

## Risk Management of CO<sub>2</sub> Injection Process on Topside Platform for CO<sub>2</sub> Storage

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Amount of usage of fossil fuel is still high due to growth of energy demand by developing country such as mainly China, India and so on. As effect of that, greenhouse effect, which increase temperature of earth, is still continued. CCSU technology is being considered as key solution to reduction of greenhouse gas, which give rise to greenhouse effect.

In this study, CO<sub>2</sub> injection process for geological sequestration of captured CO<sub>2</sub> is handled. Also safety of topside platform for this CO<sub>2</sub> injection process to be built in Pohang basin near Youngil bay in Korea is covered. Specifically, quantitative risk analysis (QRA) is implemented to topside CO<sub>2</sub> injection system for quantifying risks in the system. After the QRA, risk reduction strategies based on QRA results are applied to reduce risk into proper risk range.