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1996

A Turning Point

Annual Report

US-AEP

UNITED STATES-ASIA ENVIRONMENTAL PARTNERSHIP PROGRAM

A Letter

From the Administrator of The United States Agency for International Development

Dear Partners and Friends:

I am pleased to present the 1996 Annual Report for the United States-Asia Environmental Partnership (US-AEP), an interagency project designed and led by the United States Agency for International Development. This year marks the fifth anniversary of US-AEP and the U.S.-Asian commitment to a cleaner environment.

During the past five years, US-AEP activities have encompassed work in nearly thirty Asian and Pacific economies, building long-term partnerships among governments, businesses, and nongovernmental organizations (NGOs). At the government level, initiatives have ranged from the conceptualization of basic environmental legislation to improved enforcement and new government-industry partnerships. Government sponsorship of vitally needed urban environmental infrastructure has been augmented with new ideas on private-sector financing, construction, and operations.

The private sector in Asia has gained access to cutting-edge technologies and management ideas from the United States through exchanges, matchmaker services and trade missions. To facilitate the implementation of program activities, US-AEP, in conjunction with the United States Department of Commerce U.S. and Foreign Commercial Service, operates Offices of Technology Cooperation in 12 key Asian cities. Innovative partnerships between Asian NGOs and forward-looking private companies are creating a spirit of collaboration to solve environmental problems rather than one of confrontation.

At the same time, thousands of U.S. environmental and process-engineering firms have been strengthened by US-AEP programs through exchanges, competitive challenge grants, and market information. To date, US-AEP has promoted sales of more than $500 million in U.S. private sector environmental technologies and services to Asia and identified awards for environmental infrastructure in Asia with total project values exceeding $500 million, producing new and well-paying jobs in the United States.

Asia has reached an important step on the road to environmental health and sustainable development. We are proud of US-AEP's role in introducing U.S. clean technologies for Asia's future industrial expansion.

Sincerely,

J. Brian Atwood

1996: A Turning Point for the industrial and urban environments of asia

green tiger

"After years of turning a blind eye to pollution, the Philippines is finally getting tough about protecting its environment. Victor Ramos, who was appointed secretary of state for the environment a year ago, predicts the Philippines will become the first 'green tiger' among Asia's economies."

—Financial Times
September 4, 1996

The year 1996 appears to have marked an historic turning point for the Asian environment. It became increasingly obvious during the year that Asians have responded with vigor to the pollution problems in their industrial and urban sectors.

With economic expansion continuing to range from 6 to 8 percent, population growth holding at 3 percent, and massive migrations pouring into the world's largest cities, Asian leaders have begun to think twice about the costs and benefits of untrammeled economic growth. As a result, they are embracing wholesale shifts in perspective, endorsing, for example, tougher environmental laws and more rigorous enforcement of laws already on the books, encouraging the social pressures to elicit voluntary environmental commitments by industry, and reordering budget priorities. These changes signify an integration of global markets, government policies, and self-reliant communities—a convergence that promises to make the Asian environment safer and cleaner.

Why has this historic turnaround occurred? The most obvious answers are a recent and discernible degradation in the quality of life and a growing perception that pollution trends pose legitimate threats to the continuing viability of economic well-being. The chronic stress of pollution and traffic has galvanized environmental anxiety in all corners of Asian society, in the private sector as well as nongovernmental organizations (NGOs) and government. Toxicity and congestion have caused several Asian cities to suffer real losses in business and trade. Meanwhile, the news and information media are increasingly skilled in reflecting public alarm about risks to the quality of life and basic human health. As a result, the cleaner cities—Singapore, for example—have earned a competitive advantage and reaped the economic benefits.

During 1996 every country and city in the region witnessed feverish efforts to build systems for supplying water, treating sewage, and containing solid and hazardous wastes. In part, these efforts reveal the underlying values and political significance of Asia's burgeoning middle class. At the same time, the continuing economic boom has generated the means and incentives for underwriting capital requirements of the new infrastructure. The ultimate cost of meeting demands for new infrastructure could exceed a trillion dollars.

One sign that Asia has reached a turning point was new commitment by its governments to merge traditional economic and industrial policies with more recent environmental measures, a melding that foretells the mainstreaming of the environ-

ment and its eventual disappearance as a separate category. For example, Malaysia decided in November to use the state of the environment as an economic indicator, a shift that was noteworthy enough to earn banner headlines throughout the country. Earlier, the president of Korea had declared that the environment ranks as one of the nation's priorities, one that would walk hand-in-hand with sharpened economic competitiveness.

Concrete evidence of the integration of environmental and economic policies took many forms in 1996, most critically within powerful trade and industry ministries. Many now take active roles in the environmental management of industry. Thailand, for example, has established close collaboration between the Ministry of Industry, focused on environmental management within industrial plants, and the Ministry of Science, Technology, and Environment, whose pollution control agency enforces industrial pollution discharges and emissions with a budget now some sixteen times its level only five years ago. Malaysia's environmental department has established a position for a high-level policy and enforcement official to work with promotional staff of the trade and industry ministry. The Taiwan Industrial Technology Research Institute, funded by the Ministry of Economic Affairs, now works closely with the government's Environmental Protection Administration on its research and development program for pollution control, waste treatment, and waste minimization.

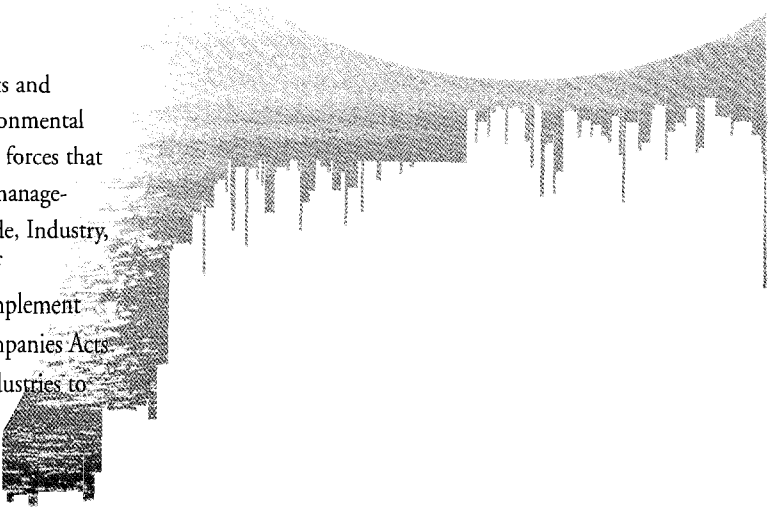
Rising public concerns about pollution, along with increased media coverage, have focused attention on industry's environmental performance. At the community level, litigation has emerged as an influential force in modifying environmental behavior in Malaysia, Sri Lanka, and Taiwan; but the most startling effects have occurred in India, where—accelerating a ten-year trend—citizen litigation has convinced the Indian Supreme Court and state-level high courts to shut down hundreds of industries for violating environmental regulations. The closures prompted industry and government to begin paying careful attention to the wisdom of some standards, the need for more vigorous enforcement of others, and the imperatives of environmental management and accelerated adoption of clean production technologies. Litigation has also compelled financial institutions to anticipate default risks associated with environmental damage. Similarly, India's Industrial Development Bank and Industrial Credit and Investment Corporation now require firms to furnish details on the pollution that a project might create and control measures required.

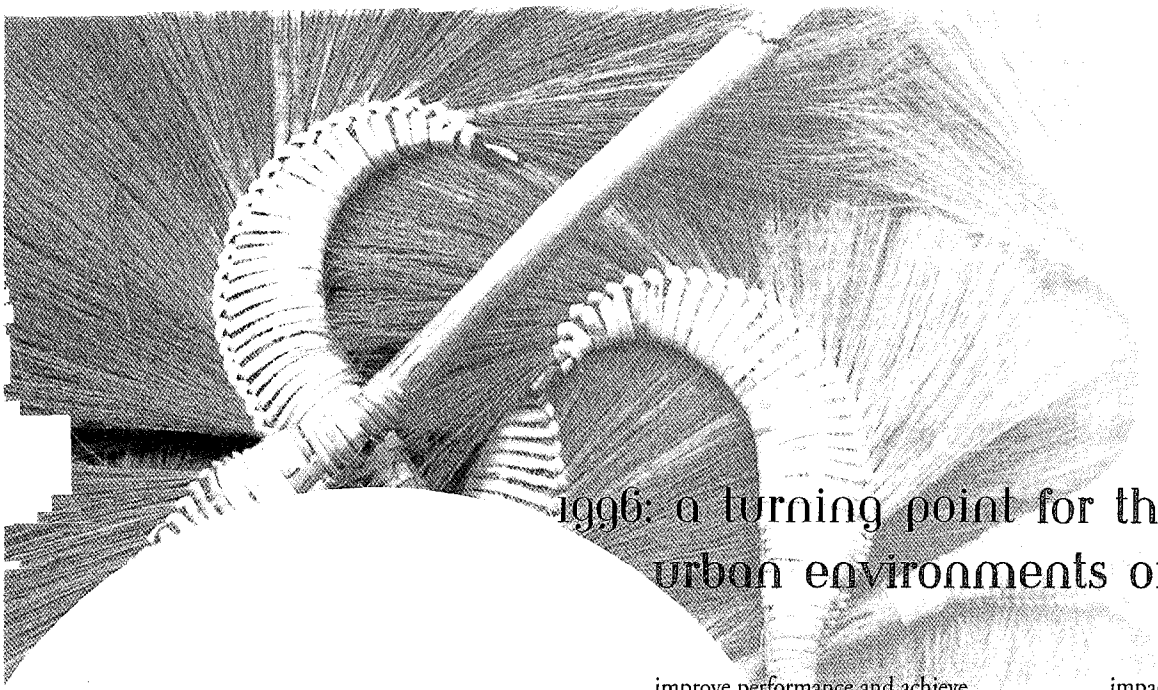
Increasingly, Asian governments and industries are integrating environmental policies with the global market forces that favor effective environmental management. Korea's Ministry of Trade, Industry, and Energy and its Ministry of Environment have begun to implement Environmentally Friendly Companies Acts that establish incentives for industries to

growing with environment

"Together with the environment-friendly development promoted by the Seventh Malaysia Plan, the intention to include the environment as an economic indicator suggests that there is an appreciation at the highest levels of Government for proper environmental accounting."

—New Straits Times
Kuala Lumpur, Malaysia
November 21, 1996





1996: a turning point for the industrial and urban environments of asia

citizens encouraged to report environmental contamination

"Citizens [in Korea] are encouraged to report unauthorized waste dumping and any other acts that are damaging to the environment to environmental authorities by facsimile, computer on-line services, phone or postcards."

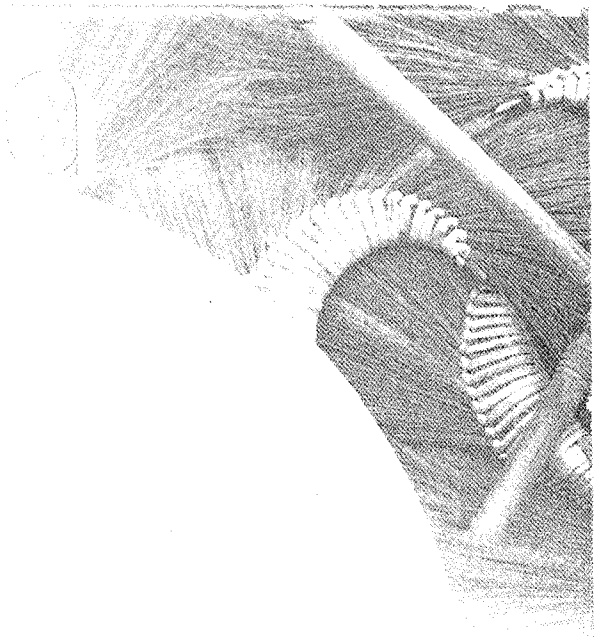
—Korea Times
March 1, 1996

improve performance and achieve certification under ISO 14000, the international standards for environmental management. Nearly all countries have established government or NGO accreditation agencies for ISO 14000, and a half dozen have local certifiers. In countries where export sales are critical, response to ISO has been significant. In Taiwan, for example, by year's end a score of companies had become ISO certified, with another hundred in the pipeline. Electronics and petrochemical companies have been especially active.

The location of new industrial facilities and wastewater or solid waste facilities has now become a major issue for communities throughout Asia. Although these concerns are not new—a decade ago citizens in Phuket, Thailand, burned a tantalum factory in a dispute over potential damage to the environment—new public demands for anticipation and mitigation are trailblazing in the Asian context. In response, governments and industries are searching for ways to avoid paralyzing disputes and violence. In Thailand and Korea, this search is a high priority. Throughout Asia, in fact, numerous jurisdictions now require environmental impact assessments to determine optimal siting for new industrial plants and the best methods for equipping new industrial estates with clean technologies. In 1996, environmental impact assessment documents—often the sole source of reliable environmental information—were increasingly available to Asian news media and interested publics, including NGO representatives, for review and comment before final decisions.

In 1996, it also became clear that industrial performance had become a concern to many constituencies beyond the environmental agencies of government. Information and opportunity, combined with market forces and governmental transparency, enabled public opinion and community spirit to come together as a constructive force to improve many of Asia's industrial regimes.

After enlisting 200 volunteer industries, BAPEDAL, the Indonesian environmental agency, collected self-reported pollution data, assigned environmental performance ratings to each polluter, reported results back to the industry, and, after an interval to allow for improvements, publicly announced the results with a color-coded grading system. BAPEDAL then collected evidence suggesting that public ratings had indeed reduced water pollution, chiefly through the cultural device of shame-avoidance and economic pressures, reinforced by conventional enforcement and citizen lawsuits. The program now reaches 400 firms, and the agency plans to enlist 1,000 firms by the end of 1997 and

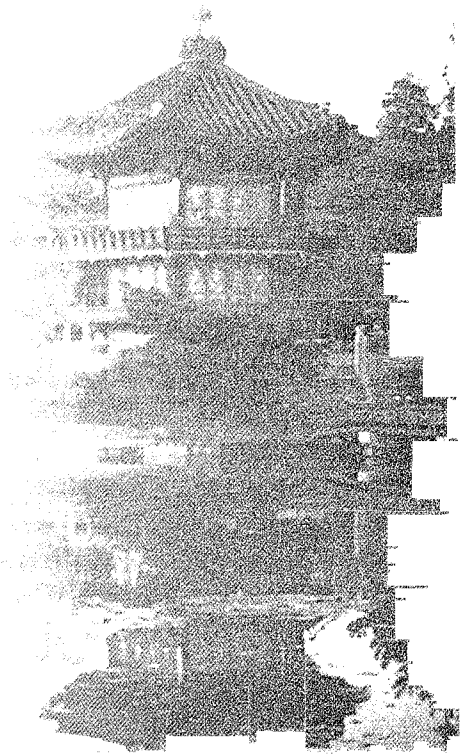


include air and hazardous waste pollution within its ambit. The Philippines started a similar program in late 1996, entitled EcoWatch. US-AEP will support the EcoWatch program in the Philippines in 1997.

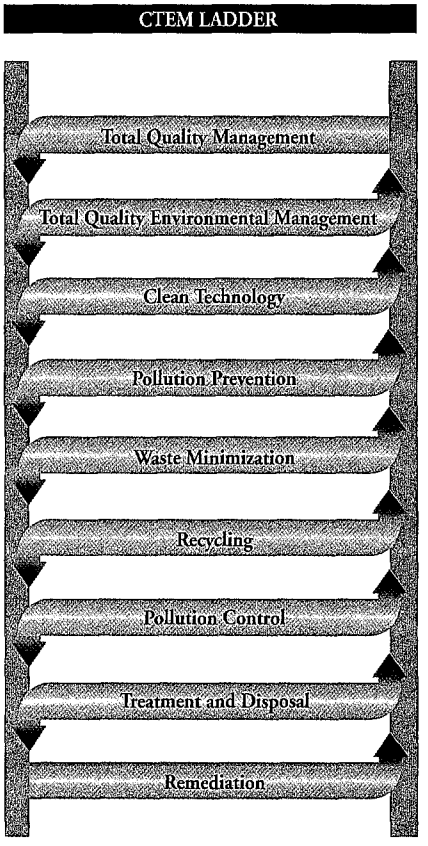
From the regional perspective, a telling shift toward an integrated development policy occurred in July 1996, when the Asia Pacific Economic Cooperation (APEC) Ministerial Meeting on Sustainable Development developed a Clean Production/Clean Technology initiative to mainstream the environmental perspective into its economic programs. As part of the strategy, the APEC delegates pledged to promote ISO 14000, which encourages voluntary action to establish environmental management systems, and to pursue continuous improvements in environmental performance. The APEC decision exemplifies the global market's embracing of environmental rationality as an engine for changing industrial behavior throughout the world.

Thus, the year 1996 cast a spotlight on Asia's new determination to construct a foundation that integrates government, community, and global market perspectives and authorities. The goal: to bring all three elements into closer alignment in support of sustainable development. In short, Asia turned an important corner in 1996.

US-AEP also rounded a significant bend in 1996, completing the reorganization, begun in 1995, of its various programs and partnerships. As the advantages of the new orientation began to generate clear-cut effects, US-AEP and its partners realized that the program had played key roles, both substantive and catalytic, in Asia attaining a new level of environmental awareness. In its new configuration, one that more closely responds to the most intractable of the region's environmental and developmental challenges, US-AEP is divided into three major components: Clean Technology and Environmental Management (CTEM), Environmental Infrastructure, and Framework—Policies, Constituencies, and Public Awareness. An Environmental Exchange Program (EEP), administered by the Institute for International Education, supports the work of the other components. The following sections of this report examine in detail the signal contributions of each of these components to an environmental turning point in Asia.



1996: A Turning Point for clean technology & environmental management



The US-AEP Clean Technology and Environmental Management (CTEM) component targets the environmental performance of industry but also works closely with governments, professional associations, and academic institutions to adapt cleaner production to the special conditions in each Asian country. In its first year, CTEM worked across a broad front, from the immediate problems of small factories to the moving of vast industries beyond disposal and remediation, to the redesign of production processes. In 1996, CTEM focused on four target industries: chemical, electroplating, pulp and paper, and textiles.

BUSINESS NOT AS USUAL

Enduring success, however, depends on changing traditional patterns of production, that is, on challenging managers to think in terms of larger systems and implications. In this realm, CTEM made its most creative contributions to Asia's shift to integrating environment in industry. Common sense, for example, suggests that designing systems to work efficiently and reduce pollution from the beginning is usually more efficient than installing expensive equipment to trap wastes at the end of the process. Yet, managing change is a complex undertaking, a daunting task that is often complicated by incomplete information, multiple variables, and problematic options. To help those making such fundamental changes, the CTEM staff has arranged all of the concepts associated with cleaner production into a simple ladder (see illustration).

On the top rungs: Total Quality Management (TQM) and Total Quality Environmental Management (TQEM), the very pinnacles of managerial achievement. At the base, supporting the entire ladder: Pollution Control, Treatment and Disposal, and Remediation, the most common and accessible methods for reducing unwanted industrial by-products.

Higher concepts embody the more anticipatory and comprehensive techniques for managing waste streams; the lower, the more immediate and reactive. The higher levels also include the more basic concepts below, incorporating them, in ascending order, into increasingly complex relationships. Lower rungs remain useful, however, for addressing the persistent problems of older plants and those that prove resistant to the latest design and production technologies. As the ladder suggests, CTEM forms an integrated whole: understanding its concepts and interrelationships builds a framework for evaluating environmental progress.

CTEM Imperatives: Means to an End

Achieving the heights of TQM and TQEM is a complex undertaking that entails five priorities:

- Increase corporate commitments to environmental management
- Introduce voluntary environmental standards to Asian businesses
- Use the market power and intensifying effects of industry giants as a catalyst for 'greening the supplier chain' of smaller firms
- Identify businesses and organizations that will perform as 'champions' of environmental leadership and responsibility
- Ease the transfer of U.S. environmental experience, practice, and technology.

Increasing Corporate Commitment to Environmental Management

Key to the ultimate achievement of TQEM is the initial commitment of corporate leadership to the principle of environmental management. Thus, CTEM is concerned with establishing distinct milestones and sees adoption of such basic concepts as environmental management systems and environmental stewardship as significant rungs on the climb toward TQEM. In the same spirit, CTEM works on accreditation for ISO 14000 with governments, NGOs, and various industries and associations. In 1996 alone, US-AEP formed partnerships with eleven engineering and consulting companies based in the United States to deliver seminars and short-term technical consultancies on ISO 14000 to business leaders in Hong Kong, India, Indonesia, Korea, Malaysia, Taiwan, and Thailand.

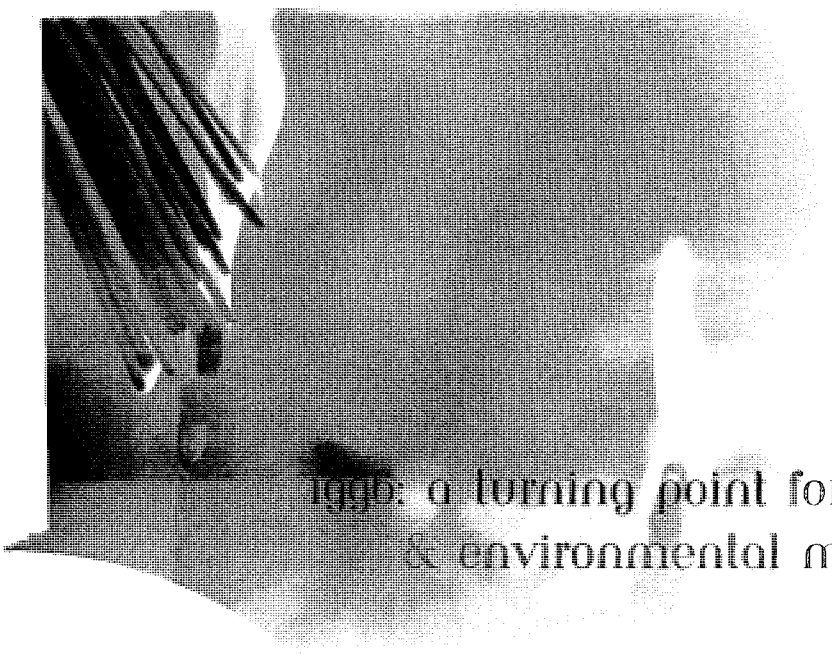
Introducing Voluntary Environmental Standards

To speed the dissemination of international standards, CTEM forms alliances with Asian associations to develop industry-specific norms that are both acceptable and constructive. Industry associations accelerate the movement of new ideas through entire sectors and related networks. In 1996, CTEM staff worked with the U.S. Technical Association of Pulp and Paper Industries to mobilize the environmental assets of the associations that represent pulp and paper manufacturers in Indonesia and the Philippines. As a result, the association in the Philippines has written new guidelines for paper mills. A partnership between the U.S. association and its Indonesian counterpart is already showing the first results of a comprehensive upgrading of the technical and institutional talents that will improve the environmental performance of one of Indonesia's most significant, sensitive, and visible sectors.

pulp and paper

In August 1996, US-AEP helped organize an exchange of information on pulp and paper between Indonesian environment, trade, and industry agencies and organizations and their counterparts in the United States. The Indonesian delegation visited leading American mills and suppliers as well as key state and federal pollution prevention agencies. Result: the exchange opened up a dialogue between the 12-member delegation and they in turn identified a series of common issues and follow-up activities in the areas of bleaching technologies, industrial plantations, and toxic and hazardous wastes generated by the industry.

—US-AEP Environmental Exchange Program



1996: a turning point for clean technology & environmental management

textiles

More than 110 bleaching and dyeing companies generate 600 tons of sludge daily in the Taegu area of Korea. These companies requested assistance to move them toward compliance with government wastewater standards and in February 1996, US-AEP sponsored a three-day seminar in Taegu. Result: a South Carolina company signed its first sales contract for a dyeing machine and anticipates follow-up business worth millions of dollars as wastewater treatment facilities in Taegu are centralized and controlled by the Taegu Dye Industry Association.

—US-AEP Environmental Exchange Program

Using the Market to Green the Supplier Chain

In 1996, CTEM began to persuade large firms to use their market strength to reach smaller firms that supply parts, materials, and resources. A grant to the Textile Working Group of Business for Social Responsibility encourages top apparel makers, such as The Gap, Levi Strauss, Patagonia, and Nike, to establish environmental guidelines for their suppliers. These firms must comply to continue as suppliers. CTEM also works in Malaysia with United Technologies Corporation (UTC) on a project that promises to become a model for industrial relationships in other emerging markets: US-AEP provides the technical support and management skills to review TQM and TQEM practices at two facilities operated by UTC and at five others chosen from among UTC suppliers, who then make TQEM improvements in a specified period of time and report back to UTC. In this way, environmental accountability becomes real as carries consequences.

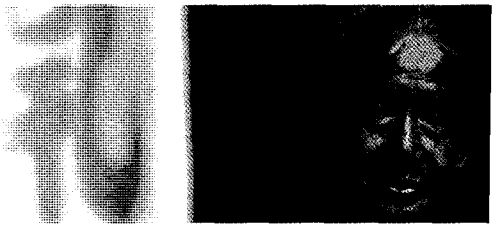
Identifying Business Champions of Environmental Leadership and Responsibility

In 1996, US-AEP initiated a grant to the National Pollution Prevention Roundtable to establish a network of its round tables throughout Asia. The round tables serve as convenient forums for industrial leaders to discuss innovative ideas on pollution, clean technologies, and related matters. Indonesia scheduled the first round table for January 1997. Meanwhile, CTEM Information Centers in Singapore, the Philippines, and Washington, D.C., provide technical information on clean technologies and pollution prevention to interested firms. Additional centers are scheduled for Indonesia, South Korea, and Sri Lanka.

Easing the Transfer of Experience, Practice, and Technology

US-AEP uses various mechanisms for transferring U.S. environmental experience, practice, and technology to Asia. This variety is designed to reflect the complexity of Asia's urban and industrial problems. Strategically located in twelve key Asian cities is at least one Technology Representative (Tech Rep), most of whom are jointly sponsored by US-AEP and the U.S. Department of Commerce. Tech Reps identify markets for products and services and respond to inquiries about American capabilities in the environmental sector. On a typical day, they are likely to be:

- Searching tirelessly through the vast environmental and process technology markets in the United States to find



the most advanced and cost-effective methods for tackling a specific environmental problem

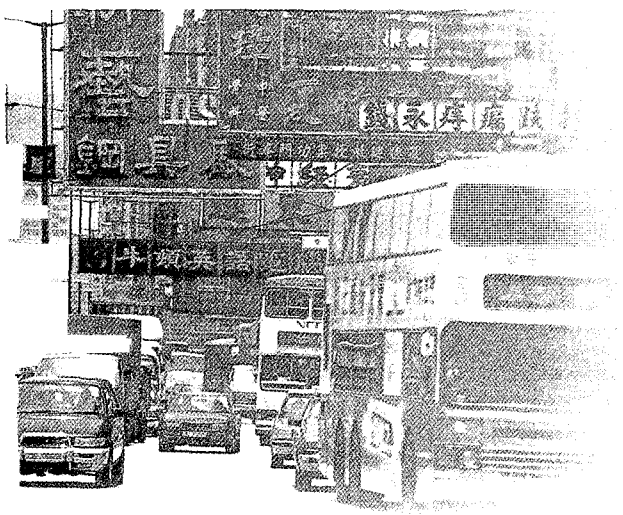
- Acting as information brokers, sharing the knowledge, skills, and wisdom gained during the long struggle to protect the American environment and improve U.S. industrial efficiency

- Identifying likely candidates for fellowships, training programs, and business exchanges

- Guiding Asian firms to American suppliers with the aid of specialized knowledge, sophisticated electronic data bases, and high-speed linkages

- Cultivating long-term, mutually rewarding relationships between the Asian and American business communities.

During the first five years of the program, Tech Reps have played a pivotal role in the transfer of $500 million in U.S. private sector environmental goods and services to Asia and the identification of awards for environmental infrastructure in Asia with total project values exceeding $500 million.



electroplating

In April 1996, US-AEP sent two U.S. experts to Hong Kong and Taiwan to provide technical assistance on clean technologies in electroplating and metal finishing industries. Workshops and site visits were sponsored by local industries and the Hong Kong Productivity Council. Result: Many of the organizations attending the workshops and hosting site visits agreed to cooperate on future projects, such as the AeroIndustry Development Center and the Industrial Technology Research Institute.

—US-AEP Environmental Exchange Program

1996: a turning point for clean technology & environmental management

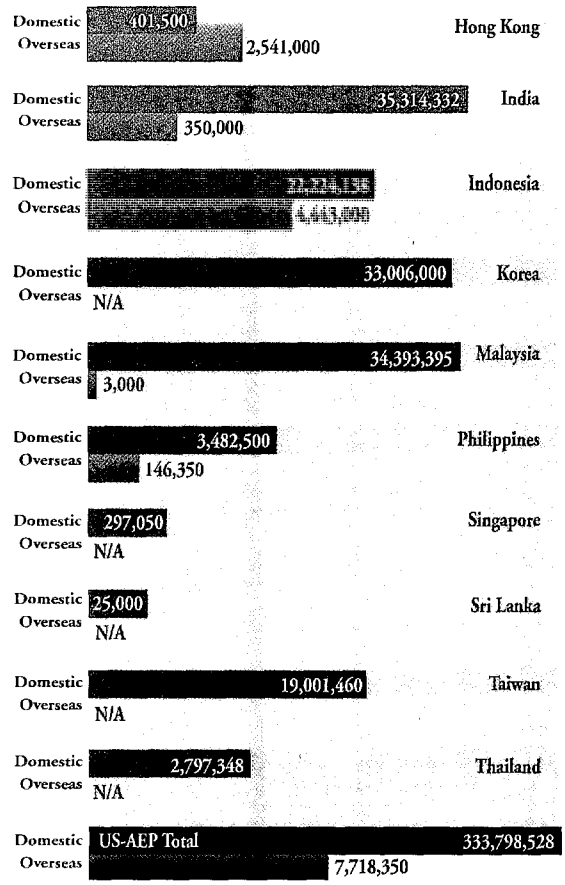
technology transfer

An initial small grant of $20,000 in 1993 opened the doors to the Taiwan and Thailand markets for a Georgia supplier of waste containment equipment. In the years following, the company found demand in Asia for many of its other environmental products. In 1996 alone, the company made sales totaling $58.5 million in seven Asian countries. Its smashing success of sales totaling $218.5 million since 1993, is "a direct result of the grant."

—US-AEP Environmental Technology Fund

ENVIRONMENTAL TECHNOLOGY FUND & OVERSEAS PROGRAM FUNDS

TOTAL SALES GENERATED

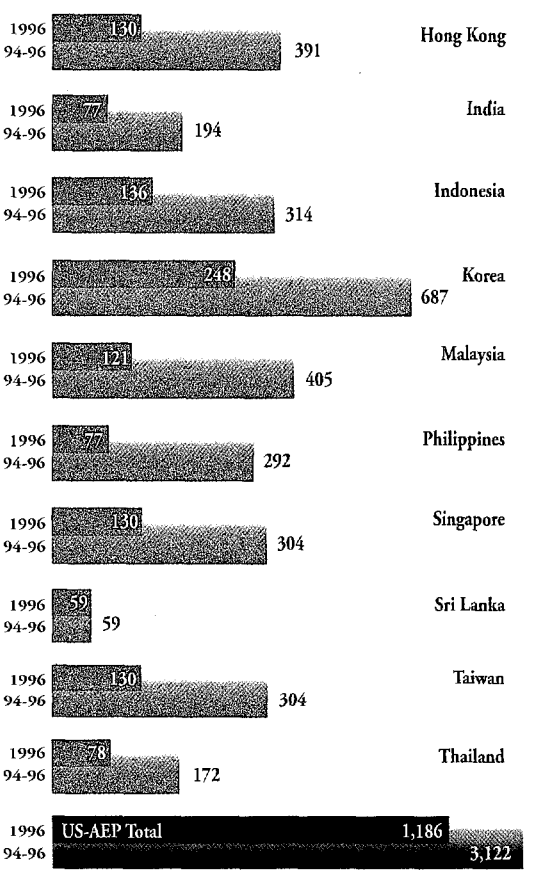


US-AEP's Environmental Technology Fund (Tech Fund) and Overseas Program Fund (OPF) are managed by the National Association of State Development Agencies, which was itself responsible for generating a full third of US-AEP's total sales figure. The Tech Fund grants often provide the marginal assistance that encourages small U.S. firms to participate in the global transfer of environmental technology and expertise. Companies from 44 states participated in the Tech Fund this year. OPF grants, which are driven by demand in Asia rather than by U.S. supply, have enabled 426 delegates from ten Asian countries to gain exposure to the latest U.S. technologies via one-on-one meetings and U.S. facility tours of 541 companies in 37 states. In 1996, the priorities that shape both these grant programs were reconfigured to bring them into congruence with US-AEP's new emphasis on TQM, TQEM, Clean Technology, and Pollution Prevention.

The Environmental Technology Network for Asia works with the U.S. Agency for International Development's (USAID's) Center for Trade and Investment Services to support the Tech Reps and link them to the U.S. business community. The network rapidly disseminates information on business opportunities to U.S. firms and reports on the technical capabilities of American companies that may interest Asian customers. In 1996, the network's data base of industrial categories began to mirror US-AEP's new focus more closely when it was expanded to include the concepts on the higher rungs of the CTEM ladder.

Environmental Technology Network for Asia

Number of Trade Leads



clean technology investments

Nearly 200 families live in shanty houses along Bolgoda Lake in Sri Lanka. The lake is highly polluted due, in part, to the accumulation of saw dust and wood waste from nearby industries. US-AID/Sri Lanka's Community Based Resource Management Project and US-AEP are working together to seek investors who can reduce pollution in the wood industry by using cleaner technologies. In 1996, US-AEP sponsored Malindu Timber (Pvt.), an interested investor, to participate in a wood by-products and substitutes group exchange. Result: After being introduced to U.S. technology on recycling wood waste, Malindu Timber purchased machinery from Sorbilite, Inc. (Virginia) for the production of wood-waste boards for use in construction and furniture. This investment is creating jobs, providing housing materials for villagers, and introducing clean technology concepts for the timber industry in Sri Lanka.

—US-AEP Environmental Exchange Program

A Turning Point for environmental infrastructure and privatizing urban services

According to the 1996 US-AEP assessment of environmental projects in Asia, more than $43 billion in water and sanitation infrastructure is contemplated for municipalities and industries in East Asian countries alone (excluding China). Although the potential market is enormous, many projects are stalled and few have actually reached completion.

Meanwhile, water supply becomes highly problematic as industry, agriculture, and swelling urban populations compete for an increasingly contaminated resource. Urban areas struggle to deal with the catastrophic effects of poor sanitation. Outbreaks of hepatitis, cholera, and other diseases are reported daily in the regional news media.

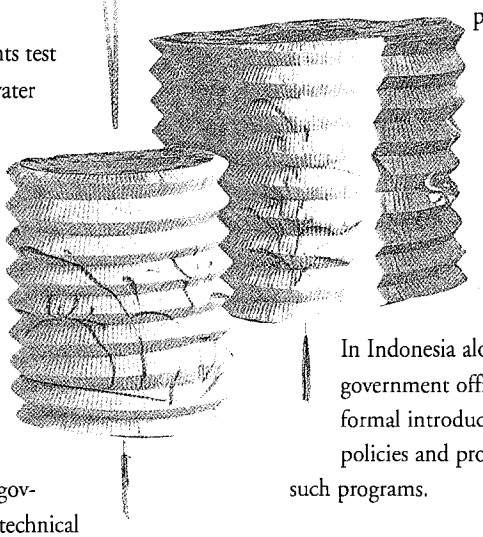
The slow pace of project realization correlates closely with a lack of available public funding, a continuing shortfall that leads many jurisdictions to consider privatization. Unique methods of financing environmental infrastructure have already surfaced. Multilateral development banks are also assisting governments in developing innovative financing schemes for major projects that supply water, treat wastewater, and contain solid and hazardous waste.

Faith in these projects is more readily evident when private investors know that central governments, USAID, the Asian Development Bank, or the World Bank are willing to guarantee a portion of the project's underwriting. In Indonesia, for example, USAID has provided more than $20 million in bilateral assistance for privatization. In the Philippines, USAID supported the formation of the Build-Operate-Transfer (BOT) Center, advised on pivotal power and water legislation, and provided more than $15 million in assistance.

US-AEP, in cooperation with USAID missions in Asia, worked during 1996 on policy issues designed to improve the investment climate and design of more feasible projects. Working cooperatively with USAID on training events, US-AEP has also helped government officials improve their understanding of investor expectations. As a result, some Asian governments, realizing the importance of privatizing environmental services, are now looking to replicate the models supported with US-AEP and USAID assistance and are rapidly putting the necessary framework of incentives and policies in place. In the tradition-bound world of environmental infrastructure, this shift in awareness signals an historic redirection.

Asian governments and other responsible bodies are continuing to ask engineering firms, some from the United States, to design water supply, wastewater, and solid waste systems for large urban zones and rural watersheds. Preliminary designs often

lead to future privatizations. American firms, such as Montgomery Watson, Metcalf & Eddy, CH2M Hill, and Camp, Dresser, and McKee, have been active on this front. Even as privatization designs proceed, a few projects are slowly moving forward in Malaysia, Indonesia, the Philippines, and Thailand. Investors are especially encouraged by the Philippines, given its recent and successful privatizations in the power and telecommunications sectors.



As central governments test the privatization of water supply services, municipalities and local governments are faced with the everyday reality of actually supplying such services—often to poor people—with minimal funding from the central government. With little technical training available to civil servants at local levels, these entities often find themselves ill equipped to meet the need for environmental infrastructure. In Indonesia, US-AEP sponsored a training program for central and local government officials on selecting cost-effective and environmentally sound infrastructure alternatives to meeting the wastewater needs of the country's poor, urban communities. A delegation of ten government officials then visited the United States to evaluate the performance of these systems and explore U.S. municipal approaches to increasing public involvement in selecting wastewater alternatives.

Technical Training

US-AEP and USAID missions in the region have initiated a series of training programs to ensure that privatization concepts are understood and Asian project managers have the tools to carry out their new technical and financial duties, even at the municipal and local levels. In Indonesia alone, more than 100 government officials have received a formal introduction to privatization policies and procedures under such programs.

An official from the BOT Center in Manila, the Philippines, and mayors from Baguio, Cagayan De Oro, General Santos, and Tagbilaren led a high-level delegation to the United States in June. The visit maximized exposure to U.S. technology and the contracting and financing complexities inherent in developing and operat-

1996: a turning point for environmental infrastructure and privatizing urban services

solid waste management

An American firm, responding to a Malaysian proposal in 1996, sought US-AEP help in arranging a tour of a California landfill site for three officials from the client organization. Malaysian participants were able to witness firsthand the development of a former California landfill into retail space, high-rises, and playgrounds. Result: the exchange enhanced the U.S. firm's chances for the landfill conversion contract.

—US-AEP Environmental Exchange Program

ing public-private projects. The mayors are now more aware of the technical and financial issues critical to privatizing these services and more sensitive to subsidy and tariff issues involved in the design and construction of new facilities.

In Taiwan, US-AEP, in cooperation with the commercial section of the American Institute in Taiwan and the American Chamber of Commerce in Taipei, hosted officials from the Philippine BOT Center at a meeting with Taiwan authorities charged with developing a plan for privatizing environmental infrastructure. In January the director of the BOT Center presented a case study on a policy framework to facilitate movement of privately sponsored infrastructure projects through BOT financing mechanisms. Regional cooperation and information sharing on environmental projects demonstrates yet again a major shift in Asian thinking on the environment.

In Indonesia, a high-level delegation of government officials toured U.S. municipalities that encourage private-sector participation in water and wastewater services. Technical discussions focused on intergovernmental relationships and the specific practices and policies of contracting with the private sector to provide management services. Utility managers and municipal contracting offices from Atlanta, Indianapolis, Los Angeles, San Jose, and Seattle shared information on contracting and procurement procedures for BOT, concession, and management and operating structures. This tour enabled participants to gain a more nuanced understanding of roles, responsibilities, standards of performance, and financial considerations for various contracting and partnership models. Delegates were drawn from the privatization team and the Bandung, Riau, Semarang, and Ujung Pandang municipal water utilities.

Developing partnerships

Although US-AEP provided Asians with technical training, it also enabled American industry to meet with Asian infrastructure representatives and project sponsors for the purpose of developing long-term relationships and partnerships. US-AEP continued its workshop series, initiated in 1995, on water and wastewater opportunities in Asia and joined with the Institute of the Americas to sponsor a workshop for more than 150 business leaders in San Diego. In September executives from nineteen leading U.S. firms operating in Asia met with a hand-picked group of project sponsors from India, Indonesia, the Philippines, Taiwan, and Thailand. This matchmaking session established solid relationships and identified key areas in which to focus future discussions and investments.

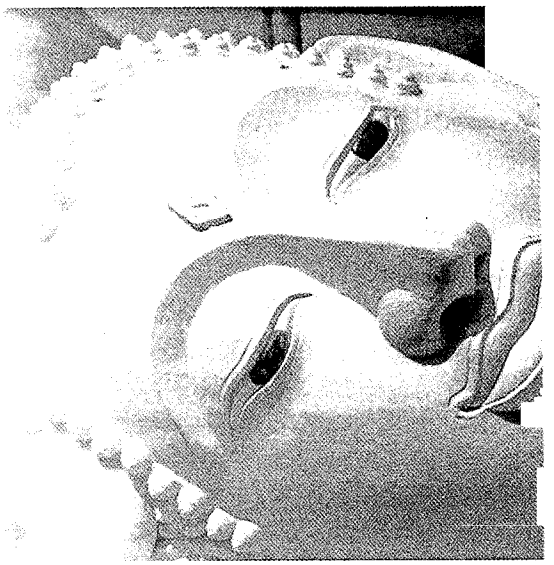
ENTERING THE ASIAN INFRASTRUCTURE MARKET

US-AEP helped U.S. firms do business in several Asian countries during 1996. In Thailand US-AEP was instrumental in the award of a $224-million contract to a partnership of Thai and U.S. firms, which demonstrated a unique approach to meeting the technical and financial demands of designing and building a wastewater treatment system. As part of the Bangkok Metropolitan Authority (BMA) Phase III program, Pate Engineers and Lockwood, Andrews, & Newman (both of Houston) will be working with the Thai company Premier on the design and build contract, whereas CH2M Hill (of San Antonio) will serve as BMA engineering advisor and construction supervisor. The US-AEP/ Thailand Infrastructure Representative counseled the U.S. companies and worked with the US-Thailand Development Partnership to provide BMA and Premier officials with training and exposure to U.S. technologies. After winning election on a platform promising to attack his city's legendary pollution—an event that signals shifting public attitudes —the new Governor of Bangkok signed the contracts on September 20, 1996. The winners had displayed the advantages of trenchless technology, which offers the best means of building a collection and treatment system within the tight land constraints of densely urbanized Bangkok.

In Hong Kong, US-AEP helped Waste Management International win a $228-million BOT contract for a solid waste refuse transfer station in West Kowloon. Pacific Waste Management was awarded its first contract in the face of strong competition from a Sino-German consortium, a Hong Kong-German joint venture, and a French-led consortium. The US-AEP/ Hong Kong Tech Rep was influential in promoting Waste Management International as a leader in solid waste disposal, management, design, and operation and worked with the U.S. Department of Commerce to carry that message to the governor of Hong Kong. The West Kowloon refuse transfer station, operational in 1997, will treat an estimated 2,500 tons of solid waste per day. Hong Kong will offer as many as six additional stations for bids in an effort to reduce the rapidly growing overflow in Hong Kong's three major landfills.

In the Philippines, three U.S.-Filipino environmental infrastructure agreements were signed as part of the Asia-Pacific Economic Cooperation proceedings in Manila in November:

- Alliance Bioremediation & Composting Corporation of Solana Beach, California, signed a build-own-operate arrangement for the $63.3-million Laguna Municipal Solid Waste Conversion Plant, which

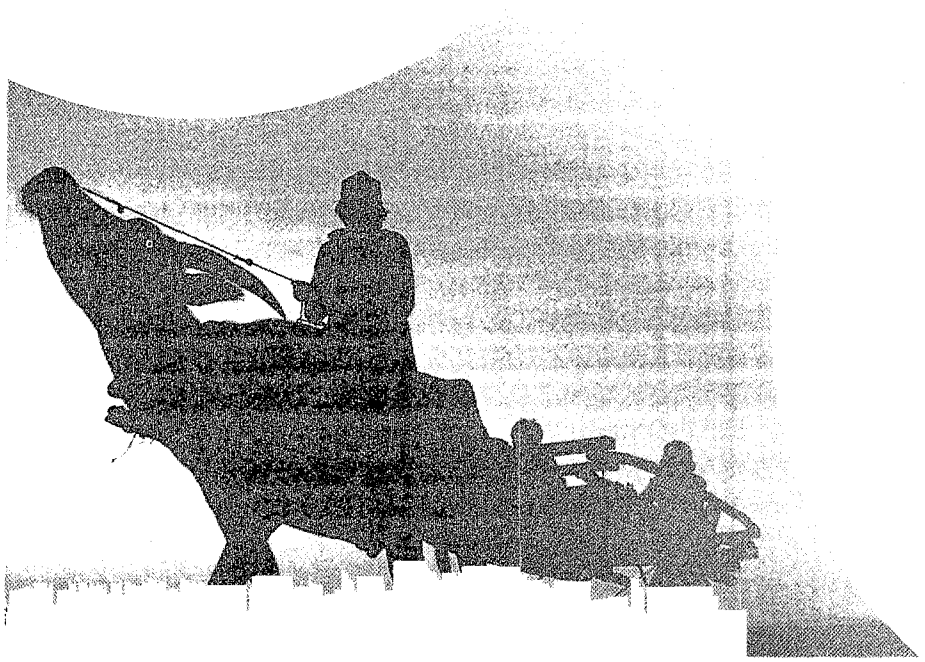


1996: a turning point for environmental infrastructure and privatizing urban services

will convert nearly 2,000 tons of solid waste into fertilizer and electrical power every day.

- Operations Management International, a Denver subsidiary of CH2M Hill, and Titan-Ikeda Construction of the Philippines signed a memorandum of understanding with the provincial government of Cavite for a $500-million bulk water supply and wastewater treatment facility.

- Ecology & Environment of Seattle was selected by the Philippine Department of Environment and Natural Resources for a $350,000 feasibility study on industrial emissions in Manila.



impacts

As 1996 came to a close, US-AEP's environmental infrastructure efforts were making a significant impact; they were clearly influential in turning Asia's environmental compass. At the same time, US-AEP reduced its own administrative costs and expanded its services to U.S. industry through a new agreement with the American Consulting Engineers Council. This innovation consolidated support for field activities and established a regional base to catalyze investments in environmental infrastructure and match U.S. expertise to the appropriate stage of maturing projects. US-AEP also expanded its infrastructure activities, adding offices in India and the Philippines to those in Indonesia and Thailand, and developed strategies for improving the viability of American participation in projects within each US-AEP country and a regional plan to exchange lessons among Asian countries.

US-AEP itself turned a corner in 1996—by laying the groundwork for future market development and ensuring that U.S. industry is part of that process. As the U.S. environmental market continues to shrink and foreign companies make inroads into that shrinking market, the $43-billion market in Asian environmental infrastructure, expanding to $287 billion by 2015, begins to look increasingly attractive.

1996: A Turning Point

for environmental policies, constituencies, and public awareness

The Policy/Framework component of US-AEP enhances the context for introducing clean production into industrial management and integrating environmental concerns into public and private decisions affecting urban and industrial development. During 1996, the Framework team assessed the factors that influence the merging of industrial and environmental regimes in ten Asian economies. The assessments provided strong evidence that 1996 was, indeed, the long-awaited and pivotal year in which the burgeoning economies of 'the Asian Miracle' reached a turning point in their collective concern for natural and social environments and began to take decisive and overdue strides toward sustainable development.

The Policy/Framework component also concentrated on two related topics: circulation of critical information on industrial pollution and its impacts and establishment of public and private policies that account for the intensity of industrial pollution and resource use. Exchanges and other activities were aligned with the new emphases over the course of the year.

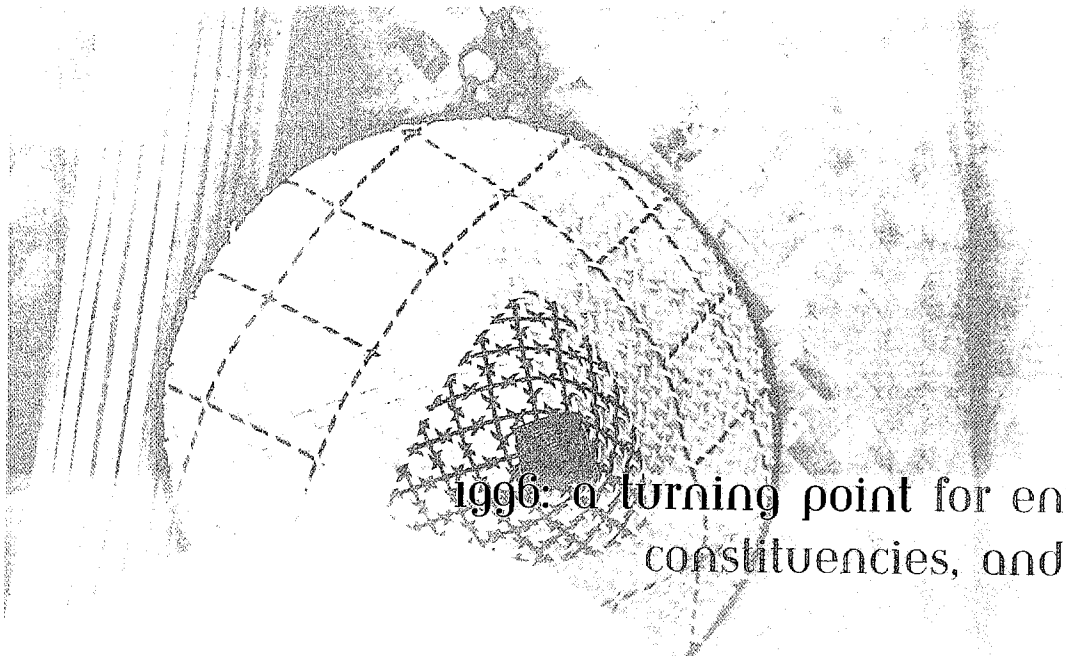
ASSESSMENTS

In the first half of 1996, the Policy/Framework component examined a diversity of Asian approaches to environmental issues in general and urban and industrial problems in particular. For each of the ten targeted countries, detailed inquiries and comprehensive reports were painstakingly prepared to guide US-AEP programs and policies in coming years. Reports prepared by US-AEP on each country addressed the following questions:

Q. How do international market pressures—such as green consumer movements, voluntary environmental management standards, and multinational corporate environmental practices—affect government policy, government-business interactions, and private environmental behavior?

A. In the targeted economies, the US-AEP assessment teams found interest in, if not explicit action relating to, programs for green labeling, pollution prevention, waste minimization, clean production, ISO 14000, and multinational 'greening of the supplier chain.' Governments in Southeast and East Asia are increasingly working with industry and research institutes to create incentives, policies, and practices that facilitate the free play of market forces in the environmental realm. Prospects for similar partnerships are growing in South Asia as well.

Q. To what extent are environmental considerations—such as reducing pollution intensities and resource waste—



1996: a turning point for environmental policies, constituencies, and public awareness

"Our company has been trying to find a way into the Indian market for two years with no success... By participating in the State Environmental Initiative program, we have shortened our entry into the market by as much as a year."

—Post Glover Resistors, Inc.
US-AEP Participant
Kentucky/India SEI Partnership

integrated into a jurisdiction's economic and industrial policies for industrial production?

A. In the most rapidly growing of the selected economies, strong evidence exists that environmental factors are being integrated into the industrial policies that have promoted high growth rates. This merging of domains is increasingly seen as a key to determining industrial priorities that are both environmentally sound and cost-effective. This process has proceeded more slowly in South Asia, but interest there is rising also.

Q. What roles do traditional command and control agencies play in promoting industrial development that uses fewer resources and produces less pollution?

A. Enormous differences characterize the assessments. Where traditional command and control is still strong, improvements in environmental protection have come about without inhibiting rapid economic growth. Ministries of the environment exist in every country, but their relative strength varies greatly. Where they have strong enforcement powers and capabilities, they tend to work closely with economic planning and finance agencies and ministries of industry. In general, this phenomenon is found in East Asia and a selection of Southeast Asian countries.

Q. How do public awareness and community pressures affect the pollution and resource intensity of industrial production?

A. In all jurisdictions, public awareness of environmental threats has risen rapidly and caused dramatic shifts in priorities for government and industry. This trend is seen throughout Asia as the wave of the future. Everywhere, community concerns about industrial pollution and infrastructure facilities are affecting site decisions and requiring more sophisticated applications of environmental management. Increasing demand for public access to information on pollution releases and impacts is gaining the attention of industrial, NGO, and government leaders.

In short, the complex matrix of global market pressures, governmental integration of environment concerns into industrial policies and regulations, and community awareness and pressures, in varying combinations, has contributed to extraordinary changes in industrial and environmental management throughout the region. These accelerating pressures have also strongly reinforced the high priority that the environment enjoys in development of urban infrastructure.

emerging models of environmental law

US-AEP sent an American attorney to Singapore to conduct a comparative law study of emerging legal models for environmental legislation in Asia. He focused on five areas: current status of environmental regulation in selected Asian countries with emphasis on Singapore for melding environmental protection and economic development, applicability of the model to other Asian countries, future of regulation in the region, degree to which the American model is copied in Asia, and future of Asian policy and regulation on markets for environmental technology. Result: the knowledge and experience gained is being applied by established and emerging environmental technology companies, consultants, and law firms in the Pacific Northwest to develop products and services responsive to Asian priorities.

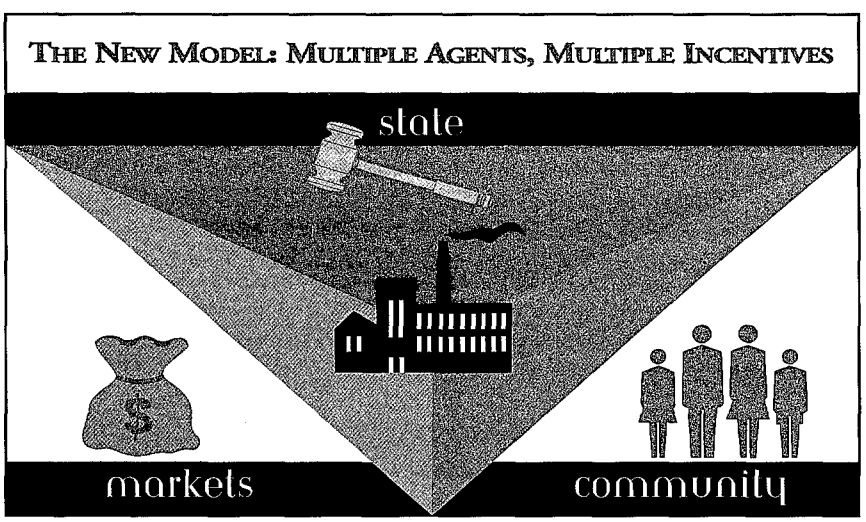
—US-AEP Environmental Exchange Program

In each of the ten economies in which US-AEP is most engaged, the assessments were able to gauge overall trends while remaining faithful to cultural, institutional, and economic differences. US-AEP's partnerships and exchanges are now tailored to fit the needs and conditions of each country.

partnerships

At the regional level, these considerations have also contributed to growing recognition of the environment as a pervasive factor in public policymaking, a development that was much in evidence during 1996 within such organizations as Asia Pacific Economic Cooperation and the Association of Southeast Asian Nations. In both organizations, environmental concerns emerged from the sidelines to influence debates on trade and investment.

In late 1996 the first evaluations of the State Environmental Initiative, an experimental partnership between US-AEP and the Council of State Governments, showed positive results. The grant to Arizona and Taiwan, one of the first eight announced in 1995, was widely seen as successful, because conservative estimates of sales by Arizonan companies range far beyond $1 million, with more sales anticipated in 1997. As a result of exposure to Taiwanese institutions, companies, and conditions, Arizonan companies also reported wide-ranging changes in their own assumptions, values, behavior, structures, and products. Clear evidence of the establishment of long-term relationships, a key to achieving success in Asian markets, also existed. Participants in the initiative also noted,



Shakeb Afsah, Benoit Laplante and David Wheeler

1996: a turning point for environmental policies, constituencies, and public awareness

information disclosure

From the Philippines, San Miguel Corporation's senior officer for the environment traveled throughout the United States for five weeks in September 1996 to learn about environmental management and news coverage. Result: On her return, she alerted her corporation to opportunities for mixing increased efficiency with elevated citizenship. She now runs an informal environmental network, a role that was obvious at the international journalists meeting.

—US-AEP Environmental Exchange Program

more tentatively, the beginnings of substantive improvements in Taiwan's environment that could be directly attributed to the partnership.

A parallel experiment, the NGO-Business Environmental Partnership strengthens NGO capacity to work with Asian businesses and address the problems arising from industrial expansion. This initiative, a venture jointly managed by US-AEP and The Asia Foundation, was also able to find its stride in 1996, particularly in India, Indonesia, the Philippines, Sri Lanka, Taiwan, and Thailand. All twenty-nine grants are still active and involve fifty-six primary partners and numerous secondary partners. Many gather baseline environmental information, perform facility audits, and develop and deliver training modules. For example, the Indian Environment Society, working with a local quarrying company, developed a process for turning raw slurry aggregates and sludge from marble into high-compression bricks while reducing process wastes. Public acceptance of the new product and its environmental efficiencies will, however, take time.

Rising public awareness has incubated a strong Asian interest in the American practice of making information on industrial pollution widely available to the public, interested NGOs, and the news media. Here, again, is a sure indicator of a turning point for Asia in integrating environmental concerns. The US-AEP partnership with the California Environmental Protection Agency (CalEPA) has drawn on the latter's experience with toxic release inventories and its program on public disclosure. Widely emulated elsewhere in the United States, the CalEPA approach has increased the sophistication of local communities in distinguishing between what is—and what is not—a significant threat. At the annual conference of the International Federation of Environmental Journalists (IFEJ)—held in late November in Cebu City, the Philippines, an event cosponsored by US-AEP—the CalEPA official in charge of releasing information about toxics to the public delivered a comprehensive briefing on the success of his program. In essence, the long-term, synergistic advantages to business and the public of pooling information far outweigh any temporary burdens and embarrassments that an individual company may endure.

exchanges

The Framework component depends heavily on the smooth functioning of US-AEP's Environmental Exchange Program to develop policy networks and move critical information and new concepts on clean technology, management techniques, and infrastructure through progressive elites and academic circles.

policy partnerships

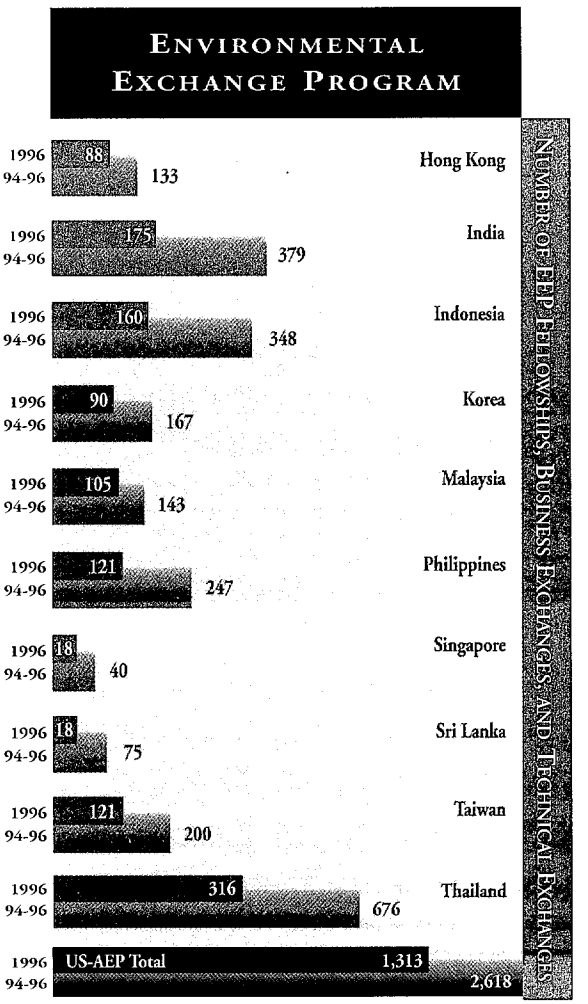
To inspect environmental legislation and expand understanding of vexing problems, members of the Committee on Ecology of the Philippine House of Representatives visited American sites in June 1996. The visitors met with members of the U.S. Senate and House of Representatives, officials of environmental agencies, and staff of the Environmental Law Institute to explore basic U.S. approaches to environmental regulation and acquainted themselves with recent advances in air and water pollution controls, incineration technologies, and solid waste management. Result: The Congressional delegation is exploring longer term partnerships with the U.S. Environmental Protection Agency and the U.S. wastewater technology suppliers.

—US-AEP Environmental Exchange Program

environmental advocacy

In May and June 1996, a US-AEP-sponsored delegation from the Consumer Education and Research Center in Ahmadabad, India, spent ten days gathering information about environmental advocacy and public education. The group visited a diverse range of U.S. organizations, including the Chemical Manufacturers Association, Public Interest Research Group, Natural Resources Defense Council, World Resources Institute, Green Seal, Center for International Environmental Law, Resources for the Future, Environmental Law Institute, and Advocacy Institute. Result: The four staffers have taken home with them information on techniques for commercializing environmental technology, recent advances in environmental law, ecolabeling and consumer education, and product safety and testing.

—US-AEP Environmental Exchange Program



Financial Statements

The United States-Asia Environmental Partnership (US-AEP) was initiated under a Presidential Determination, dated December 30, 1991, as a 10-year U.S. government effort, commencing January 4, 1992, to mobilize the intellectual and financial resources of the American public, private, and nongovernmental sectors to assist the developing and newly industrializing nations and territories of Asia and the Pacific to deal with their environmental problems and, thereby, enhance sustainable development with the maximum transfer of U.S. experience, technology, and practice. As noted herein, this focus has been sharpened by the U.S. Agency for International Development (USAID) into a single Strategic Objective (SO):

PROMOTE AN ASIAN CLEAN REVOLUTION.

USAID, the lead U.S. government agency in US-AEP, originally authorized core funding for US-AEP amounting to $100 million under USAID Project Number 499-0015, dated May 25, 1992. In 1995, the Environmental Improvement Project (EIP), between USAID and the six original constituent countries of the Association of South East Asian Nations (ASEAN), which was authorized under USAID project number 399-0360 on March 20, 1992 at a life of project (LOP) level of $17,500,000, was merged into US-AEP. During 1995, EIP was operated as an element of US-AEP for ASEAN purposes but is otherwise fully integrated into US-AEP operating structure. In 1996, EIP was effectively converted into the Clean Technology and Environmental Management (CTEM) component of US-AEP, while still fulfilling USAID's commitment to ASEAN.

In June, 1995, the Bureau for Asia/Near East (ANE) of USAID formally reviewed and approved the new strategy for US-AEP under the Strategic Objective, noted above. Under the new, re-engineered principles of USAID, programs such as US-AEP no longer have fixed LOP amounts. Rather, funding is authorized on a yearly basis, depending on achievements of results specified within SOs. The amounts shown for U.S. fiscal years 1996 and 1997 constitute funding based upon those achievements. US-AEP's future funding will depend upon its continuing a high level of performance.

The actual obligation of funds under US-AEP has been as follows:

US Fiscal Year 1992	$11,645,000
US Fiscal Year 1993	$25,159,000
US Fiscal Year 1994	$16,398,000
US Fiscal Year 1995	$22,764,615
US Fiscal Year 1996	$18,598,631
Subtotal	$94,565,246
Anticipated US Fiscal Year 1997	$14,525,000
Total	$109,090,246

One financial objective of US-AEP is to leverage these core funds on the basis of more than a dollar of other investments for every dollar of USAID-furnished investment. Thus, over the life of the program, it is expected that significant amounts of cash and in-kind contributions will be made to the program by partner organizations and individuals from the U.S. and Asian public, private, and nongovernmental sectors.

Moreover, it is anticipated that these investments will bring about technology transfers from the United States to Asian and Pacific countries through sales, joint ventures, and licensing agreements amounting to as much as $5 billion during the 10-year life of the partnership.

The following statements reflect:

TABLE A: The amounts of US-AEP actual investments (i.e., the expenditure of USAID core financing) against specific US-AEP program components (i.e., the major management units of US-AEP) and activities together with companion partnership investments, where possible (i.e., cash and in-kind expenditures by U.S. and Asian entities) for those components and activities for the period from program inception (i.e., the date actual field activities of US-AEP commenced) to December 31, 1996, a period of four and one-quarter years.

TABLE B: These same US-AEP actual investments and partnership investments arrayed against the countries in which, or for which, they were made, together with the total current value (in US$) of all technology transfers to those countries from the United States. The amount of such technology transfers were certified to the ìdue diligenceî operation of US-AEP, by reliable sources in companies that effected the transfer (or intermediate organizations such as trade associations or state development agencies) which informed US-AEP that the transfers resulted, substantially or meaningfully, from US-AEP actions or programs.

Under an internal USAID determination dated August 29, 1994, US-AEP agreed to restrict the amount of US-AEP investments in "other USAID-eligible countries" (i.e., USAID-nonpresence countries) to a maximum of $20 million over the course of the US-AEP original $100 million program. For those countries that were "USAID-assisted countries" (i.e., USAID-presence countries) and then became USAID-eligible countries, the limitation applies only to investments made after the date of change.

Both tables include the amount of support provided through the ASEAN Environmental Improvement Project (EIP), as described above.

The notes to this financial information are an integral part of that information.

US-AEP and Partnership Investments by Program Element

From Program Inception October 1, 1992 to December 31, 1996

Program Component and Activity, and (Implementer)		US-AEP Actual Investments	Partnership Investments	Total Investment
A. Clean Technology and Environmental Management				
Asian Offices of Technology Cooperation Activity (US Department of Commerce/US&FCS)		3,767,504	3,499,825	7,267,329
Environmental Technology Network for Asia [ETNA] Activity (USAID/Global/Center for Trade and Investment Services)		741,719	899,550	1,641,269
Environmental/Energy Technology Fund Activity (National Association of State Development Agencies)		6,288,103	12,054,202	18,342,305
Environmental Trade Finance Improvement Project (Bankers Association for Foreign Trade)		119,084	247,000	366,084
ASEAN Environmental Improvement Project (Louis Berger International Inc.)		9,724,824	869,405	10,594,229
	Subtotal	20,641,234	17,569,982	38,211,216
B. Environmental Infrastructure				
Infrastructure Finance Advisory Service Activity [IFAS] (K&M Engineering & Consulting Corporation)		1,551,447	N/A (1)	1,551,447
Urban Infrastructure Representatives Activity (USAID/Regional Housing and Urban Development Offices)		1,585,000	75,000,000 (5)	76,585,000
Urban Infrastructure Representative Support Activity (American Consulting Engineers Council)		181,202	144,575	325,777
Energy Development Activity (US Department of Energy)		125,000	700,000	825,000
Trade Development Program Activity (US Trade Development Activity)		500,000	N/A	500,000
Environmental Enterprise Development Initiative Activity (OPIC)		1,000,000	N/A	1,000,000
	Subtotal	4,942,649	75,844,575	80,787,224
C. Policy/Framework				
Environmental Action Activity (US Environmental Protection Agency)		2,052,189	1,859,000	3,911,189
State Environmental Action Teams (California Environmental Protection Agency)		35,824	196,000	231,824
National Environmental Association Development Activity (Air & Waste Management Association/Water Environment Federation)		272,714	193,869	466,583
State Environmental Initiative Activity (Council of State Governments)		1,909,613	6,638,324	8,547,937
Non-Governmental Organizations-Business Exchanges (The Asia Foundation)		779,999	831,675	1,611,674
	Subtotal	5,050,339	9,718,868	14,769,207
D. Environmental Exchange Program (and predecessors)				
Environmental Exchange Program Activity (Institute of International Education)		4,440,604	3,482,781	7,923,385
Environmental Fellowship Activity (The Asia Foundation)		3,373,439	4,122,000	7,495,439
Environmental Business Exchange Activity (World Environment Center)		3,796,990	4,928,733	8,725,723
Short-Term Technical Training Activity (US Environmental Training Institute)		2,456,868	1,792,000	4,248,868
	Subtotal	14,067,901	14,325,514	28,393,415
Subtotal of A thru D (Represents present Strategic Objective)		44,702,123	117,458,939	162,161,062
E. Biodiversity and Natural Resources (Special Objective)				
Biodiversity Conservation Network Activity (WWF, TNC, WRI)		11,114,604	4,720,104	15,834,708
CITES Activity (US Fish and Wildlife Service)		47,020	86,999	134,019
	Subtotal	11,161,624	4,807,103	15,968,727
F. Other Activities				
USAID Mission Transfers		3,385,000	N/A	3,385,000
Planning, Programming, Administration, Total Quality Management, Strategic Planning		14,373,691 (2)	3,686,635 (3)	18,060,326
	Subtotal	17,758,691	3,686,635	21,445,326
Subtotal of E thru F		28,920,315	8,493,738	37,414,053
US-AEP Grand Total		73,622,439	125,952,667	199,575,116

US-AEP Investment and Returns by Region

From Program Inception (October 1, 1992 or March 20, 1992 in the case of ASEAN EIP) to December 31, 1996

CATEGORY	US-AEP (4) Actual Investments	Partnership (5) Investments	Total Investment	Total Current Value All (6) Technology Transfers
USAID-Assisted Countries (7)	34,731,794	102,996,931	137,728,725	327,973,624
Other USAID Eligible Countries (8)	15,956,597	15,770,335	31,726,932	495,182,685
Regional (9)	283,373	2,629,371	2,912,744	183,278,805 (10)
OPERATIONAL TOTAL	50,971,763	121,396,637	172,368,400	1,006,435,114
Planning, Program Integration and TQM	14,373,692 (2)	3,686,635 (3)	18,060,327	
TOTAL	65,345,455	125,083,272	190,428,727	1,006,435,114
ASEAN Environmental Improvement Project	8,276,984	869,405	9,146,389	2,000,000 (11)
GRAND TOTAL	73,622,439	125,952,677	199,575,116	1,008,435,114

Notes to Financial Statements:

General:

The figures contained herein, with the exception of those relating to official authorizations and obligations of USAID, are drawn from the operational files of US-AEP, its partners, contractors, cooperators or grantees; and from the beneficiaries of the program. The amounts indicated against individual countries represent figures resulting from the "demand-driven" activities of US-AEP. They do not represent country allocations, entitlements, or other pre-programmed levels that would represent funding arrangements not part of the US-AEP program. The figures are not official numbers drawn from the accounting records of the United States Government. Nevertheless, the staff of the secretariat of US-AEP believe them to be accurate and to represent fairly the operations and performance of the program.

Specific:

N/A Not applicable

1 IFAS activity by K&M Engineering was a commercial contract with no direct partnership "leverage."

2 Investments required for providing contracted operational planning, programming and administration of the US-AEP program, largely costs of the Technical Support Services Contract with Tropical Research and Development, Inc. (TR&D) for the period January 1, 1995, to May 4, 1995, and a contract with International Resources Group (IRG) for the balance of calendar years 1995 and 1996. Includes certain communications, public education, outreach, and partnering activities undertaken under grant or contract from TR&D or IRG. Also includes investments in program Total Quality Management, largely costs of the Quality Assurance activities of Management Systems International; and for strategic planning, largely costs of activities with Winrock International and the Tata Energy Research Institute (TERI).

3 Estimated value of partners' counterpart investments to US-AEP efforts in communications, public education, and outreach.

4 Actual expenditures by US-AEP and budget transfers to USAID missions for work that integrates missions' programs with US-AEP activities. Includes grants awarded by the Biodiversity Conservation Network and the National Association of State Development Agencies technology transfer grants, whether or not funds were disbursed.

5 Includes cash and in-kind or matching contributions, or attributions, reported by all partners to US-AEP. Includes $75 million of Housing Investment Guaranty (HIG) funds acquired by the Government of the Republic of Indonesia from U.S. commercial sources, pursuant to a guarantee provided by the U.S. government. This HIG program was entered into between the U.S. Government and the Government of Indonesia as a result of, among other reasons, the agreement of US-AEP to provide expert engineering services in the provision of Urban Infrastructure. While these funds have been acquired by Indonesia, they technically may not have been yet expended.

6 Represents value reported to, and confirmed by, US-AEP from U.S. companies or intermediaries (such as trade associations or state development agencies) of all sales of goods and services, and contracts for goods and services, systems, and projects, plus estimated value, to the U.S. partner, of all joint ventures and licensing agreements to U.S. firms during the first five years of such agreements. Current figures show $520,212,114 in goods and services sold, and $496,711,595 in projects won. Project amounts may contain work performed by subcontractors to U.S. firms under the project if such work was included in the U.S. companyís prime contract effort.

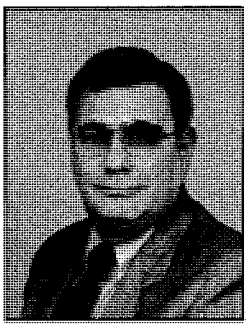
7 Bangladesh, India, Indonesia, Mongolia, Nepal, Philippines, and Sri Lanka were USAID-assisted through December 31, 1995; South Pacific was USAID-assisted through September 30, 1994, and Thailand was USAID-assisted through September 30, 1995. In USG Fiscal Year 1995 and beyond, incremental amounts for South Pacific and Thailand are recorded as "Other USAID Eligible."

8 These are countries eligible for US-AEP assistance under the Foreign Assistance Act (Hong Kong, Korea, Malaysia, Singapore, Taiwan, the South Pacific after October 1, 1994, and Thailand after October 1, 1995) but without USAID mission programs.

9 Regional investments not subdividable.

10 Not otherwise identified by the U.S. firms reporting values of transfers to US-AEP.

11 EIP is now fully integrated into the US-AEP program; 1996 and future year amounts are accounted for in overall US-AEP figures. The amount recorded for Technology Transfers represents an estimate by EIP staff made at the end of 1995.



In Appreciation...

As he approaches retirement in May 1997, we gratefully acknowledge the vision, energy, and leadership of Lewis P. Reade, founding Director General of the U.S.-Asia Environmental Partnership. He guided the program through its first five years and laid a solid foundation for further success. Through his extraordinary efforts, US-AEP has become a model for public-private partnerships that advance both U.S. economic development and foreign policy interests.

US-AEP Acts with Guidance from the Trade Promotion Coordinating Committee

Department of State (DOS)

Department of the Treasury

Department of Defense (DOD)

Department of Interior (DOI)

Department of Agriculture (USDA)

Department of Labor (DOL)

Department of Transportation (DOT)

Department of Energy (DOE)

Office of Management and Budget (OMB)

Office of the US Trade Representative (USTR)

Council of Economic Advisors

Environmental Protection Agency (EPA)

Small Business Administration (SBA)

Export-Import Bank of the United States (EXIM)

Overseas Private Investment Corporation (OPIC)

United States Agency for International Development (USAID)

United States Trade and Development Agency (TDA)

United States Information Agency (USIA)

Activity Implementing Organizations

Air and Waste Management Association (AWMA)

American Consulting Engineers Council (ACEC)

The Asia Foundation (TAF)

Center for Trade and Investment Services (CTIS), USAID

Council of State Governments (CSG)

Global Bureau, Office of Environment and Urban Development, USAID

Institute of International Education (IIE)

International Resources Group (IRG)

Louis Berger International, Inc.

National Association of State Development Agencies (NASDA)

National Pollution Prevention Roundtable (NPPR)

United States Department of Agriculture (USDA)

United States Environmental Export Council

United States Environmental Training Institute (USETI)

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1720 Eye Street, NW, Suite 700
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Tel: (202) 835-0333
Fax: (202) 835-0366
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