

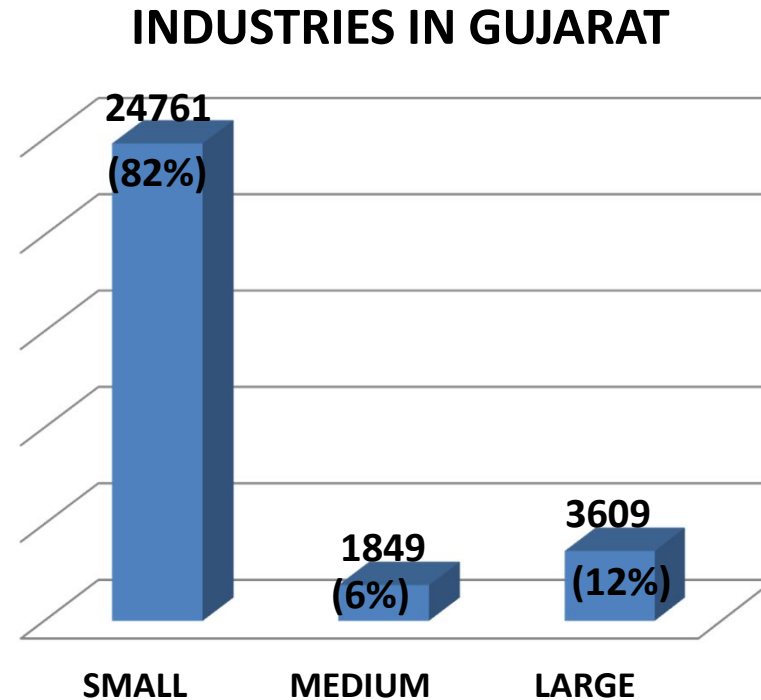
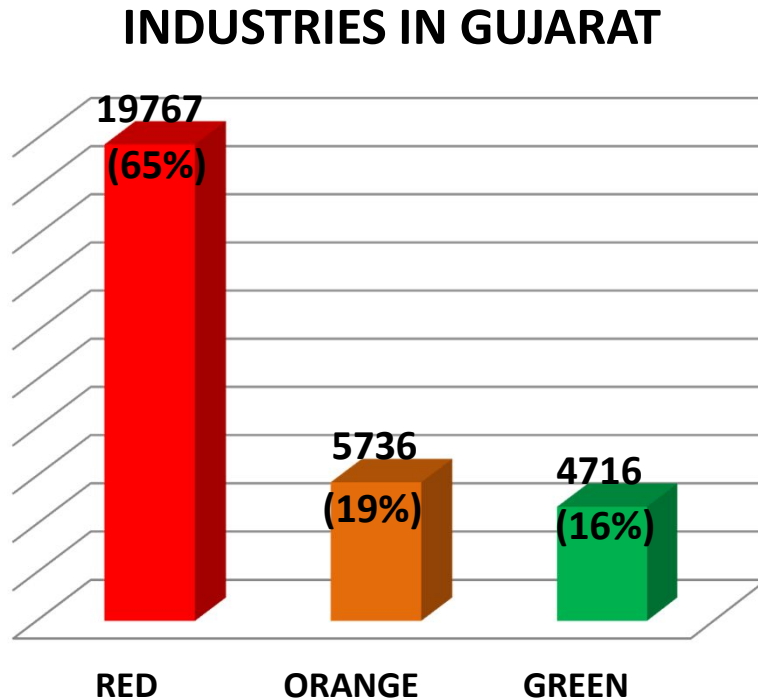
Gujarat Pollution Control Board

Reforms & Best Practices for Environmental Regulation



**S. H. Vegda, Guardian Officer, EODB
Chirag Bhimani, Nodal Officer, EODB
Gujarat Pollution Control Board
Gandhinagar**

Industrial Scenario- Gujarat



Strong presence of SSI units in the State

TOTAL – 30219

(As of 15th May, 2017)

Innovative Mechanisms Used

XGN –Online system- e-governance

Common Consents & Authorisation

Regional Office (26) & Vigilance Office (4) Concept

Longer Consent Validity Period

Auto-Renewal of Consents

System Generated Provisional Orders

Manuals for various activities of GPCB

Monitoring-Innovative tools (e.g. Written Instructions)

Third party monitoring through academic institutes

Online Payment of Fees

Use of Cleaner Production / Technology Tools

Various Actions Plans like Air Action Plan, River Action Plan

Environment Audit Scheme

ISO and NABL Accreditation

Checks (Locks) in the system for efficient operation

Use of Technology

Usage of Common Facilities like CETP, Acid Disposal, Steam etc.

Co-processing of Wastes

Research and Development work

Re-engineering of Business Processes (Fast Track Renewal)

Promotion of Centre of Excellence

Use of Non-Conventional Sources of Energy like Wind, Solar etc. promoted / emphasized

Clinical Approach

Help Desk

Citizen's Charter

E-Governance (XGN)

- Regular and effective monitoring, Transparency in the process
- Effective communication with stake holders

- Large data base development and its easy retrieval & analysis
- Better environment regulation of source and sink elements

- Quick decision making, Increase in water-cess income
- Won 6 National Awards from 2010 to 2016

- Replicated & extended to Himachal Pradesh, Uttarakhand, Madhya Pradesh, Karnataka, Goa and Andhra Pradesh

Stakeholders – Approx. 60,000



XGN Development over the years

2008

- XGN launched on 5th June as Consent Management Tool

2009

- Bio-Medical Waste Management System
- e-Communication Module
- Water Cess Module
- Legal Module

2010

- The Online Application Scrutiny Module
- The Environment Auditor's Monitoring System
- The GEMS/MINAAR CPCB / MoEFCC related Projects Monitoring
- The e>Returns Entry & Monitoring Module
- The EC (B1 & B2 Category) Module for SEIAC Committee

2011

- The Basic Co-Processing Waste Module
- The Online Emission Monitoring system
- The Inward & e-Outwarding Module
- The Common Infrastructure facilities Module
- The Hazardous Waste Monitoring System

XGN Development over the years

2012

- The RTGS/NEFT Payment system & All Payments Integration
- The Complaints Redressal System
- The Clinic Module
- The Violations Monitoring Module
- Enabling of Citizen Charter Concept

2013

- The Compliances Monitoring
- The Environment Auditor's Monitoring System
- The Jobs – Vacancy Module
- The CO-Processing Waste Exchange Platform

2014

- The Android Mobile App
- The Internal Review System (Patraks) Module
- Monthly Progress Review (MPR) Module
- Management Information System (MIS) Module

2015

- Online GPCB ID & Password Module
- Online Revocation Application Module
- Municipal Solid Waste Management System Module

2016

- Online CCA Generation
- E-Waste Management System Module
- Recycler Registration Module
- Way Ahead – Aadhar Based e-Signature

Impact of XGN

The activity	Before XGN	2009-10	2015-16
Monitoring Visits in a Year	7,500	10,721	56,000+
Pollution Samples Drawn in a Year	7,100	8,900	25,500+
Samples Analysed in labs in a Year	3,250	7,516	25,000+
Profile Updations by Ind-HCUs / Month	No System	1,800	9,500+ Monthly
PDF Docs uploaded by stake holders	No System	21,000	80,500+ Yearly
e>Returns files by stake holders – Yearly	No Track	35,000	1,40,000+
Water Cess Returns Filed	1,900	6,289	34,500+
NOC-CCA Applications – Yearly	2,500	5,280	19,000+
Ratio of Rejection - Yearly	40 %	38 %	3%
LAB Charges defaulting Amt	Rs 3.2 Cr	Rs 78 lakhs	Almost Nil
Total Waste CO-PROCESSED (MT/yr)	Nil	15,693	41,78,530

Common Consents & Authorisation

Issuance of Common Consents & Authorisation (CCA) instead of individual consents & authorisation

Issuance of CCA with longer validity
(G - 10 years, O - 7 years, R - 5 years)

Industry with ISO : 14001 given one extra year of validity

Industry with Responsible Care (RC) Certificate given two extra years of validity

Innovative Monitoring Tools

Regional Office and Vigilance Office concept

Third party monitoring through academic institutes

Regular meetings with NGO and Industries Associations to redress their complaints / issues

Issuance of written instructions at the site itself

Verification of compliance of written instructions in subsequent visit

Environmental Audit Scheme

Implemented after the judgment of Hon. High Court of Gujarat

Third party auditors registered with GPCB

Third party auditors audit the identified industries

Allotment of industries through XGN

NEERI-Nagpur evaluated - suggested replication in other states

JPAL-SA (Harvard University) assessed it as an innovative method of environmental regulation

Environmental Registration Reforms

Notified list of green industries over and above CPCB list

Exempted select Green industries from clearances (White Category)

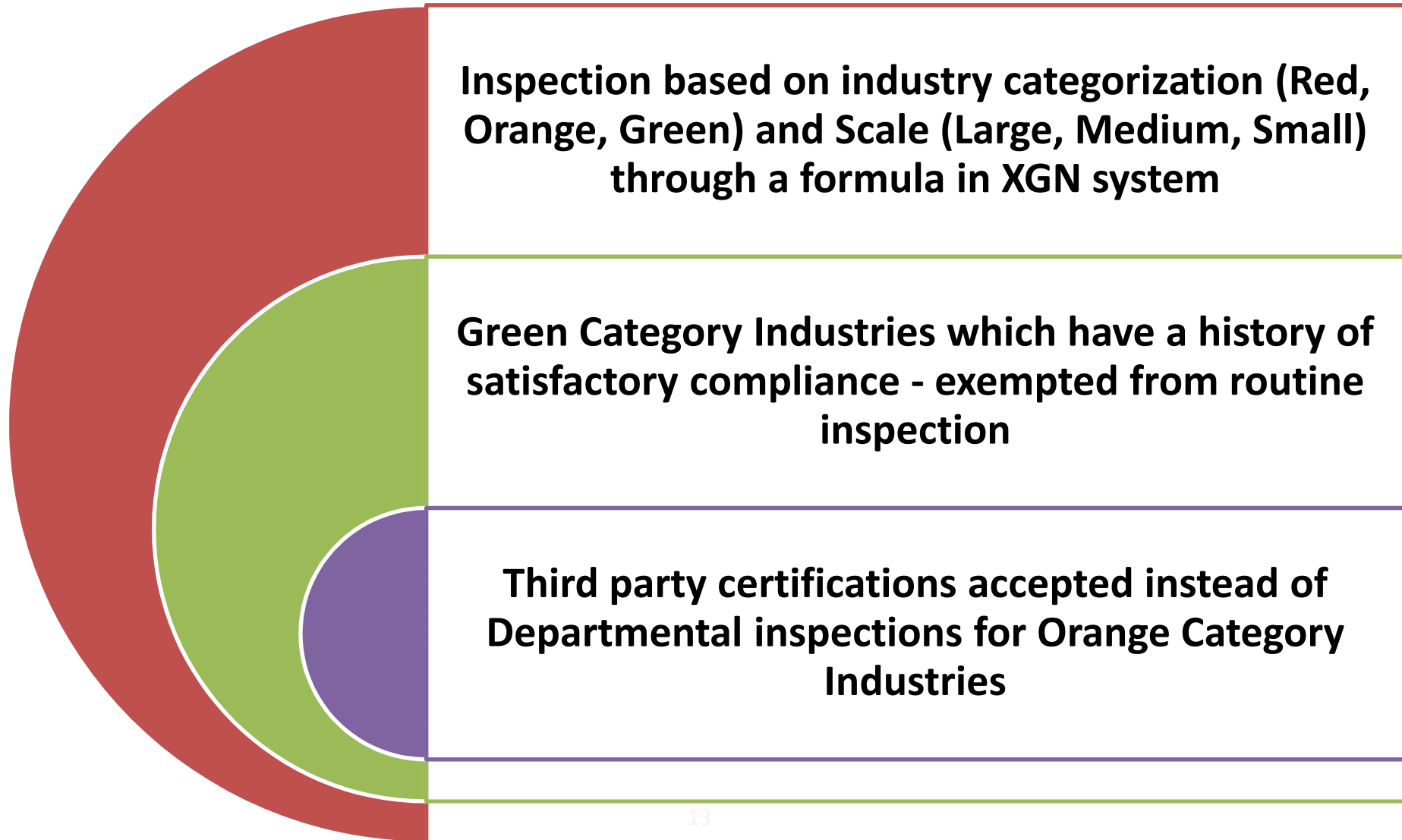
Policy for auto-renewal of CTE based on self-certification/third party certification

Policy for auto-renewal of CTO based on self-certification/third party certification

CTE issued for period of 7 years

CTO issued for period of 5 (Red), 7 (Orange) and 10 (Green) years

Inspection Reforms



ISO & NABL Accreditation

**All GPCB offices are ISO 9001
and 14001 certified**

**Standardisation in
procedures &
documentation – improved
efficiency and quality of
output**

**Cost savings due to
resource, waste and energy
management**

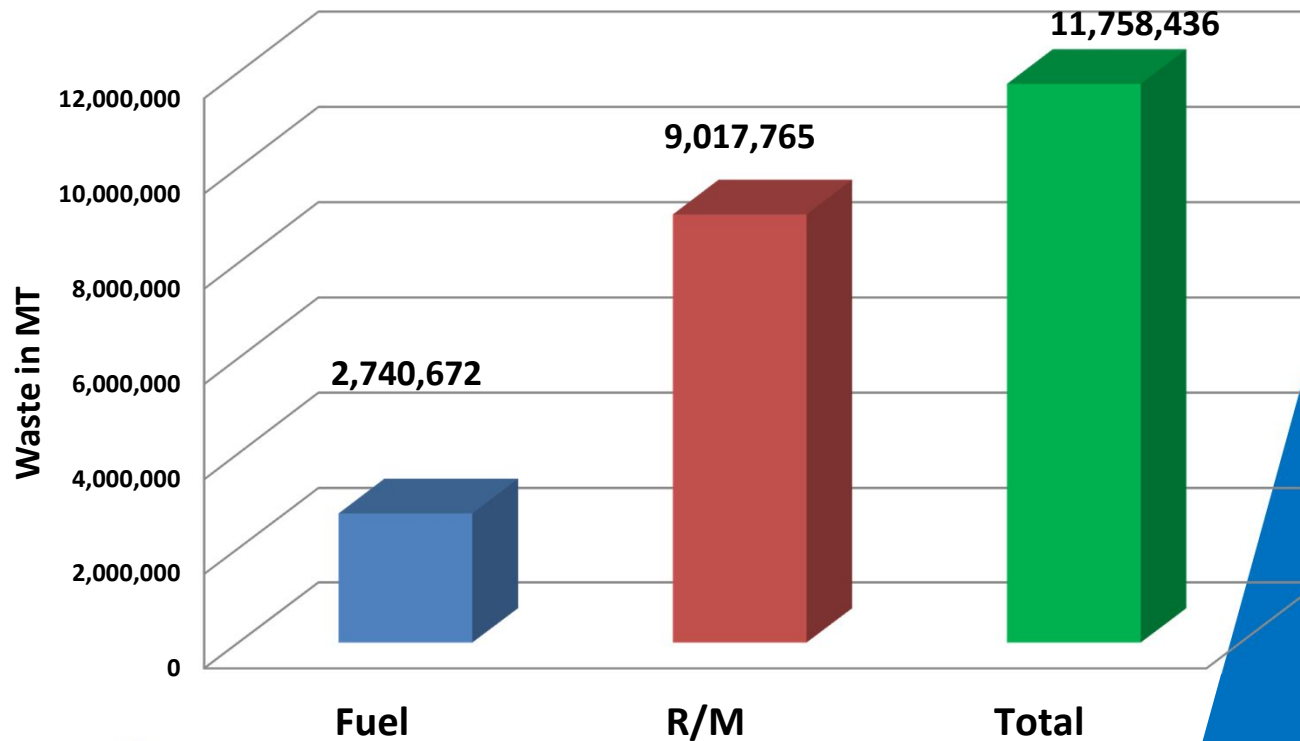
**Six Laboratories of GPCB are
NABL accredited**

**Formal recognition of
competence**

**Benchmark for performance
– standardisation of
laboratory procedures,
quality and efficiency**

Co-processing of Hazardous Waste

Waste Co-Processed from 2009 till date (in MT)



SAVINGS OF
NATURAL RESOURCES
AND IN CEMENT
INDUSTRY

ENERGY USED IN
INCINERATION OF
WASTES IS SAVED

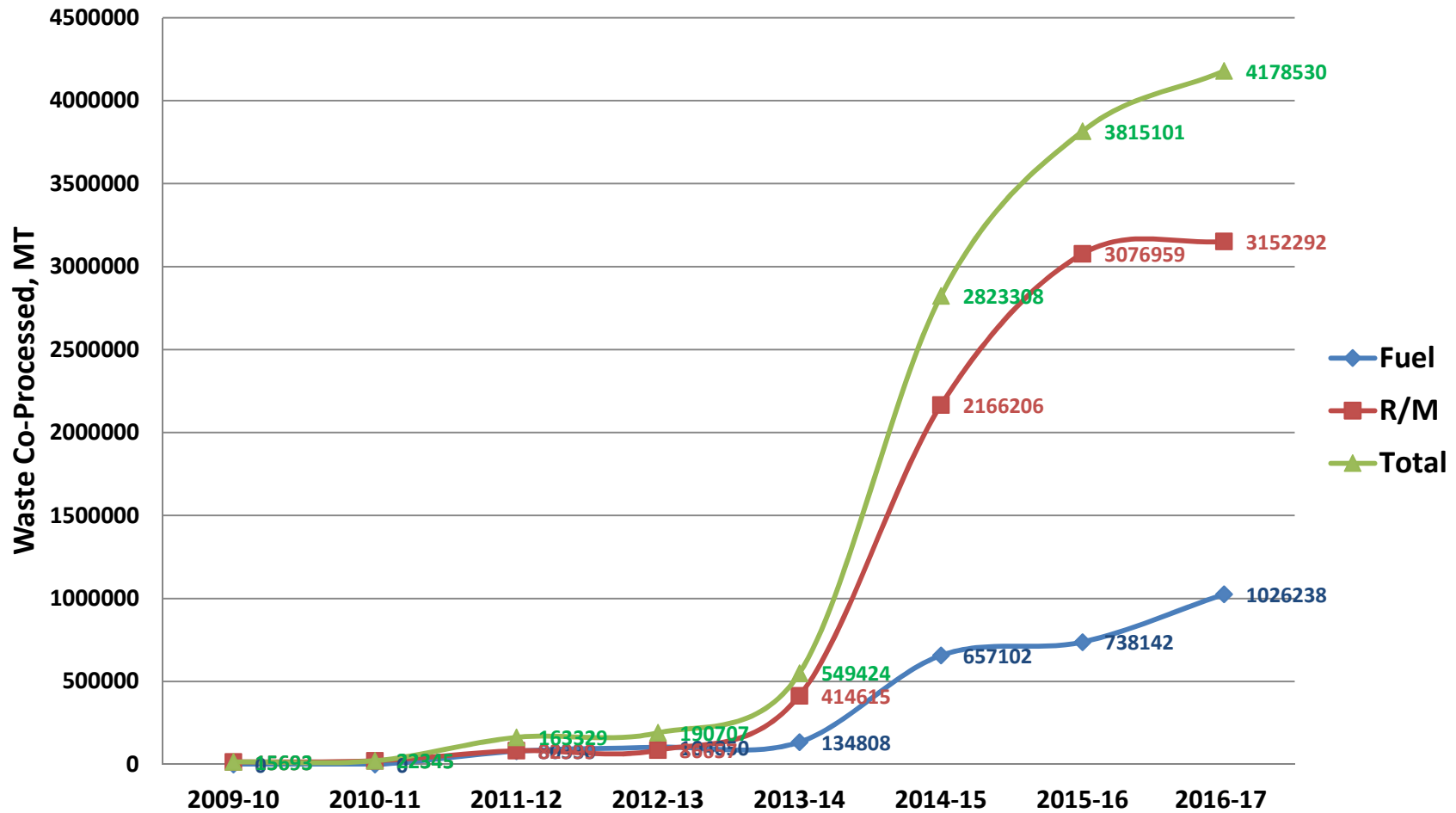
REDUCTION IN
GREEN HOUSE
GASES

PARTIAL ANSWER TO
THE "NIMBY"
SYNDROME

Disposal of industrial wastes and MSW
in environmentally sound manner

Co-processing of Hazardous Waste

Co-Processing Scenario Gujarat



Auto – Renewal CTO

Existing industry can take the benefit of scheme

Industry self-certifies no change in product, process, emissions, EMS etc.

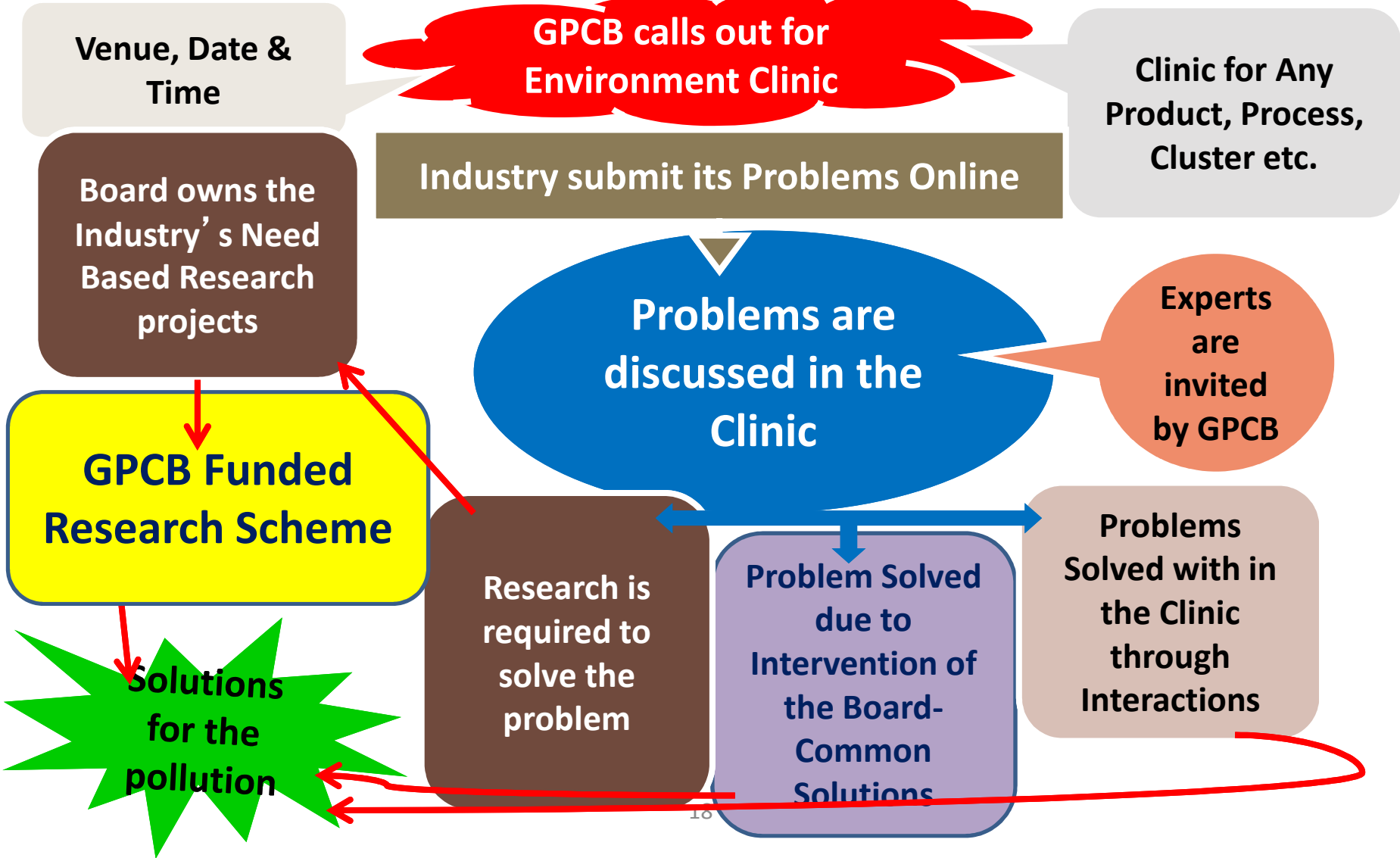
Industry should clear all dues before applying under this scheme

Mandatory visit is waived under this scheme

Verification during subsequent routine visit

CTO revoked if false self-certification submitted

Clinical Approach – Act as facilitator



Use of Technology



Date and Time of Emission



CCTV camera



Digital Video Recorder

Name and Mobile No. of Industry

Live Visualization of the stack of the industry



Communication through mobile phone/message to industries by staff of GPCB



(LCD- 32"inch at Reception counter) Live monitoring of the Industry's stack from the GPCB RO office through laptop, PC and LCD TV.

and



Laptop at any place and



Help Desk

All applications only online through XGN

Help Desk Concept to assist-support Small Scale Industries

Can avail facility without paying any charge

Help Desk at all ROs and also extended to Industry Association on request

Facilities like uploading documents, printing reports and bills, lodging application etc.

Citizen's Charter

Sr. No.	Type of Application	Time Limit in Days
1	Consent to Establish	90
2	Consent to Operate	90
3	Bio-Medical Waste Authorisation	90
4	Municipal Solid Waste Authorisation	45
5	Plastic Waste Authorisation	90
6	E-Waste Authorisation and Registration	90
7	Hazardous Waste Import One Time Registration	30
8	Environment Public Hearing	45
9	Trial run for Co-processing of Hazardous Waste	60
10	Registration for Recycling of Hazardous Waste	90

Awards

**National Award for
eGovernance (Processes
Re-engineering) - 2009-10**

CSI Nihilent Award 2010-11

**CSI Nihilent Award for
Excellence – 2013**

**Manthan South Asia & Asia
Pacific Award – 2014**

**National Award for
eGovernance (Incremental
Innovation) - 2014-15**

Recognitions

Initiative has helped GPCB in obtaining and sustaining

**ISO – 9001 and ISO – 14001
at its Head Office and all its
Regional Offices**

**NABL Certification for 6
Laboratories**

- ❖ **Planning Commission recommended replication and roll out of XGN Gujarat Model in other SPCBs - 2012**
- ❖ **DIPP - GOI recognised XGN as successful tool for e-Governance - May 2014**
- ❖ **Research paper – “Environmental Regulations through ICT” selected at Ireland University, Galway in 2014**

Recognition – Ease of Doing Business

"State Implementation of Business Reforms through Ease of Doing Business Initiative" - Report by DIPP, GOI in September, 2015

(prepared by World Bank Group, KPMG, CII and FICCI)

GPCB achieved 100% compliance in Area of "Complying with Environment Procedures" during assessment Years 2015 and 2016

GPCB's e-Governance efforts through the portal – XGN are specially recognised

Replication

Cloud Ready Application

Replicated in HP, MP, Karnataka, Goa, Uttarakhand, AP
Request received from Chhatisgarh, Assam, Bihar and
Rajasthan

Considering the successful implementation of XGN in GPCB and other SPCBs and the requests received from other SPCBs, Ministry of Environment, Forest and Climate Change has been requested to replicate and implement XGN at pan India level vide letter no. GPCB/IT-29/327938 dtd. 21st Sept., 2015

Thank You

Questions / Contact :

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