



## Environmental Cooperation-Asia

# Clean Development and Climate Program



**BACKGROUND** The rapid growth of Asia's developing economies has led to enormous environmental challenges, particularly in managing air pollution and greenhouse gas (GHG) emissions from the energy and transportation sectors. Air pollution levels in many of Asia's mega-cities are unsafe. For example, levels of suspended particulate matter (SPM) in many Asian cities exceed – often by a factor of two, or more – the ambient air quality guidelines of the European Union and the US Environmental Protection Agency.

With regard to climate change, China ranks second only to the United States in total annual GHG emissions, while India ranks fifth in the world. Indonesia, the Philippines, Vietnam, and Thailand are adding significant amounts. Energy security is a critical issue facing Asian economies, which currently import more than one-third of all global oil supplies. Experts predict that by 2030, 80 percent of Asia's oil will come from the Middle East, making the region particularly vulnerable to price shocks and supply disruptions.

In order to manage the impacts of rapid growth in energy usage, Asia will need to experience a paradigm shift toward clean energy approaches. To realize this shift, Asian stakeholders have identified a need for capacity-building in policy reform and development as well as improved access to clean energy technologies and finance. The end result must be a substantial and sustained increase in investment in energy-efficient equipment, renewable energy technologies, and cleaner fossil fuels.

**APPROACH** In cooperation with private sector and government proponents, the US Agency for International Development (USAID) Environmental Cooperation-Asia Clean Development and Climate Program (ECO-Asia CDCP) identifies and promotes clean energy solutions for Asia that help address climate change. Activities are currently focused on: (1) supporting the harmonization of standards and testing for energy efficient lights; (2) promoting the adoption of cleaner coal technologies; and (3) encouraging both innovative financing and knowledge sharing to support clean energy solutions that address climate change.

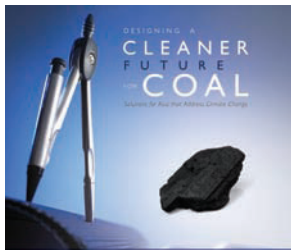
## ENERGY-EFFICIENT LIGHTING

Research by ECO-Asia CDCP has found that nearly half of the energy-saving compact fluorescent lamps (CFLs) sold in Asia are burning out faster and giving off less light than they should. To respond to this market failure, the program is supporting efforts to harmonize test procedures and performance targets for CFLs in the region, and is working with national partners in China, India, and ASEAN member countries to develop a regional database with actual test data on CFL performance.



## CLEANER COAL

Coal currently supplies nearly half (48%) of the primary energy in developing Asia, and coal use is expected to grow four-fold during the next 25 years. ECO-Asia CDCP is working with regional and national agencies, electric utilities, private sector firms, and associations to promote the adoption of viable and cost-effective cleaner coal options. The program is partnering with funders and national agencies to identify opportunities to rehabilitate older power plants in order to improve their efficiency and dramatically reduce emissions of local air pollutants and greenhouse gas (primarily carbon dioxide).



## CLEAN ENERGY FINANCE

Due to a lack of awareness and experience with clean energy technologies, many viable projects with high financial returns are not being implemented. ECO-Asia CDCP is working with clean energy project developers, as well as international and national financial institutions, to stimulate increased commercial lending for clean energy projects. Activities include assessments of the status of clean energy finance in China and India, technical assistance to project developers, and support for the design of effective clean energy funds and finance programs.



*In December 2007, a knowledge portal will be launched by the ECO-Asia Clean Development and Climate Program.*

## REGIONAL COOPERATION AND INFORMATION SHARING

The ECO-Asia Clean Development and Climate Program takes a regional approach to solving problems, sharing information, demonstrating solutions, and building partnerships with the private sector and civil society.

The program is working in cooperation with several organizations, most notably the Asia-Pacific Partnership on Clean Development and Climate (APP); the Asian Development Bank (ADB); the ASEAN energy expert groups and the ASEAN Centre for Energy (ACE); APEC energy expert groups; the Efficient Lighting Initiative (ELI); the International CFL Harmonization Initiative; the International Energy Association Clean Coal Center; and the World Coal Institute.

ECO-Asia CDCP also supports the APEC Energy Standards Information System (APEC ESIS), which is a focal point for regional collaboration and learning in the area of energy-efficiency standards and policy.

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