

IMPACT ASSESSMENT SUMMARY

CARBON CAPTURE AND STORAGE

1 ESTABLISHING AUSTRALIA’S CCS FOUNDATION

CSIRO played a central role in establishing the scientific viability of CCS, building the market confidence necessary for subsequent investment in Australia and internationally. Stakeholders consistently identify this early contribution as one of CSIRO’s most critical and enduring legacies.



2 ADVANCING CCS SCIENCE AND TECHNOLOGY



CSIRO has established itself as a global leader in the foundational science of CCS. CSIRO’s research has not only advanced the technological frontier but has also been instrumental in de-risking CCS for potential deployment globally.

3 UNDERPINNING POLICY AND INVESTMENT CREDIBILITY

CSIRO has played a pivotal role in enabling CCS investment and shaping policy via its unique combination of scientific authority, institutional neutrality, and deep technical expertise. Stakeholders consistently identified the "CSIRO Badge" as a powerful enabler.



4 BUILDING A NATIONAL CCS CAPABILITY



CSIRO has played a central and enduring role in developing Australia’s sovereign CCS capability. Over 25 years, it has delivered critical national assets including a portfolio of world-class research infrastructure and a highly skilled, experienced workforce.

5 BUILDING PUBLIC TRUST AND SOCIAL LICENCE

Public trust is a critical enabler of CCS deployment, especially where projects involve activity near communities. CSIRO has played a vital role in shaping Australia’s approach to social licence, offering science-based engagement practices that foster transparency and credibility. The organisation is praised for “doing engagement right”.



6 GLOBAL STANDING AND INTERNATIONAL INFLUENCE



CSIRO’s international engagement has remained a consistent and powerful strength. Stakeholders around the globe have repeatedly pointed to CSIRO as a benchmark-setting organisation and top-tier in CCS research; influencing policies and programs at a global scale.

7 NAVIGATING THE PATH TO COMMERCIALISATION

CSIRO has demonstrated global leadership in CCS research, yet translating this into widespread commercial deployment remains a complex challenge. To support this, CSIRO has forged strategic industry collaborations, de-risked CCS technologies through pilot projects, and developed patented IP and licensing arrangements to enhance industry competitiveness.



LIMITATIONS TO IMPACT DELIVERY

Stakeholders consulted acknowledged CSIRO’s strong technical engagement but highlighted a gap in engagement at strategic and ministerial-advisory levels.

Many noted its limited voice in the national CCS discourse, constrained by its non-advocacy stance. A more proactive public engagement strategy is seen as essential to counter misinformation and build broader social licence.

Internally, institutional hurdles—such as rigid contracting and IP processes—were seen to hamper commercial agility. Some partners also viewed CSIRO as a high-cost provider, deterring collaboration when projects didn’t require its premium credibility. Addressing these challenges could enhance CSIRO’s strategic influence and support the commercialisation of CCS technologies.