

e-Learning to increase energy efficiency

With the cost of energy rising and extensive energy use resulting in global warming becoming a clear and present danger, it is imperative that countries quickly adopt the most efficient energy technologies and energy conservation techniques. In addition, the implementation of 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.

During May–July 2010, a three-phase videoconference-based e-learning course on energy efficiency was held which was enrolled in by 310 participants from 14 member countries. The objectives of the course were to train participants in the concept, principles, and fundamental elements of energy management including a set of energy efficiency measures for pumps, boilers, furnaces, cooling towers, and compressors in industries. It was heartening to note that more than 50% of participants were from the private sector.

The course focused on providing basic training with inputs on energy efficiency concepts and fundamentals; thermal energy efficiency for industrial equipment such as boilers and furnaces; electrical energy efficiency in indus-

trial equipment such as chillers, motors, and pumps; energy auditing; experience of Japanese companies in energy efficiency; and steam distribution and utilization. All participants were provided with the APO's energy efficiency manual for supplemental reading in addition to the training material prepared by resource speakers from Japan and India. The course was structured to cover about 14 hours of online sessions and about 11 to 12 hours of offline sessions including group exercises and industrial site visits. This course enabled participants to develop preliminary energy management plans for industries to improve their energy efficiency. It also prepared them to receive more advanced training.

According to a feedback report received from a local facilitator in Pakistan, "The level of understanding and concentration of participants during the session were very good and all the participants showed great inquisitiveness in gaining knowledge." Along the same lines, feedback from Thailand stated that, "In spite of the short duration, the participants proved their potential in conducting systematic analysis using teamwork." Similarly appreciative reports from all participating countries confirmed the success of this e-learning course. High-performing participants from this course will have the opportunity to attend the advanced training course on energy efficiency, scheduled for 6–10 September 2010 in Bangkok, Thailand. 