Project Summary

Project Background
With a planned GDP growth of 8% p.a., the energy demand in India is expected to rise by 8–10% annually. To contain this dramatic situation, the Indian Government has undertaken various regulatory and institutional measures to uncouple the increase in energy consumption from economic growth rates. One important avenue in this respect is the promotion of energy efficiency, which at the same provides valuable contributions to climate change.

Project Objectives
The Energy Programme had the objective to improve the energy efficiency on the generation and the user side. Under this general aim three levels of emphasis were defined:
• Improvement of energy efficiency in industry, in particular power generation, cement and paper industries, buildings sector;
• Standards for testing of energy intensive industrial machinery;
• Employment of energy managers within firms and contracting of energy service companies.

Project Activities
Implementing organisation was the Indian Bureau of Energy Efficiency (BEE) which is responsible for the execution of the Indian energy conservation law. The project acted in an advisory function to BEE. The respective assignments covered the following areas:
• Commercialisation and marketing assistance for the BEE website “www.energymanagertraining.com”;
• Development of reference standards for selected industries e.g. CO2 benchmarking of the cement sector in Germany, Chimney Sweep;
• Workshops e.g. adoption of energy efficient process technologies, practices, implementation of Energy Conservation Act-2001 in the fertilizer sector;
• Provision of specialist know-how, e.g. software for combined heat and power plants, mapping of power plants in India using Google Earth;
• Provision of reference data on energy efficiency in buildings in Germany/Europe, capacity building on typical performance contracts.

Results achieved include: Large consumers in 6 selected industry sectors recognized the economic viability of energy savings and invested strongly in services and efficient technologies; 2000 approved energy managers were appointed in companies; 25% of operations in 6 selected sectors carried out an energy saving study through a certified auditor; 50% of these companies published business plans and budgets for the implementation of the suggested measures; the characterization of energy efficiency was introduced by a minimum of 6 household and industry appliance groups.

Implementation Features
With the structure described above, the project offered maximum flexibility to respond to the needs of the BEE and the demands of the industry. A second project, financed by the KfW, provided loans for the improvement of the operation of thermal power generation and technical improvements of public buildings, thereby reinforcing project results.

Services Provided
• Project Management and Reporting
• Provision of energy efficiency specialists (energy economists, engineers)
• Research on energy efficiency in European industries
• Capacity building and training of energy managers and energy auditors with reference to international best practice
• Support for the website www.energymanagertraining.com