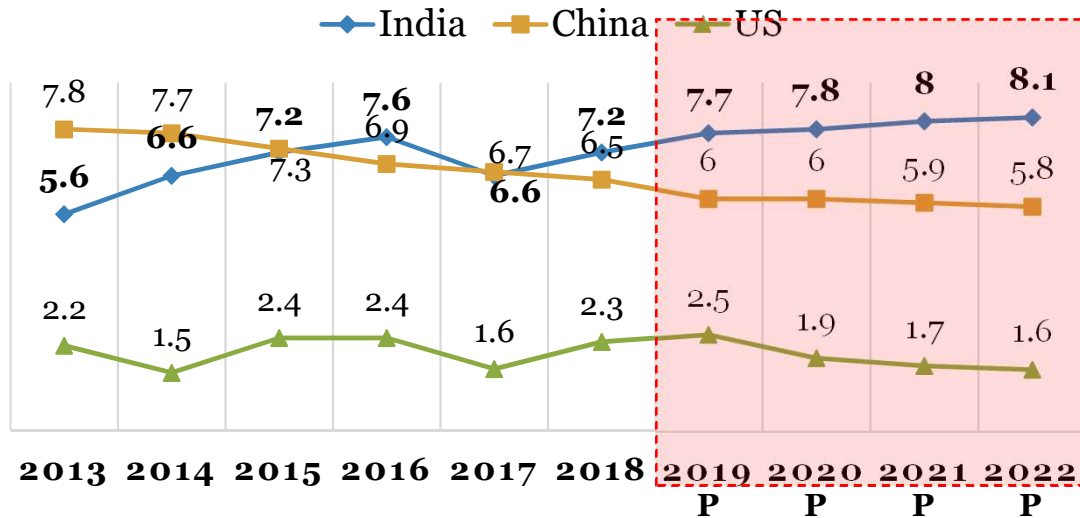


ENVIRONMENTAL
MODERNIZATION IN
INDUSTRIES IN INDIA

CHIRAG BHIMANI
INDIA

INDIAN SCENARIO

GDP Growth Rate Comparison



India remains an oasis of growth amongst slowing global outlook

India is projected to be the fastest growing major economy in 2019 surpassing China

The trend is expected to continue at least till 2021

- P = Projected
- Source: International Monetary Fund



NEW RESURGENT INDIA

New Processes



*Ease of Doing Business
GST
De-monetization*

New Sectors



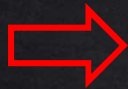
Major FDI reforms and inflows

New Approach



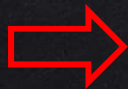
*Make in India
Digital India
Skill India*

New Infrastructure



*Key Infrastructure and
Urbanization*

New Innovation and
R&D



*India - Design & Innovation
Start Up India
Intellectual Property Rights*

New Mind-set



From red tape to red carpet

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From red tape to red carpet



ENVIRONMENTAL MODERNISATION IN INDIA

➤ POLICY INTERVENTION

- ✓ BEST AVAILABLE TECHNIQUES (BAT)
- ✓ EMISSIONS TRADING SCHEME

➤ TECHNOLOGY INTERVENTION

- ✓ CONTINUOUS EMISSIONS MONITORING SYSTEM
- ✓ BETTER TREATMENT SYSTEMS

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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
 - ✓ 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)
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MINAS

- ✓ MINAS, by definition, are techno–economical norms achievable by the industry
 - ✓ They constitute quantitative limit values for the emission of pollutants into the environment
 - ✓ These include air pollutants emitted from stacks, fugitive emissions and water pollutants in wastewater
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MINAS

- ✓ These are Best Techno-Economically Available Techniques (BTEAT) 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
 - ✓ Does not consider cross-media effect and fails to address environment as a whole
 - ✓ Provides end of the pipe treatment options and solutions
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WHY BAT REFERENCE (BREF) DOCUMENT?

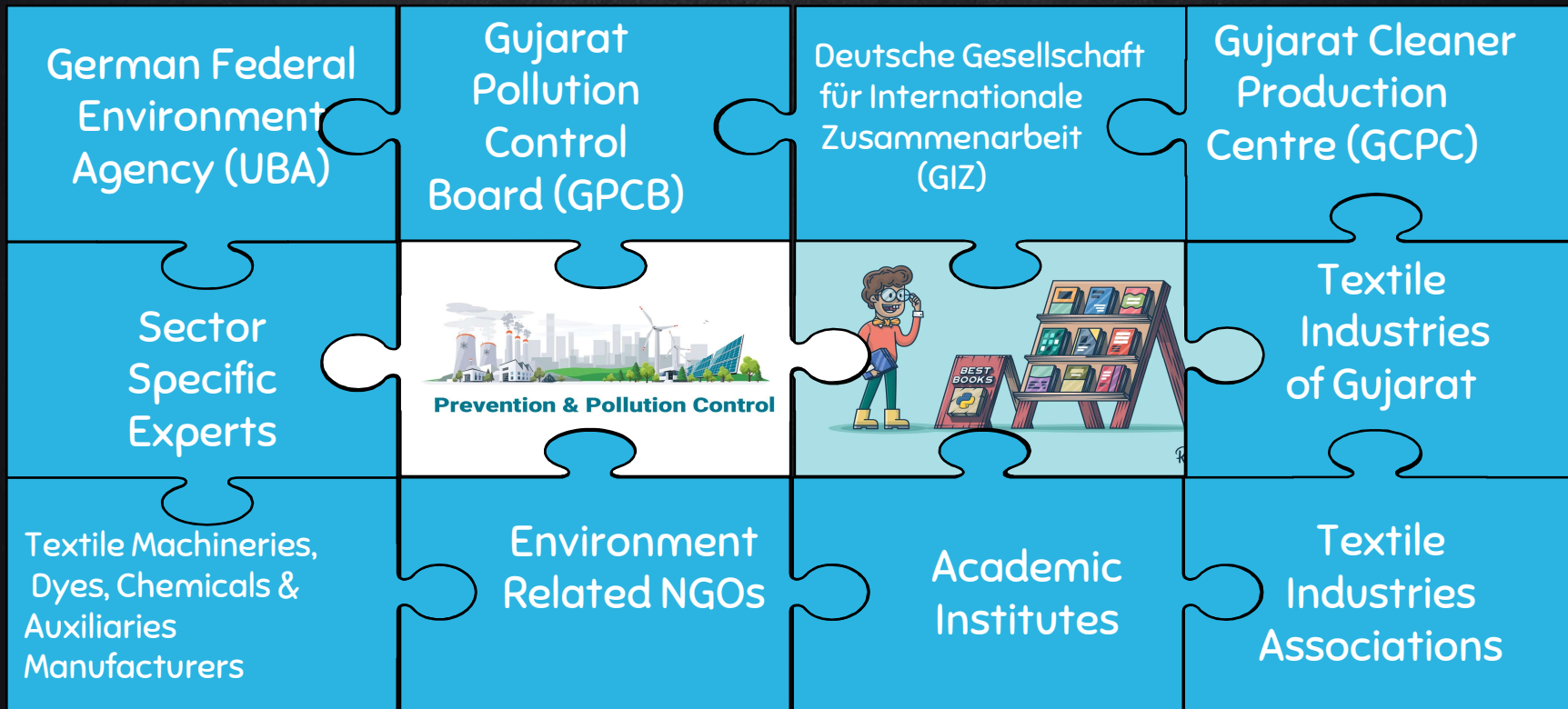
- ✓ MINAS is not BAT but BTEAT
- ✓ Core issues associated with environmental improvements are addressed beforehand in BREF
- ✓ Identifying actions needed for enabling improved performance in the sector taken into account
- ✓ Addresses issues of pollution control and mitigation and also includes resource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

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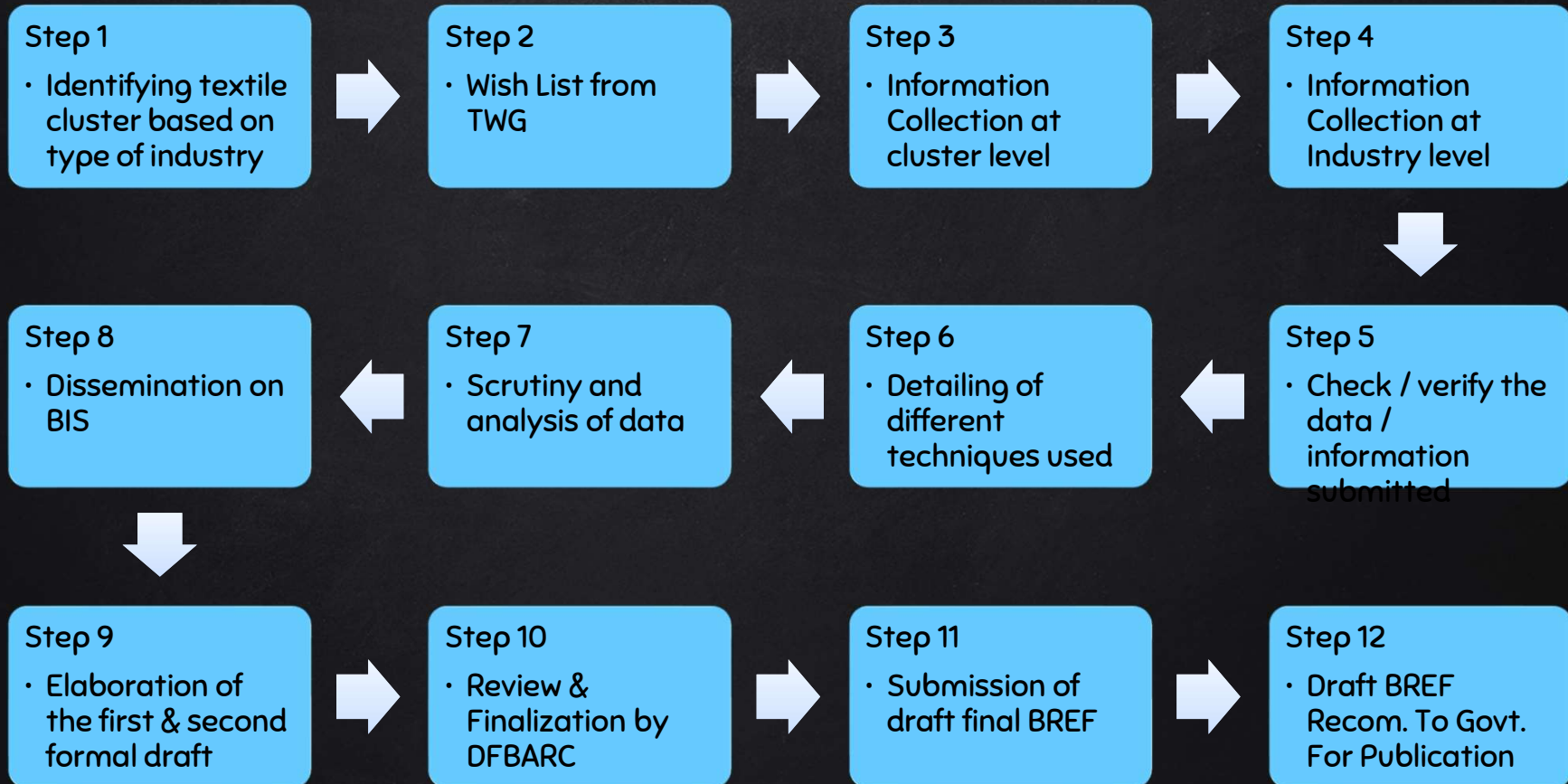
WHY BAT REFERENCE (BREF) DOCUMENT?

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



METHODOLOGY ADOPTED



FIRST RESULTS

- ✓ Preparation of Guidance document for drawing up of BREF documents
 - ✓ Questionnaires for data collection for BAT
 - ✓ Identification of the key environmental issues for the Textile sector
 - ✓ Primary identification of the best environmental performance levels, on the basis of the available data in the European Union and world-wide
 - ✓ Examination of the conditions under which these performance levels were achieved
 - ✓ Such as costs, cross-media effects, main driving forces involved in implementation of the techniques
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CHALLENGES

- ✓ New Process and Procedure
- ✓ New Concept – No previous precedence
- ✓ Industries never involved in policy making earlier
- ✓ Data Collection, its accuracy and authenticity
- ✓ Lack of knowledge – could not share details
- ✓ Data Compilation and addressing the data gaps
- ✓ Convincing and explaining the stakeholders – first of its kind effort in India
- ✓ Industries unsupportive due to novel idea and never before implemented

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THANKS!

Any questions?

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