

Energy efficiency and renewable energy for SMEs in the greater Mekong subregion

The long-term APO project, sponsored by the ASEAN Foundation, on Energy Efficiency and Renewable Energy for SMEs in the Greater Mekong Subregion of ASEAN: Reusing Biomass Waste in Industrial Boilers for Energy Recovery in Thailand, Vietnam, Cambodia, Lao PDR, and Myanmar in association with their NPOs and the Embassy of Myanmar in Japan and that country's National Planning and Economic Development Ministry, completed its final phase.

More than 99% of industries in the selected Mekong countries are classified as SMEs and most use boilers for steam, hot water, and energy. Traditionally these boilers use imported fossil fuels like coal, oil, and/or gas as energy sources. At the same time, millions of tons of biomass like rice husk, waste wood, coconut shell, horticultural and agricultural waste, etc. are generated in this region which can be utilized in boilers to replace fossil fuels. The use of biomass also provides environmental benefits in terms of stabilizing CO₂ emissions, helping to slow global warming.

The project was initiated with preparatory meetings in the five countries. Subsequently, a regional training program was held in Bangkok, 17–21 July, to finalize the training manual on biomass energy techniques, technological aspects of biomass boilers, and cost economics. This user-friendly manual will soon be available on the APO Web site. In the final phase, seminars were held on 21 September in Hanoi, Vietnam; 26 September in Vientiane, Lao PDR; 28 September in Phnom Penh, Cambodia; 3 October in Bangkok, Thailand; and 13 October in



National seminar participants engrossed in an expert lecture in Cambodia

Nay Pyi Taw, Myanmar, to discuss implementation issues at national level. In Vietnam, wood cogeneration systems can be considered. Rice husk is a prospective fuel candidate in Lao PDR and Myanmar. In Cambodia, some small gasification installations use forestry and agricultural waste. In Thailand, ethanol from biomass is commercialized to some extent. The economic feasibility of biomass boilers ensured that many entrepreneurs at the national seminars expressed interest in installing biomass boilers or retrofitting existing ones.