

GLOBAL CONTEXT FOR CO2CRC WORK

CO2CRC collaborates with leading international and national experts to conduct world-class research into CCS. Globally, CCS technology development and deployment continues to progress, albeit slowly. There are no major technology gaps or impediments to CCS; the technology is available and can be effectively deployed. The focus of technology development is on driving down costs and securing more efficient operational, monitoring and regulatory outcomes.

Investment in the early stages of development has been significant, with several promising emerging technologies. But with little or no market pull for CCS in Australia (due to the lack of carbon pricing or other economic incentives), continued government policy support and investment to implement next-generation lower cost technologies in large-scale pilot and demonstration projects is important. Governments will need to act to ensure that much lower costs of capture are available for deployment by 2030 and beyond.

For a nation with a relatively small population, Australia makes a valuable contribution to the global knowledge base in both CO₂ capture and storage. Most importantly, by being at the forefront of technology development and engaging in a meaningful way in collaborative projects around the world, Australia's capability to deploy CCS and to operate projects under local conditions is enhanced.

CO2CRC's involvement in education and training has focused particularly on developing countries, where we have assisted with university training courses.

It is encouraging that a number of studies have indicated that without CCS, the cost of meeting 2050 targets would be much higher. However, deployment of CCS is as much about deployment dynamics as it is about technology. A significant issue is that the lead time from initiating exploration, through approvals to construction will often be 10–15 years. The rate at which exploration is incentivised will have a profound impact on the degree to which CCS can contribute to 2050 global reduction targets. Greater incentivisation will allow CCS to be deployed more rapidly and, in turn, accelerate technology improvement.

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