



METHANE TO MARKETS (M2M) CONFERENCE

“Advancing Project Development in India through Public Private Partnerships

Clean Development Mechanism (CDM) Projects in ONGC & allied issues

By

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Agenda

- ❖ ONGC- Integrated Indian Behemoth
- ❖ NG Leakage Prevention- Strategy & Preparedness
- ❖ Ongoing Methane CDM Projects
- ❖ Potential Methane CDM Projects
- ❖ Issues

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ONGC

**making
tomorrow
brighter**

Courage to Explore, Knowledge to Exceed, Technology to Excel

ONGC
moves closer
to integrated business
along the Oil & Gas Value Chain



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ONGC Group



Reserves in MMT

As on 1.4.2005	Oil	Gas	O+OEG
Initially In place	4,411	1704	6,115
Ultimate Reserves	1,213	966	2,179
Cumulative Production	676	424	1100
Reserves	537	542	1079

ONGC: O+OEG Production (MTOE)



Strategy & Preparedness

- ❖ **Mitigating NG leakage to atmosphere**
- ❖ **ONGC zero emission program**
- ❖ **CDM benefits from zero emission program**

Possible leakage and management practices

Venting and flaring of unused NG

Sources are :

- **Various processing platforms**
- **Plants**
- **GGs's**
- **EPS's**
- **Situations : Operational shut down, Plant tripping**
- **Pipeline (Miscellaneous reasons)**

Systems in place

Vent valve

All in process gas lines have a vent valve connected to the flare line operating at a particular pressure which releases any excess NG in the process.

On line monitoring system

ONGC has on line monitoring system for monitoring any such leakage.

Systems in place - Contd.

Pipeline monitoring system

ONGC has pressure monitoring system to check any leakage during transmission.

Supervisory Control & Data Acquisition (SCADA system)

ONGC is installing SCADA system throughout to quantify time and extent of leakage and all the work stations are being integrated for the same.

Possible leakage and management practices - Contd.

Zero flaring norm at all installations

- **Systems in place : Practices vary with the nature and quantum of the ventable gas**

Various systems are

- **Ejectors (Motive fuel)**
- **Compression**
- **Vapour recovery**

Ongoing Methane CDM Projects – A Brief

- ❖ **Mum High GFR Project**
 - Ejector installed at BHS,BHN,SHP,SHD, NQO
 - Zero gas flaring facility commissioned at ICP
 - Methodology adopted : AM 0009
 - Status : Under Validation

Ongoing Methane CDM Projects – A Brief

❖ **Uran GFR Project**

- **FGR Compr. installed and pipeline laid**
- **Methodology : AM 0037**
- **Status : under Validation**

❖ **Hazira GFR Project**

- **FGR Compr. installed and pipeline laid**
- **Methodology : AM 0037**
- **Status : under Validation**

Ongoing Methane CDM Projects – A Brief

❖ Hazira GT1 & GT2 Project

- Up-rated components installed to improve efficiency
- Methodology : AMS II D
- Status : **Under UNFCCC Regn.No847** (expected on 1.3.07)

❖ AMD GFR Project

- Installation of Compressors, Ejectors, Separators, Laying of pipelines.
- Methodology : AM 0009
- Status : Under Validation

Ongoing Methane CDM Projects – A Brief

❖ **MHN GFR Project**

- Installation of Compressors, Separators & Laying of pipelines.
- Methodology : AM 0009
- Status : Under Validation

❖ **ANK GFR Project**

- Installation of Compressors & Separators
- Laying of pipelines
- Methodology : AM 0009
- Status : Under Validation

Ongoing Methane CDM Projects – A Brief

❖ **RJY GFR Project**

- 7 Compressors installed
- Methodology : AM 0009
- Status : Under Validation

❖ **Cauvery GFR Project**

- Dual stage ejector installed
- Methodology : AM 0009
- Status : Under Validation

Ongoing Methane CDM Projects – A Brief

❖ **Assam GFR Project**

- Pipeline laid
- Methodology : AM 0009
- Status : Under Validation

❖ **Neelam & Heera GFR Project**

- Ejector installed at Heera Process Platform
- PGC up gradation at Neelam Platform
- Methodology : AM 0009

Ongoing Methane CDM Projects – A Brief

❖ Zero HC discharge, HZR

- In house experiment (isolating stripping gas to the glycol tower to reduce HC emission) is in progress and under observation.
- Technology selection under process.

❖ Cambay GFR Project (Akholjuni, Padra & Katana)

- Presently Akholjuni supplying to vendor & part being flared
- Padra gas being flaring
- Katana is consuming all gas for heater treater

Potential Methane CDM Projects– A Brief

❖ Vapour recovery project at Cauvery Asset

Recovery of vapours at GCS using the ejector system (300 SCMD)

❖ Gas recovery from surge tank, using ejector at SCA Platform

Recovering approx 20,000 scmd since may'06.

❖ Liquid seal and ejector system at SHD & NQO Platforms

To recover Low Pressure gas at SHD(80K SCMD) & NQO(50K SCMD).

Potential Methane CDM Projects– A Brief

❖ **Gas flaring reduction at Khoraghat, Jorhat**

Laying of pipeline and distribution network for sale. Details to be firmed up.

❖ **Gas flaring reduction at Nambar, Jorhat**

Laying pipeline Khoraghat to Nambar to reduce gas flaring. Detail to be firmed up.

❖ **Gas to Wire at Cauvery Asset**

Ramnad & Narimanam GGS's have installed GTW project to utilize LP gas & reduced flaring.



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