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The Progress of Carbon Dioxide Geological Storage Research and Pilot Project in China

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From 2010 to 2013, China Geological Survey launched the project “CO₂ Geological Storage Potential and Suitability Assessment and Pilot-Project in China”, which promotes CO₂ geological storage study in China. Based on the complex geological conditions of basins in China, through learning from advanced international experience, we have got CO₂ geological storage potential and suitability assessment system suitable for China, and assess CO₂ geological storage potential and suitability about the 417 land and shallow marine sedimentary basins with the area greater than 200 square kilometers, which will provide data to support the long-term planning. The CCS pilot- project in Yinjinhuoluo of Ordos City, Inner Mongolia, as the first coal-based CCS pilot project in deep

saline aquifers in China and the largest one in the world, has been developed. Through the project, we have practiced the engineering and technology of CO₂ geological storage in deep aquifer and got breakthroughs in the drilling, perfusion, sampling, monitoring a series of scientific and technical problems. We have made substantial progress in the basic theoretical research as physical chemical and biological role, simulation, environmental impact and safety risk assessment.

Key Word: CO₂ Geological Storage; Potential and Suitability Assessment; Pilot- Project; Basic Theoretical Study

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