



# US-Asia Environmental Partnership

## Indonesia Field Program



### *FY 2003 Workplan*

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January 6, 2003

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## **Country Strategy for Indonesia FY 2003**

The US-AEP objectives in Indonesia are to help present both U.S. public and private environmental engagement in Indonesia as a creative long-term relationship with benefits for both Indonesia and the United States. More specifically, it is to engage Indonesia on selected development issues that support creative approaches to overall environmental policy, industrial and urban management issues.

The US-AEP will consider Indonesia's unique political, cultural and economic conditions and launch activities that offer the most opportunity for progress and mutual collaboration. We also plan to work cooperatively with other donors such as the World Bank and Asian Development Bank who have substantial aid programs relevant to the industrial and urban environmental issues of interest to us. A case in point is the work we have and will continue to do on clean air with a wide variety of country and multilateral donors.

### **BACKGROUND**

While Indonesia has made remarkable progress over the last 25 years in achieving economic growth and reducing poverty, much of that progress has been asymmetrical without commensurate achievements in environmental management, urban infrastructure development or sustainable urban services. In large respect, those issues still remain outstanding, taking second place to the more enveloping Asian economic crisis and the most significant political transition in thirty years.

In the post-crisis context, many urban environmental challenges are not getting any more attention than in the past. While political leadership has predicted GNP growth of 5% over the next year, this is largely dependent on foreign investment, which has not kept pace. Likewise, real reform of the judicial and legal system, which now shows some signs of progress, will be a long-term effort requiring a sustained political commitment to real reform and change. Reducing subsidies on fuel and electricity also will create a second shock in raising the cost of living. All of these economic reforms, unquestionably needed, may drive up unemployment, pushing the lower 60% of the population so far below the poverty line that social unrest could erode the reform efforts.

More importantly for US-AEP, the environmental challenges remain equally daunting. Indonesia remains one of the last countries in Southeast Asia that is still using leaded gasoline. Partly because of that, the ambient air quality is of serious concern. Apart from lead, ambient air concentrations of carbon monoxide (CO), total particulate matter (PM), and nitrous oxide (NO<sub>2</sub>) currently pose the most serious problems to health in urban areas. Jakarta currently needs to reduce its emissions of these pollutants by more than 50% to meet its air quality standards and move closer to the EURO-1 standard. Emission load estimates from 1998 reveal that motor vehicles contribute more than 70% of each of these problem pollutants, and total emissions are increasing. Passenger cars and motorcycles contribute far more than buses to total emissions. The supply of unleaded gasoline throughout the country, of a quality that allows catalytic converters to be used without posing substitute health problems, would allow Indonesia to vastly improve the urban air quality. Indonesia is also a country where clean piped water is unavailable to 80% of the population and the rate of new connections is not keeping pace with the growing demand.

These problems and pressures, however, have been accompanied by a real change to widen the breadth and depth of the political debate going on in country. Only a few years ago, to raise even the mildest of criticisms was to risk a jail sentence. Today there is a wide-ranging and more open debate on the full spectrum of political and economic issues, especially environmental issues. This is not to say that all those issues are moving quickly toward resolution. Corruption, national unity concerns, and

the need for money for upcoming political campaigns are continuing problems that will impact government policies for a long time to come, including policies in the environmental and urban areas. Nevertheless, with one presidential election past and an upcoming one two years away, Indonesia has entered into what in her terms could be called a relatively quiet political period that should afford development engagement in general, and US-AEP engagement specifically, the scope to operate and achieve some important successes.

US-AEP strategy for Indonesia has been and continues to be working very closely with the USAID Mission. The Mission strategy is wide-ranging, covering topics of macro-economic and financial sector reform, energy restructuring, development of democratic civil society and the rule of law, decentralized local governance, and health, population and nutrition, among others. During the past few years, through the efforts of the past and present US-AEP staff, we have developed and deepened a collegial, collaborative working relationship with the USAID bilateral mission that has advanced our common agenda. The joint effort to phase out leaded gasoline in Jakarta is an example. The bilateral mission has gone on record to say they appreciate the US-AEP innovative programming as it complements both the strategic interests of the Government of Indonesia as well as their own activities. We plan to continue and deepen that partnership.

Both the mission and we agree that the pace of change in Indonesia in the sectors of our mutual interest has accelerated. Certainly issues which were on the forefront of the environmental and urban agenda have evolved and become more encompassing and nuanced, thanks in part to the efforts of US-AEP staff. Additionally, within the Government of Indonesia a new team of technocrats has assumed leadership positions, settled into their jobs and seemed to have reached the point where they are now ready to push forward their agendas. In many cases these same people have worked closely with US-AEP in the past and have a natural predisposition to look to us for assistance. Provided we remain flexible, prompt and nimble, and most importantly, attuned to the real opportunities in Indonesia, we have the chance to build and maintain a robust program. It is imperative, therefore, that our strategy be field-driven in order to respond to the real challenges and opportunities of Indonesia.

### **Operational Principles**

--Strengthen institutions for environmental protection for a better quality of life for Indonesia's citizens by initiating programs, in cooperation with like-minded partners, focused on providing clean water and clean air.

--Provide programs that alleviate the strain of Indonesia's economic crisis by improving basic urban services, industrial efficiency, and good governance.

--Cooperate with partners to focus on basic environmental protection, such as air quality improvement and solid waste management.

--Continue to build alliances with international partners such as the Asian Development Bank and the World Bank that advance common objectives.

--Focus on improving the policy and institutional framework for the delivery of urban environmental services, particularly water and clean air.

--Maintain awareness of selected trade and investment opportunities that build relationships and offer longer-term opportunities in a more stable investment climate.

--Continue to focus on mutually agreed activities in the industrial sector to promote sustainable growth, particularly in the area of energy efficiency.

--Complement and enhance work on decentralization and democratization through building partnerships in the context of the Civil Society and Environmental Governance program done with The Asia Foundation and with the USAID Mission.

### **Partners and Activities**

Partnership is at the core of the US-AEP program. US-AEP will bring together national and local governments, regulatory agencies, NGOs, the business sector and individuals in a focused set of cooperative activities. In the context of this year's workplan, partners will include: Ministry of Environment, Ministry of Energy and Mineral Resources, BPLHD Jakarta (province level), USAID Mission, KPBB, Mitra Emisi Bersih, Swisscontact, the World Bank, ADB, UNDP, JICA, GTZ, SUSTRAN, PELANGI, EAPO, Institute of Technology Bandung, ASE, CAI, Friends of the Environment Fund (DML)/ Indonesian Pollution Prevention Roundtable (KMB), The Asia Foundation, PERPAMSI, IATPI, WEF, AWA, BAPPENAS, SWANA, CSG, and Ministry of Industry and Trade and Ministry of Environment for hosting the 4th Asia Pacific Roundtable for Cleaner Production in October 2002.

Our office will offer a mix of assistance comparable to that of other AEP offices with engagement in three specific areas:

1. Improved Public Policy and Environmental Regulation
2. Improved Urban Management
3. Wider use of Cleaner Production/Energy Efficiency in Industry

We have noted Intermediate Result objectives within each project description.

*Improved Public Policy and Environmental Regulations:*

We are organizing our policy activities for FY2003 around air related issues and deepening our relations with key environmental policy actors.

First, we plan to build on the successful phase-out of leaded gasoline in Jakarta by broadening the consensus and trying to extend the lead phase-out beyond the capital city. A Council of State Governments Grant to support that effort with the required level of commitment would be one of our two priorities under the CSG program. An outreach campaign detailed in this workplan will build on existing partnerships with EPA and KPBB for full phase-out. Supporting research which builds on past research may be done to assess lead sources and exposure and analyze the impact of lead on human health and the environment.

Indonesia plans to upgrade its refineries to supply unleaded gasoline to the whole country, but delays associated with financing for the upgrades mean unleaded supply beyond Jakarta could be delayed until at least January 2005. A Ministerial Decree, however, mandates nationwide supply by January 2003. The Environment Ministry and a broad stakeholder coalition are advocating an interim strategy for broader unleaded gasoline supply while the refinery upgrades are in progress. US-AEP endeavors to strengthen these efforts, to strengthen and build new alliances among ministries, the private sector, and civil society, and to make the unleaded gas and fuel specification issues more understandable to the public. The fuel quality and refinery upgrades occur in the context of implementing the recent Oil and Gas Law, which opens downstream supply for competition (breaking a 28-year monopoly). US-AEP's public outreach efforts will support the AID Mission Energy Governance program by increasing public pressure to implement the Oil and Gas Law.

Second, we plan to support strengthening coordination of stakeholders in the Jakarta Action Plan to Reduce Vehicle Emissions. In effect, we want to support the development of an influential constituency that will advance key clean air issues. The Jakarta Action Plan prioritizes other key air quality issues and was drafted by Mitra Emisi Bersih (MEB – Partnership for Clean Emissions), an association of 40 private sector, government, NGO and academic institutions. Priority air quality policy decisions in key areas include: fuel quality standards, vehicle emission standards, vehicle inspection and maintenance regulation, transportation management, and vehicle technology standards.

Third, we also plan to take a longer view and begin engaging with civil society, legislative groups and other key stakeholders on a multi-year process of building momentum for a Clean Air Act for Indonesia. The initial steps will be organized around a grant from US-AEP's Civil Society and Environmental Governance Program with The Asia Foundation. The grant will be extended to an Indonesian NGO who will organize a strategic engagement with critical stakeholders such as the MEB members and the Parliament Commission on Energy and Environment that will build a consensus for such an act. With full time advisors working with the Indonesian legislature, TAF is especially appropriate for this effort. While there will be no full-fledged Regulatory Dialogue this year, the subject matter of this effort is comparable to its experience of other countries, e.g. the Philippines and Thailand, and we plan to draw on that experience.

Finally, while air quality is the key policy sector of our engagement and while we continue to build relationships with relevant Indonesian Government officials and private organizations, the relationship targeted for development is that with the Ministry of Environment as the agency responsible for national environmental policy and coordination of regions in Indonesia. Over the years, the US-AEP local office has developed a close, collegial working relationship with them. Our long-term goal continues to be building on those successes by supporting their role in the clean air dialogue as well as opportunities that may arise in the future. Engagement in this area is especially timely, as the Ministry of Environment has just completed an internal reorganization and is raising their profile to become a

greater policy influence on a number of environmental issues. As their thinking and plans are further articulated, we plan to expand and integrate these efforts.

*Improved Urban Management:*

Through continuation of three years of intensive focus on delivery of municipal water, we expect to change the way piped water is provided in Indonesia, taking advantage of local autonomy, the attention of local parliaments to other matters, and the reduction of power of central agencies. We are doing this by assisting local start up initiatives for essential activities. We are at the phase of increasing professionalism, local government accountability in services, and consumer orientation through efforts such as the Good Neighbor program. This work will be accompanied by growing attention to wastewater treatment and solid waste disposal, leading next year to greater focus on local government provision of essential urban environmental services.

The Chairmanship of the new Southeast Asia Water Utilities Network is in Indonesia. This and other regional initiatives provide the opportunity to strengthen Indonesian institutions through integration with their regional counterparts.

*Regional Programs:*

Regional programs that make sense for the Indonesia program are reflected in this work plan. We will work with the CATSPAW and MAPES regional programs as well CAT-Net Asia and APRCP.

## **PAG 1**

### **Improved Public Policy and Environmental Regulations**

- 1.1 Clean Air Program
  - 1.1.1 Awareness Campaign for Wider Phase-Out of Leaded Gasoline
  - 1.1.2 Design of a Lead Information Center
  - 1.1.3 Stakeholder Policy Dialogue and Coordination
  - 1.1.4 Clean Air Act for Indonesia
  - 1.1.5 Regional Participation in Clean Air Initiative, CAT-Net Asia Regional Training, and A&WMA



<b>Activity 1.1 Title:</b>	Clean Air Program
<b>Primary program area:</b>	Policy
<b>Secondary program areas:</b>	Urban management of air quality and transportation
<b>U.S. Partners:</b>	USEPA, National Safety Council, IIE
<b>Asian Partners:</b>	KPBB, Swisscontact, Mitra Emisi Bersih, Ministry of Environment, Pelangi

**Description:**

The program for FY2003 builds on the successful phase-out of leaded gasoline in Jakarta as of July 2001, seeking to widen lead phase-out beyond the capital city as well as to strengthen coordination of stakeholders in addressing the priority issues in the Jakarta Action Plan to Reduce Vehicle Emissions.

Continuing in partnership with the USEPA and US-AEP, KPBB will conduct a public outreach campaign for full phase-out of leaded gasoline and awareness of lead sources and exposures. KPBB will conduct training of trainers in effective campaign strategies and sources of lead exposure.<sup>1</sup> The training will include a module on mapping of lead victims as a tool to empower communities. Alumni of last year's training of trainers program will serve as resource persons to conduct the expanded training program. Training will begin around November 2002 for community groups in 9 cities: Medan, Pekanbaru, Palembang, Jakarta, Bandung, Semarang, Surabaya, Makassar, and Denpasar. Following the training, KPBB will hold a national Women/Mothers' Forum in Jakarta to formulate recommendations to mothers and local governments on how to reduce or eliminate lead contamination in the home.

KPBB will produce campaign materials for print media and radio (possibly TV if reasonable public interest air time can be arranged). Exchanges may be arranged with India and the US to learn about campaign strategy and the evolution of lead as a public health issue (India) and data gathering and verification of lead sources (US). Press conferences will be held at major events, and KPBB will organize focus group discussions, public debates, and hearings, sometimes at the request of the Parliament Commission on Environment. Regular advocacy meetings with central government and PERTAMINA decision-makers were considered to make the largest difference over the past two years in the government's willingness to phase out leaded gasoline, and these advocacy meetings will continue in the next year. Consultative Group Meetings will be held every three months to report on monitoring results (e.g. independent fuel quality tests). This component of the project supports IR1.1a: Strengthening environmental policy, law, regulations (particularly Ministerial Decree on phasing out leaded gasoline; emission standards; fuel standards); IR1.a through US-Asian Partnerships with EPA, IIE, and possibly CSG; and IR1.2.1a by strengthening NGOs and their networks organized around urban environmental issues.

KPBB, USEPA and possibly the National Safety Council will also design a lead information center. The Lead Information Center will serve as a national information dissemination center for the public to obtain general information about lead poisoning and prevention. The center will gather data, design research projects with partners such as universities, and disseminate information and results to the public, government agencies, the press, and campaigners. The sustainability of the center will be planned as part of the design. The research will assess lead sources and exposures and analyze the local impacts of lead on human health and the environment. After the design is assessed favorably, the center's first phase activities would be implemented together with the EPA and possibly NSC. This component of the project supports IR1.1b: Formal system set up to capture environmental data (in cooperation with Asian government units).

In addition to the work focused on unleaded gasoline, US-AEP plans to support strengthening coordination of stakeholders in the Jakarta Action Plan to Reduce Vehicle Emissions. Our objective is

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<sup>1</sup> Besides leaded gasoline and the dust deposition from tailpipe emissions, lead exposures commonly occur from sources such as fish cans, water pipes, grinding stones, paint, and cosmetics.

to support the development of an influential constituency that will advance key urban air quality issues. The Jakarta Action Plan summarizes key air quality issues and was drafted by Mitra Emisi Bersih (MEB – Partnership for Clean Emissions), an association of 40 private sector, government, NGO and academic institutions. Priority air quality policy decisions in key areas include: fuel quality standards, vehicle emission standards, vehicle inspection and maintenance regulation, transportation management, and vehicle technology standards.

The MEB will conduct a stakeholder clean air policy dialogue, with the Jakarta Action Plan serving as the framework for dialogue. The objectives of the stakeholder dialogue will be to develop and advocate clear policy input representing environmental and social interests in policies such as fuel quality standards (MIGAS) and the related vehicle emission standards (Ministry of Environment), among others. The MEB will invite guest experts to make presentations at some sessions. US-AEP will support the MEB to conduct targeted focus group discussions and draft constituency-based advocacy materials. Other activities may include producing public outreach materials, providing information and data to journalists regularly, gathering relevant vehicle emission data, and possibly holding a workshop. We will explore the possibility of making this activity a CSG-qualified activity by partnering the MEB and Ministry of Environment with the State of Colorado or the State of California. Regular visits of experts in fuel quality standards and vehicle emission standards will provide technical support to the MEB and the Ministry of Environment for improving Indonesia's fuel quality standards and the related vehicle emission standards.

Building on past studies (USAID-LEMIGAS) and recent workshop recommendations (US-AEP/USEPA; ADB; Indonesian Automotive Federation) regarding technical options for octane enhancers and diesel additives, the MEB will conduct further information sharing activities and possibly exchanges with Indian and US EPA experts on renewable fuel options for Indonesia. This component of the project supports IR1.1a, IR1.a, and IR1.2.1a.

US-AEP and the EPA are also considering assisting the Mayor of Yogyakarta and Gadjah Mada University to characterize the emissions of their city's vehicle fleet and to publish this data. The EPA will assist in making real time emissions tests using its portable equipment, a first-ever measurement in Indonesia. EPA will also assist Indonesian counterparts with data analysis. Data on real emissions will enable the City to better understand where the biggest improvements can be made in the fleet, given existing fuels, engine, and driving behavior interactions. The data will also form a baseline to track progress in implementing the City's new transportation and clean air measures, such as an inspection and maintenance program. Finally, the data will support Yogyakarta in implementing the City's commitment to making Yogyakarta an "environmentally friendly city" by the year 2005. This component of the project supports IR1.1a and IR1.1b.

A number of local partners have prioritized developing a Clean Air Act for Indonesia. Through a TAF grant beginning in FY2002, Pelangi will develop a white paper and hold discussions with key MEB members and the Parliament Commission VIII on Energy and Environment. Two workshops will be held to gather input and build consensus on the fundamental concept. Exchanges may be arranged to learn about implementation aspects of the Philippines' Clean Air Act and the US Clean Air Act of 1990. This component of the project supports IR1.1a.

As part of a broader series of technical assistance and training partnerships, US-AEP will identify and fund key individuals or partners for regional and US-based exchanges, technical meetings, and professional conferences focusing on urban air quality and transportation management. US-AEP will look to continue to partner with USAID Indonesia's Energy office to co-sponsor these individuals when it is mutually useful to do so. One of the regional forums is the Clean Air Initiative for Asian Cities. The first conference in the FY03 series will be held in December 2002 in Hong Kong. Another regional forum is CAT-Net Asia, an Asia-wide network of training centers of excellence led by USEPA and the

World Bank (distance learning course) that was launched during FY2002. US-AEP supported Indonesian colleagues to become actively involved in shaping the initiative and will continue to help define the role and activities of the network in FY2003. Finally, US-AEP will continue to participate in the annual A&WMA conference and exhibition. This component of the project supports IR1.a.

Specific plans for FY 2003 are as follows:

- Campaign for Wider Phase-out of Leaded Gasoline (KPBB); September 2002-August 2003
- Design and Sustainability of a Lead Information Center (KPBB); November 2002-February 2003;
- Phase 1 Implementation (KPBB) March 2003-September 2003
- Stakeholder Clean Air Policy Dialogue (MEB); November 2002-August 2003
- Characterizing Vehicle Emissions (Univ. Gadjah Mada & City of Yogyakarta); March 2003
- Clean Air Act for Indonesia (Pelangi); October 2002-May 2003
- Regional Participation in Clean Air Initiative for Asian Cities (CAI); December 2002

### **Expected Results:**

The public outreach campaign is expected to increase the pressure on PERTAMINA and relevant government agencies to supply unleaded gasoline beyond Jakarta without unnecessary delay and to improve the quality of gasoline. The campaign will also provide pressure on MIGAS to improve its fuel standards policy, while the MEB policy dialogues will provide coordinated, representative input to MIGAS on how to improve the fuel standards policy. The fuel standards policy is particularly important in light of the Oil and Gas Law, which will open the downstream market to competition in a few years. The outreach campaign training will strengthen capacity of community groups in 9 cities to conduct effective, strategic campaigns. The maps of lead victims will provide information to empower communities to reduce harmful exposures to lead. The Women/Mothers Forum will also increase pressure on PERTAMINA as well as empower lead victims to reduce their exposures. The design for a Lead Information Center will plan a sustainable center to coordinate data, research, and press coverage.

The stakeholder clean air policy dialogue will coordinate policy input on fuel options and quality standards for gasoline and diesel and the related vehicle emission standards, particularly from the environmental and social standpoints. New data on real time vehicle emissions will set a baseline for progress and enable the City of Yogyakarta to analyze and use this data in strategic planning.

The academic paper for a Clean Air Act will initiate policy dialogue among stakeholders and build consensus around a concept for national and province level air quality regulation, participation, and enforcement.

Participation in regional exchanges serves to increase both the skills and knowledge of our Indonesian partners, as well as their ability to successfully network with their colleagues in Asia and the US. CAT-Net Asia participation should result in improved professionalism of trainers in air quality monitoring and related areas.

## **PAG 2**

### **Improved Urban Infrastructure**

- 2.1 Pilot Provincial Water Training
- 2.2 New Approaches for Full Cost Recovery
- 2.3 Municipal Wastewater Efficiency
- 2.4 Solid Waste Initiatives

<b>Activity 2.1 Title:</b>	Pilot Provincial Water Training
<b>Primary program area:</b>	Improved Urban Infrastructure
<b>Secondary program areas:</b>	N/A
<b>U.S. Partners:</b>	American Waterworks Association
<b>Asian Partners:</b>	National Planning Agency (BAPPENAS), IATPI

**Description:**

The goal of this project is to ensure replicable and sustainable decentralization of training for waterworks professionals in Medan and Makassar through the relatively new (since January 2000) Yayasan Pendidikan Tirta Dharma. If this first decentralization effort succeeds, it will be used as a model for training in other regions that will be more relevant to local needs while providing local consulting and other support services. This project supports the goal of US-AEP and USAID to ensure the sustainability of water sector reforms achieved to date.

In March/April 2002 the US-AEP-assisted PREP study produced a plan for decentralization of training to Medan and Makassar together with a cash flow analysis showing how the centers can be commercially viable. As a result, other donors were interested in assisting an effort that was planned to be sustainable. JICA has asked the National Planning Agency for approval to provide about \$300,000 worth of equipment to the centers, and the German GTZ is considering providing technical assistance.

In order to ensure that the goals of the PREP plan are achieved, in early 2003 US-AEP will provide experts for startup assistance, including two volunteers from AWWA who are experienced in administration and planning of training programs. AWWA volunteers are expected to provide input (scope of work to be written later) for up to two weeks each, mainly in Makassar or Medan. Ideally each volunteer would have experience in startup and management of a training center including the writing of budgets, position descriptions, determination of initial staffing, and promotion of training services. Using a module prepared by the Vocation Education Development Center in Magelang on training of managers, the project team will help Yayasan Tirta Dharma officers identify trainers and managers in both Medan and Makassar and provide training of managers. The training can be used in startup of future regional (provincial) training centers. Ten case studies in key areas will be developed in Bahasa Indonesia for input to all training courses, including those to be offered in the Medan and Makassar training centers. Studies would be in areas such as customer satisfaction, billing practices, technical operations, management, and incentives. These case studies will be the first ones deposited in a case studies resource center of Yayasan Pendidikan Tirta Dharma.

Specific plans for FY 2003 are as follows:

- Technical assistance by a team of Indonesian experts to guide the startup phase of decentralized training in Medan and Makassar, probably starting in early 2003.
- Preparation of case studies that can be used for training both in provincial centers and in Jakarta, also in early 2003.
- Assistance of two AWWA volunteers.

**Expected Results:** By the end of FY 2003 YPTD will be able to conduct on a sustainable basis training courses in Medan and Makassar according to the recommendations of the PREP study. Cooperation between the American Waterworks Association (AWWA) and the Indonesian Water Supply Association (PERPAMSI) will be strengthened. This projects supports IR1.2a.

<b>Activity 2.2 Title:</b>	New Approaches for Full Cost Recovery
<b>Primary program area:</b>	Improved Urban Infrastructure
<b>Secondary program areas:</b>	N/A
<b>U.S. Partners:</b>	American Waterworks Association, PADCO
<b>Asian Partners:</b>	National Planning Agency (BAPPENAS), IATPI, PERPAMSI, provincial foundations, LGWS Project

**Description:**

The goal of this project is to determine new approaches to support and disseminate the efforts of Indonesia's most forward-looking water enterprises to achieve full cost recovery. The continuation of subsidies to failing water enterprises is not a sustainable solution. US-AEP is leading the way in strengthening water enterprises, providing lessons for other large donors. Activities will support the Good Neighbor movement, a program in which directors of successful full-cost-recovery-club water enterprises can help surrounding water enterprises. Their mayors will inform other local governments about the advantages of not having to provide government subsidies to water enterprises. Mayors would make presentations of these advantages at events in Indonesia and in other countries, such the US-AEP-assisted Mayors Asia Pacific Environmental Summit (MAPES) conference where Good Neighbor directors already have made presentations.

All directors of water enterprises that have achieved full cost recovery up to and including May 2003 will participate in the Good Neighbor program. In about July 2003, all of them (about 10) will visit American Waterworks Association (AWWA) offices and AWWA-selected water enterprises in the United States to study full cost recovery issues so that they can be more effective Good Neighbors. These full cost recovery issues include customer service, incentives, community participation, and transparency.

Good Neighbor projects such as the project with PDAM Jember in FY02 will emphasize aspects of full cost recovery such as customer orientation.

The project also will support the creation of recommendations to PERPAMSI for obtaining approval, on a sustainable basis, of tariff increases in the current decentralized and unregulated atmosphere. Interviews of local parliament members, mayors, and local government officials will be conducted in representative locations to determine the perceptions of water enterprises by local governments. The information from the interviews will be combined with data from NGOs and other stakeholder groups to develop recommendations for improving communications with local governments and stakeholders. The findings and recommendations, prepared in concert with PERPAMSI directors, will be presented at a seminar in Jakarta attended by representatives of local governments and water enterprises, and the results will be made available to all water enterprises.

Specific plans for FY 2003 are as follows:

- Upgrading of experience for Good Neighbor directors who will train neighboring PDAMs
- Support for provincial training by targeted PDAM directors
- Building relations with local governments

**Expected Results:** The approaches created by this activity will enhance the efforts of the USAID-assisted LGWS project to help 20 water enterprises achieve full cost recovery by the end of 2003. The activity will strengthen the role of PERPAMSI as a professional organization upgrading the performance of its 300 member water enterprises. It is expected that the recommendations for explaining and obtaining tariff increases will be incorporated by water enterprises into their corporate plans and annual budgets. This project supports IR1.2a.

<b>Activity 2.3 Title:</b>	Municipal Wastewater Efficiency
<b>Primary program area:</b>	Improved Urban Infrastructure
<b>Secondary program areas:</b>	N/A
<b>U.S. Partners:</b>	WEF
<b>Asian Partners:</b>	IATPI, PERPAMSI

**Description:**

The purpose of this project is to bring US-AEP initiatives in industrial wastewater treatment into the municipal wastewater sector. The goal is to help ensure the sustainable development of a sector that is poorly maintained and inadequately funded. The activities build on advances made by WEF and IATPI in wastewater treatment operators training. Because of the lack of local demand and the lack of central government support, only about six water enterprises provide municipal wastewater services in Indonesia. The Association of Indonesian Environmental Engineers, in concert with WEF, has developed a program of training and certification of wastewater treatment operators. A hundred people have been trained to date, mostly in the private sector. The National Planning Board's policy is that wastewater collection and treatment will be handled through water enterprises. Yet sewerage bills cannot be included in water bills because World Bank policy and the recent consumers protection law do not allow water enterprises to bill for services that are not directly provided.

In this context, it is likely that central government funds will be programmed toward development of physical works in wastewater. Local governments do not want to see a repeat of previous experience with centrally-programmed funds for water (overprices and inappropriate local facilities planned and built by central government agencies with local governments paying the bill). Indonesia's water enterprises that are now working with wastewater will meet to form a group for cooperation and input to PERPAMSI as the advocate of water enterprises throughout Indonesia. They will take advantage of IATPI wastewater treatment operator training, and they will recommend next steps in the development and financing of locally-managed municipal wastewater collection and treatment.

WEF will continue to cooperate with IATPI for the institutional development of IATPI as a professional association and the development of the wastewater treatment sector in general. The exact nature of WEF assistance will be established in mid-2002 after an assessment of progress in the program funded at the end of FY 02.

Specific plans for FY 2003 are as follows:

- Cooperation among wastewater PDAMs \$25,000
- WEF cooperation with IATPI \$25,000

**Expected Results:**

By the end of FY 2003 it is expected that a methodology will be clear for attaining subsidized cost recovery for wastewater treatment. Also a foundation will be established for cooperation between PDAMs programming wastewater funds. There will be even closer cooperation between WEF and IATPI. This project supports IR1.2a and IR1.2.1a.



**Activity 2.4 Title:** Solid Waste Initiatives  
**Primary program area:** Improved Urban Infrastructure  
**Secondary program areas:** N/A  
**U.S. Partners:** SWANA, CSG, TAF  
**Asian Partners:** IATPI, NGOs, Bali Urban Infrastructure Project

**Description:**

The goal of this activity is to build from successes in the water sector to find possible successes areas in the solid waste sector. Ultimately this activity is aimed at bringing together all three major local accountability utilities (water, wastewater, and solid waste) to enhance and support the capability of local governments to provide urban services to their citizens. At the same time, professionalism and accountability will be emphasized in trial activities. We expect to support a pilot activity testing the effectiveness of promising new legal relationships between local governments and community-based organizations. Lastly, we will continue the activity started last fiscal year supporting a mentor from the Delaware Solid Waste Authority to assist the SARBAGITA integrated solid waste project in Bali at critical points. This project presents a potential partnership with the World Bank. We will explore the possibility of this activity qualifying for a CSG grant with the Balinese SARBAGITA solid waste authority and the Delaware Solid Waste Authority matching up.

Specific plans for FY 2003 are as follows:

- Community based/Local Government initiative \$20,000
- Delaware-SARBAGITA Cooperation \$10,000

**Expected Results:**

By the end of FY 2003, new initiatives in legal relationships between community based organizations and local governments will have been defined and tested. They may be replicated in other solid waste activities. In addition, the SARBAGITA integrated solid waste project is expected to have passed the construction phase with mentoring by a US-AEP assisted expert. This project supports IR1.2a and IR1.2.2a.

## ***PAG 3***

### **Improved Corporate And Environmental Management**

#### **3.1 Energy Efficiency Outreach Program**

<b>Activity 3.1 Title:</b>	Energy Efficiency Outreach Program
<b>Primary program area:</b>	Industry/ Energy
<b>U.S. Partners:</b>	Alliance to Save Energy
<b>Asian Partners:</b>	Center for Energy Research, Institute of Technology, Bandung; Hotel and Restaurant Association; implementing organizations in three cities TBD.

**Description:**

For decades, the Government of Indonesia has heavily subsidized both fuel and electricity prices. Prior to the year 2001, analysts commonly observed that the cost to energy users was too low to create an economic incentive to conserve energy. Industrial business managers prioritized increasing output rather than saving costs.

This picture changed in 2001, however, when the government began to cut the long-standing fuel subsidies, largely in response to IMF pressure and a staggering national debt burden. The state electricity company, PLN, went bankrupt during the economic crisis of 1997-1998. The price of diesel suddenly rose to 75% of the world market price in 2002, while gasoline rose to nearly 100% of the Singapore Platts price. Electricity rates for the commercial sector have risen sharply in 2001 and 2002. This strong price signal raises questions such as whether end users are becoming more interested in energy efficiency, and in which sectors consumers are likely to act the most readily.

In April 2002, US-AEP<sup>2</sup> and the Alliance to Save Energy (the “team”) undertook a scoping mission to assess opportunities to strengthen energy efficiency implementation in Indonesia. The team met with government agencies, research centers, NGOs, consulting firms, energy conservation associations, and other key players in the energy use arena. The team identified the following areas of opportunity: efficiency in hotels and commercial buildings; public awareness campaigns targeted at certain groups in the household and commercial sectors and public use buildings; educational programs for grade schools; and strengthening small- and medium-sized enterprise associations. The team specifically recognizes the energy service providers in Indonesia and aims to strengthen demand for their services.

The team decided to begin with a hotel sector project as a first step. The preparatory phase of this project began in FY2002 with initial scoping, research and planning undertaken in partnership with the Center for Research on Materials and Energy at ITB (Dr. Tatang, Director). The preparation includes gathering key information, advising on appropriate cities to site the project, and identifying implementing partners in three or four cities.

Specific plans for FY 2003 are as follows:

Three or four Indonesian cities will be identified to take part in the project. Defined criteria will be used to vet hotels according to management and commitment characteristics for ability and promise in implementing energy efficiency.

Key technical managers from the Bandung hotel sector will share their practical experience and demonstrate the economic and other benefits gained. No-cost and low-cost measures will be prioritized.

Energy management associations will be formed in the participating cities if appropriate, and these associations will serve as local demonstration networks for the surrounding hotel community.

Meetings and information sharing projects, including workshops, will be held.

In FY2003, these fuel and electricity price trends are set to continue upward. President Megawati announced a further 39% cut in fuel, electricity and food subsidies in the 2003 state budget draft (to

<sup>2</sup> Participants from US-AEP included the Secretariat regional Country Coordinator (DZ), the Secretariat Washington DC Indonesia backstop (JB), and the Indonesia Director for Program Coordination and Policy (SB).

\$2.91 billion).<sup>3</sup> The lower subsidies mean higher fuel prices and electricity rates, the latter set to increase by an average of 6% every quarter in the next year.<sup>4</sup> The higher costs of fuel and electricity prices are in most cases being borne by the consumer, although some protective measures remain in place for the poorest of the poor (e.g. kerosene and diesel subsidies, and pledged government salary increases). A number of energy-related organizations have begun to send the message that although energy prices are undoubtedly going to go up, one can do something about it by taking no- or low-cost energy efficiency measures. US-AEP/Indonesia aims to strengthen the capacity of organizations to follow through with this message in practical terms.

**Expected Results:** This project is anticipated to have a duration of three years, contingent upon satisfactory progress at the end of each year. The scoping process has resulted in an initial decision to focus on the hotel sector. The first deliverable is a detailed work plan for year one, citing the cities on which to focus, describing how the hotel industry will be engaged, and providing specific project goals. The work plan design will be informed by the TDY mission at the end of October and completed by December 31, 2002.

Professional associations for hotel energy management will be strengthened in three cities, so that they in turn may share energy management practices with their members in respective regions. A methodology for replicable sharing of managerial know-how in hotel energy efficiency will be developed by using the Bandung model as a starting point and learning how to effectively share management experience in hotel communities in cities with different development characteristics (e.g. tourist areas, business centers, rapidly developing cities). Energy and cost savings will be gained in participating hotels, with strengthened professional capacity to replicate these savings in neighboring hotels and cities in the future. This project supports IR1.a and IR1.3.2a.

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<sup>3</sup> Jakarta Post August 18 "Govt announces subsidy cuts, higher taxes for 2003 budget."

<sup>4</sup> *Ibid.*

## SUCCESS STORIES OF FY 2002

1. Public Outreach Raises Awareness of Lead Danger and Introduction of Unleaded Gasoline
2. Jakarta Students get New Environmental Textbook
3. Solid Waste Workshop Highlights Community-Driven Successes
4. Southeast Asia Water Utilities Network (SEAWUN) Established
5. Decentralized Training Plan Attracts Donor Commitments
5. US-AEP Training Support for WEFT Creates a Sustainable Asset

## **1. Public Outreach Raises Awareness of Lead Danger and Introduction of Unleaded Gasoline in Jakarta**

During 2001 and 2002, US-AEP supported local partner KPBB (Coalition for Unleaded Gasoline) in launching a creative and sustained campaign to raise awareness of the dangers of lead and the planned introduction of unleaded gasoline. The campaign, coordinated with an unlikely coalition of government, private sector and NGO players, followed over ten years of unrealized government commitments to supply unleaded gasoline.

In February 2001, the advocacy efforts of KPBB and others paid off when state oil company PERTAMINA and the Government of Indonesia agreed on a new plan and timetable to begin lead phase-out. It would begin in June 2001 in Jakarta, with complete phase-out throughout Indonesia by January 2003. The Minister Energy and Mineral Resources formalized these commitments in a Ministerial Decree.

The public awareness campaign aimed, first, to keep pressure on the government to follow through with implementation on time, and second, to prepare the public for using unleaded gasoline. The campaign sought to increase the public's level of understanding about the dangers of lead, the benefits of unleaded gasoline, and increase public acceptance of a fuel price increase. The campaign targeted car users, street vendors, bus and minivan drivers, the automotive industry, students, national Muslim organizations, key government offices, and other stakeholders. Representatives from each target group helped design an action plan to prepare for the use of unleaded gasoline.

The campaign activities began in April 2001 with three TV talk shows featuring PERTAMINA and City of Jakarta officials and KPBB leaders on the topics "Unleaded Gasoline: Trade-off Between Supply and Quality", "Benefit of Unleaded Gasoline for Vehicles and Air Quality", and "Leaded Gasoline Phase-out: First Gate Toward Clean Air". Campaign materials were produced, including posters, stickers, brochures, banners, pins, balloons, masks, flags, and T-shirts carrying messages such as "Because of Lead, Children Become Victims", "Save Our Children: Support 1 July Jakarta Free from Leaded Gasoline", "Lead Generation", "Unleaded Jakarta", and "My Jakarta Without Lead". KPBB distributed materials at a rally march on Earth Day, Environmental Exhibitions, shopping malls, on the streets, and at a long list of events.

KPBB organized a seminar to develop local lead phase-out plans on June 25. The seminar was intended for 60, but 90 participants came, reflecting the success of the campaign. The seminar ended with a live radio show with interactive dialogue and listeners calling in from home. On July 1, the first PERTAMINA tankers with unleaded gasoline arrived on schedule. KPBB organized launching ceremonies at City Hall and at Monas with a children's drawing festival, a symbolic "green walk" and a bike ride through the city, and a press conference drawing full media turnout.

Through the end of 2001 and in 2002, KPBB held public debates and forums, distributed data on the new fuel composition, and reported on independent testing results of gasoline lead content in Jakarta which confirmed lead levels had dropped. The coalition continued to produce regular newsletters, newspaper articles, radio interviews, and to launch and manage an "anti-lead" email listserve. The campaign has raised awareness of the dangers of lead and has provided the most consistent and focused pressure to date on the government and PERTAMINA to follow through with the commitments to phase out leaded gasoline. The Jakarta area has enjoyed unleaded gasoline supply without interruption for one year as of July 2002.

## 2. Jakarta Students Get New Environmental Textbook

In the area of environmental education, US-AEP partnered with Swisscontact and a host of Indonesian government agencies to support the printing and social integration of a unique school textbook. The textbook is the first of its kind in Indonesia and is entitled *Air Pollution from Motor Vehicles: Efforts to Raise Awareness*. The text introduces students in grades 4 to 6 to air pollution's causes, effects, and prevention in urban areas. The program produced books both for students and for teachers.

The textbook combines natural science (chemical composition of urban air pollution), human health (physical impacts on lungs, brain, etc.), and family or individual actions necessary to prevent air pollution (e.g. vehicle pollution prevented by regular maintenance and emission testing) in an interesting format for elementary school students.

US-AEP supported distribution of 5,000 sets of the books to 900 schools in Jakarta, together with brightly colored large posters. In addition, the Jakarta Department of Education, on its own budget, distributed another 20,000 sets to the total 4,000 elementary schools in the Jakarta area.

US-AEP also supported training workshops that engaged 131 teachers in discussions about Jakarta's air pollution problems and teaching methods for this subject. The program includes periodic classroom visits to receive feedback on the use of the books and continue classroom discussions. Reflecting the need for such training at an early age, the Ministry of Education officially integrated the air pollution textbook into the formal national curriculum for all Indonesian schools.

Counterparts from other Asian countries have found the book so innovative and useful that they have begun translating the book to their languages. In the Philippines, the books are soon to be printed in English.

### **3. Regional Solid Waste Workshop Highlights Community-Driven Successes**

US-AEP deployed its regional cooperation capabilities in order to share lessons learned regarding solid waste management from Indonesia, Singapore, the Philippines and the United States. US-AEP, together with the Singapore Ministry of Environment and the Indonesian Ministry of Environment, held an international workshop in Jakarta, "Developing Urban Municipal Solid Waste Management Systems and Institutions," May 13-14, 2002. More than 100 participants attended from 22 metropolitan areas across Indonesia, including Mayors, city sanitation and finance departments, research institutes, NGOs, and the Ministries of Environment, Health, and Technology.

The Philippine speakers shared successes that have been achieved in social and economic contexts similar to those currently in Indonesia, including the Philippines Ecological Solid Waste Management Act. Of particular interest to the Indonesian audience was the Philippine experience building partnerships between community groups, local governments, and local companies to manage urban waste.

US speakers presented management techniques that could lead to full cost recovery in the municipal waste sector. The speakers also presented experiences conducting stakeholder participation processes for disposal siting and other contentious issues, as well as information about US technologies. The Singapore speakers presented successful waste minimization and recycling programs in a space-limited context, including operation of an off-shore landfill.

The Indonesian participants identified principles for better integrating community and government efforts to manage solid waste at the local level. Participants outlined ways to improve compost operations as a key strategy for minimizing waste volumes and transport costs in urban areas. A visit to the Rawasari demonstration treatment site provided participants with a first-hand view of one community-operated waste minimization project.

The workshop provided Indonesian decision-makers with useful information about regional Asian experiences at different levels of development. Participants developed ideas for new roles for community groups, such as creating NGO-city agreements that would improve city services. The organizers are awaiting a follow-up proposal from the Singaporean Ministry of Environment.



#### **4. Southeast Asia Water Utilities Network (SEAWUN) Established**

With financial assistance from US-AEP/Indonesia and logistical assistance from US-AEP/Vietnam, representatives of water utility associations in the Philippines, Indonesia, Vietnam, and Thailand met in Hanoi. On August 13, 2002, they established the Southeast Asian Water Utilities Network (SEAWUN) for information sharing, advocacy, and regional cooperation for better delivery of piped water. The head of the Indonesian Water Supply Association was elected SEAWUN's first chairman. For the first three years, SEAWUN's secretariat will be located in Hanoi.

US-AEP/Indonesia budgeted in FY 02 for an exchange between the Indonesian Water Supply Association, PERPAMSI (representing 300 water enterprises) and VWSA, the Vietnam Water Supply Association (representing 68 water enterprises). Because the municipal water supply systems of Indonesia and Vietnam had much in common, they were natural partners for a first exchange leading to closer regional cooperation.

While working on a parallel track, ADB encountered obstacles to the establishment of a Southeast Asian water utilities network. The planned Indonesia-Vietnam exchange provided an ideal venue for a tripartite meeting between the water supply associations of Indonesia, Vietnam, and the Philippines.

In early February 2002, during the course of a US-AEP-assisted Municipal Infrastructure Finance workshop in Manila, the new President of the Philippine Association of Water Districts (PAWD) agreed in principle to join the meeting in Hanoi, and the ADB agreed to support the costs of PAWD's participation. Although there is no association covering all 1,000 water enterprises in the Philippines, the Philippine Association of Water Districts represents 561 water districts throughout the country. In mid-February 2002, PERPAMSI formally proposed an exploratory meeting in Hanoi in July/August 2002, and the VNWSA agreed.

In April 2002, during informal discussions with Indonesian and other water enterprise directors at the US-AEP assisted Water Managers' Urban Institute inaugural session in Honolulu, Thailand's Provincial Waterworks Authority (PWA) agreed to join the Hanoi meeting. PWA owns and operates 225 water enterprises serving 650 municipalities throughout Thailand. Later in May 2002, officers representing water enterprises in Malaysia agreed to join. ADB agreed to fund the costs of the Thai and Malaysian delegates, as well. Thus, because of the US-AEP-assisted exchange and follow-up at regional conferences, a truly representative group of Southeast Asian water enterprise directors was able to form SEAWUN.

US-AEP's office in Hanoi serves as a reliable back-up for the Secretariat. The establishment and development of SEAWUN demonstrates the value of AEP's regional presence and expertise.

## 5. Decentralized Training Plan Attracts Donor Commitments

Poorly established training programs often become tar babies for donors. If donors stop funding them, they die, but if they continue funding them, the training programs often cling to life without improvement, continually in debt and continually in need.

The Indonesian Water Supply Association's Board of Governors determined that in order to be more relevant and more cost-effective, centralized training should be dispersed to the provinces. *Yayasan Pendidikan Tirta Dharma* (YPTD), the training arm of the Indonesian Water Supply Association, asked for US-AEP's assistance in making a master plan for an effective and cost-recovering training program in the provinces.

The 7 week-long Pre-feasibility Reconnaissance for Education in the Provinces (PREP) study was launched in March 2002. The team used a questionnaire to conduct interviews at training sites and in water enterprises on Java and in the provinces.

The team conducted interviews with about 100 people with emphasis on officers in the cities of Medan and Makassar where the first two training centers will be located. They determined local training needs and resources. They identified physical locations that could be used for training and the materials and equipment that would be needed. At the end of the study, their findings were incorporated into a detailed cash flow plan showing break-even points under different scenarios.

On May 1, 2002, at a one-day workshop in Jakarta, the PREP team presented its recommendations to YPTD, other stakeholders, and donors. Even though it was prepared in only 7 weeks, the plan was so thoroughly thought-out that it was accepted by the YPTD Board as a full-fledged feasibility study. Because the Medan and Makassar training center plan was shown to be self-supporting and sustainable, it was very popular among the donors who viewed support as being less risky. To date, JICA has committed to providing \$300,000 worth of equipment for the two centers, and other donors are considering program support. The JICA assistance alone is worth more than 8 times the US-AEP contribution.

Implementation of the plan is expected to provide a method for decentralization of training that can be used in other provinces. Because of the intensive contribution of the US-AEP-assisted PREP study, YPTD now has a "bankable" plan that is attracting donor start-up support. If it is followed, the master plan will provide demand-driven professional water enterprise training on a sustainable basis.

## 6. US-AEP Training Support for WEFT Creates a Sustainable Asset

Between December 2000 and July 2001, through a US-AEP grant for Water Enterprise Functional Training (WEFT), a team of Indonesian water curriculum experts prepared modules for a three week-long water enterprise directors management course to be offered on a cost-recovery basis. Due to recent decentralization reforms, a one-time input of up to 200 water enterprise directors (out of 300 directors nationwide) was expected in 2001/2002. The modules were designed to help new managing directors understand the lessons learned from WET/LGWS, decentralization effects, and the new consumer protection law.

PERPAMSI (the Indonesian Water Supply Association) was the grantee, PERPAMSI's training arm, *Yayasan Pendidikan Tirta Dharma*, was executing agency for the grant. A training specialist and a trainer were provided from the USAID-assisted Local Government Water Services project.

For the first time in Indonesia's history, new water enterprise managing directors received training before managing local governments' water supply assets.

In the first year, the amount of the WEFT grant, \$20,000, leveraged training of 47 directors x \$700 tuition = \$32,900, paid by the water enterprises. The leverage will grow proportionately greater in subsequent years. Thus, US-AEP's assistance not only made possible training for new water enterprise directors, it also helped create an asset (a highly-regarded set of training modules) that increases professionalism in the water sector while enhancing the sustainability of the training institution, *Yayasan Pendidikan Tirta Dharma*.