Partnership to Advance Clean Energy-Deployment (PACE-D)
Technical Assistance Program

Cleaner Fossil Technologies

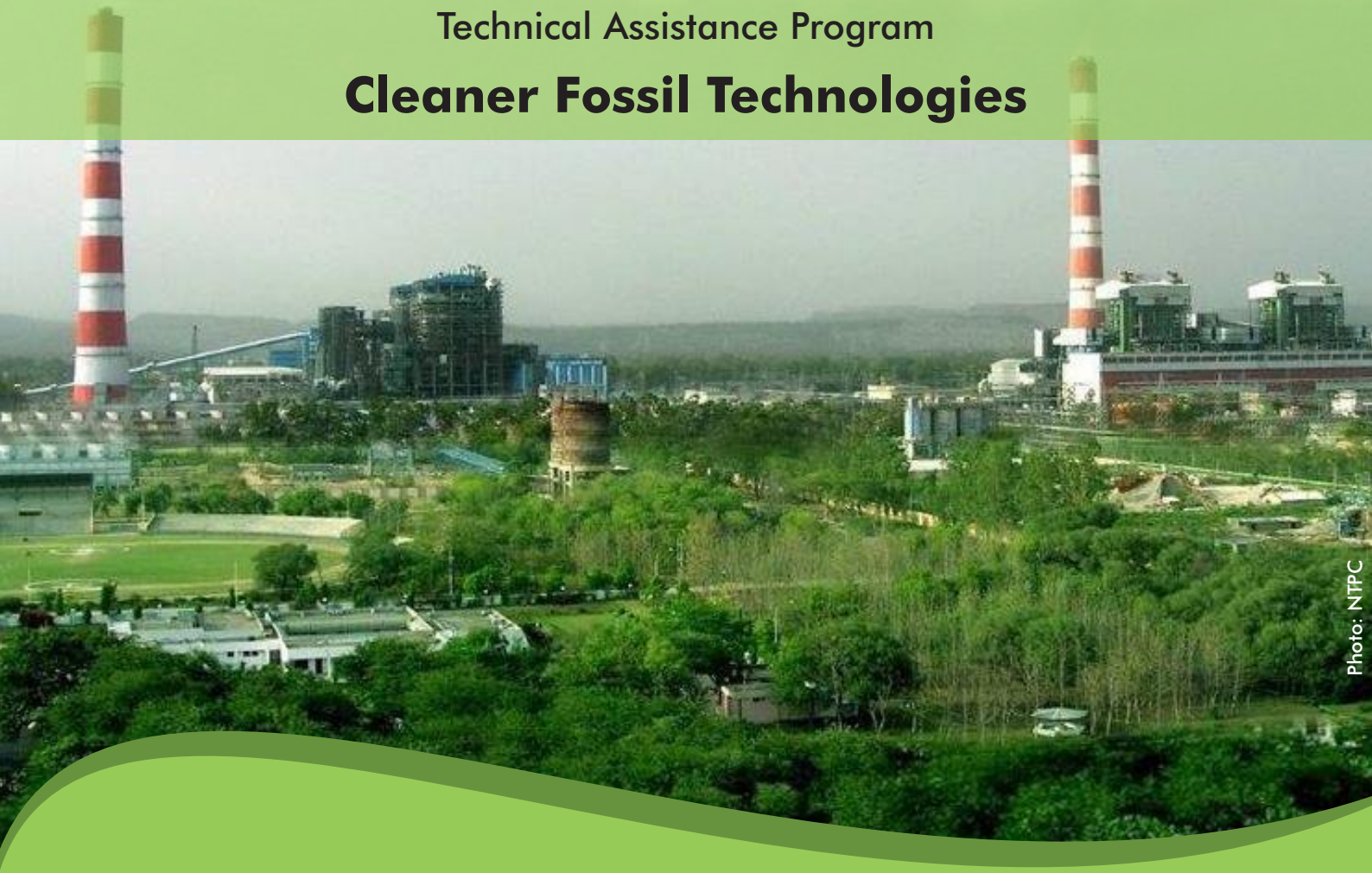

Photo: NTPC

Operational Efficiency of Coal-based Power Plants

The PACE-D TA Program is working with Ministry of Power and NTPC on a range of efficiency improvement interventions. The program activities specifically focus on a) the operational efficiency of supercritical thermal power plants and b) heat rate improvement in two state utilities.

The operational improvements at the supercritical thermal power plants include developing a best practices manual, preparing a benchmarking report for NTPC, pilots on coal blending and automated pattern recognition through appropriate software, trainings and international study tour. The knowledge developed under the program was disseminated through an international conference on super-critical best practices held in November 2013.

The heat rate improvement at the two state owned utilities, Chandrapur and Panipat, are expected to be made over a period of 2-3 years, based on an implementation plan that was prepared under the program.

The program is also in the process of setting up a Heat Rate Alliance with Indian-U.S. power utilities, original equipment manufacturers, service providers, and vendors to catalyze the heat rate improvement ecosystem in the country.

USAID FROM THE AMERICAN PEOPLE

Ministry of POWER GOVERNMENT OF INDIA

Government of India
Ministry of New and Renewable Energy
Renewable Energy is Green, Clean & Sustainable

Cleaner Fossil Technologies Utility Exchange Program.

The USAID PACE-D TA Program organized an exchange program to the U.S. in July-August 2013 to facilitate knowledge exchange on coal blending and supercritical technology. Indian participants got an opportunity to observe best practices in the U.S.; interact with U.S. technology counterparts; build network and collaborate for future technology transfer engagement. The exchange program included visits to utilities, research institutes as well as universities.

Key Deliverables

- Heat rate improvement plan for two utilities to facilitate better operation and maintenance practices.
- An operational guideline manual for supercritical technology and benchmarking of supercritical thermal power plant.
- Establishment of Indian Heat Rate Alliance (IHRA).
- Capacity building, training and outreach via conferences, workshops and study trip.

Key Activities and Progress

- Developed "Best Practices Manual for Indian Supercritical Plants".
- Prepared Heat Rate Improvement Plans for one unit each for Chandrapur and Panipant Thermal Power Stations in Maharashtra and Rajasthan respectively.
- Design and implementation of coal blending and automated pattern recognition in NTPC's Sipat super thermal power station.
- Organized study trip to U.S. for knowledge sharing on supercritical technologies.
- Organized international conference on advanced technologies and best practices for supercritical thermal power plants.
- Initiated meetings with potential host organizations for establishing Indian Heat Rate Alliance.
- Conducted training workshops in Panipat, Sipat and Chandrapur.

Program Overview

The PACE-D Technical Assistance Program is a part of the overall Partnership to Advance Clean Energy (PACE) initiative, the flagship program under the U.S.-India Energy Dialogue. The five year program, implemented in collaboration with the Ministry of Power and Ministry of New and Renewable Energy, has three key components: Energy Efficiency, Renewable Energy and Cleaner Fossil Technologies. Within each of these components, the program's focus is on institutional strengthening, capacity building, technology pilot projects, innovative financing mechanisms and increasing the awareness of clean energy technologies. Please access www.pace-d.com for additional information.

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