

Optimizing ownership scenarios for commercializing carbon capture and storage in Japan

This article is a part of our Japanese Government funded research project, which is to develop a comprehensive policy and legal framework for commercializing Carbon Capture and Storage (CCS) in Japan. The Paris Agreement of 4 November 2016 for the first time brought all nations together to share the responsibility of combatting climate change and adapting to its effects. There has been wide discussion about CCS considered as one of the significant approaches to greatly reduce CO₂ from the global atmosphere. The Japanese government submitted Intended Nationally Determined Contributions (INDCs) to the United Nations Framework Convention on Climate Change (UNFCCC) in 2015. Japan decided on the GHG reduction target of 26% by 2030 below 2013 level. The government also targets an 80% reduction of GHG emissions by 2050 and has acknowledged CCS can potentially contribute to reducing 7.1 billion tons of CO₂ by 2050, resulting in approximately 21% of potential contribution to reducing CO₂. Thus, the future CCS deployment associated with an appropriate legislative framework will allow potential benefits and meet Japan's climate policy goals. In this regard, this article offers a strategic framework for optimizing different ownership systems for the future CCS deployment in Japan. Throughout this study, it proposes three different scenarios in terms of developing CCS deployment in Japan, they are: Private ownership, private associated with government/public ownership and government/public ownership for CCS. The degree of cost and risk sharing will be differentiated, depending on the development stage and scenarios. Accessing relevant literature, we have proposed three potential scenarios for addressing the best legal framework for the future CCS operation in Japan.

Biography

He has graduated with a PhD in Public Policy from the University of Tasmania and has also built considerable experience in these fields both in Australia and Japan. His research expertise is in the field of policy instrument analysis in relation to climate change policy.

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