

Project Order

Proforma 2021

1. Short Project Title

Monitoring community wellbeing and attitudes to CSG in Narrabri (Pre-construction phase)

Long Project Title		nmunity wellbeing and local attitudes to bri, NSW: Post-approval and post FID
GISERA Project Number	S.14	
Start Date	01/01/2022	
End Date	30/06/2025	
Project Leader	Dr Rod McCrea	
2. GISERA State/Territor	y	
QueenslandSouth AustraliaNational scale project	New South WalesWestern Australia	 Northern Territory Victoria
3. Basin(s)		
Amadeus	Beetaloo	Canning Carnarvon
Clarence-Morton	Cooper	Eromanga 🗌 Galilee
Gippsland	Gloucester	Gunnedah 🗌 Maryborough
McArthur	North Bowen	Otway 🗌 Perth
Surat	Other (please specify)	
4. GISERA Research Prog	ram	
Water Research	Greenhouse Gas Research	n 🖂 🛛 Social & Economic Research
Biodiversity Research	Health Research	Agricultural Land Management Research
Other		



5. Project Summary

Objective

The overall objectives of this project are:

- 1. To monitor any changes in local community wellbeing and attitudes to CSG across different phases of CSG development in the Narrabri Shire.
- 2. To provide useful information for the local community, industry, and government for planning and enhancing local community wellbeing, including current perceptions of CSG development in the Shire.

Description

The social licence for onshore gas development in a region is underpinned by a range of social, environmental, economic and political factors, which also contribute to local community wellbeing. (Walton and McCrea, 2020c, Zhang et al., 2018, Mercer-Mapstone et al., 2017, Moffat et al., 2016, Williams and Walton, 2013). Baseline measures of local community wellbeing and attitudes to CSG development in the Narrabri region were gathered in 2017 in a previous GISERA project (Walton and McCrea, 2017), prior to the Narrabri Gas Project receiving state and federal approvals to proceed in late 2020. This research project will continue monitoring of community wellbeing and attitudes to CSG development in the Narrabri at two time points: after government approvals and following any financial investment decision (FID) by the proponents Santos.

Two surveys will be conducted to measure any changes in community wellbeing and attitudes to CSG development between the baseline measures taken in 2017 and 1) post-approval and 2) post-FID decision, both being prior to any construction phase. The first is planned for the first half of 2022 during the continuing appraisal phase by Santos. The second, is planned to be conducted after any FID decision being made of Santos about proceeding onto a construction phase. As such, the timing of a second survey is dependent on Santos making any such an FID, expected in the first half of 2023.

Note that another subsequent survey has already been approved by the GISERA NSW Regional Research Advisory Committee for the construction phase, if it were to proceed This subsequent survey is expected to be undertaken in 2026 when any construction phase is expected to be in full swing. The two intervening surveys in this project would continue to monitor local community wellbeing and attitudes to CSG development in this pre-construction phase (i.e., post-approval and post-FID), measuring any changes since 2017 and immediately before any construction phase.

The main research question is: How has community wellbeing and the social licence for CSG development for residents in the Narrabri Shire changed from prior to any government approvals in 2017 to post-approvals in 2021/22 and post-FID, expected toward the end of 2022/23.





Need & Scope

The social impacts of unconventional gas development on local communities are best assessed against baseline measures of community wellbeing and attitudes, established prior to any such development proceeding. Such a study was conducted for the Narrabri Shire in 2017 as part of a previous GISERA project (S7) entitled "Social baseline assessment of the Narrabri region of New South Wales in relation to CSG development". This social baseline study conducted in the pre-approval phase provides a benchmark important for assessing any impacts on community wellbeing and attitudes to CSG development in later phases.

In late 2020, both the NSW and Federal Governments approved the Narrabri Gas Project, though the developer Santos announced an extension of its appraisal phase before making any financial investment decision (FID) or commencing any construction phase. This period between government approval and the construction phase is a timely opportunity to survey community wellbeing and attitudes toward CSG development for a couple of reasons.

First, community wellbeing and attitudes to CSG development can change between different phases of development, especially between pre- and post- government approval (McCrea et al., 2020). This continuing appraisal phase represents an opportunity to assess community wellbeing and attitudes to CSG development



following the NSW state and federal government approvals being given. It also provides an opportunity to verify the findings from McCrea et. al. (2020), which were derived from statistical modelling, with empirical time series data, showing differences in social licence between different phases of onshore CSG development.

Second, Santos is expected to have made a financial investment decision (FID) about whether to progress to the construction phase by the end of 2022/23. After an FID being made is another important opportunity to test whether there are any changes in local attitudes toward CSG following a decision by the proponent Santos to proceed to the construction phase (or not), as well as benchmarking levels of local community wellbeing just prior to any construction phase.

As such, these are two important timepoints for monitoring community wellbeing and attitudes to CSG development - after government approvals and after an FID – both being prior to any construction phase. From previous modelling, we would expect changes in attitudes to CSG development post-approval, and it is important to measure them again post-FID to establish another benchmark just prior to any construction phase. It is also useful to show how any underlying drivers of social acceptance may have changed over time, as well as providing the local government with useful information about changes in different aspects of their local community wellbeing since 2017.

Relevant State/Territory Government independent reviews

This project assists with monitoring progress on recommendations in the Final Report of the Independent Review of Coal Seam Gas Activities in NSW (NSW Government, 2014) relating to "Intent, communication, transparency and fairness". More specifically, this project measures changes in resident perceptions of distributional fairness; procedural fairness; formal and informal governance mechanisms; as well as levels of agreement with the rationale for needing CSG extraction in the Narrabri region.

Methodology

Monitoring community wellbeing and attitudes to CSG development in 2022 and 2024

The methodology employed would be very similar to the 2017 baseline survey of community wellbeing and attitudes to CSG development in the Narrabri region since a main objective is to monitor any changes from pre-approval to post-approval phases of development, including the continuing appraisal phase and after any FID decision being may by the proponent Santos to proceed to a construction phase. Briefly, this involves three main activities:

- Revising the 2017 survey of community wellbeing and attitudes to CSG development, where needed
- Randomly sampling and surveying approximately 400 residents living in the Narrabri Shire, using the same methodology as in 2017.



• Analysing the survey data and feeding back findings to a range of local community, government and industry stakeholders

The 2022 and 2024 survey questions would be essentially the same as in the 2017 survey to ensure continuity of measurement. However, it would be reviewed to see if any minor changes were needed. For example, there is evidence from other CSIRO social licence surveys that agreement with the rationale for an industry is an important factor underlying its social licence (Walton and McCrea, 2020a, Walton and McCrea, 2020b), and a question to measure such an effect for the CSG industry in Narrabri would be designed and added. Recent research has also shown that beliefs about the role of solar farms in the energy transition (its rationale) is one of the most important predictors of social acceptance for solar farms (Walton et al., in press).

Once the survey data is collected and analysed for each survey, feedback session(s) would be arranged to share and discuss findings with key local community, industry and state government stakeholders. These may be conducted online as well as using local feedback sessions, COVID restrictions permitting. This provides opportunities for discussing any practical implications and actions in response to changes identified in community wellbeing and perceptions of CSG development since 2017.



6. Project Inputs

Research

As mentioned, this research continues from the baseline assessments of community wellbeing and attitudes to CSG development in the Narrabri Shire conducted in 2017 by CSIRO. Some years have passed, and these 2017 baseline assessments were envisaged to be monitored over time. As such, the survey questions and methodology would remain essentially unchanged to maintain continuity for monitoring purposes.

Resources and collaborations

Researcher	Time Commitment (project as a whole)	Principle area of expertise	Years of experience	Organisation
Dr Rod McCrea	81 days	Community wellbeing and social licence to operate; survey design, sampling, and data analysis	10 years	CSIRO
Dr Andrea Walton	77 days	Social science research into community resilience and wellbeing, social licence to operate, social acceptance and trust, and perceptions of risk and benefits in relation to contested industries.	10 years	CSIRO

Subcontractors (clause 9.5(a)(i))	Time Commitment (project as a whole)	Principle area of expertise	Years of experience	Organisation
Third party research company	20 days	Online computer assisted interviewing	10+ years	Q&A Research



Budget Summary

Source of Cash Contributions	2021/22	2022/23	2023/24	2024/25	% of Contribution	Total
GISERA	\$56,214	\$49,607	\$60,139	\$91,928	80%	\$257,888
- Federal Government	\$46,865	\$41,356	\$50,137	\$76,645	66.7%	\$215,002
- NSW Government	\$2,811	\$2,480	\$3,007	\$4,596	4%	\$12,894
- Santos	\$6,539	\$5,771	\$6,996	\$10,687	9.3%	\$29,992
Total Cash Contributions	\$56,214	\$49,607	\$60,139	\$91,928	80%	\$257,888

Source of In-Kind Contribution	2021/22	2022/23	2023/24	2024/25	% of Contribution	Total
CSIRO	\$14,054	\$12,402	\$15,035	\$22,982	20%	\$64,472
Total In-Kind Contribution	\$14,054	\$12,402	\$15,035	\$22,982	20%	\$64,472

TOTAL PROJECT BUDGET	2021/22	2022/23	2023/24	2024/25	-	TOTAL
All contributions	\$70,268	\$62,009	\$75,174	\$114,909	100%	\$322,360
TOTAL PROJECT BUDGET	\$70,268	\$62,009	\$75,174	\$114,909	100%	\$322,360



7. Project Impact Pathway

Activities	Outputs	Short term Outcomes	Long term outcomes	Impact
Revising the 2017 survey and repeat survey in 2022	 A factsheet outlining the project A revised survey and updated sample design An interim report on changes since 2017 (pre- and post-approval phases) 	 Improved community awareness about present levels of their community wellbeing and perceptions of local 	Uptake of research findings in industry and government	The onshore gas industry operates in a
Feeding back (stage 1) 2022 findings to key community, industry and government stakeholders	 A knowledge transfer session and presentation of 2022 findings to key community, industry and government stakeholders Revised factsheet including 2022 findings 	 onshore gas development. Improved industry and government knowledge 	resulting in standards, practices, guidelines, policies, programs, planning,	socially, economically, and environmentally sustainable
Repeating the survey in 2024, after an FID decision, expected by June 2023	 A final report on changes since 2017 (post- approval and post-FID), including updated benchmarks prior to any construction phase 	of what is important to	and other initiatives related to onshore gas that reflect what's important to local communities	manner, supported by good industry and government
Feedback (stage 2) changes across time (2017, 2022, and 2024) in community wellbeing and attitudes toward CSG development	 A knowledge transfer session and presentation of 2024 findings to key stakeholders Revised factsheet highlighting main findings from 2022 and 2024) 			governance
Publications	Two journal papers submitted to e-PublishPreparation of article for GISERA newsletter	different phases of CSG development		



8. Project Plan

Project Schedule

ID	Activities / Task Title	Task Leader	Scheduled Start	Scheduled Finish	Predecessor
Task 1	Revising and conducting the 2022 survey	Rod McCrea	01/01/2022	31/05/2022	
Task 2	2022 data analyses, interim report, and stakeholder communications	Andrea Walton	01/06/2022	30/11/2022	Task 1
Task 3	Repeating survey after a Financial Investment Decision (FID)	Rod McCrea	01/01/2024 (depending on timing of any FID)	31/05/2024	Task 2
Task 4	Post-FID data analyses, final report, and stakeholder communications	Andrea Walton	01/06/2024	30/11/2024	Task 3
Task 5	Extended dissemination of findings (various - GISERA article, papers, and conference)	Rod McCrea and Andrea Walton	01/02/2025	30/06/2025	Task 4



Task description

Task 1

TASK NAME: Revising and conducting the 2022 survey

TASK LEADER: Rod McCrea

OVERALL TIMEFRAME: 01/01/2022 - 31/05/2022

BACKGROUND: While the survey needs to stay essentially the same for monitoring over time purposes, there is an opportunity to make small revisions to ensure the survey is as useful as possible to the local community, industry and government. This task also involves interviewing selected key informants from community, government, and industry about potential revisions that may be useful.

TASK OBJECTIVES: 1) To obtain ethics approval; 2) To establish technical reference group; 3) To revise the survey questionnaire, where useful and feasible, using interviews and related research data, and 4) to conduct a representative survey of residents in the Narrabri Shire

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

- 1) Ethics approved obtained
- 2) Technical reference group established
- 3) A revised survey instrument, while still being comparable to the 2017 survey on all the main dimensions of community wellbeing and social licence to operate.
- 4) A clean and representative dataset for 2022.
- 5) A factsheet outlining the project.

Task 2

TASK NAME: 2022 data analyses, interim report, and stakeholder communications

TASK LEADER: Andrea Walton

OVERALL TIMEFRAME: 01/06/2022 - 30/11/2022

BACKGROUND: These interim findings will report on changes between the pre-approval and the continuing appraisal phase (post-approval).

TASK OBJECTIVES: To assess any changes in community wellbeing and attitudes to CSG development after government approvals were given

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

- 1) A weighted 2022 dataset for representativeness, which is linked to the 2017 dataset
- 2) An interim report



- 3) A knowledge transfer session and presentation of 2022 interim findings to key community, industry and government stakeholders. This may include a presentation of interim findings in Narrabri (COVID restrictions permitting).
- 4) A factsheet outlining the interim results

Task 3

TASK NAME: Repeating survey after a Financial Investment Decision (FID)

TASK LEADER: Rod McCrea

OVERALL TIMEFRAME: 01/01/2024 - 31/05/2024 (depending on timing of any FID)

BACKGROUND: A Post-FID baseline is important for measuring any changes before any subsequent construction phase.

TASK OBJECTIVES: 1) To revisit the survey questionnaire, making only minor changes. and 2) to conduct a representative survey of residents in the Narrabri Shire, using the same methodology as in 2017.

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

- 1) Revisiting the survey and sample design, ensuring that it is still comparable with the 2017 and 2021 surveys on all the main dimensions of community wellbeing and social licence to operate.
- 2) A clean and representative dataset for 2024 which links to the 2017 and 2022 data.

Task 4

TASK NAME: Post-FID data analyses, final report, and stakeholder communications

TASK LEADER: Andrea Walton

OVERALL TIMEFRAME: 01/06/2024 - 30/11/2024

BACKGROUND: The finalised findings will include changes between the pre-approval phase and continuing appraisal plus the post-FID phase.

TASK OBJECTIVES:

- 1) To assess community wellbeing and perceptions of CSG development in the region post-FID, and
- 2) To serve as new benchmarks for measuring any changes during any construction phase, if it were to proceed.

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

- 1) A weighted 2024 dataset for representativeness which is linked to the 2017 and 2022 datasets
- 2) A final report plus a knowledge transfer session and presentation of 2024 findings to key community, industry and government stakeholders. This may include a presentation of final findings in Narrabri (COVID restrictions permitting).



3) Revised factsheet highlighting the final findings

Task 5

TASK NAME: Extended dissemination of findings (various - GISERA article, papers, and conference)

TASK LEADER: Rod McCrea and Andrea Walton

OVERALL TIMEFRAME: 01/02/2025 - 30/06/2025

BACKGROUND: It is important to share learnings from this project to the broader public and scientific audiences, beyond key community, industry and government stakeholders. The two scientific papers will enhance the credibility to the project's findings, as well as further developing the science of social licence in the onshore gas industry.

TASK OBJECTIVES: To ensure that the information generated by this project is documented and published to a wider audience

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

- 1) Preparation of article for GISERA newsletter
- 2) Two scientific papers submitted to e-Publish
- 3) Attending a conference or open access for a scientific paper



Project Gantt Chart





9. Technical Reference Group

The same Technical Reference Group would be invited as were in the 2017 social baseline assessment project in Narrabri:

- Annie Moody Team Leader, Community and Land, Santos Narrabri Gas Project. Annie has extensive practical and experience the Narrabri Gas Project and local community relations.
- Dr Michael Askew Monash Sustainable Development Institute Michael has previously conducted social research in the Narrabri region, including a report for the NSW government.
- Prof Rosemary Leonard –Western Sydney University Rosemary has extensive experience in social research, as well as being a former CSIRO colleague conducting research on community wellbeing and resilience in the context of CSG development in Queensland.

Stakeholder	Objective	Channel	Timeframe (Before,
		(e.g. meetings/media/factsheets)	during at
			completion)
Regional community / wider public	To communicate project objectives and key messages from the research	Fact sheets (including development of one at commencement of project which will explain in plain English the objective of the project – this will be updated periodically as project progresses).	At commencement of project and after Tasks 2 and 4
		Project progress reported on GISERA website to ensure transparency for all stakeholders including regional communities.	As required and at completion
Government	Briefing on research being undertaken and progress	Engagement during project	During
Gas Industry	Industry adopts methods that support the community's wellbeing and its social licence to operate	Presentation of findings at joint Gas Industry/Government Knowledge Transfer Session	After Tasks 2 and 4
Government	Advice provided to senior bureaucrats / ministers / policy makers	Presentation of findings at joint Gas Industry/Government Knowledge Transfer Session	After Tasks 2 and 4

10. Communications Plan



Stakeholder	Objective	Channel (e.g. meetings/media/factsheets)	Timeframe (Before, during at completion)
Community stakeholders	Presentation of research findings	Presentation of findings at workshop/briefing	After Tasks 2 and 4
Regional community/wider public, government, scientific community and industry	To report on key findings	Public release of final report Factsheets Scientific conference/papers	At project completion



11. Budget Summary

Expenditure	2021/22	2022/23	2023/24	2024/25	Total
Labour	\$33,268	\$57,509	\$35,174	\$106,409	\$232,360
Operating	\$0	\$4,500	\$0	\$8,500	\$13,000
Subcontractors	\$37,000	\$0	\$40,000	\$0	\$77,000
Total Expenditure	\$70,268	\$62,009	\$75,174	\$114,909	\$322,360

Expenditure per task	2021/22	2022/23	2023/24	2024/25	Total
Task 1	\$61,878	\$0	\$0	\$0	\$61 <i>,</i> 878
Task 2	\$8,390	\$62,009	\$0	\$0	\$70 <i>,</i> 399
Task 3	\$0	\$0	\$66,304	\$0	\$66 <i>,</i> 304
Task 4	\$0	\$0	\$8,870	\$64,305	\$73,175
Task 5	\$0	\$0	\$0	\$50,604	\$50,604
Total Expenditure	\$70,268	\$62,009	\$75,174	\$114,909	\$322,360

Source of Cash Contributions	2021/22	2022/23	2023/24	2024/25	Total
Federal Government (66.7%)	\$46,865	\$41,356	\$50,137	\$76,645	\$215,002
NSW Government (4%)	\$2,811	\$2,480	\$3,007	\$4,596	\$12,894
Santos (9.3%)	\$6,539	\$5,771	\$6,996	\$10,687	\$29,992
Total Cash Contributions	\$56,214	\$49,607	\$60,139	\$91,928	\$257,888

In-Kind Contributions	2021/22	2022/23	2023/24	2024/25	Total
CSIRO (20%)	\$14,054	\$12,402	\$15,035	\$22,982	\$64,472
Total In-Kind Contributions	\$14,054	\$12,402	\$15,035	\$22,982	\$64,472

	Total funding over all years	Percentage of Total Budget
Federal Government investment	\$215,002	66.7%
NSW Government investment	\$12,894	4.0%
Santos	\$29,992	9.2%
CSIRO investment	\$64,472	20.0%
Total Expenditure	\$322,360	100%



Task	Milestone Number	Milestone Description	Funded by	Start Date (mm-yy)	Delivery Date (mm-yy)	Fiscal Year Completed	Payment \$ (excluding CSIRO contribution)
Task 1	1.1	Revising and conducting the 2021 survey	GISERA	01/01/2022	31/05/2022	2021/22	\$49,502
Task 2	2.1	2022 data analyses, interim report, and stakeholder communications	GISERA	01/06/2022	30/11/2022	2022/23	\$56,319
Task 3	3.1	Repeating survey after a Financial Investment Decision (FID)	GISERA	01/01/2024 (depending on timing of any FID)	31/05/2024	2023/24	\$53,043
Task 4	4.1	Post-FID data analyses, final report, and stakeholder communications	GISERA	01/06/2024	30/11/2024	2024/25	\$58,540
Task 5	5.1	Extended dissemination of findings (various - GISERA article, papers, and conference)	GISERA	01/02/2025	30/06/2025	2024/25	\$40,483



12. Intellectual Property and Confidentiality

Background IP (clause	Party	Description of	Restrictions on use	Value
11.1, 11.2)		Background IP	(if any)	
				\$
				\$
Ownership of Non-	CSIRO			
Derivative IP (clause				
12.3)				
Confidentiality of	Project Results are	not confidential.		
Project Results				
(clause 15.6)				
Additional	Not Applicable			
Commercialisation				
requirements (clause				
13.1)				
Distribution of	Not Applicable			
Commercialisation				
Income				
(clause 13.4)				
Commercialisation	Party		Commercialisation In	terest
Interest (clause 1.1)	CSIRO		Not Applicable	
	Santos		Not Applicable	



13. References

- MCCREA, R., WALTON, A. & JEANNERET, T. 2020. An opportunity to say no: Comparing local community attitudes toward onshore unconventional gas development in pre-approval and operational phases. *Resources Policy*, 69, 101824.
- MERCER-MAPSTONE, L., RIFKIN, W., LOUIS, W. & MOFFAT, K. 2017. Meaningful dialogue outcomes contribute to laying a foundation for social licence to operate. *Resources Policy*, 53, 347-355.
- MOFFAT, K., LACEY, J., ZHANG, A. & LEIPOLD, S. 2016. The social licence to operate: A critical review. *Forestry: An International Journal of Forest Research.*, 89, 477-488.
- WALTON, A., MCCREA, R. & ET AL. in press. Australian attitudes and perceptions of large-scale solar: Social licence and the role of solar in the energy transition Australia: CSIRO
- WALTON, A. & MCCREA, R. 2017. Community wellbeing and local attitudes to coal seam gas development Social Baseline Assessment: Narrabri project - Phase 3 Survey report. Australia: CSIRO.
- WALTON, A. & MCCREA, R. 2020a. Community wellbeing and local attitudes to onshore conventional gas development in the Gippsland Basin. Australia: CSIRO.
- WALTON, A. & MCCREA, R. 2020b. Community wellbeing and local attitudes to onshore conventional gas development in the Otway Basin. Australia: CSIRO.
- WALTON, A. & MCCREA, R. 2020c. Understanding social licence to operate for onshore gas development: How the underlying drivers fit together. *Applied Energy*, 279, 115750.
- WILLIAMS, R. & WALTON, A. 2013. The Social Licence to Operate and Coal Seam Gas Development. A literature review report to the Gas Industry Social and Environmental Research Alliance (GISERA). Canberra: CSIRO.
- ZHANG, A., MEASHAM, T. & MOFFAT, K. 2018. Preconditions for social licence: The importance of information in initial engagement. *Journal of Cleaner Production*, 172 1559-1566.