understanding carbon capture and storage

Carbon capture and storage (CCS) is a proven technology for reducing greenhouse gas emissions. It takes carbon dioxide (CO$_2$) from industrial processes and permanently stores it in geological formations deep underground. CCS is critical to a lower-carbon future and essential to achieving the net zero goals of the Paris Agreement.

the gorgon CCS system

Chevron Australia’s Gorgon liquefied natural gas (LNG) facility incorporates the world’s largest CCS system designed to capture carbon emissions. Naturally occurring CO$_2$ is taken from offshore gas reservoirs and injected into a giant sandstone formation two kilometres beneath Barrow Island, where it remains permanently trapped.

the gorgon CCS system prevents millions of tonnes of greenhouse gases being vented into the atmosphere

More than 6 million tonnes of CO$_2$ injected to date

More than 100 million tonnes of CO$_2$ expected to be mitigated over the life of the CCS system

1 from CCS system startup in August 2019 to July 2022

according to the intergovernmental panel on climate change, it is impossible to achieve net zero emissions by 2050 without scaled deployment of technologies such as CCS
The Australian Government has committed $60 million to the Gorgon Carbon Dioxide Injection Project as part of the Low Emissions Technology Demonstration Fund (LETDF).

The Chevron-operated Gorgon Project is a joint venture between the Australian subsidiaries of Chevron (47.3 percent), ExxonMobil (25 percent), Shell (25 percent), Osaka Gas (1.25 percent), Tokyo Gas (1 percent) and JERA (0.417 percent).

1 from CCS system startup in August 2019 to July 2022