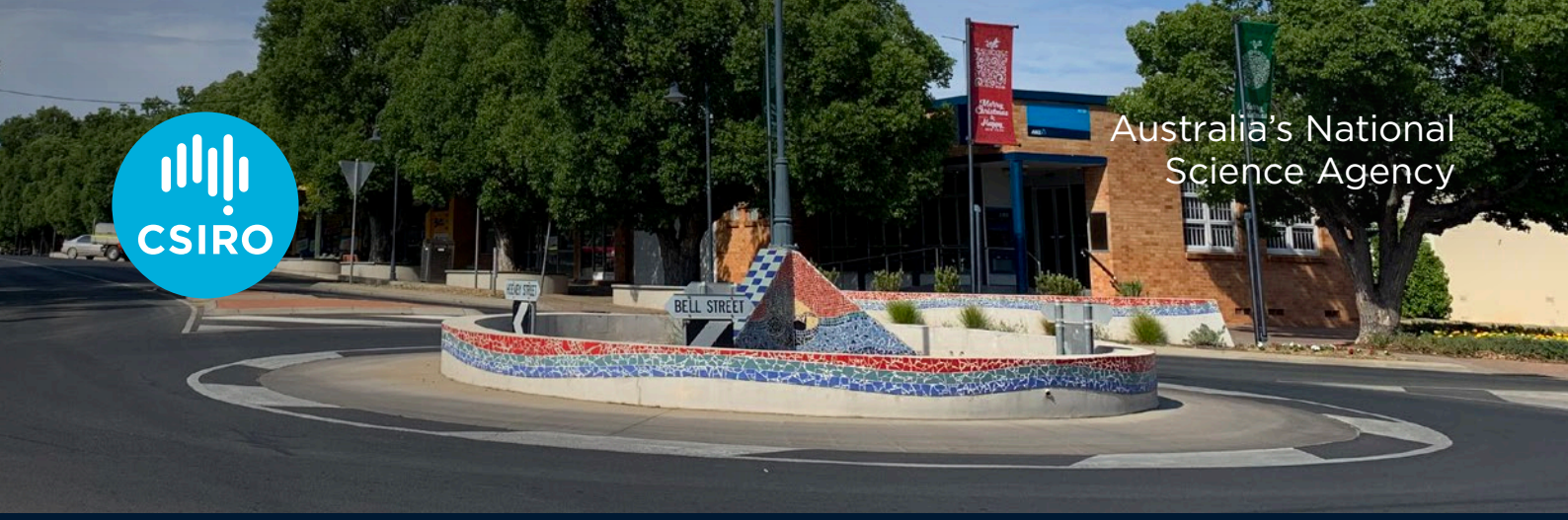


Australia's National Science Agency

GROUND AND SURFACE WATERS

**GISERA** | Gas Industry Social and Environmental Research Alliance

# Evaluating the medium-term socio-economic impacts of onshore gas activity in southern Queensland

This project will update our understanding of the medium-term impacts of onshore gas extraction in Queensland's Bowen and Surat Basins, by analysing socio-economic data from the last 10 years.

The growth of onshore natural gas extraction in the last two decades in Queensland has had a range of positive and negative social, demographic and economic impacts. Yet there is a lack of research on the medium- to long-term impacts of these industries on local communities.

CSIRO's Gas Industry Social and Environmental Research Alliance (GISERA) is undertaking a study of the medium-term impacts of the industry, focusing on the last 10 years of socio-economic data from the Bowen and Surat Basins of southern QLD.

## Key points

- Onshore gas extraction has a range of positive and negative social, demographic and economic impacts.
- Yet there is little research on the medium- to long-term community-level impacts, and the changes that mining and energy Industries bring to a regional economy.
- This project aims to address knowledge gaps in our understanding of the medium-term impacts of natural gas extraction in Queensland's Bowen and Surat Basins.
- The research builds on CSIRO's GISERA 2013-2014 study of the regions. We can now update and expand this analysis to look at the last 10 years: the medium-term impacts.
- This desktop study uses data from the latest Australian Bureau of Statistics (ABS) Population Censuses.

## Research objectives

This research project aims to expand the community's knowledge on the medium-term positive and negative socio-economic impacts of onshore gas extraction on communities in the Bowen and Surat basins, in southern Queensland during the last two decades.

This project will update and expand on the initial 2013-14 GISERA studies of the region. Ten years on, we have the opportunity to build on this foundational study.

This is a desktop study. GISERA researchers will explore and analyse secondary data, primarily from 2016 and 2021's Australian Bureau of Statistics Population Census. We will place special emphasis on local economic functionality, employment changes across sectors, alteration in migration patterns, educational attainment, and the participation of women and young people in the workforce.

## The Bowen and Surat Basins of QLD

South-east Queensland hosts the largest CSG producing fields in Australia, and the number of wells in Queensland is expected to reach 22,000 by 2050.

This study will focus on the impacts of onshore gas extraction in the Bowen and Surat Basins.

CSIRO | Australian Government Department of Industry, Science and Resources | NSW Government | Supported by Government of South Australia | Queensland Government | Northern Territory Government | origin | Australia Pacific LNG | QGC | Santos

## The importance of understanding impacts

We know there are socio-economic impacts from industrial activities, such as onshore gas extraction, for the nearby economies. But a thorough analysis of these impacts is often limited because of data availability, alternative explanations for trends, and the challenges of testing impacts over time.

This study will better equip communities, industries, and government to respond to any medium-term changes arising from gas field development.

And, by providing evidence of the medium-term impacts of a resource industry associated with potential regional 'booms and busts', this knowledge can inform how new industries and energy transitions are established in the future, so that they avoid any unintended consequences.

## Building on an initial study from 2013-2014

This research plans to update the previous work by CSIRO, funded by GISERA.

The previous research (Measham, T., Marcos-Martinez, R., Fleming D. A. 2017) used Census data from 2001 and 2011 to identify the initial impacts from the coal seam gas (CSG) activity expansion across local economics of the Bowen and Surat Basins of Southern QLD.

These previous studies revealed unprecedented insights into potential boom effects, with key findings including:

- Positive job spill-over effects (although these were limited to certain types of jobs, namely construction and professional services).
- Negative job spill-over effects: the number of jobs in some sectors decreased, namely agricultural jobs.
- Employment in the resources sector showed higher growth, as did some non-resources sector employment, in some areas.
- Regions with CSG development experienced a growing number of young people in the population, including more women, as well as a higher proportion of youth with university degrees and advanced technical training.
- There was also some mitigating and reversing of the global phenomena of rural community decline – the depopulation trend common in many rural regions.


## Project methods and outcomes

This research will use the methods employed in GISERA's previous research in the Surat and Bowen Basins.

In addition to standard indicators (such as population and skills profiles), the study will incorporate a broader range of indicators, such as community functioning and well-being resilience, demographics, housing and services and regional economic change.

This research will improve the understanding of the social and economic transitions that have occurred since 2001, in regions where gas development has occurred.

All results will be publicly available on GISERA's web site.

## More information

Read more about the project.

Learn about other GISERA projects based in Queensland.

**Further information | 1300 363 400 | gisera@gisera.org.au | gisera.csiro.au**



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