

R & D Achievements on Carbon Capture and Storage in CPC, Taiwan

■ Research and development results of China Petroleum Corporation (CPC)

- Complete CO₂ geosequestration site selection.
- Complete the evaluation of the EGR/EOR potential of the target site.
- Compose the geological model of the target reservoir (Fig.1).
- Complete the design and test of the surface facility and work flow (Fig.2).
- Complete the well testing, flow test and downhole sampling.
- Complete the dowhole sample analysis.
- Complete the injection and storage simulation.
- Cooperate with ITRI to set up the CO₂ long term monitoring system.
- Establish the pressure analysis technology using commercial software.
- Complete the general public understanding and acceptance survey, and organize the public outreach strategy.

■ Future Work

- Continue the monitoring programs to collect the background information.
- Cooperate with ITRI carbon capture pilot test project to ensure stable CO₂ source.
- Launch the research of saline aquifer CO₂ geosequestration in YHS field.
- Launch the CO₂ geosequestration potential survey for the Dalin refinery expansion project.

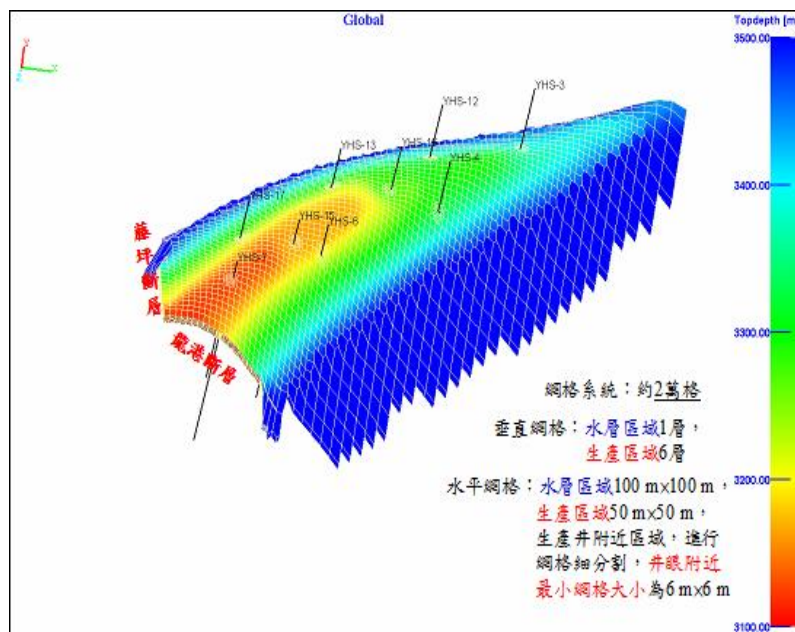


Fig. 1 Geological model of target reservoir

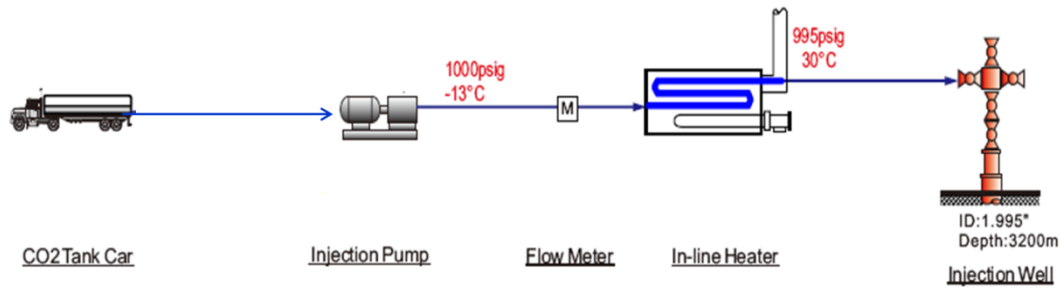


Fig.2 Planning of CO₂ injection work flow

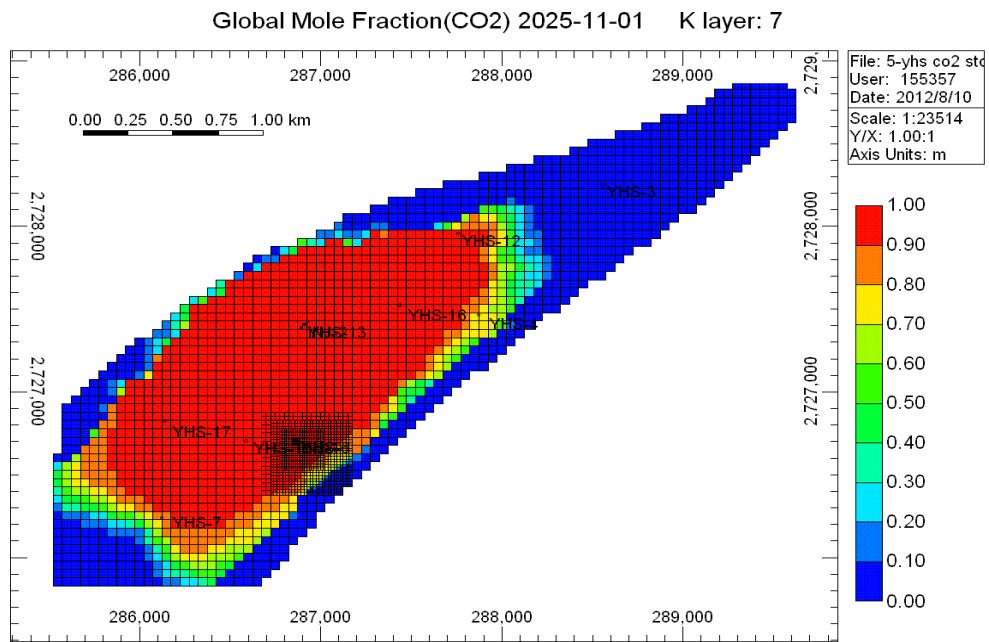


Fig.3 Injection and storage simulation

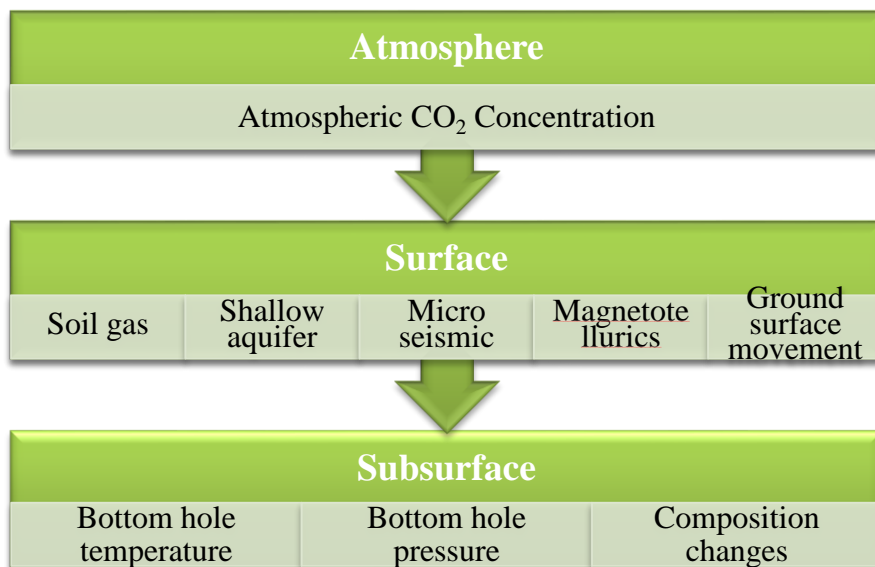


Fig. 4 Monitoring programs