



**Seminar on CCS Awareness & Networking of
Petroleum Geoscience Institutes in the CCOP Region**
16-17 November 2009, Bangkok, Thailand

**GEO-RESOURCE SECTOR
UPDATE**



Coordinating Committee for Geoscience
Programmes in East and Southeast Asia (CCOP)

Annual and Steering Committee Meeting 18-25 October, Vungtau, Vietnam



The 46th Annual Session,
18-23 October, 2009,
Vung Tau, Vietnam.

The 54th Steering Committee
Meeting, 24-25 October, 2009,
Vung Tau, Vietnam.





MEMBER COUNTRIES (MC)

COOPERATING COUNTRIES (CC) / COOPERATING ORGANIZATIONS (CO)



Policy making body

STEERING COMMITTEE
 CHAIRMAN
 Dato' Yunus Abdul Razak
 VICE-CHAIRMAN
 Ms. Nellie James

ADVISORY GROUP
 Honorary Advisers
 CC & CO Representatives
 CHAIRMAN
 Dr David Prior
 VICE-CHAIRMAN
 Dr. Jos L.J. de Sonnevile

Input and advice on technical and cooperation issues

TECHNICAL SECRETARIAT (TS)
 DIRECTOR
 Dr. Hee-Young Chun
 Secretary: Ms. Sansanee Wudhiwanich

- Securing assistance, planning and coordinating,
 - Implementing the decisions of SC, projects, training and other activities.

SECTOR COORDINATOR

GEO-RESOURCES	GEO-ENVIRONMENT	GEO-INFORMATION
Dr. Nguyen Nhu Trung	Mr. Niran Chaimanee	Ms. Marivic P. Uzarraga

PROJECT COORDINATOR
 Mr Simplicio Caluyong

FINANCE & ADMINISTRATION

TECHNICAL PROGRAMME

GEO-DATA & INFORMATION

PUBLICATION & DOCUMENTATION



Organization Chart



Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP)

GEO-RESOURCE SECTOR

◆ The overall objective:

To strengthen the M.C.s' technical capabilities in establishing the development potential of the resources and promoting their socially responsible and environmental sustainable development.

◆ Main outcome:

The accumulation of skills, know-how and experience of the M.C.s' resource persons.

◆ This sector consists of three programs:

- *Energy program*
- *Mineral program*
- *Groundwater program*



GEO-RESOURCES SECTOR

CURRENT TECHNICAL ACTIVITIES

Project/activities	No. of activities
1- Mineral Programme <ul style="list-style-type: none"> - CSAM Asia-Pacific - GMRAP 	 1 1
2- Energy Programme <ul style="list-style-type: none"> - EPPM - PETRAD - Gas Hydrate - New initiative 	 9 Waiting for MC's request Preparing proposal
3- Groundwater Programme <ul style="list-style-type: none"> - CCOP/GSJ groundwater phase II - Deep groundwater - New initiative 	 1 Preparing proposal



MINERAL PROGRAMME

◆ Global Mineral Resources Assessment Project

GMRAP Final Working Group Meeting for the join CCOP-USGS Project: Mineral Resource assessment of Asia

- **The purpose of the project:**
Update the mineral activities (non-fuel) in the CCOP Member countries
- The venue: Pusan, Korea
- Date : 16-17 March 2010
- Participants: Nomination of CCOP Member Countries



MINERAL PROGRAMME

CASM Asia-Pacific Project:

CASM Asia-Pacific Database Launching Seminar

At the moment, we are seeking the funds from the World Bank!



**Coordinating Committee for Geoscience
Programmes in East and Southeast Asia (CCOP)**

ENERGY PROGRAMME

- ◆ 4-year CCOP-Norway Program for Enhancing Public Petroleum Management for the CCOP Member Countries (EPPM)

(Simplicio will talk to you later)

- ◆ CCOP/ASCOPE/PETRAD Programs

- For the year 2010, the program has not full detail schedule yet. CCOP and ASCOPE Members are requested to send seminar topics through PETRAD and CCOP T/S to organize tailor-made bilateral seminars.



ENERGY PROGRAMME

CCOP-PETRAD-PETRONAS-INTSOK

- The first Workshop for 2010:

+ Title:

Outline Corrosion Management Workshop

+ Objective:

To provide an interactive forum where management of integrity, safety and risk of pipeline and platform structures can be discussed.

+ Date: 12-13 January 2010

+ Venue: Malaysia

+ Participants: nomination from CCOP Member Countries
cooperating organizer



GROUNDWATER PROGRAM

- ◆ ***CCOP-GSJ/AIST Groundwater Project Phase II.***
- ◆ **The CCOP-GSJ/AIST Groundwater Phase II Kick-off Meeting held in Bangkok on 1st -2nd October 2009 concludes the phase II project on next stage will focus on:**
 - Seawater intrusion
 - Land subsidence and
 - Groundwater pollution
 - To release some kinds of hydro-geological map including latest scientific information to end-users at the end of the project
- ◆ **A workshop will be expected to hold in China next year.**



GEO-RESOURCES SECTOR

Project Proposal



GROUNDWATER PROGRAMME

Status of new proposal

DEEP GROUNDWATER AQUIFER EXPLORATION AND MANAGEMENT IN CCOP MEMBER COUNTRIES

- ◆ 16-21 Feb 09, Deep groundwater site meeting was held in conjunction with International Groundwater Symposium in Bangkok, Thailand.
- ◆ 1-2 October 09, Deep groundwater meeting was held in conjunction with groundwater phase II kick-off meeting in Bangkok, Thailand.

Some project concepts were discussed and outlined:

- **Geographic areas:** China, Vietnam, Korea and Indonesia.

- **Objectives:**

1. To raise the awareness of the value of deep groundwater aquifers and potential cooperation between oil and groundwater industries;
2. To map the potential areas and to assess potential resources of deep groundwater in the CCOP Member Countries and define the roadmap to develop this potential;
3. To share the expertise, experiences and transfer technologies between oil & gas and groundwater industries among CCOP MC.
4. Enhancement of capacity of CCOP MC and cooperation among them for sustainable groundwater exploration and management.



GROUNDWATER PROGRAMME

Status of new proposal

DEEP GROUNDWATER AQUIFER EXPLORATION AND MANAGEMENT IN CCOP MEMBER COUNTRIES

◆ Expected outputs

1. The knowledge and expertise in oil and gas and groundwater sectors shared among CCOP Cooperating and Member Countries;
2. Some technologies transfer from oil & gas sector to groundwater sector;
3. The network of experts in oil and gas and groundwater sectors in CCOP CC and MC established and serves as background for further cooperation.
4. Potential areas and resources of deep groundwater in the CCOP MC to be mapped out and the roadmap to develop this potential to be defined;

◆ **Draft project concept** will be available around November for discussing.

◆ **Project proposal** will be submitted to CCOP's SC in March 2010 for approval.

◆ **CCOP will submit** project proposal to Norway Embassy for consideration and seeking for funding donor/stakeholder.



GROUNDWATER PROGRAMME

Status of new proposal

It seems to exist a paradox in the deep groundwater sector that:

- Who has data (petroleum sector), but not much yet interested in.
- Who wants to interested in (groundwater sector), but does not have technology and data.

⇒ *“FROM OIL TO GROUNDWATER”*

⇒ *So we highly encourage the oil and gas experts to participate in this project.*



ENERGY PROGRAMME

Status of new proposal

◆ GAS HYDRATE PROJECT IN CCOP REGION

The new initiative project of GH was endorsed by the 51st Steering Committee Meeting in Chiang Rai, Thailand, 2-4 April 2008.

- ❖ In 2010, we would like to prepare the project proposal concept to submit to CCOP Steering Committee for approval and seeking for funding donor/stakeholders.



GEO-RESOURCES SECTOR

B- New initiatives





**1. Project title:
“Investigating and Capacity Building on CO₂ Geo-sequestration
for CCOP Region”**

Background

- CO₂ storage is one good mitigation option for reducing greenhouse gas emissions (CO₂) and it can play a decision role as it could contribute 33% of the CO₂ reduction needed in 2050.
- Hand in hand with CCS, humanity could progress environmentally friendly way while at the same time creating a bridge to a worldwide economic based on sustainable energy production.
- Subsequent to the discussions at the CCOP workshop and seminar, there were indications of interest by the MC to request for a new CO₂ geo-sequestration project in CCOP region:



A light blue map of East and Southeast Asia is centered in the background of the slide. The map shows the outlines of China, Korea, Japan, and the Southeast Asian archipelago.

1. Project title

Investigating and Capacity Building on CO₂ Geo-sequestration for CCOP Region

Project focuses on:

- 1- Exploration techniques and survey plan for site selection and capacity estimation of CO₂ storage;
- 2- Technique process and technologies for monitoring the CO₂ storage reservoir and overburden;
- 3- Assessment of risk and safety and public perception;
- 4- Case studies and expert visits on mapping the potential areas and target geo-systems for possible CO₂ geo-sequestration.

Participating organizers: CCOP Member Countries and potential Cooperation Country or Organization



1. Project title: Investigating and Capacity Building on CO₂ Geo-sequestration for CCOP Region

◆ Expected output

- Deeper awareness of CCOP Member Countries on global warming issues and the urgent actions to reduce greenhouse emissions especially carbon dioxide.
- Information and expertise shared, technology transferred among CCOP Cooperating and Member Countries regarding all aspects of carbon geo-sequestration.
- Enhanced cooperation among CCOP Cooperating and Member Countries in the field of CO₂ geo-sequestration resulting in possible regional geo-sequestration project.
- Potential areas and target geo-systems for possible carbon geo-sequestration in CCOP Member Countries are mapped out.
- Roadmap for site selection and capacity estimation of CO₂ storage;



2. Project title : Cooperation and Sharing of Geoscience Knowledge for Sustainable Development of the Petroleum Resources In CCOP Region

Background

- ◆ The cross-border study have been well encouraged by our Member Countries and so creating the platform for enhancement of cooperation among Member Countries
- ◆ The new geoscientific information, knowledge and technology are transferred through the conducted training courses toward the goal of Capacity Building (i.e. Basin Modeling, Geochemistry, CO₂ and outcrop-core-well log-seismic correlation)
- ◆ Through various workshops within the CCOP project, CCOP's Technical Secretariat has received requests from the Member Countries which focus on support within capacity building, research, training and enhancement of technical capabilities in the state-of-the-art techniques in exploration and sustainable management of petroleum resources



2. Project title

Cooperation and Sharing of Geoscience Knowledge for Sustainable Development of the Petroleum Resources In CCOP Region

Project focuses:

1. To enhance the capacity and capability of the state petroleum institutions of CCOP Member Countries in exploration and exploitation of hydrocarbons through case studies and technology transfers;
2. To promote cooperation within CCOP region in petroleum business by the enhancement of networking, sharing and disseminating the existing knowledge of petroleum systems in the region.
3. To promote investment in petroleum industry for economic development in CCOP region.

Participating organizers: CCOP Member Countries and potential Cooperation Country or Organization



2. Project title : Cooperation and Sharing of Geoscience Knowledge for Sustainable Development of the Petroleum Resources In CCOP Region

Expected output:

- ◆ Capacity enhanced through modern techniques and technologies transferred to CCOP Member Countries,
- ◆ Case studies reports produced with knowledge captured and experiences shared gives better understanding of current geological setting and petroleum potential of the region
- ◆ The network of geoscientists in petroleum industry well established among Member and Cooperating Countries, which could further facilitate more cooperation activities in the future
- ◆ More investments in petroleum industry of the region would come in place through dissemination of the project results





Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP)

**Thank you for
your attention!**

