UNITED STATES - ASIA
ENVIRONMENTAL PARTNERSHIP

CLEANER AND HEALTHIER CITIES IN ASIA

US-AEP
A Program of USAID

USAID
UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

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Environmental Challenges

The **United States-Asia Environmental Partnership (US-AEP)** is a regional program of the **U.S. Agency for International Development (USAID)** that supports cooperation between governments, businesses, and communities in Asia and the U.S. to address the environmental challenges associated with urbanization and industrialization. Working in India, Indonesia, the Philippines, Sri Lanka, Thailand, and Vietnam, US-AEP introduces policies, practices and technologies that improve environmental conditions for city dwellers throughout the region, with a particular focus on the urban poor. By working toward cleaner and healthier cities, US-AEP also promotes sustainable economic growth and an improved quality of life for the people of Asia.

Creating Sustainable Solutions through Partnerships

US-AEP offers a valuable means for six Asian countries to share lessons and develop solutions that significantly affect the region. US-AEP achieves its environmental objectives by providing flexible and fast responses to high priority opportunities. Through grants, technical assistance and exchanges, US-AEP brings practitioners and experts together to address specific problems and share experiences in the areas of:

- Air quality
- Water quality and supply
- Environmental governance
- Solid and hazardous waste management
- Energy efficiency and renewable energy

Maximizing Impact through Regional Cooperation

US-AEP facilitates sharing of regional best practices that can be adopted to address country-specific needs. In addition to US-Asia partnerships, the program supports regional dialogue and action on common environmental problems by replicating successful projects, sharing best practices, creating and strengthening networks that promote dialogue and cooperation, and building stakeholder capacity for achieving consensus.

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Cleaning the Air

Growth in the transport, power, and manufacturing sectors in many Asian countries has worsened air quality, contributing to respiratory and other health-related problems. In Indonesia, leaded gasoline is the primary source of childhood lead poisoning. Urban air pollution causes as many as 2,300 premature deaths and 9,600 cases of chronic bronchitis annually in Thailand. Pollution from industrial sources is also a major public health concern throughout the region. US-AEP develops and supports partnerships with governments, businesses and communities to improve air quality in Asia by promoting the use of cleaner fuels, helping cities develop air quality management plans, improving vehicular inspection and maintenance programs, and providing technology solutions. US-AEP also collaborates with the Asian Develpment Bank and the World Bank on the Clean Air Initiative for Asian Cities (CAI-Asia), a regional program to share knowledge on air quality management, improve policy and regulatory frameworks, and assist cities in implementing integrated air quality strategies. Below are representative program accomplishments from each US-AEP country.

INDIA

- Improving urban air quality through science-based air pollution control strategies and policies, including emissions inventory modeling and air quality monitoring.

INDONESIA

- Promoting the phase-out of leaded gasoline nationwide, and expediting adoption of cleaner EURO-II vehicle technology and emission standards.
- Monitoring health impacts and benefits of air quality improvement programs.

PHILIPPINES

- Developing a replicable pilot program in the cities of Puerto Princesa and San Fernando (La Union) to reduce emissions from tricycles, a major source of air pollution in cities throughout the Philippines.
- Implementing a media campaign to increase public awareness on the health impacts of air pollution due to excessive tricycle emissions.

SRI LANKA

- Contributing to the nationwide phase-out of leaded gasoline and a subsequent 80 percent reduction in ambient lead levels in Colombo.
- Supporting the implementation of the national Clean Air Action Plan through stakeholder consultations focused on reducing emissions of particulate matter and sulfur oxides from vehicles.

THAILAND

- Implementing policy and technology solutions to reduce harmful emissions from diesel vehicles in collaboration with Thailand's Pollution Control Department, the Department of Land Transport, and the World Bank.

VIETNAM

- Promoting the adoption of tighter fuel and vehicle emissions standards, promoting best practices in vehicle inspection and maintenance, and improving air quality monitoring in Hanoi and Ho Chi Minh City.

CLEANER A

Supporting
Clean Water Initiatives and Better Sanitation Systems

Water availability and quality are paramount issues in Asia. Urban demand for water in India exceeds supply by as much as thirty percent. With over three quarters of the population lacking adequate sanitation, water-borne diseases are prevalent, including diarrhea, which kills 500,000 children each year. In Indonesia, it is estimated that less than 40 percent of the urban population has access to clean, piped water. US-AEP is helping Asian countries improve water quality and increase access by upgrading the accountability and efficiency of local government institutions providing services to consumers and by undertaking watershed planning activities with local communities. In addition to the initiatives described below, US-AEP also works with regional bodies such as the Southeast Asia Water Utilities Network (SEAWUN) to promote full cost recovery as a means of improving the quality of water utility services.

INDIA

- Supporting rainwater harvesting programs as a simple and cost effective solution to increase water supply and eliminate shortages in Mumbai, Kolkata, and in the Jalore district of Rajasthan.
- Developing water recycling and reuse models for cities in three Indian states.

INDONESIA

- Training water enterprise managers and wastewater treatment operators to improve basic skills and increase their ability to provide the urban poor better access to clean, piped water.
- Working with communities to reduce water contamination and improve waste management.

PHILIPPINES

- Assisting four cities to establish effective, low-cost wastewater treatment facilities to reduce water pollution through innovative financing schemes.
- Improving implementation of the Clean Water Act by sharing international best practices, supporting wider consultations on its implementing rules and regulations, and pilot testing establishment of water quality management areas.

SRI LANKA

- Engaging school children and communities to better understand the health implications of poor water quality.
- Improving water pumping, treatment and supply efficiency to enhance access to clean water.

THAILAND

- Developing community-based solutions to revitalize the Tha Chin River basin, one of Thailand's largest watersheds and a major source of drinking water.
- Developing models for local action through partnerships with the Laguna Lake Development Authority in the Philippines, the University of Maryland, environmental NGOs in the Chesapeake Bay region, and other Maryland and Thai stakeholders.

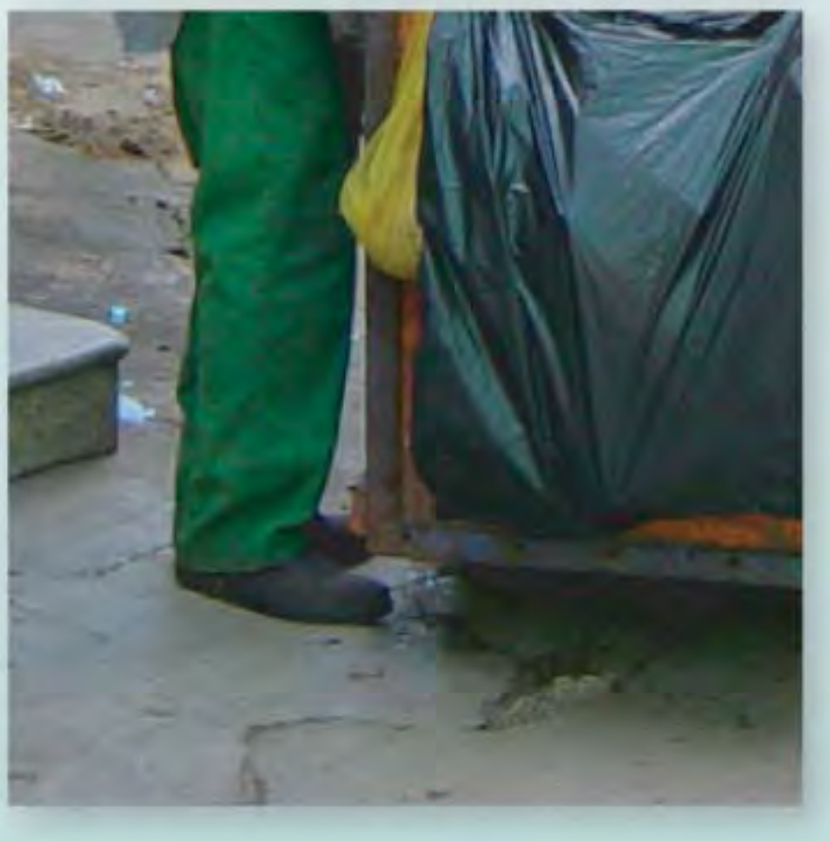
VIETNAM

- Mobilizing community support to clean up the Tan Hoa-Lo Gom Canal, a heavily polluted watershed serving over 1 million people in Ho Chi Minh City.
- Developing models for local action through international partnerships with the City of Portland Oregon, Portland State University, NIKE and others.
- Sharing lessons with governmental stakeholders in Thailand, the Philippines, and the Mekong Delta.

AND HEALT

Improving Solid and Hazardous Waste Management

Solid and hazardous waste management is a serious challenge in urban areas throughout Asia. While hazardous waste can directly pose a serious threat to the health of populations, the indiscriminate dumping of solid waste in waterways pollutes major sources of drinking water for millions of people. Only forty percent of solid waste is collected in the Philippines while the rest is dumped into waterways and open spaces, and nearly 2.5 million tons of hazardous waste are generated each year. Increasingly evident in Vietnam's cities are signs of municipal and household wastes in rivers and lakes, and untreated industrial pollution in close proximity to residences, rice paddies, and schools. US-AEP is helping address these challenges by strengthening the capacity of local governments to develop plans, prepare solid waste projects, and promote composting and recycling technologies.



INDIA

- Introducing best practices for treatment and disposal of municipal solid waste, hazardous waste, and bio-medical waste, and increasing private sector participation in solid waste management.
- Increasing awareness among citizens, local governments, regulators, and industry of solid waste management practices to increase compliance with laws and regulations.

INDONESIA

- Building a public information dissemination center for prevention of lead poisoning and improved hazardous waste management.
- Providing public information about safer mining practices and the dangers of mercury through partnerships among civil society and local governments.

PHILIPPINES

- Assisting local governments establish sustainable funding mechanisms such as garbage collection fees for solid waste management projects.
- Conducting training on hazardous waste management for government agencies and assisting in the development of a chemical and hazardous waste emergency response program.

SRI LANKA

- Creating public-private partnerships and providing technical assistance to: process municipal waste in Colombo; support a community model to recycle plastic and make compost and biogas in Galle; and introduce technology to produce methane from brewery wastewater.

THAILAND

- Promoting continuous improvement in solid waste management through benchmarking of performance and service levels of current practices for thirteen municipalities.

VIETNAM

- Increasing the efficiency of solid waste collection in Ho Chi Minh City through improvement in the legal framework for greater involvement of the non-public sector.
- Assisting government and industry to properly manage and dispose of hazardous wastes, particularly Persistent Organic Pollutants (POPs).

THER CITI

Strengthening Environmental Governance

Government policy plays a vital role in addressing environmental challenges throughout the region. While major legislation on clean air, solid and hazardous waste management, and clean water has been enacted in many Asian countries, enforcement and compliance remain major challenges. Industrial facilities in Vietnam operate within a weak regulatory framework while civil society and local communities have limited power and influence in addressing environmental concerns. Thailand has a new constitution that mandates improved environmental governance and is now tasked with decentralizing the decision-making process and empowering local governments and citizens to participate in protecting the environment. US-AEP is working with partners throughtout Asia to strengthen environmental compliance, involve citizens in environmental decision making, and promote policies that result in real solutions to environmental concerns. US-AEP is also collaborating with the Asia Development Bank, World Bank, and OECD on development of a regional environmental compliance and enforcement network linking key Asian and U.S. officials and practicioners.

INDIA

- Demonstrating successful models of citizen involvement in environmental decision making through the Civil Society Partnership Program, and promoting voluntary environmental management within industry.

INDONESIA

- Strengthening institutional coordination among authorities influencing air quality management through a regulatory consultation and review process in Medan, Makassar, Pontianak, and Jakarta.
- Encouraging transparency in energy regulation toward a competitive market for cleaner fuels.

PHILIPPINES

- Strengthening enforcement of environmental regulations through decentralization and pilot testing of improved procedures.

SRI LANKA

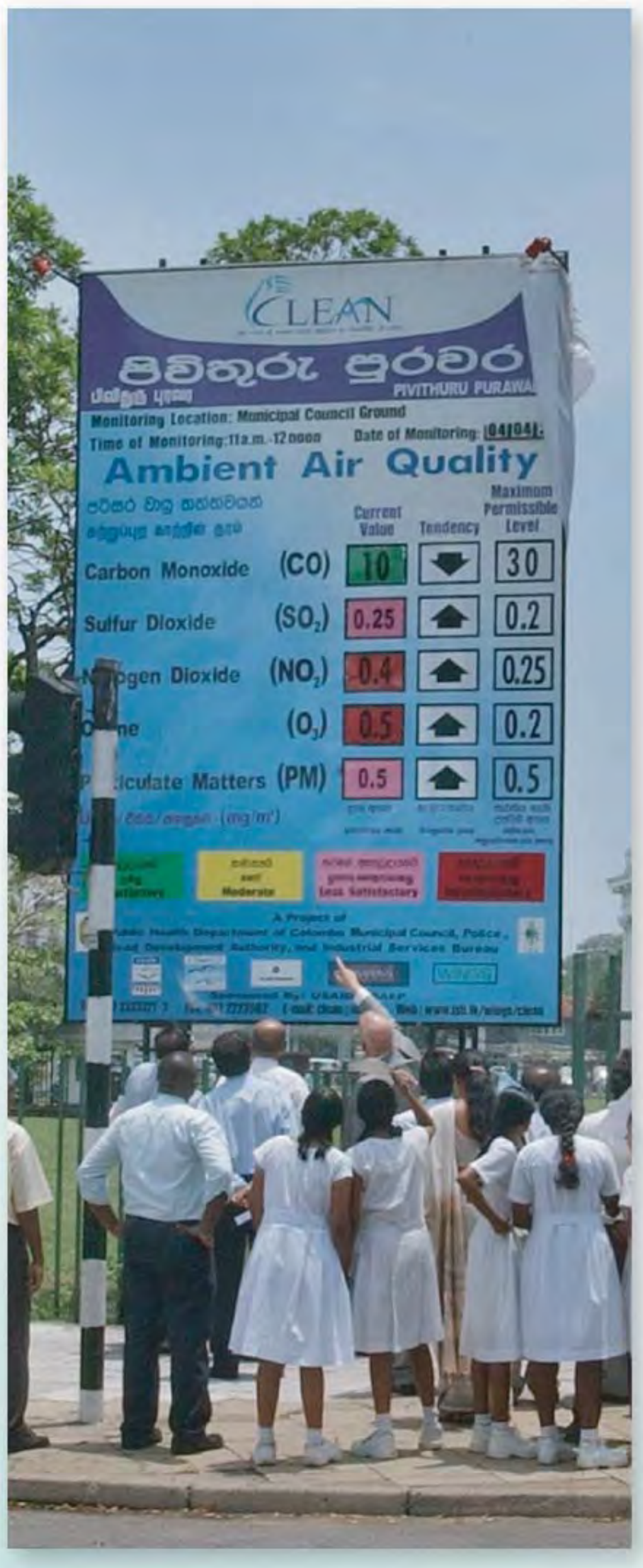
- Strengthening municipal environmental governance through stakeholder participation, adoption of international best practices/techniques, and increased use of digital maps and information communication technology.

THAILAND

- Preventing and resolving environmental disputes through mediation training and the establishment of a mediation center of excellence.
- Strengthening court capabilities in the environment through establishment of a "Green Bench" and judges training.

VIETNAM

- Piloting "polluter pays" approaches to waste water management in Hanoi.
- Assisting the Ministry of Natural Resources and Environment with implementation of the Law on Environment, and strengthening environmental compliance and enforcement capacity.



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