

EPA's International Programs:

Serving U.S. Environmental, Economic,
Foreign Policy, and National Security Interests

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America's environmental interests do not stop at U.S. borders. The protection of U.S. citizens and natural resources requires the cooperation of other countries. EPA's international programs:

- *protect U.S. citizens from air, water and land pollution along our borders;*
- *reduce global environmental threats, such as pollution of the atmosphere and oceans; and*
- *enable the United States to benefit from scientific, technological, and environmental management advances in other countries, thereby promoting "cleaner, cheaper and smarter" environmental protection in the United States.*

International cooperation also serves important U.S. economic, foreign policy, and national security interests. EPA's technical assistance programs overseas, for example, have led to commercial opportunities for U.S. environmental businesses, thereby improving the U.S. trade balance and creating high-wage jobs for American citizens. The promise of environmental cooperation has been an integral element of the Middle East peace process. Our technical exchange program with Russia is helping reduce barriers to the decommissioning of the Russian nuclear fleet.

EPA's Office of International Activities (OIA) leads the Agency's international programs. Providing management and coordination on behalf of the EPA Administrator, OIA works closely with EPA program (e.g., air, water, and waste) and regional offices, other federal agencies, international organizations, and foreign governments to achieve U.S. environmental objectives overseas. This role assures that the Agency speaks with one voice on international policy. It mobilizes the vast scientific and technical expertise available at EPA in a more cost-effective manner.



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Recognizing that the United States is part of a global ecosystem that is affected by the actions of all countries, EPA should begin working with relevant agencies and organizations to develop strategic national policies that link national security, foreign relations, environmental quality, and economic growth.

—Beyond the Horizon
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Protecting Citizens Along U.S. Borders

Nowhere are the benefits of EPA's international programs more apparent than in the Caribbean and Arctic and along our common borders with Mexico and Canada.

Mexico: EPA's cooperative programs with Mexico, as well as the Agency's role in negotiating the Environmental Side Agreement to NAFTA, have led to concrete environmental gains in both countries. The construction of wastewater and hazardous waste treatment facilities in Mexico is helping solve decades-old problems affecting human health and the environment in California, Arizona, New Mexico, and Texas. Joint air pollution efforts will help mitigate respiratory and other problems in U.S. cities along the border, as well as in their Mexican "sister" cities. In addition, by helping Mexico acquire the necessary regulatory and enforcement capabilities, EPA's programs will help ensure that Mexican companies are subject to the same pollution control requirements as ours, thereby helping to level the playing field for U.S. industry.

Canada: Long-standing cooperation with Canada has resulted in significant environmental gains along our northern border. Benefitting from the Great Lakes Water Quality Agreement and other cooperative agreements, mercury levels in fish in Lakes Michigan, Huron, and Erie have dropped by more than 75 percent since 1970. Phosphorous loadings into Lake Erie

decreased by more than 50 percent over the same time period, thereby improving water quality and raising fish stocks. Harmonized approaches under the U.S.-Canada Air Quality Agreement have cut transboundary flows of sulfur dioxide and other compounds causing acid rain.

Caribbean: The United States is part of the Wider Caribbean Region. Environmental cooperation in the Caribbean is helping improve water quality along U.S. shores, as well as promote tourism and fishing industries that depend on Caribbean waters for their livelihoods. Ongoing work includes the negotiation of a protocol on land-based sources of pollution and cooperative efforts to control marine debris. Such cooperation will protect American coastlines in Texas, Louisiana, Mississippi, Alabama, and Florida.

Arctic: EPA is spearheading a project to double Russia's capability to process low-level nuclear waste. The project will reduce dumping of such wastes in the Arctic and Pacific oceans, and help Russia decommission part of its nuclear submarine fleet in accordance with U.S.-Russian agreements.



Reducing Global Environmental Threats to Our Communities

Global threats can become local threats. Chlorine-containing molecules rising to the upper atmosphere deplete stratospheric ozone over the entire globe, not just over the country in which they were emitted. Emissions of carbon dioxide and other greenhouse gases threaten to raise temperatures throughout the global atmosphere, again regardless of origin. Irreversible losses of species and habitats imperil the earth's biological diversity, threatening the health of ecosystems and depriving the world of commercially valuable and potentially life-saving genetic materials. EPA's international programs address the serious global threats that directly affect the health and environment of every American citizen.

Stratospheric Ozone Depletion: EPA played a leading role in negotiating the Montreal Protocol on Substances that Deplete the Ozone Layer, and it is now charged with issuing the regulations that implement the agreement in the United States. Conclusion of the Protocol helped enlist the cooperation of other nations in reducing ozone-depleting substances. (The ozone layer protects the earth's surface from harmful ultra-violet radiation.) It has also helped ensure that U.S. companies are not subject to more stringent controls under domestic legislation than their foreign competitors, and enhanced the demand for substitute chemicals and technologies, an area in which U.S. companies have a distinct competitive advantage.

Climate Change: Implementation of the climate change convention has refined the understanding of the processes that affect global climate and boosted efforts to reduce anthropogenic climate problems. EPA's voluntary greenhouse gas (GHG) reduction ("Green") programs encourage companies and public and private agencies to voluntarily install energy-saving technology, thereby reducing electricity demand. (Utilities are one of the major sources of GHGs.) These and other pro-

grams have contributed to a thriving energy efficiency and conservation industry in the U.S. and stimulated demand for such technology here and abroad. They also reduce other forms of air pollution and save companies money through more efficient operations.

Marine and Coastal Pollution: EPA provides policy and technical leadership under international agreements to prevent and reduce pollution of the marine environment from dumping, vessels, and land-based sources. The recent agreement under the London Convention to ban the sea disposal of radioactive and industrial wastes, for example, helps protect U.S. coastal areas, fisheries, and human health.

Loss of Biological Diversity: Protection of biological diversity is critical to the health of ecosystems the maintenance, crop diversity, and the preservation of genetic resources that may be used to develop life-saving pharmaceutical and other products. Fishing and birdwatching are just a few activities that are affected by loss of diversity. Medicines to treat painful or life-threatening illnesses may never be developed if the plants from which they are derived become extinct.



Promoting U.S. Technologies and Services Abroad

The United States is a world leader in environmental technologies and expertise. Twenty-five years of rigorous environmental regulations have engendered an environmental industry second to none. Helping American companies capture a larger share of the global market for environmental technologies and expertise—currently estimated at around \$300 billion a year—will help solve environmental problems overseas while fueling economic growth and creating high-paying jobs in the United States.

U.S. TIES: EPA's U.S. Technology for International Environmental Solutions (U.S. TIES) program is enlisting greater participation of the U.S. private sector on behalf of U.S. environmental objectives overseas. Launched in 1994 and serving as the primary international component of the President's Environmental Technology Initiative, U.S. TIES uses technical assistance and training, information exchange, and technology demonstrations to match pressing environmental problems overseas with U.S. suppliers of proven and cost-effective technologies and expertise.

For example, Mexico, like many countries, has a problem ensuring the safety of its drinking water supply. Such problems can lead to outbreaks of diarrhea, cholera, and other water-borne intestinal diseases in that country (including regions bordering the United States). The U.S. environmental industry is a leading competitor in drinking water treatment technologies,

including the small community systems of particular interest to Mexico. Under the Mexico drinking water demonstration project begun in FY 1994, EPA is working with the U.S. Department of Agriculture, American vendors and universities, and Mexican officials to demonstrate the performance of low-cost, reliable, and easy-to-operate package plants for three small Mexican communities.

USETI: The U.S. Environmental Training Institute (USETI) is another important vehicle for enlisting the private sector on behalf of the environment. Launched by EPA in 1990, USETI introduces public and private sector officials from foreign governments to U.S. environmental management techniques and technologies. The result is improved environmental quality abroad with enhanced commercial opportunities for U.S. businesses.



Removing Barriers to U.S. Trade

The Agency's international work also serves U.S. business interests by removing barriers to trade. By working with foreign governments and international organizations, EPA seeks to improve environmental conditions internationally while ensuring that U.S. businesses are not left at a competitive disadvantage due to poor environmental enforcement overseas. The upward harmonization of standards internationally also helps improve the safety of products imported into the United States.

Upward Harmonization of Standards: By working directly with the International Standardization Organization (ISO), the European Union (EU), and other international organizations, EPA is helping establish international standards for products ranging from chemicals to automobiles and tractors. For example, EPA works closely with EU regulatory bodies to ensure that European vehicle emission standards are compatible to U.S. standards. This enables American car and off-road engine manufacturers to sell their products in the EU, thereby avoiding potential trade barriers that could affect thousands of American jobs. Other efforts

to improve environmental standards overseas prevent the creation of "pollution havens" that siphon off U.S. jobs and help American businesses compete in the global marketplace.

NAFTA: EPA is working with its Canadian and Mexican counterparts under the Environmental Side Agreement to NAFTA to ensure that all NAFTA signatories reach comparable levels of environmental protection. These levels will ensure that no country offers an unfair competitive advantage to business (e.g., through weak enforcement of environmental statutes).



Strengthening Environmental Protection Overseas

The Agency is recognized throughout the world as a leading source of environmental information and expertise. Benefitting from over 25 years of environmental experience in the United States, EPA is now engaged in a comprehensive effort to strengthen environmental institutions and human resource capabilities throughout the world.

Central/Eastern Europe and the NIS: EPA's programs to strength environmental institutions ("capacity building") in Central and Eastern Europe and the Newly Independent States (or "NIS," the former Soviet Union) have played a critical role in helping restore environmental quality in this part of the world. These programs are also helping to build the regulatory and enforcement capabilities that drive demand for environmental goods and services, thereby creating trade and investment opportunities for U.S. business.

The EPA-launched Regional Environment Center in Budapest operates a business information center to help firms better understand the region's environmental markets. EPA and several other agencies jointly funded energy efficiency centers in the Czech Republic, Poland, Ukraine, Russia, and China. After seeing the benefits of this U.S. technology, foreign countries have purchased \$5 million of U.S.-produced environmental goods and services, with agreements signed for \$25 million more. Another project in the Czech Republic led to a \$7.5 million sale of air pollution equipment. Finally, the demonstration of U.S. coal-bed methane recovery technologies in Poland has resulted in an additional \$10 million sale.

Asia: EPA's participation in the U.S.-Asia Environmental Partnership and other programs has helped boost environmental protection efforts in a region undergoing enormous economic and environmental changes. It has

also increased demand for U.S. environmental technologies and expertise. For example, EPA's technical assistance to Thailand helped alleviate a significant health and environmental problem posed by electric power plants in the MaeMoh Valley. It also opened the way toward a \$100 million purchase of U.S. monitoring and control equipment.

Africa and the Middle East: EPA efforts under the Middle East peace process have introduced the latest U.S. approaches and technologies for dealing with chemical and oil spill emergencies, small community wastewater problems and reuse opportunities, and environmental monitoring and measurement. In cooperation with two international agencies, EPA has supported efforts to introduce World Health Guidelines for Drinking Water Quality involving nine countries in East and Southern Africa.

Latin America: EPA's environmental programs in Latin America will help build stronger environmental programs in this region of the world, while expanding opportunities for trade and investment throughout the hemisphere. Through the Agency for International Development (AID), EPA is promoting safer pesticide use in Central America, including work to control excessive use of pesticides, discourage the use of dangerous ones, and improve compliance with U.S. import requirements to help ensure the safety of the U.S. food supply.



Reducing the Cost of Environmental Protection in the U.S.

The Agency's international programs can elevate the quality and reduce the cost of environmental protection in the United States. Cooperative programs enable the United States to benefit from scientific, technological, and environmental management breakthroughs in other countries and to share the burden of environmental research and regulation internationally.

Cooperative Research Agreements: Cooperative scientific and technical exchanges enable EPA to benefit from foreign environmental research and experience. These programs furnish EPA with information, technologies, and practices that can be adapted to U.S. circumstances and conditions. This often results in better regulatory design and at less cost than if U.S. researchers and industry had to address a given issue without foreign input. Historically, the major sources of scientific and technical information have been Canada, Germany, Sweden, Japan, and the Netherlands. For example, joint research between the United States and China provides an extremely cost-effective way to gather data and verify air pollution tracking methods. Air pollution studies in China (including a study of the effect of certain pollutants on children) are being carried out at less than half the cost (\$2 million, rather than \$4 to \$5 million) than if done in this country. In addition, China presents unique environmental, geographic, and demographic conditions, allowing scientists to collect data not available in the United States.

Innovative Regulatory Approaches: While the United States has often been at the forefront of incentive-based regulatory and enforcement approaches, the U.S.

can also benefit from innovation elsewhere. The United States, for example, learned about Germany's effluent fee systems, and the Germans learned about our experience with "emissions trading" (which lets companies buy and sell rights to emit pollution) and the "bubble" concept (which gives companies greater flexibility in cleaning up pollution sources). The Netherlands and Sweden have also been sources of advanced concepts on "user-friendly" regulations.

International Organizations: Cooperation with international organizations enables the United States to share the burden of environmental research and other data collection efforts. Through the Organization for Economic Cooperation and Development (OECD), for example, the world's most industrialized nations are sharing the cost of toxicity testing for over 700 high production chemicals. OECD nations are also sharing data used in reregistering older pesticides, at an enormous savings of time and resources for both EPA and U.S. pesticide manufacturers. The World Health Organization and other international technical agencies allow EPA to validate research methods and conduct scientific investigations and analyses with the United States paying only a fraction of the costs.

