

Chapter 6

Conclusions and Recommendations

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Chapter 6

Conclusions and Recommendations

The CCUS value chain cost assessment conducted in the MCS (chapter 2), regulatory and policy study (chapter 3), and the discussion at the MCS workshop (chapter 5) have revealed that cost reduction effort and development of regulatory and policy framework complement each other. As discussed at the workshop, cost reduction is most likely achieved through technological development and business scale-up, facilitated by investment through policy support. Moreover, large-scale financing will only be possible with clarified responsibilities of each concerned party accompanied by clear risk allocation.

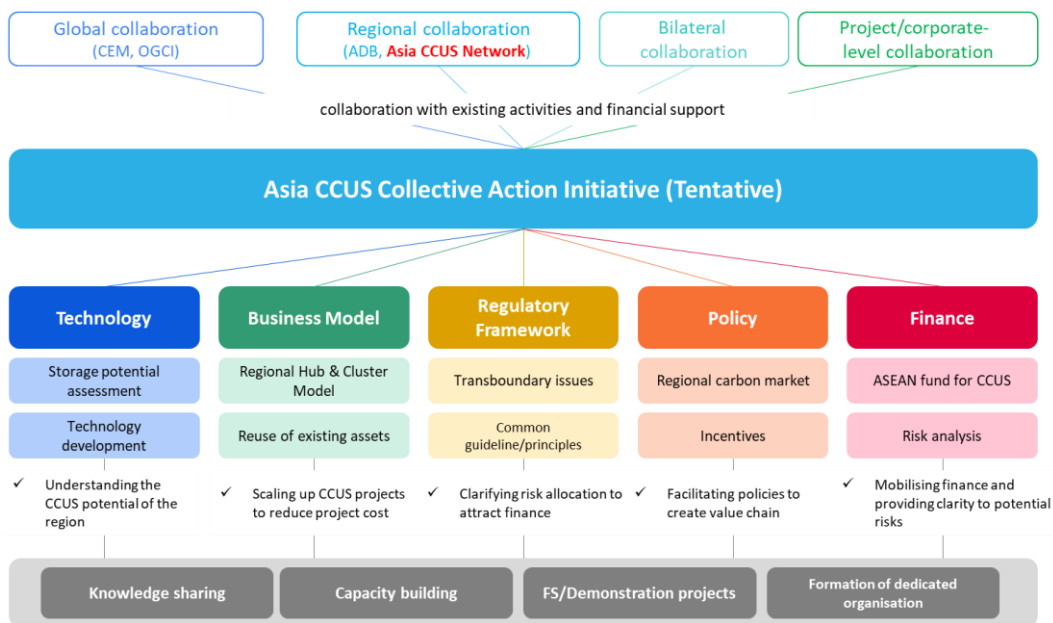
Although many cooperative activities are already taking place (chapter 4), laying the foundations for CCUS promotion in the Asian region, they remain somewhat fragmented. To achieve this virtuous cycle of facilitation of CCUS deployment and the development of an enabling environment, the following are suggestions for comprehensive and cohesive further regional engagement, based on the comments obtained from the MCS workshop participants.

- Continuous implementation of joint feasible studies and demonstration projects that lead to workable business model creation
Technological development and building know-how through ‘learning by doing’ are keys to cost reduction.
- Increased capacity building to raise awareness on regulatory issues and policies share lessons learnt from advanced cases studies from Asia and outside of Asia for engaging with those countries that have yet to start a deep discussion on regulatory and policy issues to promote CCUS
- Collection of more storage capacity data to create business opportunities
Data collection is a lengthy and costly process that can greatly benefit from regional collaboration.
- Regional finance mobilisation through positioning CCUS within regional green finance framework, and developing a regional carbon market a regional CCUS fund

Considering the suggestions above, a collective action initiative of CCUS in the Asian region, tentatively called ‘Asia CCUS Collective Actions Initiative’ through which participating countries can agree on basic principles and areas for joint efforts to promote CCUS, is recommended. Areas of cooperation can be broadly categorised into technology, business model, regulatory framework, policy, and finance (Figure 6.1). In technology, a collaborative approach in storage potential assessment and technology development can lead to a better understanding of CCUS potential in the region to possibly identify increased business opportunities. In the business model, networking different business entities to create a business model fit for regional hub and cluster model and efficient use of infrastructure, including reuse of existing assets, would lay the foundation for scaling

up CCUS projects to increase cost performance. In regulatory framework, setting common guidelines or principles, referring to international case studies and local situations, will provide participating countries the necessary know-how and materials to discuss CCUS-specific regulatory issues, such as liability and CO2 monitoring in each country in a regional cohesive manner. In policy, a regional carbon market and incentives can be designed to create a CO2 value chain. Last but not least, in finance, creating a regional fund through collaboration with international and regional partners would demonstrate the region's commitment for decarbonisation through CCUS, acting as an anchor to mobilise private finance.

Figure 6.1: Concept of 'Asia CCUS Collective Action Initiative (TBC)'



Source: Created by author (2021).

The keys to enabling the work in the areas described above to produce results are knowledge sharing, capacity building, feasibility study and demonstration projects, and the formation of an organisation to spearhead the effort. Hopefully, the ACN will start the initiative in this area as a regional and collective CCUS framework.