A paper from the Department of Civil Engineering, Monash University, Melbourne Victoria informs the following.

The production of CSG requires the extraction of large volumes of water in order to allow gas to flow, which may worsen the state of groundwater resources. Given that CSG is composed primarily of methane, a potent greenhouse gas (GHG), direct emissions to the atmosphere can potentially have implications for anthropogenic climate change. Despite the rapid growth in this industry, the extent of knowledge around environmental impacts from CSG production remains poorly documented and highly contentious. There are still numerous areas of uncertainty around aspects of environmental risks from the removal of water, aquifer depressurisation, potential contamination of groundwater and soils (e.g. from chemicals used in drilling, completions and stimulation, or salts, metals, organics and radionuclides from formation waters), diffuse and point source gas migration, GHG emissions intensity, surface impacts from habitat fragmentation by infrastructure and the relevance of the regulatory process. There are also other risks including air quality impacts (e.g. volatile hydrocarbons), pipeline leaks, water management, infrastructure venting, induced seismicity and subsidence that generally sit outside the scope of this kind of project.

Take it from someone who lives in Queensland - Australia’s CSG capital, keep the CSG in the ground!