

# Carbon Capture and Storage; CCS, in Thailand

Present by

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## **OUTLINE**

- Thailand Climate Change and Energy Policy
- CCS Activities and Result in Thailand
- Conclusion





# **Thailand's Climate Change Policy**



Thailand
Climate Change
Master Plan
2011-2050

#### Ministry of Natural Resources and Environment

http://www.mnre.go.th/mnre/



- EIA

- Thailand Climate Change Master Plan 2011-2050

**ONEP** 

http://www.onep.go.th/



- CDM http://www.tgo.or.th/



Alternative Energy Development Plan

**Energy Efficiency Plan** 

#### MINISTRY OF ENERGY

Energy Policy and Planning Office http://www.eppo.go.th/

Department of Alternative Energy Development and Energy Efficiency http://www.dede.go.th/

Department of Mineral Fuels http://www.dmf.go.th/



**PTT Groups** 



EGAT



# **Thailand's Climate Change Master Plan**

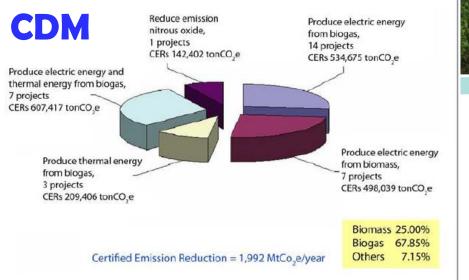
# **Greenhouse Gas Mitigation Plans**

#### **Reduce Agricultural Burn**



#### **Forestation**





# **Energy Efficiency**



## **Alternative Energy**



The Second National Communication under UNFCCC (2000)



# **CCS Activity In Thailand**

# **Ministry of Energy CCS Task Force**

Ministry
of
Energy

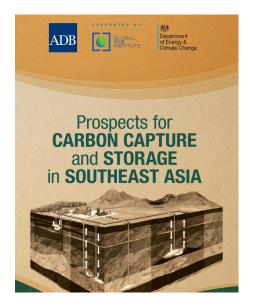
Geological Storage Potential Study

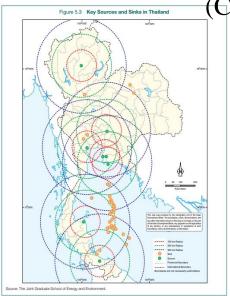
(Cooperation with Tetra Tech)

Prospects Carbon Capture and Storage in Southeast Asia www.adb.org (Cooperation with ADB)

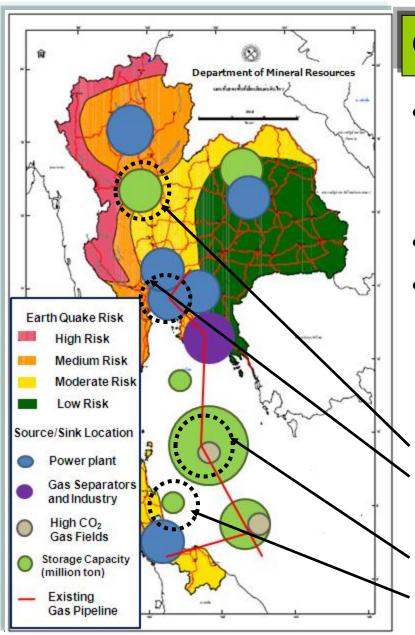
Feasibility & Regulation Study

(Cooperation with PTIT)





#### **Possibility to Utilize CO2 for EOR**



# **Geological Storage Potential**

- Estimated Total Storage 1,935 million Ton (only in petroleum reservoir, not include aquifer storage)
- More than 90% in the Gulf of Thailand
- Storage/Emission per year =  $\sim$  8 years

## **CCS Potential**

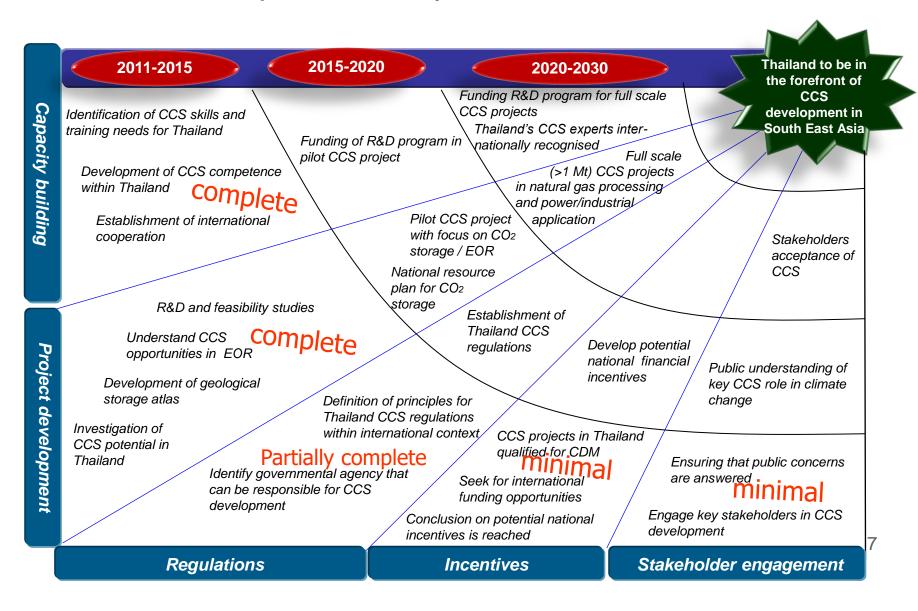
Pitsanulok Basin Suphanburi Basin

Pattani Basin Songkhla Basin



# **Roadmap for CCS in Thailand**

#### **Thailand CCS Roadmap for E&P Industry**



#### **Conclusion**

- CCUS is technically possible in Thailand
- Financing remains a long term issue
- Oil and gas fields in Thailand are approaching end of field life; hence, there are potential pilot project(s)
- Existing regulatory framework can support pilot project(s), but full-scale project require major modifications



# Thank you

# Questions

