Kingdom;
- produced a video and the booklet *Back to the Future: Using Hydrocarbons Safely* for technicians using hydrocarbons;
- organized special sessions during the Regional Ministerial forums on ozone layer protection and compliance to the Montreal Protocol in Latin America, Africa and Asia;

Focus on Africa

Special support was given to African countries, in particular in:

- the development and implementation of African country programmes and refrigerant management plans (RMPs) under the Montreal Protocol through the ODS Officers Network and in cooperation with the UNDP and bilateral organizations from France, Germany and Canada;
- a presentation at the African Ministerial Conference on the Environment (AMCEN) to raise awareness on the urgency of compliance with the Montreal Protocol, Dakar, October 2000;
- the regular provision of information services (publications, videos and databases) to all National Ozone Units in Africa through the OzonAction Information Clearinghouse (OAIC);
- the setting up of web fora for English- and French-speaking African countries; and
- *Patterns of Achievement: Africa and the Montreal Protocol*, a booklet highlighting the efforts made by Africa in implementing the Montreal Protocol was released in Ougadougou, Burkina Faso.



- produced four issues of the *OzonAction* newsletter in English, French, Spanish, Chinese and Arabic;
- published *Updated Regulations to Control Ozone Depleting Substances*, an overview of the structure and strategies in existing ODS regulations.

Leveraging information technology

- updated *OzonAction Strategic Information System* (OASIS 2000), the CD-ROM database reference tool;
- ran e-mail fora and produced updates called RUMBA (Regular Updates on Methyl Bromide Activities) and CLIO3 (Climate and Ozone Update).

Capacity enhancement through training and management plans

- completed the development of country programmes in 82 countries and continued preparing them for another 16;
- continued implementation of institutional strengthening projects in 77 countries;
- Refrigerant Management Plans (RMPs) have been completed for 37 countries and are being developed in another 10 countries (implementation is coordinated jointly with UNDP);
- cooperated with FAO and UNIDO in delivering education and training for farmers in selected developing countries;
- improved the capacity of NGOs and local agriculture institutes in the developing countries to raise awareness on alternatives to methyl bromide.

Regional networking

Learning by sharing experiences and knowledge is the principle of the eight regional networks that UNEP operates and manages. National Ozone Units from more than 100 countries have made this activity the focus of compliance efforts. The programme's regional networks are supported by developed countries which provide both technical advice and funding. In 2000, network priorities included policy mentoring for countries that lagged behind in compliance and promoting South-South cooperation.

Assistance to countries with economies in transition

UNEP, jointly with UNDP, is assisting 22 countries with economies in transition to comply with the Montreal Protocol. In 2000, UNEP :

- continued providing assistance to institutional strengthening and training projects in Azerbaijan, Latvia, Lithuania, Turkmenistan and Uzbekistan;
- completed country programmes for Estonia and Kazakhstan;
- prepared new country programmes and RMPs for Armenia and and Krygystan;
- organized a regional workshop for customs officers in the Baltic and Eastern European countries; and
- convened regional workshops on alternatives to methyl bromide in Poland.

ENERGY

UNEP DTIE Energy addresses the environmental impact of increasing global energy consumption, with three main objectives:

- increasing global use of renewable energy resources;
- increasing energy end-use efficiency; and
- improving the overall planning and management of energy systems.

These goals are pursued in close cooperation with other UNEP units, UN and other government agencies, non-governmental organizations and private partners. The work is implemented jointly with the UNEP Collaborating Centre on Energy and the Environment (UCCEE) at the Risø National Laboratory in Denmark.

Major activities started or continued during 2000 included:

- The GEF-supported Renewable Energy Technology/Energy Efficiency (RET/EE) Investment Advisory Facility continued to help financial institutions make informed investment decisions on energy projects in developing countries. To date the Facility has helped seven banks and investors evaluate potential sustainable energy investments, the first two of which have now gone forward — a US\$36 million small hydro peaking plant in Guatemala, and a biomass plantation in Tanzania.
- UNEP's pilot Sustainable Energy Advisory Facility (SEAF), started in early 2000 with support from the Danish Government, helps developing country



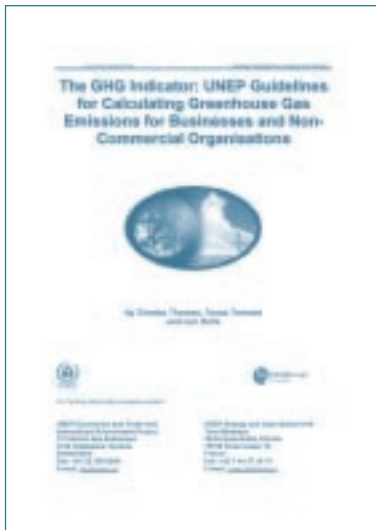
Interlinkages between the Ozone Layer and Climate Change

In 2000, OzonAction:

- co-organized a seminar at Beijing University and published proceedings on interlinkages between ozone layer depletion and global warming
- with the UN University and the Massachusetts Institute of Technology organized a meeting on addressing interlinkages between the Montreal and Kyoto Protocols
- held pilot meetings of the joint network of Ozone Officers and Climate Change officers of the Baltic and Nordic Countries, with the support of the Government of Finland



Sample spread from the new UNEP brochure *UNEP and Global Climate Change: an integrated response*



governments design and implement sustainable energy policies and activities by providing small amounts of targeted assistance. Through SEAF, UNEP/UCCEE is helping Jamaican authorities make reforms that should lead to a sustainable energy development path. In Mali, SEAF is helping resolve institutional bottlenecks to expanding the *pourghere* oil multi-function platforms. In Botswana, SEAF is helping the Government improve the national photovoltaic home system programme by suggesting management reforms.

- The African Rural Energy Enterprise Development Initiative (AREED) started in earnest in 2000. AREED helps the private sector deliver affordable energy to rural areas based on clean and renewable energy technologies. AREED is now well underway in the five countries of Botswana, Ghana, Mali, Senegal and Zambia with energy enterprises or joint activities being developed with more than 40 entrepreneurs and NGOs, and discussions for immediate partnership underway with five local financial institutions. An AREED tool kit and training programme have been developed.
- The Division organized with UN/DESA a regional meeting on energy and sustainable development to help African countries identify common interests and positions prior to the 9th Session of the UN Commission on Sustainable Development (CSD9).
- DTIE Energy started, with the University of the South Pacific and SOPAC, a capacity building project on the integration of Renewable Energy Technologies into the electricity systems of the Pacific Island Countries.
- The International Energy Authority, UNEP's Economic and Trade Unit and the DTIE Energy began a series of regional workshops on energy subsidy reform and sustainable development. The first two, in Europe and Africa, were held in 2000, and two more will be held in 2001. A synthesis report of the series and associated analytical work will be submitted to CSD9.
- DTIE Energy published *Natural Selection: Evolving Choices for Renewable Energy Technology and Policy*. This publication describes different renewable energy technologies and the government policies that can make them a reality.
- A meeting with 11 automotive manufacturers in May identified several priority areas for joint action, including indicators for environmental reporting and sustainable mobility issues for developing countries.

ECONOMICS AND TRADE

In the field of economics, trade and financial services, UNEP's goals are to improve countries' understanding of the interlinkages and complementarities between environment, trade and development; enhance countries' capacities in integrating environmental considerations into macroeconomic policies, including trade policies; and to promote the development and implementation of sustainable development policies by the financial services sector. In meeting these goals, UNEP focuses its activities on four main components.

Awareness raising

Linkages between trade, environment and development

UNEP has published studies and publications on economics, trade and finance. Topics include: environmental impact assessment (EIA), environmental and natural resource valuation, environmental accounting, economic instruments for environmental management, and critical issues in the trade and environment debate. Finance Initiatives topics include the financial sector's role in sustainability and the greenhouse gas indicator. Additionally, in collaboration with the International Institute for Sustainable Development (IISD), UNEP has recently published *Environment and Trade: a Handbook* (see box right for publications list).

Policy tools

The development of policy tools responds to widespread needs of decision makers, at the national and international level, to enable them to design and implement mutually supportive trade, environment and development policies.

- The *Reference Manual on the Integrated Assessment of Trade-Related Policies* provides practical and cost-effective approaches to comprehensive — environmental, social and economic — reviews of trade-related policies.
- The *EIA Training Resource Manual* has been fully revised based on field trials and requests from governments. It enables trainers to develop tailor-made courses for different target groups participating in EIAs, and has been supplemented by a compendium of case studies reflecting experiences of

2000 publications

Environment and Trade: a Handbook. UNEP and IISD

Economic Instruments for Environmental Management: A Worldwide Compendium of Case Studies

Environmental Valuation: A Worldwide Compendium of Case Studies

Integrated Environmental and Economic Accounting: An Operational Manual. UNSD/UNEP

The Clean Development Mechanism, Building International Public-Private Partnerships under the Kyoto Protocol. UNCTAD, UNDP, UNEP and UNIDO

The GHG Indicator: UNEP Guidelines for Calculating Greenhouse Gas Emissions for Businesses and Non-Commercial Organisations

The UNEP Finance Initiatives Newsletters *The Bottom Line* and *The Partner Line*

Report of the results of the UNEP Insurance Industry Initiative Survey of Implementation

UNEP Financial Institutions Initiative Fifth International Roundtable Meeting on Finance and Environment: *New Roles for Finance in the Race to Sustainability*



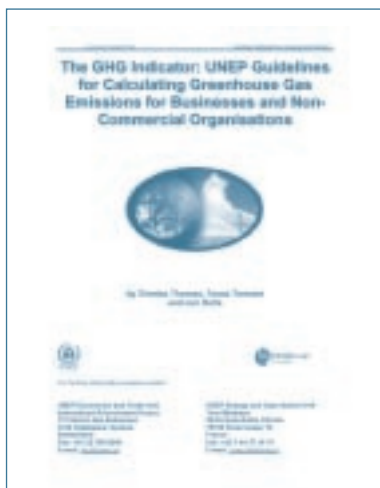
countries conducting EIAs.

- *Operational Manual on Integrated Environmental and Economic Accounting (IEEA)*, prepared in collaboration with the United Nations Statistical Division (UNSD), provides a user-friendly guide for integrated environmental and economic accounting at the national level.
- Studies have been prepared on
 - the role of the precautionary principle/approach in international and national environmental law-making, and its implications for issues related to trade and environment;
 - the design of intellectual property regimes to benefit small-scale innovators and the environment, with reference to the WTO TRIPs Agreement; and
 - on perverse or trade-distorting fisheries subsidies.
- *The GHG Indicator: UNEP Guidelines for Calculating Greenhouse Gas Emissions for Businesses and Non-Commercial Organisations* includes a built-in on-line calculator making it a 'living' management tool that permits companies to make their own real-time calculations.
- *The UNEP Insurance Industry Initiative Survey of Implementation* allows companies to benchmark their own position against other companies and focus future efforts on areas where the Insurance Industry Initiative membership will be of benefit.

Capacity building

Capacity building is still urgently needed to improve countries' capacities to develop mutually supportive trade and environment policies. UNEP supports a participatory, 'learning by doing' approach to addressing countries' economic, environmental, and social needs according to national development priorities and socio-economic circumstances.

- In mid-2000, responding to country demand, UNEP launched a new round of six Country Projects on trade liberalization and environment (in Argentina, China, Ecuador, Nigeria, Senegal and Tanzania) and three Country Projects on the design and implementation of policy packages including economic instruments (in Chile, Kenya and the Philippines) to identify the impacts of trade and trade liberalization



on these nations' natural and environmental resources, and to develop policies, including economic instruments, to manage these resources sustainably. Country Project Case Studies and a Synthesis Report will be published in late 2001.

- To reinforce its work in this area, UNEP and UNCTAD launched the UNEP-UNCTAD Capacity Building Task Force on Trade, Environment and Development (CBTF) in April 2000. The CBTF is designed to strengthen the capacities of countries, particularly developing countries and countries with economies in transition, to address trade-environment-development issues at the national level and to participate effectively in related deliberations at the international level.
- The UNEP Finance Initiatives held 'Outreach' events promoting the Initiative and its work programme in Melbourne with the Environmental Protection Authority, State of Victoria, Australia, and the Environmental Protection Authority, Sweden. These events looked at issues relevant to the financial services sector and sustainable development and the environment at a national and regional level. As a follow-up, working groups have been set up to draft a work programme to implement the recommendations of these events.

Partnerships and consensus building

Partnerships and consensus building activities aim to identify areas of shared perception and approach among major stakeholders in order to address trade-environment issues at the international level, and to support the development and implementation of sustainable development policies by the financial services sector in order to mainstream environmental considerations into economic decision-making. A principal aim of the partnership and consensus building activities is to strengthen coherence between Multilateral Environmental Agreements (MEAs) and the World Trade Organization (WTO), as well as to clarify the relationship between WTO rules and trade measures in MEAs (see box right).

- At the country level, UNEP regularly consults with governments in the formulation and implementation of its activities to ensure that countries' concerns and needs are met. Such consultations provide an opportunity for governments to focus on particular environment-trade issues and define their priorities for research, capacity and consensus building activities.
- At the international level a series of secretariat-to-secretariat meetings between

A framework for cooperation

One of the objectives of UNEP-ETU is to strengthen coherence between Multilateral Environmental Agreements (MEAs) and the World Trade Organization (WTO), including clarifying the relationship between WTO rules and trade measures in the MEAs. In October 2000, UNEP-ETU convened an international meeting on MEA-WTO issues, which was attended by more than 200 delegates from 90 countries. The meeting aimed to provide a constructive, open and informal dialogue between trade and environmental officials on ways to enhance synergies between MEAs and the WTO. The resulting Chairman's Summary provides an overview of the main issues raised by participants and a list of future work that was suggested by government representatives, and that may be undertaken by UNEP in collaboration with MEA and WTO Secretariats.

Focus on Africa

Trade and Economics worked closely with four African countries to assess the environmental impacts of their trade activities and develop policy response packages to address them.



MEAs, the WTO and UNEP, combined with a High Level Panel Discussion at CSD-8 in April 2000, and an international meeting at the UN in Geneva in October, led to identification of concrete steps that these institutions and their memberships can take to enhance synergies and mutual supportiveness between the multilateral environment and trade agreements.

- UNEP has been working closely with banks and insurance companies since the early 1990s in two initiatives, which now have a membership of more than 260 institutions, to promote environmentally sound practices in the internal and external operations of these institutions, and awareness and understanding of the benefits accrued by these enterprises by integrating environmental considerations into their operational policies. Through the establishment of working groups, workshops and international conferences, UNEP is able to promote and facilitate environmentally responsible investments within the sector. Outreach meetings have resulted in partnerships with Centro Latinoamericano para la Competitividad y el Desarrollo Sostenible (INCAE) in Costa Rica, the Division of Standards, Economics and Information within the Israeli Ministry of Environment, and the EPA of the State of Victoria in Australia.. In November, Deutsche Bank hosted in Frankfurt (Germany) UNEP's Finance Initiatives Annual International Round Table Conference on Finance and the Environment, which was attended by some 200 participants. Work programmes are underway for 2001.
- Together with the International Energy Agency (IEA), UNEP has initiated a project on energy subsidy reform and sustainable development. Based on four regional workshops in Europe, Africa, Asia and Latin America, the initiative seeks to advance sustainable energy production and use in both developed and developing countries. The workshops will provide a platform for policy makers, economists and representatives of industry and NGOs to discuss issues surrounding fossil fuel subsidy in preparation for CSD-9 and Rio+10.
- The DTIE Economics and Trade Unit (ETU) has started work on fisheries subsidies. The overall objective is to build understanding and consensus on policy reforms in the fishery sector, including subsidy reform that will contribute to the sustainable and equitable management of fisheries. A comprehensive approach is envisaged through a combination of research work, country studies and policy dialogue, aimed at understanding the effects of fisheries subsidies on the economy, environment and society.

REGIONAL ACTIVITIES

DTIE activities are delivered in the regions through the Regional Offices which also help identify specific regional needs for future programmes. The main activities in the Regional Offices related to industry, technology and the economy — many undertaken jointly with UNEP DTIE units — are described below.

Africa

- Input to the Meeting and Report of the 8th Session of the African Ministerial Conference on the Environment, 3-6 April;
- Publication, in collaboration with the International Human Dimensions Programme on Global Environmental Change Industrial Transformation, of the report of the Africa Regional Workshop on Industrial Transformation in Africa;
- Organization of the First Cleaner Production Roundtable for Africa and workshop on Sustainable Consumption (9-11 August);
- Organization of a Seminar on Rural Energy Provision in Africa, in collaboration with the International Solar Energy Secretariat (9-11 October);
- Organization of the Regional Workshop on Wood Energy Information in Africa (with FAO, 23-27 October); and
- Support to the International Training Workshop on the Integrated Management of Eutrophication in Lakes and Reservoirs (17-21 January, Naivasha, Kenya).

Regional Offices



UNEP Regional Office for Africa (ROA)

P.O. Box 30552
Nairobi, Kenya
tel: +254 2 62 38 12
fax: +254 2 62 39 28
e-mail: cheikh.sow@unep.org

UNEP Regional Office for Asia and the Pacific (ROAP)

United Nations Building, Rajadamnern Avenue, Bangkok 10200, Thailand
tel: +66 2 288 12 34
fax: +66 2 280 38 29 and 288 10 00
e-mail: andrewsni@un.org

UNEP Regional Office for Europe (ROE)

15 Chemin des Anémones, 1219
Chatelaine, Geneva, Switzerland
tel: +41 22 917 81 11
fax: +41 22 917 80 24
e-mail: frits.schlingemann@unep.ch

UNEP Regional Office for Latin America and the Caribbean (ROLAC)

Boulevard de los Virreyes No 155, Col. Lomas Virreyes, Apartado Postal 10793, 11000 - Mexico, D.F., Mexico
tel: +52 2 202 7529/7493
fax: +52 2 202 09 50
e-mail: rsanchez@rolac.unep.mx

UNEP Regional Office for North America (RONA)

1707 H Street N.W., Suite 300
Washington, D.C. 20006, United States
tel: +1 202 785 0465
fax: +1 202 785 4871
e-mail: bvd@rona.unep.org

UNEP Regional Office for West Asia (ROWA)

P.O. Box 10880, Manama, Bahrain
tel: +973 276072
fax: +973 276075
e-mail: uneprowa@batelco.com.bh

REGIONS



Asia and the Pacific

DTIE/ROAP helped formulate the Asia-Pacific Regional Action Programme for Environmentally Sound and Sustainable Development, 2001-05, adopted at the Ministerial Conference on Environment and Development in Asia and the Pacific 2000. Other activities are listed below:

- the first regional workshop on Environmental Technology Assessments was held in Manila, Philippines, 22-26 February;
- UNEP's report on cleaner production in the Asia-Pacific region was updated in cooperation with the Asia-Pacific Roundtable on Cleaner Production;
- the Financial Services Conference, promoting the Financial Institutions Initiative, gathered some 150 participants in Melbourne, 21-22 February;
- the first regional symposium on private sector-government partnerships was organized in Kitakyushu, Japan, 31 August–1 September;
- the APELL programme was reinforced through activities with the Asian Disaster Preparedness Center, including a seminar on Emergency Preparedness in Industrial Estates and the preparation of an action plan for Southeast Asia;
- the Tour Operators Initiative was launched in a series of meetings with local stakeholders in Southeast Asia and China;
- consultations on transfer of environmentally sound technologies for freshwater management in the Mekong River Basin were held in Phnom Penh and Bangkok;
- an NGO forum was organized in cooperation with ESCAP and UNDP as a side event to the Regional Meeting on Energy for Sustainable Development in Bali, Indonesia, 21-22 November;
- A manual for cleaner production in hotels was produced in cooperation with the Canadian Universities Consortium/Urban Environmental Management Project and Thailand Environment Institute;
- the two Regional Networks of Ozone Officers carried out four regional meetings;
- the international CP financing project was officially launched in Viet Nam and a project secretariat was established in Hanoi; and
- a training course on environmental management for graduate students at the Asian Institute of Technology in Bangkok was carried out for the third year running.



Europe

Industry-related work in ROE concentrated on sustainable consumption, transport, and cleaner production. Highlights are listed below:

- collaboration with DTIE in the production of a strategy report on sustainable consumption and its accompanying web site which will be used to develop awareness and consensus in the field of consumption and the environment, particularly in meetings with Central and Eastern European countries;
- acted as UNEP's delegated signatory for Lithuania's signing of the International Declaration on Cleaner Production;
- participation in a national television programme in Bulgaria on the UNEP Global Campaign on Youth and Sustainable Consumption; and
- help in planning a series of meetings to explore the concept and practice of sustainable consumption in Europe.

Latin America and the Caribbean

- cleaner production training for 60 people during the 33rd Congress of Security and Ecology (Santa Fe de Bogota, Colombia, June 13–14);
- cleaner production training for 60 officers of the textile, leather, painting, automotive, pharmaceutical and chemical sectors in Leon, Guanajuato Mexico, during the 10th National Congress of Ecology of the Mexican Association of Public Health and Security (AMHSAC);
- OzonAction Web page based at ROLAC updated and made available in Spanish and English;
- presentation of the cleaner production programme in the Industrial Expo in Querétaro, Mexico (August 23–26);
- signing by Argentina of a Memorandum of Understanding with UNEP on the organization of the Meeting of Government Officers of the Americas on Cleaner Production — the Cleaner Production Declaration was also signed by the Government of Argentina;
- cleaner production training for 60 people and APELL training for 40 in Cuba (La Havana, November 27–30);
- cleaner production training for 50 officers and APELL training for 90 in the



Part of the Home Page of the new ROLAC ozone site, available in both Spanish and English

The WILD awards

The WILD Foundation and UNEP New York honoured four companies — Animal Planet, Jaguar Cars, American Electric Power and Home Depot and their advertising firms — with the 2000 WILD Awards. The awards are designed to enhance corporate consciousness, promote responsible use of wildlife and wilderness in advertising, and encourage corporate philanthropy that supports the conservation and sustainability of the wild world.

Animal Planet was recognized for its trademark featuring of nature and wildlife in advertising and programming. Jaguar Cars, Ltd., and its advertising agency Green Team Advertising, Inc., received its award for the 'Jaguar Saving Jaguars' campaign, and for their support to the World Conservation Society. American Electric Power, and its advertising agency HMS Hallmark, was named for its 'The Wilds' advertising campaign. The Wilds span 4000 hectares of reclaimed, surface-mined land in Ohio where African, Asian and North American wildlife species roam freely. Home Depot, and their advertising agency The Richards Group, were recognized for their television commercials featuring pandas in their new zoo in Atlanta and for their role in educating zoo visitors about pandas.

textile, leather, painting, automotive, pharmaceutical and chemical sectors (Quito, Ecuador, December 13–14);

- translation to Spanish of *TransAPELL* and its dissemination in the region; and
- production of posters for the First Exposition of Pemex (Petróleos Mexicanos) during the celebration of Environment Day.

North America

- Co-sponsoring of a UN Headquarters Workshop/Exhibit on Energy Efficiency, Global Competitiveness and Deregulation, chairing the session on 'Challenges and Promises for Clean Energy Usage and Sustainable Development' (1-2 February).
- At the US Environmental Protection Agency round table, in Washington, DC, on 'Climate change and the insurance industry: risk, mitigation and opportunities', presentation on the UNEP Financial Services Initiatives and the link with climate change negotiations (28 March).
- As part of World Environment Day, organization of a seminar at UN Headquarters, with the Rainforest Alliance, on the role of industry in the conservation of biodiversity and natural resources through improved forest management.
- Organization of and chairing a ministerial round table on the 'Role of information and communications technology for development: the environmental dimension' in early July, at which executives from the telecommunications industry participated. An exhibition on the same theme was also organized.

West Asia

- ODS Officers Network/West Asia Meeting, Jeddah, Saudi Arabia, May;
 - Workshop on Cleaner Production and APELL, Amman, Jordan, July;
 - Workshop on Cleaner Production and APELL, Doha, Qatar, September; and
 - Presentation on behalf of the Executive Director to the Global Summit on Peace through Tourism, Amman, Jordan, November.
-

CONTACT ADDRESSES IN UNEP DTIE

Division

Jacqueline Aloisi de Lardere, Director
39-43, quai André Citroën
75739 Paris Cedex 15, France
tel: +33 1 44 37 14 50
fax: +33 1 44 37 14 74
e-mail: unep.tie@unep.fr
<http://www.uneptie.org>

IETC

Steve Halls, Director
2-110 Ryokuchi koen
Tsurumi-ku
Osaka 538-0036, Japan
tel: +81 6 6915 4581
fax: +81 6 6915 0304
e-mail: ietc@unep.or.jp
<http://www.unep.or.jp>

Production and Consumption

Fritz Balkau, Chief
39-43, quai André Citroën
75739 Paris Cedex 15, France
tel: +33 1 44 37 14 50
fax: +33 1 44 37 14 74
e-mail: unep.tie@unep.fr
http://www.uneptie.org/hp_pc.html

Chemicals

James Willis, Director
International Environment House
11-13, Chemin des Anémones
CH-1219 Châtelaine
Geneva 10, Switzerland
tel: +41 22 917 81 11
fax: +41 22 797 34 60
e-mail: chemicals@unep.ch
<http://www.chem.unep.ch>

Energy and OzonAction

Rajendra Shende, Chief
39-43, quai André Citroën
75739 Paris Cedex 15, France
tel: +33 1 44 37 14 50
fax: +33 1 44 37 14 74
e-mail: unep.tie@unep.fr
<http://www.uneptie.org/ozonaction.html>

Economics and Trade

Hussein Abaza, Chief
International Environment House
11-13, Chemin des Anémones
CH-1219 Châtelaine, Geneva 10,
Switzerland
tel: +41 22 917 82 98
fax: +41 22 917 80 76
e-mail: etu@unep.ch
<http://www.unep.ch/etu>

WEB SITES

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<http://www.unep.or.jp/ietc/Publications/Insight/Nov-00/Index.asp>
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http://www.unep.or.jp/ietc/database/maestro_intro.asp

Production and Consumption

http://www.uneptie.org/hp_pc.html
APELL
<http://www.uneptie.org/apell/home.html>
Cleaner Production
<http://www.uneptie.org/cp/home.html>
http://www.uneptie.org/Cp2/info_sources/icpic_data.html
<http://www.uneptie.org/Cp2/declaration.html>
<http://www.financingcp.org>
Sustainable Consumption
<http://www.uneptie.org/sustain/home.html>

Tourism

<http://www.uneptie.org/tourism/home.html>

Chemicals (see page 16)

Energy and OzonAction

<http://www.uneptie.org/ozonaction.html>
OzonAction Newsletter
<http://www.uneptie.org/ozat/ozat/main.html>

Economics and Trade

<http://www.unep.ch/etu>

