

# **BREF for Gujarat & Comparison with EU BREF**

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on Best Available Techniques  
Seville, Spain**

# Agenda

- ✓ Background
- ✓ About Gujarat BREF
- ✓ Salient Features of Gujarat BREF
- ✓ Comparison with EU BREF

# Background

## Current Scenario

- India doesn't operate with a BAT concept like that of European Union
- Several rules, notifications and guidelines for the control and prevention of industrial pollution exists
- This includes legally binding emission standards or discharge limit values specific to each industrial sector

# Background

## Current Scenario

- Industrial facilities must comply in order to obtain permission from the State Pollution Control Boards
- The industry-specific emission standards or discharge limits are called Minimal National Standards (MINAS)

# Background

## About MINAS

- These are Best Techno-Economic Techniques (BTET) rather than BAT
- Exchange of information during the process between all stakeholders is absent and missing
- No improvement of competence in the applied industrial processes in the authorities

# Background

## About MINAS

- Does not consider cross-media effect and fails to address environment as a whole
- Provides end of the pipe treatment options and solutions
- Developing a MINAS normally takes two to three years.
- Driving force behind the development of a new MINAS or the revision is the availability of new technologies in prevention, control, and abatement of pollution.

# Background

## About COINDS

- Techniques for prevention and control of chemical pollution from industries are considered as part of the development of the MINAS, and in many cases presented in the accompanying Comprehensive Industry Documents Series (COINDS), which constitutes a set of sector-specific guidelines.

# Background

## About COINDS

- The COINDS are a series of comprehensive documents designed to summarize the status of specific industrial sectors in the country, and make reference to the MINAS applicable to each sector.
- The CPCB has published COINDS for 37 sectors.



# Background

## About COINDS

- The COINDS generally include information on manufacturing plants of a specific type of industry being operated in the country, with information on the location and manufacturing capacity of each plant.

# Background

## About COINDS

- Furthermore, the COINDS include a description of the type of products manufactured in the sector, the raw materials used, existing manufacturing processes, an estimation of the quantity of pollutants generated by the industry and a description of the techniques and measures used for prevention and control of pollution including waste generation

# Background

## About COINDS

- The technologies and processes for prevention, control, and abatement of pollution presented and discussed in the COINDS constitute guidelines; they are not legally binding for industry operators

# Background

## About COINDS

- Industry operators are free to use any technologies in the manufacturing process as well as for prevention, control, and abatement of pollution, provided they meet the MINAS or other norms or standards prescribed by the SPCBs or UTPCCs.

# Background

## About COINDS

- However, industry operators are obliged to inform the State Pollution Control Board (SPCB) whenever they change manufacturing processes or technologies, including pollution control technology or equipment.

# Background

## Limitations of COINDS

- MINAS are legally binding, while the COINDS simply constitute guidelines, allowing industrial facilities to choose the pollution abatement techniques that are best suited to their conditions.

# Background

## Limitations of COINDS

- As a result of the focus on emission/discharge standards, rather than on abatement techniques, industrial facilities primarily have an end-of-pipe approach to emissions reduction, and that process-integrated techniques often are neglected.

# Background

## Limitations of COINDS

- Challenges include inadequate and poor data, lack of intensive monitoring and little information about new techniques is available to industry operators.



# Background

## Why BREF?

- MINAS is not BAT but BTET
- Core issues associated with environmental improvements are addressed beforehand in BREF
- Identifying actions needed for enabling improved performance in the sector taken into account
- Addresses issues of pollution control and mitigation and also includes resource conservation, performance efficiency etc.

# Background

## Why BREF?

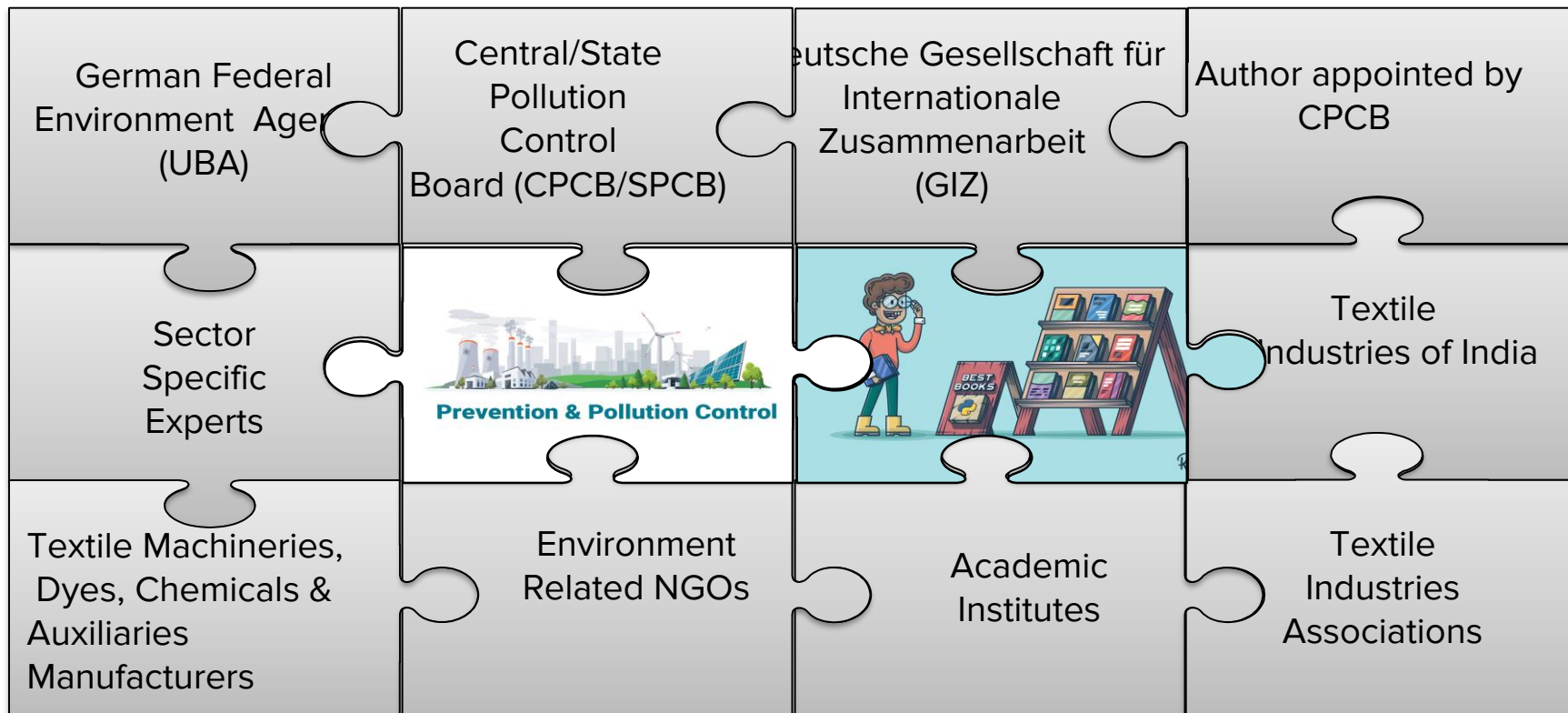
- All the key stakeholders like industrial units, experts from industries etc. are included in the process leading to successful implementation
- Meetings are held to draw important conclusions from the group giving a meaningful input to BREF
- Sector Specific and Product Specific standards are possible using BAT

# Background

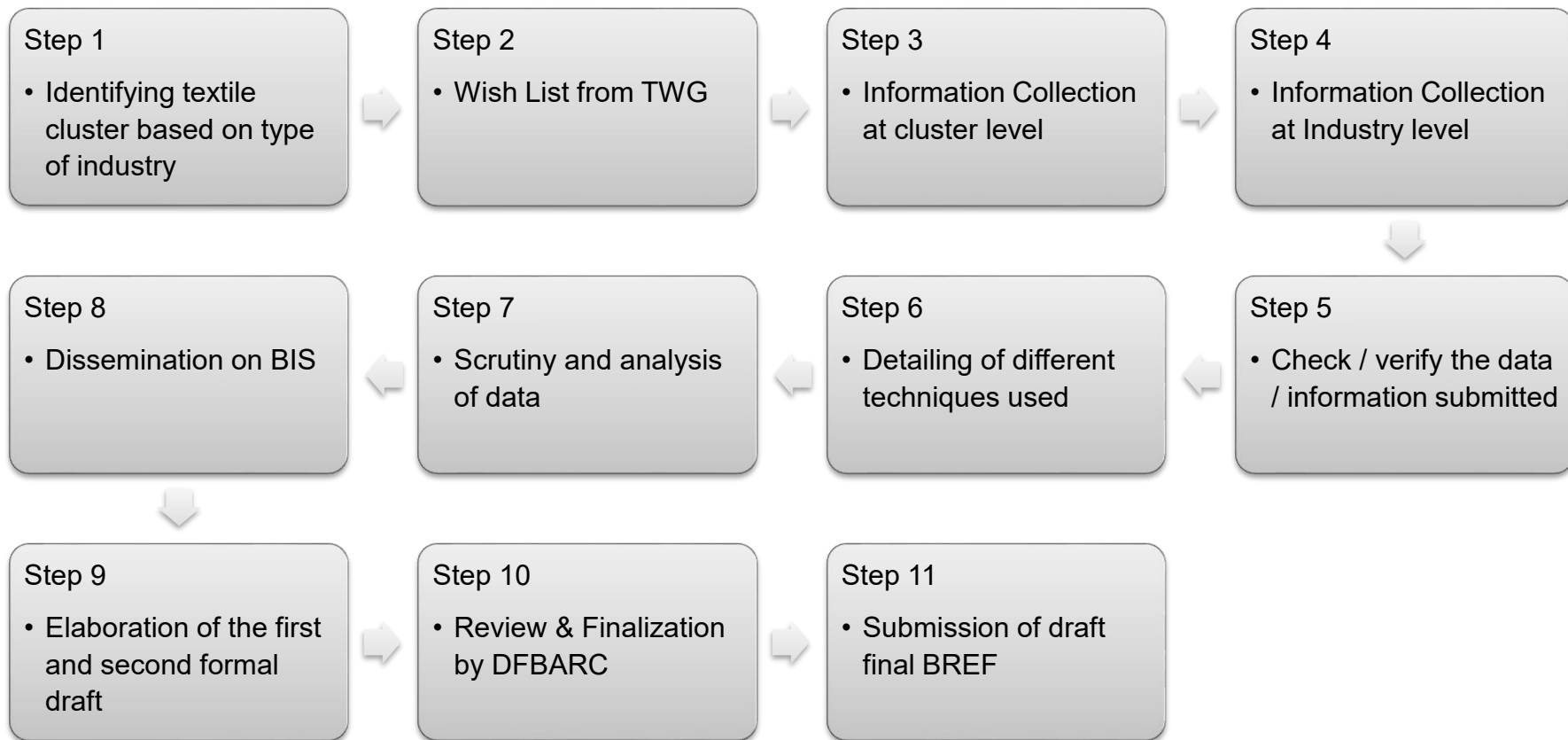
## Why BREF?

- Addresses applicability issue and cross-media effects
- Focusses more on process integrated prevention of pollution instead of end of pipe treatment

# About Gujarat BREF – Organisations Involved



# About Gujarat BREF - Methodology



# Structure of Gujarat BREF

Preface

Scope

Chapter 1: General Information

Chapter 2: Applied Processes and Techniques

Chapter 3: Current Emission and Consumption Levels

Chapter 4: Techniques to Consider in the Determination  
of BAT

Chapter 5: Best Available Techniques (BAT) Conclusions

# **Structure of Gujarat BREF**

Chapter 6: Emerging techniques

Chapter 7: Documentation of Compliance, Guidance for  
Authorities

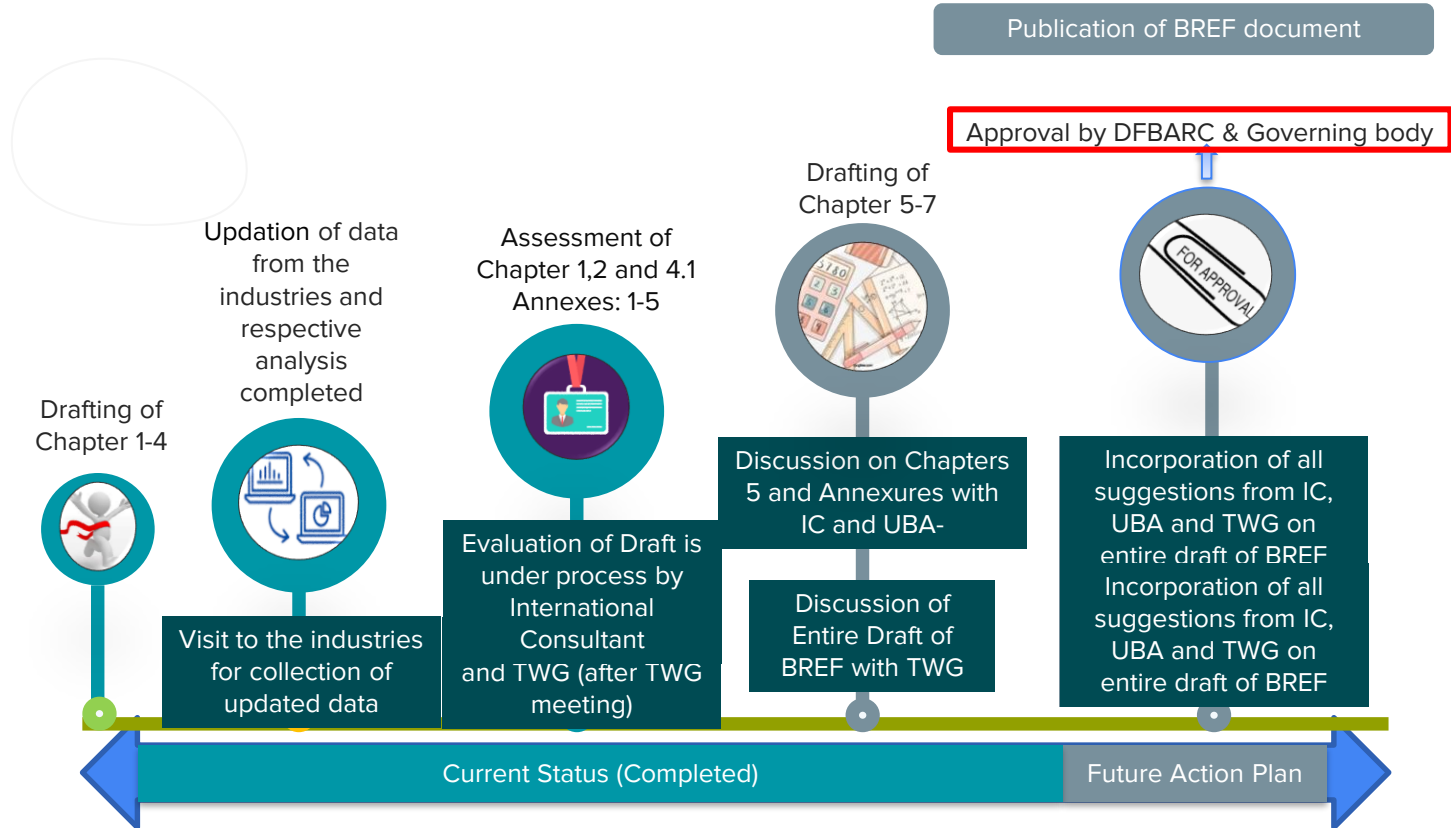
Chapter 8: Concluding remarks and recommendations  
for future work

References

Glossary of terms and abbreviations

Annexes (1 - 5)

# Current Status of Gujarat BREF





## **Salient Features of Gujarat BREF**

- 1st of its kind in India.
- BAT mentioned are based on the actual case studies found across industry in Gujarat
- It establishes the benchmarks for current emission and consumption levels.
- Detailed processes explained with overview of input/output of the whole process and sub processes for different types of fibres used and products manufactured in Gujarat

## Salient Features of Gujarat BREF

- Provides information on present consumption and emission levels (results from site visits):
  - Raw material consumption (raw fibres, chemical additives)
  - Water use and waste water flow
  - Energy demand
- DFBARC (Draft Final BREF Assessment & Review Committee)

## **About Gujarat BREF - DFBARC**

- DFBARC (Draft Final BREF Assessment & Review Committee) is headed by MS, GPCB and two independent committee members (nominated by TWG)
- In case of split views not resolved unanimously, then the same will be resolved by this committee during TWG meeting
- The draft final BREF will be assessed and reviewed by DFBARC before final approval by GPCB Governing Board.

# Comparison with other BREF

## Similarities with EU BREF

- The process of drawing up of BREF is similar in both cases.
- Preparation of both BREF includes Technical Working Group (TWG) who are main source of information for the drawing up and reviewing of a BREF
- The Best Available Technique (BAT) definition is same in both BREF documents.

# Comparison with other BREF

## Similarities with EU BREF

- The criteria for determining best available techniques is also same in both BREFs
- Both are under purview of Govt law wherein,
  - EU BREF is part of Industrial Emissions Directive 2010/75/EU
  - Gujarat BREF is prepared under the various provisions of the bouquet of Environmental Acts and Rules.

# Comparison with other BREF

## Differences with EU BREF

- Primary difference is that EU BREF is obligatory in nature while Gujarat BREF will serve as a guiding document and as a benchmark for industries seeking to implement industry best practices.

# Comparison with other BREF

## Differences with EU BREF

- There is no provision of DFBARC in EU BREF
- Scope of both the BREF is very different
  - Based on geography, type and size of installations covered are very different in both documents.
  - The key environmental issues covered in both documents is different.

## **Comparison with other BREF**

- Further comparison with other Textile BREFs not enlisted since the document is not yet finalized and is under review by DFBARC and there can be changes in the text.



# Thank You

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