



PETROVIETNAM

Workshop on CARBON CAPTURE - STORAGE (CCS)

**PHUKET - THAILAND
29 Jun - 2 Jul. 2010
Present by:**



CONTENT

I. Profile of Petrovietnam

II. Environmental mitigations

**III. Attendance in the technical
activities**



PETROVIETNAM

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: more than 27.000 man power;
- ❑ Exploited oil: 236 million tons; in 2009: 16 million tons; 25 Mtons equiv
- ❑ Exploited gas: 46.513 billion m³; in 2009: 9.5 billion m³;
- ❑ Produced Urea fertilizer in 2009: 760 million tons;
- ❑ Produced power: 9 power plants with 115 bkwh/year



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.



PETROVIETNAM

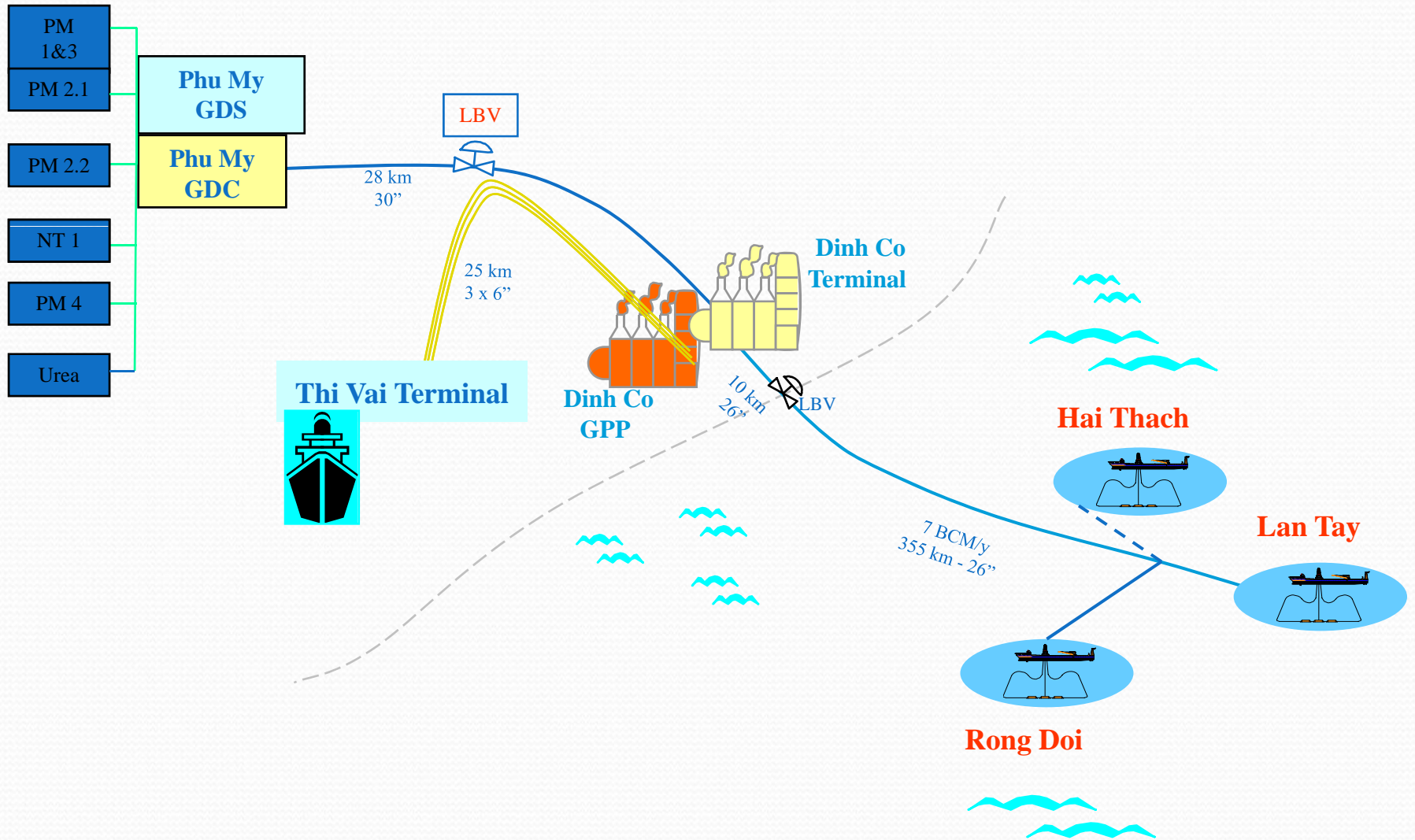
GAS PIPELINE SYSTEM NOW AND NEAR FUTURE

- **Bach Ho – Rang Dong – Phu My Pipeline**
- **Nam Con Son Pipeline**
- **PM3 – Ca Mau Pipeline**
- **Low Pressure Pipeline**
- **Block B – Omon**
- **Nam Con Son 2**



PETROVIETNAM

NCS Pipeline





PETROVIETNAM

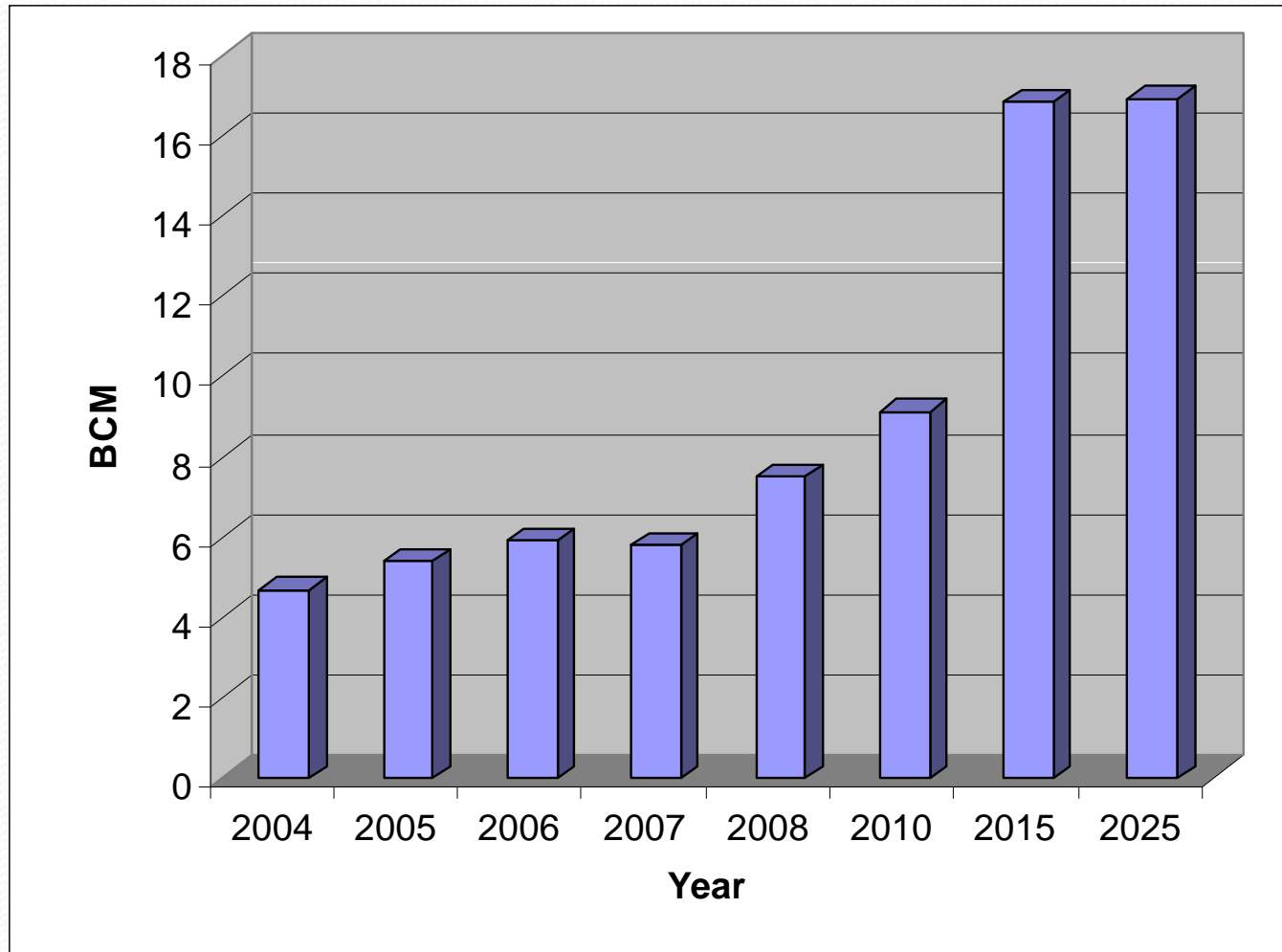
II. ENVIRONMENTAL PROTECTION

- ❑ All activities of Petrovietnam meet Vietnamese environmental 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.



PETROVIETNAM

GAS VOLUME TO ONSHORE





PETROVIETNAM

II. ENVIRONMENTAL PROTECTION

- ❑ 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.
- ❑ Green house gases reduction projects (potential CDM projects) are:
 - ❑ associated gas recovery projects such as NamRong- Doi Moi oil field, SutuVang oil field, Hai Su Trang-Te giac Trang oil field
 - ❑ Wind power plant in Binh Thuan province, solar energy projects
 - ❑ Bioethanol projects
 - ❑ Gas power plants: Ca Mau 1 &2; Nhon Trach 1 &2
- ❑ **Now, PetroVietnam and Exxon Mobile are running the CCS project natural gas field high CO₂ (70-85%) from Block 117, 118, 119 offshore (Phu Khanh Basin) re-injection to Bach Ho field (Cuu Long basin).**



PETROVIETNAM

III. ATTENDANCE IN THE TECHNICAL ACTIVITIES

- ❑ Nowadays, all associated gas is recovered instead of flaring. It will reduce a lot of emission gas.
 - ❑ When developing high CO₂- natural gas field, re-injecting CO₂ removed from gas sources needs to be considered.
 - ❑ In the future, Petrovietnam to studying continues projects such as recovering CO₂ from stacks of Fertilizer Plants, Power Plants, but we have still study the solutions for storing
- .



PETROVIETNAM

CONCLUSIONS

1. Environmental protection in the petroleum industry has been strictly implemented during the past time
2. 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
3. Petroleum industry will better protect the environment, ensure long-term sustainable development and contribute effectively to national efforts in environmental protection.



PETROVIETNAM

THANK YOU

On behalf of Petrovietnam would like to thank CCOP for inviting, that is representatives to attend on the workshop. We appreciate information to shared with you.

Q&A