e-Learning to disseminate energy efficiency

he scarcity of resources is a fundamental cause of economic problems. Currently, the most serious concern affecting the global economy is that demand for petroleum is stretching finite supplies. Recent increases in the price of oil, reminiscent of the oil crises of the 1970s, are causing an energy crunch. With the cost of energy rising precipitously and extensive energy use resulting in global warming a clear and present danger, it is imperative that countries quickly adopt the most efficient energy technology and energy conservation techniques. In addition, energy efficiency programs can directly benefit organizations by enhancing resource efficiency and productivity, which in turn provides direct monetary benefits.

Recognizing that industrial organizations in member countries urgently need technical assistance in this area, the APO has organized a series of projects on energy management and energy efficiency (EE). To disseminate the concepts, principles, and fundamental elements of energy management to as many people as possible in an effective manner, the training course on EE was offered in an e-learning format using the World Bank's Global Development Learning Network platform, a videoconferencing facility.

"The multiplier effect of this e-learning course seems better than that of a comparable face-to-face project, since it can accommodate a large number of participants, say 100 to 150. It also allows participants to develop a network of professionals in various countries," said Deputy Director Rajat Gupta, Environment Department of the National Productivity Council, India, a local program coordinator. The EE training course, implemented in three phases for groups of countries in similar time zones in June and July 2008, attracted 331 participants from 15 member countries, many more than could be accommodated in a traditional face-to-face format. "Participants were happy to experience this new mode of learning in which they could communicate with participants from other countries via the IT facilities. The interaction was good and all participants were friendly," reported Managing Director Alan Cajes, Center for Sustainable Hu-



Opening session of the e-learning course, Tokyo Development Learning Center

man Development, Development Academy of the Philippines. Expert lectures were delivered on-screen through videoconferencing, while site visits and group discussions were separately managed by the local program coordinators under the guidance of APO experts.

The course provided participants with a basic overview of EE and energy conservation fundamentals. It included training in systematic energy auditing, boiler efficiency, steam distribution and utilization, and energy management for electrical equipment, along with a case study approach featuring outstanding examples of EE in industries. To develop a pool of EE trainers with advanced knowledge, the APO is planning to organize a face-to-face follow-up course in IR Iran on Training of Trainers in EE in November for selected well-performing participants who completed the e-learning course. To disseminate EE information more broadly at the national level, participants from the November course will be required to conduct follow-up training in their own countries.