

1. 6 issues

2. January 2020

3. Jan 2015 – Dec 2019

4. Dec 2011 – December 2014

9 Unique systems

11 interventions

6 immediate steps

ALL in 15 minutes !!!!!&&&&*****\$\$\$\$)((+++@@@@@

- i. Cocktail
 - ii. Passing the buck
 - iii. Ignorant / empirical information
 - iv. Evasive
 - v. Yet Willing
 - vi. Credible!!!!
-

R G **O** p **i** ch and ran

GERMI

15 12 2011

Year 2020

- NIE is the
 - Lead author of the National Plan for Climate resilient Industrial estates.
 - Head of the South Asia Regional Climate Efficient Industrial estate planning initiative
 - Lead station for Gujarat's ETS
- They are there because of their credibility in transforming intent to reality.

They have (Nine unique and established systems for PEM)

1. Time series information on the waste streams based on which on – site and on – sink mitigation and adaptation measures are taken

2. Apportioned & liabilities accepted through MIS on emissions, liquid and solid wastes

- Relate ground water quality & quantity, soil & air quality
- Benefits of Green Chemistry & Sustainable chemistry

- 3. Demonstrated the feasibility of WM, CP, PP & value addition practices**
- 4. Revived water and soil systems in the estate and the surrounding areas.**
- 5. Have precise information on the fate of chemicals released in soils, water and air with respect to the physical, chemical and biological characteristics of the multi – media.**
- 6. 75% of common facilities are supported through renewable energy sources**
- 7. Flood and related mishaps are history and have not occurred in the past 5 years.**
- 8. Contributed to policies for preventive management through empirical inputs**
- 9. A community of highly compliant industries that**
 - do not cheat / smudge**
 - adopt FATCM approaches**
 - use LCA tools**
 - climate efficient inventory of materials / products**
 - well trained on disaster reduction / avoidance practices**

- **builds capacities of communities in the vicinity**

They recognize that

- **Climate change phenomenon and impacts are only a “window of opportunity” to improve efficiencies through a well defined logical framework (GATI)**
- **Other phenomena may grow in prominence and have individual and synergistic impacts**
- **PEM cannot be restricted to the boundaries of the estate**
 - **Stochastic & non – stochastic phenomena**
 - **CRTK**
 - **AEA**

NIE has proposed 4 important interventions

1. Integrated assessments of

- **Qualitative and quantitative profiles of emissions**
- **Differences between natural and artificially induced variations**
- **Innovations in the estates to reduce material and energy intensity**
- **Waste mining opportunities**

2. MIS for historically significant perturbations including disasters of all types and intensities.

3. A portfolio of mitigation and adaptation measures that are relevant and feasible.

4. An ICH

Year 2015 - 2019

• **Collaborations with the**

1. PRL, ISRO and the IITM are set to assess and document relevant information

2. NIF, NEERI, NCL, IIT B & several CSIR institutions have been established to assess and implement PP, WM, CP & GHK techniques

3. CEPT for regional and micro level planning for PEM

4. NABARD & the SAUs for value addition for recovery and reuse of water and better management of soils in the surrounding areas

5. GPCB notices have almost become history and the GOCB now brings representatives of other estates to learn from the NIE experience

- 6. USDOE, Max Planck Institute, JICA, CIDA, AUSAID and the EU Secretariat for bilateral and multilateral cooperation**
- 7. NIOH for preventive practices.**
- 8. Impact assessments and relevant mitigation measures are in progress**
- 9. IIM A for forecasts and policy assessments**
- 10. CEE for IEC strategies**
 - **MIS at the individual industry and estate level has been established and is functional from 2013.**

December 2011 – end December 2014

- 1. The first phase of projects to gather empirical information on the thrust areas identified by CEPT have been completed (CPA, GHK, DM, Emission mapping, waste mining & exchanges, Foot print & hand print **CEE** assessments)**
- 2. Longer term data collection and integration plan gas been working well and all data are verifiable.**

- 3. CP & WM are at their best and national initiatives have examined “work stations” in NIE to develop sectoral bench marks**
 - 4. DM systems are working well and all occupants play their roles well.**
 - 5. Ahd Mun Authorites have requested other industrial estates in the city to adopt similar strategies.**
 - 6. NIA invites CEPT to sign up for fully supported long term hand holding till 2020 & beyond.**
-