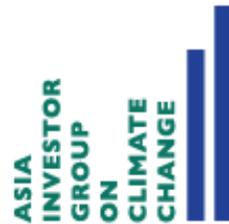


Media Release



13 December 2021

Investors should scrutinise Asian CCS plans as new analysis finds large-scaled deployment could fall short

The deployment of carbon, capture and storage (CCS) across Asia will likely undershoot industry claims and scenario projections, with a new analysis finding that significant financial and operational hurdles for large-scale deployment will remain for decades.

A growing number of Asian governments and companies are putting significant stock in CCS to underpin their transition plans and bridge emissions gaps to reach net zero. CCS involves the capturing carbon dioxide emissions from power generation or industrial production, transporting it and permanently storing it underground.

To begin testing the growing reliance on the technology as part of transition plans, the Asia Investor Group on Climate Change (AIGCC) commissioned consultants Wood Mackenzie to model the trajectory for CCS in key Asian markets against other technologies.

The Wood Mackenzie modelling analysed the 2021 and 2040 cost competitiveness of CCS and technology mix across China, India, Japan, and South Korea in electricity generation and steel production under two scenarios, including a pathway to limit average global warming to the Paris Agreement goals.

The modelling and AIGCC's analysis found:

- CCS faces significant cost competitiveness challenges in electricity generation across all four markets out to 2040 as renewable energy, storage and other alternatives continue to fall in price.
- CCS is more likely to be cost competitive for steel production in several of the markets assessed in 2040, especially with higher carbon prices, contingent on the development of low-carbon alternatives like hydrogen-use are in earlier stages in development.
- Alongside financial competitiveness, large-scale deployment of CCS faces significant challenges including environmental risks, technical challenges, a lack of available financing, societal opposition, and policy uncertainty.
- The attractiveness of CCS is ultimately lower when other cost competitive low or zero emissions options are available. Accelerating the deployment of CSS will be dependent on policy support and technology developments.
- The numerous obstacles, combined with the improving economics of renewables and storage, means that there is a risk of CCS capacity to undershoot current projections, which in turn, has significant implications for decarbonisation pathways of climate models and strategies of industries, governments, and companies.

AIGCC Chief Executive Officer Rebecca Mikula-Wright, said investors need to carefully scrutinise the assumptions and net zero transition plans of Asian companies to ensure that the deployment of CCS was realistic and that it does not result in a prolonged use of fossil fuels. Proposed deployment should be backed by detailed technical work to understand and overcome the challenges involved.

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“CCS can play an important role in the future to help bridge the emissions gap to net zero emissions for some hard-to-abate industries. But even under favourable conditions this role will likely be limited,” Ms Mikula-Wright said.

“Given the technical challenges, modest policy support and the competition from lower cost alternatives like renewable energy, AIGCC’s analysis finds the large-scale deployment of CCS across Asia will risk an undershoot of the sizeable expectations.

“A growing number of governments and companies are putting significant stock in CCS as part of their transition plans and to justify further construction and operation of new fossil fuel projects, particularly power plants.

“The significant financial and technical challenges means that an overreliance on CCS for a company’s transition to net zero increases the prospect of stranded assets as the world moves to decarbonise.

“In most instances companies and governments in Asia will need to acknowledge that a credible decarbonisation pathway will require the phasing out of high-emissions assets and fossil fuels, and that CCS use will only be used to address residual emissions and as a bridging technology for hard-to-abate sectors like steel production.

“Those companies that are relying on the deployment of large-scale CCS should at a minimum be providing detailed disclosure of the expected contribution of the technology to their emissions reduction goals, including feasibility studies and contingency planning in the event of shortfall.”

“If governments are serious about the deployment of CCS, they will also need to make significantly larger investments to overcome the technical barriers and ensure there is robust carbon pricing to address the financial limitations.”

Click [here](#) to download the report.

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Notes to Editors

- Wood Mackenzie’s cost competitiveness and technology mix analysis was based on a 2°C decarbonisation scenario. A 1.5°C pathway was not available with the granularity required for the Asian market at the time of assessment. It is expected that the direction and feasibility of CCS identified will broadly remain similar under a 1.5°C pathway with some nuances that are outlined in the report.

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About the Asia Investor Group on Climate Change (AIGCC)

The Asia Investor Group on Climate Change (AIGCC) is an initiative to create awareness and encourage action among Asia's asset owners and financial institutions about the risks and opportunities associated with climate change and low carbon investing. AIGCC provides capacity for investors to share best practice and to collaborate on investment activity, credit analysis, risk management, engagement and policy. With a strong international profile and significant network, AIGCC represents the Asian investor perspective in the evolving global discussions on climate change and the transition to a greener economy. AIGCC has over 50 members from 13 markets and with \$26 trillion in assets under management. www.aigcc.net