



SEMINAR ON CARBON CAPTURE STORAGE

**PETROVIETNAM
BANGKOK – THAILAND**

November, 18 and 19



CONTENT

I. Profile of Petrovietnam

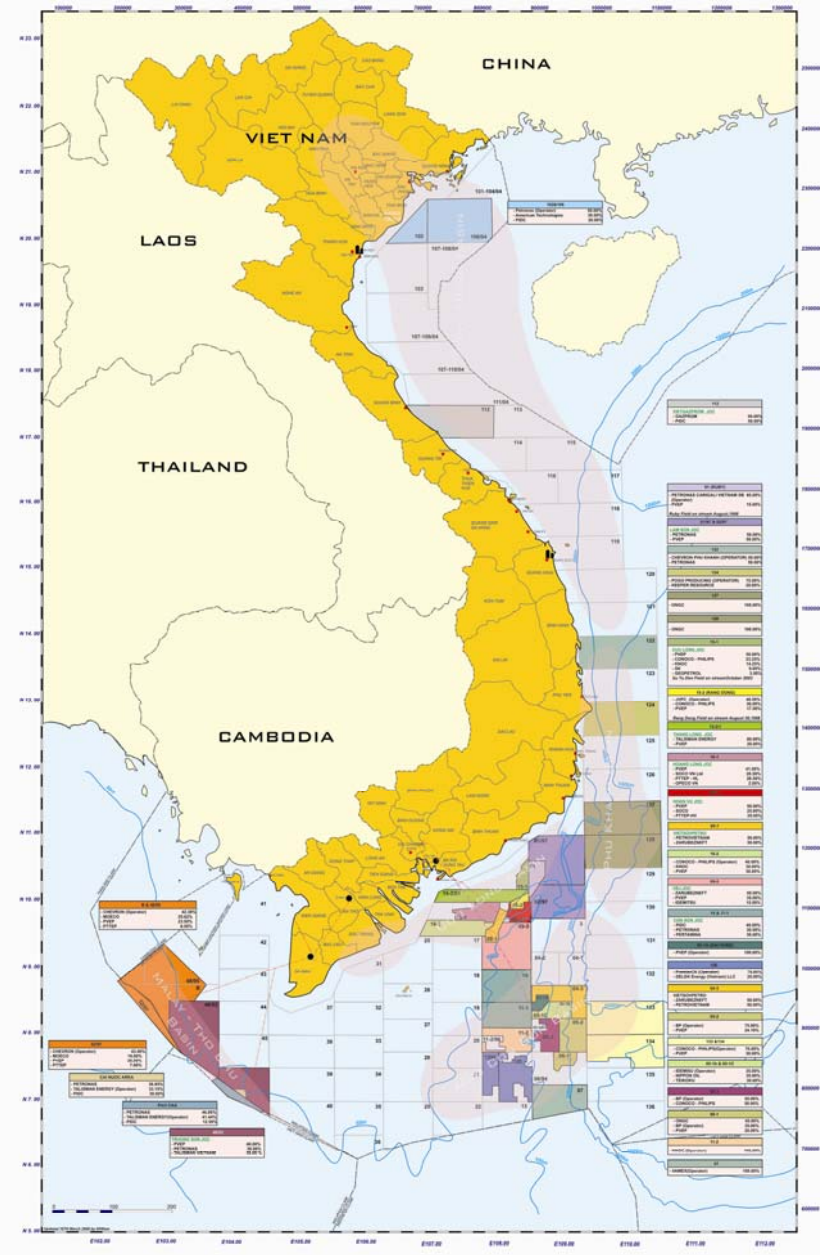
II. Environmental mitigations

III. Attendance in the technical activities under the EPPM.

I. PROFILE OF PETROVIETNAM

- Vietnam Oil and Gas Group is found in 2006 based on Vietnam Oil and Gas Corporation (found in 1975);
- 50 subsidiaries, Joint Venture Corporation, Joint Stock Company;
- Manpower: 27.000 people;
- Exploited oil: 236.79 million tons; in 2008: 15 million tons;
- Exploited gas: 46.513 billion m³; in 2008: 7.5 billion m³;
- Produced Urea fertilizer in 2008: 740 million tons;
- Produced power:

BẢN ĐỒ HOẠT ĐỘNG DẦU KHÍ VIỆT NAM



ETNAM

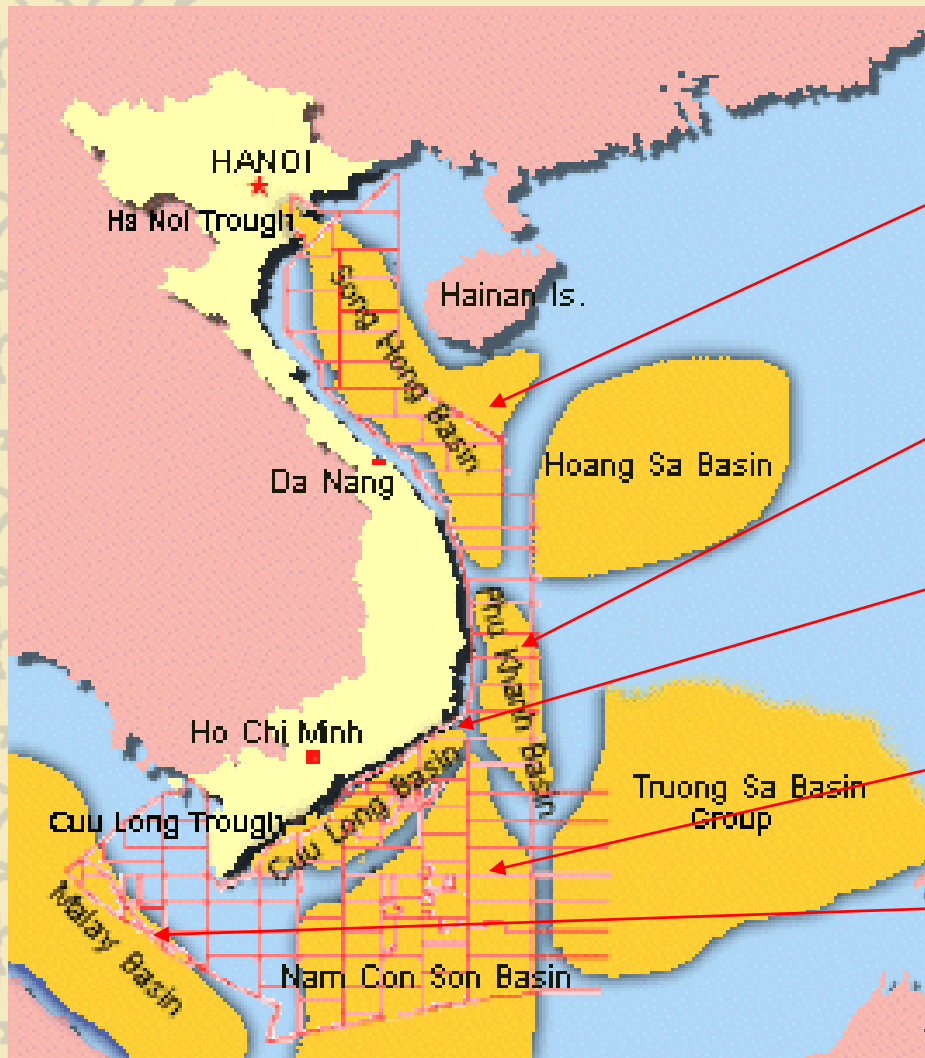


I. PROFILE OF PETROVIETNAM

Main activities

1. Prospect, Explore and Product Oil and Gas
2. Processing Oil and Gas
3. Producing and trading Power
4. Storing, transporting and distributing Oil and Gas
5. Carrying out services on Oil and Gas sector
6. Carrying out services on finance field
7. Training and supplying manpower.

I. PROFILE OF PETROVIETNAM



Song Hong Basin

Phu Khanh Basin

Cuu Long Basin

Nam Con Son Basin

Malay - Tho Chu Basin



II. ENVIRONMENTAL PROTECTION

- All activities of Petrovietnam meet international standards as well as Vietnamese requirements.
- Petrovietnam has issued **POLICY ON HEALTH, SAFETY AND ENVIRONMENT** and applied at all subsidiaries. It define Health, Safety and Environment (HSE) is a prime responsibility of management at all levels in the organization and is an integral part of Petrovietnam business and operations management. PETROVIETNAM will take every reasonably practicable step to eliminate or minimize the risks of damages to health, environment and assets.

II. ENVIRONMENTAL PROTECTION



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- ❑ According to Kyoto Protocol, Vietnam is non-Annex 1 countries but Petrovietnam has carried out a lot of measurements to minimize emission causing climate change.
- ❑ PetroVietnam and ConocoPhillips, Nippon Oil have developed the associated gas recovering project of Rang Dong field as CDM project with CO2 reducing amount of 6.7 million tons.
- ❑ Nowadays, all associated gas is recovered instead of flaring. It will reduce a lot of emission gas.



● III. ATTENDANCE IN THE TECHNICAL ACTIVITIES UNDER THE EPPM.

- Now Petrovietnam is studying some projects such as recovering CO₂ from stacks of Fertilizer Plants, Power Plants, but we have still not found out the solution for storing.
- When developing high CO₂- natural gas field, re-injecting CO₂ removed from gas sources needs to be considered.

ENVIRONMENTAL ISSUES AND PROBLEMS IN VIETNAM PETROLEUM INDUSTRY

Difficulties in management

Envi. regulatory framework

has not caught up with development of petroleum operations.

Petrovietnam

is authorized to sign contracts with foreign contractors, but is not a State Management Body;

prepared envi. legal documents for envi. monitoring, auditing for petroleum industry and getting approvals from Government

offshore oil and gas activities makes difficulties in envi. monitoring, inspection and requires appropriate management measures.

CONCLUSIONS

- ✿ Environmental protection in the petroleum industry has been strictly implemented during the past time
- ✿ Awareness of the potential challenges, the environmental management will be made by the industry as well as the assistance of the State Authorities and the public
- ✿ Petroleum industry will better protect the environment, ensure long-term sustainable development and contribute effectively to national efforts in environmental protection.



***THANK YOU FOR YOUR
ATTENTION!***

- ✦ Taking this opportunities, Petrovietnam would like to thank CCOP for inviting PetroVietnam representatives to attend this seminar. We appreciate information shared on Carbon Capture Storage.