## CCOP – Norway EPPM Program 3<sup>rd</sup> Seminar

11-12 November 2010, Bangkok, Thailand

## Summary:

The 3rd Annual Seminar (S3) of the 4-year CCOP-Norway Program for Enhancing Public Petroleum Management for the CCOP Member Countries (EPPM) aims to enhance the capabilities of the Member Countries on global climate change issues and the roles of geosciences & the upstream oil and gas industry to address the issues. The main seminar presentation was on **CCS & the global climate change issues**-

- Why CCS & what are the current issues?
- Procedures & technologies for Mapping of suitable CCS reservoir.

This was presented by **Ms. Eva Halland**, Project Director, Norwegian Petroleum Directorate. The Seminar was opened by MRS. PORNTHIP PUNCHAROEN Permanent Representative of Thailand to CCOP, Director-General, Department of Mineral Resources (DMR).



A total of 36 participants from the CCOP Member Countries – Cambodia, China, Korea, Malaysia, Philippines, Timor Leste, Thailand and Vietnam were present. The report of the participating countries covered

- Impact of EPPM technical activities with recommendations for further improvements;
- Identifying national program to address the climate change issues and specific role(s) of geosciences to address the issues- including specific roles of upstream oil & gas sector;
- Capacity building needs relative to geosciences for climate change mitigation/adaptation.

## **Highlights of the Seminar**



- Climate change is high on the agenda of Member Countries – mitigation & adaptation mandates are available.
- 2. Role of geoscience is clearly defined in most of the Member countries.
- 3. CCS into the geological reservoir study is on-going activity, others still being planned.
- 4. All members support CCS- as regional solution to GHG mitigation, EOR, development of high CO2 fields.
- 5. Legal frameworks for CCS is still being planned geosciences organizations will play an important role of providing important input to policy makers.
- 6. CCOP's core strength- geoscience networking, information/knowledge sharing must be continued and further enhanced for CCS projects to be successful leveraging on lessons learned.
- 7. CCS opportunities as future business case is recognized- in addition to climate change mitigation option.
- 8. Government agencies & NOC's will play an important role in CCS into the geological reservoir implementation.
- 9. Challenges of implementing a regional CCS Program is duly recognize funding, data availability, expertise, etc.
- 10. For a post-EPPM Program/Project:
  - Goals (to be defined) consistent with national goals on sustainable energy resource development & climate change agenda
  - Contents (initially):
    - Atlas of CCS potential reservoir in East & SE Asia;
    - Development of high CO2 gas fields;
    - Gas hydrates as potential new energy resource & potential for CCS;
    - Oil and gas shale & other unconventional O & G resource mapping;
    - Atlas of tertiary basins in East & SE Asia updating the previous Atlas of CCOP – Norway Oil & Gas Resource Management Project (OGRM) of 1995.
  - Funding strategy
    - Cooperating countries & member countries
    - Identify projects related to CCS study
    - To find out if budget & activities can be shared to other member countries.

## 11. Way forward

- o CCS work group to be form through the national coordinators
- o CCOP TS to approach our cooperating countries for their inputs
- Continue with the discussion with an aim to produce a draft proposal by Mid-2011.