#### **GMI Activities Update – India** Focus- ONGC

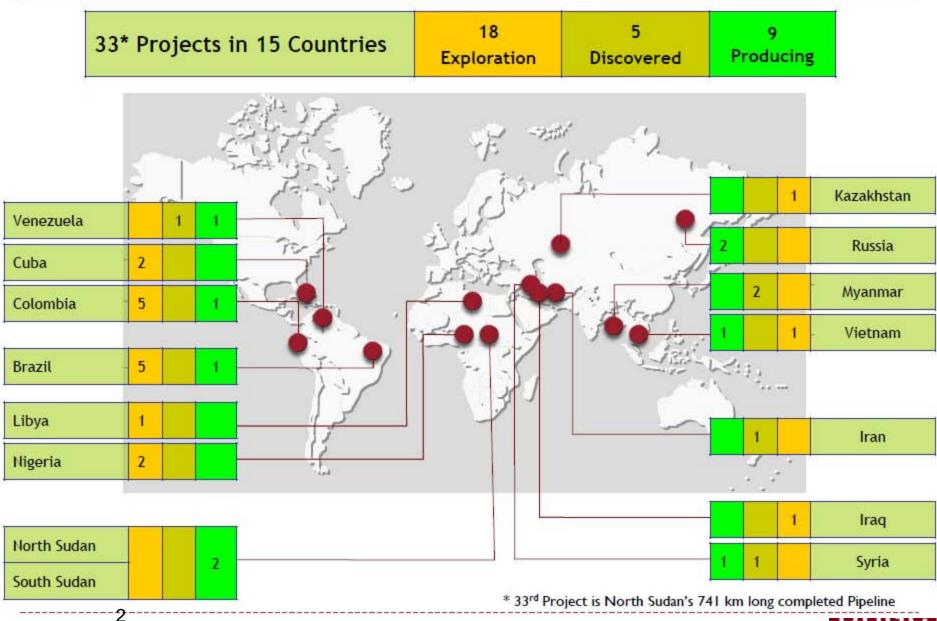


#### The Global Methane Initiative Oil and Gas Sub-committee Meeting Westin Denver Downtown, Denver, Colorado, USA

A K Hazarika Director (Onshore), ONGC O&G Sub-committee member GMI Program, India April 12<sup>th</sup>,2012

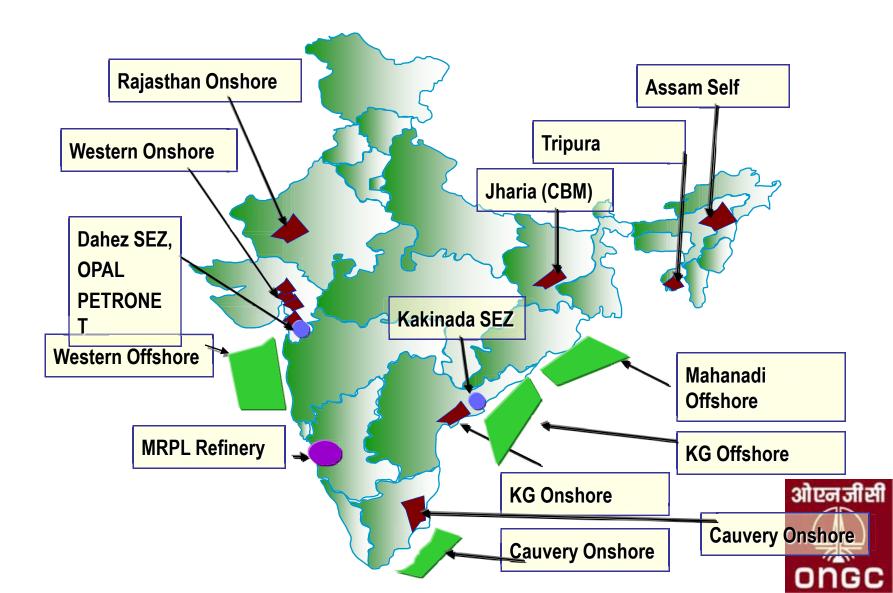
#### OVL: Global footprint





01100

# **ONGC: Domestic Operations**



#### Value-multiplier projects





#### ONGC Petro-additions Ltd.

- To produce: HDPE/LLDPE, Poly Propylene, Benzene
- Scheduled completion Q3, FY'13



ONGC Mangalore Petrochemicals Ltd.

- To produce Paraxylene/ Benzene
- Scheduled completion Q4, FY'12



#### ONGC Tripura Power Company Ltd.

- 726.6 MW Gas based power plant
- Scheduled completion Q4; FY'12







- Leak Survey & measurements
- Opportunities
- Capacity Building
- Action Plan

#### Leak Survey & measurements



# \*By ONGC-USEPA collaborative team -7 installations (In 2008-09)

**\***By in-house CM&SG team- **50** installations (In 2011-12)





### Leak Survey & Measurement study-Details



- By in –house CM&SG team
- Locations covered- 50(from April 2011- March 2012)

Ahmedabad Asset: 6 Installations

#### Mumbai Offshore:

- BHS Complex
- Neelam Complex
- Uran Plant
- Assam Asset: 13 Installations
- Tripura Asset: 4 Installations
- Cauvery Asset: 6 Installations
- Mehsana Asset: 6 Installations
- Ankleshwar Asset: 12 Installations
- Hazira Gas Processing Plant- (detail survey)

## **Result achieved**



#### Identification, Quantification, Reduction-(IQR path)

- Identified more than 425 leaking points from 57 (7+50) Installations
- Quantified over 50 million m<sup>3</sup> /Yr of Fugitive Hydrocarbon- (Approx 28 million m3 of methane)

• **R**eduction of methane emission

- 2008-09 3.2 MMSCM
- 2009-10 4.72 MMSCM
- 2010-11 0.625 MMSCM
- 2011 -12 1.24 MMSCM (till November 11)

**\*** Environmental benefit- reduction of 139,000 tCO2e

## **Opportunity-Emission Recovery Potential**



- Approx 30% of the identified leak has been reduced
- ONGC has good potential to improve its reduction
  - By DI&M practices
  - By appropriate feasible technological interventions
    - VRU (Vapour recovery unit)
    - Pneumatic system against servo gas
    - Ejector

# **Capacity Building**



- More equipments are being purchased by ONGC
- CM&SG ONGC would be further strengthened by additional manpower

Training

# Capacity Building- Contd..



- US-EPA sponsored 8 ONGC officers to a study tour in 2011-12 at facilities in USA.
- Study tour has paid dividend to ONGC and GMI program at large
- US-EPA has sponsored 2 of ONGC officers this year also

#### Support required from US-EPA

- The same needs to be continued in future to create a critical mass in ONGC
- Sponsorship for Subcommittee Member & Project Implementation Manager required

# **Action Plan**



- To map all the production installations across ONGC for methane emissions and form a comprehensive fugitive emission inventory of ONGC.
  Approx 80% has been mapped
  20 % would be covered in 2012
- Infrastructure and capacity building of the GMI team in 2012-13
- To incorporate appropriate technical interventions to reduce these emissions.
- Yearly monitoring.
- A system of yearly reporting of methane reductions





#### NAMA

- Govt. of India is still considering the overall issue
- We need to wait involves policy level decision at Govt level



#### **Expo- 2013**

• Preparatory actions need to be taken now



# Thank you







