

Leveraging the Lessons from the Development of the Queensland Onshore Gas Industry



Project

This document is the final report on Leveraging the Lessons of the Development of the Queensland Onshore Gas Industry. Coexistence Queensland has commissioned the UQ Gas & Energy Transition Research Centre to undertake this research. The need for this work was identified through a stakeholder engagement process undertaken by Coexistence Queensland in mid-2024 and captured in an Insights Summary published in October 2024. Through this process, and other engagement, stakeholders outlined the need to understand the lessons learned from the onshore gas industry so they could be applied to other sectors.

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Executive summary

Queensland is entering another wave of large-scale energy development. Many of the regions now experiencing renewable energy, critical mineral, and new gas activity are the same places that were reshaped by coal seam gas (CSG) development two decades ago. This study draws on 25 stakeholder interviews, an open, online discussion board, and documentary sources to elicit perceptions of what was done well, or not so well, in CSG development that can inform new energy projects. Overall, the development of an onshore gas industry in Queensland brought jobs, skills, investment, and institutional learning but also created significant concern, social and regulatory disruption and coordination challenges. The findings are organised into eight key themes: community engagement, land-use balance, environmental management, economic diversification, benefit sharing, workforce development, partnerships, and infrastructure. The lessons learned along with identified leading practices are listed below.

Key Lessons:

Theme 1: Community Engagement

Early, consistent, and respectful community engagement matters – First encounters with the industry forms the basis for future interactions. Attention should be given to how first contact is made and by whom so it is respectful and demonstrates commitment to local values. There is also an important role for government in early engagement to establish the legitimacy of the industry - to clarify the rights and responsibilities of different parties, and to explain how rights and interests will be protected through the regulatory environment. In addition, consistent, well-resourced and empowered engagement strategies and staff are key to maintaining and building trust. Appointing skilled land access officers as single points of contact, opening regional shopfronts, hosting site visits, and involving independent organisations to provide balanced information, helped. These practices showed that when engagement is consistent, resourced, and respectful, trust can be built even in challenging circumstances.

Timelines and engagement channels must align with stakeholders' needs – The timing of consultation and negotiations was driven mainly by project needs and schedules, which was said to cause frustration, place additional pressure on those engaging with the industry, and contributed to “consultation fatigue” across multiple projects. Trust breaks down when engagement is rushed, poorly timed, or when companies fail to honour commitments. Credibility improved where engagement was coordinated across proponents, where senior decision-makers attended meetings, and where forums, digital tools, and local committees ensured continuity. The lesson is that engagement strategies should be coordinated, and should respect community needs and dynamics, such as farming seasons and council cycles.

Independent and trusted platforms build legitimacy – Communities valued neutral, third-party sources of information more than company messaging. Organisations that assisted in early CSG development included the former GasFields Commission (now Coexistence Queensland), Office of Groundwater Impact Assessment (OGIA), specialist scientific research organisations such as the former UQ Centre for Natural Gas (now UQ Gas & Energy Transition Research Centre), CSIRO's

Gas Industry Social and Environmental Research Alliance, together with regional consultation and stakeholder advisory committees.

Theme 2: Balancing land use across industries

Balancing multiple land uses and values requires strategic planning and clear delineation of rights and responsibilities – Robust frameworks that recognise and protect both formal and informal rights, particularly those of First Nations peoples and local communities, are essential. Inclusive processes, collaborative decision-making, and coordinated spatial data collection help ensure that planning accounts for the duration of land uses as well as the historical and cultural values attached to them. Strategic, regional-scale planning supported by sound ecological, economic, and social assessments provides a stronger basis for coexistence. Policies such as the *Strategic Cropping Land Act 2011* and the *Regional Planning Interests Regulation 2014* were important steps toward clarifying priorities and guiding decisions, but inconsistencies and shortfalls remain.

Involve landholders and neighbours in the siting and co-design process – Co-design before layouts are “locked in” using detailed topo/satellite maps. This approach reduces avoidable impacts and costs, incorporates local knowledge (e.g., access tracks doubling as firebreaks), and respects farm operations and neighbours. A business-like but empathetic approach acknowledged power asymmetries and improved coexistence outcomes.

Coexistence requires planning beyond the property scale – Property-by-property negotiations were said to overlook cumulative impacts and erode regional values. Spatial platforms such as Queensland Globe and GeoResGlobe introduced clearer rules and better data access, though gaps remain. Practices such as co-designing infrastructure with landholders and using digital contractor management tools reduced conflicts and improved compliance. Coexistence demands regional-scale planning that considers rights, long-term land values, and the need for periodic review of agreements.

Theme 3: Environmental management

Strong and transparent environmental oversight is essential – Reliance on industry self-regulation weakened public confidence, particularly when baseline data were incomplete and regulatory systems fragmented. Independent oversight by OGIA, cumulative groundwater modelling, and landholder monitoring programs showed how accountability can be strengthened. Co-designed biosecurity protocols and evolving industry codes for well placement and decommissioning became leading practices. Future projects need to ensure that environmental data is collected through ongoing monitoring, shared on accessible platforms, with triggers for action on emerging risks such as brine waste, decommissioning, and biosecurity threats.

Theme 4: Economic diversification and local investment

Local council readiness, coordinated local content, and inclusive investment to create lasting regional prosperity – CSG development showed that bold visions for growth only deliver lasting benefits when local councils, businesses, and communities are well-prepared and ready to participate. Over time, stronger planning, local procurement support, infrastructure upgrades, and advocacy bodies like Toowoomba Surat Basin Enterprise helped capture economic opportunities

and embed benefits across sectors. Leading practices such as the Western Downs Community Partnering Framework, Roma Airport and Dalby Events Centre upgrades, and Indigenous Participation Plans demonstrate how strategic infrastructure, procurement pathways, and inclusive programs can extend benefits well beyond the resource sector supply chain.

Theme 5: Delivering community benefits

Benefits are more meaningful when community-driven and strategic – Early community benefit schemes were described as *ad hoc* and uneven, particularly for smaller towns. Over time, councils built capacity and became more assertive, aligning social investments by companies with long-term community plans. Initiatives like the Western Downs Communities Partnering Strategy and pooled funds across projects created larger and more trusted legacies. Transparent reporting tools such as UQ’s *Boomtown Indicators* and mandatory project-level Social Impact Management Plan (SIMP) reporting improved accountability. Benefits have the most significant impact when they are strategic, transparent, and developed in collaboration with communities.

Theme 6: Workforce development

Coordinated economic and workforce development fuels business growth and local capability – Worker influxes and mismatched training cycles put extreme pressure on housing, local services and economies. Barriers to participate for local businesses were often insurmountable. Over time, integrated procurement planning, early notification of tenders, and capability-building helped local firms enter supply chains. Business advocates like TSBE and local Chambers of Commerce were pivotal. Workforce development also benefited from Indigenous participation plans, and training partnerships. Skills development and investment in healthcare, childcare and housing are needed to support workforce participation and liveability. Innovative incentives were offered to reward loyalty and retain local employees in existing local businesses and industries.

Theme 7: Stakeholder partnerships

Partnerships and infrastructure require regional coordination – Uncoordinated project rollouts strained local infrastructure and created duplication. Yet structured multistakeholder committees, local reference groups, and regional business advocates such as TSBE helped identify and facilitate partnerships and align strategies. Council-led strategies, such as the Western Downs Communities Partnering Strategy, demonstrated how regional benefit portfolios and asset-repurposing frameworks could secure long-term value. The lesson is that partnerships across government, industry, and councils are essential to ensure infrastructure planning delivers legacy benefits rather than short-term fixes. Partnerships may arise out of social innovation around shared purpose, but collaboration in a competitive environment can require more active facilitation with either incentives or other stimulus.

Theme 8: Infrastructure and regional growth

Energy projects are part of multi-industry ecosystems – resources and energy projects do not operate in isolation, they interact with existing industries (particularly agriculture), water, housing, community services, workforce and education pathways, local governance, and other projects. Current regulatory and planning frameworks seldom assess and approve projects in consideration

of the complete project ecosystem of the particular region. A shift in approach is needed towards one that assesses energy projects as components of broader social, environmental, and economic systems, ensuring cumulative impacts and cross-sector trade-offs are recognised.

Any reflection on the lessons learned from Queensland's CSG experience must acknowledge the significant benefits the sector brought to the region but also the significance of disruption it caused - to local communities, including families and friendships, local landscapes and identities, but also in the wider institutional environment. CSG development challenged the adequacy and effectiveness of existing regulatory processes and policies and questioned the role of governments in public debate about contentious land use issues. Some of the lessons have been absorbed through maturing regulation, industry practice, informed landholders, and council leadership. Others remain unresolved, for example cumulative impact management, more equitable distribution of impacts and benefits, legacy outcomes, data sharing between regulatory agencies, and holistic regional planning.

The enduring insight is that energy projects need to be understood as part of broader regional ecosystems. Where leading practices were applied, independent oversight, co-designed siting, transparent benefit sharing, and coordinated engagement, outcomes were more positive. Where timelines were rushed, data opaque, and planning fragmented, communities experienced disruption and mistrust.

1.0 Introduction

Queensland is experiencing another wave of significant energy development. Alongside the rapid expansion of renewable energy, hydrogen, battery storage, and critical minerals projects across regional areas, traditional mining and gas sectors continue to grow. This combined momentum intensifies how land is used, how communities function, and how local infrastructure is planned and managed. The convergence of traditional and new industries creates a more complex development landscape with significant cumulative impacts. While these shifts bring economic opportunities, they also generate layered challenges that must be recognised and addressed early to support sustainable outcomes.

This is not the first time Queensland has experienced large-scale and fast-paced energy resource development. The development of coal seam gas (CSG) resources in the Surat and Bowen basins underpinned the world's first export of coal seam gas as liquefied natural gas (LNG) from Curtis Island in December 2014. This development required the installation of significant infrastructure including, pipelines, powerlines, telecommunications, gas processing and water treatment plants, workforce accommodation and storage facilities, as well as the wells themselves. Across the three major projects, the estimated value of capital investment is over \$70 billion AUD, making it the largest concentration of investment in Australia's history, bringing new infrastructure, people and jobs to the regions. However, it also precipitated a major overhaul of state regulations, creating disruption in regional communities. This led to significant angst among landholders, ongoing tensions between landholders and gas companies, and conflicts between community expectations and project timelines, as well as among the different sectors of government trying to keep up with the fast-paced development. CSG development became and remains a controversial public issue.

In response to these challenges, numerous approaches have been introduced. The Queensland Government established the GasFields Commission Queensland (now known as Coexistence Queensland) in 2013 to manage the relationship between landholders, communities, and the gas industry and to provide oversight of a fragmented regulatory landscape. A set of regulatory reforms, such as land access legislation, protections for strategic cropping land, mandatory social impact assessment requirements, and strengthened environmental standards, was introduced. Alongside these, community benefit funds were initiated, and greater attention was given to how people were engaged, how risks were managed, and how benefits could be shared. Some of these efforts worked well. Other initiatives had mixed results. But together, they create an anthology of experience that can offer valuable lessons.

Today, many of the same challenges are being experienced once again. Renewable energy zones, wind and solar farms, battery and pumped hydro storage facilities, green hydrogen hubs, and transmission lines are all being developed with a similar sense of urgency. Some of these projects are taking place in regions where CSG and mining already exist, but many others are located in areas with limited experience in previous development. These new energy projects bring similar pressures on communities, land, water, housing, employment, services, infrastructure and trust. Local councils and communities are being asked to respond quickly to proponents, with limited project or environmental information and limited preparation time and capacity.

It is becoming clear that the lessons learned from CSG industry development, are not always being used to guide new developments. Much of the knowledge gained over two decades of gas development by government, industry, researchers, and communities remains scattered and underutilised. As a result, mistakes are repeated, and opportunities to improve planning and engagement are missed.

This project is designed to help change that. It elicits key learnings from the development and maturation of the CSG industry in Queensland. It brings together insights from research, government reports, industry documents, and the experiences of stakeholders and communities. It identifies what was perceived to have worked, what didn't, and what lessons and suggestions can be applied to future energy projects. With better coordination and planning, stronger engagement, and smarter governance, regional areas can capture a greater range and magnitude of benefits from new projects, without repeating past mistakes. The insights gained from this project can inform and support governments, industry, local councils, and communities as they navigate the next phase of Queensland's energy transition.

This work is particularly timely as Queensland energy development in all its forms continues to quicken and expand, with dozens of major energy projects being actively progressed, and many more on the horizon. This is coupled with growth in the resources sector continuing across Queensland's regions. Without clear coordination and communication, regional communities risk becoming overstretched, leading to community fatigue, project delays, and diminished trust. By drawing from past lessons and acting with foresight, Queensland can foster a more successful, equitable, and sustainable energy future.

This project draws on the wisdom of hindsight, from multiple perspectives and experiences, to shape the path forward. The shared vision is for Queensland's regions to become not just energy and agricultural production hubs, but thriving, liveable centres where communities, industries, and governments collaborate to co-create stronger, more resilient futures.

1.1 Objectives of the study

- i. *Capture and document stakeholder experiences* - comprehensively capture, record, and document the insights and firsthand experiences of a diverse range of stakeholders involved with or affected by the Queensland onshore gas industry.
- ii. *Analyse and report lessons learned* - critically analyse the collected stakeholder data to identify, synthesise, and report key lessons learned.
- iii. *Identify opportunities for improved coexistence* - explore and articulate broader applications of the lessons learned, thereby fostering stakeholder partnerships and promoting sustainable economic, environmental, and social outcomes.

2.0 Methodology

The project was initiated in October 2024. A mixed-methods qualitative research design was employed to ensure a comprehensive understanding of stakeholder perspectives, experiences, and the multifaceted challenges encountered within the gas industry. This section outlines the

methodological framework, including participant selection, data collection methods, thematic analysis, and the integration of supplementary materials to enhance the study's findings.

Participant Selection and Recruitment

A purposive sampling strategy was adopted to capture a diversity of perspectives from a range of stakeholders who had been involved with or exposed to the CSG industry since its early development. Participants contributed both individual and organisational perspectives, including those from agricultural industry bodies, community members and organisations, landholders, Traditional Owners, local government, environmental and other advocacy groups, state government agencies, associated professionals, as well as the CSG industry itself. Participants were chosen for their subject matter expertise and direct involvement with the development of the Queensland CSG industry, with a particular focus on those involved in the early evolution of the sector. Invitations to participate in the study were extended through official channels, direct emails, and stakeholder networks. Emphasis was placed on ensuring that the sample covered a diverse range of perspectives and experiences with CSG development. In addition to the interviews, an open-access online discussion forum was established and circulated via LinkedIn and direct email.

Data Collection Techniques

Data collection was completed using a multi-modal approach, designed to triangulate findings and enhance the validity of the research outcomes. The primary data collection method involved conducting 25 in-depth, semi-structured interviews with key stakeholders. Each interview was planned to allow flexibility in probing for detailed insights while adhering to a semi-structured interview guide based on eight themes of coexistence challenges. The interviews were conducted between January and May 2025.

In addition to the interviews, an online discussion board was established on the Padlet platform to capture the views of stakeholders who preferred to share their opinions anonymously. This online forum provided a secure and confidential space for a much broader public participation. It allowed participants to express their concerns, share experiences, and offer commentary that added validity or an alternative view to the points discussed during the interviews. The Padlet link was initially shared via the LinkedIn platform by the UQ Gas & Energy Transition Research Centre (UQGET), then extended through Coexistence Queensland and other individuals and networks.

Written supplementary materials, including documents, reports, and personal narratives detailing experiences with the onshore gas industry provided by interviewees, were included in the analysis. These additional data sources complemented interview findings and provided further context that enriched the overall analysis.

Data Analysis

A thematic data analysis was conducted based on eight key coexistence themes. The themes included: delivering community benefits, balancing land use across industries, workforce development, infrastructure and regional growth, community engagement, economic diversification and local investment, environmental management, and stakeholder partnerships. Coexistence Queensland identified these themes, drawing on insights from 10 years of stakeholder engagement. While not theoretically founded, the themes represent key challenges and provide a

clear and consistent analytical framework for this study. Interview transcripts were compiled and analysed using established qualitative data management software (NVivo) to identify salient points under each of the themes, while remaining open to emergent insights.

The report is written in a way that attempts to preserve the voices of participants while protecting their anonymity and uses participants' own words to illustrate sentiment and key points raised.

Ethical Considerations

This research has been conducted in compliance with all Australian policies and standards for the responsible conduct of research, including ethics for research involving human participants. The research has been approved by The University of Queensland's human research ethics committee. A detailed human ethics process, policies, and legislation can be found on UQ's website, <https://www.uq.edu.au/research/research-support/ethics-integrity-and-compliance/human-ethics>.

3.0 Results

This section presents interviewee responses regarding the lessons learned from Queensland's CSG industry, with a focus on areas where improvements can be made. Stakeholders shared their experiences with CSG development, from a range of perspectives and positions, including those who actively oppose the development. By reflecting on the challenges and what could have been done better, they provided suggestions for improved approaches, emphasising the importance of strong government leadership, better coordination and regional planning, transparent and shareable data, balanced information, and more inclusive stakeholder engagement to build legitimacy and trust, rather than to gain access or approval. Their experiences highlight missed opportunities and suggest actionable strategies for future projects.

3.1 Community engagement

Effective community engagement extends beyond consultation, encompassing listening, responding, and building relationships over time. It involves creating accessible spaces for dialogue, ensuring communities have a say in decisions, and recognising diversity in local communities and local voices. This theme examines the lessons learned from past engagement processes, highlighting how they can be improved to foster greater inclusivity, respect, responsiveness, and build shared understanding.

3.1.1 Lessons learned from the CSG development in Queensland

Community engagement needs to be facilitated and coordinated, not left entirely to individual proponents

Stakeholders recalled how initial community engagement about CSG was conducted mainly by the proponents, whose primary purpose for engaging was to “*further their own interests*”. For example, one interviewee stated, “*early engagement was all about production schedules, land access agreements, jobs and spend. There was nothing about long-term impacts or benefits*”. Another described their frustration about early engagement being all about “*...jobs, jobs, jobs. They always focus on the jobs... and the economic benefits. I don't think they talked objectively enough about the environmental impacts*”

Many stakeholders suggested there could have been a more active role for government in this early engagement space - to provide neutral, balanced information about the industry in terms of its impacts and benefits, to explain the criteria for assessment of project approvals, how the industry would be regulated to protect social and environmental values, to listen to and investigate concerns raised, and to encourage more respectful, balanced public debate. While CSG had the open support of state government (and bipartisan political support) at the time, the government was described as taking a “backseat approach” as the engagement began and when concerns were raised. The State government was thought to play a vital role in shaping public discourse around CSG, not only through policy and formal consultation processes, but also in how it engages with citizens on key issues and responds (or not) to public concerns.

The lack of government presence in early engagement was described as a significant factor contributing to angst and anger, leading to the formation of collective anti-CSG activism. One CSG

adversary described, “we felt we were being threatened by the CSG industry, so we went to the Government, you know, they could have done something, but they wouldn’t protect us, so we just had to rally together to defend ourselves”.

There is also an important role for “third parties” in providing objective and independent information, listening to, and representing people’s concerns, and facilitating open dialogue. Influential third parties mentioned include the GasFields Commission Queensland (now Coexistence Queensland), the University of Queensland’s Centre for Coal Seam Gas (now UQ Gas & Energy Transition Research Centre), CSIRO’s Gas Industry Social and Environmental Research Alliance (GISERA), and the Office of Groundwater Impact Assessment (OGIA). AgForce, an agricultural industry peak body, also ran a program¹ of workshops to provide information to landholders negotiating agreements. These third parties, although rightfully subjected to scrutiny and criticism, have endured over time, largely in recognition of the importance of their role as independent observers, communicators and analysts in the regulatory ecosystem.

When multiple projects are underway in the same region, the burden of participation in engagement can be intense for local people. Coordinating community engagement across projects can help manage ‘consultation fatigue’ and ensure consistent quality and fair processes. Overlapping consultations - each with its own timelines, language, and messaging - can overwhelm communities, leading to frustration and increased angst. By aligning engagement efforts across projects, government and industry can work together to present a more coherent narrative to justify the development, ensuring consistent communication, and respecting the time and attention of stakeholders. A more coordinated approach also facilitates the identification of shared concerns, streamlines feedback mechanisms, and ideally establishes calm control, continuity and transparency to support long-term relationships with the community.

Effective community engagement was also described as providing “the right amount” of objective information about both the risks and benefits of the industry or projects. A crucial insight for both government and industry is that too little information (especially about the risks of a project) can create a vacuum, fuelling speculation and mistrust. At the same time, overly technical or detailed information may overwhelm and alienate communities. It was explained how either scenario can spark concern that quickly escalates into opposition. Striking the right balance in communication builds confidence in the industry, supports informed public debate, and encourages authentic engagement.

This is particularly important in the context of risk communication. For example, one CSG industry stakeholder said about communicating the practice of gas flaring, “*Everyone [government and industry] was trying to walk this really fine line between giving enough information, but not so much that causes alarm*”. Another community interviewee noted, “*I think that is why they flare. But I think, if you don’t have all that other information, it does sound a bit scary*”.

Engage with local councils first so they are aware and can answer any questions that come

When communities express concern about local development, their first point of contact is often the local council. Well-informed councils, familiar with the details of proposed projects and having

¹ This information program, although delivered by AgForce, was funded by the CSG industry and Queensland Government

constructive relationships with proponents, are better equipped to answer questions confidently. This in turn enables them to provide clear, consistent information, address concerns promptly, and create a better understanding of the project within the local community.

Initiatives taken by CSG companies to build understanding and capacity within local governments were commended. These include proponents briefing local government on the proposed project at the earliest opportunity, offering site visits and demonstrations, attending industry and research events, and facilitating conversations with local governments in other jurisdictions that have already experienced similar development.

Engage with the best available information. “It doesn’t have to be perfect” - but acknowledge uncertainty and gaps

“Engagement is as good as the information provided”. Stakeholders explained how in early engagement, CSG companies were hesitant to make detailed plans, including maps outlining the proposed number and placement of infrastructure, which were widely available. To landholders and many community stakeholders, this reluctance gave the impression of deliberately withholding or “hiding” information. Industry stakeholders, however, explained that the hesitancy was due to the levels of uncertainty in the plans and the desire not to give misleading information. With the wisdom of hindsight, the lesson learned is that being open and honest about the uncertainties and the reasons why plans might change is a better approach than being hesitant to disclose or withholding information. Particularly for landholders, but also for those wishing to participate in the opportunities generated by the development (for example, residential land release, training, business growth), having the best available information and the most accurate forecasts is critical. It was explained that this “doesn’t have to be perfect” information. Still, there should be an indication of the level of confidence in the accuracy of the information and an honest discussion of how, when and why parameters might change.

Being “upfront” about when and why plans might change can help overcome frustration and the erosion of trust that can happen when plans change without explanation. One participant observed that *“they [the industry] engage very well with landholders, but then change their plans, with no explanation”* Another participant reflected how *“[project plan] changed so many times that all trust is eroded”*.

Unclear communication around project scope or timing can carry significant financial consequences for stakeholders, particularly those who have made investments in business expansion or housing based on anticipated industry growth. This underscores the need for regular updates, timely revisions to plans, and as much advance notice as possible to help stakeholders make informed decisions and manage risk.

Engage early with landholders and involve them in project planning to build trust, reduce impacts and maximise opportunities for mutual benefit

It is important to engage early with landholders in the planning phase, before infrastructure is ‘locked in’, and involve them in the co-design of infrastructure placement, on-property logistics, access routes, and operations. Landholders explained how being involved in co-design helped them build an understanding of the management environment of the CSG industry and its needs, develop trust in their processes and identify shared pain points and opportunities where mutual

benefits could be realised. Engaging landholders at the concept stage demonstrates respect for existing land management and farm business plans. It creates space to align project goals and needs with those of landholders (and neighbours). A key learning was that early engagement and co-design need to extend beyond the host landholders to include neighbours, to provide transparency to those both directly and indirectly impacted.

Early engagement is best facilitated by appropriately scaled, detailed topographic maps or satellite images. Ideally, proponents would present scenarios of what they “would like” (i.e. a maximum or optimal scenario for them) and be prepared to negotiate back. Each party would outline its non-negotiables (e.g., biosecurity zones, irrigation layouts) and negotiables (e.g., access track routes), while being transparent about project timelines and design uncertainties. As one landholder observed in relation to well placement, *“the first thing you need to do is tell me that you need to move it [the planned well site], and here are all the parameters that are going to restrict where it can go”*. An industry stakeholder described how failing to engage with landholders “up front” leaves companies *“shooting themselves in the foot”* with late redesigns and strained relationships. When discussions begin early and remain open, landholders can meaningfully shape operations, operators can plan within clear parameters, and both sides take shared ownership of workable, coexistence-focused solutions.

In addition to building better coexistence relationships, involving landholders in planning enables the incorporation of valuable local knowledge that can avoid costly mistakes (such as getting equipment bogged) and create mutual benefits (such as planning access roads to double as fire breaks).

“Upfront” engagement with landholders around co-design and infrastructure placement, while necessarily a “business-to-business transaction”, should also be compassionate, with acknowledgement that the landholder did not have a choice in entering a coexistence relationship with CSG companies but may instead feel like it was “forced upon” them. While this may be different for other types of development, where resource tenures and access rights vary, acknowledging and being respectful of underlying relationships of power in engagement remains a key lesson to be learned from the CSG experience.

Recognise diversity and acknowledge and appreciate people’s time

There is no template for effective community engagement. Early engagement should aim to build mutual understanding, demonstrate a long-term commitment to local people, values, and the local region, and a commitment to ethical conduct and leading practices.

Engagement should recognise diversity within the community and the different information needs of various groups. Native Title rights holders should be engaged early as part of an inclusive community engagement strategy, rather than being targeted (often later) by gas companies “solely because of our Aboriginality” to negotiate Indigenous Land Use Agreements (ILUAs) as part of regulatory obligations.

Because farm layouts, business models, and individual attitudes toward risk differ widely, and local councils vary in their readiness for projects, early, tailored dialogue is essential to build trust, set fair and defensible compensation, and achieve sustainable development outcomes.

Stakeholders described early engagement by the CSG industry as ‘schedule-driven’, in that it focused primarily on gaining a social licence to operate and securing land access to meet fast-paced project timelines. This resulted in considerable pressure placed on those conducting the engagement, but more importantly, the “rush” to secure land access “forced” landholders to enter negotiations and make decisions under extreme pressure, often feeling ill-informed, overpowered and underprepared.

Respecting landholders’ time, particularly given their multiple responsibilities and seasonal farming demands, can improve trust and reduce friction. Flexibility is especially important during peak agricultural periods, such as harvesting, when farmers are “already working overtime” and their availability is limited. Recognising that landholders and community members are managing competing priorities, effective engagement involves working around their schedules and providing easily accessible information and prompt responses to questions.

Keep track of engagement, record interactions, ensure feedback loops to avoid making “empty promises”

Commonly mentioned shortfalls in community engagement by the CSG companies were a lack of consistency and a lack of “follow-through”. This was said to be exacerbated by the fast pace of development, the multiple projects happening at once, and the many “new faces” that local communities were engaging with. Local community stakeholders and landholders described their frustration at “*having to say the same thing over and over again*” to different company representatives each time or going along to information sessions with their questions “left unanswered”.

Maintaining accurate records of interactions and providing regular feedback loops by reporting back to the community/stakeholders on the outcomes of the engagement were said to build trust and reduce the burden of engagement on local people. It was mentioned how companies reported their community engagement and social investment activities to the Government (for social impact management compliance) and to their shareholders and investors (through annual performance reporting). Still, there was little to no reporting produced at a level that was accessible or targeted to the local communities.

Local people understand high turnover in CSG company engagement and liaison staff, but this was said to “set back” relationships and erode trust when there was not an adequate “handover” or succession process.

Having senior company “decision-makers” present at community engagement events was also said to show respect and build trust. Community stakeholders explained the importance to them of being able to “put a face to” corporate communications and decisions, and to be able to ask their questions and have them answered with authority. They also thought it was extremely beneficial for (mostly city- or foreign-based) corporate decision-makers to see and experience the context in which their decisions are played out.

Acknowledge concerns, and engage constructively to address concerns

Community engagement for CSG generated shock and anger, particularly for directly affected landholders and those concerned about environmental impacts. Many stakeholders reflected on how neither the CSG companies nor the gas industry’s peak body adequately acknowledged the

levels of contestation and concern in their public communications, instead focusing “bullishly” on legitimising the industry through its economic benefits and technological efficiency.

It was thought that the CSG industry and the relevant government agencies (including the Federal government) could have given greater attention to constructive engagement with those concerned and opposed, provided more comprehensive risk communication and assurances, and offered greater transparency regarding how local wellbeing and environmental values were being protected. For example, *“if the concerns were unfounded, then they [CSG companies] should have explained why people didn’t need to be concerned”*.

Stakeholders opposed to CSG described feeling “sidelined” in the design of community engagement activities and deliberately ignored in the public debate by CSG companies. The absence of response (by both industry and government) was said to have fuelled frustration and suspicion about the CSG industry, and allowed for the unchecked circulation of inaccurate, subjective or misleading information. CSG industry stakeholders interviewed highlighted the complex internal communication protocols that hindered their ability to respond swiftly to public concerns raised, particularly in the fast-paced landscape of social media. Similarly, government stakeholders noted that formal institutional processes often constrained their capacity to engage in public discourse. The resulting reticence was interpreted as “reluctance”, “conspiracy” or “inaction” by other stakeholders. There are lessons to be learned for all stakeholders to engage constructively in public debate when projects become contentious. Engaging in contentious debate requires a balance of strong, evidence-based arguments, respectful communication, and strategic thinking. For industry and government, engagement should begin by seeking to understand the perspectives of opponents and responding in a timely way to concerns and allegations raised.

It was generally agreed among those interviewed that having local “champions” as spokespeople who were prepared to offer explanations and share their CSG experiences was effective in moderating debate. However, some thought that this approach “was overdone” and that it caused friction between community members and was stressful for those acting as industry spokespeople.

The lesson is for government and industry to monitor levels of concern and give “equal airtime to all concerns.” This requires dedicated spokespeople who can track and engage in public debate, responding to concerns proactively.

As one stakeholder explained, *“framing the other party as ‘the enemy’ is not helpful. If we have to learn to live with each other, that is not a helpful place to start”*.

Have skilled, resourced, land access officers as the project’s principal point of contact with landholders

The importance of the role of land access officer was emphasised throughout the interviews. It was explained how land access officers should have good general knowledge, including a good understanding of the landscape, and the operations of the existing industries (in this case, agriculture) and local networks and culture, as well as excellent problem-solving and engagement skills. Having “the right person” in this role can save significant costs to the project and create benefits for local industries. These people should be the company’s single point of contact for landholders.

Land access officers should also be adequately resourced with sufficient discretionary budget and decision-making powers to be able to “commit to doing something and delivering it”.

Frequent turnover of land access officers or having multiple project officers and contractors engaging with the same landholder often led to “knowledge loss” and inconsistent messaging. As one interviewee mentioned, *“your landholder person is your key contact with the landholder. No one else [in the company] should be talking to the landholder, because it only ever ends badly.”*

Continuity in the role is desirable, as relationships of trust are built over time. However, where this is not possible, there must be effective handover processes, including proper close-outs and introductions.

First impressions count – don’t underestimate “word of mouth”

Pre-existing “bush telegraph” narratives can erode trust well before a company’s first meeting. For example, one landholder noted that hearing about other people’s experiences can sometimes make confidence *“sometimes gone before you’ve even met them.”* Legitimacy is established when both government and industry layer multiple, complementary methods such as visits by senior leaders, personal one-on-one visits that show respect, small, facilitated discussions where neighbours can compare experiences, clear, data-rich fact sheets that avoid “marketing gloss”, and relatable case studies that demonstrate community benefits. Each touchpoint is shared via “word-of-mouth” within social networks, so every interaction, conversation, leaflet, or site tour must be able to stand up to scrutiny. When these channels reinforce one another consistently, transparently, and over time, scepticism can give way to constructive and collaborative relationships.

3.1.2 Leading practices examples of community engagement

Community presence: shopfronts, regional offices, and spatial information resources for public awareness

Gas companies operating in the region established physical shopfronts in key communities, developed interactive maps and displays, and offered educational materials to inform and engage local communities. Staffed shopfronts serve as accessible information centres where community members can inquire about ongoing and upcoming projects, voice concerns, and engage with the projects and staff at their own convenience. Operating alongside permanent regional offices, these shopfronts signal that companies are part of the social and economic fabric of the community.

To complement these face-to-face channels, companies promoted interactive spatial tools such as [GeoResGlobe](#), Queensland’s public geospatial portal. The platform overlays exploration and production tenures, individual well locations, water-bore registers, environmental authorities, and land-use constraints, allowing community members to see how CSG activities intersect with properties, aquifers, and infrastructure.

Printed or downloadable fact sheets now provide fit-for-purpose, plain-language explanations of gas operations, landholders’ rights, and how to participate in statutory approval processes. Transparent interactive digital mapping tools – most notably Queensland Globe and GeoResGlobe – layer land tenure boundaries, well pads, water-bore registers, and environmental authorities, allowing communities to visualise how CSG projects intersect with individual properties and

regional assets. Additionally, regular workshops and information sessions take these materials on the road, allowing landholders and community groups to ask questions, clarify what they can expect as projects progress, and build confidence in how their concerns will be addressed.

Independent third parties supporting trust and fairness in engagement

Independent third parties have played a crucial role in facilitating dialogue between the gas industry and local communities in efforts to create more balanced and fair engagement.

The [Surat Basin CSG Engagement Group](#) (SBEG), convened by the Queensland Government in 2011, brought together 22 stakeholders, including landholder advocates, as well as Western Downs, Maranoa, and Toowoomba mayors, senior executives from the gas industry, and departmental heads, under the leadership of an independent chair. Tasked with addressing groundwater, land access, and compensation disputes early on, the forum enabled data sharing in plain language and concerns to be raised and discussed by those with the power to make decisions. Stakeholders interviewed provided examples of the effectiveness of the SBEG in crafting rapid responses to concerns raised, demonstrating that structured dialogue among decision makers can help address conflicts before they escalate.

SBEG's success informed the 2013 establishment of the independent statutory body, GasFields Commission Queensland (now Coexistence Queensland). Regionally based commissioners produced plain-language guides, informally mediated disputes and advised Ministers on land-use coexistence across onshore gas developments.

Community consultation committees for ongoing local dialogue

The gas industry established Community Consultation Committees (CCCs) at a project level to actively involve a range of local voices in decision-making processes and ensure ongoing dialogue and communication with community members and key stakeholders across the project lifecycle. These committees serve as forums where community representatives, industry officials, and other stakeholders can discuss project developments, address concerns, and collaboratively seek solutions. Although generally reported to be a positive initiative, concerns were raised about the representativeness of the community consultative committees and whether they accurately reflected community sentiment towards the industry. Careful thought should go into the selection of committee members to ensure that a full and diverse range of views is represented, including those with concerns about the industry.

For example, one CSG-LNG proponent established [Regional Community Consultative Committees](#) (RCCCs) in the Western Downs, Maranoa, Banana Shire, and Gladstone regions. These committees oversaw the implementation of social impact mitigation strategies and provided feedback on the project's Social Impact Management Plan (SIMP). They included representatives from local councils, state government, industry bodies, Indigenous groups, and community members.

[Another CSG-LNG proponent also set up three RCCCs](#) covering Western Downs, Banana and North Burnett Shires, as well as one in the Gladstone Region. These committees focused on addressing social impacts identified during the project's Environmental Impact Statement (EIS) process and monitoring the implementation of mitigation strategies.

Dedicated local company representative for landholder engagement

Queensland's Land Access Code requires resource companies to establish clear, respectful communication channels with landholders. Most gas operators, therefore, appoint specialist staff, variously titled Land Access Managers (LAMs), Land Liaison Officers or Landowner Relations Advisors (LRAs), to serve as a single, accountable point of contact for every affected property. These officers coordinate land access negotiations, relay project updates, and ensure that on-ground activities comply with statutory conduct conditions ([Land Access Code, 2023](#)).

For instance, [one energy company's Land Access Protocol](#) stipulates that "a dedicated Landowner Relations Advisor is provided to each landowner for the life of development activities." The LRA must notify landholders before entry, minimise disruption to day-to-day operations, and act as the direct conduit for resolving issues or claims. Similarly, [another company assigns every farming family](#) a Land Liaison Officer (LLO) who "lives and works in the local community." The LLO's brief is to understand each property's current and future uses and to tailor drilling schedules, traffic routes, and rehabilitation plans accordingly.

One of the interviewees noted, "*a well-trained, educated, and empowered land-access person will handle those issues ... without the company getting itself into tricky situations*". Giving LAMs delegated authority short-circuits approval bottlenecks that otherwise arise when project changes collide with tight schedules, thereby protecting landholder relationships and project timelines.

3.2 Balancing land use across industries - coexistence

Effective coordination is essential, as rural regions often host multiple industries and associated land uses, ranging from agriculture to energy development. Balancing these uses requires clear planning, respect for existing livelihoods, and recognition of cumulative impacts. This theme explores the lessons learned about coexistence, planning, and the governance challenges of managing competing land uses.

3.2.1 Lessons learned from the CSG development in Queensland

"Take the time to build mutual understanding and respect"

Stakeholders almost always referred to "respect" as the foundation of coexistence. Respect is earned "*at the drawing board, not after the survey pegs are in the ground*".

Respect was said to come from taking the time to develop mutual understanding - of communities and their values; of Aboriginal culture and ways of knowing the land; past experiences; of the operating environments of different industries (including shared pain points); of different types of land tenures and the rights and responsibilities associated with them; together with an empathetic acknowledgement that coexistence for many is an "imposed, rather than voluntary" state, and that some things are lost or compromised (for example "quiet enjoyment") as existing uses and values "make way" for new land uses.

Building mutual understanding through respectful deliberations identifies the full scope of opportunities for mutual benefit, going "well beyond the obvious". For example, one landholder explained the benefits of having good coexistence relationships, as having "more eyes" on the property. An example was given where a cow was seen lying down in the paddock, and he

received a call, allowing him to go and check on the cow and save its life. There were other examples, however, where communication and relationships were not good, and through misunderstandings and a lack of communication, crops ended up being damaged.

The importance of good relationships was highlighted, facilitated through the presence of a locally based liaison. One landholder described, *“We had to fight tooth and nail with the folks in Brisbane, and if it hadn’t been for [landholder liaison officer], we wouldn’t have been able to do it... He [advocated] so ours and their existence could be better. That was coexistence.”* This early, collaborative layout work was said to have saved redesign costs, protected farm assets and operations, and, most importantly, embedded a culture of *“mutual respect and understanding each other’s wants”* long before construction began. The lesson is clear that front-loading design collaboration is the fastest route to enduring coexistence in multi-use landscapes.

“Think bigger than property scale” – strategic land use planning at regional and local scales enhances balanced development and stakeholder collaboration

Stakeholders from government agencies, local councils, landholders and communities consistently highlighted the need for planning frameworks that integrate economic, environmental, and social objectives. It was thought that a better baseline assessment of existing environmental values and land uses, overlaid with forecasting of future developments, would enable proactive dialogue about competing values and trade-offs, including between energy and agriculture and between urban development and conservation.

Stakeholders expressed concern that “piecemeal” and strictly bilateral negotiations for land access (between individual landholders and proponents) would, over time, erode important regional values such as prime land for agriculture and biodiversity. For example, *“commercial incentives can always tempt an individual landowner to surrender their land”*. Many stakeholders referred to the Strategic Cropping Land legislation as being well-intentioned to prevent high-value farmland from being “negotiated away in individual bites”. However, recognising shortfalls, there were suggestions for a new, higher-order planning approach that treats landscape integrity and national food security as “collective, not private, assets”. Such an approach would clearly identify landscape-scale attributes and connectivity.

The Queensland CSG experience demonstrates that, when done well, collaborative regional planning can streamline decision-making and better align energy projects with broader regional objectives. When planning is inclusive and data-driven, it establishes a robust foundation for sustainable, balanced regional growth.

Clear, accessible information empowers stakeholders and enhances procedural fairness across industries

Queensland’s CSG experience highlighted power imbalances and the need to take active measures to ensure procedural fairness. One approach that was thought to help reduce misunderstandings and go some way towards addressing power imbalances was the development of the [Gas Guide 2.0](#), by the GasFields Commission Queensland (now Coexistence Queensland). It guides landholders, resource companies, and councils through every stage of petroleum and gas development, outlining rights, obligations, and dispute-resolution options in clear, straightforward language, accompanied by visual roadmaps. The Gas Guide has been supported by community

engagement and information sessions, where Coexistence Queensland, in collaboration with relevant government departments, has hosted a series of [community drop-in sessions](#) across Roma, Miles, Chinchilla, and, more recently, extending to other hubs. In addition, annual Community Leaders Council events provide opportunities for landholders, Traditional Owners, industry and government representatives to come together to identify and discuss issues. These events enable stakeholders to test assumptions, raise concerns early, and co-create solutions in real-time within challenging, multi-use regional landscapes.

From a regulatory perspective, comprehensive, spatially integrated land-use data should be shareable across government departments and preferably hosted on an open-access platform. Having transparent data was said to be important for keeping “a level playing field” so there can be “no power plays” in negotiating coexistence between land uses, or in assigning priority to one land use over another.

Detailed mapping drives informed negotiations for optimal infrastructure placement

High-quality maps, which integrate spatial data on infrastructure, environmental constraints, and existing land uses, are “indispensable” for informed coexistence negotiations. These maps provide a visual context that helps stakeholders understand where the needs of energy projects intersect with agricultural zones, residential areas, and conservation regions. Farmers can highlight cropping rotations, stock movements, and drainage lines, while project teams can add technical constraints and safety buffers. Interviewees recalled engineers who “found it really exciting” to adjust tracks and easements on the spot, turning mapping into a shared design exercise rather than a finished product handed down for comment. Early collaboration over maps reduces redesign costs, minimises conflict, and produces layouts that meet the expectations of regulatory, technical, and community stakeholders alike.

Strict contractor management upholds standards and protects rights and assets

Queensland's CSG experience demonstrates that clear contractual guidelines, performance metrics, and oversight mechanisms are essential in ensuring that contractor activities support responsible industry development and do not infringe upon the rights of agricultural, residential, or conservation interests.

Stakeholders report that stringent oversight of contractor land access and behaviour, along with transparent reporting, helps mitigate operational disruptions and environmental impacts. This is particularly crucial in multi-use landscapes where energy projects intersect with the operation of other industries. Integrity is maintained when contractors are properly inducted and operate within a well-defined (and well-communicated) framework. This approach to managing contractor behaviour preserves operational safety and efficiency, ensuring that energy developments are sympathetic to surrounding land uses.

Have mechanisms for review

It is recognised that requirements for balancing land uses and coexistence will change over time as industries flux or need to respond to different drivers of change in their operating environments. There should be mechanisms for periodic collaborative review of coexistence agreements (such as CCAs and ILUAs) to ensure they remain fit for purpose, and if not, a simple way to incorporate required and agreed-upon changes (without having to create a new agreement).

Similarly, at a regional scale, land use priorities may change with new knowledge and as impacts accumulate or become evident (especially in relation to ecological thresholds and Aboriginal cultural values). It was suggested that there should be clear processes for identifying and reviewing land use priorities with triggers for interventions and actions where necessary.

3.2.2 Leading practices examples on balancing land use across industries

Strategic Cropping Land Act 2011 and Regional Planning Interests Regulation 2014

The intention of Queensland's [Strategic Cropping Land Act 2011](#) was to draw a clear line around the state's most productive soils, with the intention of protecting them from urban development and open-cut mining and forcing other projects (such as CSG) to demonstrate how they will reduce their footprint and impacts on productivity. This was an early attempt to "*hard-wire economic and community values into resource approvals*".

The [Regional Planning Interests Act 2014](#) then further developed the idea of protecting areas of regional interest, adding a broader range of priority areas, including living and environmental areas. It is designed to manage competing demands on land by ensuring that regulated resource activities do not undermine other important land uses identified in the land planning system, and to address conflicts upfront through a single Regional Interests Development Approval. By mapping priority agricultural, cropping, living and environmental areas and applying the test "avoid irreversible impacts, otherwise design for coexistence," the Act aims to strengthen the connection between planning and resource statutes and clarifies expectations before projects advance. However, a [review](#) by the GasFields Commission (2021) found that while the Act improved early conflict resolution, farmers and other interest groups still contested its exemptions and enforcement. The review determined that although the framework's ambition is sound, its credibility and effectiveness will depend on further clarification and continual refinement.

Queensland's Land Access Framework

Queensland's Land Access Framework was established in 2010 as part of a broader effort to manage interactions between resource companies and landholders. Anchored by the Land Access Code (which has been updated over time, most recently in 2023) and the statutory requirement to negotiate Conduct and Compensation Agreements (CCAs), it sets clear, enforceable rules for how resource companies engage with landholders to improve transparency and fairness. It provides statutory rights for landholders to access independent legal, accounting, and valuation advice at the proponent's expense, and provides tiered alternative dispute resolution pathways if negotiations stall.

The Framework's centralised Resources Engagement, Assessment and Compliance Hub (formerly known as the CSG Compliance Unit) within the Department of Natural Resources, Mines, Manufacturing, and Regional Development acts as the single triage point for complaints, maintains an active field presence, and investigates alleged breaches, giving communities a practical avenue for redress and helping to sustain trust in the regulatory system.

Complementing this government function, AgForce Queensland's standalone CSG Landholder Support Program, which was jointly funded by the CSG industry, played a crucial role in empowering landholders by delivering on-farm workshops and tailored resources that build their

capability to navigate CCAs and monitor industry activity. By pairing a robust, statute-backed framework with both compliance oversight and independent producer advocacy, Queensland's CSG experience offers a leading practice model for balancing resource development with rural property rights and building community confidence.

Real-time monitoring and data: UQ Indicators, Shared Landscapes Reports, CSG Globe

There are several leading practice examples of real-time monitoring, transparent reporting and open-access data. The University of Queensland has been continuously monitoring a simple set of socioeconomic indicators for ten towns in the Surat and Bowen basins. The project, with funding support from the CSG industry, began in 2013, where a core set of indicators was selected through community engagement to reflect local values and concerns. Time series data is compiled for each of the indicators, dating back to 2000, to track both long-term trajectories and short-term fluxes. The indicator data is updated each year and shared with research participants in each of the studied communities. The participants "ground truth" the indicators data and provide narratives of the lived experience to explain the observed trends and identify any emergent concerns about changes in the data. Each year, an [Annual Report](#) is produced for each of the towns studied. The indicators and data are also made publicly available through an [online portal](#) where a simple interactive charting tool can be used to create charts that show changes in indicators for a chosen town or compare changes in indicators across towns.

Queensland's [Shared Landscapes series](#) provides transparent, evidence-based reporting on the intersection of agriculture and onshore gas development. Each edition synthesises spatial, economic, and environmental data - covering development footprints, groundwater systems, compliance actions, and regional value creation—into a single, plain-language narrative. This holistic snapshot enables landholders, communities, industry, and regulators to understand cumulative impacts and collaborate on workable coexistence strategies.

Launched in 2013, the CSG Globe (now Queensland Globe) complement these reports by translating raw regulatory datasets into an intuitive, publicly accessible mapping tool. It included data on the location and status of CSG wells, water bores, and other relevant infrastructure. The CSG Globe has subsequently evolved through the introduction of GeoResGlobe in 2019, providing even greater availability of gas-related spatial information using a single spatial tool. The Shared Landscapes reports, Queensland Globe and GeoResGlobe showcase best practices in making complex resource data transparent, enabling stakeholders to make informed land-use decisions and fostering trust in the regulatory system.

App-based terms & conditions and inductions for staff and contractors

The gas industry has increasingly adopted app-based platforms to streamline the induction process and manage company staff and contractors. These tools ensure that before a staff member or contractor even sets foot on-site, the app prompts them to review and acknowledge land-access rules and obligations specific to that property. Completion records sync in real-time, providing supervisors with instant proof of compliance and, in some instances, providing landholders access to real-time data about who is operating on their property.

Built-in alerts and refresher quizzes flag any changes to legislation or operating procedures, enhancing compliance. By ensuring every worker arrives fully briefed on the unique obligations

negotiated with landholders, these platforms have measurably reduced conduct-related breaches on-site and off-site, cutting administrative overhead and standardising inductions across multiple assets.

3.3 Environmental management

Strong environmental management is central to community confidence and long-term sustainability. Communities have consistently emphasised the importance of robust environmental oversight, particularly about water, land, and cumulative impacts for all land uses. This theme explores the lessons learned about how environmental risks are monitored, managed, and communicated, highlighting where regulatory approaches and community expectations have aligned or diverged.

3.3.1 Lessons learned from the CSG development in Queensland

Comprehensive baseline assessments and participatory monitoring increase understanding and environmental stewardship

Collecting high-quality baseline environmental data is critical for understanding pre-development conditions across ecosystems, water resources, and air quality. According to stakeholders, this was not done well before CSG development and remains a weakness in establishing accountability for observed changes. Interviewees noted that the value of these studies lies not only in “*the science that they do, but the communication of that science as well.*” Real-time monitoring of air quality, publicly accessible data viewers, and environmental reporting are all available; however, they are not easily accessible, and the data is not always presented in a format that is easily interpreted by non-experts.

Ongoing monitoring was considered crucial for detecting deviations from expected performance and triggering timely corrective action. A positive example cited was the Groundwater Net program, which was run through the then Department of Resources CSG Compliance Unit. This program aimed to equip local landholders with the skills to sample and track their bore water. This hands-on involvement in monitoring was reported to have enhanced participants’ understanding of groundwater resources and how their own and CSG operations impact those systems.

Stakeholders emphasised that baseline datasets should also guide progressive rehabilitation, ensuring proponents leave each site in comparable or better condition than when activities began. When landholders participate in ongoing monitoring and interpretation, environmental stewardship becomes a shared, transparent practice throughout the project lifecycle.

Science-led environmental regulation and regional coordination

The Office of Groundwater Impact Assessment (OGIA) prepares the Underground Water Impact Report for the Surat Cumulative Management Area every three years, pooling data from all CSG tenure holders, modelling drawdown across the entire basin, and then prescribing make-good and monitoring duties that apply to all operators. This statutory process ensures consistent regional-scale groundwater management, including mandated make-good obligations and monitoring responsibilities across all operators, regardless of individual project boundaries

Interviewees also emphasised that such state-led frameworks are essential because, while companies *“do area-wide planning or localised planning ... at the end of the day, when they’re delivering on projects, they’re doing the small parcels.”* Coordinated regional oversight by government converts the many disconnected parcel-level Environmental Management Plans into a single, landscape-scale safeguard, ensuring landholders that cumulative effects are considered at the state government level.

However, effective implementation of this model depends on seamless data sharing and interoperability between government agencies. Improved coordination across departments would enhance the ability to monitor environmental outcomes and respond adaptively to emerging risks.

Transparent compliance reporting for accountability and to guide continuous improvement in environmental management

Government agencies should routinely publish detailed reports evaluating industry performance against environmental and regulatory standards. Transparent reporting enables the public and stakeholders to track compliance trends, understand the cumulative impacts of operations over time, and hold industry and government accountable.

As one interviewee noted, when cumulative impact assessments are completed by operators merely *“to tick off compliance-requirement boxes”* they lack the commitment of organisations that embed reporting *“as part of the culture... because it’s important to the business”* Nonetheless, regardless of intent, requiring these reports is essential in that they enable diverse data streams to be weaved into a unified, regional understanding of environmental conditions.

Such mandatory reporting enhances accountability, informs adaptive policymaking, and facilitates continuous regulatory improvement. The gas sector’s early failure to release reports in a timely and transparent manner eroded community trust - a misstep that future energy projects must avoid if they are to build lasting credibility with both the public and government institutions.

Consider and plan for end-of-life and waste management early

Addressing end-of-life and waste issues, from CSG brine to decommissioned infrastructure, is essential for mitigating long-term environmental risks. Interviewees pointed to two looming end-of-life “headaches”. CSG operations still create *“piles of brine ... and no fair solution,”* and solar and wind projects raise *“concerns ... around decommissioning liability and rehabilitation”* with few perceived binding rules beyond *“ad hoc council bonds”*.

Stakeholders identified a key lesson learned in the importance of having a solid plan for waste disposal throughout the industry’s lifespan and establishing clear regulatory standards for decommissioning from the early stages of industry development, along with clear accountability for rehabilitation. Effective planning involves setting defined timelines, establishing remediation standards, and implementing continuous monitoring to ensure compliance with environmental regulations. Plans should be regularly reviewed and updated with timely engagement with local stakeholders, and particularly local councils.

Rigorous biosecurity measures safeguard agricultural productivity and promote regional well-being

Biosecurity is a significant and ongoing concern for local stakeholders (not only farmers), and the enforcement of strict biosecurity measures has been a key issue in debates and discussions about CSG development and its associated movement of people and vehicles. Interviewees emphasised that biosecurity management is successful only when gas companies, government regulators, and farmers work in concert, which is a valuable lesson for future energy projects. Some stakeholders highlighted that biosecurity risks in CSG operations have been partially mitigated over time through reduced site visitation and more structured access protocols. For instance, wells are now typically visited only every few months, reducing the frequency of movement across properties. This reflects a broader lesson on the need for ongoing coordination between operators and landholders to manage the cumulative impacts of access and uphold biosecurity standards.

Landholders reported several occurrences where contractors breached biosecurity protocols or failed to recognise their importance. Incidents of biosecurity lapses have significantly hindered agricultural operations and strained coexistence relationships, underscoring the need for stricter enforcement and enhanced training of all personnel involved. These breaches disrupt farming activities and erode trust among stakeholders, making it imperative for future projects to enforce rigorous biosecurity standards.

3.3.2 Leading practices examples on environmental management

Groundwater Management and Make Good Agreements

The Office of Groundwater Impact Assessment (OGIA) manages groundwater resources within Queensland's [Surat Cumulative Management Area](#) (CMA). Established in 2011, the Surat CMA extends from Toowoomba in the east, to Mitchell in the west, and from Goondiwindi in the south, to north of Blackwater in Central Queensland, covering coal seam gas (CSG), conventional oil and gas, and coal mining tenures². OGIA's independent mandate is to assess the cumulative impacts of groundwater from all resource activities and design proactive management strategies, funded by an industry levy.

A key component of these strategies is the [Underground Water Impact Report](#) (UWIR), which assesses the cumulative effects of groundwater extraction by resource tenure holders and outlines measures to mitigate identified impacts. Suppose it shows that a bore will be impaired, in that case, the UWIR automatically triggers legally binding "make-good" duties e.g. companies must undertake baseline and bore assessments, physically restore the water supply by deepening, re-drilling, or reconnecting the bore, or negotiate and lodge a make-good agreement that compensates the owner until the full supply is reinstated.

Over 700 make-good agreements have been executed across the basin, and OGIA audits compliance annually. The model's strength lies in its basin-scale lens: it converts dozens of individual Environmental Management Plans into a single, enforceable safety net that protects

² <https://www.ogia.water.qld.gov.au/surat-cma>

farmers, towns, and ecosystems, while giving companies regulatory certainty and clear closure pathways.

Compliance and Enforcement approaches

The then Department of Natural Resources, Mines and Energy established a dedicated coal seam gas compliance unit by pooling staff from both the resources and environment portfolios, providing landholders and communities with a single point of contact for enquiries, complaints, and incident investigations. The CSG Compliance Unit was established to ensure that CSG companies adhere to their legal obligations, focusing on sustainable development and balancing the interests of residents, landholders, and the resources sector.

Currently, its functions sit within the broader [Resources Engagement, Assessment, and Compliance Hub \(REACH\)](#), extending a similar risk-based, one-stop approach across all resource activities, not just coal seam gas, so the department can continue balancing community, landholder, and industry interests through coordinated compliance monitoring, engagement, and enforcement.

Evolution of well construction and abandonment codes

Between 2011 and 2019, Queensland progressively strengthened its [Code of Practice](#) for the Construction and Abandonment of Petroleum Wells and Associated Bores in Queensland, establishing it as the legally binding benchmark for the entire well lifecycle. Compliance with this Code is now a statutory requirement: all petroleum and coal-seam-gas operators must adhere to design and drilling standards, as well as maintenance and final abandonment, ensuring wells are built, managed, and decommissioned to protect groundwater, prevent gas migration, and safeguard landholders.

[This code](#) aims to achieve long-term well integrity, ensure the containment of petroleum, and protect groundwater resources. It provides operators with guidelines to comply with their obligations under Queensland's petroleum legislation, emphasising industry standards and good oilfield practices.

Biosecurity measures in resource operations

Leading CSG operators now view biosecurity as a shared land management task, rather than a mere compliance exercise.

It was explained how leading companies will sit down with landholders, especially those running sensitive systems such as certified organic or horticultural enterprises, to co-design [property-specific protocols](#) and embed them in Conduct and Compensation Agreements (CCAs). Jointly agreed measures typically cover vehicle wash-down, weed-seed inspections, seasonal access windows, and chemical-use restrictions, with clear audit and review clauses.

There is a precedent of coexistence between a certified-organic property with active gas wells, showing how bespoke BMPs can protect market accreditation while allowing resource operations to proceed. This collaborative, CCA-anchored approach is now regarded as a leading environmental management practice across Queensland's gas fields.

3.4 Economic diversification and local investment

While resource development can bring short-term growth, long-term prosperity depends on diversifying local economies and investing in future industries. This includes support for local enterprises, infrastructure, and workforce capabilities. This theme explores the lessons learned about how economic benefits can be extended and embedded within regional communities.

3.4.1 Lessons learned from the CSG development in Queensland

A strategic vision must be matched by local readiness

The rapid development of a CSG industry in Queensland was underpinned by a shared industry-government vision for regional economic diversification and growth. However, interviewees shared how local governments were initially “caught off-guard” in that they lacked the knowledge, staffing capacity and baseline data to “keep up with” the demands of the new industry and to manage the social and economic impacts and benefits. Local councils had little experience in dealing with global companies and said they didn’t understand their “bargaining power” to better align the new investment with their priorities. Councils have built that capability over time, and through “hard-earned experience”, have since developed clearer land-use plans, upskilled staff, and negotiated stronger community benefits over successive project cycles.

The key lesson here is two-fold. A bold strategic vision can unlock significant capital and spur ancillary industries, but it must be paired with early, well-resourced support for local government planning and partnership frameworks. Where councils stepped up, the vision translated into coordinated infrastructure upgrades, targeted workforce programs, and more resilient local economies. [Western Downs’s Community Partnering Framework](#) is often cited as the leading practice of this. Without that groundwork, significant energy projects risk remaining siloed investments that deliver short-term gains yet leave communities struggling to catch up.

Coordinated local content development fuels business growth and community empowerment

Harnessing and growing local expertise and resources offers immense potential for stimulating regional economies. As one interviewee described, “*local content can be done, but it’s not easy*”. CSG industry development has demonstrated how local businesses can benefit from being integrated into supply chains and infrastructure projects, but this requires deliberate and targeted support from the industry, state government, local economic development organisations and local business groups.

Another lesson is to specify timelines for economic participation clearly. This involves outlining the phases of projects and development, as well as the types of opportunities that come (and go) with each phase. Many interviewees noted the challenges of understanding opportunities for participation given the fragmented nature of various approvals and project timelines, different types of infrastructure required and different rollout schedules for each project, which made it “almost impossible” to accurately know when and where the industry would need people, goods and services. This was seen as a significant hurdle for local participation. They explained that when exploration and development, pipeline construction, and support-service contracting run on disconnected schedules, small and mid-size local enterprises struggle to anticipate opportunities or scale up in time.

Some initiatives were developed to encourage greater local participation including targeted and subsidised training, support for developing business capability statements and accessing procurement portals, simplified paperwork, and early visibility of contracts. As one supplier recalled, “[CSG has] really, really high [standards], and so trying to get them up to speed was always an issue, there was a lot of paperwork to do. But all the companies really welcomed local content wherever they could, and local business engagement.” The lesson is that local content required active support and a commitment by proponents to adapt and “go above and beyond” their standard procedures to accommodate local suppliers and talent. The combination of coordinated planning and targeted capability-building is a critical lesson for future large-scale energy projects.

Diversified labour influx reshapes regional communities and economic landscapes

Interviewees highlighted that the influx of highly skilled professionals and culturally diverse unskilled labour during project development reshapes regional communities in complex ways. Skilled workers bring technical expertise and can elevate local standards in business practices, while unskilled workers contribute to essential service roles and foster cultural vibrancy. This diverse labour force can drive knowledge transfer, productivity, and social diversity.

However, these dynamics also pressure regional infrastructure, housing, and services, requiring proactive planning and investment. A key lesson from Queensland’s gas experience is anticipating labour competition across sectors, particularly agriculture, which often struggles to retain and attract workers during major resource projects. Interviewees noted that competition for labour has been a source of local tension and disruption. Local businesses reported difficulties in managing workflows and delivering projects on time, contributing to a reluctance to expand operations or take on apprentices, citing concerns that once trained, staff are often drawn to higher-paying roles in the gas sector. As such pressures are likely to intensify during future developments, coordinated and place-based regional workforce strategies will be essential to balance industry needs, protect local business continuity, and support community cohesion.

3.4.2 Leading practices examples on economic diversification and local investment

Regional infrastructure enhancements and business capability development

The gas industry has made significant contributions to regional infrastructure and business development. One key example is the [Roma Airport upgrade](#), completed in 2012, which was partly funded by the Queensland Government and the gas industry and supported the expansion of Fly-in Fly-out (FIFO) operations for the CSG industry. This upgrade enabled greater passenger capacity and enhanced regional accessibility for the industry and the public. While primarily designed to serve the resource sector, the upgraded airport also improved connectivity for residents and opened opportunities for tourism, agribusiness logistics, and other regional services.

Additionally, the development of the [Dalby Events Centre, with funding and support from the gas industry, the government, and the regional council](#), provided a venue for large-scale events, community engagement, and industry networking, thereby enhancing Dalby’s capacity to host major activities associated with resource operations. Over time, this facility has also supported agricultural shows, educational expos, and cultural events, helping position Dalby as a regional service and event hub beyond the lifecycle of gas development.

Alongside infrastructure, business capability development was supported through initiatives like training in business capability statements. For example, [TSBE's Supplier Portal](#) was designed to enhance local visibility and enable businesses to rebuild their pipeline of work. Gas proponents encouraged or facilitated these statements to help local businesses articulate their services and meet the procurement requirements of large projects. This practice enhanced transparency and competitiveness among local suppliers, enabling them to bid more effectively for contracts within the supply chain. These strengthened capabilities often positioned local businesses to access future work in unrelated sectors, such as civil construction, renewable energy, and transportation.

Regional business advocacy and incubation initiatives

[Toowoomba and Surat Basin Enterprise \(TSBE\)](#) is a regional economic development organisation that extends its support beyond local government boundaries. Initially established with substantial funding from the gas industry, TSBE was designed to build local and regional business capacity to participate in emerging gas projects. It has since evolved into a broader success story, diversifying into agriculture, infrastructure, and export development sectors. TSBE has actively linked local businesses to national and international gas project supply chains. Through their Enterprise Hub and advocacy work, TSBE has been crucial in promoting local procurement and regional economic resilience. Their [Go Global Export Program](#) and Energy and Infrastructure division help regional enterprises navigate complex tendering processes and build export capability.

Business incubators, often supported by government and industry partners, have also emerged in gas-impacted regions to support startups and SMEs. The CSG company-funded [Business Navigator](#) program was a cited example. Delivered in partnership with TSBE, the program connects local businesses with mentors to help them grow and commercialise innovative ideas.

These incubators provide mentoring, infrastructure, and access to business networks, helping entrepreneurs develop services or products that align with regional economic opportunities, including those presented by the gas sector.

The [Central Highlands Development Corporation](#) (CHDC) offers a similar model, focusing on local investment, workforce development, and business support. Programs like the Economic Futures Forum and Business Navigator help strengthen non-resource sectors and ensure gas benefits are reinvested locally.

Local Chambers of Commerce further support this ecosystem by advocating for the inclusion of small businesses in major project supply chains, helping to align local capabilities with industry demand.

Attraction and retention of skilled workforce to regional areas

The expansion of the gas industry in regions like the Surat Basin prompted a range of strategies to attract and retain skilled and unskilled workers in rural and remote communities. Beyond national and international recruitment, companies partnered with TAFEs and universities to co-develop training programs while investing in local apprenticeship pathways, worker accommodation, and relocation support. These efforts focused on workforce supply and enhancing the liveability and employment landscape of host communities.

One of the most frequently noted community benefits was the return or retention of younger generations, who chose to stay in or move back to the region due to greater job diversity and improved economic prospects. While the FIFO workforce model remained dominant, many companies invested in local workforce development programs and apprenticeships to ensure a longer-term skills pipeline in host communities.

Commitments to First Nations participation

Major gas companies have formalised Indigenous Participation Plans or commitments within their social impact strategies. These plans often emerged from consultation with Traditional Owner groups, including employment targets, cultural heritage management protocols, Indigenous business procurement strategies, and investment in community infrastructure or education.

For example, gas companies have partnered with Indigenous businesses to deliver services such as fencing, catering, and construction, and have supported initiatives such as scholarships for Indigenous students. While cultural heritage assessments are a statutory requirement, many companies have taken additional steps to build enduring, collaborative relationships with Traditional Owners and Indigenous communities. These efforts aim to create broader social and economic benefits that support long-term engagement beyond regulatory obligations.

One criticism of these initiatives, however, is that Indigenous Participation Plans set “arbitrary quotas” and do not necessarily prioritise local Traditional Owners or their families. As one Traditional Owner noted, “yes, *they have these programs for jobs, but Indigenous includes... people from all over. It’s not about jobs for the local people*”. This reflects a broader concern that a quota-driven approach to Indigenous participation can overlook the rights and needs of local Aboriginal people.

A more common concern raised by Traditional Owners is that engagement often happens only when legally required, such as through Indigenous Land Use Agreements (ILUA) or Cultural Heritage Management Plans. This lack of early engagement was said to have resulted in missed opportunities around co-design and legacy benefits. This can result in gestures and initiatives being viewed as “tokenistic” by Traditional Owners, rather than genuine efforts to support Aboriginal culture, economic development and self-determination or long-term outcomes for future generations.

3.5 Delivering community benefits

Benefit-sharing has become a key mechanism for creating value for host communities, but its effectiveness varies. Transparent governance, community involvement, and alignment with local priorities are critical. This theme explores the lessons learned about what makes community benefit initiatives fair, effective, and enduring.

3.5.1 Lessons learned from the CSG development in Queensland

Understand community needs and aspirations for lasting benefits

Community expectations require companies to act in ways that align with local values, delivering benefits that are important to the community. When planning to provide community benefits, it is essential to engage with local councils and communities to understand both their immediate needs

and long-term aspirations, ensuring that social investments align with and further local priorities. Many stakeholders recalled that, early on in CSG development, social investments by companies appeared to be 'ad hoc' and too 'piecemeal' to yield any significant overall community benefit. For many, this resulted in unmet expectations and contributed to feelings of injustice when impacts were felt but benefits were not seen.

Another insight from the interviews was that engaging local governments as trusted conduits for community vision and priorities can be beneficial, rather than relying on individual engagement. Local councils often hold long-term strategic, economic and community development plans shaped through extensive community consultation. As one participant explained, *"It's so much safer for a project to invest into something [Council plans] that's part of a strong, strategic plan... that's had really broad community consultation."* These strategic plans are more than bureaucratic documents; they reflect deeply rooted community aspirations, sometimes sustained over decades.

When community voices are genuinely integrated into project design, the outcomes are more balanced and mutually beneficial, ultimately enhancing trust and social license. Community needs and priorities change. Therefore, projects should have adaptive plans to deliver their community benefits. Equally critical is ensuring that projects deliver on their promises - consistency between intent and delivery reinforces credibility.

Leverage innovative pathways for creating community benefits

Initially, community benefits were conceptualised as predominantly financial benefits, whether through community grant funding, event sponsorship, or capital contributions to social infrastructure and other direct social investments. Over time, as the CSG companies consulted more with local communities and listened to feedback, more nuanced and innovative pathways for creating community benefits were realised, rather than just "paying for stuff" and creating dependency.

Some of the non-monetary but high-value initiatives cited include allowing time for CSG staff to participate in community volunteering work, encouraging staff to join local sports groups and teams, and offering "living local" bonuses as a direct incentive for staff to locate themselves within and contribute to the fabric of the communities they operate in.

Further opportunities for sharing benefits were suggested, including sharing freight costs with local businesses (for example, when CSG companies are ordering spare parts that agricultural producers might also need), or sharing bulk purchasing power (for example, when ordering tyres and equipment).

This is a particularly important lesson for renewable energy projects that will not have social investment budgets to provide community benefits comparable to the CSG companies.

Balancing funding allocation for immediate and strategic community opportunities ensures equitable development

Early social investments, such as infrastructure repairs and local service upgrades, played a key role in meeting urgent community needs as a starting point for broader acceptance. While these initiatives delivered quick, visible benefits, the focus has since evolved. There has been a noticeable shift away from short-term, high-profile contributions (e.g. sponsoring sporting teams or

community events) toward more enduring, legacy investments. These include road and airport upgrades, community development programs, housing initiatives, and enhanced access to social services. For example, an energy company's sponsorship of dental services in Wandoan illustrates how targeted investment can address longer-term needs.

The key lesson is in the evolution from *ad hoc* or symbolic contributions toward well-structured, sustained support that aligns with regional development goals. Often, these legacy projects represent a collaboration between a CSG company and another organisation. A well-calibrated community benefit funding strategy enables a more resilient integration of immediate community benefits with broader regional growth. Diversified investment portfolios, which balance quick wins with strategic initiatives, can respond to community priorities and offer a sustainable pathway to regional progress.

A consistent framework for reporting local benefits enhances transparency and trust

The gas industry's experience underscores the importance of having a clearly defined and consistent framework for reporting community benefits from the outset. Interviewees noted that in the absence of sector-wide standards, reporting practices have often been sporadic, company-specific, and difficult to compare. This fragmentation has made it challenging to track cumulative benefits or evaluate outcomes across regions. Without accessible and aggregated data, it becomes difficult for communities to assess the full scope of benefits delivered. This leads to perceptions that the industry may not be doing enough, even when commitments are met. A robust reporting framework would include agreed-upon indicators, regular performance reviews, and public-facing communication of investments and outcomes. This would support accountability and help build trust and shared understanding across stakeholders.

Collaborative partnerships deliver lasting, meaningful benefits to local communities

Projects succeed when all parties engage in open dialogue and work towards shared goals. Queensland gas industry projects that encouraged collaboration through joint committees, co-designed community projects, and integrated planning sessions demonstrated superior outcomes in terms of local benefits and long-term social value.

Interviewees noted that collaboration facilitated the pooling of resources, expertise, and local knowledge, resulting in tailored solutions that addressed both immediate challenges and longer-term community aspirations. For example, cross-sectoral initiatives such as [local content development and procurement initiatives](#), as well as collaborative industry hubs, supported regional supply chain readiness and improved local business participation in procurement processes. Similarly, [the Regional Skills Investment Strategy](#) contributed to building workforce capabilities aligned with project demands. This partnership approach improved project transparency and accountability, cultivating an environment where community needs were prioritised alongside industry objectives. The integrated efforts of diverse stakeholders allowed for innovative problem-solving and enhanced the overall resilience of local communities.

Decoupling social investment from corporate branding amplifies the collective impact of community initiatives

When social investments are closely tied to corporate identity, they may be perceived as superficial or self-serving rather than genuinely community focused. Interview insights highlight that pooling

investments across multiple projects, without heavy branding, enables more flexible, targeted support for local needs. As an interviewee noted, “*meaningful long-term social investment*” was possible in regions like the Western Downs due to high-capacity local government and strong coordination by groups like the Chamber of Commerce and TSBE, which “*has been really successful... in an environment that’s made it easy.*” Community benefits valued as a social impact rather than a marketing tool create a positive impression on local communities because the industry demonstrates its genuine intent to help them. Future energy projects should consider multifaceted funding mechanisms that prioritise collective social impact over corporate visibility.

3.5.2 Leading practices examples on delivering community benefits

Social Impact Management Plans (SIMPs) and mandatory reporting

Social Impact Management Plans (SIMPs) are required under Queensland’s State Development and Public Works Organisation Act 1971 for major resource projects. Integrated into the EIS process, SIMPs are the result of a thorough social impact assessment process, documenting how social impacts will be managed, including mitigation measures, their effectiveness, responsibilities, and timelines. Proponents must also meet mandatory reporting obligations, which enable government oversight and ensure ongoing accountability throughout the project lifecycle. For example, one CSG-LNG project developed a SIMP that includes measures such as providing temporary accommodation for workers to alleviate pressure on local housing markets and investing in community development initiatives. Mandatory reporting within these SIMPs ensures transparency and accountability for a range of social impacts, both positive and negative. While social impact assessments are required for other large projects (such as renewable projects and those assessed under the Planning Act), SIMPs are not mandatory, but represent leading practice in monitoring and reporting the management of social impacts.

Community development plans and addressing local priorities

Gas companies contribute to the development of community plans by providing financial support and collaborating with local stakeholders to identify and address community priorities.

In Wandoan, for instance, the community developed a 10-year plan to reverse population decline and promote sustainable growth. The plan focuses on enhancing local infrastructure, supporting economic diversification, and fostering community resilience. Industry funding and involvement have been instrumental in implementing initiatives outlined in such plans. Many local authorities already have community planning frameworks, which can be strengthened through targeted investment from the industry. In Wandoan’s case, industry funding and collaboration played a crucial role in advancing initiatives within the plan, demonstrating how such partnerships can enhance the reach and impact of local development strategies.

Transitioning from grants and donations to significant legacy projects

The gas industry has shifted its community investment focus from providing small-scale donations and grant programs, such as barbecues and sponsoring sporting teams and community groups, to supporting larger, long-term projects that leave enduring benefits.

Examples include establishing the Chinchilla Clinical Training Centre, which enhances regional health education by providing local training for healthcare professionals. Additionally, collaborative

initiatives such as the [Heart of Australia](#) program, which delivers specialist medical services to remote areas, and the development of the [Miles Historical Village Museum](#) contribute to cultural preservation and tourism. The construction of the Tara helipad has improved emergency response capabilities in that community. In a true partnership, major gas companies pooled together to support the [LifeFlight Surat Gas Aeromedical Service](#) (SGAS) Rescue helicopter servicing the Roma region.

Independent town-level data reporting (UQ Indicators)

[The University of Queensland's Boomtown Toolkit](#) (UQ Indicators) provides a framework for collecting and analysing indicators in communities affected by resource developments, including population changes, housing affordability, wages and income, and employment rates. This data-driven approach enables companies and communities to make informed decisions, track progress, and proactively address emerging issues.

Independent data reporting at the town level is considered a leading practice because it enhances transparency, builds trust, and provides a shared evidence base for all stakeholders. When updated regularly and made publicly accessible, this kind of reporting can support long-term planning, highlight disparities in development outcomes, and enable more accountable and responsive governance.

3.6 Workforce development

Resource projects have the potential to contribute to regional skills and employment, but this depends on inclusion, accessibility, and long-term planning. Building sustainable local workforces requires investment in education, training, and career pathways. This theme explores the lessons learned about how workforce initiatives can deliver lasting regional value.

3.6.1 Lessons learned from the CSG development in Queensland

Financial and non-financial incentives are needed to reduce competition and conflict between local employers and the new industry in the face of intense competition for labour

CSG development created unanticipated levels of conflict and competition (which still exists today) between local employers and the energy sector due to intense competition for labour, especially for trade-related employees. Local trade services and manufacturers were often unable to deliver services (with significant economic impacts to their businesses) due to skills shortages as skilled employees moved to higher-paying roles in the CSG sector. Recruiting new staff was “almost impossible” because associated housing shortages and high rents prevented people from moving to the region, despite opportunities for work. Competition for labour drove wages up. Unable to compete with the high wages offered by CSG companies, some local employers began offering novel and innovative “loyalty rewards” to employees who remained. Initiatives focused on improving lifestyle and wellbeing, including additional holidays and time off, handyman and mowing services at their private residence (for weekend relaxation), gym memberships, reciprocal discounts with other local businesses, and access to holiday apartments. Although there are lessons to be learned from the CSG experience, skills shortages, competition for labour and resulting costs to local businesses remain concerns across the region.

Anticipating skills gaps and securing housing early would go a long way to ensuring there is enough appropriately skilled labour to go around. Incentives are needed to attract workers to the region. Some businesses reported having to buy houses to provide accommodation for their staff. Discounted or free accommodation then became an incentive offered to recruit workers to the region.

Expanding workforce capabilities through integrated skill development increases community support

Interviewees mentioned that the project workforce development plan should extend beyond technical skills to encompass essential supporting services in the region, such as childcare and healthcare. Industry's growth demands a workforce that is not only skilled in specialised technical functions but also supported by robust ancillary services. *"If employees' families are cared for, it improves retention and overall job satisfaction"*.

For instance, local community representatives noted how improving childcare provisions and accessible health services allows greater participation by women in the workforce and relieves stress for those in the workforce. Improved services also help the broader local community. Collaborations that address these broader skill requirements lead to a more resilient supply chain and a vibrant local economy. For example, one interviewee commented, *"you might have this great well-paid job, but there's nowhere in town to get a haircut"*.

Anticipating cyclical resource needs through timely industry insights strengthens workforce planning

The gas industry operates on specific cycles, with peak periods requiring tailored workforce planning and clear lead times. Industry representatives stress that timely anticipation of resource needs is essential for aligning training programs with the operational phases of projects. For example, interviewees highlighted how a good understanding of industry phases allows educational providers and supporting industry bodies to synchronise their curricula and recruitment drives, ensuring that the right skills are available when demand surges. Advanced planning facilitates the standardisation of procedures and the creation of protocols that accommodate fluctuating market conditions. New industry players can use strategic forecasting and proactive scheduling to prevent skill shortages and ensure operational continuity.

Quality, long-term, and fit-for-purpose housing solutions are essential to ensure good local employment and retention

Those with long-term project contracts should be integrated into the community. Interviewees observed that when contracts extend beyond 12 months, support to secure quality housing becomes paramount in retaining skilled workers. However, a one-size-fits-all approach to workforce accommodation does not work. Some communities prefer workers to stay in camps outside town, while others want them housed locally. Some support a hybrid model, where workers live in camps but actively use local services. Co-planning ensures that housing strategies align with community expectations and help build positive relationships.

Employees residing locally enhance project efficiency and strengthen the community's social fabric. Local representatives noted that the high turnover of industry employees often makes it difficult for them to establish any meaningful connections. Additionally, they believed that if more

senior industry officials resided locally, it would help retain the local workforce. Future energy developments must incorporate to build resilient, community-oriented facility services operations.

Welcoming new talent while preserving community identity strengthens social fabric

New people in local communities inject fresh perspectives and skills. However, interviewees cautioned that rapid demographic changes should not come at the expense of social cohesion and identity. Community members and local government representatives observed that while the arrival of new employees was welcome in that it enhanced cultural diversity and stimulated economic growth, it also placed additional demands on housing, public services, and local infrastructure. Careful management of this transition is crucial to preserving community priorities and ensuring that development benefits are shared equitably. Local community members advocated for balanced planning and “onboarding” measures that support integration without compromising established community values in future projects.

3.6.2 Leading practices examples on workforce development

Collaborative investment in apprenticeships (e.g. childcare and hairdressing)

The gas industry has actively co-invested in [apprenticeship programs](#) to cultivate a skilled workforce essential for its operations. Notably, the industry has extended its apprenticeship initiatives beyond traditional technical roles to include childcare and hairdressing. This diversification aims to support the broader community by providing employment opportunities in various sectors, thereby enhancing the socio-economic fabric of the regions where the industry operates.

'Safer Together'- standardising safety requirements across projects

[The 'Safer Together' initiative](#) represents a concerted effort within the gas industry to harmonise safety standards and practices across various projects. Established as a not-for-profit, member-led organisation, 'Safer Together' brings together operating companies and contractors to develop and implement safety protocols collaboratively. The initiative simplifies and standardises safety requirements to ensure consistency and clarity, reducing the risk of incidents.

'Country University' Learning hubs and STEM enrichment programs

The gas industry has supported the establishment of ['Country University' learning hubs](#) and STEM (Science, Technology, Engineering, and Mathematics) enrichment programs. These hubs offer accessible educational resources and training opportunities in rural and regional areas, bridging the gap between urban and remote communities.

Employment opportunities for local youth

Initiatives such as the [KAEFER Indigenous Employment and Pathways Program](#) (Rise up to work) offer training, education, and employment pathways in various roles within the industry. For instance, participants receive training in scaffolding, administration, and other essential skills, leading to sustainable employment. These programs are designed to address barriers to employment, promote diversity and inclusion, and support the economic development of Indigenous communities.

'Live Local' Campaigns

Through ['Live Local' campaigns](#), the gas industry encourages its workforce to reside in the communities where they operate. This initiative aims to support local economies and reduce the environmental impact associated with long-distance commuting. By incentivising employees to live locally, the industry contributes to the vitality and sustainability of regional areas.

Gas companies have implemented variations of this approach by offering relocation support, housing subsidies, and lifestyle incentives to encourage operational staff and contractors to settle in towns such as Roma, Chinchilla, and Miles. These campaigns are often developed with local governments and regional development bodies to align with broader community planning goals. While challenges remain, such as the limited availability of suitable housing and services in some regions, the 'Live Local' model is increasingly seen as a preferable alternative that supports regional sustainability and social licence to operate.

3.7 Stakeholder partnerships/collaboration

Collaborative approaches can help resolve complex issues and strengthen legitimacy. Effective partnerships require clarity, mutual accountability, and shared goals that span multiple sectors.

No single entity, operating in isolation, can create the environment necessary for the development of a social licence to operate. Collaboration and partnerships involving government, industry, communities, First Nations peoples, and research institutions are essential to build shared trust and understanding, and to realise mutual benefits from relationships that require coexistence.

This theme explores the lessons learned about how partnerships among government, industry, and communities are formed, sustained, and challenged.

3.7.1 Lessons learned from CSG development in Queensland

Novel and unique partnerships drive cross-sector innovation and collaboration

Novel and unique partnerships, 'not the usual crowd', can catalyse cross-sector innovation and improved project and community outcomes. Interviewees recount how unconventional alliances, bridging research and industry, as well as government and private sectors, influenced positive outcomes for communities. These partnerships create a dynamic environment where diverse expertise converges, allowing each partner to contribute distinct insights and resources.

Novel partnerships and collaborations also emerged in opposition to the CSG industry, influencing CSG operations and communities. Such collaborations can emerge 'organically'; however, they can also be 'orchestrated' for a specific function or purpose.

Structured incentives foster collaboration across projects in competitive environments

Collaboration between projects in the same or different industries does not generally happen 'naturally' and requires structured incentives or persuasive mechanisms to exist and persist in an otherwise competitive environment. Interviewees observed that in a fast-paced industry like the CSG sector, individual projects tended to operate in silos, driven by competitive pressures that hinder spontaneous cooperation. However, when proper incentives are established, projects are more inclined to share resources, technical knowledge, and best practices, creating synergies that

benefit the broader energy sector. Interviewees noted that even modest incentives, such as cost savings or delivering community benefits, can bridge the gap between isolated efforts and coordinated action. However, this often requires external coordination, which is expected to be provided by the government. In this context, persuasion techniques such as shared success stories and performance benchmarks have effectively aligned disparate projects towards common goals.

Unified industry collaboration strengthens social licence and impact management

When the gas industry presented a united front, it was able to generate better community outcomes, utilise resources effectively, and help mitigate social risks. As highlighted by several interviewees, this ‘Safer Together’ approach encourages collective responsibility where each entity contributes to addressing shared challenges. Collaborative efforts in impact management, such as coordinated environmental monitoring and joint community engagement initiatives, have demonstrated the capacity to balance operational demands with social and ecological considerations. A cohesive industry strategy, built on partnerships and joint initiatives, creates a sustainable framework that benefits all stakeholders.

3.7.2 Leading practices examples on stakeholder partnerships

Establishing trusted sources of information and research

The gas industry collaborates with reputable research institutions to ensure that independent, high-quality scientific data guides development. The University of Queensland's [Gas & Energy Transition Research Centre](#) (previously known as the UQ Centre for Natural Gas), supported by the gas industry, draws on expertise from across the university faculties to conduct multidisciplinary research on the various challenges associated with the production and supply of natural gas. Similarly, the [Gas Industry Social & Environmental Research Alliance](#) (GISERA), a collaboration between CSIRO, government bodies, and the gas industry, focuses on environmental and socio-economic topics related to gas development. These partnerships provide communities and policymakers with reliable information, fostering informed decision-making and public trust.

Government leadership in field engagement

The Office of Groundwater Impact Assessment (OGIA) plays a central role in overseeing the cumulative impacts of groundwater extraction in Queensland's gas fields. Through on-ground fieldwork and scientific assessment, OGIA contributes to maintaining environmental standards and strengthening community confidence in government oversight. One notable initiative was OGIA's trial on a landholder's property in 2014, which several stakeholders described as “*quite ground-breaking at the time*” due to its transparent and collaborative approach.

Stakeholders stressed the importance of a robust regulatory framework to prevent long-term harm: “*The Government's got to have all the regulations in place to make sure that we do go from Greenfield to Greenfield,*” said a landholder, referring to a model of development that begins and ends with land returned to a productive or natural state. OGIA's field presence and regulatory role were viewed by interviewees as instrumental to delivering the ‘complete package’ of responsible resource management, ensuring environmental protection, accountability, and long-term community trust.

Partnerships promoting science and culture

One gas company collaborates with the [Queensland Museum for the World Science Festival](#) Queensland, aiming to increase student engagement in STEM subjects. Similarly, another gas company partners with the [Queensland Symphony Orchestra to deliver music education](#) and concerts in regional areas. These initiatives enrich community life and demonstrate the industry's commitment to social responsibility.

Collaborative community initiatives: The Chinchilla Liquor Accord

The [Chinchilla Liquor Accord](#) exemplifies collaboration between the gas industry, local businesses, and law enforcement to promote community safety. This initiative involves collaboration among the Queensland Police Service, local publicans, the RSL, and gas companies to manage alcohol-related issues and ensure a safe environment. Such partnerships demonstrate the industry's commitment to positively impacting the communities in which it operates.

Importantly, the Liquor Accord highlights how cross-sector collaboration can address social challenges linked to rapid industry growth. The presence of a large, mostly male, transient workforce in resource regions often raises concerns about antisocial behaviour and community cohesion. By proactively supporting local agreements like the Liquor Accord, gas companies helped co-create tailored responses that reflect local priorities.

3.8 Infrastructure and regional growth

Resource projects often drive the development of new infrastructure, but the benefits can be uneven or short-lived without broader planning. Aligning infrastructure investment with regional priorities ensures that benefits are more inclusive and lasting. This theme explores the lessons learned about how infrastructure planning can contribute to long-term regional growth.

3.8.1 Lessons learned from CSG development in Queensland

Government planning and coordination are essential to optimise infrastructure delivery and avoid boom-bust cycles

Effective government planning and coordination, both spatially and temporally, are critical to aligning infrastructure development with industry expansion. Interviewees emphasised the importance of integrated infrastructure planning, including provisions for shared or common user infrastructure, which can deliver efficient economic outcomes while minimising social and environmental impacts.

Coordinated approaches, where infrastructure is staged to match industry growth and designed to serve multiple users, can reduce costs, limit cumulative impacts, and improve long-term community benefits. When guided by strategic oversight, a measured rollout of services such as transport links, utilities, and social infrastructure is key to avoiding infrastructure-led boom-bust cycles.

Managing cumulative impacts through a comprehensive needs assessment

Interviewees consistently emphasised that isolated assessments of individual projects are insufficient in regions undergoing simultaneous infrastructure development. Instead, a holistic approach that integrates needs assessments across all projects clarifies the collective strain on resources, such as transportation networks, utilities, and public services.

The initial phase of gas development did not fully account for the cumulative pressure of multiple projects, leading to infrastructure oversaturation and operational inefficiencies. While later, the gas industry began incorporating rudimentary cumulative assessments into its plans, they remained largely limited (to environmental parameters) in scope. As one interviewee noted, *“Perhaps individually [projects] might not [have] much of an impact on local infrastructure, but there’s that cumulative effect-yes, cumulative”*. This sentiment was echoed across interviews, with participants stressing the need to assess the combined impact of multiple projects within the gas sector and across industries.

Although some mechanisms exist, such as the role of the Coordinator-General in encouraging cumulative impact assessments, participants recognised limitations in practice. *“They try and push some of that cumulative impact assessment onto developers, but... that can be very difficult to do... But yeah, I think there is more that the industry can do”*. Landholders and community representatives also argued that future development must be accompanied by a comprehensive, area-based cumulative impact assessment of all existing projects in the region, as well as new project developments.

Empowering local councils strengthens regional infrastructure management

When equipped with instruments such as Road Infrastructure Agreements, comprehensive local planning and approval processes, adaptable rate structures, and management protocols for temporary camps, local councils can play a pivotal role in coordinating regional development.

In the early stages of Queensland’s gas industry expansion, local councils were often under-equipped, resulting in delays in infrastructure approval and the adoption of reactive rather than proactive measures. Recent experience with some councils that have adopted detailed and integrated planning indicates that community concerns are effectively integrated into decision-making when councils are heavily involved in planning, development expansions, or new developments.

New projects should consider this and have a provision to equip local councils with robust tools, such as impact assessment frameworks, data-sharing platforms, planning support systems, and capacity-building resources tailored to the project’s scale and regional context. Project proponents should also engage with the local government early to provide briefings on project plans and capacity-building efforts, if they plan to use any of these tools.

Anticipating long-term maintenance costs of community investments ensures infrastructure resilience and community liveability

Interviewees emphasised that while the initial deployment of infrastructure, such as roads, utilities, and community amenities, is vital, the ongoing costs associated with maintenance, repair, and eventual upgrades often determine the long-term viability of these projects. Early gas industry developments often underestimated the maintenance expenses associated with their community investments, leading to deteriorating public facilities or additional and unbudgeted costs for local councils. For example, park and playground upgrades were undertaken with one-off community grants from industry, but they require ongoing maintenance and upkeep, which often falls within the responsibility of local government. It was suggested that there could be greater consideration of ongoing costs associated with social investments in community infrastructure, particularly in light

of costs for local government, especially if it might impact local government rates. By anticipating these expenses, governments and industry partners can develop more realistic financial models that ensure continued functionality and resilience, which can be maintained over the long term by local governments.

Future energy projects must incorporate robust, long-term financial planning to manage ongoing costs effectively, safeguarding public investments and ensuring lasting benefits for all stakeholders.

3.8.2 Leading practices examples on infrastructure and regional growth

Spatial mapping of major projects by Western Downs Regional Council

The Western Downs Regional Council (WDRC) utilises advanced [spatial mapping tools](#) to oversee and coordinate major projects within its jurisdiction, including those related to the gas industry. Through their interactive mapping platform, WDRC provides detailed geospatial data on planning scheme requirements, flood impacts, waste collection, and underground services.

This platform enhances transparency in decision-making and supports proactive land-use planning, which is particularly important in regions undergoing rapid infrastructure expansion. By integrating gas industry activities into local spatial data systems, WDRC ensures alignment between resource development and community infrastructure needs. The public availability of interactive maps also builds trust with stakeholders by providing accessible information.

Road infrastructure agreements in Queensland's gas industry

Road Infrastructure Agreements (RIAs) are established between gas companies and local authorities to address the impact of increased industrial traffic on public roads. [For example](#), the CSG-LNG projects in Queensland manage their impact on the regional road network by entering into infrastructure agreements with the Department of Transport and Main Roads (TMR) and regional councils as a condition of their EIS approval. Such collaborative arrangements help mitigate wear and tear on infrastructure, enhance safety, and support the sustainability of regional transportation networks.

These agreements represent a proactive model for managing the interface between public infrastructure and private industrial activity. By requiring companies to contribute financially and operationally to infrastructure upkeep, RIAs ensure that the costs of industrial development are not borne solely by local governments or residents. Moreover, they help build positive relationships between councils and proponents, reduce road safety concerns, and provide clearer expectations during project planning and approvals.

For local governments, RIAs are one of the few points of leverage they have, to require certain actions and behaviours from large projects that would otherwise be controlled through State government processes.

4.0 Discussion

As Australia moves deeper into its energy transition, reimagining future energy projects through the lens of regional CSG industry experience offers valuable strategic insight. The lessons captured in

this study, drawn from diverse stakeholder perspectives, highlight systemic dynamics, structural constraints, and the complex web of relationships between industry, governments, and local communities. These insights are not only relevant to the gas sector but also instructive for shaping the next generation of regional energy developments, encompassing renewables, future fuels, transmission infrastructure, and critical minerals.

What emerges from this study is more than just a catalogue of best practices or cautionary tales - it elicits a new generation of strategic questions about how we plan, deliver, and govern energy (and other major) projects. These questions challenge existing assumptions and highlight the need for more adaptive, inclusive, and context-aware approaches as Australia navigates the complexities of its energy transition.

Regional energy projects are multi-industry ecosystems, not isolated ventures

One of the key insights from this study is that resources and energy projects, though controlled by different companies, do not operate in isolation. They continuously interact with existing industries (particularly agriculture), water resources, community services, housing markets, workforce and education pathways, local governance structures, and, of course, other projects in the area. Each of these industries influences the operations of other industries in that area.

However, current regulatory and planning frameworks seldom assess and approve projects in consideration of the complete project ecosystem of the particular region. Communities are still consulted separately for different projects, leading to consultation fatigue and conflicting information. Additionally, communities often receive siloed, short-term, and small-scale benefits. In contrast, a coordinated, place-based approach to creating a broad range of community benefits - that spans energy, resources, and other sectors - could help deliver longer-term, integrated, and more substantial legacy benefits by aligning efforts and pooling resources across multiple developments.

A shift in approach is needed towards one that views regional energy and resource projects as components of a broader economic ecosystem. Therefore, planning new developments should explicitly consider the goals and operations of other industries in the same landscape, as well as building systems for multi-project collaboration or resource sharing, such as roads, data, land access, or workforce sharing. Cross-project and industry collaboration should not be an afterthought. Still, they should be a standard part of the project approval process, and the government should have mechanisms in place to ensure its effective implementation.

Moving beyond coexistence to co-design and mutual benefit, rebalancing the agency between developers and the region

Queensland's CSG experience was heavily focused on the notion of coexistence, ensuring, 'after the fact', that the gas industry could operate along with agriculture and local communities. While the coexistence model may have helped reduce conflict and improve transparency, it wasn't without friction. The goalposts are shifting for future energy projects, particularly in the renewables and transmission sectors. The coexistence approach used for CSG integration is no longer sufficient for balancing multiple, competing land use values and coexisting with local communities. Regions are requesting upfront co-design and are seeking greater agency in shaping the

development, including where it should occur, how benefits are distributed, and where other regional industries intersect to co-develop together.

This goes beyond consultation-focused community engagement (i.e. about how the project will be delivered). It requires establishing novel governance mechanisms that allow local councils, Traditional Owners, local industries, and the energy proponents to sit at the same planning table early, with shared responsibilities and decision-making power. This might mean region-specific social agreements, co-developed land-use overlays, or shared investment funds for community development. The expectation is clear: to minimise social risks and ensure long-term accountability, the project must be embedded in local agency from the outset. Embedding a project within a local agency isn't just good practice, it's a cornerstone of sustainable and ethical development. When communities have a sense of 'ownership' from the start, it enhances legitimacy, trust, and relevance, while reducing the risk of unintended consequences.

The coexistence conversation has moved beyond simply ameliorating or mitigating impact, to facilitating mutually beneficial outcomes – whether it be at an agri-enterprise, local business or community level. The ultimate coexistence goal is about 'leaving it better than when you arrived'.

Information is a shared structure that builds local data sovereignty

During the gas industry's development over the last two decades, industry, academic institutions, and government have accumulated enormous volumes of data on sub-surface properties, groundwater, land use, social and economic impacts, infrastructure utilisation, and local markets. However, much of this data remains inaccessible to local communities, councils, or even other project proponents. Often, the limited data shared was neither timely nor easy to understand. Local stakeholders also had a limited understanding of cumulative impacts and of making informed planning decisions based on them.

Future energy projects should reimagine data as a shared regional asset, not a proprietary tool. What would it look like if all regional energy projects contributed to and accessed a shared regional knowledge platform that covers environmental baselines, infrastructure usage, landholder preferences, and social trends? Such local data sovereignty would enhance information quality, data transparency, the quality of regional decision-making, resource utilisation efficiency, and reduce duplication of research work, monitoring, and stakeholder engagement.

Rewiring social investments from virtue-signalling to structural capacity building for regions

Queensland's CSG industry experience has shown that social investments tied to energy projects often lean heavily toward short-term, high-visibility benefits, such as event sponsorships, donations, or small infrastructure upgrades. While appreciated locally, communities also expressed expectations that industries would leave enduring legacies, particularly by helping to build key regional capacities. A notable example to follow for building regional capacities can be the industry-led Queensland Minerals and Energy Academy (QMEA), which has just celebrated its 20th anniversary, assisting Queensland students, particularly focusing on female and indigenous students, to broaden their knowledge and skills of the resources sector, providing a talent pipeline for resource sector careers.

Future energy projects can reframe social investments as long-term capacity building by supporting regional research hubs, funding enduring community service facilities (such as schools and healthcare), workforce training centres, or investing in local planning capabilities. Critically, these investments should be pooled across projects and industries, managed independently of corporate branding, and structured around regionally defined priorities. This shifts the narrative from doing good to strengthening the systems that regions need to manage the scale and pace of development over decades and beyond, rather than just the lifecycle of a particular project.

Supporting workforce development as a regional service system

One of the unexpected lessons from the gas industry experience is that workforce challenges were not only about finding people with relevant skills and technical training, but also included systemic bottlenecks, a lack of childcare facilities, housing, transport, or health services that hindered people's ability to participate in the workforce and live locally. With these enabling factors in place earlier, perhaps local economies could have been further boosted.

Future energy projects need to consider workforce development in terms of skills pipelines and as part of a broader regional service system. Workers are not just a labour unit; they are part of the local community and economy. For example, if they cannot find suitable housing, or if their partner is unable to access meaningful employment and family services (such as childcare, schools, interest groups) that support liveability in the region, they will not stay.

Developers, councils, and governments should collaborate to plan holistic workforce ecosystems (whether short-term or longer-term), supported by shared housing strategies, service partnerships, and cross-sectoral planning. This is particularly critical in regions with overlapping project timelines, diverse industry presence, and constrained labour pools.

Contractors are reputation carriers

Much of the gas industry's reputation was determined not by senior executives or engagement officers but by contractors. Their behaviour both on farms and in towns, their understanding of the land access rules, and how they handled safety, traffic, and biosecurity often defined how communities judged the project.

Yet, structural and accountable contractor engagement has often remained a blind spot in many energy projects. Future projects should treat contractors as strategic partners, not just service providers. That means clearer onboarding processes, better cultural and environmental training, local inductions, and real-time community feedback loops. Tracking contractor interactions digitally, as some gas companies have begun to do, can provide a live pulse check on local communities' sentiments and social risks, if done respectfully and transparently.

Self-regulation has its limits

While Queensland's CSG industry developed leading practice Codes of Conduct and demonstrated innovative responses to environmental and community issues, there were mixed views about the effectiveness of the 'hands off' regulatory approach taken by the Queensland Government. Industry self-regulation can work and certainly reduces the burden of compliance enforcement by governments (which is significant over a vast jurisdiction such as Queensland), but certain conditions must be in place. The most important of these is transparency in monitoring and

reporting of data, preferably with some mechanism for third-party or expert review (even if industry-funded) to check for bias and improve accountability. There should also be transparency about industry performance and individual companies' track records in compliance.

Plan for reuse, not just closure

One of the more forward-looking insights from the stakeholders was the need to embed end-of-life planning more strategically and reuse potential, given adequate consideration in project design. Regional communities often face stranded assets, such as camps, pipelines, or roads built for short-term use, which can take time to achieve adequate closure or remain in a reusable condition. Often, there is no adequate monitoring of these assets. The fear of stranded assets is more pronounced for renewable energy projects, due to a lack of clear communication on what would happen to solar panels and wind turbines if they are not used.

For new energy project infrastructure, particularly in renewables and transmission, this is a great opportunity to explore the reuse potential of their project assets. End-of-life project planning should commence at the feasibility stage and involve communication with local communities prior to obtaining approvals. Monitoring mechanisms should also be in place to ensure energy developers fulfil their promises. Infrastructure design standards, planning approvals, and funding models should explicitly incentivise adaptability and regional reuse, following circular economy principles and regional development goals.

5.0 Conclusions

This report has attempted to document key lessons learned from Queensland's experience of coal seam gas development. The lessons have been derived from 25 interviews with a range of stakeholders and comments posted on an online discussion platform. Each interview captured a different perspective, with rich details of personal and professional struggles, reflections and learnings. The lessons identified here are not intended to represent an exhaustive list but to highlight some of the approaches taken in response to the challenges faced under the eight identified themes of coexistence.

The report highlights that the importance of early engagement, transparent planning and reporting, and genuine respect for community values are not optional add-ons—they are essential pillars of responsible industry practice and governance. Aligning project goals with local priorities through coordinated planning, inclusive decision-making, and robust data-sharing transforms fragmented efforts into enduring partnerships.

Empowering local councils, anticipating skills shortages and preparing communities, and integrating technical development with social infrastructure can help build trust, mitigate impacts, and enhance long-term regional resilience. Whether it's managing workforce accommodation, ensuring environmental protection, or building strategic land-use maps, the consistent threads are transparency, collaboration and adaptability.

There are also lessons to be learned about the governance of major projects, with an expected role for governments to provide neutral, balanced information, explain approval processes, listen and respond to concerns, and promote respectful, informed public debate. Regulatory agencies need to be visible in monitoring and enforcing compliance, even where industry self-regulation

further industry best practices. Coordination between regulatory agencies is crucial for integrating local area plans into comprehensive, landscape-scale safeguards.

Some of these lessons were addressed over time, as the industry responded and matured, the regulatory environment evolved, and local councils and landholders became more informed and empowered. Others are more structural, and the ongoing struggle transcends the coal seam gas experience, such as coordination and data sharing between regulatory agencies, cumulative impact assessments, more equitable community benefits and regional planning.

Any reflection on the lessons learned from Queensland's CSG experience must acknowledge the significance of disruption it caused - to local communities, including families and friendships, local landscapes and identities, but also in the wider institutional environment, as it challenged the adequacy and effectiveness of existing regulatory processes and policies and questioned the role of governments in public debate about contentious land use issues. While the scale and pace of CSG development were unprecedented and may not be repeated, there are nevertheless important lessons to be learned from the experience.

If these lessons are embraced early and earnestly, future projects can move beyond disruption toward shared value, where industry development is inseparable from community wellbeing.

Sustainable coexistence is a worthy goal, but not an endpoint. It is understood as an ongoing process of building and maintaining respect, mutual learning and adjusting to meet changing needs. Sustainable coexistence does not just happen when tenures overlap or land uses coincide. When uninvited or unexpected, it is characterised by trauma. Indeed, it can be a precarious state of symbiosis at best. Sustainable coexistence requires adequate acknowledgement and protection of rights and values, and upfront risk management as its foundation, before opportunities for mutual benefits can be fully realised. Maintaining coexistence requires conscious and concerted effort by all parties involved, including land and rights holders, communities, industry and governments.

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