



SOCIAL AND ECONOMIC IMPACTS

GISERA | Gas Industry Social and Environmental Research Alliance

Understanding community wellbeing and attitudes to energy development in the North Perth Basin

Researchers will investigate how energy infrastructure projects, including conventional gas, carbon capture and storage, and large-scale renewables, might impact the functioning and wellbeing of local communities in Western Australia.

Key points

- The economic and industrial development of the Mid West region of Western Australia is well underway.
- The expansion of the energy sector in the region potentially includes onshore gas development, large-scale wind and solar, carbon capture and storage facilities, and industrial sites for manufacturing blue hydrogen, ammonia and urea.
- This project seeks to engage with communities in the region and improve our understanding of their views on the perceived risks and benefits of such projects.
- The information gathered through this study will provide an important evidence base to help governments and industry address concerns, engender trust, and gain and maintain social licence to operate.

Through a combination of online surveys and face-to-face-interviews, scientists will gather data on the current wellbeing of communities, as well as the extent of knowledge that communities hold about the perceived risks and benefits of energy development projects.

The project fills an important knowledge gap, as there are currently no published studies on social attitudes or acceptance of gas projects from the Mid West region, and few studies on the social impacts of gas developments in other regions of Western Australia.



Waitsia gas field infrastructure. Banner image: Mid West region landscape.

This project, conducted through CSIRO's Gas Industry Social and Environmental Research Alliance (GISERA), aims to provide an in-depth understanding of how communities in the Mid West region of Western Australia perceive large-scale projects such as those planned as part of Australia's energy transition.



The Mid West region of Western Australia

Conventional gas extraction in the Mid West region has co-existed with other land uses since the 1960s and has been an important source of gas for the Perth markets since 1971.

Natural gas fields, such as the Waitsia, Beharra Springs and South Erregulla fields, are focused on supplying LNG to meet Western Australia's energy demands.

There are also plans for the development of more complex industrial sites using natural gas production in the manufacturing of blue hydrogen, ammonia and urea, incorporating carbon capture and storage (CCS) technologies and renewable energy infrastructure.

The towns that form the principal focus of this regional study are located between Geraldton and Perth. They are a combination of coastal and wheatbelt communities that include Donagara, Eneabba, Three Springs, Mingenew, and the city of Geraldton itself.

Listening to community views

While development projects such as those planned for the Mid West region can provide benefits to local communities, they can also have actual or perceived negative impacts.

These include impacts on property values and aesthetics, health and safety, trust, and contamination of water sources and the wider environment.

CSIRO's GISERA undertook a research project in 2020 that investigated community attitudes to conventional gas in south east South Australia. The study found that trust in the gas industry and in governance issues was low, and that improving these was key to increasing social acceptance.

Fair distribution of costs and benefits in the community was also shown to be an important issue, while improved knowledge and understanding of the industry was found to help shape perceptions of impacts.

Based on this research, and on GISERA research from other regions of Australia, attitudes towards energy sector development and issues pertaining to trust and fairness are likely to be similar in Mid West communities. However, without community engagement and evidence collection, this cannot be confirmed.

This research project will also address the important question of whether attitudes towards gas projects differ when renewables, conventional gas, manufacturing and CCS are combined in one site. To date, there has been little research done on this.



Project methods and outcomes

The project will be conducted in four phases:

- 1. A desktop review** of local area statistics, demographics, existing services and policies; and stakeholder mapping to understand local context, key stakeholders and community segments.
- 2. Baseline study:** A Community Functioning and Wellbeing (CFWB) survey will be conducted. A postcard with the survey weblink will be distributed, supported by social media promotion and engagement with key stakeholder groups in the farming sector.
- 3. Face-to-face stakeholder engagement:** Community focus groups will be conducted at specified locations, including meetings with the Traditional Owners of the region, the Amangu, through the Yamatji/Marlpa Aboriginal Land Corporation.
- 4. Feedback to participants and stakeholders:** Key findings and insights from the baseline study and face-to-face engagement will be highlighted in a final report. In addition, a range of communications and engagement activities are planned to share research findings and identify further opportunities for collaboration.

The accurate measurement of community views, using principles of transparency and co-design that reflect local values, will assist industry and government to make more informed and effective planning decisions about existing and new energy developments.

More information

Read more [about this project](#)

Learn about other [GISERA research in Western Australia](#)

Find out more about [GISERA's social and economic impact research](#)

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GISERA is a collaboration between CSIRO, Commonwealth and state governments and industry established to undertake publicly-reported independent research. The purpose of GISERA is to provide quality assured scientific research and information to communities living in gas development regions focusing on social and environmental topics including: groundwater and surface water, greenhouse gas emissions, biodiversity, land management, the marine environment, and socio-economic impacts. The governance structure for GISERA is designed to provide for and protect research independence and transparency of research.