United States - Asia Environmental Partnership

Development and the Environment at the Millennium: Asia and the United States

FY 2000 Results Review and Resource Request (R-4)
Submitted by the Secretariat for the U.S. - Asia Environmental Partnership

March 2, 1998

Technology can be used to ameliorate the industrializing world's environmental problems in two ways. One is to apply technologies proved in industrialized countries - by and large, pollution control and remediation - in the industrializing world. The other is to transform basic industrial processes and products, building in efficiency and environmental soundness - in a way that is mindful of local context. Both pathways have merit, and both can link the developed and developing world. But a new balance between the two is urgently needed so that generic, long-term transforming solutions gradually replace the wholesale transfer of today's “end of pipe” technology.

Missing Links
World Resources Institute
October, 1994

February 27, 1998

Mr Kelly Kammerer, Assistant Administrator
Bureau for Asia and the Near East
U.S. Agency for International Development
Washington, D.C. 20520

Dear Kelly,

I am pleased to submit the FY 2000 Results Review and Results Request for the United States - Asia Environmental Partnership. I have been Director of the US-AEP since January 12th and want to pass along my first impressions - based on one trip to Asia and countless conversations.

US-AEP is well-established in Washington, among the states of our union, throughout Asia, and with governments, businesses, nongovernmental organizations, and a host of individuals on two continents. Conceived as a catalyst, it is to some a development program or movement, to others a foreign policy initiative, and to still others an international trade organization. From my brief exposure, and to its advantage, the partnership includes elements of each.

US-AEP is energized by a diverse set of contractual, partnership, and voluntary agreements in each of which the parties have a strong sense of ownership. One cannot help but be struck by the diversity of a partnership which includes, among others, the California Environmental Protection Agency, Council of State Governments, Business for Social Responsibility, Philippine Association of Hog Raisers, Clark University, Hong Kong Productivity Council, and United Technologies Corporation.

US-AEP defines what many perceive to be a contradiction - a vibrant trade program and ambitious development initiative. Personally, I am struck by Arthur Lewis' reflection on the power of international trade to propel growth - more practically by the development intuition, understanding, access, and initiative of the technology representatives in each of our ten target countries.

US-AEP is vigorously championed by an expanding number of Asian organizations, including, among others, the the Confederation of Indian Industries, Singapore Industries Association, ASEAN Institutes of Strategic and International Studies, Chulalongkorn University, Industrial Technology Research Institute of Taiwan, Hong Kong Environmental Protection Department, and Malaysia Ministry of Agriculture. During my visits to India and Singapore, I was particularly struck by the fact that the industry associations there comfortably use US-AEP's “clean revolution” and “transformation” language and concepts.

US-AEP is helping to demystify the “clean revolution” as organizations such as the U.S. Environmental Protection Agency, Council on Environmental Quality, National Pollution Prevention Roundtable, National Academy of Engineering, Greening of Industry of Network, and Asia Pacific Economic Cooperation (APEC) come to use both the premises and language promoted by the program.

US-AEP is pioneering new approaches to development cooperation - reflecting particular sensitivity to the evolution of U.S. foreign policy as it comes into closer alignment with the forces of globalization. Its placement of the “clean revolution” on the APEC agenda underscores the promise of its pioneering efforts for USAID programming among the rapidly modernizing countries of Asia.

US-AEP is seeking to “franchise” its mandate through the deeper commitment of its partners. Current efforts are directed to the Foreign Commercial Service for technology transfer, the American Consulting Engineer's Council for infrastructure, the National Pollution Prevention Roundtable for clean technology, and Clark University, the Greening of Industry Network, and a set of related regional partners for policy.

US-AEP's Secretariat went through major changes in leadership during the year, with the retirements of two directors, Lewis Reade and Larry Crandall, and my own appointment in January, 1998. The intense inquiry and review that was associated with each change creates a platform for ANE, USAID, and myself to reconsider premises, programs, and progress in the review of this year's R-4. In this regard, we are all on equal footing.

Peter Kimm, Director
U.S.-Asia Environmental Partnership

FOREWORD

In response to direction from the ANE Bureau, the Secretariat organized an external review of the United States - Asia Environmental Partnership (US-AEP) in 1997. The Five Year Review is complete and available as back-up to this year's Results Review and Resource Request. The summary findings to the four questions put to the review team by the ANE Bureau are reproduced from the Executive Summary:

> *- most of the basic building blocks for a "clean revolution" are identified and reflected in US-AEP's development strategy for Asia;*
>
> *- US-AEP is operating in the correct set of countries, following the development problem from top levels to on-the-ground representation in the outposts of the "clean revolution" in Asia;*
>
> *- development and trade activity are both compatible and important to the realization of U.S. development interests in Asia; and*
>
> *- partnership, broadly defined, is the key to any serious effort to effect a technological transformation sufficient to reduce environmental impacts dramatically.*

In its role as a catalyst, the US-AEP continued to make demonstrable progress in 1997. Important examples or measures of that progress include:

"Clean Revolution" The US-AEP introduced the "clean revolution" in the FY 1997 Results Review and Resource Request. Progress promoting the idea is reflected by the endorsement of the Asia Pacific Economic Cooperation (APEC) ministers for science, technology and the environment. The transformation concept was the explicit premise for APEC's first clean production project - developed by US-AEP, proposed to APEC by the U.S. Environmental Protection Agency (EPA), and executed by the National Academy of Engineering (NAE). Moving beyond the mere raising of hands, nine member economies launched research in 1997 to assess metrics for industrial environmental performance, paralleling US-AEP's work with NAE, and demonstrating the development advantage to political leverage. This is important progress.

There is other important evidence that the "clean revolution" idea is taking hold. The Greening of Industry Network, encompassing the international policy community working the industrial transformation agenda, agreed to expand its reach, authorizing the organization of its first institutional base in the developing world at Chulalongkorn University in Thailand. The "clean revolution" is the premise for the Asian Network. Also in 1997, the ASEAN Institutes of Strategic and International Studies launched a framing activity in collaboration with Clark University and the US-AEP Policy Group to promote the idea of industrial transformation as a development goal and environmental indicator to their national policy-making constituencies. And the National Pollution Prevention Roundtable (NPPR) successfully replicated roundtables in Indonesia and Philippines, in both cases using the transformation agenda as the organizing premise.

Partnership There was significant progress in 1997. With regard to the Secretariat itself and US-AEP operations, the Foreign Commercial Service made good on its pledge to sustain the

successful “tech rep” program from its own account - contributing fully two-thirds of operational costs in FY 1997 and committing to an additional $4.1 million through FY 2000. The American Consulting Engineers Council launched an independent infrastructure initiative in Asia based on US-AEP objectives and approach, permitting the Secretariat to reduce its contractual overhead. US-AEP also organized a discrete policy program in 1997. The Policy Group was established in association with Clark University, Greening of Industry Network, Chulalongkorn University, and ASEAN ISIS with the intent of rooting the policy initiative for the “clean revolution” in these independent organizations and networks.

The Air and Waste Management Association and Water & Environment Federation solidified their professional base in Asia by organizing membership chapters in seven of ten target countries. Even more expansively, the Council of State Governments completed awards which will engage some 87 different environmental agencies, 24 academic institutions, 16 nongovernmental organizations, and 54 businesses from Asia and the United States on 18 different project activities in nine target countries. The Asia Foundation completed awards to more than 50 Asian NGO/business partnerships. And again in 1997, US EPA added India to its list of mature country partners, completing a national workplan for the National Pollution Control Department and receiving authorization from the Government of India and U.S. Embassy to tap the local currency endowment there for cooperative activity.

Technology Transfer This is an area where the US-AEP story is better understood, but where numbers still add dimension. From the outset of the program in 1992 through 1996, the export of U.S. environmental technologies to ten target countries in Asia more than doubled from $635 million to $1.3 billion. Over that same period, U.S. market share grew more than 33 percent. And the increase in import of environmental technologies from all countries by Asian economies as a percentage of industrial GDP grew by more than 45 percent between 1995 and 1996, up from 30 percent between 1991 to 1992, and 20 percent between 1990 to 1991. Did the US-AEP contribute to that performance? Perhaps the single best testimony to the worth of the US-AEP contribution is reflected in the continuing and growing financial commitment of the Foreign Commercial Service to the “tech rep” program.

The potential of US-AEP as a model for technology cooperation and transfer was demonstrated in 1997 in several important ways. Administrator Atwood directed USAID's Global and regional bureaus to develop independent programs in other countries and regions related to the model. The USAID mission in India developed a new strategic objective and clean technology initiative related to the model. American Consulting Engineer's Council developed an international infrastructure initiative based-on the model. And both the German and Japanese governments made in-depth assessments of the model with a view to developing new international environmental initiatives of their own.

Results Results are described in the Performance Review that follows, but a few highlights from the Clean Technology & Environmental Management (CTEM) program confirm continuing progress. By 1997, there were national accreditation bodies for ISO 14000 in nine

of ten target countries. The U.S. chemical industry's "responsible care" initiative was adopted in each of ten target countries. Five private banking institutions adopted environmental "due diligence" in three of ten target countries. And five U.S. based multinational corporations launched environmental programs with their suppliers from Asia. In each of these instances, it is fair to assert that the results would not have been achieved in 1997 without the initiative and support of US-AEP.

Finally, the financial crisis in Asia. How will it affect the program? In ways we can both imagine and hardly imagine. Obviously, investment levels will slow over the next several years, and the appreciation of the dollar will affect the cost of the U.S. environmental technologies. Our technology transfer program will be challenged. On the other hand, transformation is in the wind - creating an opening for the "clean revolution." Competitiveness will create increasing pressures for industrial efficiency and productivity, as the inevitable export drive will make Asian industry even more sensitive to the pro-environmental forces emerging in the global marketplace. We shall see. Hopefully it will prove to be a development opportunity.

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PART I: FACTORS AFFECTING PROGRAM PERFORMANCE

In earlier submissions, (e.g., FY 1997, 1998, and 1999 Results Review and Resource Requests, and the Results Management Plan - October, 1996), the US-AEP Secretariat outlined the rationale for the program and its objectives. The Secretariat continues to identify and verify factors that affect program performance (see, for example, Country Assessments - October, 1996 and the Five Year Review - June, 1997). Based on that ongoing work, more recent direction from ANE to clarify objectives and indicators, and continuing assessment of the financial crisis in Asia, the Secretariat believes further discussion of the factors affecting program performance is warranted.

A. Performance Factors

The most obvious factor (1997 continuing into this year) is the financial crisis in Asia. It started in the over-burdened financial systems of the faster-growing economies. They attracted massive foreign investments throughout the 1990s which inflated land and asset prices. Lending mushroomed. Investment from Greater China, Japan, Europe and the United States followed. Huge infrastructure projects - new cities, railways, roads, power stations - were put under construction. Yet, beneath the surface, economic pressures were increasing.

Most currencies in the region were pegged to the U.S. dollar, which had been appreciating throughout the period. As a result, successful exporters gradually became less competitive. Many economies also suffer from what is commonly called "crony capitalism." It is perhaps not surprising, then, that some of the faster-growing economies - Indonesia, Malaysia and Thailand - ran into difficulties. Intermittent financial crises are often a consequence of very rapid growth. This time, however, the problem had wider significance.

The region is also entwined with foreign banks and investors. Its powerful export industries are both suppliers to and competitors with key world industries - cars, semiconductors and computers. The leading economy, South Korea, was ranked as the world's 11th largest. And the crisis-struck economies are intimate neighbors of Japan, the world's second largest economy, which is still struggling to emerge from the collapse of its own 1980s bubble. These circumstances gave the crisis a global dimension - the resolution of which is still playing-out.

What can be discerned from the crisis that could affect the prospects for what we have come to call a "clean evolution?"

- Asia is, and will likely continue to be, fundamentally important to the world economy. Asia has adopted capitalism as the basis of economic life and become deeply integrated into the global economy. While the current crisis makes the case for economic reform, global capitalism will continue to be a powerful force for growth in the region, even in the face of serious limitations in economic structure. Rapid and sustained economic growth over several decades increased the region's share of world income from about 20 percent in 1950 to 33 percent by 1992. If the major economies can sustain five percent growth, not automatic but not beyond the experience of the past several decades, Asia's share of world income could exceed 50 percent by the year 2025. The significance of this scenario for the US-AEP program is heightened by the related shift in global manufacture from the OECD to modernizing countries of the developing world.

- the crisis is best understood in a larger sense, as a challenge to the Asian growth model itself. The development record in Asia over the past several decades was truly remarkable - the region growing faster than all others in the world while at the same time reducing absolute levels of poverty and income inequality. The "economic miracle" was neither accidental nor miraculous. Rather, to the extent development professionals and scholars can agree, it was attributable to a fundamental reformulation of development principles, policy, and practice which emphasized macroeconomic management, high savings and rapid capital accumulation, an educated labor force, modern technology, and resourceful entrepreneurship - fundamentals which still bode well for the future. To the extent there is agreement about the current crisis, it is that a transformation in development policy and practice is probably necessary again both to sustain progress and to accommodate the demands of the new international system. Note the emphasis on the words "development" policy - economic policies certainly, but policies related also to issues of governance, social structure, and the environment.

- the United States has taken a leadership position towards the Asian crisis, reflecting a change in the focus of American foreign policy, and suggesting the basis for a new development mission. The policy goal of the OECD countries is to make Asian economies more responsive to norms already widely accepted by the industrialized economies. The strategy is to accomplish this by bringing them into a fuller participation in the emerging international system. Entry will be conditioned on adherence to international norms, defined in our own case by strongly-held economic, social, civic, and ecological values. The strategy depends, of course, on a much more careful articulation and elaboration of norms and international expectations, on the full measure of leverage inherent to the institutions and forums being created to govern the new international system, and finally on an enlarging set of professional and institutional relationships binding local, national, and regional systems to the emerging international system.

- USAID, working through programs like the US-AEP, can be an important player in the implementation of this new foreign policy focus. The Administrator himself has picked-up on the opportunity inherent for USAID in the new focus of American foreign policy - "the most basic challenge is how to build on the substantial development progress that has been made to help these nations (especially in Asia and Latin America) become full members of the global economy, the last step in the development continuum. We can do these things." The current financial crisis, understood to require a broader development transformation and the exercise of American leadership, constitutes a platform for the "clean revolution" envisioned by the Asia Bureau for the US-AEP program. Indeed, the crisis may create the conditions in which ideas about environmental performance, technology transfer, and international partnership will have a better hearing, as part of a larger agenda for economic and industrial transformation.

B. Performance Trends

In earlier submissions, the Secretariat described the conditions and prospects for a "clean revolution" as presented in Asia. While the current financial crisis has obvious implications for industrial growth and environmental imports, the Secretariat also believes the current discussion of industrial transformation is an opportunity to introduce the ideas and approaches promoted by the program. The following review relates that opportunity to U.S. foreign policy as discussed above.

Advancing Ideas

An important element of U.S. policy towards Asia is the clarification, articulation and promotion of norms and international expectations related (in this case) to economic growth and the environment. This has been part of the US-AEP agenda and workplan since it first put the "clean revolution" concept forward in 1995. Indeed, leadership on the development dialog has been an important part of USAID practice for more than four decades. During the past year, US-AEP has made significant progress in attracting professionals and professional organizations to its idea of a "clean revolution."

- **National Academy of Engineering**: In January 1997, the Secretariat presented its idea of a "clean revolution" to the leadership at the National Academy of Engineering in Washington, later again at a committee meeting of the Academy's industrial ecology group at Woods Hole. In response, the Academy organized a membership Committee on Industrial Environmental Performance Metrics and launched a collaboration with the US-AEP to mainstream the concept by promoting international consensus on performance measures and cost-efficient metrics (the essential tools for driving change).

- **National Pollution Prevention Roundtable**: Following almost twelve months of discussion, with ideas and approaches moving back-and-forth between US-AEP and NPPR, the latter undertook to establish local roundtables throughout the Asia region early in 1997. The initiative is built on performance and pollution prevention concepts well-established in the United States, expanded to emphasize investment, new industrial capacity, and the role for international technology transfer in Asia.

- **Environmental Protection Agency**: Based on similar presentations, discussions, and debate with the Environmental Protection Agency, the United States government (through the delegation leader, EPA) presented the transformation concept to ***APEC***'s Industrial Science & Technology Workgroup. In response, the Workgroup in 1997 approved a first Clean Production Project organized around the US-AEP concept (i.e., interrelated ideas about industrial environmental performance, industrial policy, the pro-environmental emerging pressures in the marketplace and community, new industrial investment in Asia, and technology cooperation).

- **Five Year Review**: In June 1997, a professional panel, organized in response to direction from the Asia Bureau, completed a Five Year Review. "The US-AEP correctly identifies technological transformation as the primary strategy for avoiding environmental degradation, elaborating on the strategy with a more direct concern for the industrial growth model itself, articulating a strategic range of policy and practice changes necessary to effect the desired result. In this regard, the 'clean revolution' is directly linked to sustainability concepts, is working at an appropriate level of abstraction, and reaches a much broader range of issues than is usually associated with either industrial pollution or the environment."

Premises for a Clean Revolution

1. The world's environmental future will be determined in significant part by what happens in the rapidly industrializing countries - especially in Asia and Latin America - where economic and population growth are converging most forcefully.

2. If a doubling and redoubling of economic activity is accomplished with the technologies now dominant in energy, resource extraction, transportation, manufacturing and agriculture, truly catastrophic impacts are likely on global climate, human health, and the productivity of natural systems. Seen this way, reconciling economic and environmental goals will be possible only through a transformation in technology - a shift perhaps unprecedented in scope and pace, to new technologies that dramatically reduce environmental impact per unit of prosperity.

3. Industry is the lead sector in all Asian economies. Therefore, the only way the total environmental burden can be reduced in the region while maintaining economic growth is by reducing the environmental *intensity* of industrial production (and related energy generation and use). This can be achieved either by altering the sectoral composition of production, or reducing the environmental intensity of individual sectors. The environmental intensity of an industrial sector, of course, varies according to the manufacturing process involved. .

4. Since Asia has yet to install most of the industrial capacity that it will have by early in the next century, it has an unique opportunity to get in front of the environmental challenge - improving the sectoral composition of production, affecting the spatial distribution of new industrial investment, and introducing cleaner management and technology systems for industrial production from the outset. Environmental infrastructure also is also key to any strategy since there will always be waste from the industrial process and its related urban environment

5. With regard to industrial operations, improvement in environmental performance - not simply environmental management - is the appropriate goal. Performance, of course, has already become the focus of policy innovation in the industrialized countries - building as it does on concepts of pollution prevention, process solutions, continuous improvement and clean production - and capitalizing as it does on the way in which business thinks, economic incentives, the marketplace, community and public pressures, and the idea of sustainability.

6. Performance standards also suggest a broad range of industrial, investment and technology policy options to supplement underdeveloped and overburdened environmental regulatory systems. This is particularly important in Asia where systematic public intervention in the development process is the norm.

7. A wide range of nongovernmental pressures are coming to bear on the environmental behavior of industrial firms - reflecting community and public advocacy, consumer demands, voluntary business standards, corporate and association codes, corporate requirements on suppliers, environmental due diligence by financial institutions, and the aggressive extension of technological innovation. These pressures are of increasing strategic advantage to public policy.

8. Since most of the industrial investment and technology originates outside of individual Asian countries, it represents both a part of the environmental problem and solution. The terms of international technology transfer, then, are also an integral part of the agenda for transformation in Asia.

- ASEAN Institutes of Strategic and International Studies: After a sustained interaction with five centers for strategic and international studies in South East Asia (operating under the rubric ASEAN-ISIS), the centers agreed in October, 1997 to co-sponsor a framing activity to more carefully articulate and elaborate the transformation concept, identify related lines of inquiry, and promote specific policy initiatives to policy-makers within ASEAN. The *Centre for Strategic and International Studies*, Indonesia, and ***Clark University***, Worcester, Massachusetts, both intellectual leaders in the areas of development, industry and the environment, are the executing parties for the framing activity.

- Greening of Industry Network: In November 1997, the Greening of Industry Network, an international development, industrial and environmental policy initiative with institutional headquarters in Europe and the United States, highlighted the "clean revolution" concept and the US-AEP at its annual conference in Santa Barbara. Its governing board also agreed to establish an Asian base. ***Chulalongkorn University*** in Thailand has taken leadership for the initiative in the region. Chulalongkorn has already organized a research activity directed to the transformation concept, raising independent resources and technical support from the ***Thai Research Fund*** and ***New Jersey Institute of Technology***.

Political Leverage

Another important element of the U.S. Asian strategy is aggressive engagement with governments and other institutions and forums being created to govern the new international system. This has also been part of the US-AEP agenda and workplan since first suggesting the conceptual framework for a "clean revolution" in 1995. During the past year, the program has made significant progress in associating the program with important national, regional, and international political forums.

- Bilateral Platforms: Although a regional program, the US-AEP has had some success in establishing national platforms for the "clean revolution." In ***Indonesia***, June 1997, the US-AEP completed a memorandum of understanding with BAPEDAL, the environmental ministry, to implement an important policy reform related to performance measurement and public disclosure (PROPER). A memorandum was also proffered in Philippines, and similar arrangements will be sought throughout ASEAN over the next year. Working with partner organizations, similar bilateral government relationships have been developed and formalized in India and Taiwan (***EPA***), Malaysia and Thailand (***Cal EPA***), and with an enlarging number of state agencies and Asian governments through the ***Council of State Governments***.

- Regional Platforms: The U.S. government proposed a Clean Production Project to ***APEC***'s Industrial Science & Technology Workgroup in June 1977. The project is organized around the US-AEP's transformation concept and the National Academy of Engineering's measurement work. The project was approved with five national co-sponsors. On the basis of the American presentation, and the broad-based support for the proposal, nine member governments have launched analytic and research activities paralleling the National Academy's work. Similarly, the US-AEP proposed a framing activity to promote the transformation concept with the *ASEAN Secretariat* and related committees. It was

agreed that the concept should be carefully examined by Asian policy professionals to provide a basis and challenge for effective policies, strategies, and actions for ASEAN policy makers in government, also in business, NGOs and other organizations. An ASEAN inter-ministerial conference will be organized towards the end of 1998. More recently, The Policy Group at the US-AEP launched a cooperative project with the Environment Division of the East Asia Department of the World Bank to develop a rapid assessment template for gauging industrial response to environmental incentives (both public and private). While the direct engagement is in terms of collaborative analysis, the longer-term US-AEP agenda is to attract the bank to the transformation agenda (particularly the opportunities inherent to new industrial capacity and industrial policy). If successful, the policy leverage inherent to Bank thinking and criteria could be enormous.

- **International Platforms**: The US-AEP has been seeking ways to use environmental norms and expectations for admission to the emerging international system as an incentive

for industrial environmental transformation in Asia. Given the related concern (from both the industrialized and modernizing economies) about trade barriers, this has been a difficult task requiring extended interaction with policy institutions in both sets of economies. By late 1997, the US-AEP had convinced the *Organization of Economic Cooperation and Development's* Environmental Directorate to extend its work with member economies related to public disclosure and the environment - a common entry point for a very wide range of institutions interested in the industrial-environmental interface (e.g., government, nongovernmental organizations, citizen groups, business, financial institutions, etc.) - to include the modernizing countries in Asia. OECD agreed to open an already planned conference in Tokyo to a broader Asian audience, introduce many of the ideas inherent to the "clean revolution" approach, and include representatives of US-AEP on the Working Committee for the conference and follow-on.

Promoting Partnership

Another important element of the U.S. Asian strategy is the promotion of professional and institutional partnerships to bind local, national, and regional systems to the emerging international system. This has been part of the US-AEP agenda and workplan from the outset in 1992. During the past year, the program has made significant progress in fortifying the partnership premise and actually realizing breathing relationships. A very brief summary of progress this past year is included below.

- US-AEP Secretariat: Mobilization of independent initiative for a "clean revolution" has been a part of the US-AEP agenda from the outset. And 1997 was a year of considerable progress. First, the U.S. *Department of Commerce* made good on its commitment to maintain the successful "Tech Rep" program from its own account - contributing fully two-thirds of operational costs in FY 1997. Second, the US-AEP moved towards privatizing the greater part of the infrastructure initiative, with the *American Consulting Engineers Council* launching a regional initiative based-on US-AEP objectives and approach. Third, The Policy Group associated its programs with *Clark University* and *Greening of Industry Network* in the U.S., and with *ASEAN ISIS* and *Chulalongkorn University* in Asia, seeking to root the policy initiative in independent organizations and networks. While as yet some distance from complete independence, the direction for the policy program was set in 1997.

- Professional Associations: In an important sense, professional relationships are at the center of the US-AEP partnership strategy. Whether policy, technology, management, or advocacy-oriented, a core principle from the outset has been to bind local, national, and regional systems to the emerging international system. A few examples. In 1997, the *Air and Waste Management Association* and *Water & Environment Federation* completed the organization of membership chapters in Hong Kong, Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand. The *National Pollution Prevention Roundtable* established roundtables in Indonesia and Philippines, and made significant progress

towards the organization of a regional roundtable. The *National Academy of Engineering* tested the prospects for a regional network of academies of engineering and science to promote the practice of industrial ecology through performance measurement, given impetus by APEC and already resulting in a set of nine parallel studies. And, again in 1997, the *Greening of Industry Network* agreed to expand from its European and North American base to Asia. Each of these partnerships is rooted in local organization in the Asia region.

- Government Linkages: The US-AEP has worked with federal agencies from the outset, most notably with the *Environmental Protection Agency* and Department of Commerce. In 1997, the Environmental Protection Agency added India to its list of mature country partners, completing a national workplan with the Pollution Control Department (i.e., India's EPA), and receiving authorization from the Government of India and U.S. Embassy to tap the local currency endowment there for cooperative activity. As significant, five *state environmental protection agencies* (Arizona, California, Illinois, Oregon and Vermont)completed national partnership arrangements in India, Indonesia and Philippines. These arrangements reflect something more than memorandums of understanding, rather mutually dependent environmental initiative and projects.

Part II: Progress Toward Objectives

In response to the terms of its management contract, the US-AEP Secretariat reconsidered and clarified the Strategic Objective Tree in 1997. While the thrust (and in most cases content) of the approved objective and intermediate results are retained, they are reorganized to reflect manageable interests, symmetry between strategic and intermediate levels, and simplification of indexes. Given the very close connection between the older and newer Objective Tree, the Secretariat uses the revision in this submission.

Goal	*a "clean revolution" in Asia*
Strategic Objective	*impact on key drivers of the clean revolution*
Indicators	*i) increased pressures in support of improved environmental performance, and* *ii) increased integration of institutional and technology systems as between Asia and the United States*

Intermediate Results

i) increased government and public pressure in support of improved environmental performance and net additions to the stock of environmental infrastructure

ii) increased corporate and private sector pressure in support of improved environmental performance and the privatization of environmental infrastructure

iii) increased regional pressures (public and private) in support of improved environmental performance and net environmental infrastructure

iv) increased web of international institutional relationships in support of improved environmental performance and environmental infrastructure, and

v) increased flow and adoption of environmental and cleaner industrial and infrastructure technologies, with emphasis on U.S. practice and technologies

The current objective (i.e., "clean revolution") is reformulated as a goal, refocusing the strategic objective on *key drivers*, thereby bringing the objective more clearly within manageable interests. It is also redefined to emphasize *impact over promotion* - output over process The Secretariat believes these two changes are important to the credibility of the program.

The indicators for the strategic objective are restated as i) increased pressures in support of improved environmental performance, and ii) increased integration of environmental and technology systems between Asia and the United States. The indicators assume, of course, that increased public, private, and regional pressure for environmental performance, coupled with an increased stock of environmental infrastructure, and closer integration of environmental systems

between Asia and the United States, will lead to improved environmental performance. There is no question that tougher regulation in the United States and Europe, coupled with new institutional and environmental infrastructure, was the proximate cause of improved environmental conditions. That well-established linkage substitutes for plant-level measurement herein.

The intermediate results are tied directly to these indicators, intended to focus management attention on the building blocks of a "clean revolution." The first three intermediate results (public, private, and regional pressures) are tied directly to the first indicator, the fourth and fifth intermediate results (partnership and trade) to the second indicator. Together, the five capture the totality of the existing intermediate results.

A. Performance Analysis

Performance Summary			**Exceeded Expectations**
	Target	Actual	
Public Pressures (1997)	*25*	*25*	*Met expectations*
Private Pressures (1997)	*25*	*41*	*Exceeded Expectations*
Regional Pressures (1997)	*25*	*25*	*Met Expectations*
Partnership (1997)	*25*	*41*	*Exceeded Expectations*
Technology Transfer (1996)[1]	*25*	*34*	*Exceeded Expectations*
Composite	*25*	*33*	*Exceeded Expectations*

The US-AEP continues to *meet (even exceed) expectations* vis a vis the strategic objective. Unfortunately, quantitative measures and summary formulas blur qualitative highlights (outlined in the Foreword) and other anecdotal evidence within intermediate results (e.g., the APEC clean production agenda, the early success with ISO and industrial standards, the dramatic pick-up in Asian partnership, and the multi-year record re technology transfer). Nor does it capture the clear sense that the "clean revolution" idea is gaining adherents in Asia, here in the U.S., and in the international community. Implementation issues are also masked by the reporting format (e.g., delays attendant on the transition to ACEC management in the infrastructure area, the apparent lag in country-level policy innovation, and the slow start to extension in the CTEM program). Each of these issues has its own particularized definition and does not reflect structural problems across the program.

The Director of the Secretariat plans to review both the infrastructure and technology transfer programs in 1998. The first is intended to interrelate the work of ACEC, the Global Bureau, and US-AEP. The second is occasioned by the financial crisis in Asia. On the policy side, the Secretariat believes that the organization of The Policy Group and its related associations in Asia will facilitate policy innovation and implementation. Re extension, detailed design studies are underway in Indonesia and Philippines which should put that element back on-track.

[1] There is a one year lag in the verification of trade data.

First Indicator
Increased Pressures in Support of Improved Environmental Performance

Discussion: The program goal is to effect a paradigm shift in the Asian growth model to drive continuous improvement in environmental performance throughout the region. The strategic objective is to demonstrate *impact* on key drivers of the envisioned "clean revolution." One set of drivers includes *pressures* favoring environmental performance as reflected in public policy, the marketplace, community, and regional institutions.

Public Pressures The US-AEP seeks to introduce a new, complementary approach to environmental regulation built on the idea of performance. The elements of the strategy are straight forward - articulate the transformation concept and attract policy professionals to it, stimulate related research and analysis, promote environmental performance as an industrial goal and environmental indicator, introduce policy measures that encourage continuous improvement in environmental performance, and promote privatization approaches to the finance of environmental infrastructure. *Program performance met targets in 1997.* The program is managed through The Policy Group, a voluntary collaboration of US-AEP contractors and partnership organizations under the leadership of Winrock International. The American Consulting Engineers Council (ACEC) provides leadership for infrastructure.

Policy Research: Eight Asian countries launched research in direct response to US-AEP and USAID initiative. Research on performance measurement, of course, is the necessary first-step to policy initiative and reform - and also an important indicator that the performance approach is being considered or accepted. Indonesia, Hong Kong, Korea, Philippines, Singapore, and Taiwan launched measurement work in 1997 in response to the U.S. government's APEC initiative (which, in turn, was based on the US-AEP transformation concept). Significantly, although not a target country, China also launched measurement work in response to the APEC initiative. Apart from the APEC initiative, the Confederation of Indian Industry launched a related research/bench marking activity with its membership, in cooperation with USAID and US-AEP. Malaysia had undertaken similar work as early as 1995. This leaves only Sri Lanka and Thailand (with a research proposal already formulated and seeking funding in 1998). The US-AEP also engaged on a cooperative project with the Environment Division of the East Asia Department of the *World Bank* to develop a rapid assessment template for gauging industrial response to environmental incentives. Our distinctive contribution was to enlarge the scope of the research (e.g., attention to industrial policy, emerging pressures in the marketplace and community, and new investment) and analysis of the research product. Work is ongoing in Indonesia with implications for environmental and industrial policy there and Bank activity in other countries in East Asia.

Policy Studies: In a related development, and as the natural follow-on to research, the Centre for Strategic and International Studies in Indonesia, on behalf of an ASEAN consortium of strategic studies institutes, and in collaboration with Clark University, launched a framing activity to introduce the transformation concept to Asian policy-makers and to suggest the most promising lines of inquiry for policy research and innovation. The ASEAN institutes of strategic and international studies were organized by the member governments to undertake the policy studies and research necessary to policy innovation. The Policy Group promoted this initiative, and the US-AEP is contributing financial support. It is related to a parallel effort with the

Greening of Industry Network and Chulalongkorn University to promote similar ideas through advocacy and research.

Policy Implementation: Disclosure, of course, is the important implementation strategy for environmental performance and is fast-becoming the centerpiece of environmental policy and regulatory reform throughout the world. Policy reforms require timely, accurate and compact environmental and performance information on a continuous basis. Most environmental agencies do not have this capacity. BAPEDAL, the Indonesian environmental ministry, and US-AEP are the lead agencies studying and promoting information-based environmental policy innovation in Asia. PROPER is an information-based program for promoting improved industrial environmental performance in Indonesia, enabling BAPEDAL to increase compliance levels for water pollution from 35 to 50 percent and to reduce pollution at the industrial source by around 40 percent at target facilities - all over a period of two years, and with no significant increase in its enforcement budget. The 1997 partnership agreement between BAPEDAL and US-AEP expands the PROPER program beyond water impacts to include hazardous wastes and beyond environmental burden to proxy measures for industrial performance. US-AEP inputs relate to methodology and model building, but also include technical assistance and training. The experience with BAPEDAL and PROPER will provide the necessary input to develop a comprehensive policy marketing package that the Greening of Industry Network at Chulalongkorn University and US-AEP will use to promote environmental policies based-on performance and public disclosure in other Asian countries.

Infrastructure: Emphasis in the approved strategy is on privatization and the identification of privatization champions in each target country. They exist in India and Philippines with institutional support from USAID's Regional Housing and Urban Development Offices (RUDOs) and related support from US-AEP. Three or more projects have been identified in Indonesia, Philippines, and Taiwan. A review of the policy element of the infrastructure component will be organized by the Director of the Secretariat in 1998.

Private Pressures The US-AEP has committed important resources to increasing private initiative and market pressure in support of industrial environmental performance. Environmental pressures are increasingly present in the Asian marketplace, and the US-AEP seeks to accentuate their impact. The elements of the strategy are straight forward: promote environmental management systems locally (and particularly ISO 14000), introduce voluntary environmental standards for industrial sectors, promote environmental expectations all along the industrial supply chain, introduce environmental due diligence to financial practice, and redirect industrial extension to the environment. *Program performance exceeded target in 1997.* The program is managed through the Clean Technology & Environmental Management (CTEM) initiative, a voluntary collaboration of US-AEP contractors and partnership organizations under the leadership of Louis Berger, International, Inc.

Environmental Management Systems: Progress in this area is indicated by the increasing use of the ISO 14000 standard in the region. By the end of 1997, there was, at least, one designated national accreditation and certifying agency established in nine of ten target countries. Local certification and accreditation is important for several reasons. International consensus standards, like ISO 14000, lend priority to environmental management systems, standardize

approaches across countries and industries, and through certification, establish some accountability. Illustratively, governments in Indonesia, Malaysia, Philippines, and Thailand are developing regulations to promote the use of voluntary standards based on ISO 14000 - something that wouldn't have happened were the certification and accreditation process entirely in the hands of Americans, Europeans or Japanese. While firm registration is driven largely by market forces (in many cases supported by bilateral development and trade agencies from among the OECD), the development of national certification and accreditation agencies has been largely at the initiative of national governments with support from the CTEM program (no other OECD agencies working purposefully with government at the national level in Asia).

Voluntary Environmental Standards: Environmental standards are used by industrial associations to guide member behavior and to publicly express commitment to environmental principles. The most widely recognized environmental standard or code is the ICC Business Charter for Sustainable Development. The US-AEP is working to cover each of the important industrial sectors in Asia with a sectoral code. In 1997, at the initiative of the US-AEP itself (working through its CTEM program), "Responsible Care" (i.e., the code used most widely by the chemical industry throughout the OECD) was adopted in all ten target countries. While technical assistance was contributed through informal arrangements with the Chemical Manufacturers Association in the U.S. and Asian chemicals associations, the initiative was launched and led by CTEM. The US-AEP Secretariat itself took the lead to develop a similar standard for the food processing industry. In 1997, a founding group was organized by a set of associations and multinational companies from Asia and the U.S., and the voluntary standard will probably be completed in 1998. Unlike the chemical industry, where a standard was in wide use among the industrialized countries, work with food processing started without a sectoral template.

Supply Chain Relationships: One of the most promising incentives for environmental performance is emerging from supplier relationships, with first-tier manufacturing and marketing firms articulating environmental standards to suppliers. With the rapid disaggregation of manufacturing, first-tier firms from the OECD economies are fast becoming conduits for environmental regulatory and consumer pressures to suppliers in the developing countries. There is also some evidence that large national firms in Asia are beginning to pass their own environmental standards down along the supply chain. In 1997, the CTEM program completed a partnership arrangement with Business for Social Responsibility (BSR). In collaboration with Levi Strauss, Nike, and Patagonia, BSR and US-AEP launched ongoing outreach activity to the textile industry in Hong Kong, Philippines and Taiwan. CTEM also completed partnership arrangements with United Technologies and Texas Instruments in the electronics industry to promote environmental standards to suppliers in the region.

Environmental Due Diligence: An important focus of the US-AEP program is on investment and new industrial capacity in Asia. Since all investments will have to move through the financial community, the introduction of environmental due diligence has become a major

objective for the program. In 1996, under the leadership of its Field Representative, the US-AEP completed a long term partnership arrangement with the Bank of America to introduce its due diligence systems as models for both public and private banking institutions in the region. In 1997, the US-AEP added to its list of champions the Development Bank and Land Bank of the Philippines, the Industrial Finance Corporation of Thailand, and the National Development Bank of Sri Lanka. In each of the three countries, the champion banks are charged by government to promote the practice of environmental due diligence. Based on the collaboration among Bank of America, the national champions in three Asian countries, and the US-AEP, five private banks in the region have introduced environmental due diligence to their credit and investment practices - Bank of Indonesia and Panin Bank in Indonesia, the Far East Bank and Trust Company and Philippines, and the Bank of Ceylon in Sri Lanka.

Industrial Environmental Extension: The premise behind the extension agenda is straight forward. There are existing organizations throughout Asia whose mission it is to promote managerial and technological innovation at the firm level. Most extension organizations are characterized by technical staff that go in and out of firms as a regular feature of their operation (with some innovators building on the communications revolution). The first part of the US-AEP agenda is to work with these organizations to introduce a clean production message and to improve the delivery of the message. The second part is to link those organizations to a technological back-up system in the United States to provide an information base, referral center, and support base for technical assistance and training. In 1997, the CTEM team completed an assessment of extension organizations, identifying appropriate targets in each of the ten countries, undertook design of a model programs for India, Indonesia and Thailand, and successfully graduated its initial program in Singapore.

Regional Pressures Beyond national boundaries, there are important regional opportunities to increase the pressures for improving environmental performance. They include initiative by organizations such as APEC, ASEAN, and Asian Development Bank , as well as initiative that might be taken by national organizations in Asia. The elements of the strategy are straight forward: introduce the transformation agenda to the multilateral development banks, launch transformation initiatives through regional political organizations, and promote national initiative to other economies in the region. *Program performance met targets for 1997.* These efforts are managed directly by the Secretariat's Regional Representative with support from The Policy Group, CTEM, and US-AEP family of partnership organizations.

Multilateral Development Banks: The Policy Group launched a cooperative project with the World Bank in 1997 to develop a rapid assessment template for gauging industrial response to environmental incentives. While the direct engagement is in terms of collaborative analysis, the longer-term agenda is to attract the Bank to the transformation agenda. The US-AEP is also working with the Asian Development Bank to bring them into a collaborative relationship with both the Greening of Industry Network at Chulalongkorn University and the Centre for Strategic and International Studies, which is cooperating with Clark University re the regional framing activity.

Regional Political Organizations: The U.S. government proposed a Clean Production Project to APEC's Industrial Science & Technology Workgroup in June 1997. The project is directed to US-AEP's transformation concept and the National Academy of Engineering's measurement work. On the basis of the American presentation, and the broad-based support for the proposal, nine member governments have launched analytic and research activities paralleling the National Academy's work. Similarly, the US-AEP discussed a framing activity to promote the transformation concept with the ASEAN Secretariat and related committees. An ASEAN inter-ministerial conference will be organized towards the end of 1998. And, at the behest of US-AEP, OECD expanded its environmental disclosure initiative to include the modernizing countries of Asia.

National Initiative: Significant progress was made in 1997. On the policy side, agreement was reached between the Greening of Industry Network and Chulalongkorn University in Thailand. On the basis of discussions with the university, the Thai Research Fund, the ministries of environment and industry, NGOs, and US-AEP will conduct a set of workshops to promote policy innovation related to clean production. On the CTEM side, also at US-AEP initiative, an Environmental Center for Livestock Waste Management was organized at National Pintung University of Science and Technology in Taiwan. The Centre has been developed cooperatively with Asian and U.S. organizations to extend the latest waste management practice and technology to the Asia region. The activity is joined by government departments in Hong Kong, Korea and Malaysia. And, in collaboration with US-AEP, the Government of Indonesia promoted the adoption of its PROPER program to Columbia (LAC) and Philippines (ANE).

Second Indicator
Increased Integration of Environmental and Industrial Systems Between Asia and the U.S.

Discussion: The program goal is to effect a paradigm shift in the Asian growth model to drive continuous improvement in environmental performance throughout the region. The strategic objective is to demonstrate *impact* on key drivers of the revolution. Another set of drivers includes the synergies inherent to the closer *integration* of environmental and industrial systems as between Asia and the U.S.

Partnership The US-AEP seeks to create new linkages, to connect actors from the United states with counterparts in the modernizing countries of Asia, to promote cooperation among governmental, business, multilateral and NGO institutions, and to build on cooperation inside of networks and associations. They do not require massive new transfers of aid or capital or large-scale institutions, relying heavily instead on new relationships within the private sector, supported and channeled by public activity. *Program performance exceeded targets in 1997* (see again Part IB). The program is managed through a voluntary collaboration of US-AEP contractors and partnership organizations under the leadership of the International Resources Group.

Professional Partnership: The US-AEP focused on professional partnership during the period with some considerable success. The Water & Environment Federation added three new chapters during 1997 in Malaysia, Singapore, and Thailand bringing their total to seven with 500 professional members. The Air and Waste Management Association added new chapters in India, Malaysia, and Sri Lanka, bringing their total chapters six with 300 professional members. In

addition, the National Pollution Prevention Roundtable launched ventures in Indonesia and Philippines and initiated work towards the formation of a regional roundtable based on a successful first regional conference in Bangkok. Finally, it is important to note that the Council of State Governments was able to approve five and launch 18 new state-based partnerships in the region.

Technology Transfer US-AEP utilizes USAID resources to catalyze commercial linkages between domestic environmental firms with both counterparts (for joint ventures) and industrial end-users (for sales) in Asia, offering services from information about environmental technologies for sale from the United States, to "trade leads" identifying potential buyers in Asia, to market information identifying regulatory and investment trends in each of the ten target countries, to promoting the organization of consortia for private infrastructure ventures. In addition, US-AEP offers a limited range of technical assistance and training to firms and associations. *Program performance exceeded targets in 1997*. This program is managed by the Foreign Commercial Service in collaboration with the US-AEP Secretariat and a voluntary collaboration of US-AEP contractors and partnership organizations

Technology Representation: This indicator is intended to capture two things: U.S. environmental exports to ten target countries, and total Asian environmental imports from all countries - trade and the movement to cleaner production. Note, that infrastructure is now included within both export and import figures. The record through 1996 is truly extraordinary, of course - with the dramatic pick-up in U.S. exports linked to the launch of US-AEP and the establishment of the "tech rep" operation (see again the Foreword). It is also important to note the important support role played by the exchange programs of the Institute of International Education and National Association of State Development Agencies, the trade leads activity of the Global Bureau's Center for Technical Information Services, and the information support activity of the Global Bureau's GreenCom Project. The review of IIE's Environmental Exchange Program, included as an Annex, reflects the complexity and richness of these related programs and the inter-relationship between the development and trade aspects of the US-AEP program.

Financial Crisis: While obviously concerned about the impact of the financial crisis on trade in 1998, the Foreign Commercial Service and US-AEP are monitoring the situation and making adjustments to institutional infrastructure and workplans as appropriate. Together with USAID/ANE, Trade Promotion Coordinating Committee (TPCC), President's Council on Environmental Quality, Environmental Protection Agency, and Department of Energy, the Foreign Commercial Service and US-AEP are also working closely with the credit organizations of the U.S. government (e.g., Ex-Im, OPIC, TDA, etc.) to anticipate and ameliorate anti-competitive factors that might disrupt the rather remarkable progress of the past five years

B. Expected Progress Through 2000

Prospects for Achieving Performance Targets Through FY 2000

As noted earlier, a Five Year Review was completed in 1997. The reviewers concluded that the objectives of the program were within reach, indeed, that "...the moment is right for the kind of transformation necessary to resolve the tension between rapid growth and environmental protection in Asia. US-AEP correctly identifies technological transformation as the primary strategy for avoiding environmental degradation, elaborating on the strategy with a more direct concern for the industrial growth model itself, articulating a strategic range of policy and practice change necessary to effect the desired result. In this regard, the clean revolution is directly linked to sustainability concepts, is working at an appropriate level of abstraction, and reaches a much broader range of development issues than is usually associated with either industrial pollution or the environment."

The key issue relating to the prospects for the US-AEP and the "clean revolution" is undoubtedly the financial crisis. It will affect the technology transfer program, but it may open opportunities on the development side. It is an issue to be watched carefully throughout 1998 in close collaboration with ANE.

Remedial Actions

The Five Year Review "...found areas in which the promise of US-AEP is insufficiently realized." Remedial action has been taken in each of those areas which serve as a check-list.

energy and urbanization: the new Director for the Secretariat has initiated discussions within the Agency to determine whether, within what scope, and with what kinds of collaboration and coordination with both field missions and the Global Bureau the US-AEP might engage more directly on issues of energy and urbanization.

policy context: the Secretariat formalized the policy program in 1997, organized The Policy Group, and associated its programs and staff with important partnership organizations in both Asia and the United States.

geographic scope: the Secretariat was fully engaged with Administration efforts to seek Congressional authority for expanding the geographic scope to include China in 1997. Expansion was not approved.

Asian partners: Asian partnerships were dramatically expanded in 1997 through the initiative of the Air and Waste Management Association, Water &Environment Federation, Council National Pollution Prevention Roundtable, Council of State Governments, The Asia Foundation, and the initiative of The Policy Group and CTEM.

foreign policy: political leverage became an important part of US-AEP strategy in 1997, with some considerable success as, for example, in the APEC endorsement of the National Academy of Engineering's environmental metrics project. The Secretariat also worked closely during 1997 with the National Security Council and Council on Environmental Quality.

technology transfer: the Secretariat organized several meetings in collaboration with NASDA to develop criteria and approaches to clean technology for the technology transfer program. CTEM also put greater emphasis on the demand side by strengthening its information programs in Singapore and undertaking analytic work in support of extension. Given the long-term commitment of the Department of Commerce to the "tech rep" program, a broader review of the technology transfer program is planned for 1998.

leadership: this was an area of high priority throughout 1997, including discussions with the Council of State Governments to launch an international environmental leadership program, and including the organization of an Asian base for the Greening of Industry Network.

Intermediate Results Through FY 2000

As noted at the introduction to Part II, the Strategic Objective Tree for the US-AEP was reorganized to relate more directly intermediate results to the indicators for the strategic objectives. Results were discussed at Part II A, Performance Analysis.

Based on experience to date, and component workplans, the Secretariat believes that there will be continued progress with regard to the first three intermediate results (public, private, and regional pressures for improved environmental performance). The second two intermediate results (partnership and trade) will be under some pressure from the financial crisis, but that will have to be watched carefully throughout 1998.

Prospects for Achieving Objective

The ambition for a "clean revolution" is bold. The US-AEP Secretariat is heartened in its ambition by several factors. *First*, the idea of a "clean revolution" is clearly taking hold within important leadership organizations - not yet at the national policy level - but demonstrably within the U.S. development and environmental communities - and, this year, within important regional and other leadership organizations in Asia. *Second*, the thought that we could successfully "blow on the embers" - on the pro-environmental pressures emerging in the marketplace - is showing fruit as demonstrated by progress re ISO 14000, the introduction of "responsible care," and the pick-up on "greening the supply chain" and "environmental due diligence." *Third*, partnerships are gaining momentum, and we crossed the difficult Asian threshold in 1997. We have a core set of important Asian partners. *Fourth*, the model for

technology cooperation and transfer is well-established with the associated partner organizations developing new, independent relationships and trade initiatives. And, *fifth*, we have real commitment by a growing number of organizations to assume responsibility for various elements of the US-AEP program (e.g., the Foreign Commercial Service, American Consulting Engineers Council, and Clark University in collaboration with the Greening of Industry Network and Chulalongkorn University). Cumulatively, these factors, together with the encouragement of the Five Year Review, suggest that there are real prospects for achieving the objective - a "clean revolution" in Asia.

C. Global Climate Change

The Secretariat is working with Agency representatives and committees to relate the US-AEP program to Agency commitments re global climate change. As part of that early work, Douglas Fox, member of the Inter-Governmental Panel on Climate Change (IPCC), and former president of the Air and Waste Management Association, has made the following initial observations. The Secretariat will report further on this work to the ANE Bureau.

> As it is currently configured the US-AEP is directly relevant to climate change. First, the focus on private sector environmental management systems, voluntary standards, and greening the supply chain will promote reductions in the growth of greenhouse gas emissions without even explicitly including them in the portfolio. According to the IPCC, industrial emissions represent 47 percent of the current anthropogenic carbon emission, 75 percent from OECD countries. For perspective, industrial sector emissions are about 47 percent of all anthropogenic emissions. In the next 50 years, the most realistic scenario projects OECD country emission growth of 25 percent while developing country emissions are projected to increase 500 percent to then represent 57 percent of industrial carbon emissions. The IPCC further states that "While standard setting and regulation have been the traditional approaches to reduce unwanted emissions, the immense range of players suggests that these be supplemented with market mechanisms, voluntary agreements, and other non-traditional approaches." Finally, the report identifies that the most efficient technological options include clean technologies and energy efficiencies that are, in fact, typical of the US-AEP clean technology initiative.
>
> Secondly, US-AEP's policy concern for environmental performance directly feeds the climate change agenda. The climate change issue has promoted greenhouse gas emissions as a major international environmental performance standard. Developing countries are struggling with the implications of this performance measure, and its associated global regulation, for their economic well being while in OECD countries, business and labor coalitions are raising similar concerns.
>
> US-AEP efforts to develop and implement environmental performance measures represent a major potential contribution to understanding the significance of greenhouse gas emission limitations to the economies of these countries. Even if greenhouse gases

are not the specific object of the measures US AEP partners are proposing, the logic and understanding being developed can be immediately translated to the climate change agenda.

US-AEP can easily be aligned with major climate change initiatives. The CTEM program, at first look, suggests opportunity to add energy conservation and energy efficiency considerations explicitly. Already, much of CTEM activity is directly relevant to the climate issue. Five industrial sectors have been identified by the IPC: basic metals, chemicals, pulp and paper, construction materials, food products, and light manufacturing. CTEM is already active in chemicals and food processing. The addition of construction materials to the portfolio could enhance the program's relevance to climate change. The policy program has a similar opportunity to add explicit measures of greenhouse gas emission to the performance measures they are developing with Asian nations.

In the next year, US-AEP will complete a review of current programming for climate change impacts, assess strategic options, and develop a multi-year plan for increasing focus on partnerships and clean technologies to promote less intense growth of greenhouse gas emissions. US-AEP will collaborate with the Global Bureau in development of its climate change plan and initiatives. The Secretariat believes that the economies of Asia, the current crisis not withstanding, over the medium and long term will continue to grow. US-AEP is built on the premise that transformation of industrial and environmental processes can allow growth with lower resource intensity, and lower pollution and emissions per unit of economic growth.

D. Performance Tables

Agency Goal: **Protecting the Environment**

US-AEP Goal: **a "clean revolution" in Asia**

Strategic Objective: **impact on key drivers of the clean revolution**

Performance Summary (1997)
performance indexes (on 1-100 scale)

	expected 1997	**25**
indicator one:		
increased public, private and regional pressure in support of improved environmental performance	**exceeded expectations**	**30**
1.1 government and public sector pressure	*met expectations*	25
1.2 corporate and private sector pressure	*exceeded expectations*	41
1.3 regional institutional pressure	met expectations	25
indicator two:		
increased integration of environmental management systems and technologies between Asia and the U.S.	***exceeded expectations***	**37**
2.1 institutional partnerships	*exceeded expectations*	41
2.2 technology transfer	*exceeded expectations*	34

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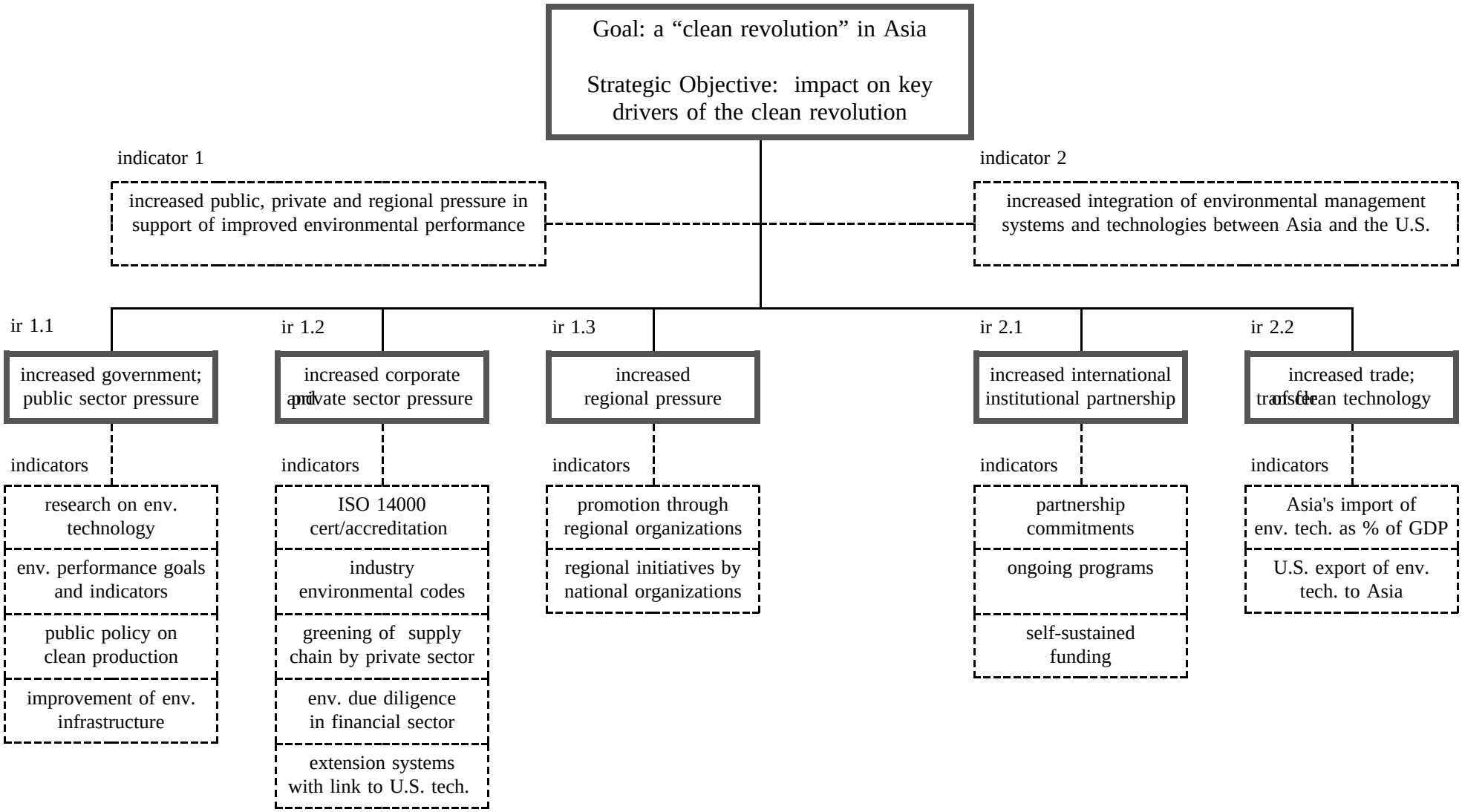
United States - Asia Environmental Partnership Program (US-AEP)
Strategic Framework



Note: Revisions of US-AEP Strategic Framework

Strategic Objective: A “clean revolution” in Asia has been clarified as the program Goal; USAEP aims for catalytic impact on key drivers of that revolution - an Objective more closely within the program's “manageable interests.”

Intermediate Results: US-AEP's results framework has been re-structured to more rationally relate program activities to five key drivers of improved environmental performance

Increased government and private sector pressure
Increased corporate and private sector pressure
Increased regional pressure
Increased international institutional partnership, and
Increased trade and transfer of technology

Indicators: Program indicators remain largely the same though some have been simplified; some definitions have been tightened and all of the performance indexes have been re-calibrated to a common 1-100 scale to facilitate comparability.

Current Indicator		Previously
1.1a	research on environmental technology	SO 3(i)
1.1b	environmental performance and goals	SO 3(ii)
1.1c	public policy on clean production	SO 3(iii)
1.1d	improvement of environmental infrastructure	IR 2.1
1.2a	ISO 14000 certification/accreditation	SO 2
1.2b	industry environmental codes	IR 1.2
1.2c	greening of the supply chain	IR 1.3
1.2d	environmental due diligence in the financial sector	IR 1.4
1.2e	extension systems with links to U.S.	IR 1.5
1.3a	promotion through regional organizations	IR 3.1
1.3b	regional initiatives by national organizations	IR 3.2
2.1a	partnership commitments	SO 4 (revised)
2.1b	ongoing programs	SO 4 (revised)
2.1c	self-sustained funding	SO 4 (revised)
2.2a	Asia's import of environment technology as % of GDP	SO 1 (revised)
2.2b	U.S. export of environmental technology to Asia	IR 1.6

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)

Goal: a “clean revolution” in Asia
Strategic Objective: impact on key drivers of a clean revolution

Indicator: 1 index of increased public, private and regional pressure in support of improved environmental performance

Composition: three indices and sub-indicators shown below

1.1 increased government and public sector pressure:
- **1.1a research on environmental performance**
- **1.1b environmental performance goals and indicators**
- **1.1c public policy directed to promoting clean production**
- **1.1d public/private partnerships to improve environmental infrastructure**

(one third of total score)

1.2 increased corporate and private sector pressure:
- **1.2a ISO 14000 certification established**
- **1.2b environmental codes established in key industries**
- **1.2c greening of the supply chain promoted and practiced by the private sector**
- **1.2d environmental due diligence promoted and practiced by the financial sector**
- **1.2e extension systems linked to U.S. technical support.**

(one third of total score)

1.3 increased regional pressure:
- **1.3a promotion through regional organizations**
- **1.3b regional initiatives by national organizations**

(one third of total score)

	year	planned	actual
baseline	1995	NA	5
	1996	10	10
	1997	25	32
	1998	40	
	1999	60	
	2000	80	

Comments:

maximum 100 points
based on averages of scores for each sub-indicator

1997 point scores detailed on separate pages

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)

Goal: a “clean revolution” in Asia
Strategic Objective: impact on key drivers of the clean revolution

Indicator: 2 index of closer integration of environmental management systems, policy and technologies between Asia and the Untied States

Composition: two indices and sub-indicators shown below

2.1 increased international institutional partnership:
- **2.1a partnership commitments**
- **2.1b ongoing programs**
- **2.1c self-sustained funding**
  (one half total score)

2.2 increased trade and transfer of cleaner technologies:
- **2.2a increased Asian import of environmental technologies as a % of GDP**
- **2.2b increased export of U.S. environmental technologies to Asia**
  (one half total score)

	year	planned	actual
baseline	1995	NA	5
	1996	10	10
	1997	25	37
	1998	40	
	1999	60	
	2000	80	

Comments:

maximum 100 points
based on average scores for each sub-indicator

1997 point scores detailed on separate pages

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)

Intermediate Result: 1.1 increased government and public sector pressure in support of improved environmental performance and environmental infrastructure

Indicator: performance index (on 1-100 scale)

Composition: four sub-indicators

1.1a **research on environmental performance**: at least one important government or public sector institution (can include R&D institutes) has continuing programs in place to benchmark and monitor environmental performance ***(one point/country to total 10 points max)***.

1.1b **environmental performance goals and measures:** measures of environmental performance are provided by at least one important government or public sector institution in regular reports on economic performance ***(two points/country to total 20 points max)***.

1.1c **public policy (i.e. actual regulations) directed to promoting clean production and environmental management:** incentives and regulations are in place to "mainstream" environmental performance and investment in clean technology ***(four points per country to total 40 points max)***.

1.1d **public/private partnerships to improve environmental infrastructure:** I) at least one organizational "champion" (e.g. industry or municipal association, utility, leading corp., NGO) actively promoting public/private infrastructure partnerships ; ii) at least three infrastructure privatizations or public/private partnership projects under contract ***(three points/country; to total 30 points max)***.

	year	planned	actual
baseline	1995	NA	5
	1996	10	10
	1997	25	25
	1998	40	
	1999	60	
	2000	80	

Comments:

maximum 100 points

see separate table with 1997 scores by country

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)

Intermediate Result: 1.2 increased corporate and private sector pressure in support of improved environmental performance and privatization of environmental infrastructure

Indicator: performance index (on 1-100 scale)

Composition: five sub-iindicators

1.2a ISO 14000 certification established: i) national ISO 14000 accrediting agency and at least one national certifying agency established; ii) international reciprocity for local accreditation/certification ***(two points/country to total 20 points max).***

1.2b industry codes established: voluntary environmental business standards adopted by the appropriate industrial association in three important industries ***(one point/industry/country to total 30 points max)***.

1.2c "greening of the supply chain" promoted and practiced by the private sector: iI) at least one local "champion" (e.g. industry association, NGO, leading corporation) actively promoting the "greening of supply chains"; ii) U.S. companies with suppliers in Asia and major Asian corporations adopting programs to "green" their supply chain ***(two pts/ctry; to total 20 max)***.

1.2d environmental "due diligence" promoted and practiced by the financial sector: i) at least one local "champion" (e.g. banking association, NGO, leading bank) actively promoting environmental "due diligence"; ii) at least two major private sector banks incorporating environmental "due diligence" in their lending practices ***(two points/country to total 20 points max)***.

1.2e extension systems linked to U.S. technical support: i) at least one organization with proactive outreach for improved environmental performance; ii) at least one organization with self-sustaining links to U.S. technical support ***(one pooint/country to total 10 points max).***

	year	planned	actual
baseline	1995	NA	5
	1996	10	12
	1997	25	41
	1998	40	
	1999	60	
	2000	80	

Comments:

maximum 100 points

see separate tables with 1997 scores by country

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)

Intermediate Result: 1.3 increased regional institutional pressure in support of improved environmental performance and environmental infrastructure

Indicator: performance index (on 1-100 scale)

Composition: two sub-indicators

1.3a promotion thru regional organizations:

I) leverage thru multi-lateral development banks: evidence that environmental management and clean technology are considered in assessments or strategies and activities that contribute substantively to development of investment components approved for financing by the ADB and World Bank ***(five points for collaborative activities and ten points for activities related to loans - up to total 20 points max).***

ii) pressure from regional organizations: evidence of significant meetings, initiatives and policies on environmental management and clean technology taken by ASEAN, APEC or other major multi-lateral regional policy and economic organizations with some US-AEP or Partner support ***(five points for major events and ten points for significant advances agreed to by members - up to total 40 points max).***

1.3b regional initiatives by national institutions:

evidence of ongoing programs or initiatives of national organizations to promote environmental management and clean technology thru outreach, training, information systems, technical support ***(five points/institution - up to total 40 points max).***

	year	planned	actual
baseline	1995	NA	5
	1996	10	10
	1997	25	25
	1998	40	
	1999	60	
	2000	80	

Comments:

maximum 100 points

see separate table with 1997 scores

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)

Intermediate Result: 2.1 increased international institutional partnership in support of improved environmental performance and environmental infrastructure

Indicator: performance based index (on 1-100 scale)

Composition: three sub-indicators

2.1a partnership commitments: formalized commitments between U.S. and Asian institutions for the promotion of improved environmental performance ***(one points/partnership to total 20 points max)***.

2.1b ongoing programs: partnerships with active ongoing programs to improve environmental performance ***(one additional point/partnership to total 30 points max)***.

2.1c self-sustaining relationships: partnerships whose programs to improve environmental performance are completely funded by the partners without US-AEP assistance ***(a second additional point to total 50 points max)***

	year	planned	actual
baseline	1995	NA	5
	1996	10	10
	1997	25	41
	1998	40	
	1999	60	
	2000	80	

Comments:

maximum 100 points

see separate table with 1997 scores by country

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)

Intermediate Result: 2.2 increased flow and adoption of environmental and cleaner industrial and infrastructure technologies, with emphasis on U.S. practice and technologies

Indicator: performance index (on 1-100 scale)

Composition: two sub-indicators

2.2a increased regional import of cleaner environmental technologies relative to industrial GDP: greater than 10% increase over the preceding year in the ratio of total import of environmental equipment to total industrial GDP ***(one point per country for every one percent increase over ten percent (e.g. a 12% increase in the ratio would score 2 pts) maximum 5 points).***

2.2b increased export of U.S. environmental technology to Asia: increase over the preceding year in sales and investments in U.S. environmental goods and services including estimated value to the U.S. partner of all joint ventures and licensing agreements ***(one point per country for each 5% in sales over the preceding year; maximum 5 points).***

	year	planned	actual
baseline	1995	NA	5
	1996	10	10
	1997	25	34
	1998	40	
	1999	60	
	2000	80	

Comments:

maximum 100 points

see separate table with 1997 scores by country

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)

Intermediate Result: 2.2 increased flow and adoption of environmental and cleaner industrial and infrastructure technologies, with emphasis on U.S. practice and technologies

Indicator: 2.2a increased regional import of cleaner environmental technologies relative to industrial GDP

Unit of Measure: percent increase

definition: increase in the weighted average ratio of total annual import of environmental equipment in the ten USAEP countries of the region to total industrial GDP in those countries.

source: United Nations International Trade Branch Commodity Trade Statistics (COMTRADE) based on 13 Dept. Of Commerce commodity codes identified in the 1993 U.S. EPA study, “International Trade in Environmental Equipment”

frequency: annual collection of data, reported in following year (latest data available for R4 will always be one year behind)

comment: environmental equipment imports by the ten USAEP countries in 1995 (base year) totaled $274 million and industrial GDP totaled $67 billion; with a weighted average ratio of 0.36 which was a 10.3% increase over the previous year. Sustained increases to 15% by 2000 would be a clear indication that environmental technology is an increasingly important consideration in industrial investment.

note: this indicator is expressed in two formats: (A) percent increase, shown here and (B) as a performance based index so that it can be compared with other USAEP indexes.

	year	planned	actual
baseline	1995	NA	10%
	1996	11%	25%
	1997	12%	
	1998	13%	
	1999	14%	
	2000	15%	

data for 1997 not yet available

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)

Intermediate Result: 2.2 increased flow and adoption of environmental and cleaner industrial and infrastructure technologies, with emphasis on U.S. practice and technologies

Indicator: 2.2b increased export of U.S. environmental technology to Asia

Unit of Measure: $ million

definition: sales and investments in U.S. goods and services and systems for improved environmental performance including estimated value, to the U.S. partner, of all joint ventures and licensing agreements (cumulative).

source: U.S. Bureau of the Census: 64 SIC codes for “dual use” environmental commodities

frequency: annual collection of data, reported in following year (latest data available for R4 will always be one year behind)

comment: U.S. environmental exports to the ten USAEP countries, totaling $1.0 billion in 1995 (base year), represented approximately 20% all U.S. environmental exports world-wide. That would increase to approximately 30% with a potential tripling of exports to Asia by 2000.

note: this indicator is expressed in two formats: (A) exports in $ million, shown here and (B) as a performance based index so that it can be compared with other USAEP indexes.

	year	planned	actual
baseline	1995	NA	1,000
	1996	1,300	1,300
	1997	1,600	
	1998	2,000	
	1999	2,500	
	2000	3,000	

data for 1997 not yet available

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PART III STATUS OF THE MANAGEMENT CONTRACT

The Management Contract for FY 1998 is included as Annex C. It included two directions: i) "improving the performance monitoring plan," and ii) "encourage its partner NGOs to recuit women for training...and to taget woemn through NGOs."

Performance Monitoring: During 1997, the Secretariat worked to revise the measurement regime for the strategic objective (see discussion at Part II pages 15 and 16, the performance tables at Part II page 27, and Annex B at page 47). The Secretariat believes it has met the requirements of the contract.

Gender: Leadership for programs supported by The Policy Group is largely in the direction of women - the new executive director of the Greening of Industry Network at Chulalongkorn University being an Asian woman, the project director for the NAE metrics study being an Asian woman, the executive director of CSIS (i.e., framing papers) being an Asian woman, and the director of our World Bank collaboration is also a woman. Leadershsip for the CTEM program is similarly in the direction of women, the director of the Louis Berger contract being an American woman - the field director being an Asian woman.

In addition, during the fiscal year, the Institute of International Education's Environmental Exchange Program has identified some 72 Asian organizations with women and the environment as thier focus. To increase participation by women in US-AEP programs, IIE will launch outreach effort to each of these organizations informing them of US-AEP, its program elements and the opportunitties for participation. The information package will also include a survey form to better identify the focus and needs of each group.

United States - Asia Environmental Partnership

FY 2000 Results Review and Resource Request (R-4)

Part IV: Resource Request

March 2, 1998

PART IV: RESOURCE REQUEST

A. Financial Plan

With program resources of $15.2 million in FY 1998 and $18 million in FY 1999 and FY 2000, US-AEP will have the resources to achieve the anticipated results for FY 1998 through FY 2000. It should be noted, however, that the current Asia financial situation is expected to adversely impact the ability of the program to leverage resources from non USAID and private sector sources that work towards our Strategic Objective and Intermediate Results.

US-AEP resources have been in sharp decline beginning from FY 1996, declining from a level ranging between $20 and $25 million in the prior three years to less than $15 million in FY 1997. US-AEP's FY 1998 OYB is now $15.2 million versus its request level of $19.0 million, and the projected request level is now $18 million for FY 1999 and FY 2000. Despite these significantly adverse reductions, a number of management actions and events, outlined below, have enabled the program to maintain program momentum.

declining mortgage payments for USAEP's biodiversity activity:

In FY 1998, US-AEP will complete its $20 million commitment to the biodiversity activity now managed by the Global Bureau with a final tranche of $1.9 million. US-AEP funding for this activity was $4 million in FY 1996 and more than $2 million in FY 1997. While this activity will be concluded, US-AEP will continue to carry-out activities within its current focus that can contribute to the preservation of biodiversity, commensurate with its request levels.

greater leverage and cost sharing:

A critical component of US-AEP's program is its operation of technology cooperation offices in ten Asian countries and infrastructure representatives in four. The majority of these activities are funded through an interagency agreement with the Department of Commerce. US-AEP has effectively renegotiated its agreement with Commerce, a true partner in this program, so that Commerce has assumed more than 65 percent of the costs of US-AEP "tech rep" field operations costs. In FY 1998, a new agreement was signed that commits Commerce to providing up to $4 million over three years vs a USAID contribution of $1.6 million. Previously, US-AEP's direct contribution averaged more $1.5 million a year.

forward funding:

US-AEP entered FY 1996 with many of its contracts and grants forward-funded by 18 months; hence the first year reductions in US-AEP's FY 1996 budget were not immediately felt. However, US-AEP entered FY 1998 with its major technical support contract having as little as

two months forward-funding, an unacceptable situation.. See additional discussion in the "threshold" section.

revisions in grant levels:

US-AEP reviewed program criteria and funding levels for partners that administer grant programs on behalf of the US-AEP. As a result, the Secretariat and its grantees agreed to reduce the size of individual subgrants and to tighten award criteria. These actions enabled the program to maintain its efforts to expand American and Asia partnerships and to broaden Asia's access to U.S. technologies.

participation of nongovernmental organizations:

To date, the majority of US-AEP funded activities are directly or indirectly carried out by NGOs. These include: The Asia Foundation, the National Association for State Development Agencies, the Council of State Governments, the National Pollution Prevention Roundtable, Institute for International Education, and various professional associations. A core value of the US-AEP is promoting participation of the private sector and nongovernmental organizations in the development mission of USAID.

B. Prioritization of Objectives

US-AEP has a single SO strategic objective. Therefore no prioritization of objectives is possible or called for. It is important to note that although US-AEP's strategic objective is within the environmental goals of USAID, the program also makes an important contribution to USAID's economic growth agenda. More specifically, US-AEP activities directly promote economic growth by encouraging improvements in industrial efficiency, access to international markets, voluntary trade regimes, and establishment of voluntary business standards.

C. Linkage With Centrally Funded Mechanisms

US-AEP has made consistent use of Global Bureau mechanisms, including the Economic Growth Center's CTIS contract for management of the US-AEP's Environmental Technology Network for Asia. It is noteworthy that this activity, jointly pioneered by US-AEP and CTIS, is becoming globalized within USAID as the other geographic bureaus establish similar programs modeled after the US-AEP system. The US-AEP has also made use of the Environment Center's EPIQ contract to assist in the development of US-AEP strategy work, conduct program reviews , prepare specific technical papers, and coordinate its policy programs. In addition to these two "buy-ins," US-AEP intends to access Global's IQC with PADCO to assist in reviewing US-

AEP's work in the infrastructure and municipal management areas. Discussions are underway with the Global Bureau's Environment Center to identify others areas where the respective contracting and grant mechanisms of each may be best utilized to support current activities, including especially those supportive of USAID's efforts in Global Climate Change.

D. Work Force and OE

US-AEP's current staff level of 4 USDHs and 1 full time RSSA are insufficient to operate the program with adequate controls and assurance that resources are maximized. Because we do not have staff to dedicate to NMS(procurement, tracking, delivery, reports, travel, etc), professional officer's time is taken away from the management of program components and the evaluation of component progress and effectiveness.

Two of US-AEP's core values are the establishment of new partnerships and increasing the leverage of both existing and new partners. Because officers have had to devote an inordinate amount of time attending to contract, grant and cooperative agreement management, little to no time is left for US-AEP to increase its effectiveness by pursuing these core values of new partnership and increased leverage.

US-AEP clearly requires the services of a mid level program analyst to allow the professional officers and COTRs to maintain up to date knowledge and control of the program, while concurrently allowing them sufficient time to pursue US-AEP's core value work.

ANNEX A.

PERFORMANCE TABLES

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)
Performance indicators: 1997 Scores by Country

Intermediate Result: 1.1 increased government and public sector pressure in support of improved environmental performance

indicators 1.1a-c:

1.1a **research on environmental performance:** at least one important government or public sector institution (can include R&D institutes) has continuing programs in place to benchmark and monitor environmental performance ***(one point/country; 10 points max)***.

1.1b **environmental performance indicators:** measures of environmental performance are provided by at least one important government or public sector institution in regular reports on economic performance ***(two points/country; 20 points max)***.

1.1c **public policy (i.e. actual regulations) directed to promoting clean production and environmental management:** incentives and regulations are in place to "mainstream" environmental performance and investment in clean technology ***(four points per country; 40 points max)***.

	1.1a research **(1pt)**	1.1b indicators **(2 pts)**	1.1c policy **(4 pts)**	points
HongKong	yes			1
India	yes			1
Indonesia	yes		yes	5
Korea	yes			1
Malaysia	yes	yes		3
Philippines	yes			1
Singapore	yes	yes		3
Sri Lanka				
Taiwan	yes	yes		3
Thailand				

Total Points **18**

maximum 70
IR maximum 100

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)
Performance indicators: 1997 Scores by Country

Intermediate Result: 1.1 increased government and public sector pressure in support of improved environmental performance

indicator 1.1d: public/private partnerships to improve environmental infrastructure

I) at least one organizational "champion" (e.g. industry or municipal association, utility, leading corporation, NGO) actively promoting public/private infrastructure partnerships ***(one point/country; 10 points max)***.

ii) at least three infrastructure privatizations or public/private partnership projects under contract (water/wastewater/solid waste/hazardous waste) ***(two points/country; 20 points max)***.

	1.1d(I) champions *(1 pt)*	1.1d(ii) privatizations *(2 pts)*	points
HongKong			
India			
Indonesia		yes	2
Korea			
Malaysia			
Philippines	yes	yes	3
Singapore			
Sri Lanka			
Taiwan		yes	2
Thailand			

Total Points **7**

maximum 30
IR maximum 100

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)
Performance indicators: 1997 Scores by Country

Intermediate Result: 1.2 increased corporate and private sector pressure
In support of improved environmental performance

indicator 1.2a: ISO 14000 certification established

i) national ISO 14000 accrediting agency and at least one national certifying agency established
(one point/country; 10 points max).

ii) international reciprocity for local accredidation/certification
(one point/country; 10 points max).

	1.2a(i) agencies *(1 pt)*	1.2a(ii) reciprocity *(1 pt)*	points
HongKong	yes		1
India	yes		1
Indonesia	yes		1
Korea	yes		1
Malaysia	yes		1
Philippines	yes		1
Singapore	yes		1
Sri Lanka			
Taiwan	yes		1
Thailand	yes		1

Total Points **9**

maximum 20
IR maximum 100

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)
Performance indicators: 1997 Scores by Country

Intermediate Result: 1.2 increased corporate and private sector pressure in support of improved environmental performance

indicator:
1.2b industry codes established

voluntary environmental business standards adopted by the appropriate industrial asociation in three important industries ***(one point/industry/country; 30 points max)***.

note: can include agro-industries and municipal operations (e.g. waste management, transport, etc.)

	1.2b industry A *(1 pt)*	1.2b industry B *(1 pt)*	1.2b industry C *(1 pt)*	points
HongKong	chemical			1
India	chemical			1
Indonesia	chemical			1
Korea	petro-chem.			1
Malaysia	chemical			1
Philippines	chemical			1
Singapore	chemical			1
Sri Lanka	chemical			1
Taiwan	chemical			1
Thailand	chemical			1

Total Points **10**

Notes:
(1) voluntary waste water guidelines have been established for textile suppliers of GAP, Levi Strauss, Nike, Pategonia, LL Bean and Guess. These have not been included in score.

maximum 30
IR max 100

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)
Performance indicators: 1997 Scores by Country

Intermediate Result: 1.2 increased corporate and private sector pressure
In support of improved environmental performance

indicator 1.2c: "greening of the supply chain" promoted and practiced by the private sector

i) at least one local "champion" (e.g. industry association, NGO, leading corporation) actively promoting the "greening of supply chains"
(one point/country;10 points max).

ii) U.S. companies with suppliers in Asia and major Asian coorporations adopting programs to "green" their supply chain
(one point/company;10 points max).

	1.2c(i) champions *(1 pt)*	1.2c(ii) companies *(1 pt)*	points
HongKong			
India			
Indonesia		one	1
Korea		one	1
Malaysia			
Philippines			
Singapore			
Sri Lanka			
Taiwan			
Thailand			
U.S.	yes	five	6
		Total Points	**8**
		maximum	20
		IR maximum	100

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)
Performance indicators: 1997 Scores by Country

Intermediate Result: 1.2 increased corporate and private sector pressure
In support of improved environmental performance

indicator 1.2d: environmental "due diligence"
Promoted and practiced by the financial sector

i) at least one "champion" (e.g. banking association, NGO, leading bank) in each country and in U.S. actively promoting environmental "due diligence" ***(one point/country; 10 points max)***.

ii) at least two major private sector banks incorporating environmental "due diligence" in their lending practices ***(one point/country; 10 points max)***.

	1.2d(i) champions *(1 pt)*	1.2d(ii) banks *(1 pt)*	points
HongKong			
India	yes	yes	2
Indonesia		yes	1
Korea			
Malaysia			
Philippines	yes	yes	2
Singapore			
Sri Lanka	yes	yes	2
Taiwan			
Thailand	yes		1
U.S.	yes		1

Total Points

9

maximum 20
IR max 100

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)
Performance indicators: 1997 Scores by Country

Intermediate Result: 1.2 increased corporate and private sector pressure
In support of improved environmental performance

indicator 1.2e: extension systems linked to U.S. technical support

i) at least one organization (government agency, business or industry association, utility, consulting industry, academic or technical institution or NGO) with proactive outreach (promotion, training, information services) for improved environmental performance ***(one half point/country;10 points max)***.

ii) at least one organization with self-sustaining links to U.S. technical support ***(one half point/country;10 points max)***.

	1.2e(i) outreach ***(1/2 pt)***	1.2e(ii) U.S. links ***(1/2 pt)***	points
HongKong	yes	yes	1
India	yes		1/2
Indonesia		yes	1/2
Korea			
Malaysia			
Philippines		yes	1/2
Singapore	yes	yes	1
Sri Lanka			
Taiwan	yes		1/2
Thailand	yes		½

Total Points

4.5

maximum 10
IR maximum 100

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)
Performance indicators: 1997 Scores by Country

Intermediate Result: 1.3 increased regional institutional pressure
in support of improved environmental performance

indicators:

1.3a promotion thru regional organizations:

l) **leverage thru multi-lateral development banks: evidence that environmental management and clean technology are considered in assessments or strategies and activities that contribute substantively to development of investment components approved for financing by the ADB and World Bank *(five points for collaborative activities and ten points for activities related to loans - up to total 20 points max)*.**

ii) **pressure from regional organizations: evidence of significant meetings, initiatives and policies on environmental management and clean technology taken by ASEAN, APEC or other major multi-lateral regional policy and economic organizations with some US-AEP or Partner support *(five points for major events and ten points for significant advances agreed to by members - up to total 40 max)*.**

1.3b regional initiatives by national institutions:

evidence of ongoing programs or initiatives of national organizations to promote environmental management and clean technology thru outreach, training, information systems, technical support *(five points/institution - up to total 40 points max)*.

1.3 events and advances	points
1.3a regional organizations:	
ASEAN mtg, 1996	5
ASEAN member agreement, 1997	10
1.3b national institutions:	
Korea/Taiwan animal waste	5
Indonesia PROPER program	5
Total Points	**25**
Maximum	100

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)
Performance indicators: 1997 Scores by Country

Intermediate Result: 2.1 increased international institutional partnership in support of improved environmental performance

indicators:

2.1a partnership commitments: formalized commitments between U.S. and Asian institutions for the promotion of improved environmental performance
(one points/partnership to total 20 points max).

2.1b ongoing programs: partnerships with active ongoing programs to improve environmental performance
(one additional point/partnership to total 30 points max).

2.1c self-sustaining relationships: partnerships whose programs to improve environmental performance are completely funded by the partners without US-AEP assistance
(a second additional point to total 50 points max)

	2.1a	2.1b	2.1c	points
HongKong	1	1	1	3
India	1	1	1	3
Indonesia	3	1	1	5
Korea	3	2	2	7
Malaysia	1			1
Philippines	4	3	3	10
Singapore	1	1	1	3
Sri Lanka				
Taiwan	2	2	2	6
Thailand	1	1	1	3
			Total Points	**41**
			maximum	100

UNITED STATES - ASIA ENVIRONMENTAL PARTNERSHIP (USAEP)
Performance indicators: 1997 Scores by Country

Intermediate Result: 2.2 increased trade and transfer of cleaner technologies

indicators 2.2a-b:

2.2a increased regional import of cleaner environmental technologies relative to industrial GDP: **greater than 10% increase over the preceding year in the ratio of total import of environmental equipment to total industrial GDP *(one point per country for every one percent increase over ten percent (e.g. a 12% increase in the ratio would score 2 pts) maximum 5 points).***

source: United Nations International Trade Branch Commodity Trade Statistics (COMTRADE) based on 13 Dept. Of commerce commodity codes identified in the 1993 U.S. EPA study, "International Trade in Environmental Equipment."

2.2b increased export of U.S. environmental technology to Asia: **increase over the preceding year in sales and investments in U.S. environmental goods and services including estimated value to the U.S. partner of all joint ventures and licensing agreements *(one point per country for each 5% in sales over the preceding year; maximum 5 points).***

source: U.S. Bureau of the Census: 64 SIC codes for "dual use" environmental commodities

note: **data, collected annually is only available in following year; scores based on preceding year's performance (e.g. 1997 score is based on increase in 1996.**

	2.2a Increase in imports/GDP	2.2b Increase in U.S.exports	points
HongKong	20%	<1%	5
India	NA	33%	5
Indonesia	37%	7%	6
Korea	4%	19%	7
Malaysia	(8%)	57%	
Philippines	>100%	56%	
Singapore	NA	44%	5
Sri Lanka	>100%	(25%)	
Taiwan	NA	33%	5
Thailand	NA	5%	1
		Total Points	**34**
maximum		100	

Ratio of Total Environmental Equipment Imports to Industrial GDP
1993 through 1996
(Environmental Equipment in thousand and GDP in millions of US dollars)

	1993			1994			1995			1996		
	Env. Equip Imports	Industrial GDP	Ratio	Env. Equip Imports	Industrial GDP	Ratio	Env. Equip Imports	Industrial GDP	Ratio	Env. Equip Imports	Industrial GDP	Ratio
Hong Kong	92,543	19,842	0.47%	108,076	20,807	0.52%	113,898	21,109	0.54%	139,993	21,583	0.65%
India	39,183	63,924	0.06%	40,300	76,054	0.05%		85,274			88,391	
Indonesia	118,974	62,699	0.19%	160,489	71,471	0.22%	152,592	82,247	0.19%	259,876	98,552	0.26%
S. Korea	276,545	144,841	0.19%	347,418	163,171	0.21%	477,952	198,530	0.24%	556,414	219,451	0.25%
Malaysia	146,197	26,667	0.55%	176,812	30,583	0.58%	223,213	36,877	0.61%	217,279	38,994	0.56%
Philippines		17,782		21,160	20,860	0.10%	25,708	23,833	0.11%	77,717	27,371	0.28%
Singapore	150,476	20,365	0.74%	163,979	24,525	0.67%	198,708	29,725	0.67%		33,451	
Sri Lanka	5,071	2,275	0.22%	6,570	2,616	0.25%	2,851	2,928	0.10%	260,813	33,451	0.78%
Taiwan	185,568	NA			NA			94,676		338,547	94,676	0.36%
Thailand	170,962	48,920	0.35%	170,962	56,203	0.30%	273,976	66,566	0.41%		74,222	
Average Ratio			**0.35%**			**0.32%**			**0.36%**			**0.45%**
% Increase			NA			-6.44%			10.30%			25.80%

U.S. Exports of Environmental Protection Equipment
Historical and Forecasted
1992-2000
(in thousands of U.S. Dollars)

	Historical					Forecasted			
	1992	1993	1994	1995	1996	1997	1998	1999	2000
Hong Kong	65,303	58,974	54,901	89,108	89,608	99,974	111,558	124,440	138,834
India	23,934	23,099	24,736	60,978	81,082	118,199	172,308	251,186	366,174
Indonesia	35,332	33,966	29,129	63,196	82,692	109,505	145,011	192,029	254,293
S. Korea	154,628	161,608	228,657	370,412	441,502	581,888	766,975	1,010,776	1,332,179
Malaysia	30,753	51,859	38,746	42,053	65,959	83,888	106,508	135,691	172,575
Philippines	19,488	24,153	29,010	39,111	60,865	81,351	108,731	145,326	194,238
Singapore	86,962	98,097	107,241	125,933	180,754	218,299	263,644	318,407	384,545
Sri Lanka	554	719	558	1,183	891	1,101	1,388	1,682	2,080
Taiwan	176,327	153,271	135,760	186,107	192,270	199,911	207,858	216,116	224,705
Thailand	43,183	57,866	60,387	100,097	105,044	133,684	170,132	216,518	275,550
TOTAL US-AEP	636,464	663,612	709,125	1,078,178	1,300,667	1,627,800	2,054,185	2,612,171	3,345,173
TOTAL WORLD	4,034,334	4,279,855	4,470,733	5,444,225	6,280,573	7,029,259	7,887,192	8,805,013	9,854,628
% US-AEP of WORLD TOTAL	15.8%	15.5%	15.9%	19.8%	20.7%	23.2%	26.0%	29.7%	**33.9%**

ANNEX B

US-AEP'S ENVIRONMENTAL EXCHANGE PROGRAM

The Environmental Exchange Program (EEP) is a unique initiative within US-AEP, yet it is also thoroughly interwoven into the fabric of the other US-AEP components. EEP's multiple functions are managed by the Institute for International Education (IIE), the largest nonprofit educational and cultural exchange organization in the United States. EEP provides Asian professionals and relevant organizations and businesses with unique opportunities to address their most pressing environmental problems. Exchanges may flow from Asia to the United States, from the United States to Asia, or among various points within Asia. All environmental exchanges must respond to specific environmental issues in Asia and support US-AEP's Strategic Objectives (SOs) or Intermediate Results (IRs). Wherever the location and whatever the program, participants can rely on IIE's professionalism within all three categories of exchange:

Environmental Fellowships provide senior Asian and US professionals with practical, on-site opportunities for exchanging information and expanding their understanding of environmental issues and various approaches to solving problems. Typically lasting from one to three months, these non-academic fellowships help participants develop concrete solutions to specific environmental problems. Participants usually work side by side with their overseas counterparts and may be placed in businesses, nongovernmental organizations (NGOs), or government agencies.

***Environmental Business Exchange*s** provide Asian participants with opportunities to identify sources of US technology, observe key facilities and technologies first-hand and evaluate their suitability for Asian applications, meet face-to-face with potential partners, and confer with government officials and industry leaders. American participants may travel to Asia to evaluate the scope of environmental problems and suggest solutions that may draw upon US sources for appropriate technologies and practices. These exchanges are short and intense, usually lasting less than two weeks.

Environmental Technical Exchanges normally a week long, offer short-term technical workshops and study tours. Technical Exchanges may be held in Asia or in the US, and generally involve participants from several different countries from varying sectors, (i.e.: government, private sector, or NGO). These exchanges offer participants a unique opportunity to delve into a specific industry's environmental issues and simultaneously address cross-sectoral concerns.

The EEP Story

IIE began implementing the EEP 15 May 1995, and by 31 December 1997 had programmed 256 exchange activities for 2,001 individuals. In 1997, IIE's contract was amended to increase its deliverable to 2,850 exchanges over 5 years (from 5/95 through 5/00). To date,

IIE has received 556 applications for the EEP from a variety of sources including: the ten US-AEP Offices of Technology Cooperation and four US-AEP Urban Infrastructure Representatives overseas, the five USAID missions in Asia, miscellaneous companies, NGOs, and private individuals in Asia and the United States. (See Attachment I for a breakdown of the number of EEP participants by country, the percentage of EEP exchanges by type, and by US-AEP SO/IR for calendar year 1997.).

Requests are screened by EEP's evaluation team to determine if they are consistent with US-AEP's Strategic Objectives. EEP staff add value to proposed exchanges through refining activities, communicating with all relevant parties, contacting potential hosts, scheduling appointments, bargaining cost-share arrangements, and arranging appropriate travel logistics. Once all of the pieces are in place, promising exchanges are sent to the US-AEP Secretariat in Washington, DC for approval. Approval criteria include: the number of individuals that will be traveling; the type and amount of cost sharing that the applicant's home organization will contribute; the endorsement of the appropriate Technology Representative and/or USAID Mission; previous participation in a US-AEP activity by the applicant; and that the expected exchange outcome contributes to US-AEP's strategic objectives and intermediate result goals.

One month after the event has been completed, EEP participants are obligated to submit Participant Reports. These reports are distributed to all relevant US-AEP partners. In addition, six months after the EEP exchange's end date, IIE contacts participants to determine if any additional action occurred that further promotes US-AEP's Strategic Objectives. This contact is made through telephone and fax interviews or questionnaires.

Selection of Successful EEP Exchanges

The following exchange descriptions illustrate EEP's contribution to each of US-AEP's Strategic Objectives and Intermediate Result goals promoting a "*clean Asian industrial revolution*." Examples are grouped by Strategic Objectives. Intermediate Results are grouped under their pertinent SOs. These descriptions represent 19 of 104 exchanges programmed by IIE in 1997.

Strategic Objective 1: Increasing Investment in Environmental Technologies

US-AEP Effort to Decrease Large-Scale Swine Industry Environmental Pollution: EEP Logs #451, 374, 222

The EEP continued to provide expertly implemented exchanges to support CTEM's Environmental Center for Livestock Waste Management (ECLWM) agro-industry initiative throughout 1997. In September, EEP brought five swine industry experts from Hong Kong, Thailand, Malaysia, the Philippines and Korea to Honolulu for participation in the second International Symposium on Livestock Waste Management co-hosted by the University of

Hawaii and US-AEP. This Environmental Business Exchange (EBE) is part of a series of bundled exchanges designed to establish the ECLWM.

US-AEP brought these private and public sector Asian experts to Hawaii to join industry colleagues from Taiwan's National Pingtung University of Science and Technology (NPUST) in finalizing plans for ECLWM's establishment at NPUST. The ECLWM is designed for showcasing U.S. waste management equipment and providing training for the best available and most appropriate technology to reduce pollution from livestock-raising operations in Asia.

The ECLWM provides U.S. industry a unique opportunity to showcase its equipment to Asian buyers. In addition, the waste management system that the US-AEP led Technical Team designed will have extensive market applications to the U.S. swine-raising industry. Therefore, U.S. industry offered to donate equipment, valued at approximately $800,000, to the center.

The exchange brought about two key results in line with US-AEP's Strategic Objective of *increasing investment in environmental technologies*: first, the Asian delegates endorsed the ECLWM and agreed in principle to support its operations as much as they could via their national hog raising associations, government extension agencies etc., and second, they agreed that they would welcome the opportunity to receive training at the center once it is up and running in early 1999.

Intermediate Result 1.6: Increased Transfer of U.S. Environmental Experience, Practice and Technology (CTEM)

IAEC Industries - Air Pollution Equipment: EEP Log# 422

This EBE resulted in a distribution-agent agreement between an Indian and U.S. company promoting the *increased transfer of U.S. environmental experience, practice and technology* contributing to the *increasing investment in environmental technologies*.

Following a trade lead circulated by US-AEP's Chennai representative through ETNA, IAEC Industries Madras Limited (Chennai, India) met with CECO Filters, Inc. (Conshohocken, PA) through this EEP EBE. The August 1997 meetings identified the required conditions for selling CECO's air pollution control equipment in India. Prospective pollution control technologies were: 1) filters for control of emissions from tank venting, grinding, incineration, and gear boxes; 2) high performance filter media for bag houses (used in carbon black manufacturing, metal smelting, lime and cement kiln operation, waste incineration); and 3) systems engineering and facility management services to improve pollution prevention and productivity.

IAEC's director also participated in a week-long CECO training session. The training concentrated on corporate, sales, and market strategies for introducing CECO products into the Indian market. Training was accompanied by site visits to view first-hand the engineering

and technology in industrial applications. Upon completion of this EBE, IAEC drafted a business plan to integrate CEO technologies into their current product mix of pollution control equipment and environmental protection systems.

Following the exchange, IAEC has developed a marketing and sales team that will promote CECO Filters, Inc.'s product line in southern India. This Distributor-Agent agreement works on a commission basis and expected sales are $200,000 in the first 18 months. IAEC has built shipping vessels that are currently being inspected by CEO for the shipment of CEO products.

Intermediate Result 2.1: "Privatization" Concepts Established

Financing for Municipal Environmental Infrastructure Project Course: EEP Log #456

From October 27 - 31, 1997, an EEP technical exchange program conducted by Research Triangle Institute (RTI) exposed Asian participants to the various options for selecting appropriate financing for private environmental infrastructure projects. The technical exchange recognized that financing infrastructure projects in Asia depends on a partnership between local governments and the private sector. Promoting privatization is one way to *increase investment in environmental technologies* (SO1). The course focused on the tools, techniques, and methodologies that local governments can use to establish these partnerships. Examples were drawn from Thailand, the Philippines, and Indonesia. Participants learned how to apply the methods they learned about by completing a case study as a group exercise. They also presented action plans on how they will apply methods learned once they return to their jobs.

Twenty-three participants from Thailand and the Philippines attended the course at Pattaya Beach, Thailand. A one-day site visit was made to the General Environmental Conservation Co. (GENCO). GENCO signed a Memorandum of Understanding (MOU) with the Thai Ministry of Industry to meet industry's need for world-class environmental services in managing the transport, recycling, and disposal of chemical waste. The Ministry of Industry has a 25% equity interest in GENCO which is financed through industrial users' payment for services.

After the course was completed the local course sponsor Kenan Institute of Asia (KIA) and US-AEP's Bangkok Technology Representative sent letters to the participants urging them to make use of the various U.S. environmental services available and reviewed participant actions plans. KIA and the Technology Representative also identified opportunities to involve U.S. environmental services in participants' future efforts. In addition, US-AEP Bangkok and KIA agreed to coordinate assistance where municipal authorities were faced with problems created by partial central government financing -- either insufficient funds for construction, or the lack of any apparent revenue stream or technical expertise for operations and maintenance and training. Their hope is that a team of U.S. companies, consultants, finance companies, and operators will be involved in finding solutions.

Intermediate Result 2.2: Increased Transfer of U.S. Environmental Experience, Practice and Technology (Urban Infrastructure)

Varanasi - Advanced Integrated Waste Water Pond System: EEP Logs # 250 and 372

Strategically grouped EEP EBEs successfully promoted an *increased transfer of U.S. environmental experience, practice and technology* for urban infrastructure contributing to *increasing investment in environmental technologies* (SO1) in India.

Dr. James Kichner of UC Berkeley traveled to India in January 1997 on an EBE. Dr. Kichner evaluated potential geomorphological alterations of the Ganges River Channel by installing Oswald Green's (Berkeley, CA) advanced integrated waste water pond system (AIWPS). Oswald Green had proposed using AIWPS technology to treat 300 mld of sewage from Varanasi city on a daily basis. Kichner's expert evaluation favored Oswald Green's AIWPS technology. Following Kichner's evaluation, Oswald-Green was short-listed as a technology provider.

A second EEP EBE took place in August 1997. This time an Indian delegation comprised of various stakeholders visited the U.S. to further explore Oswald-Green's AIWPS. The U.S.-based EBE allowed Indian delegates to visit the Environmental Engineering and Health Sciences Laboratory at UC Berkeley. Technical sessions focused upon sustainable wastewater management strategies and technologies, using the Varanasi project as an example. Technical visits included the research scale model AIWPS facility located near the University's engineering field station and several municipal and industrial AIWPS facilities in the San Francisco Bay area.

Following the second EBE, the National Rivers Conservation Directorate of the Indian Ministry of Environment and Forests recommended the Oswald Green proposal to the Government of India (GOI). The GOI approved the Oswald Green proposal. Design and engineering fees have an expected value of $800,000 - $1,000,000. Bechtel will build the interceptor for the wastewater treatment system. Oswald Green will also provide supervision during the construction and assist with operator training.

Strategic Objective 2: Increasing Commitment to Corporate Environmental Management

International standards can have significant ramifications for the export-oriented Asian economies. One set of international standards currently under development, the ISO 14000 series, sets criteria for environmental management systems (EMS). Asian governments as well as the industries themselves want to be sure to stay abreast of these evolving international environmental standards.
In 1997, EEP designed EBEs for delegations from India, Indonesia and the Philippines to promote US-AEP's second strategic objective, *"increasing commitment to corporate*

Environmental Management" for the CTEM component. A brief description of each exchange and known outcomes is presented below:

Bureau of Product Standards of the Philippines: EEP Log #277

In June 1997, representatives from Philippine government and industry participated in an EBE initiated by the participants (working with the US-AEP Field Director in Manila). This visit familiarized the participants with the U.S. experience with ISO 14000, with an emphasis on the areas of Consumer and Environmental Protection (Phase I), ISO 14000 Accreditation, Promotion, and Certification (Phase II), and Industry Experience (Phase III). Mr. Jesus L. Motoomull, Director, Bureau of Product Standards (BPS), attended all three phases of the exchange, while the other participants attended those phases of most interest to them. CTEM met with the participants during the EBE to determine how US-AEP could best work with the Philippine government to assist their efforts to develop BPS's ISO 14000 capabilities and to promote ISO 14000 to Philippine industries.

Due to the exchange, the Philippine government is now better able to promote ISO 14000 in the Philippines. The BPS has prepared an EMS accreditation document that will undergo international review, and it is simultaneously working to educate Philippine industry of the requirements and potential benefits of the standard.

Bureau of Indian Standards: EEP Log #306

The Indian government is working to promote ISO 14000 in India by developing the capabilities of its agencies to act as internationally-recognized accreditation and certification bodies. The USAID Mission/India and the participants, Mr. P.S. Das, Additional Director General, Bureau of Indian Standards (BIS); Mr. S. Mazumder, Joint Director (Chemicals), BIS; and Mr. R.T. Pandey, Director, Ministry of Civil Supplies, Consumer Affairs, & Public Distribution initiated this EEP EBE to facilitate the GOI's objectives. From June 2-21, 1997, three government officials met with key U.S. organizations for ISO 14001, EMS, to help them develop India's EMS documentation. Their meetings focused on how ISO 14001 accreditation and certification is done in the U.S.. CTEM met with the participants while they were in Washington, DC to assess the status of ISO 14000 in India and determine how US-AEP could best work with the Indian government to promote ISO 14000 to Indian industry.

As a result of this exchange, the Quality Council of India (QCI) and BIS have gained the information they need to develop their own ISO 14001 accreditation and certification documentation that should be acceptable for international recognition. US-AEP continues to work with QCI and BIS to assist them in their efforts to pass the international peer review process to have their documents officially accepted at the international level.

ISO 14000 Indonesian Study Tour: Log #449

Since its introduction to Indonesia in 1995, ISO 14000 has been incorporated into the long-term goals of both government agencies and private industry. Indonesia expects the ISO 14000 series to play an increasingly important role in the development of the global market. As the environmental regulatory agency for an export-driven economy, BAPEDAL is actively taking steps to insure that a framework supporting the design, implementation and maintenance of ISO 14000 systems is in place as they expect the number of companies seeking certification to continue to rise. However, Indonesia now faces some obstacles in preparing for the implementation of these environmental systems.

EEP designed an EBE for an Indonesian delegation which included representatives from BAPEDAL, the Indonesian Standardization Council (DSN), Department of Forestry, PT Sucofindo, PT Surveyor Indonesia, ELNUSA (the state-owned oil company) and PT Rayon (a pulp and paper company). The Indonesian delegation visited the U.S. in December 1997 to learn about ISO 14000 accreditation, certification, and standardization processes and to build their information-sharing capacity.

Following the exchange, PT Surveyor Indonesia and BAPEDAL developed a two-day workshop on "Indonesian Environmental Legislation and its Implementation" aimed at ISO 14000 certification bodies and environmental consulting firms who use environmental regulation as the foundation upon which to build an EMS.

Intermediate Result 1.2: Voluntary Standards Covering an Increasing Percentage of Industry or GDP

Another important US-AEP goal is promoting voluntary business standards (VBS) in specific industries throughout Asia. In 1997, US-AEP's CTEM component promoted the Responsible Care VBS system in the chemical industry. EEP actively worked with US-AEP's CTEM Component to design the following EBEs, contributing to US-AEP's overall efforts. Brief descriptions and known results are presented below.

Responsible Care Workshops in Indonesia and Sri Lanka: EEP Log #462

EEP worked with CTEM to identify a U.S. expert in Responsible Care (RC) to conduct two two-day workshops in Indonesia and Sri Lanka in October 1997. In Indonesia, the KN-RCI co-sponsored the workshop; and in Sri Lanka, the co-sponsor was the Ceylon Chamber of Commerce. The U.S. expert, Mr. Stan Szymanski from OxyChem, is a member of Chemical Manufacturers Association's (CMA) International Affairs Evaluation Committee for Certification. Topics presented at the workshops included RC's codes of management, the benefits of RC, and case studies explaining to companies "what's in it for me?"

CTEM considers both the Indonesia and Sri Lanka seminars milestone events. The Indonesia seminar helped launch the RC initiative in Indonesia. The chemical industry there considered the event a major breakthrough after four years of discussions. The seminar created interest from other ICIC members and as a result more companies signed onto the RC program. KN-RCI is now working towards completing the requirements for certification.

In Sri Lanka, the event raised the awareness and concern of the Ceylon Chamber of Commerce on RC. The seminar resulted in a Chamber committed to advance the RC Partnership Program. The situation in Sri Lanka is unique. There is no chemical industry; so the RC program is not applicable. Instead, CTEM is promoting the adoption of the RC ethic in allied industries. The Chamber committed to start work designing Material Safety Data Sheets (MSDS) for allied chemical industries. The RC seminar introduced the MSDS to the Chamber.

Korean Petrochemical Industry Association Responsible Care Seminar: EEP Log #480

Initiated by the US-AEP CTEM component, this EBE continued promoting VBS in chemical manufacturing by championing the RC model in Korea. The KPIA is a strong local champion for voluntary environmental standards in the Korean chemical industry. KPIA agreed to sponsor a RC seminar and requested that US-AEP provide a U.S. expert to make a presentation.

EEP staff worked with the U.S. CMA to identify a candidate with extensive RC experience in the United States and in the steps needed for RC's implementation. Mr. Fred Parady, EHS Manager of OCI Wyoming, L.P., traveled to Korea in November 1997 to make the presentation. The seminar was attended by approximately 150 participants, including: EHS managers, government officials, NGO representatives, and journalists. The presentation was well received and provided a valuable opportunity to encourage the Korean chemical industry to further its environmental activities. In follow-on meetings with local chemical manufacturers and regulators, Mr. Parady emphasized the importance of engaging wider sectors of government and industry in RC activities, and promoted increased public participation in potential KPIA efforts to green the industry.

Strategic Objective 3: Increasing Public Policy Concern for Industrial Environmental Performance

Greening of Industry Network Introduced to Key Asian Policy Makers: EEP Log #468

EEP supported US-AEP's Policy Component through an EBE that brought 13 leading Asian policy makers from six countries (India, Indonesia, Malaysia, Philippines, Singapore and Thailand) to the Greening of Industry Network (GIN) November 1997 annual conference. The substantive industrial and environmental policy debates at the GIN Conference impressed the Asian delegates. For their part, the Asian delegates were instrumental in providing their fellow conference delegates from the U.S. and Europe with a deeper understanding of the current political and economic realities in Asia.

The exchange brought about two key results in line with US-AEP's *increasing public policy concern for industrial environmental management* (SO3): first, the Asia delegation left the GIN Conference with a real interest in seeing a GIN center established in Asia in 1998; and second, key members of the delegation committed themselves to working on Policy Framing Papers with the US-AEP Policy Team and members of the GIN. These papers will be influential is spreading the message of integrated environmental and industrial planning to Asian policy making circles.

Intermediate Result 1.1: Increased Business Reporting, Disclosure and Accountability

Industry Self-Monitoring and Disclosure Technical Exchange: EEP Log #444

Working with Jellinek, Schwartz & Connolly, Inc. (JSC) in Rosslyn, VA and US-AEP's Policy Group, EEP helped design an October 1997 technical exchange program that explored the subject of industry self-monitoring and disclosure. The main purpose of this exchange was to provide government regulators with the information and tools necessary to design cost-effective self-monitoring and disclosure programs suitable to their own countries.

Twelve participants from five countries (Bangladesh, Hong Kong, Indonesia, Philippines and Thailand) attended the five-day program which examined U.S. mandated programs such as the Toxic Release Inventory and the Emergency Planning and Community Right to Know Act. The stakeholder role and the methods of assuring quality and accuracy of data was discussed. Presentations were given by representatives from the private sector including: JSC, CMA, International Technology Cooperation, Eastman Chemical, Ropes & Gray. The U.S. Environmental Protection Agency, and two NGOs (the Unison Institute and Hampshire Research) also participated.

US-AEP's Policy Group participated in this exchange in an effort to establish relationships for future Policy Group activities. Anticipated outcomes from this program include implementing policies and practices which will encourage disclosure of environmental data, as well as increasing the accountability of industry to government and the community in each of the participants home countries.

Intermediate Result 1.3: "Greening the Supplier Chain" Concepts Established

Green Design Workshop: EEP Log #415

Working in close collaboration with CTEM, EEP helped design and implement a technical exchange promoting green design for the textile industry which took place in September 1997 in Hong Kong. The activity was cosponsored by the Institute of Textiles and Clothing of the Hong Kong Polytechnic University and by US-AEP. The focus of the workshop was on greening the supplier chain, green-product development and costs, green product process options, international standards, and eco-labeling. The program included an introduction to

innovative textiles technologies and local site visits to the Hong Kong Productivity Council and the Hong Kong Trade Development Council.

The workshop was aimed at high-level designers, product developers, and merchandisers working for global and multinational companies, as well as Asian textiles educators. Attendants came from Hong Kong, Indonesia, the Philippines, and Thailand, and the presentations were made by U.S. and Hong Kong experts who focused on Asian circumstances and approached green design issues from a designer's product development perspective. Lecturers also discussed lessons learned from hands-on experience in developing green design initiative with companies like Esprit and Patagonia.

This exchange worked toward greening the supplier chain (IR 1.3) in the textiles industry by promoting the concept to the designers and the decision-makers that can push their suppliers toward cleaner production. As the leading textile design and product development center for Asia, Hong Kong houses many of the headquarters for the region's leading textile multinationals and apparel manufacturing operations. US-AEP's collaboration with the Hong Kong Polytechnic University was crucial in supporting the establishment of a local and regional champion for greening the supplier chain in the textiles industry.

Intermediate Result 1.4: Financial Institutions: Environmental Due Diligence Adopted

RTP and Bank of Baroda: EEP Log #494

Mr. Sunil Hangal, Senior Scientist at RTP Environmental Associates (Green Brook, NJ), a U.S. environmental consulting firm with extensive experience in environmental due diligence and environmental risk analysis, traveled to India in early December 1997 on an EEP EBE to cement a business relationship with the Bank of Baroda. This EBE opportunity rose from a trade lead from the US-AEP India Technical Representative's Office. As a result of the exchange, RTP signed an MOU with the Bank of Baroda for RTP to provide consulting services on establishing an environmental due diligence unit at the Bank of Baroda. Specifically, RTP will: 1) train the Bank of Baroda's staff on U.S. hazardous waste management so the Bank may comply with a $50 million World Bank loan to address hazardous waste management in India; and 2) assist the Bank of Baroda and its clients in identifying appropriate treatment technologies and other pollution reduction techniques.

This exchange is part of US-AEP's efforts to successfully promote the practice of environmental due diligence to Asian national and commercial banks. EEP has played an integral role in this effort through: 1) implementing fellowships for Asian bankers to meet with their U.S. counterparts in the financial sector that promote the advantages of assessing environmental risk in lending decisions; 2) holding four technical training courses in cooperation with the Bank of America for Asian bankers in the Philippines, Indonesia, Thailand and India; and 3) sending U.S. experts to assist Asian bankers on the finer details of getting a environmental due diligence unit up and running in their respective bank.

The RTP exchange is a good example of EEP supporting US-AEP's financial institution strategy. EEP and the Bank of America held the last of their four technical exchange seminars in Mumbai just prior to RTP's trip to India. The Bank of Baroda sent key personnel to the technical exchange, which helped create a positive business environment for RTP. Through such successful exchanges EEP helps the US-AEP achieve *environmental due diligence adopted* (IR1.4).

Strategic Objective 4: Increasing Evidence of Institutional, Professional and Information Linkages Between Asia and the United States

Toba Lake Fellowship: EEP Log #276

The initiative that became the Lake Toba - Lake Champlain Sister Lake Exchange began with a visit by David Barker of the Municipal Finance Project, (Lake Champlain Region, USA) to Jakarta. Mr. Barker was working on a project for Lake Toba (located in northern Sumatra) when he met Dr. Midian Siriat, Executive Chairman of the Toba Lake Heritage Foundation. In response to Dr. Siriat's expressed hope to establish a sister lake project, Mr. Barker contacted US-AEP and Ms. Alisa Borre, the Coordinator of the Lake Champlain Basin Program (LCBP), through Mary Boomgard, UIR/Indonesia and Vicky McDonald of USAID/Jakarta. Lake Champlain was chosen as a promising sister lake because LCBP had recently completed a strategic plan to manage the watershed, involving several government agencies and NGOs.

An EEP exchange promptly evolved under the joint sponsorship of the Vermont Agency of Natural Resources, the Lake Champlain Basin Program, the USAID-funded Municipal Finance Project, and US-AEP. In November 1996, Ms. Borre traveled to Jakarta and Northern Sumatra on a reconnaissance mission with the primary objectives of discussing (in her own words): "...prevailing U.S. institutional mechanisms for environmental management of inter-jurisdictional lakes, exemplified by Lake Champlain, and apply[ing] this understanding to refine the institutional and implementation arrangements for the Clean Toba Campaign..."; as well as to explore opportunities for a sustained relationship between the two watershed management groups to enable them to share information and approaches to environmental management.

The EBE generated sufficient interest between the two groups resulting in a signed letter of intent for establishing a sister lake exchange, securing further funding, and arranging for the signing of an MOU between the Governors of Sumatra and Vermont. In September 1997 success followed when a delegation from Sumatra, including the Governor, visited Vermont and signed an MOU with Lake Champlain. The Indonesian delegation obtained funding for this visit through a Council of State Government (CSG) grant to the Vermont Agency of Natural Resources, with matching funds provided by the U.S. project partners.

Ms. Borre's engagement with the US-AEP program also extended to the Laguna Lake Exchange (EEP Log #350) in July 1997. She hosted the Laguna Lake Development

Authority (LLDA) delegation from the Philippines and set up meetings for during their visit. Ms. Borre aspires to include the LLDA in the Sister Lake Exchange, as well as Lake Ohrid in Macedonia and Lake Geneva. She is eager to participate in any future US-AEP activities that pertain to her expertise, and is a vocal US-AEP champion.

Center for Environmental Technology Transfer and Demonstration (CETTAD) in Thailand: EEP Log #514

This EBE demonstrates how one successful exchange generates another. From 25 April - 17 July 1996, four participants from the Thai Pollution Control Department (PCD) came to the U.S. on an Environmental Technical Exchange (EEP Log #127) to receive training in hazardous wastes and dangerous chemicals tracking as a part of an MOU with the State of New Jersey to establish a joint center for environmental technology. Upon their return, the Thais laid the groundwork for the joint center and requested an EBE as a follow-up exchange that would officially establish the center.

In November 1997, five U.S. participants traveled to Bangkok, Thailand for the first, "kick-off" meeting of the Center for Environmental Technology Transfer and Demonstration (CETTAD), hosted by the PCD. Both exchanges, the first initiated by Mr. J.D. Murphy, Technical Representative for Thailand, and the second, initiated by the participants, supported i*ncreasing evidence of institutional, professional information linkages between Asia and the United States* (SO4).

At this meeting, the U.S. and Thai partners met over the course of seven days to write CETTAD's first- and five-year plans, and form the crucial linkages between the U.S. and Thai partners that will enable them to work together successfully. The U.S. participants now know the priority environmental issues facing Thailand, and have begun to identify those U.S. industries with appropriate sustainable technologies for transfer and demonstration. As a result of this exchange, U.S. and Thai experts are working closely together to promote U.S. advanced environmental technology to Thai industry, creating greater opportunities to transfer its U.S. environmental technology to Thailand.

Intermediate Result 1.5: Strengthened Industrial/Environmental Extension Systems

Strengthening Industrial/Environmental Extensions in the Sugar Processing Industry: EEP Log #478

Prompted by a request for an exchange to strengthen industrial/environmental extension from the Phillippines Sugar Millers Association (PSMA), the Environmental Export Council (EEC) brought fifteen selected sugar processing associations, extension organizations, and sugar

milling companies to attend an EEP-sponsored group-study tour. Participants visited Hawaii, Louisiana, and Florida in December 1997. The tour demonstrated proven extension models in the U.S. Sugar Processing Industry to existing extension organizations in Asia.

By showing how extension systems can raise the productivity and environmental performance of
sugar processing firms and open up networks of cooperation across the Pacific, this activity enhanced informational and training networks for the transfer of technology and know-how to Asian sugar processors.

Visits focused on three regional models for cooperation in extension activities. Each model involved the cooperation of the government, sugarcane processors, and universities. Participants appreciated the comprehensiveness of this tour, especially the exposure to the Louisiana extension system facilitated by LSU's Agricultural Center, the Louisiana Department of Economic Development, the American Sugar Cane League, F.C. Shaffer & Associates and the USDA Southern Agricultural Research Center. Strong private sector participation by the three largest U.S. millers -- U.S. Sugar Corp, Alexander & Baldwin, and Florida Crystals provided working examples of clean technology deployment and in-house extension.

The study tour has catalyzed a strong interest among sugar processing organizations to enhance their extension services through technical cooperation with local and U.S. research institutions and technology companies. Several Asian sugar organizations generated action plans which delineated future collaborative extension activities to be administered in their respective countries. The Philippine group drafted a private-industry driven plan for an environmental extension network to the sugar industry. Thailand's representative resolved to reinforce the master plan for Thailand's new Cane and Sugar Research Center with extra environmental activities. India's Renewable Energy and Development Agency and Dharaini Sugars established a dialogue with the Hawaiian Natural Energy Institute to share information on bagasse boiler efficiency, and with Westinghouse Corp. to investigate possibilities for the transfer of bio-gasification technology to India. The Indonesian Estates Training Institute drafted a plan which seeks more outside funding to build its training capacity in clean sugar processing.

All participants agreed that continued commitment and contact from the U.S. extension organizations, U.S. suppliers, and US-AEP would be important for the development of effective extension systems in Asia.

The Institute of International Education

The Institute of International Education (IIE) offers its clients over 75 years of experience in providing and managing training to help countries strengthen national institutions, build and maintain economic competitiveness, and tackle global problems in fields such as the environment and health. IIE administers some 250 international education programs annually for more than 200 sponsors. These sponsors include: U.S. and foreign government agencies, corporations, foundations, nongovernmental organizations and individuals. By developing and administering exchange and training programs -- both for Americans and individuals from abroad -- and providing technical assistance overseas, IIE helps develop the human resources needed to address the challenges facing the global community.

ATTACHMENT I

The following table is a breakdown of the number of EEP participants by country and EEP exchange type for 1997.

# OF EEP PARTICIPANTS by HOME COUNTRY & TYPE OF EXCHANGE in 1997				
Home/Host Country	*Fellowships*	*Environmental Business Exchanges*	*Technical Exchanges & Workshops*	*Total*
Bangladesh	0	1	3	**4**
Hong Kong	5	8	20	**33**
India	0	52	9	**61**
Indonesia	0	66	130	**196**
Korea	1	17	12	**30**
Macau	1	0	0	**1**
Malaysia	0	11	10	**21**
Mongolia	0	0	0	**0**
Nepal	0	1	0	**1**
Philippines	0	57	67	**124**
Singapore	0	13	4	**17**
Sri Lanka	0	9	0	**9**
Taiwan	0	14	11	**25**
Thailand	0	26	74	**100**
United States	0	63	3	**66**
Total	**7**	**338**	**343**	**688**

The following table shows the percentage of EEP events by type of exchange for 1997.

Type of EEP Exchange	Number of Completed Events in 1997	% of Events by Exchange Type in 1997
Environmental Fellowships	7	7%
Environmental Business Exchanges	86	83%
Environmental Technical Exchanges and Workshops	11	11%
Total	**104**	**100**

The following chart presents EEP events and participants by US-AEP SO/IR in 1997.

# of EEP Events and Participants by SO/IR in 1997		
US-AEP SO or IR	***# of EEP Events***	***# of People (Exchanges)***
SO 2	10	31
SO 3	5	63
SO 4	1	1
IR 1.1	7	22
IR 1.2	4	18
IR 1.3	1	20
IR 1.4	8	154
IR 1.5	11	93
IR 1.6	44	192
IR 2.1	3	29
IR 2.2	13	47
IR 3.1	1	11
IR 3.2	1	1
Other	3	6
Totals	**112***	**688**

*Note: Because 8 events had multiple IR's, total EEP events is 112 rather than 104.

ANNEX C

MANAGEMENT CONTRACT

USAID FY 2000 BUDGET REQUEST BY PROGRAM/COUNTRY

22-Sep-98
03:11 PM

Country/Program: US-AEP
Scenario: Base Level

S.O. # , Title					FY 2000													
	Approp. Acct	Bilateral/Field Support	Est. SO Pipeline End of FY 99	Estimated Total	Basic Education	Agric.	Other Growth	Pop	Child Survival	Infectious Diseases	HIV/AIDS	Other Health	Environ	D/G	Est. Expend. FY 00	Est. Total Cost life of SO	Future Cost (POST 2000)	Year of Final Oblig.
SO 1: Promote an Asian Clean Industrial Revolution																		
		Bilateral	12,362	16,800									16,800		17,000		0	XX
		Field Spt	530	1,200									1,200		1,200			
	Total		12,892	18,000	0		0	0	0		0	0	18,000	0	19,200	140,000	0	
		Bilateral		0													0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0													0	XX
		Field Spt		0													0	
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0									0				0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0													0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0													0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0														
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0														
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
Total Bilateral			12,362	16,800	0		0	0	0		0	0	16,800	0				
Total Field Support			530	1,200	0		0	0	0		0	0	1,200	0				
TOTAL PROGRAM			12,892	18,000	0		0	0	0		0	0	18,000	0			**0**	

FY 2000 Request Sector Totals -- DA	
Econ Growth	0
[Of which Microenterpris	[]
HCD	
PHN	0
Environment	18,000
[Of which Biodiversity]	[]
Democracy	0
Humanitarian	0

FY 2000 Request Sector Totals -- ESF	
Econ Growth	0
[Of which Microenterprise	[]
HCD	0
PHN	0
Environment	0
[Of which Biodiversity]	[]
Democracy	0
Humanitarian	0

FY 2001 Target Program Level	20,000
FY 2002 Target Program Level	20,000
FY 2003 Target Program Level	20,000

USAID FY 1999 Budget Request by Program/Country

22-Sep-98
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Country/Program: US-AEP
Scenario: Base Level

S.O. # , Title	Approp. Acct	Bilateral/Field Support	Est. SO Pipeline End of FY 98	Estimated Total	FY 1999 Basic Education	Agric.	Other Growth	Pop	Child Survival	Infectious Diseases	HIV/AIDS	Other Health	Environ	D/G	Est. Expend. FY 99	Est. Total Cost life of SO	Future Cost (POST 2000)	Year of Final Oblig.
SO 1: Promote an Asian Clean Industrial Revolution																		
		Bilateral	12,562	16,800									16,800		17,000		0	XX
		Field Spt	530	1,200									1,200		1,200			
	Total		13,092	18,000	0		0	0	0		0	0	18,000	0	19,200	140,000	0	
		Bilateral		0													0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0													0	XX
		Field Spt		0													0	
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0									0				0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0													0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0													0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0														
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0														
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
Total Bilateral			12,562	16,800	0		0	0	0		0	0	16,800	0				
Total Field Support			530	1,200	0		0	0	0		0	0	1,200	0				
TOTAL PROGRAM			13,092	18,000	0		0	0	0		0	0	18,000	0			**0**	

FY 1999 Request Sector Totals -- DA	
Econ Growth	0
[Of which Microenterpris	[]
HCD	0
PHN	0
Environment	18,000
[Of which Biodiversity]	[]
Democracy	0
Humanitarian	0

FY 1999 Request Sector Totals -- ESF	
Econ Growth	0
[Of which Microenterprise	[]
HCD	0
PHN	0
Environment	0
[Of which Biodiversity]	[]
Democracy	0
Humanitarian	0

FY 2001 Target Program Level	20,000
FY 2002 Target Program Level	20,000
FY 2003 Target Program Level	20,000

USAID FY 1998 Budget Request by Program/Country

22-Sep-98
03:11 PM

Country/Program: US-AEP
Scenario: Base Level

S.O. # , Title	Approp. Acct	Bilateral/Field Support	Est. SO Pipeline End of FY 97	Estimated Total	FY 1998 Basic Education	Agric.	Other Growth	Pop	Child Survival	Infectious Diseases	HIV/AIDS	Other Health	Environ	D/G	Est. Expend. FY 98	Est. Total Cost life of SO	Future Cost (POST 2000)	Year of Final Oblig.
SO 1: Promote an Asian Clean Industrial Revolution																		
		Bilateral	13,502	12,060									12,060		13,000		0	XX
		Field Spt	490	3,140									3,140		3,100			
	Total		13,992	15,200	0		0	0	0		0	0	15,200	0	16,100	140,000	0	
		Bilateral		0													0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0													0	XX
		Field Spt		0													0	
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0									0				0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0													0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0													0	XX
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0														
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
		Bilateral		0														
		Field Spt		0														
	Total		0	0	0		0	0	0		0	0	0	0			0	
Total Bilateral			13,502	12,060	0		0	0	0		0	0	12,060	0				
Total Field Support			490	3,140	0		0	0	0		0	0	3,140	0				
TOTAL PROGRAM			13,992	15,200	0		0	0	0		0	0	15,200	0			**0**	

FY 1998 Request Sector Totals -- DA	
Econ Growth	0
[Of which Microenterpris	[]
HCD	0
PHN	0
Environment	15,200
[Of which Biodiversity]	1,975
Democracy	0
Humanitarian	0

FY 1998 Request Sector Totals -- ESF	
Econ Growth	0
[Of which Microenterprise	[]
HCD	0
PHN	0
Environment	0
[Of which Biodiversity]	[]
Democracy	0
Humanitarian	0

FY 2001 Target Program Level	20,000
FY 2002 Target Program Level	20,000
FY 2003 Target Program Level	20,000

Workforce

us-aep FY 1998 On-Board Estimate	SO/SpO Staff SO 1	SO 2	SO 3	SO 4	SpO 1	SpO 2	SpO 3	Total SO/SpO Staff	Management Staff Org. Mgmt.	Con- troller	AMS/ EXO	Con- tract	Legal	All Other	Total Mgmt.	Grand Total Staff
U.S. Direct Hire	4							4							0	4
Other U.S. Citizens: 1/																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	2							2							0	2
FSN/TCN Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
FSN/TCN Non-Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	1							1							0	1
Total Staff Levels	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
TAACS								0							0	0
Fellows								0							0	0

1/ Excluding TAACS and Fellows

Workforce

us-aep FY 1999 Target On-Board Estimate	SO/SpO Staff							Total SO/SpO Staff	Management Staff						Total Mgmt.	Grand Total Staff
	SO 1	SO 2	SO 3	SO 4	SpO 1	SpO 2	SpO 3		Org. Mgmt.	Con-troller	AMS/ EXO	Con-tract	Legal	All Other		
U.S. Direct Hire	5							5							0	5
Other U.S. Citizens: 1/																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	2							2							0	2
FSN/TCN Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
FSN/TCN Non-Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	1							1							0	1
Total Staff Levels	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
TAACS								0							0	0
Fellows								0							0	0

1/ Excluding TAACS and Fellows

us-aep FY 1999 Request On-Board Estimate	SO/SpO Staff							Total SO/SpO Staff	Management Staff						Total Mgmt.	Grand Total Staff
	SO 1	SO 2	SO 3	SO 4	SpO 1	SpO 2	SpO 3		Org. Mgmt.	Con-troller	AMS/ EXO	Con-tract	Legal	All Other		
U.S. Direct Hire	5							5							0	5
Other U.S. Citizens: 1/																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	2							2							0	2
FSN/TCN Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
FSN/TCN Non-Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	1							1							0	1
Total Staff Levels	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
TAACS								0							0	0
Fellows								0							0	0

1/ Excluding TAACS and Fellows

us-aep FY 2000 Target On-Board Estimate	SO/SpO Staff SO 1	SO 2	SO 3	SO 4	SpO 1	SpO 2	SpO 3	Total SO/SpO Staff	Management Staff Org. Mgmt.	Con- troller	AMS/ EXO	Con- tract	Legal	All Other	Total Mgmt.	Grand Total Staff
U.S. Direct Hire	5							5							0	5
Other U.S. Citizens: 1/																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	2							2							0	2
FSN/TCN Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
FSN/TCN Non-Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	1							1							0	1
Total Staff Levels	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
TAACS								0							0	0
Fellows								0							0	0

1/ Excluding TAACS and Fellows

us-aep FY 2000 Request On-Board Estimate	SO/SpO Staff SO 1	SO 2	SO 3	SO 4	SpO 1	SpO 2	SpO 3	Total SO/SpO Staff	Management Staff Org. Mgmt.	Con- troller	AMS/ EXO	Con- tract	Legal	All Other	Total Mgmt.	Grand Total Staff
U.S. Direct Hire	5							5							0	5
Other U.S. Citizens: 1/																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	2							2							0	2
FSN/TCN Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
FSN/TCN Non-Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	1							1							0	1
Total Staff Levels	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
TAACS								0							0	0
Fellows								0							0	0

1/ Excluding TAACS and Fellows

us-aep FY 2001 On-Board Estimate	SO/SpO Staff SO 1	SO 2	SO 3	SO 4	SpO 1	SpO 2	SpO 3	Total SO/SpO Staff	Management Staff Org. Mgmt.	Con-troller	AMS/ EXO	Con-tract	Legal	All Other	Total Mgmt.	Grand Total Staff
U.S. Direct Hire	5							5							0	5
Other U.S. Citizens: 1/																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	2							2							0	2
FSN/TCN Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
FSN/TCN Non-Direct Hire:																
OE Internationally Recruited								0							0	0
OE Locally Recruited								0							0	0
Program	1							1							0	1
Total Staff Levels	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
TAACS								0							0	0
Fellows								0							0	0

1/ Excluding TAACS and Fellows

us-aep Summary On-Board Estimate	SO/SpO Staff SO 1	SO 2	SO 3	SO 4	SpO 1	SpO 2	SpO 3	Total SO/SpO Staff	Management Staff Org. Mgmt.	Con-troller	AMS/ EXO	Con-tract	Legal	All Other	Total Mgmt.	Grand Total Staff
FY 1998:																
U.S. Direct Hire	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
OE Internationally Recr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OE Locally Recruited	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total OE Funded Staf	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
Program Funded	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Total FY 1998	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
FY 1999 Target:																
U.S. Direct Hire	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
OE Internationally Recr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OE Locally Recruited	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total OE Funded Staf	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
Program Funded	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Total FY 1999 Target	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
FY 1999 Request:																
U.S. Direct Hire	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
OE Internationally Recr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OE Locally Recruited	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total OE Funded Staf	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
Program Funded	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Total FY 1999 Request	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
FY 2000 Target:																
U.S. Direct Hire	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
OE Internationally Recr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OE Locally Recruited	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total OE Funded Staf	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
Program Funded	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Total FY 2000 Target	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8

FY 2000 Request:																
U.S. Direct Hire	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
OE Internationally Recr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OE Locally Recruited	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total OE Funded Staf	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
Program Funded	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Total FY 2000 Request	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8

FY 2001 Estimate:																
U.S. Direct Hire	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
OE Internationally Recr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OE Locally Recruited	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total OE Funded Staf	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
Program Funded	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
Total FY 2000 Target	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8

MISSION :

USDH STAFFING REQUIREMENTS BY SKILL CODE

BACKSTOP (BS)	NO. OF USDH EMPLOYEES IN BACKSTOP FY 98	NO. OF USDH EMPLOYEES IN BACKSTOP FY 99	NO. OF USDH EMPLOYEES IN BACKSTOP FY 2000	NO. OF USDH EMPLOYEES IN BACKSTOP FY 2001
01SMG	1	1	1	1
02 Program Off.	1	1	1	1
03 EXO				
04 Controller				
05/06/07 Secretary	1	1	1	1
10 Agriculture.				
11Economics				
12 GDO				
12 Democracy				
14 Rural Dev.				
15 Food for Peace				
21 Private Ent.				
25 Engineering				
40 Environ				
50 Health/Pop.				
60 Education				
75 Physical Sci.				
85 Legal				
92 Commodity Mgt				
93 Contract Mgt				
94 PDO	1	1	1	1
95 IDI				
Other*		1	1	1
TOTAL	4	5	5	5

*please list occupations covered by other if there are any

GLOBAL FIELD SUPPORT

Objective Name	Field Support: Activity Title & Number	Priority *	Duration	Estimated Funding ($000)					
				FY 1998 Obligated by:		FY 1999 Obligated by:		FY 2000 Obligated by:	
				Operating Unit	Global Bureau	Operating Unit	Global Bureau	Operating Unit	Global Bureau
GRAND TOTAL.....									

* For Priorities use high, medium-high, medium, medium-low, low