

FACT SHEET

ABOUT CTSCo AND THE INTEGRATED SURAT BASIN CCS PROJECT

Carbon Transport and Storage Corporation Pty Ltd (CTSCo) is a wholly owned, 'non-profit' subsidiary of Glencore, one of the world's largest diversified natural resource companies.

It is a special purpose entity created to conduct the Integrated Surat Basin CCS Project on behalf of all of the Project funders.

The Project was established to demonstrate the technical viability, integration and safe operation of Carbon Capture and Storage (CCS) in the Surat Basin to benefit all emitters of CO₂ including coal-fired power stations, industry production of cement, iron, steel, fertilisers and chemicals.

The knowledge gained from this Project will be very important in demonstrating the criteria required to develop CCS in a safe, scalable and cost-effective manner across Australia.

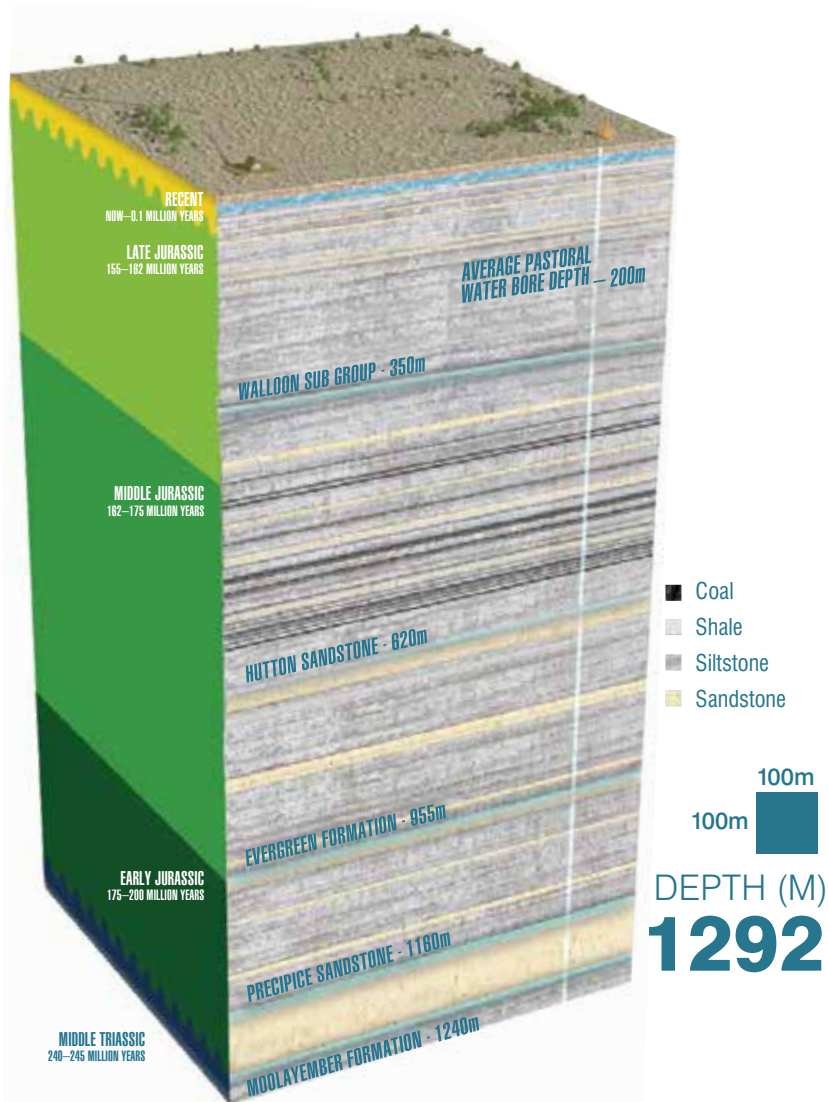
THE ASSESSMENT PROCESS

This grant-funded demonstration project is in the study stage and will be subject to a range of assessments and approvals processes including environmental, social and technical aspects, under local, State and Federal Government regulations. These will all need to be successfully completed prior to the demonstration project commencing test operations.

WORKING WITH THE LOCAL COMMUNITY

CTSCo is committed to working closely with local communities and fully investigating the economic, environmental, social and cultural implications of the proposed project. In 2015 independent community baseline research was undertaken to better understand the issues and attitudes of the Wandoan community. The results from this research have helped shape the local engagement program and drive the ongoing interaction with this community.

A technical advisory group with leaders in the resources sector, academia and research areas ensures a best practice approach is applied in all aspects of the project including stakeholder and community engagement.



PROJECT FUNDERS

Funders of the Feasibility/FEED stage (2014 to 2018) include:

- \$15.24m** COAL 21 Fund – Managed by Australian Coal Association Low Emissions Technologies Ltd (ACALET)
- \$8.775m** Department of Industry Innovation and Science (DOIS) has also granted \$8.775 million of Australian Government funding

Several separate research and development projects have been carried out by the Australian National Low Emissions Coal Research and Development (ANLEC R&D).

The pre-feasibility study stage (2009 to 2012) was funded by the Australian and Queensland Governments, as well as ACALET, and hosted by Glencore, as part of the Australian Government's Carbon Capture and Storage Flagships program.

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THE GLOBAL CO₂ CHALLENGE

The use of widely available low cost fossil fuels is an ongoing source of cost-effective energy and electricity in many countries.

The International Energy Agency (IEA) estimates that coal, one of the world's most abundant and cost-effective sources, will remain an important energy resource for years to come. In fact, even with concerted action using renewables and other low emission technologies, fossil fuels would still provide 60% of the world's primary energy by 2040.

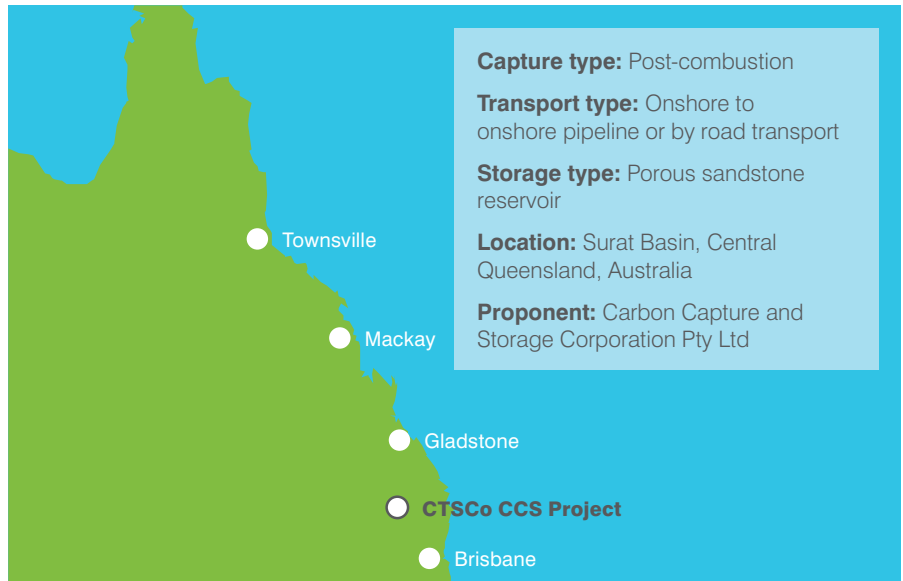
In addition to electricity generation, many other industrial processes including the production of cement, iron, steel, fertilizer or chemicals, also rely heavily on fossil fuels.

There is a global push to lower Greenhouse Gas (GHG) CO₂ emissions to the atmosphere. This drives the need to develop low emission fossil fuel technologies over the next few decades. The IEA cites that carbon capture and storage (CCS) is a critical GHG reduction solution and that "there is no climate-friendly scenario in the long run without CCS."

ROLE FOR CARBON CAPTURE AND STORAGE

Australia, like many nations around the world, still uses fossil fuels for its primary energy generation, which will continue to for some time. As Australia transitions to other and renewable energy sources over the coming years, it is important to explore technologies which will help fossil fuel power generation stations, including coal-fired power stations, reduce their emissions impact.

Low emission coal technologies refer to technologies that are capable of significantly reducing greenhouse gas from coal or other fossil fuels such as



TECHNICAL ASPECTS:

- Regional CO₂ storage capacity in the Surat Basin is considered prospective but significant and has been identified as a key geostorage area by the National Carbon Storage Taskforce report and in the Queensland Government's GHG Storage Atlas.
- The geology of the Surat Basin has up to 2.9 billion tonnes of CO₂ storage potential.
- There are a significant number of coal-fired power stations nearby, making it easy to transport CO₂ to the site, and therefore reducing transport costs.
- The prefeasibility study examined options to retro-fit suitably scaled

post-combustion capture (PCC) modules at an existing coal-fired power station located in the Surat Basin.

- PCC modules could range in capture volume between 120,000 tonnes per annum to more than 1,000,000 tonnes per annum.

KEY DELIVERABLES:

- Determine the technical, economic and social viability of industrial-scale CO₂ in the Surat Basin
- Link to a large-scale demonstration CO₂ capture project at a Queensland power station located within the region.

coal seam gas and oil to make electricity, conventional gas and industrial products that we all consume and which underpin our current standard of living.

One of these technologies is carbon capture and storage (CCS). CCS involves capturing the carbon dioxide (CO₂) from a large emission source, compressing it into a liquid form and transporting it to a suitable

storage site and storing it permanently deep underground where it cannot be released back into the atmosphere.

Projects such as CTSCo's Integrated Surat Basin CCS Project will bring valuable insight into the development of CCS in an industrially scalable, safe and cost-effective manner for all large-scale emitters of CO₂ that will require storage.

