## Coastal Area Industrial Development



**Necessities, Challenges and Way Forward** 



#### **NECESSITIES, CHALLENGES AND WAY FORWARD**

#### INTRODUCTION

- Industrial Development Wherever Happens impacts the environment
- 'Not in my Backyard' can not be said by AIPSN or TNSF
- Economic Growth-Development & Societal Progress
- "Nature is the mother and labour is the father"
- "...despite all these things rapid growth of capitalism only create a condition favourable to the wage labour."



#### **NECESSITIES, CHALLENGES AND WAY FORWARD**

#### **ELECTRICAL ENERGY**

- 'The Report on Integrated Energy Policy' (Planning Commission, 2006): India need 28,000 MW/Annum Electrical Installed Power addition till 2032
- Tamil Nadu requires about 2000 MW/Annum
- COP 21 Pledges:
  - Reduce GHG emission intensity of GDP by 33-35% below 2005 level by
    2030 : Reduction by 3 Billion tons by 2030
  - 40 % Energy by Non Renewable Resources by 2030



**NECESSITIES, CHALLENGES AND WAY FORWARD** 

#### **ELECTRICAL ENERGY**

- Supercritical Thermal Power Plant
  - consumes less coal by 150 gms/Unit; less Water by 2-3 ltrs/Unit
  - Minimum Economical Size : 650 1000MW
  - 1000 MW Plant requires 42MCM of water : 100 Hectares of Paddy
  - 27 Lac T/Annum of coal with 6000 K.Cal/T
  - Indian Coal with ash content > 40% and < 4200 k.Cals/T</p>
  - Raniganj Tuticorin : 4400 kM . Energy for Transport : 1540MJ/T;

Raniganj Coal: 1674MJ/T: Net: 134MJ/T: 95 Units of E;

Australian Coal at pit head · 3140 Units of E/T



#### **NECESSITIES, CHALLENGES AND WAY FORWARD**

#### OIL & GAS

- Tamil Nadu : Major Refinery @ manali 10.MMTA(2.5Lac
  Barrels/Day) Minor Refinery @ Narimanam 1 MMTA
  - Consumtion 11.881 MMT in 2014 & 12.391 MMT in 2015 ; CAGB
    5%
  - Std Economical Size : 6 lacs Barrels/Day
  - Std Refinery requires 12.776 MCM of water : > 42 Hectares of Paddy & Crude Unloading Facilities
  - Effluent : ?



#### **NECESSITIES, CHALLENGES AND WAY FORWARD**

#### Desalination

- 1000 MW Power Plant requires 4.8 MLD; 6 Lac Barrels/Day Refinery requires 112.5 MLD of fresh Water
  - Chennal receives 985 MLD against the requirement of 1200
    MLD (in 2017); In 2031, the requirement : 2100 MLD
- Industrial and Domestic Requirements make Desalination Plants inevitable
- Effluent : Concentrate with higher salt content (by 1.5 times)



**NECESSITIES, CHALLENGES AND WAY FORWARD** 

#### **SUMMARY**

 Tamil Nadu Coastal Line is going to be dotted with Thermal Power Plants, A refinery (Minimum) and its Down Stream Industries and Desalination Plants

Sounds Dystopian But not so

"All Sciences will be superfluous if the outward appearance and essense of things directly coincided" - Karl Marx



**NECESSITIES, CHALLENGES AND WAY FORWARD** 

#### WAY FORWARD

- A Holistic Approach with state as the unit and democratic participation
- Global Warming and Climate Change as the Top Criteria
- Identified Stretches for Traditional Coastal Population with safeguarded livelihood.
- Scheduled Tribe status for Traditional Fishing Communities.
- Power Plant with Ancillary for 100% usage of Fly Ash, Scrubbers and ESPs, Zero Effluent Refineries , Desal Plants with Proper Dispersal Systems



NECESSITIES, CHALLENGES AND WAY FORWARD

# THANK YOU

