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**USAID**  
**U.S.-ASIA ENVIRONMENTAL**  
**PARTNERSHIP PROGRAM**

**FINAL REPORT**  
**AUGUST 31, 2001**

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**CONTRACT No.: PCE-I-00-98-00013-00, TASK ORDER No.: 4**  
**CONTRACT DATES: SEPTEMBER 1, 2000 – JUNE 30, 2001**

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# **Fourth and Final Report**

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## **INDUSTRY AND URBAN PROGRAMS**

Contract #: PCE-I- 00-98-00013-00, SEGIR Task Order Number 4

Fourth and Final Report

Quarter 01 April 2001 to 30 June 2001



Submitted to:

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	PERIOD	

Contractor : **Louis Berger Group, Inc. (LBG)**  
Contract No. : **PCE-I-00-98-00013-00, SEGIR Task Order Number 4**  
Reporting period : **01 April 2001 to 30 June 2001**

## **A. NARRATIVE REPORT**

### **1. BACKGROUND**

The US Agency for International Development (USAID) has awarded the Task Order 4 in accordance with Article 1.2 of Subcontract No. B09001-0189-528961IN314 (Prime Contract No.: SEGIR IV, PCE-I-00-98-00013-00) by and between Booz, Allen & Hamilton Inc. located at 8283 Greensboro Drive, McLean, Virginia 22102 and Louis Berger Group, Inc. Located at 1819 H Street, N.W., Suite 900, Washington, D.C. 20006 for the performance of Technical Leadership Services and Project Management Services. LBG will execute these services on behalf of the USAID/SEGIR (United States Agency for International Development/Support for Economic Growth and Institutional Reform) Trade and Investment IQC to Asian industry, NGOs (Non Government Organization), and Government institutions. The Contract Period is from September 1, 2000 to June 30, 2001.

The Contracts Office Technical Representative (COTR) is Mr. Jeremy Hagger.

### **2. EXPECTED RESULTS**

The Contract makes a provision for 1,299 person days of professional services to be provided by the Contractor over the period of the contract. Under this task order, the Contractor will perform work that will contribute to the SEGIR (Support for Economic Growth and Institutional Reform) objective. In pursuit of this goal, the Contractor will provide the following outputs:

1. Core research on priority technical, policy and strategic issues
2. Information dissemination,
3. Customized strategic and tactical development approaches
4. Technical Advice and implementation support to US-AEP offices and staff as well as USAID ANE bureau and field missions
5. Train host country decision makers and technical personnel, and
6. Provide long-term, in-country coordination through field operations.

The Contractor is expected to provide services in the following three Contract task areas:

*1. Market-Based Clean Technology and Environmental Management Programs (Technical Leadership): LBG will help USAID, and the specified target countries, USAID bi-lateral Missions, and other organizations as required to evaluate environmental needs and how they affect the economic development, and develop recommendations for making them more effective.*

2. *Urban-Based Environmental Management Program (Technical Leadership Services)*: The goal is to improve urban environmental management in Asian cities to attract increased investment and trade in US-AEP targeted countries. Technical interventions are: conduct assessments; design new development concepts and approaches; evaluate and monitor current US-AEP related work plan designs; information dissemination, partnership building.

3. *Project Management Services*: LBG will provide in-country technical services as required in at least India, Indonesia, and the Philippines. The Contractor is responsible for project management and Contract administration, which will be implemented in coordination with US-AEP field offices for support to the maximum extent possible.

### **3.1 CURRENT CORE ACTIVITIES**

The Contractor will perform Technical Leadership Services and Project Management Services as described in the Scope of Work. Technical Leadership Services will be performed in each of the three task areas accompanied by Project Management Services. The Contractor shall help USAID, and the specified target countries, USAID bilateral Missions, and other organizations as required to evaluate environmental needs and how they affect the economic development, and develop recommendations for making them more effective. All tasks will be implemented in coordination with the overall US-AEP program and with the US-AEP Secretariat.

#### **3.11 Market-based clean Technology and Environmental Management**

*Goal:* Build public/private partnerships, and increase industrial competitiveness to sustain economic growth and reduce barriers to trade in US-AEP target countries.

*Interventions:* Conduct assessments; design of new development concepts and approaches; evaluation of current US-AEP related programs; provide technical leadership and technical development approaches; provide US-AEP related work plan designs; information dissemination, partnership building.

#### **TASKS PERFORMED**

During this quarter, the US-AEP/LBG activities focused on 6 month indicator collection efforts both in Washington and the field, development of regional FY 2002 activities, developing new industry program areas and drafting urban and industry 6-month reports. In India, a workshop on Environmental Management Systems on Mass Transit System was organized and in the Philippines efforts on Green Government Procurement continued with DENR. Tasks performed are shown below.

## **INDUSTRY AND URBAN PROGRAMS**

### **Industry and Urban 6 Month Indicator Collection Efforts**

- Had series of meetings with Secretariat members, EPA, PriceWaterhouse Coopers, Industry, Urban, and Policy PAGs on systems leading to 6 month data collection. Developed tools for data collection on Intermediate Results and Strategic Objectives. Followed up with the eleven countries. Developed memos, templates and samples to send to the country offices to collect industry and urban program performance monitoring information country tables.

### **Industry and Urban Regional Activities for FY 2002 Efforts**

- Drafted Memos for Peter Kimm, developed FY 2002 activity sheets, and spread sheets on Regional Activities. The memo provides guidance for partners in developing the regional activities.

### **Both PAGs 6 month reports**

- Completed 6 month Urban and Industry Reports.

### **US-AEP Semiannual Meeting in Vietnam**

- Louis Berger staff (Jeff Bowyer, Nick Shufro and Conchita Silva) traveled to Vietnam for the semiannual meeting held from April 23-28, 2001 Annual Meeting allowed Senior Commercial Officers, partners, and members of the Secretariat the opportunity to focus on the progress US-AEP has made in the region by sharing past accomplishments, and future directions and successes. At the Semi-Annual Meeting, an area of focus was the role US-AEP plays in facilitating trade and technology transfer between Asia and the United States, for the economic and environmental benefit of both. During the five-day period, certification training was provided by several international state trade development agencies (topics included client management skills, screening clients, counseling, assessing company's export readiness, export financing, international sales contracts, intellectual property rights, strategic alliances, and export regulations) to promote better collaboration and partnerships with the states. Additional training was conducted for field reps and DC staff on and preparing work plans. Finally, the meeting allowed US-AEP to reacquaint the field representatives with the latest ideas in US-AEP's urban, policy, industrial and regional programs.
- Developed new industry program areas:
  - Metrics - "what gets measured, gets managed" and how corporations should use environmental metrics to tie into financial metrics.
  - EMS - "what gets managed, leads to performance improvements" and how corporations should use EMS to tie into business systems including Quality Management Systems.

- Best Practices - "information not shared is energy wasted" and how corporations should highlight best practices in environmental and energy management to improve industrial environmental performance to meet US-AEP's goal to promote a clean revolution in Asia.
- GSC - "the best leveraging opportunity" and how to increase corporate and supplier profitability - especially if the savings are shared with suppliers.
- Energy Efficiency - the "money is in the bank" concept that is simple to implement because most people can relate easily to the basic concepts of energy efficiency (for instance, turning off lights to save money and save energy)

## **INDIA**

- Met with Tech Reps eastern, northern and western region for India industry program strategy. As an outcome, the draft strategy was prepared and sent to Manila/WDC for the Mid- Term Tech Rep meeting at Vietnam (copy of report enclosed).
- Mr. Mazumder attended and chaired the Technical Session -I of the workshop on Environmental Conditions and Air Quality in Industrial Estates, organized by Conserve and supported by USAEP
- Presentation was made on International Workshop on Environmental Management Systems (ISO 14001) at the workshop organized by Confederation of Indian Industry and USAID/CTI.
- Guidance and assistance provided to Tech Rep, Sri Lanka for organizing a Study tour on ISO 14000 to India.

## **PHILIPPINES**

- Met with the Team Philippines to review the Philippine workplan and budget.
- Met with the new officers of the DENR for a US-AEP briefing.
- Met with Dr. Somporn in Manila to discuss the Industry and Urban indicators of US-AEP specific to Thailand.
- Assisted the Office of Environmental Management (USAID/Phil) in nominating one or more U.S. companies that have demonstrated corporate excellence in their local operations. Dole Philippines has been identified as one of the nominees.
- Attended DENR's 1st Private Sector Consultation meeting. The meeting is to promote the private sector cooperation and investment in environment and natural resource development and management.

### **3.12 Urban-based Technology Management Programs**

*Goal: Improve urban environmental management in Asian cities to attract increased investment and trade in US-AEP targeted countries.*

Interventions: Conduct assessments; design new development concepts and approaches; evaluate and monitor current US-AEP related programs; provide technical leadership and technical development approaches; provide US-AEP related work plan designs; information dissemination, partnership building

#### **Mayors' Asia -Pacific Environmental Summit (MAPES)**

- On May 4-6, 2001 in Honolulu, US-AEP participated in the second MAPES, which brought together government officials, business representatives, and non-governmental organizations from the region to share information, best practices, and strategies to improve urban environmental management. Over 100 mayors or city managers and an approximately equal number of other city officials participated in the event. Major sponsors and coordinators of the event were the City of Honolulu, the Asian Development Bank, ICLEI, ICMA, and UNDP. Julie Haines, Jeff Bowyer, and Devon Rager played an active role to prepare US-AEP for the event and to facilitate the Summit sessions and the many side meetings during the Summit. Our role included:
  - participated in the Conference Planning Committee;
  - helped line up speakers and plan the sessions for the Urban Air Quality and Sustainable Energy track, which was managed by US-AEP;
  - prepared talking points for Peter Kimm for his opening plenary speech and his moderation of two sessions; and
  - facilitated the sponsorship of 24 Asian mayors and other officials (including a mix of fully and partially funded participants) from 8 countries: India, Indonesia, Korea, Malaysia, Philippines, Singapore, Thailand and Vietnam.
  - Participated in a number of side meetings, including discussions about US-AEP's possible role in Rio +10, the World Bank/ADB Clean Air Initiative, and in helping build the capacity of local government associations throughout Asia.

#### **Air and Waste Management Association's Urban Air Forum**

- On June 24-26, Jeff Bowyer participated in A&WMA's 3rd International Urban Environmental Infrastructure Forum, held in Orlando and titled Air Quality through Environmental Stewardship in the World's Megacities. Mr. Bowyer prepared a presentation, given by Jeremy Hagger, and a paper for the Forum. He participated in the roundtable discussions, giving the US-AEP's approach to improving air quality, and in a strategic meeting, which helped lay out possible future areas of collaboration between US-AEP, A&WMA, and the Association's Asian chapters. This discussion helped set the course of US-AEP's activities in the air sector in FY 2002. Mr. Bowyer also assisted US-AEP's involvement in the A&WMA Annual Conference, which was being conducted in conjunction with the Forum.

## **INDIA**

### **Environmental Management Systems for Mass Transit Systems - India**

- Subrata Mazumder met with the General Manager of Calcutta Metro Railway about organizing a workshop on EMS on Transit System, and, as a result, organized a three-day implementation workshop on Environmental Management System on Mass Transit System at Calcutta from 3-5 May, 2001. This was organized in association with Calcutta Metro Railway, who are receiving technical assistance from US-AEP to establish ISO 14001 to their system. US-AEP brought Mr. Ajay Singh, Chief, Capital Management Program (CPM) Group of New York City Transit Authority (NYCTA) who has experience in similar kind of activities while establishing ISO 14001 for New York Transit System. US-AEP through this activity is trying to establish linkages between NYCTA and Calcutta Metro for creating a NYCTA like model at Calcutta Metro for reducing environmental impact, and improving energy efficiency of a transit system.
- Mr. Mazumder also met with Member Secretary- Delhi Pollution Control Board, Special Secretary, Department of Transport, Govt. of Delhi and Chairman and Managing Director - Delhi Metro Rail Corporation for explaining the need of Environmental Management Systems for Transit system to improve overall environment effected by various modes of transportation system. Presentation was made before the Chairman, Managing Director and other top management of DMRC in this effect.
- Mr. Mazumder and Jeff Bowyer were also successful in planning a follow-up exchange for Calcutta Metro Railway and Delhi Metro Rail Corporation to New York City as an immediate follow-up to the successful meetings and workshop held in India.

## **PHILIPPINES**

### **Green Government Procurement - Philippines**

- LBG/Manila submitted an EEP request for one trainer from the US to assist the DENR in implementing their Action Plan. The activities in the Action Plan consist of the following:
- developing a handbook that will serve as a guide for integrating environmental consideration with DENR's procurement practices;
- develop and implement a supplier outreach program;
- and implement a pilot project to test the preparedness of DENR

### **3.13 Project Management Services**

The Contractor provided in-country technical services as required in at least India, Indonesia, and the Philippines. The Contractor was responsible for project management and Contract administration implemented in coordination with US-AEP activities. The following tasks were performed:

- Prepare monthly invoices for reimbursement;

- Process travel approval memos, country clearances;
- Draft Reports.
- Process travel approval memos, country clearances, and other logistical support for staff travel.
- Research Topical issues, definitions.
- Attended Partners and Senior Staff Meetings.
- Coordinated with Tech Reps on indicators and 6 month indicator report.
- Reviewed the Country responses to Indicator data and report.
- Coordinated Urban and Industry PAG meetings.
- Discussed R4 data reporting process.
- Provided logistical support for the Mayors Asia Pacific Environmental Summit.

#### 4.1 OTHERS

##### 4.11 Project Management

The Contract period is September 1 2000 to June 30, 2001. The task title is United States - Asia Environmental Partnership Program.

#### B. FINANCIAL INFORMATION

##### Total Expenses To Date in Dollars (\$)

Description	Budget 6/01/2000	Revised Ceiling Value, Mod. #2, May 1, 2001	Expense for Sept 1- March 31, 2000	Expenses for Fourth Qtr April 1- June 30, 2001	% Budget Expended	Remainin g Balance
Labor	603,353.32	614,709.94	587,770.50	26,940.53	100.00%	(1.09)
Travel	41,084.00	41,084.00	34,058.29	7,367.22	100.83%	(341.51)
Hotel	13,818.03	13,818.03	15,615.41	4,006.98	142.01%	(5,804.36)
M & IE	5,655.00	5,655.00	9,798.08	2,179.73	211.81%	(6,322.81)
Other Direct Cost	107,886.99	107,886.99	76,254.50	6,007.64	76.25%	25,624.85
<b>TOTAL</b>	<b>771,797.34</b>	<b>783,153.96</b>	<b>723,496.78</b>	<b>46,502.10</b>	<b>98.32%</b>	<b>13,155.08</b>
<b>TOTAL expenses to date</b>			<b>769,998.88</b>			

Through the end of the reporting period, LBG has spent US \$769,998.88 under the Contract. The remaining unexpended balance is US \$13,155.08 or 1.68% of the ceiling value (\$783,153.96).

##### Estimated Utilization of Contractor's Level of Effort (LOE)

For the Fourth Quarter, the Contractor provided an estimated total of 398.15 person-days of professional, core technical, field technical support, and country office support services. The remaining LOE balance is -1.44 person-days.

**Estimated levels of effort provided by the Contractor and its subcontractors are as follows:**

Year	Total LOE Per Contract	Expended LOE	Remaining LOE (person-months)
		LBG & Core Personnel	
	1393.65 person-days		
LOE use for Sept 1-Dec 31, 2000		507.16	-1.44
LOE use for the Quarter Jan 1-March 31, 2001		489.78	
LOE use for the Quarter April 1-June 30, 2001		398.15	
<b>TOTAL LOE to Date</b>		1,395.09	

**Estimated Travel**

The total number of days spent on travel for the Quarter is approximately 54 days and the total number of trips during the period was 10.

**B. SUMMARY OF PREVIOUS TASKS PERFORMED DURING THE CONTRACT PERIOD**

- Made preparations for presentation of the Industry Program for the Annual Meeting. The presentation addressed the following topics: previous industry program successes, beginning of a process and dialogue to create a cohesive and coordinated industry program, assumptions underlying the “new vision”, proposed new framework, observations on the country work plan, role of PAG, example of strategic direction and country strategy, next steps, and activity highlights.
- Completed analysis of the work plan for industry. The template defined the industry programs into three program areas, environmental protection, cleaner production, and sustainable practices. The country programs were then analyzed in terms of how they confirmed to these three program areas.
- Developing a marketing piece to illustrate the three pronged strategic focus of the Urban Programs, and examples of how these concepts look at an implementation stage.

- Completed Sustainable Industrial Production Report. This report was the basis for discussion to engage partners and develop pilot activities to promote sustainable industrial practices.
- New Investment Systems Scope of Work: Made revisions and distributed the second draft of the Terms of Reference (TOR) for the Study on New Investment Systems in East Asia and South East Asia.
- Completed Greening Supply Chain Study. The objective of the Greening Supply Chain (GSC) Evaluation is to document how CTEM's efforts have effected the environmental performance of partner companies in Asia.
- Urban Country Strategies were completed for the Philippines and Thailand.
- Industry Country Strategy for Singapore was completed.



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This concludes the Final Quarter (April 1 to June 31, 2001) Report for LBG on USAID Contract No. PCE-I-00-98-00013-00, Task Order 4 for the US-AEP. Questions should be directed to Julie Haines, Chief of Party, LBG and Managing Director, Industry/Urban Programs, US-Asia Environmental Partnership.

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**Annex 1:  
Urban Program Semi Annual  
Overview**

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## **URBAN PROGRAM ADVISORY GROUP**

### **SEMI-ANNUAL OVERVIEW AND GUIDANCE**

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The purpose of this document is to provide guidance to Partners and field staff on US-AEP urban programs for FY 2002 workplans, as well as to provide a template for such guidance for future years, where procedures for collection of US-AEP tracking information could be improved. As a basis for this guidance, an analysis of performance in FY 2000 is included. An analysis of progress to date in FY 2001 is forthcoming but will not be included in this document.

## **I. BACKGROUND**

### ***A. US-AEP Urban Strategy***

US-AEP programs and activities inform and influence decision-makers to establish priorities that will improve urban environmental management and resulting health conditions. US-AEP's urban program contributes to implementation of workable, sustainable improvements in urban environmental management by facilitating:

- *Improved urban policies and information flow* - strengthening of networks and NGOs that provide access to information by decision-makers about policies, management practices, and technology options,
- *Improved municipal technical and financial management systems* - building the capacity of local government units to manage urban environments, in part through sharing of environmental management tools and approaches, and
- *Increased local capacity to implement sustainable environmental improvements* - supporting environmental projects that have a direct impact on the environment and can serve as role models for achieving results.

At the same time, the Urban Program will seek to promote linkages with the Policy, Trade, and Industry Programs.

### ***B. Regional Environmental Indicators***

While we expect that the work of US-AEP alone will not measurably impact improved environmental conditions in Asia, especially as economic growth and population pressures continually add environmental strain, it is important to understand the context of the problems that the US-AEP strives to address. Information in this section is primarily drawn from the Asian Development Bank's Asian Environmental Outlook 2001.

*Urban Population Growth.* Between 1970 and 1997, Asia's urban population grew from 19 to 33 percent of the population. By the year 2015, Asia's urban population is projected to be 45% of the region's total, and is projected to grow to just over one-half of the total Asian population by 2025. Much of this growth will occur in megacities – cities with populations over 10 million. In 1994 the UN estimated that 9 of the world's 14 megacities were located in Asia. By 2020, the number is expected to rise to 18 out of 27.

*Environment and Health.* Urban air pollution exacts a heavy toll on human health and the quality of urban life. Bangladesh, India, Indonesia, and Nepal account for about 40 per cent of the global mortality in young children caused by pneumonia (WHO 1993). Every year 3-4 million people, most of them children, die each year of diarrhoeal disease linked to inadequate water supply, sanitation, and hygiene (John Hopkins University School of Public Health, 1998).

*Water Supply and Wastewater.* The percentage of urban population in Asia served with a household water connection of any kind is 93%, while 78% of the urban population has access to household latrines or sewage systems. The majority of wastewater in Asia's less developed countries is untreated prior to discharge in water bodies. Inadequate sanitation, industrial pollution, and run-off have caused levels of suspended solids in Asia's rivers to almost quadruple since the late 1970s. Average biochemical oxygen demand in Asia's rivers is 1.4 times the levels recommended by the OECD.

*Solid waste.* Solid waste collection varies between cities. For example, Bangkok's collection rate is 95% while Karachi's is 36%. Most cities collect 70 to 80% of solid waste and most of the waste is disposed in open dumps. Very few cities have sanitary landfills. Waste per capita is increasing steadily each year, such that by 2024, cities in Asia will be seeing an increase of threefold in their waste generation.

*Air pollution.* Urban air pollution, caused by consumption of coal-fired energy, rising automobile usage, traffic congestion, and poor automobile and road conditions, is one of the most urgent environmental problems facing East Asia. In the vast majority of Asian cities, transportation is the largest source of pollution. The number of cars in Asia is growing exponentially. In Manila and Delhi, for example, they have been doubling every seven years (ADB 1999). Air pollution levels in the region's large cities are among the highest in the world, producing serious human health impacts and the degradation of aquatic and terrestrial ecosystems. Twelve of the 15 cities in the world with the highest levels of particulate matter are located in Asia. In most of the region's megacities, air pollution levels exceed WHO guidelines by wide margins. The region's emissions of sulfur and nitrogen oxides in 2030 are projected to be 3 to 4 times their 1990 levels (UNEP 2000).

*Energy.* The energy efficiency of a nation typically is represented by the trend over time in the energy/real GDP (E/GDP) ratio over time. While some nations in Asia have decreasing E/GDP ratios, some have had rising E/GDP ratios. The generation, transmission, and distribution of electricity in Asia are plagued with inefficiencies and waste. Bangladesh, India, Philippines, Sri Lanka, and Viet Nam lose from 15 to 20 percent of their electricity in transmission and distribution.

### ***C. Urban Environmental Management Needs***

US-AEP supports and advocates an urban environmental management process managed at the local level that begins with assessing information about local environmental issues, then proceeds to setting goals and objectives, evaluating options and setting priorities for action through a participatory process, followed by planning and implementing sound projects. The needs of local managers include:

*Information.* An accurate and complete local information base, coupled with informed analysis of that data, is needed to achieve consensus on the problems and to be able to set priorities and alternatives and construct decisions (including equity issues, gender issues). It is also helpful to understand relevant solutions and issues faced by other similar cities in addressing their environmental issues.

*Adequate capacity for management of existing systems* Urban local bodies need people with the financial and technical capacity to operate, maintain, and manage existing services and infrastructure, and training activities for skills improvement for managing existing facilities.

*Local authority and capacity and resources for planning and project development.* Urban local bodies also need the authority and the technical and financial capacity and resources to design, develop and expand services as well as the capacity to operate and maintain new or expanded systems, either with their own employees or through contracts with the private sector. They can be most effective if they have tools to establish priorities and involve all stakeholders and if there is institutional and public political will for implementation.

US-AEP responds to these needs and empowers local bodies to use innovative, collaborative approaches to meeting urban environmental challenges.

## **II. OVERVIEW OF US-AEP PROGRESS IN ADVANCING IMPROVED URBAN ENVIRONMENTAL MANAGEMENT**

US-AEP progress in advancing improved urban environmental management can be gauged by indicators established as part of its performance monitoring plan and by anecdotal successes.

### ***A. Urban Indicators***

The one indicator which US-AEP established in April, 2000 to measure its overall results in numerical form was “The number of municipalities *engaged* in US-AEP supported improvements in environmental management.” “Municipalities” were defined as “urban jurisdictions including major cities and towns as well as separate jurisdictions in large metropolitan areas, such as the 17 jurisdictions that make up Metro Manila”, and “engaged” was defined as “actively involved in one or more US-AEP programs.”

This IR-level indicator was modified to read “number of local government units and public agencies *implementing* improved urban environmental practices and policies or implementing new or improved environmental infrastructure projects.” Additionally, four sub-IR indicators were established to monitor inputs and progress towards the overall goal. See the Annex for a summary of current US-AEP urban indicators, as well as highlighted program-wide indicators that are most directly related to US-AEP urban activities.

- 1.2.1a: “Number of new or strengthened NGOs/ associations/ networks established around urban environmental issues”
- 1.2.2a “Number of new or improved urban environmental practices and policies implemented by local government units and public agencies”
- 1.2.2b “Number of US-AEP assisted local government units, associations, and NGOs demonstrating progress along a financial scale.”
- 1.2.3a “Number of local projects implemented that result in the addition or improvement of environmental infrastructure or equipment.”

US-AEP does not gauge its urban environmental management results only by these numerical indicators. More important are the actual quality of the partnerships established and the real environmental improvements that result in the better environmental management on the part of national and local officials.

## B. FY 2000 Performance

<i>Old Indicator: Number of Municipalities Engaged (at least 2 times) in US-AEP Activities</i>					
<i>Fiscal Year</i>	<i>Planned</i>	<i>Actual</i>	<i>Increase</i>	<i>Breakdown of Increase</i>	
				<i>Country</i>	<i>Description</i>
2000		125			
2001	130	214	89		
			12	India	Medical and Solid Waste Management
			8	Indonesia	WET / WETTER / WISE
			2	Malaysia	Solid and hazardous waste management
			18	Taiwan	Municipal environmental regulations
			2	Hong Kong	Solid waste management and mass transport planning
			2	Philippines	Municipal pollution prevention case studies
			1	Bangladesh	Provincial water supply
			43	Thailand	Transparency and financing of environmental services
			1	Vietnam	City planning

This performance data, while easy to tabulate and sum, gives a good indication of the breadth of US-AEP urban activities, but does not give a good indication of the quality and impact of our programs. Note that performance data for Fiscal Year 2001 will be reported against the new indicators. Development of baseline data for those indicators and guidance on reporting against those indicators is in the process of development.

Notable success stories in FY 2000 include:

- In India, efforts of US-AEP have resulted in implementation of new or revised regulations in solid waste management, biomedical waste management, and vehicular pollution, among others, at both the state and national levels.
- In Thailand, the Philippines, Indonesia and Vietnam, US-AEP assistance has influenced the drafting and implementation of new laws and regulations to air quality, including phasing lead out of gasoline. These initiatives have also lead to an important role for US-AEP in the newly launched World Bank Institute led Clean Air Initiative for Asian Cities, and have been importantly linked to trade opportunities through the Air Technologies Conference to be held this June.
- In India, four new city managers associations were founded. These associations have the potential to play a vital role in dissemination of best practices, capacity-building, and advocacy for urban managers, but follow-up is necessary to ensure their continuity.
- In the Philippines, US-AEP assisted in strengthening the nascent Solid Waste Management Association of the Philippines (SWAPP) and facilitated capacity building for LGUs as well as technology transfer opportunities.

**C. FY 2001 Mid-year Performance.** The section presented below is the first attempt to provide both a comprehensive and detailed picture of what US-AEP’s Urban Program is accomplishing. As the data collection process is further refined, this picture will become clearer. Some of the current limitations in the most recent process include:

- US-AEP/Thailand, among the four largest country programs in Urban, has not yet reported;
- While the field offices gave a good effort for a first attempt, they did not provide enough information in the narratives to allow PAG 2 to check the numerical data for accuracy (some of this, however, was addressed in follow-up communication);
- There is still some uncertainty on the part of the field about how to record results numerically, something that must be addressed in order to set accurate baselines and determine realistic targets.

**Indicator 1.2a**

As the only I.R.-level indicator for the Urban Program, this indicator gives an indication of the geographic breadth of US-AEP’s urban work. The following five US-AEP countries reported that their programs assisted 97 local government units to *implement* improved urban environmental practices, policies and environmental infrastructure projects. Three activities – the Clean Cities Center project in the Philippines, solid waste management in India, and the WET project in Indonesia – account for 60 LGUs, or 62% of the total reported.

Indicators 1.2.2a and 1.2.3a (both sub-I.R. indicators) essentially measure the other side of the same coin as Indicator 1.2a,. While the unit of measurement for this indicator is “No. of local government units,” the two aforementioned sub-IR indicators measure number of improvements – the first in environmental management practices, the second in environmental infrastructure – in those LGUs. Thus, more detailed narratives of what actually *happened* in the LGUs were reported under the sub-IR indicators, and, hence, there is no narrative section under this Indicator.

**Reported mid-FY results for Indicator 1.2a**

<b>Country</b>	<b>No. of LGUs and local agencies</b>	<b>Highlights</b>
India	21	12 municipal corporations implementing improved solid waste management practices.
Indonesia	40	36 local water districts implemented WET recommendations to increase connections.
Philippines	34	13 municipalities made progress in implementing integrated solid waste management.
Sri Lanka	1	Improvements in solid and medical waste management and air quality data management in Colombo.
Vietnam	1	Seattle-Hai Phong partnership led to sharpening of Haiphong’s objectives in urban upgrading.
<b>Total</b>	97	

### **Indicator 1.2.1a**

Four countries reported strengthening a total of 53 NGOs, associations, and networks organized around urban environmental issues. This program area seems to be getting greater attention in the last year – and rightly so. City manager associations and media-based associations are a recent phenomena in Asia, and they will play an increasingly important role in building the capacities of their growing membership and spreading information about policies, management practices, and technology options. US-AEP is finding ways to strengthen associations and NGOs, as well as helping to build up networks between them.

#### **Reported mid-FY results for Indicator 1.2.1a**

<b>Country</b>	<b>No. of NGOs, associations, and networks</b>	<b>Highlights</b>
India	8	Strengthening of city managers in Gujarat and formation of four more in Maharashtra, Andhra Pradesh, Karnataka & Tamil Nadu.
Indonesia	41	Joint Committee for the Leaded Gasoline Phase-Out, a US-AEP grantee, strengthened capacity of over 30 local NGOs and CBOs to advocate on air quality issues in three regions.
Philippines	3	Coalition for Cleaner Fuels, multisectoral group that helped promote the move to unleaded gasoline, strengthened as a result of two workshops.
Sri Lanka	1	Multi-stakeholder group formed to help find a sustainable solution to improve the quality of lake water.
<b>Total</b>	<b>53</b>	

#### **India**

- Through three types of assistance – 1) technical assistance for statutory registration, annual plan development, streamlining the procedure; 2) professional staff support to initiate and implement programs; and 3) operational support through computers, books and periodicals – US-AEP helped strengthen the City Management Association of Gujarat and helped form four new associations.
- Work with Indian Environmental Association and WEF Chapter in Chennai to support workshops in Hyderabad and Bangalore dealing with treatment of waste stream from chemical, pharmaceutical, electronic and other industries.
- US-AEP/Chennai co-sponsored two workshops with IEA/WEF in Hyderabad and Bangalore. In the process, the Water Environment Federation in Chennai increased its knowledge about dealing with treatment of waste stream from chemical, pharmaceutical, electronic and other industries.
- With US-AEP assistance, the Society of Indian Automobile Manufacturers (SIAM) and the Society for Automotive Fitness & Environment (SAFE) are looking into privatizing the existing Inspection and Certification facility in Delhi.

#### **Indonesia**

- As part of the Women's Institutions for Local Development (WILD) project, 10 Local women's groups were identified and integrated into the planning and outreach programs of local water enterprises.
- The Joint Committee for the Leaded Gasoline Phase-Out, a US-AEP grantee, strengthened capacity of over 30 local NGOs and CBOs to advocate on air quality issues.

- The Indonesian Society of Sanitary and Environmental Engineers (IATPI) continues to publish its monthly magazine, which was launched with assistance from US-AEP for the first three issues.

#### Philippines

- A network of mayors from twelve cities was formed as part of the Clean Cities project. The project has brought mayors together to provide them with the necessary technical support to influence all existing industries within their jurisdiction.
- During a November workshop, a strategic framework for the clean air campaign was developed with the Partnership for Clean Air (formerly the Coalition for Cleaner Fuels).
- As a result of facilitating the Second National SWM Conference and Exhibit, the Solid Waste Association of the Philippines, a group supported by US-AEP, increased its membership to 199 LGUs, individuals and corporations. As a result, UNEP will fund a workshop requested by SWAPP on dumpsite rehabilitation and closure.

#### Sri Lanka

- US-AEP helped to organize a group of city managers, city medical officer, irrigation department and water quality experts to evaluate the status of the Kandy Lake and to find a sustainable solution to improve the lake water quality. Cleanflo, MN technology was also presented as an option.

#### **Upcoming Work under 1.2.1a.**

- Indonesia – The Water Treatment Operator Training/Certification (TOMCAT) project is approved and is about to start the contracting process. The program will offer the training arm of PERPAMSI, the Indonesian Water Supply Association, trainings on water treatment operator training/certification on regular basis. This activity should lead to the strengthened capacity of PERPAMSI to train and certificate water treatment operators.
- India – A US-AEP grant to the Center for Resource Education (awarded through USAID in FY 00 and implemented in FY 01) is helping to establish a network of NGOs to work with municipalities in improving the environment. CRE conducted six awareness workshops in various cities highlighting the role of NGOs in urban environmental improvement. This activity is expected to lead to the development of six NGO network forums in Hyderabad, Warangal, Kurnool, Vijawada, Tirupati and Visakhapattanam.
- Philippines – US-AEP will seek to assist the Solid Waste Association of the Philippines, perhaps through a NASDA grant, to develop a resource center to achieve the goal of SWAPP being an information-sharing network among LGUs to improve their technical capability on SWM.

#### **Indicator 1.2.2a**

The five countries that counted results under this indicator reported a total of 81 new or improved urban environmental practices and policies implemented by local government units and public agencies. This indicator measures what has long been viewed as the stalwart part of the Urban Program – sharing environmental management tools and approaches to build the capacity of local government units to manage their urban environments. About 65% of the success recorded in the first half of this fiscal year came in solid waste sector, but activities related to the air sector seem to be getting increased attention. Indonesia is still the only country achieving significant results in water/wastewater.

### Reported mid-FY results for Indicator 1.2.2a

Country	No. of urban practices/policies	Highlights
India	37	Improved solid waste management practices in 12 municipal corporations, including improved primary collection.
Indonesia	4	The WILD Project is assisting water enterprises to integrate the participation of women and women's groups.
Philippines	35	Working through SWAPP, US-AEP is assisting a number of municipalities to improve their solid waste management. A number of them have sourced funds to upgrade their facilities.
Sri Lanka	4	Participation in WasteExpo2000 influenced Colombo officials to make improvements in solid waste management.
Vietnam	1	Seattle-Hai Phong partnership leading to improvements in urban upgrading.
<b>Total</b>	<b>81</b>	

#### India

- A grant to CONSERVE through AID (awarded in FY 00 and implemented in FY 01) to work with schools in /around Delhi, helped generate awareness of school children about the benefits of vehicular inspection and maintenance in New Delhi.
- Twelve municipal corporations improved their solid waste management practices three ways: 1) improved primary collection, 2) development of a containerized system at the waste storage depots, and 3) addition of dumper placer system/container lifting devices.

#### Indonesia

- As part of the WILD project, three water enterprises adopted improved customer orientation through the integration of women and women's groups.
- Jakarta implemented activities related to the promotion of unleaded gasoline, such as TV talk shows, public debates, campaign literature, rallies, children's art contest, seminars, press conferences and newsletter publishing.

#### Philippines

- The twelve participating cities in the Clean Cities Center project obtained a city council resolution committing to the program and developed a workplan.
- Dipolog City is now finalizing its project proposal for a solid waste management system and drainage/waste water system, a step aided by ACEC's work on creditworthiness and privatization to complement the CDS strategy of the World Bank.
- Nine cities in the Philippines improved community knowledge and participation in the phase-out of leaded gasoline through a public outreach campaign.
- Seven LGUs in Laguna Province are working to increase awareness of solid waste management issues as a result of a CSG-funded exchange to Minnesota, part of which included developing next steps to establish an integrated solid waste management facility in the province.
- Six municipalities have taken various steps towards implementing an Integrated Solid Waste Management System since attending the Second National SWM Conference and Exhibit, put on by the Solid Waste Association of the Philippines.

### Sri Lanka

- Since officials from the city of Colombo observed solid waste management approaches and technologies at WastExpo2000, the city has 1) developed a scheme to privatize the disposal of MSW and 2) decided to pay a dumping fee to a private contractor for MSW disposal.
- US-AEP/Sri Lanka provided information and an exchange visit to a city official from Colombo on medical waste, contributing to the city's effort to develop a plan to manage medical waste.
- Colombo adopted USEPA air quality data management techniques after US-AEP trained the scientist in charge of the air quality data collection in the Greater Colombo Metropolitan Area.

### Vietnam

- Through four workshops conducted through the three month support by Seattle Planner Mr. Henry Sharpe, Haiphong sharpened its objectives in urban upgrading.

### **Upcoming Work under 1.2.2a**

- Indonesia – Much of the results of US-AEP/Indonesia's water and wastewater work will be available by the end of the fiscal year. New water enterprise senior managers will benefit from the upcoming Water Enterprise Functional Training (WEFT) activity. Provincial officers and private sector water/wastewater installations are in the process of establishing re-rating technology for their facilities. And an activity that will serve to improve the financial viability of water enterprises may happen later in the year.
- Philippines – Mayors that obtained a city council resolution and developed a workplan under the requirements of the Clean Cities Center project are now, to varying degrees, putting their workplans into action. This will involve mayors requiring new investors to consider cleaner production methods and to develop environmental management systems at the design phase of projects.
- India – The results of a couple of US-AEP's activities in water and wastewater improvement will soon be more apparent. In Uttar Pradesh, US-AEP is supporting the introduction of advanced integrated wastewater pond systems. In Tamil Nadu, the USTDA and the Tamil Nadu Pollution Control Board (TNPCB) recently signed an agreement to help the latter evaluate the technical and institutional alternatives available to develop industrial wastewater recycling and reuse for the tanneries in the Vellore region.
- Vietnam - US-AEP/Vietnam is supporting the USEPA to help implement a national public outreach campaign on issues related to the use of lead in gasoline. To facilitate this, US-AEP has developed a joint effort with Ford Motor, Caltex, and J. Walter Thompson to run workshops and carry out a nationwide public information campaign.

### **Indicator 1.2.3a**

Program activities that are measured by this indicator have typically been few, largely because US-AEP's Urban Program does not commonly provide the kind of direct assistance to local government units that help them see through actual improvements in their environmental infrastructure. This is largely due to the nature of the Urban Program, which has tended to cast its net wider rather than deeper in engaging local government officials. The correct balance between the two might be examined to determine if more direct assistance with a few select local government units might play a more prominent role in the Urban Program.

### Reported mid-FY results for Indicator 1.2.3a

Country	No. of infrastructure improvements	Highlights
Indonesia	36	See below.
Philippines	1	See below.
<b>Total</b>	37	

#### Indonesia

- As part of the Water Efficiency Team (WET) project, a June survey of the 54 assisted local water enterprises indicated that 36 of them recently implemented recommendations to increase connections.

#### Philippines

- A Drainage/wastewater system is under construction in San Fernando City, La Union following the release of a recent World Bank loan. According to the project manager, a US manufacturer is currently supplying the necessary equipment for the drainage system.

#### Upcoming work under 1.2.3a

- Philippines – A number of LGUs in the Philippines are poised to follow the lead of San Fernando City in making improvements to their SWM infrastructure. Seven local government units in Laguna Province hope to share an integrated solid waste management facility in the province. Meanwhile, a couple of municipalities that are members of SWAPP, including Naga City, are now at a point where they are submitting proposals to fund disposal projects.
- Indonesia – The training of waste/wastewater officials as part of the re-rating activity being undertaken by US-AEP/Indonesia could result in treatment plants with higher capacity.
- India – The program has a number of projects either ongoing or in the TBD stage that may lead to the adoption of new technologies in the air sector, especially related to vehicular emissions. These include: a demonstration of cleaner combustion technology/retrofitment in existing diesel engines in Delhi; a Delhi particulate matter source attribution activity with the EPA, the India Green Fleets Program, and improvement in inspection and maintenance camps being led by the Society of Indian Automotive Manufacturers.

#### Indicator 1.2.2b

This indicator is presented last because no countries reported results under it. US-AEP has not implemented activities that actively promote increased urban infrastructure financing, so it would stand to reason that countries would not have much to report under “Number of US-AEP assisted local government units, associations, and NGOs demonstrating progress along a financial scale.” However, in the coming months, the Urban Program will assess if and where this program area fits as part of the larger Urban Program strategy. That assessment will largely determine whether it makes sense to retain this indicator.

## C. FY 2002 Workplan Guidance

### 1. US-AEP Regional Initiatives and Priorities

US-AEP Urban Program sees the following as region-wide program priorities in FY 2002:

- Building increased *integration* of activities across program advisory groups, particularly synergies with the technology cooperation goals of US-AEP.
- Promoting the creation and strengthening of *municipal leagues* and other professional networks, including possible new cooperation with the U.S. League of Cities.
- Strengthening cooperation with region-wide donor initiatives, in particular the *Clean Air Initiative* and the *City Development Strategy*.
- Participating in the Asia-Pacific regional preparations for the *World Summit on Sustainable Development*, to be held September, 2002 in Johannesburg, South Africa.
- Conducting a number of regional events to promote preferred urban environmental practices. Possibilities include EMS for cities, infrastructure project finance, eco-industrial park planning, decision makers guidance on selecting environmental technologies, and city sustainability indicators.

### 2. Possible country opportunities to explore in FY 2002

In India our goals for FY 2002 are to build on the momentum of US-AEP work in the areas of:

- Strengthening city managers' associations which are already formed in six states and which are likely to be formed in three more states in FY 2001.
- Wastewater treatment, recycling and disposal.
- Solid waste management, bio-medical waste management.
- Air quality management with particular emphasis on vehicular emission control.
- Energy efficiency in municipal establishments.

While at the same time, pursuing activities in the following areas:

- Form city managers' association in four more states in FY 2002.
- In affiliation with ICMA, form umbrella city managers' association in FY 2002 having affiliation with all city managers' association of states in affiliation with ICMA.
- Appropriate US Technology identification for wastewater treatment and solid waste treatment, processing and disposal.
- Building stronger relationship with the World Bank and Asian Development Bank activities in the country.
- Cooperating with US AID efforts in response to earthquake in Gujarat.
- Supporting City Alliance efforts in City Development Strategy and Slum Upgradation Programs in India.
- Strengthening India's local water program, possibly in partnership with ICLEI.

In Indonesia our goals for FY 2002 are to build on the momentum of US-AEP work in the areas of:

- Sound financial management, customer orientation, involvement of women's groups in the water sector.

- Strengthening the IATPI professional association and other networks.
- Training of wastewater treatment plant operators.
- Air quality improvement activities.

While at the same time, pursuing activities in the following areas:

- Working closely with and leveraging resources of other donors, as well as cooperation with the Clean Air Initiative.
- Building stronger integration between technology cooperation and urban environmental management goals.

In the Philippines our goals for FY 2002 are to build on the momentum of US-AEP work in the areas of:

- Improving Philippine government, private sector and civil society capacity to manage air pollution, solid waste, hazardous waste and water pollution (in that order of priority).
- Working in collaboration with ADB and World Bank activities, including the City Development Strategies, to increase effectiveness.
- Actively engaging and strengthening the League of Cities, the League of Municipalities, the Water Environment Association of the Philippines, the Solid Waste Management Association of the Philippines, and the Partnership for Clean Air.
- Working to hasten the devolution of certain environmental regulatory functions to LGUs.

While at the same time, pursuing activities in the following areas:

- Exploring opportunities to enhance the capability of the Local Government Academy to conduct environmental programs.
- Exploring opportunities to strengthen NGOs, specifically those involved in improving solid waste management in riverside communities.
- Assisting LGUs in developing clean cities centers, bond financing,
- EMS and environmental benchmarking, in support of various initiatives and local interest.

In Thailand our goals for FY 2002 are to build on relationships established and programs initiated in the areas of:

- Strengthening environmental management *capacities of local governments* as the ongoing *decentralization* process grants them greater authority.
- Improving Thailand government, private sector and civil society capacity to manage air pollution, wastewater (O&M and cost recovery), and solid waste (in that order).
- Continuing the successful Green Fleets program, which has just received a formal endorsement in the form of an Executive Order by the Governor of Bangkok.
- Working to complement and support ADB and World Bank programs, including the latter's Environmental Institutions Reform Project.

While at the same time, pursuing activities in the following areas:

- Strengthening support of the Thai Local Self Government Association and the Municipal League of Thailand, especially focused on municipal budgeting and citizen participation.
- Developing and supporting partnerships between Thailand and U.S. states and cities, particularly Maryland, Portland, and Denver.
- Building off the successful Portland-Rayong Resource Cities Partnership, pursue another partnership (possibilities include Honolulu-Phuket and Denver-Bangkok).

- Supporting a municipal manager certification program involving ICMA, Chulalongkorn University, and the recently established College of Local Government Development within the King Propoclaou Institute (KPI).
- Developing a program with EPA on eco-industrial estates in partnership with the Industrial Estates Authority of Thailand.
- Focusing increased attention on secondary cities and less on Bangkok.

In Vietnam our goals for FY 2002 are to gradually broaden the program's activities by building on relationships established with national government agencies and programs initiated in the areas of:

- Air quality improvement.
- Partnership with other donors, particularly the World Bank
- Fostering dialogue on infrastructure finance options.
- Building stronger collaboration with the Asian Development Bank on urban and water projects. that are in the works.

### ***3. Planning for Sustainability, Maximum Impact, and Program Integration***

As new areas of engagement are explored, new activities are developed, and existing initiatives mature, careful consideration will be paid to the impact of each effort, its sustainability, and opportunities for synergies with the broad range of US-AEP objectives. Prioritization and support of new program initiatives / activities will be based on whether those activities address primary focus areas for the country, and also to what extent the activities include consideration of:

- steps to be taken towards institutional and program long-term sustainability
- a type of engagement with maximum resource leveraging / impact
- use of all relevant US-AEP tools and resources
- relationships to US-AEP policy, partnership, trade and energy objectives
- goals and outcomes

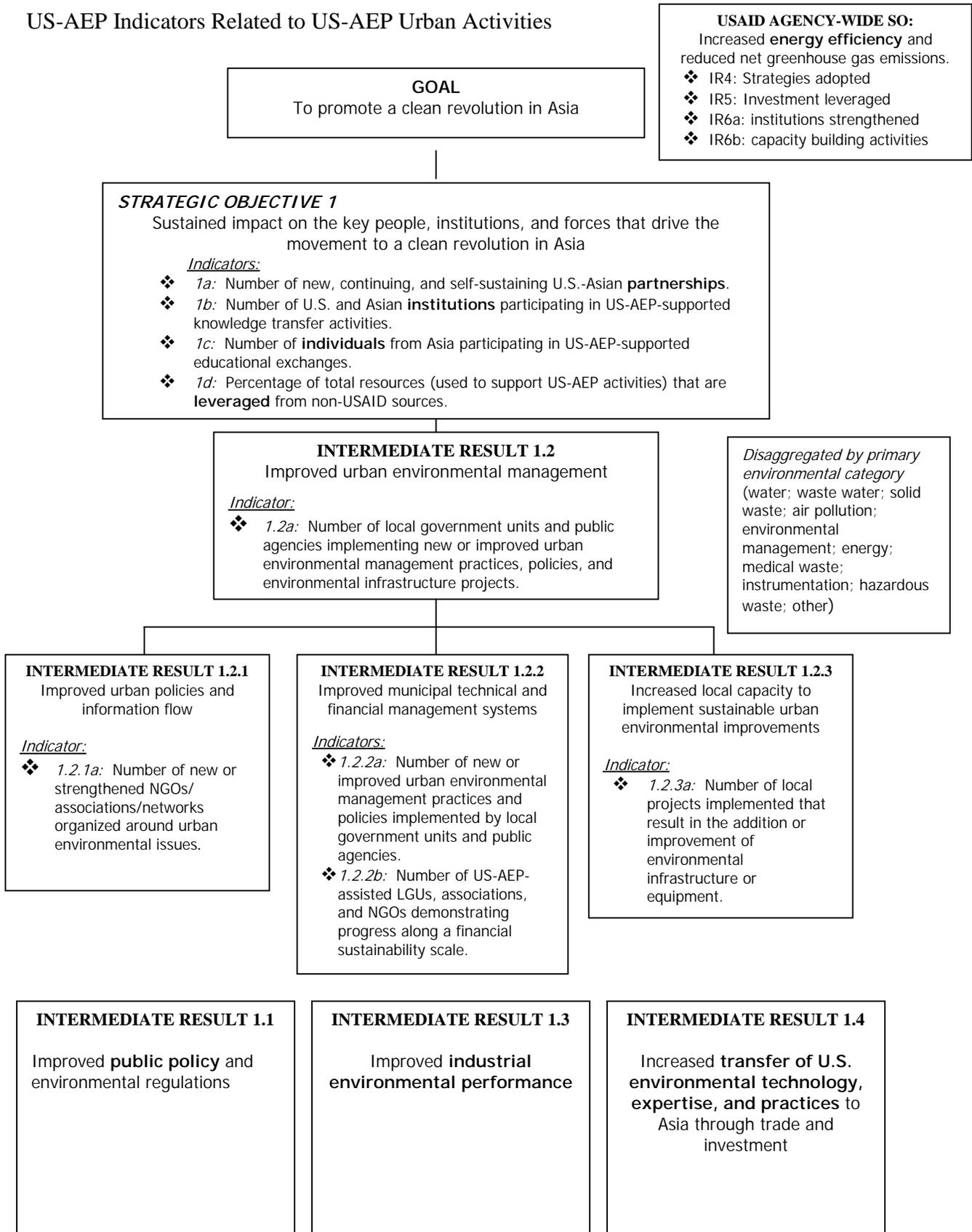
### ***4. Assistance in Development of Country and Regional Activities***

US-AEP Urban Unit staff and Washington partners will provide input and are available to assist in the development of country and regional activities for the FY 2002 work plans. An important aspect of this assistance has been the preparation of Urban Strategies, which are in the process of being completed (at the time of this draft) for Philippines, Thailand and India. This process has involved interaction between Washington and the field and has set the stage for development of particular activities for FY 2002.

It is expected that ideas for activities will be initiated both in the field and in Washington, and final activity priorities and details will be a result of input from both sides. Washington partners who are leading or promoting particular activities will provide necessary details on preliminary activity sheets to field country representatives. Activities of multiple partners will likely be combined together to form initiatives, with the field representatives taking the lead on developing initiative concepts, and the urban unit backstopping these efforts. Field representatives can also request specific support from Washington partners, with approval of the Secretariat Urban PAG leader.

## Annex I: US-AEP Urban Results Framework

### US-AEP Indicators Related to US-AEP Urban Activities



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**Annex 2:  
Industry Program Semi  
Annual Review**

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Prepared by: Louis Berger Group  
Date: July 13, 2001

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## **I) Background**

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Much of the work conducted at US-AEP is based on the assumption that "a very large percentage of the Asian industrial infrastructure in the next 20 years will consist of factories that are not on the ground today." A challenge noted in the introduction to the recent US-AEP New Industrial Investment Study is,

*How can we best influence these public and private investments in Asia, so that future industrial investments have positive environmental impacts? As industrial investment pours into Asia during the next 10 to 20 years, US-AEP will have a unique opportunity to affect decisions to the benefit of the environment. Our task, then, is to identify appropriate tools and points of intervention.*

The first purpose of this report is to provide a progress report on the Industry activities that have taken place in the first 6 months of the fiscal year. It is not intended to critique implementation of the FY 2001 Work Plan activities. However, the analysis may impact the implementation of Industry program activities for the remainder of the FY 2001 fiscal year and may also be used to inform the work planning process of the FY 2002 work plans. The second purpose is to provide FY 2002 work plan guidance.

## **II) The Industry Program Advisory Group (PAG)**

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A Program Advisory Group, led by Judith Barry, Secretariat supported by Louis Berger staff, was formed in the year 2000. The role of the Industry PAG is three-fold:

- a) Provide technical advice and assistance to the Country Program on structuring a comprehensive program against the Industry objective. This could mean a variety of things ranging from developing tools to generate a menu of country-specific activities, to visiting the country to engage stakeholders in developing a strategy and set of activities to developing and implementing an activity on behalf of the country program to simply undertaking some analysis on a specific topic.
- b) Ensure overall coordination across countries, PAGs, contractors and partners to ensure that information is shared and make sure where there are opportunities for collaboration and economies of scale, that US-AEP takes advantage of them.
- c) Track activities against the US-AEP Intermediate Results and Sub-Intermediate Results and ensure that the cumulative industry activities from the various countries results in progress against the indicators.

## **III) Evaluation of Intermediate Results**

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US-AEP staff and partners pursued a wide range of Industry initiatives during the first half of FY 2001. As part of implementing the results-oriented tracking, information on the Intermediate Results and Performance Indicators was collected and evaluated in June and July 2001. As stated in the Performance Monitoring Plan, the purpose of collecting this information was to 1) Monitor overall performance and take appropriate action based on data collected for performance indicators; and, 2) Assess the progress and performance (including expenditures) of implementing partners responsible for major program components.

Only ten of the eleven countries had Industry program activities planned for FY2001. As of July 13, 2001, nine of these ten US-AEP countries had completed the first 6-month reporting.

- A. Indicators.** To measure success in Industry initiatives, US-AEP currently uses an Intermediate Result (1.3) that measures “Improved industrial environmental performance”, and three more to measure the more specific Performance Indicators (1.3.1a, 1.3.2a, and 1.3.3a) “increased corporate commitment to cleaner production,” “outreach/advocacy mechanisms to increase dialogue established,” and “enabling environment for improved corporate environmental performance created”. The four specific indicators used, the results thus far in 2001 and upcoming work expected during FY2001 are described below.
- B. Results Thus Far in 2001.** US-AEP staff and partners pursued many diverse Industry initiatives during the first half of FY2001. Actual statistics on the successes are available but not included since not all responses to follow-up questions have been received.

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**Indicator 1.3a:** With nine of the ten countries reporting thus far, we count seven successes toward Indicator 1.3, “Number of US-AEP-assisted companies with production facilities in Asia recognized for corporate sustainability principles”.

These include:

**India –**

- *Ford Motor Company Conservation and Environmental Grants.* US-AEP submitted a list of NGO's to Ford India Limited as candidates to be considered for their grant program that took place on December 1, 2000. EXNORA, a Chennai-based NGO, won a grant.
- *Course on ISO 14000 for industries.* To assist 20 firms in Mumbai with improving corporate governance and environmental management, US-AEP and the US Environmental Resource Center (US-ERC) collaborated on a second EARA approved course on ISO 14000.
- *Greening Supply Chain Study.* US-AEP catalyzed and facilitated the adoption of the concept of GSC to one industry Champion and five suppliers. These are: Mafatlal Industries – Champion; Daval Fabrics, Atlas Dye-Chem Industries, Atmaram Maneklal Industries Limited, Indian Dyestuff Industries, and Clariant Industry - Suppliers.

**Philippines -**

- *Environmental Accounting at Confederation of Asia Pacific Accountants Convention.* As a result of the CSG Illinois environmental accounting project, PICPA continues to conduct the course on environmental accounting for accountants, engineers, and managers from large, medium and small companies in the Philippines. EMA is expected to help improve the company's ESH performance, promote its full integration into the business organization, and drive more environmental improvements in company processes. The Course on Environmental Accounting has led the Lopez Group of Companies, composed of about 30 diverse businesses in the Philippines, to include environmental management accounting (EMA)-type data in their Environment, Safety and Health (ESH) internal reporting and assessment system.
- *A Guide to Green Government Procurement.* This is a continuation of a program that was initiated in January 2000 for implementation by the Department of Environment and Natural Resources (DENR) to integrate environmental considerations into its buying decisions, taking account of environmental costs and benefits and, when relevant, evaluating the environmental performance of tenderers in providing products and services, including any relevant manufacturing processes. In the first half of FY2001, DENR launched the program through a departmental special order and press release, created a Task Force and published a brochure about the program. After the program is implemented, approximately ten suppliers will be required to show adherence to corporate sustainability principles (EMS).
- *Greening the Supply Chain Promotion.* Catalyzed and facilitated the adoption of the concept of GSC to five MNC's and one industry foundation. These are: Ford Motor Company Philippines, Pilipinas Shell Petroleum Corporation, Nestle Philippines Inc., PNOC Petrochemical Development Corporation, United Laboratories, Inc., and Batangas Bay Coastal Resources Management Foundation. These participating buyer companies influenced the environmental behavior of over 3,000 first-tier suppliers. By March 31, 2001 suppliers had made substantial progress in implementing an EMS at their facilities.

**Upcoming Work under 1.3a:** In addition, Malaysia reported upcoming programs for which they plan to have documented success in the second half of FY2001 or early in 2002 for:

**Malaysia -**

- *Incorporate environmental courses in PSDC curriculum.* Penang Skills Development Center is a vocational training institute, supported by Penang industry and the state government. PSDC plans to incorporate environmental courses in its curriculum and US-AEP has agreed to support them by providing US experts to deliver seminars on various topics of interest.

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**Indicator 1.3.1a:** With nine of the ten countries reporting thus far, we count two successes toward Indicator 1.3.1a, "Number of US-AEP-supported corporate programs established for transparent reporting and disclosure,"

These include:

**Hong Kong –**

- *Conference on Environmental Risk Management for Financial Institutions.* With the environmental guidelines recommended by the Hong Kong Association of Banks as a direct result of the conference, its members will follow those guidelines and take in consideration of environmental liability on their lending practices.

**India –**

- *EMS for Transit Systems.* The Calcutta Metro is developing and implementing an EMS. The activity intends to send two people from Calcutta Metro to NYCTA for an "onsite" experience and to take the first step of developing an EMS manual for implementation.

**Upcoming Work under 1.3.1a:** None listed.

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**Indicator 1.3.2a:** With nine of the ten countries reporting thus far, we count seventeen successes toward Indicator 1.3.2a, "Number of US-AEP-supported networks and associations established and/or strengthened to promote environmental management systems and cleaner industrial production,"

These include:

**India –**

- *Establishment of Clean Technology Center in Gujarat.* US-AEP facilitated the establishment of clean technology centers in Gujarat. The Center for Environmental Education (CEE) received funding from UNDP to promote environmental management systems and cleaner industrial production.
- *Tamil Nadu Pollution Control Board grant from USTDA, to enable cleaning of hundreds of tanneries.* USTDA had agreed with the Tamil Nadu Pollution Control Board (TNPCB) to provide a funding to conduct a feasibility study for Wastewater Recycling in the Vellore Tanneries (approximately 500). TNPCB is awaiting TDA's formal approval of CDM's selection to sign the contract with Camp Dresser & McKee International Inc. There are over 1,000 tanneries throughout India that will probably be impacted.
- *Capacity Building of Eastern India Multiplier Agencies.* An MOU with World Resources Institute was signed to incorporate environment management principles in its business management curriculum. IISWBM trains students who are placed in responsible corporate positions all over India. ICC has the largest membership base in eastern India. It is a leading training provider to corporation on environment management.

**Malaysia –**

- *Capacity Building of Malaysian Energy Center.* MEC was created by the Government of Malaysia as a "non-profit company" in order to coordinate implementation of the \$20 million UNDP Malaysian Industrial Energy Efficiency Improvement Project. In FY 2001, the Alliance provided technical support to MEC to develop certification programs for facility energy managers and energy management professionals, and to develop benchmark data allowing industrial energy consumers to determine how their energy consumption compares to other similar facilities. As an example, the Alliance organized a study tour to the United States in June 2001 for members of MEC and university professors.

### **Philippines –**

- *Conference on Cleaner Production in Montreal.* P3R, APRCP strengthened as a result of representatives' participation in conference, which led to better planning and implementation of the 3rd ARPCP.
- *Confederation of Asia Pacific Accountants Convention.* Fatima Reyes of the Phil. Institute of CPAs (PICPA) spoke on Environmental Accounting at the Confederation of Asia Pacific Accountants Convention (CAPA) in Manila as a follow on from the CSG Illinois environmental accounting project. The Environmental Management Accounting Network - Asia Pacific (EMAN-AP) created as a result of US-AEP's support to PICPA and PICPA was strengthened as a result of the conference.
- *3rd APRCP.* US-AEP staff in Manila were heavily involved in planning for the 3rd APRCP, which was held in Manila. Regional EEP funds and a US-AEP grant supported the event. Multiple Philippine institutions (estimated at 100 government, NGO and private sector) participated in the conference.

### **Singapore –**

- *Developed Singapore Industry Strategy.* Developed a comprehensive short medium-term strategy for US-AEP Singapore's efforts to improve industrial environmental performance in Singapore and throughout the region. This industry program-sector strategy provided specific recommendations for activities that US-AEP Singapore will institute and support over the next two to three years.

### **Sri Lanka –**

- *Sponsored a survey to "Understand and document environmental technologies used in Sri Lanka."* Survey team visited 160 industrial locations and studied the solid waste, water, air emission and noise management. Measurements were taken. Interpretations of data and some recommendations were provided to industries based on the observations and measurements made. The final report will contain analysis of technology gaps, needed policy interventions and recommendations. Small and Medium Enterprises Division (SMED) of Federation of Chambers of Commerce and Industries of Sri Lanka and Dept. of Chemical Engineering at Univ. of Moratuwa started using the data to promote Cleaner Production concepts in industry.
- *Federation of Chambers of Commerce and Industry.* Invited Federation of Chambers of Commerce and Industries to be a partner in the South Asia Regional Energy Coalition under South Asia Regional Initiative on Energy.
- *Industrial Technology Institute.* IT participated at the WEFTEC2000 and obtained a wealth of information on EM. ITI is the primary Govt. Industrial Research Institution (heavily assisted by Japan). Exposure given to the head of the environmental division via WEFTEC2000 was used widely later during industrial forums in Sri Lanka
- *National Development Bank.* Increased awareness of credit facilities to improve EM. During the US-AEP Environmental Survey on Industrial Technologies the survey team distributed information on financing mechanisms available to industries to upgrade technologies via National Development Bank (NDB). E-friends and Pollution Control Abatement Fund (PCAF) are two of the soft loan and grant packages NDB operates.

### **Thailand –**

- *Creation and Strengthening of Thailand Association of Businesses for Energy Efficiency (ABEE).* Strengthened the ABEE through the establishment of working groups, Draft Action Plans, Outlines of key policy issues. A new association, Energy Entrepreneurs Association was created.

**Upcoming Work under 1.3.2a:** In addition, India reported upcoming programs for which they plan to have documented success in the second half of FY2001 or early in 2002. These include:

### **India -**

- *Confederation of Indian Industry-US-AEP Clean Technology Information Center in Chennai.* The Center will disseminate information on US technologies to CII members and other visitors to CII's library. The Green Business Center (GBC) is taking shape in Hyderabad. The foundation stone was laid (Jan 01). The CTI Center will be located in the Green Business Center. The GBC is supported by US-AEP/AID, CII and the Andhra Pradesh Government. It is likely to be commissioned by early 2002. A fund raising seminar is planned in August 2001.
- *Seminar on Environmental Management in the Mining Industry.* The activity took place in Goa (Western Region) and was scheduled for June 28, 2001.

- *EMS for Transit Systems.* Following the Calcutta Metro success, Delhi Metro is considering implementing an EMS in their operations at the project implementation stage itself.

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**Indicator 1.3.3a:** With nine of the ten countries reporting thus far, we count twelve successes toward Indicator 1.3.3a, “Number of US-AEP-assisted Asian institutions involved in international industrial-environmental dialogues.”

These include:

**India –**

- *Bio-Medical Waste Management Seminar.* Two World Bank funded health projects in West Bengal and Orissa are in dialogue with US institutions and companies on various aspects of medical waste management. A component of these projects is to support/assist various health care institutions on various aspects of waste management. The dialogue is being facilitated by US-AEP. It has already resulted in export of medical waste treatment technology from the US to these entities.

**Korea –**

- *DyeTec Training of Trainers.* US-AEP provided a grant to the U.S National Pollution Prevention Roundtable (NPPR) to provide a training of trainers program for cleaner production and pollution prevention auditors at DyeTec. US-AEP made this commitment when DyeTec sought US-AEP’s assistance in developing an industrial environmental extensions center upon recognizing that industry must adopt environmentally-friendly processes to be internationally competitive. The University of Louisville’s Kentucky Pollution Prevention Center (KPPC), The National Pollution Prevention Roundtable (NPPR), and the Illinois EPA led the training. In attendance were industry members as well government officials. Approximately 50 Industry attendees learned how to plan, market, assess for site-specific P2 and CP opportunities at industrial facilities. The focus of the training was on available technical assistance approaches from a wide array of sources including NGO, states, and academic institutions. With the completion of the training, trainees are equipped to identify and explore ways to cleaner production and environmentally-friendly at their respective facility.

**Philippines –**

- *Conference on Cleaner Production in Montreal.* The University of the Philippines/Diliman became involved in the international CP dialogue by sending a representative to the conference. The participant relayed information from the conference to a group of students who then helped organize the 3rd APRCP.

**Singapore –**

- *“Beyond ISO 14001 – Environmental Economy Seminar.”* One-day seminar, which coincided with Singapore’s Clean & Green Week with the theme of Environmental Economy. Largest number of participants (250) at US-AEP co-hosted event in Singapore and PSB pleased with turnout.

**Sri Lanka –**

- *Sponsored a survey to “Understand and document environmental technologies used in Sri Lanka.* Director of the Project SMED, who is also the Chairman of the Steering Committee for the US-AEP Environmental Survey, participated in the Asia Pacific Round Table for Cleaner Production and honored with the Vice Chairman position. (See additional detail under 1.3.2a above).
- *Ministry of Industries - Hazardous waste management.* Helped the Ministry of Industrial Development to obtain information via USEPA on hazardous waste management to design protocols to implement Basel Convention and to manage hazardous waste.
- *Horizon Lanka Private Limited.* Helped Horizon Lanka (Pvt.) Ltd to link up with two US companies, Zeta Corporation, and Odor Management Inc. Zeta and Horizon Lanka had a workshop in Sri Lanka to discuss EM using capacitor technology. Horizon Lanka learned much from Odor Management Inc. about improving indoor air quality and they conducted local presentations to interested groups.
- *Project SMED (Small Medium Enterprise Division) of Federation of Chambers of Commerce and Industries of Sri Lanka on cleaner production.* US-AEP engaged project SMED to provide limited consultancy work to improve EM and to increase the dialogue on Cleaner Technologies at the industrial locations identified during the US-AEP industrial survey.

## **Thailand –**

- *Center for Environmental Management and Training.* Define, develop and implement jointly funded tasks in areas of environmental education, pollution prevention and chemical emergency preparedness training. MOU signed between Chulalongkorn Environmental Research Institute, IEEAT and University of Hawaii.
- *Environmental Curricula for Thai Business Schools.* Partnerships with Thammaset and Chulalongkorn Universities, KIAAsia and University of North Carolina initiated.
- *Consultative Meeting as part of GIN Asia January 21 – 30, 2001.* The objective was to conduct a consultative meeting with Asian partners to discuss how US-AEP might work to promote Sustainable Industrial Production in Asia including discussions on relevance, applicability, barriers and incentives to it as an effort to better inform the creation of the next generation industry program for US-AEP. The consultative meeting was held in conjunction with the Greening of Industry Network Meeting that was held in Bangkok, January 12 – 15, 2001. Originally, US-AEP had identified 22 individuals, representing industry, government, NGOs and a cross-section of the target countries (India, Malaysia and, Philippines, Singapore, and Thailand) to have a small discussion on Sustainable Production. However, about 200 people attended the session. As a result, much of the discussions took place in a follow-up discussion group held during lunch the next day and in on-on-one meetings with the invited participants.

**Upcoming Work under 1.3.3a:** In addition, India reported an upcoming program for which they plan to have documented success in the second half of FY2001 or early in 2002.

## **India –**

- *EMS for Transit Systems.* Following the Calcutta Metro success, the Calcutta Metro Railway is in dialogue with NUT to share its experience in incorporating ISO 14001 principles in its operations.

## **C. Recommendations Regarding Indicators**

The US-AEP Industry program advisory group had evaluated the existing Intermediate Results and Performance Indicators and had recommended no changes (attached as VI below). However, Jack Kneeland of US-AEP Thailand provided the following comment on July 12, 2001.

The indicators for the industry program seem to match the direction of CTEM closely. However, the emphasis on sustainability, reporting and international dialogue does not equate with the current conditions in Thailand. The focus is largely with voluntary programs with leading industries. I would like to see these reworked to reflect Thai efforts to address more egregious polluters. Incorporate import efforts such as supporting government initiatives and programs, building capacity, industrial pollution inspection, enforcement and compliance type activities.

## **D. Important Lessons**

Several important lessons have already emerged from this process, including:

- 1) Highlighting that US-AEP and its partners can improve in sharing information, and that although much information is received, “silos of information” exist within the various organizations.
- 2) Reinforcing the utility and role of the Policy, Urban and Industry Program Advisory Groups for leadership, consistent program implementation and centralized communication is critical.
- 3) Reporting systems developed will not only be useful for reporting the six month results, but will also serve as valuable tools for tracking ongoing success while building an important historical record of country programs.
- 4) In the process of preparing the reporting templates and guidance materials, it quickly became apparent that simply reporting on the number of activities (such as number of workshops completed) did not offer enough information for the program evaluation. In fact, in order to communicate its success stories, US-AEP needs to capture the results of the activities, not just the number of activities. As an example, US-AEP should be looking for data on how many corporations developed new greening the supply chain activities as a result of a workshop, and in turn, how many Tier I suppliers were impacted by the corporate initiatives.

- 5) Another lesson learned from the data collection process was that data are simply data, and that US-AEP requires narratives of success stories to fully tell its story. These narratives serve many purposes too numerous to list but particularly of note, narratives can be included in marketing materials and periodic publications reviewing US-AEP progress; used in budget discussions with partners, and can help tell a success story to other US-AEP countries to encourage them to implement similar activities.

#### **IV) FY 2002 Work Plan Guidance**

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##### **A) Process Review**

###### **1) FY 2001 Work Plan**

The US-AEP Secretariat realizes that it would be unlikely that 50% of the activities listed in the Work Plans for FY 2001 would be completed in the first six months of the fiscal year due to a number of reasons:

- a) The Work Plans were approved in October 2000, and many holidays and vacations occur at calendar year end; b) many activities completed may have been opportunistic activities that were not anticipated in the work plan; and c) some activities listed in the work plans may be dropped or postponed for various reasons – including funding issues, lack of interest, and external events.

Consequently, US-AEP does not anticipate that 50% or more of the Indicator Results will be accomplished by the end of the 6-month period. As of June 28, 2001, 7 countries have reported their 6-month data. Data has not yet been received from Indonesia, Sri Lanka, Taiwan, and Thailand.

###### **2) Integration of Vision Statement, Country Strategy and Work Plan**

In preparation for the Semi-Annual meeting in April 2001 in Vietnam, a country-by-country analysis was prepared on whether or not the work plan activities listed in the FY 2001 work plan accurately reflected the Vision Statement and Country Strategies developed by each country. While not intended as a “gap analysis”, the questions raised in the analysis included: “do the work plans **accurately reflect** desired vision statement and country strategy?” and “do the work plans provide **sufficient level** of detail to categorize work plan activities?” (shows which Intermediate Result is supported by activity).

On a macro level, the following observations were made:

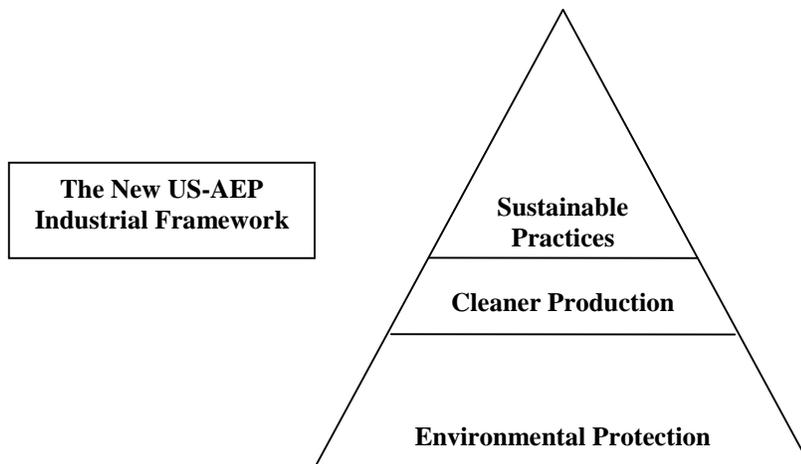
- a) The work plans had varying degrees of detail – some listed general activities while others offered more detailed descriptions (e.g. , seminar title and date)
- b) Many work plans contain activities to meet specific country vision and strategy goals and objectives – others were less clear on the purposes of the work plan activities
- c) Many work plans encouraged peer exchanges and sharing of best practices
- d) Some work plans highlighted specific targeted industrial sectors
- e) Many work plans placed a higher emphasis on technology transfer and US export opportunities

Once again, the net result of this analysis was an understanding that there are no correct answers since countries may choose to emphasize different areas or focus limited resources on different programs. Also, while the work plans are intended to reflect the country’s vision statements and country strategies, the reality is that opportunistic activities arise during the course of the year that are not captured in the country’s work plan. It is imperative for the countries to take advantage of these valuable opportunities as they arise.

##### **B) Assess Potential Opportunities for FY 2002**

###### **1) Pyramid Questions**

In 2000 US-AEP introduced a three-tiered template by which to frame our approach – a pyramid incorporating three levels of program development: an environmental protection foundation, a cleaner production mid-section, and topped off by sustainable practices. While the framework was introduced conceptually, additional work was needed to implement the framework across all Industry programs.



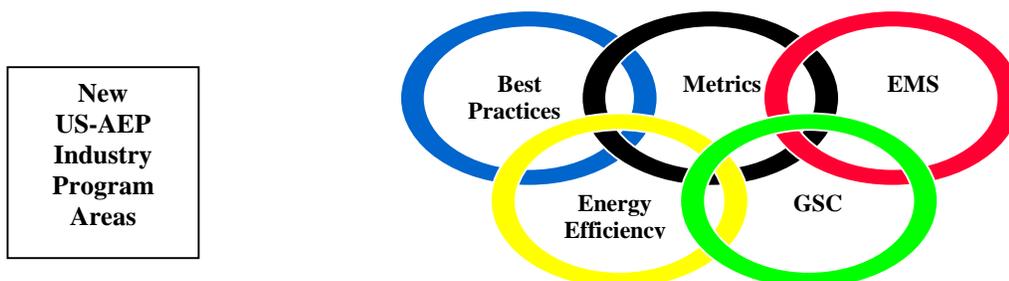
At the Semi-Annual Partners meeting in Vietnam, a simple assessment tool was introduced for helping to identify where the individual country programs fit within the Industry framework. While it was understood that it would be difficult to assess “all industry across all sectors in a particular country”, it was felt that used appropriately, the tool would help to identify areas requiring further emphasis. For example, US-Philippines walked through the first section on environmental protection. Based on the score given by the tool, the new Philippine Clean Air Act, and a rise in implementation and enforcement activities, they decided to include some work plan activities on basic compliance and environmental protection in the FY 2002 work plan.

When identifying work plan activities for FY 2002, the Field may want to go through the process of walking through the assessment tool to gain a better understanding of where their country’s industrial program fits within the program framework.

## 2) Five Olympic Rings

As described above, new Industry program areas are being emphasized. The drivers for these Industry programs include:

- a) **Metrics** – “what gets measured, gets managed” and how corporations should use environmental metrics to tie into financial metrics.
- b) **EMS** – “what gets managed, leads to performance improvements” and how corporations should use EMS to tie into business systems including Quality Management Systems.
- c) **Best Practices** – “information not shared is energy wasted” and how corporations should highlight best practices in environmental and energy management to improve industrial environmental performance to meet US-AEP’s goal to promote a clean revolution in Asia.
- d) **GSC** – “the best leveraging opportunity” and how to increase corporate and supplier profitability – especially if the savings are shared with suppliers.
- e) **Energy Efficiency** – the “money is in the bank” concept that is simple to implement because most people can relate easily to the basic concepts of energy efficiency (for instance, turning off lights to save money and save energy).



### 3) **Incorporating Industry Programs into Regional Activities and Trade and Technology Initiatives**

A number of regional activities are being proposed for FY 2002. Some are new activities, while some are continuation of FY 2001 activities that were deemed successful. Countries should examine the regional activities to identify those that may complement their own country-specific activities and where they may be able to leverage regional centralized budgets to further their objectives. Industry should also pay attention to Trade and Technology Initiatives since Industry may be a leader in adopting some of the innovative technologies highlighted in the Technology initiatives. Industrial output may also benefit from enhanced trade opportunities.

## V) **Specific Recommendations**

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### A. **Guidance on Work Plans**

FY 2002 Work Plans should identify ongoing significant environmental problems and potential opportunities for Industry to improve Industrial performance. In addition, Industry group is attempting to systematize work plan process and trying to expand the planning horizon beyond next fiscal year. By implementing the new industrial framework and by answering the so-called “pyramid questions”, the Industry group is hoping to provide future direction for the Industry programs in each country.

While many activities can be planned, one cannot ignore potential opportunistic activities that may arise. At this time, the Industry group is unaware of US-AEP’s combined budget for all Industry group activities in FY 2002. Each country will either receive an allocation from the US-AEP Secretariat or will have to negotiate their share with the US-AEP Secretariat. This total amount will be distributed among country-specific activities and regional activities, and will include grants, exchanges, and programs, but not salaried staff time.

### B. **Country-Specific Activities**

The following are some country-specific activities that are of interest. The list is not comprehensive and stems primarily from the one-on-one discussions at the Semi-Annual Partners meeting in Vietnam or in subsequent conversations with US-AEP Tech reps:

- 1.) **Thailand:** “the country is an Industry program in waiting”. While US-AEP would like to increase the Industry program in Thailand, recent reshuffling of departments and reporting lines in the government realistically mean that the Industry program will probably not get going immediately. Thailand continues to be a likely leader for Eco-Industrial Estates and Energy Efficiency initiatives.
- 2.) **Vietnam:** “a country looking for a limited scope start-up for an Industry program”. Due to current trade negotiations and the relatively new US-AEP presence in Vietnam, US-AEP should initiate an Industrial activity or two with limited scope, rather than trying to launch a comprehensive program. Nike is a ready customer for GSC and Best Practices.
- 3.) **Philippines:** “a country hungry for additional Industry program successes”. The Philippines have the resources on the ground to make it happen and have recently completed several successful initiatives in GSC and for the New Investment Trade Study. They would like to continue with the GSC initiative, and as a result of the “pyramid questions analysis”, have decided to return to programming some basic environmental protection activities that will complement their new laws and enforcement activities.
- 4.) **India:** “a country that wants to do integrated programs where lessons learned can be leveraged across all four of its regions”. India wants to do GSC activities in the automotive, textile and food industries – especially the automotive sector that would include activities in all four regions. In addition, the Field would like the Industry PAG to begin working on a periodic newsletter that would highlight internal US-AEP Industry program successes.
- 5.) **Singapore:** “a country with a strategic view” - Singapore continues to embrace Industry activities and recently completed an Industry Strategy. This Strategy Paper, developed with assistance by the Industry PAG leadership, is a model for developing a country-specific strategy and should be viewed by all countries eager to further their Industry programs.

- 6.) **Malaysia:** “a country – eager for industrial development and industry programs”. Recent offline discussions in Vietnam indicate that Malaysia would like to move forward with GSC, Best Practices and Energy Efficiency Industry activities.
- 7.) **Indonesia:** “a country that can wait in line”. Due to a difficult political situation, Indonesia is willing to wait for the situation to calm down before launching new Industry program initiatives. Also expecting to devote significant time and effort to the Prep-Com for Rio +10 next year.
- 8.) **Sri Lanka, Hong Kong, Korea, and Taiwan:** At this point, unsure of direction or interest in Industry activities for FY 2002.

### C. Program-Specific

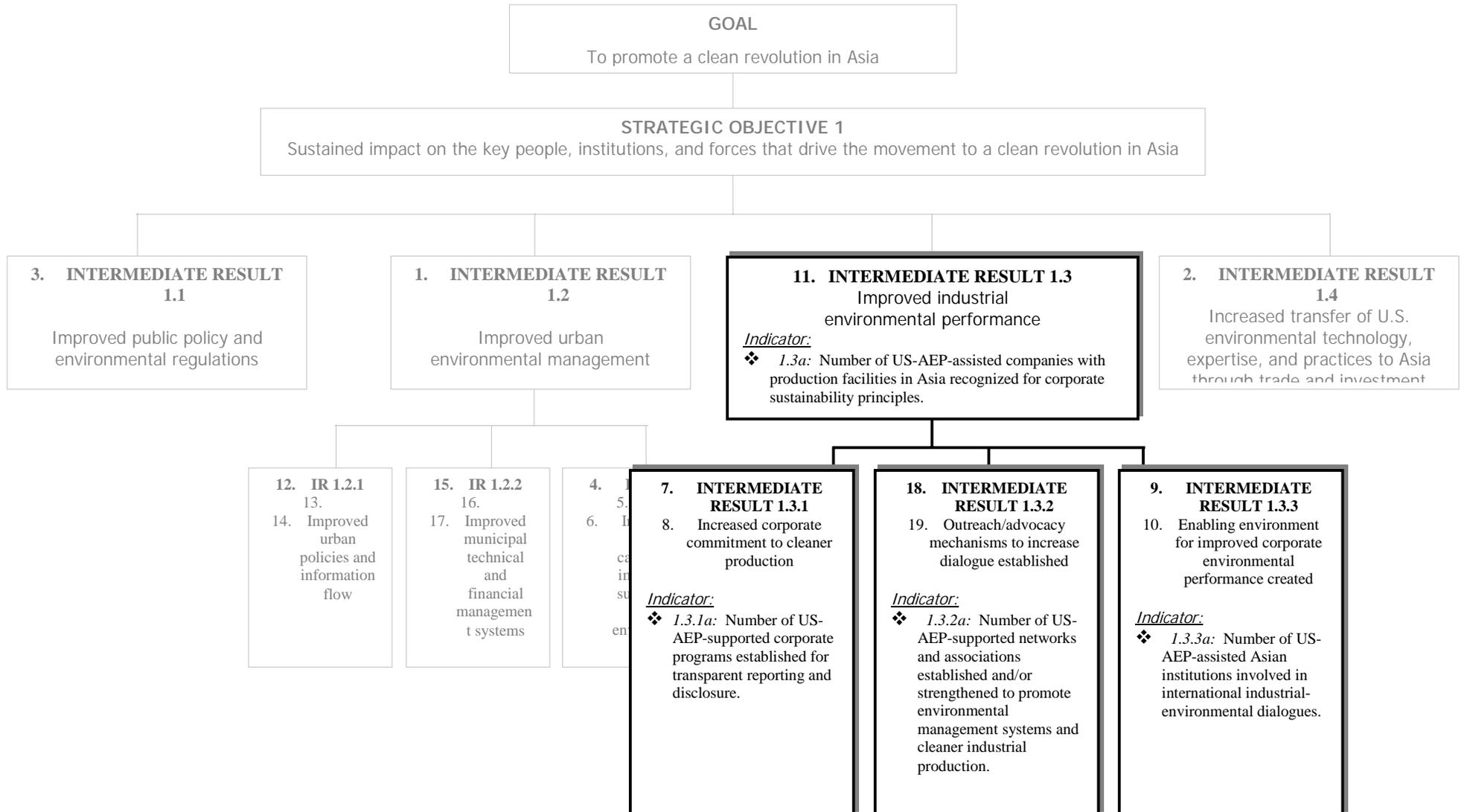
There are many opportunities for increasing the effectiveness of the Industry activities in a program-specific perspective. These include:

- 1) Try to maximize impact by including at least two Program areas for each activity. For instance, one could do a Best Practice activity that included Energy Efficiency or Metrics, or could include an activity that would impact one or more Intermediate Results.
- 2) Try and leverage other resources – including Corporate participation and/or non-US-AEP partner funding. Obviously, by not having to shoulder all of the resource costs, more monies may be available to do other activities.
- 3) Avoid any “corporate welfare look alike programs” that could be interpreted as solely benefiting a local corporation or multinational corporation. Try to design corporate Industry activities to reach Small and Medium Enterprises or other targeted groups.
- 4) Encourage those participating in US-AEP programs to commit to adopting the best practices across all of their sites, suppliers, or across industrial sectors. This should include sharing with other organizations in Asia, with other Corporate sites not in Asia, and with non-competing companies.
- 5) Corporations should be encouraged to evaluate accepted best practices for economic feasibility, and if applicable, should commit to implementing the best practice.
- 6) As part of a continuous improvement exercise, each Corporate partner should commit to spreading its successes with a quantified target of other organizations – more Corporate sites or organizations – or should commit to striving for better performance and/or more aggressive environmental improvement goals.
- 7) Wherever possible, the Industry program should seek collaboration with other program groups to further engage additional stakeholders. Examples include:
  - a) **With Policy Group:** Activities that promote public-private partnerships and transparency (like GRI) that will help Industry to tell its story, educate others, raise trust levels with stakeholders, promote benchmarking and may lead to increased profitability (especially if new ideas).
  - b) **With Urban Group:** Activities that encourage promote improved industrial performance including opportunities to promote Eco-Industrial Estates.
  - c) **With Energy:** Since Industry is a primary user of energy, activities to increase the efficiency of energy use should be encouraged. Another driver is that Industry can also be a leader in selling the energy efficiency products developed.
  - d) **Common programs:** Rio+10 and US-AEP at 10 are wonderful opportunities to share US-AEP Industry success stories.
- 8) Corporate partners should be asked to highlight the US-AEP relationship when sharing the successes.

### D. Assistance and Resources

Finally, in terms of assistance and resources, the US-AEP Industry group is ready to allocate limited resources to helping to develop work plan activities and to develop individual Industry Country Strategies similar to the one developed for Singapore. If interested in this assistance, individual countries should communicate their interest both to the US-AEP Industry group and to the Secretariat member acting as the Country Manager.

**VI: Intermediate Result 1.3 & Performance Indicators**



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**Annex 3:  
Vietnam Trip Report**

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**TRIP REPORT**  
**Urban and Industry Groups**

**HO CHI MINH CITY, VIETNAM, APRIL 23-28, 2001**

**US-AEP SEMI-ANNUAL CONFERENCE**

**Objective:**

The US-AEP Semi-Annual Meeting allowed Senior Commercial Officers, partners, and members of the Secretariat the opportunity to focus on the progress US-AEP has made in the region by sharing past accomplishments, and future directions and successes. At the Semi-Annual Meeting, an area of focus was the role US-AEP plays in facilitating trade and technology transfer between Asia and the United States, for the economic and environmental benefit of both.

During the five-day period, certification training was provided by several international state trade development agencies (topics included client management skills, screening clients, counseling, assessing company's export readiness, export financing, international sales contracts, intellectual property rights, strategic alliances, and export regulations) to promote better collaboration and partnerships with the states. Additional training was conducted for field reps and DC staff on and preparing work plans. Finally, the meeting allowed US-AEP to reacquaint the field representatives with the latest ideas in US-AEP's urban, policy, industrial and regional programs.

**Background:**

Plenary session presentations updated all participants to recent industry and urban successes, future program directions, and tools developed to enhance the planning process. The urban team (led by Jeff Bowyer) and the industry team (lead by Conchita Silva and Nick Shufro) had one-on-one meetings with various countries to highlight concerns, to review progress and to identify priority areas for future activity. Specific follow up activities and meeting highlights are described below. In addition, there were ample opportunities for informal discussions throughout the week-long meeting.

**Meeting Results:**

A new industry framework (replacing CTEM), as well as tools to help identify industry program priorities, was presented and discussed. Specific follow up actions were identified.

# INDUSTRY AND URBAN PROGRAMS

A Program of the United States–Asia Environmental Partnership, contracted through Louis Berger International, Inc.

- DATE:** 5/2/01
- SUBJECT:** ANNUAL TECH REP MEETING IN HO CHI MINH CITY, VIETNAM 04/23/01-04/28/01
- PARTICIPANTS:**
- US-AEP Secretariat and Staff, US Department of Commerce Senior Management, Individual Country Senior Commercial Officers and Tech Reps
- PURPOSE OF TRIP:**
- Provide general training & overview of activities to ensure understanding of US-AEP objectives and mission by all participants.
  - **ANNUAL MEETING TO SHARE SUCCESS STORIES, PLAN FUTURE ACTIVITIES**
  - Discuss renewal of relationship between US-AEP and US DOC
  - Individual PAGs provided opportunity to meet with different countries to learn of country concerns and to plan future potential activities.
  - Opportunity for all to network, exchange ideas and further US-AEP objectives.
- SPECIFIC OPPORTUNITIES:**
- **INDUSTRY GROUP HAD FORMAL ONE-ON-ONE MEETINGS WITH TECH REPS FROM INDIA, INDONESIA, THE PHILIPPINES AND THAILAND. INFORMAL DISCUSSIONS OCCURRED WITH REPS FROM MALAYSIA, SINGAPORE AND VIETNAM.**
  - Industry Group had opportunity to share tools developed to facilitate development of FY 2002 work plans. Tech Reps provided opportunity to give feedback on how to make the tools more useful. This included discussion of assessment tools to identify specific activities within Industry Program Framework.
- RESULTS:**
- **INTERACTIONS IN ONE-ON-ONE MEETINGS LED TO SEVERAL SPECIFIC OPPORTUNITIES.**
  - Generally, US-AEP tech reps indicated that countries are “industry program starved” and are looking to augment existing programs.
  - Potential additional funding opportunities for non-budgeted work activities discussed and will probably be enthusiastically sought after by Tech Reps.
  - General positive endorsement of assessment tools.
- DISCUSSION & ACTION TAKEN:**
- US-AEP Secretariat and Staff provided overview of particular components of US-AEP program in order to set baseline understanding level by all SCOs and Tech Reps
  - DOC senior management presented rationale and objectives of survey currently being conducted to review DOC’s involvement in US-AEP program. Overall methodology and preliminary analysis of survey shared with SCOs and Tech Reps. Future steps, timing and probable steps shared with group.
- FOLLOW-UP:**
- Separate follow-up with individual countries (attached memos).
  - Meetings with Industry Group and other Groups to refine assessment tools.
  - Specific amounts, requirements and processes for applying for additional industrial funding to be shared with targeted countries.
- GENERAL OBSERVATIONS:**
- While some of the discussions between DOC and US-AEP appeared difficult in nature, meeting seemed to achieve meeting objectives.

## INDUSTRY AND URBAN PROGRAMS

A Program of the United States–Asia Environmental Partnership, contracted through Louis Berger International, Inc.

- DATE:** 4/26/01
- COUNTRY:** INDIA
- PARTICIPANTS:** CAPT. AUGUST VON BORN MILLARD (“VON) FROM NEW DELHI, S. SUBRAMANIAN (SUBI) FROM CHENNAI, ANANDA MALLAWATANTRI (SRI LANKA), ARUP KUMAR MITRA (ARUP) FROM CALCUTTA, CONCHITA SILVA, NICK SHUFRO  
MISSING: SUNEEL PARASNIS FROM MUMBAI AND K. BALAKRISHNAN
- LEVEL OF INTEREST:** Extremely high
- OPPORTUNITIES:**
- Greening Supply Chain – automotive, textiles, electronics with automotive best opportunity since applicable in all regions. Want to pursue a program with Ford Motor Company.
- FEEDBACK ON TOOLS:**
- Tools viewed as extremely useful. Want to review and work with Pyramid Questions. Make sure to share them with Subrata.
- SPECIFIC OPPORTUNITIES THAT EXIST NOW:**
- May want to participate in APRCP.
- CONCERNS:**
- If any commitments are made with respect to specific dates or programs – need to stay with commitments, because other associations may participate and commit resources.
  - Need help on planning process. Prefer that industry program funding be separate and in addition to overall country.
- FOLLOW-UP:**
- Make sure Subrata is in the “loop”.
- COMMENTS:**
- If additional funding is made available this year for industrial activities, should send e-mail to all tech representatives regarding how to apply for additional funding (amount, process to apply, dates...).
  - Would like Industry Group to develop a periodic newsletter to be shared with all tech reps in all countries highlighting industrial activities.
  - Would like to be kept in the loop regarding other non-US-AEP activities in India (eg. GEP). May be able to leverage or compliment US-AEP activities with non-US-AEP activities.

## INDUSTRY AND URBAN PROGRAMS

A Program of the United States–Asia Environmental Partnership, contracted through Louis Berger International, Inc.

- ATE:** 4/26/01
- COUNTRY:** INDONESIA
- PARTICIPANTS:** Karla Boreli, Aulia Rochaini, Conchita Silva, Nick Shufro
- LEVEL OF INTEREST:** HIGH, LOTS OF REQUESTS FOR INFORMATION, DESPITE CURRENT POLITICAL PROBLEMS. BEST AREAS ARE ENERGY CONSERVATION, EMS AND BEST PRACTICES (EAGERLY SOUGHT AFTER). GREENING SUPPLY CHAIN MAY BE HARD TO IMPLEMENT.
- OPPORTUNITIES:** BIGGEST SECTOR OF GROWTH IS SMES. EMS FOR BAPEDAL AND STATE BHAPTOL (MAYBE CLONE FILIPINO GREEN GOVERNMENT PROCUREMENT) MAY BE OF INTEREST. INDONESIA JUST WON NEXT APRCP ROUNDTABLE. NEED TO BRAINSTORM ON US-AEP PARTICIPATION AND SUPPORT.
- FEEDBACK ON TOOLS:** EXTREMELY POSITIVE. APPRECIATE TIME AND EFFORTS DEVOTED TO DEVELOPING TOOLS, WILLINGNESS TO “GROUND TRUTH” TOOLS.
- SPECIFIC OPPORTUNITIES THAT EXIST NOW:**
- \$25,000 ENERGY EFFICIENCY – JUDITH BARRY’S PROGRAM ON HOLD LAST YEAR BECAUSE OF TRAVEL RESTRICTIONS FOR PERSONS, BUT MONEY IS THERE. SHOULD SIT DOWN WITH JUDITH TO FIGURE OUT HOW TO BEST COLLABORATE BETWEEN INDUSTRY PROGRAM AND ENERGY PROGRAM. PERHAPS PROVIDE PERSON TO DO AN ASSESSMENT.
  - PROPER/US-AEP database for companies reporting environmental data meant to introduce industry to reporting. Due to political changes, data not published, even though 80%-90% reporting rate. This is considered richest database in Asia maintained by Monde Srtiwar (formerly with BAPEDAL, now with IRG). Database moved to IRG, data not mined. Tie information into metrics program?
  - EMS: Huge number of requests – with requests all over the board. (train the trainers, EMS for BAPEDAL, State Bhaphitols, etc...)
  - Two publications sitting unused that could be shared:
    - Community industry Group Watchdogs – How to Engage Your Community – (training manual for companies)
    - Comic Books on Pollution Prevention in black & white & color, for kids
- CONCERNS:**
- Contractual concern – “will Rini be funded to do the programs?”
  - How to reach out to smaller firms.
  - Political situation continues.
- FOLLOW-UP:**
- Have never received completed PMP. Would like copy. (Conchita to Karla)
  - Willing to test Country Assessment tool (electronic) & provide feedback. (Nick to Karla)
  - Information on ISO 14001 for Aulia (Nick to Aulia).
  - “How to” prepare business plan slides. (Nick to Karla)
  - Slides (draft) on 5 Olympic Rings. (Nick to Karla)
  - Management Association of Philippines Best Practices (Conchita to Nick).
  - Send e-mail to Rini on ERM Workshop (Conchita to Rini).
- COMMENTS:**
- Aulia devoting 50% of her time to US-AEP until Tech Rep is hired.

## INDUSTRY AND URBAN PROGRAMS

A Program of the United States-Asia Environmental Partnership, contracted through Louis Berger International, Inc.

**DATE:** 4/26/01

**COUNTRY:** PHILIPPINES

**PARTICIPANTS:** ALMA MADRAZO, STACY BONNAFFONS, CONCHITA SILVA, NICK SHUFRO

**LEVEL OF INTEREST:**

- High level, want to continue successes in industry programs. Want to be aggressive in going after any additional US-AEP funding in 2001.

**OPPORTUNITIES:**

- With passage of Clean Air Act, Clean Water Act, and Solid Waste Act (and implementation and enforcement) and monitoring programs can lead to additional programs (and corresponding control equipment sales) in Environmental Protection.

**FEEDBACK ON TOOLS:**

- Extremely useful. Could be shared with various trade associations. Highlighted need to devote some resources on environmental protection. Useful for FY 2002 work plan preparations. Actually went through Pyramid questions for Philippines (Environmental Protection only).

**SPECIFIC FUNDING OPPORTUNITIES THAT EXIST NOW:**

- Want to be extremely proactive in applying for additional potential industry funding.

**CONCERNS:**

- Reaching and motivating small enterprises.

**FOLLOW-UP:**

- Apply for additional program funding (if available) (Conchita)
- Share pyramid questions electronically (Nick to Conchita)

**COMMENTS:**

- Alma bought a nice new scarf.

## INDUSTRY AND URBAN PROGRAMS

A Program of the United States–Asia Environmental Partnership, contracted through Louis Berger International, Inc.

- DATE:** 4/26/01
- COUNTRY:** THAILAND
- PARTICIPANTS:** Jack Kneeland, Dennis Zvinakis, Conchita Silva, Nick Shufro
- LEVEL OF INTEREST:** **JACK CHARACTERIZED THAILAND AS “INDUSTRY PROGRAM IN WAITING.” NO COMMITTED, DEDICATED ENGAGEMENT IN THE INDUSTRY SECTOR. SOME FORMERLY OTHERWISE CLASSIFIED ACTIVITY “ECOSTATES” AND “ENERGY EFFICIENCY” SHOULD BE CONSIDERED INDUSTRY PROGRAM ACTIVITIES. HAVE DEVELOPED “ANCHORED” PROGRAMS IN POLICY AND URBAN AREAS, NOW WANT TO MOVE FORWARD WITH INDUSTRY**
- OPPORTUNITIES:**
- Building upon successes with ERIC and Chulalongkorn University, Industrial Estate Authority. Leverage relationship with Choola for outreach efforts to private companies and to utilize Choola as an organizing node for GIN. Dr. Somphorn incorporate her companies into Alliance to Save Energy and Industrial Estates. Green Accounting may be of interest.
- FEEDBACK ON TOOLS:**
- **MINIMAL – DID NOT SPEND MUCH TIME DISCUSSING.**
- SPECIFIC OPPORTUNITIES THAT EXIST NOW:**
- Working with Dr. Somphorn to include her companies into proposed activities
- CONCERNS:**
- Earlier work plans too ambitious. Looking for fewer, more detailed activities, no reason to add new things, build on what we are already doing. Not precluding industrial activities, but want to enhance existing activity.
- FOLLOW-UP:**
- Need to meet with Judith Barry to coordinate energy conservation and US-AEP energy programs. Discussions with Joe Lopez and Felicia Ruitz of Alliance to Save Energy, Judith Barry of US-AEP, and Dr. Summers (Conchita), Susan Span (EPA). (Nick and others in Washington)
  - Jack asked us to review two Thai program strategy papers and to provide feedback. Documents list program drivers (competitiveness, recognition, best practices, compliance, ISO 14001); sectors; key objectives (e.g. work with US and Thai companies to promote GRI, etc.) (Conchita and Nick)
  - Find out from Dr. Somphorn what happens to GIN before the next meeting? Planned activity or nothing? Same with APRCP? (Conchita)
- COMMENTS:**
- Within Thailand, Department of Public Works, moving from current position - may move to Pollution Control Development Authority or Department of Industrial Works, Ministry of Natural Resources. Since this department is “in play,” may need to see how things settle out. However, if there are other US-AEP countries really eager to use additional US-AEP industrial program funding – then Thailand may pass – more to “concerns.”

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**Annex 4:**  
**Workshop Report on EMS**  
**for Mass Transit**

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**Workshop Report**  
**on**  
**Environmental Management Systems**  
**on**  
**Mass Transit System**

*Calcutta Metro Auditorium, Calcutta*  
*3-5 MAY, 2001*

**The Industry Program Group of United States ~ Asia Environmental Partnership (US~AEP)**, organized a three day implementation workshop on Environmental Management System on Mass Transit System at Calcutta from 3-5 May, 2001. This was organized in association with Calcutta Metro Railway, who are receiving technical assistance from US~AEP to establish ISO 14001 to their system. US~AEP brought Mr. Ajay Singh, Chief, Capital Management Program (CPM) Group of New York City Transit Authority (NYCTA) who have experience in similar kind of activities while establishing ISO 14001 to New York Transit System. US~AEP through this activity is trying to establish linkage between NYCTA and Calcutta Metro for creating a NYCTA like model at Calcutta Metro for reducing environmental impact and improved energy efficiency of a transit system.

**Program Detail:**

During the inaugural program, the top management of Calcutta Metro, Mr. Rex Moser, Director American Center, press people participated. Calcutta Metro top management expressed that implementing such system would definitely help them in improving their operational efficiency thereby reducing the cost. At the same time they have indicated that improving environment is a social responsible for which they are committed. They also feel that a management tool like ISO 14001 would be supportive for this endeavor. The entire top management of Calcutta Metro was present in the inaugural session. Calcutta Metro have identified core group of 7 senior officers from various department who was not only trained by US expert during the workshop but also will take lead for implementing ISO 14001 in the identified area(s) of Calcutta Metro.

Mr. Moser during his speech in extended cooperation for facilitating videoconference between Calcutta Metro and NYCTA (Ajay Singh) for resolving issues to expedite in adopting ISO 14001. The program was well covered by media. Copies of media coverage are attached along with this report.

During the 2 ½ days program, Ajay Singh from NYCTA and Subrata Mazumder from USAEP, Industry Program described the different parameters of ISO 14001, conducting Gap Analysis, siting various global systems who have either adopted or in the process of adopting ISO 14001 for their transit system, benefit etc. US expert and the core group made a field visit to one of the identified site of Calcutta Metro (Noapara Maintenance Workshop) where gap analysis was conducted to find out the current level of understanding for establishing ISO 14001. During entire program the core group was interactive on issues pertaining to environment and energy, which have impact on their day to day activities as well as on organizational performance. The core group also made an action plan for implementing ISO 14001 at the identified site. Copy of which is attached with this report. On the last day of the workshop, the core group made a presentation before their top management for how to proceed towards implementation of ISO 14001. (copy attached) along.

In the closing session, the Secretary General, Indian Chamber of Commerce (ICC), Mr. Nazeeb Arif was also present and volunteered Chamber's cooperation for assisting Calcutta Metro in implementing ISO 14001. ICC has offered "Envirosafe" - a database on Environmental Laws (which was supported by LBG to ICC-EMC under CTEM component of the US-AEP) free of cost to Calcutta Metro. This is very much required by the core group to understand the legal compliance in respect to environment for their day to day activities.

The another important area what core group has identified to be addressed immediately was appointing a consultant by Calcutta Metro to help them for establishing a system and get the certification. Mr. Nazeeb Arif, who was present in the closing session, was requested to explore assisting Calcutta Metro in that issue.

### **Next Steps:**

To keep things moving as next step, people from Calcutta Metro will tentatively visit NYCTA in July, 2001 (Ajay Singh has confirmed his availability during this period) to experience the system NYCTA established for getting ISO 14001 certification. The number of participants of the exchange program would be finalized depending upon the resources available and in consultation with Calcutta Metro top management.

**Conclusion:**

This workshop indeed created a level of awareness and confidence among top and middle level management of Calcutta Metro, which could play a key role for success of such an important activity.

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**Annex 5:  
6-month Indicator Collection  
Effort**

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