Introduction

The development of Carbon Capture and Storage (CCS) technologies in Southeast Asia might be slower than the rest of the world but it is progressing in tandem to mitigate the impact of greenhouse gas emissions. Both offshore and onshore carbon storage are becoming the key tools in global effort to reduce CO2 levels. However, the success of these projects in Southeast Asia will rely upon effective regulatory frameworks that create a holistic CCS value chain.

This abstract explores the overlapping between CCS and stakeholders' engagements, especially in Southeast Asia setting and highlighting how both sectors can collaborate to ensure that CCS projects are implemented sustainably without undermining effective engagement to be part of the holistic CCS value chain.

CCS and Stakeholders Engagements

CCS project, particularly offshore, involves capturing CO2 from carbon sources such as power plants or industrial facilities and injecting it into geological formation beneath the sea for long-term storage. Meanwhile, Onshore CCS is located on land, where their implementation can raise concerns about land use, water resources, and local ecosystem, issues that might be affecting local communities such as fisherfolks, native and indigenous peoples.

CCS projects in Southeast Asia is still at infancy stage. Therefore, it is important to raise that conducting stakeholders' engagement with local community such as fisherfolk, native and indigenous communities are equally critical to the success of CCS value chain. Effective fisheries management is not just to ensure sustainable practices that preserve marine ecosystem's population but also raise awareness to the fisherfolks who depend on marine resources for their livelihoods. Meanwhile, native and indigenous people are frequently the most directly affected using land because they use it for cultural practices and economic activities. Therefore, their participation in the planning of CCS projects is essential in which they can offer valuable insights into local environmental conditions and sensitivity.

Effective stakeholders' engagement requires understanding the intersection between the project and local requirement and understanding, ensuring that the regulatory frameworks governing these projects prioritize both climate goals and environmental stewardship, ensuring the inclusion of relevant stakeholders within the broader context of CCS value chain.

Good regulations and collaborations

Good regulatory frameworks are paramount in balancing the interests of CCS proponents and local stakeholders. Regulatory frameworks must be robust and designed to conduct effective stakeholders' engagement in protecting environmental integrity. This includes transparent mechanisms of public participation and socialization with the local community. Specifically in Southeast Asia, a two-way approach is needed for collaborative governance models, which integrate information from both proponents and the stakeholders in making sure all voices are considered. Joint efforts could include participation of the local community in the project, shared environmental monitoring programs and corporate social responsibility (CSR). By fostering collaboration between government agencies, CCS developers and local stakeholders, a more holistic approach to CCS can be achieved.

Conclusions

In conclusion, the intersection between CCS and stakeholders' engagement would require the need for robust regulations and collaborations. It presents a unique opportunity to create the future of CCS value chain. Through collaborative governance, the integration of scientific, regulatory, and traditional knowledge, and the recognition of local community, it is possible to ensure that CCS projects contribute to a more valuable CCS value chain. An inclusive approach towards maximizing the benefits of carbon storage without undermining the power of stakeholder's engagement would ensure a more resilient and sustainable future for all stakeholders involved.

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