Improving energy efficiency in Pakistan's textile sector

akistan is an energy-deficient country experiencing a severe power shortfall. Consequently, energy conservation is a major national policy objective to minimize the gap between supply and demand. Pakistan has attempted to use several methods to increase energy efficiency, generate success stories demonstrating energy and cost savings, and provide information on best practices. One such attempt was by the National Productivity Organization (NPO) under the Government of Pakistan's Ministry of Industry, Production and Special Initiatives in August 2007 in collaboration with the APO and international expert on energy efficiency Pawan Kumar, India.

Kumar conducted a two-week energy audit in two textile units in Lahore under the APO's Technical Expert Services (TES) Program. He also provided practical training in energy audits to a team of about 20 technical staff from the NPO, stakeholders, local consultants, industry technicians, students, and academics while the team was carrying out the audit. The success of the first energy audit prompted the NPO to approach the APO to repeat the energy audit-cum-training in 2008. Under Kumar's supervision, the NPO conducted energy audits in three textile units, two in processing and one in spinning, in Lahore, 15 March–4 April. The audit team of 20 comprised six NPO staff and their partners, including students.



APO expert Kumar (2nd R) visiting a local sock manufacturer

The second audit-cum-training course proved to be as successful as the first. It demonstrated that energy use could be reduced by 10–15% by adopting energy-saving measures suggested by the audit. The five-unit course also created a pool of energy conservation specialists capable of undertaking energy auditing independently.

The wrap-up session of the project was jointly chaired by Chairman of the All Pakistan Textile Mills Association in the Punjab zone Akber Sheikh and NPO Consultant Ishfaq A. Sheikh. Many entrepreneurs and representatives from the textile industry attended the event to hear the findings and outcome of the project. I.A. Sheikh said that the audit had evaluated measures such as changes of equipment and machinery and upkeep of production facilities and emphasized the necessity for rapid, broad-based energy audits. This would permit an uninterrupted supply of electricity to textile units, which is vital for the exportoriented industry as a whole. The local newspaper, Business Recorder, carried a story on the successful completion of the project and the major points in I.A. Sheikh's speech. In his concluding remarks, I.A. Sheikh highlighted the ambitious target set under the dynamic leadership of NPO Chief Tariq Bajwa to attain energy efficiency by reducing energy losses and productivity-energy efficiency deficits in the textile industry. He also conveyed appreciation to the APO and expert Kumar for their support and to the six-member team from the NPO for their hard work and contributions.

The NPO has already organized subsequent awareness sessions in key areas. These sessions raise public consciousness of the need to improve industrial energy efficiency; identify sustainable energy-saving measures; recycle usable waste energy resources; optimize the utilization of energy resources; build capacities and develop human resources in industry; upgrade/deploy the required technology; and initiate industrial training, especially training of trainers courses.

Contributed by Ishfaq A. Sheikh, officer in charge of the energy efficiency project, NPO, Pakistan