

Best Available Techniques for Selected Industry Sectors

Duration: August 2019 - December 2025



India



Background

The Central Pollution Control Board (CPCB) is India's apex regulatory body for pollution prevention and control. As a part of its mandate, CPCB has developed sector-specific Comprehensive Industry Documents (COINDS), which guide authorities in developing environmental directives and help industries comply with the directives.

In Europe, environmental standards for industrial installations are based on Best Available Techniques (BAT), identified through an exchange of information among regulators, industry and other stakeholders. These are described in reference documents (so called BREF) for each industrial sector. The EU's BREF process has been successfully applied across countries for many years.

Building on this approach, in 2019, CPCB decided to develop a new COINDS document for the textile sector to align practices in India more closely with international standards.

In the previous BMUKN EXI project (2019 to 2023), we supported our partners in:

- Developing guidelines on procedures for drafting environmental standards that promote environmentally friendly production processes and are adapted to the Indian context. The measures are being implemented in close cooperation with the relevant authorities and the German Federal Environment Agency (UBA).
- Training experts from our partner organisations on the content and application of the guidelines.
- Developing a first draft of the BREF document for the textile industry in Gujarat, in cooperation with the UBA.

Aim of the cooperation



The module's objective is to develop adapted BAT reference documents (BREFs) for selected industrial sectors in India.

The module is set up to make a direct contribution to building resilient infrastructure, promoting inclusive and sustainable industrialisation, and fostering innovation (SDG 9).

What we do

As a partner of the Export Initiative Environmental Protection, GIZ is implementing the global project “Environmental Protection Worldwide” on behalf of BMUKN.

Technical advice and capacity development: In cooperation with the German Federal Environmental Agency (UBA), we helped our partners (environmental authorities at the national and state levels) to develop the knowledge and capacities needed to:

- Develop BAT reference documents for the textile sector at the national and at the Gujarat state level.
- Develop legally binding environmental directives and guidelines to strengthen compliance with environmental standards in the textile sector.

Knowledge exchange: We fostered the exchange of information between UBA, CPCB, the State Pollution Control Boards and other interest groups, ensuring the transfer of BAT information sheets to additional industry sectors.

Results

- **Sound environmental standards for industry:** In close cooperation with the German Environmental Agency (UBA), developed a practical guideline on procedures for preparing environmental standards to promote environmentally friendly production, tailored to the Indian context.
- **Enhanced institutional capacity and expertise:** CPCB and GPCB and other key stakeholders have acquired the technical capacity to prepare BREF documents and apply them effectively. Partner experts trained on the content and application of this guideline to improve industrial environmental processes.



- **Policy and institutional integration:** Environmental directives, guidelines and BAT reference documents for the textile sector have been developed and formally adopted both at national and state level in Gujarat. The BREF approach is now institutionalised within CPCB and GPCB, enabling these agencies to apply their new expertise and capacities for stronger environmental compliance across industries in India.

Project and Cooperation Partners

- Indian Ministry of Environment, Forest and Climate Change
- Indian Central Pollution Control Board
- Gujarat Pollution Control Board
- German Federal Environmental Agency





German-Indian partnership strengthens environmental protection in India

Results and Impact



The Central Pollution Control Board (CPCB), India's apex body for pollution prevention and control, develops sector-specific Comprehensive Industry Documents (COINDS) that guide authorities in drafting environmental directives and help industries comply with them. To raise standards further, CPCB looked to international models, particularly Europe's Best Available Techniques (BAT) process, where environmental standards are based on proven practices documented in reference documents (BREFs). Building on this approach, CPCB decided in 2019 to prepare a new COINDS for the textile sector, one of India's largest and most resource-intensive industries. The goal was to adapt the BAT method to the Indian context, strengthen compliance frameworks, and provide practical guidance for regulators and industry.

In cooperation with the German Environment Agency (UBA), the project provided technical advice and capacity development support to national and state-level environmental authorities. Key areas of work included:

- **Development of BREFs:** [BAT reference documents](#) were prepared for the textile sector at both the national level through CPCB and the state level in Gujarat through the Gujarat Pollution Control Board (GPCB).
- **Policy integration:** Support was provided to develop legally binding environmental directives and guidelines based on the new BREFs, ensuring that standards were anchored in regulation and enforcement processes.
- **Capacity development:** Targeted trainings were delivered to CPCB, GPCB, and other stakeholders, building institutional skills to prepare, interpret, and apply BREF documents.
- **Knowledge exchange:** The project fostered structured exchanges between UBA, CPCB, State Pollution Control Boards, and other interest groups, enabling the transfer of BAT information to additional industrial sectors.

The project achieved several milestone results that strengthened India's environmental governance in the textile sector:

- A practical guideline for preparing environmental standards was developed in close collaboration with UBA and tailored to Indian conditions.
- Partner experts were trained on the content and application of the guideline, ensuring that it can be implemented effectively in policy and practice.
- BREF documents for the textile sector were completed at both the national and state level, providing structured, science-based references for regulatory authorities and industry.
- Institutional capacities were built within CPCB, GPCB, and other agencies, enabling them to prepare and apply BREFs independently in the future.
- Environmental directives and guidelines based on the textile sector BREFs were developed at both levels, strengthening the legal framework for compliance.
- The BREF approach was institutionalised within CPCB and GPCB, ensuring that expertise and processes are embedded in regulatory practice and can be extended to other industrial sectors over time.

By aligning Indian regulatory practice with international standards, the project not only improved environmental compliance in the textile sector but also created a model for strengthening industrial environmental governance more broadly. The enduring partnerships forged between Indian and German institutions will continue to support this transition, opening pathways for systemic improvements and long-term sustainability in India's industrial sectors.



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