

Current Status of CCS in the World

TANAKA, Ryoza^{1*}

¹Research Institute of Innovative Technology for the Earth (RITE)

CCS is a promising technology to mitigate the global warming. The low-carbon technology, according to an analysis by the International Energy Agency (IEA), is required to contribute to 14% of the global CO₂ emissions reduction by 2050 necessary to achieve the internationally-agreed goal of limiting the rise of the average global temperature to 2 degree C. There have been more than 10 commercial-scale CCS projects, including the world first CCS project in the power sector that became operational in Canada in autumn 2014, and there have also been around 10 projects under construction. The progress of CCS deployment is, however, far behind the anticipated trajectory. This is mainly because there is lack of business case. This is underpinned by a fact that most of the projects under operation and construction are in combination with enhanced oil recovery (EOR) by using anthropogenic CO₂, which contributes to making them feasible commercially. The situation draws wider attention to policies and regulations to incentivize or mandate CCS implementation. Such policies and regulations have been in place mainly for fossil fuel power plants in, for example, the USA, Canada and the UK. This presentation is to summarize the current status of large-scale CCS projects and CCS incentive/ mandatory policies and regulations.