

# Energy Efficiency Industry and Data

## Context

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has been supporting India in its efforts towards renewable energy and energy efficiency since 1995. The Indo-German Energy Programme (IGEN) has committed itself to take India's energy agenda forward, focusing primarily on the Perform, Achieve, Trade (PAT) scheme, which has led to huge reductions in CO<sub>2</sub> emissions and the use of coal.

Companies that do not participate in the PAT scheme have only limited knowledge about the latest energy-efficient technologies. They also often do not have the capacity to evaluate their effectiveness and profitability, which is important when making investment decisions.

The Indo-German development cooperation project 'Energy Efficiency Industry and Data' seeks to build capacities of the non-PAT industries in India's secondary steel, pulp and paper sectors to implement energy-efficient measures.

This will help boost India's contributions to goals set down in the National Strategic Plan for Energy Efficiency and the Nationally Determined Contributions (NDCs), which include the reduction of emission intensity by 45% in 2030 compared to 2005 levels, 50 per cent of which is expected to come from increased energy efficiency.

## Objective

The project supports the Bureau of Energy Efficiency (BEE) and the Ministry of Power (MoP), Government of India, in strengthening the capacities of companies in the steel and paper sectors that do not participate in emissions trading (PAT), the implementation of energy-efficient technologies and improvement of processes.

Project name	Energy Efficiency Industry and Data
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)
Project region	Punjab, Uttarakhand, Uttar Pradesh, Gujrat, Chattisgarh, West Bengal, Maharashtra, Karnataka, Tamil Nadu
Lead executing agency	Bureau of Energy Efficiency (BEE) under the Ministry of Power (MOP), Government of India
Duration	2020 to 2025

## Our approach

The project aims to strengthen the capacities of selected State Designated Agencies (SDA) to promote energy efficiency in non-PAT industries by analysing barriers and challenges. It focuses on developing an SDA service portfolio for small and medium-sized enterprises (SMEs), as well as a communication and outreach strategy. Non-PAT industries will gain access to information on key energy-efficiency processes and technologies, as the project sets benchmarks for key energy-intensive processes. Technology provider databases will be used to achieve this objective.

Further information and knowledge will be provided to non-PAT industries by highlighting key processes and technologies using feasibility studies and demonstration projects. In addition, knowledge products will be made available on an energy-efficiency web platform as well as in workshops and training courses.

Peer-to-peer learning among SDAs and non-PAT industry clusters is being institutionalised. This covers the establishment of exchange formats for peer-to-peer learning among SDAs (including a long-term strategy), developing peer-to-peer training modules, and showcasing demonstration projects from advanced non-PAT industries. The project also shares experience gained



L. to r.: Steel and paper plants in India

from implementation and operation practices among non-PAT industry clusters.

A national-level dialogue on energy efficiency in the steel, pulp and paper sectors between policy-makers, research institutes and business associations has been established by setting up national roundtables and facilitating study tours to inform key stakeholders about international good practices and national achievements. Cooperation with policymakers to further improve the overall regulatory framework for energy efficiency is being pursued.

## Highlights

- Mapping of the secondary steel, pulp and paper sectors
- Establishing process benchmarks and baseline studies: Over 380 energy audits from more than 30 clusters (group of companies) have been completed in the steel and paper sectors
- Launching of a digital benchmarking tool on the BEE platform
- Operationalising Energy Management Centres at SDAs
- Implementing and monitoring energy efficiency measures in steel and paper industries
- Setting up a help desk structure to support SMEs
- Mapping SDAs and developing a comprehensive service portfolio
- Developing knowledge products, such as video tutorials, case studies and feasibility studies
- Implementing two international knowledge exchange programmes with policymakers and industry representatives, targeted at the steel and papers sectors
- Developing a framework for an incentive scheme for Micro, Small and Medium Enterprises (MSMEs) - Perform, Achieve & Earn Scheme
- Supporting the development of the comprehensive star rating scheme for MSMEs
- Conducting twenty gender sensitisation trainings covering 400 participants in the Belgaum Foundry Cluster
- Introducing simulation based training programmes for industry stakeholders
- Implementing two pilot projects on Industry 4.0

## Project Coverage Map



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## Contribution to the 2030 Agenda



Published by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH  
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On behalf of Federal Ministry for Economic Cooperation and Development (BMZ)

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As at July 2024