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23 Economic Impact Assessment

23.1 Introduction

This section provides a summary of the existing economic environment within the region and locally to the Project area. This section also addresses the values that could be affected by the impacts associated with the construction, operation and decommissioning phases of the Project.

Values are discussed in terms of the character and basis of the local and regional economies. Environmental protection objectives have been developed and the mitigation, management and economic enhancement measures to achieve these objectives identified. The residual impact assessment assumes that the proposed mitigation and management measures have been applied.

The potential direct and indirect impacts of the Project on environmental values have been assessed using one of three impact assessment methods: significance assessment, risk assessment and compliance assessment; this study has used risk assessment. For further details see the Impact Assessment Method chapter (Section 6) of this EIS.

The detailed findings of the Project's economic impacts are presented in the Economic Technical Report (Appendix T) of this EIS. A description of the Project is provided in the Project Description chapter (Section 4) of this EIS. A cross reference to the locations where each of the requirements of the ToR has been addressed is given in Appendix B which references both the study chapters (Sections 1 through 34) and/or the Appendices (A through EE).

23.2 Legislative Context

The following legislation is relevant to the assessment of economic impacts, identifying values, and avoiding, mitigating and managing impacts related to economics, through all phases and activities of the Project, including construction, operation and eventual decommissioning:

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). This act applies because it aims to balance the protection of environmental and cultural values with Australian society's economic and social needs. It creates a legal framework and decision-making process based on the guiding principles of ecologically sustainable development.

Environment Protection Act 1994 (EP Act). The objective of the EP Act is to protect Queensland's environment by promoting ecologically sustainable development. An assessment of the potential adverse and beneficial environmental, economic and social impacts of a Project is required under chapter 3 of the EP Act.

Petroleum & Gas (Production and Safety) 2004 Act (P&G Act). The objective of the P&G Act is to regulate petroleum activities, including CSG exploration and production, and pipeline licensing other than distribution. It manages safety and technical matters for the upstream and downstream petroleum industries and gas consumers.



Sustainable Planning Act (SP Act). This act applies to any activity that is not authorised under the P&G Act and therefore not subject to a Petroleum Licence (PL) exemption under local planning schemes. As such, activities outside of the PL area (e.g., depots) require assessment under the SP Act and relevant local government planning scheme, and development approvals.

23.3 Study Method

The economic impact assessment was conducted as a desktop study and comprised the following:

- Characterisation of the existing economic environment and assessment of the broader economic context and issues relevant to the Project through:
 - Review of data sourced from the Australian Bureau of Statistics, Office of the Government Statistician, regional councils and other public sector agencies;
 - Review of available government policies, economic development strategies and research papers of relevance;
 - Consultation with local businesses and peak industry bodies; and
 - Review of private sector data and economic data and proprietary models compiled by AECgroup (see the Economics Technical Report (Appendix T) of this EIS).
- Establishment of the Project 'base case' in terms of Project related expenditure and revenue
 including the associated distribution of expenditure and revenue across geographies and sectors
 as inputs to Project specific economic models; and
- Completion of an assessment of the economic impacts of the Project. The assessment identifies the economic impacts specific to the Project compared to what would be anticipated if the Project does not proceed (i.e. compared to a baseline scenario). The baseline scenario is not simply the existing economic environment. Rather, the baseline scenario accounts for future anticipated economic growth in the local, regional, state and national economies based on available projections of future economic activity from relevant government bodies. The assessment comprised the following key steps:
 - Completion of economic modelling using computable general equilibrium and cost-benefit analysis modelling techniques;
 - Consultation with business, industry and key industry organisations to identify potential economic impacts;
 - Interpretation of modelling output in the context of the regional and state economies, and analysis of other, non-quantified changes to the economic environment;
 - Evaluation of the significance of impacts in relation to economic resources; and
 - A summary assessment of the magnitude of key identified impacts based on the above analysis and using a risk assessment framework.

Additional information on each of these steps and the methodology undertaken are presented in the Economics Technical Report (Appendix T of this EIS).



23.4 Existing Environment and Values

This section provides an outline of the existing economic indicators in regards to populations, industry contributions and labour market characteristics with an overview of recent economic performance in the local and regional economies that may be impacted by the Project. The relevant study area for the assessment of economic impacts extends beyond the Project area and comprises the Isaac, Mackay and Central Highlands local government areas (LGAs). This region is referred to hereafter as the 'Bowen Catchment Area' or 'Catchment Area'.

The Catchment Area is selected because it:

- Includes the local economies most likely to be affected through the supply of labour, goods and services for the Project;
- Reflects the economies most likely to be impacted by the development and operation of the Project; and
- Includes the nearby regions in which the Project is most likely to compete for labour and other resources should planned energy resource projects in the Bowen Basin proceed.

The Catchment Area economy is dominated by resources and energy including coal, CSG, and liquefied natural gas (LNG) projects. The Catchment Area is largely viewed as a mining region given its abundance of natural resources.

The following points provide a summary of other key conditions within the Catchment Area economy. Additional data supporting these points is presented in the Economics Technical Report (Appendix T of this EIS).

- The estimated population of the Catchment Area was 175,812 in 2011, with the majority of residents living in Mackay. The Catchment Area is expected to grow at a faster rate than Queensland to 2031, largely driven by population growth in the Isaac LGA. This excludes growth in transient workers, which is also expected to increase.
- Mining (including energy resources) is the largest contributor to the Catchment Area's 2010-11 gross value added (GVA). Its contribution is over five times higher than to Queensland's GVA in 2010-11, demonstrating the region's heavy reliance on resources.
- Between 2006-07 and 2010-11, the fastest growing sector was finance and insurance services.
 Complementary and support businesses are increasingly attracted to the region to maximise their exposure to the resources sector. Business attraction has led to significant gross regional product (GRP) growth, particularly in Mackay, which is the Catchment Area's urban centre. Agricultural land (i.e. sugar cane) is under pressure from industrial development as Mackay's support industry expands.
- Mining and construction dominate employment, which is expected to continue. However, as major
 projects come online, the proportion of construction work is expected to decrease while the
 proportion of mining workforce is expected to increase. Over half of the working population in the
 Isaac LGA is dependent on the mining industry for employment.
- The Catchment Area has a tight labour market with lower unemployment than Queensland overall.
 Unemployment in the Isaac and Central Highlands LGAs is extremely low, considered to be approaching virtually transitional.



- The low unemployment rate is a symptom of high labour demand and limited local supply. This has
 resulted in significant skills shortages in the region, and growing competition for labour between
 industries. Limited local skills means the region has a large and growing fly-in, fly-out (FIFO)
 workforce.
- The region's natural resource abundance provides many economic benefits to individuals and families. However, the dominance of the resources sector means the regional economy and many businesses are highly exposed to commodity prices.
- The Minerals Resource Rent Tax (MRRT), the extended Petroleum Resource Rent Tax (PRRT), and carbon price will add financial pressure to resource companies operating in the Catchment Area. Projects previously considered viable may be postponed or cancelled, which could negatively impact economic growth in the Catchment Area. Despite this, the resource sector will continue to play an important role in Australia's energy production and in the economy, at least in the medium term.
- Attracting new permanent workers and their families to the region is important to build strong community foundations. Access to social and community infrastructure makes towns more liveable and is likely to improve residents' quality of life.
- The Catchment Area is now largely viewed as a mining region, compared to an agricultural region historically. In the years leading up to the 2010-11 floods, agricultural growth was slow, as Queensland experienced one its worst droughts. Combined with strong competition for land and resources (e.g. labour) from the mining sector, there has been a decline in the prominence of the Catchment Area's agricultural industry in value add contributions. This has also affected the social identity of the region, as many rural properties are sold to resources companies. Maintaining rural character is important to attract and retain non-mining businesses and residents.
- The Catchment Area's property market has tightened significantly in recent years, driven largely by increased demands from resource companies and their employees. This is likely to intensify as more projects are developed.
- In the past five years, property sales have declined in the Catchment Area but median property prices have risen. This is likely to be driven by a combination of strong population growth, limited supply of existing houses, and a low level of new residential building approvals.
- Rental prices have also increased significantly in the last five years, which is likely to be the result
 of a high transient workforce. This is most evident in the Isaac LGA, where rents have increased by
 100-200% reflecting a chronic shortage of properties. This is a primarily concern for local residents
 employed outside the resources industry, who have lower average incomes and are more likely to
 be affected by housing affordability issues.
- Infrastructure is of a good standard to meet existing demands. While some new infrastructure
 investment is under investigation, these projects are typically designed to support the resource
 sector, not anticipated population growth. This may place pressure on existing public infrastructure
 and local government services.



23.5 Predicted Beneficial Impacts

Results of economic modelling are discussed below in terms of the predicted beneficial impacts of the Project. Modelling results are all represented in terms comparable to the baseline scenario (where this is the anticipated economy modelled without the Project). Peak economic impacts of the Project in terms of industry output will occur during steady state operations. Modelling results are presented to 2036-2037 as economic impacts are expected to remain relatively stable once steady state production is achieved. The below points comprise a summary. Greater detail on the modelled impacts is presented in the Economics Technical Report (Appendix T of this EIS).

23.5.1 Impacts on Gross Regional, State and National Product

Modelling indicates that the Project will generate significant economic benefits for the Catchment Area, Queensland and Australian economies. Potential beneficial impacts arising from the Project include significant increases in industry output, GRP, employment and incomes in the Catchment Area and Queensland over the Project life through both direct and indirect impacts. The modelled data indicates a steady increase in the regional, state and national economies over a six year ramp up period (2015-16 to 2021-22). Over this time the Project's contribution to GRP, above the baseline scenario, is estimated to:

- Increase steadily over a six year ramp up period to approximately \$600 million by 2021-22;
- Plateau at approximately \$600 to \$700 million (or just over 2% of the Catchment Area's GRP) on average once peak gas production is reached; and
- In percentage terms, slowly trend towards the baseline scenario after peak production as Project production remains steady against a backdrop of growth in the broader economy.

The Catchment Area is anticipated to receive the majority of growth generated by the Project, accounting for almost all gross product as evidenced by similar absolute changes in Catchment Area GRP as observed in gross state product (GSP) and gross domestic product (GDP). The impact of the Project on GRP / GSP / GDP in the Catchment Area, Queensland and Australia is shown in Figure 23–1.



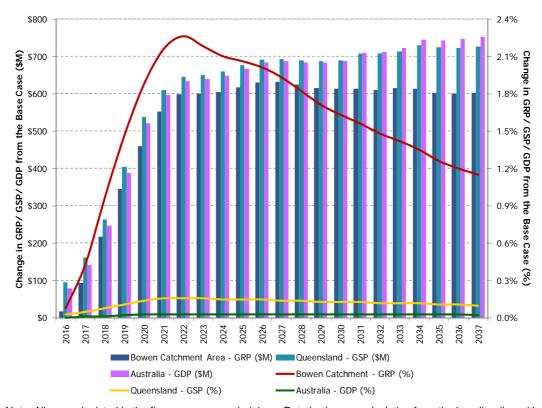


Figure 23-1 Impact of the Project on GRP / GSP / GDP in Bowen Catchment Area, Queensland and Australia

Note: All years depicted in the figure are year ended June. Data is shown as deviation from the baseline (i.e. without Project) scenario. Source: Prime Research (unpublished)

23.5.2 Impacts on Employment

The Project is anticipated to result in a beneficial impact to employment with a net increase of approximately 1,000 full time equivalent (FTE) employees in the Catchment Area compared to the baseline scenario during peak labour demand in the ramp up period. Employment impacts fluctuate through the life of the Project due to the staging of works and general trend downward following the peak in construction activity in 2015-16. This represents a peak increase of approximately 1.1% in employment in the Catchment Area provided by the Project. A lower beneficial impact is anticipated for Queensland reflecting the high FIFO labour requirements for the Project (i.e. some labour will be drawn to the Catchment Area from elsewhere in Queensland).

The construction and mining industries will receive the majority of benefits, primarily as a result of direct employment for the Project. Other industries in the Catchment Area likely to be beneficially impacted by an increase in employment compared to the baseline scenario include business, finance and insurance services, transport and storage, and manufacturing. Trade employment is also expected to benefit during the ramp up period. The impact of the Project on employment in the Catchment Area and Queensland are shown in Figure 23–2.



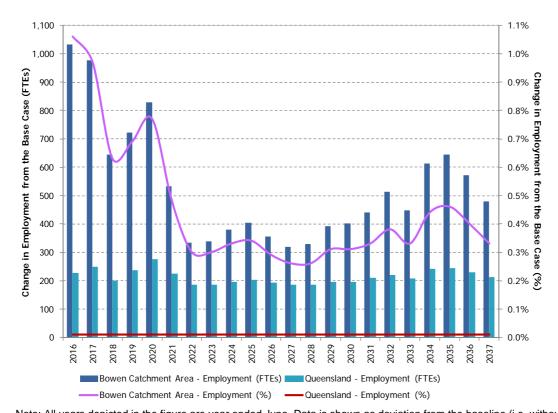


Figure 23-2 Impact of the Project on Employment in the Catchment Area and Queensland

Note: All years depicted in the figure are year ended June. Data is shown as deviation from the baseline (i.e. without Project) scenario. Source: Prime Research (unpublished).

23.5.3 Impacts on Wages

Modelling results indicate that the Project could contribute to a marginal increase in real wages of approximately 0.02% per annum on average in Australia and 0.07% per annum on average in Queensland between 2015-16 and 2036-37. In the Catchment Area the impact to real wages is higher, averaging 0.5% above the baseline scenario over the same period, peaking above 0.6% in 2019-20. The increase in real wages is an indication of pressures in the local labour force to provide the labour requirements of the Project. However, an average increase of 0.5% in real wages, while notable, is not anticipated to significantly destabilise the existing labour market in the region. The annual percentage change in real wages as a result of the Project in the Catchment Area, Queensland and Australia is shown in Figure 23–3.



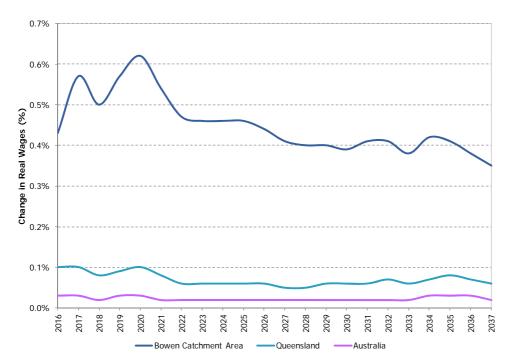


Figure 23-3 Annual Percentage Change in Real Wages as a Result of the Project in the Catchment Area, Queensland and Australia

Note: All years depicted in the figure are year ended June. Data is shown as deviation from the baseline (i.e. without Project) scenario. Source: Prime Research (unpublished).

23.5.4 Impacts on Other Aspects of the Economy

In addition to the above contribution to the Catchment Area, state and national economies, the following beneficial impacts are also anticipated:

- Opportunities for local business to secure new contracts and increase sales to supply and service the needs of both the Project and the workforce;
- Increased population (through attraction of labour to the Catchment Area) and business activity that
 will provide additional demand for local household and business services. This is likely to result in
 an increase in service levels over time;
- A permanent lift in the local skills base through implementation of skills development and training strategies as part of the Project;
- Households will be beneficially affected by the Project, through increased job and income earning opportunities. The impact of the Project on household incomes in the Catchment Area, Queensland and Australia is shown in Figure 23–4;
- The Project will provide a lift in local, Queensland and Australian government taxation revenues through a variety of taxes and duties;
- While the Project will not directly result in the export of gas to overseas markets, the Project will
 deliver gas that enables increased exports of LNG through the Arrow LNG Plant (examined in a
 separate EIS). This has the potential to support the Australian dollar through export of high value
 LNG, resulting in lower comparative prices for foreign goods and services; and



Potential for reduced greenhouse gas emissions. The gas will be removed by Arrow prior to mining
activity and used as a fuel input elsewhere (e.g. electricity generation). Gas combustion produces
carbon dioxide, which has a lower global warming potential compared to other venting.
 Furthermore, degassing mines may improve the economic feasibility of some mining projects
through reducing the capital required to develop the coal, thereby potentially enabling earlier mine
development.

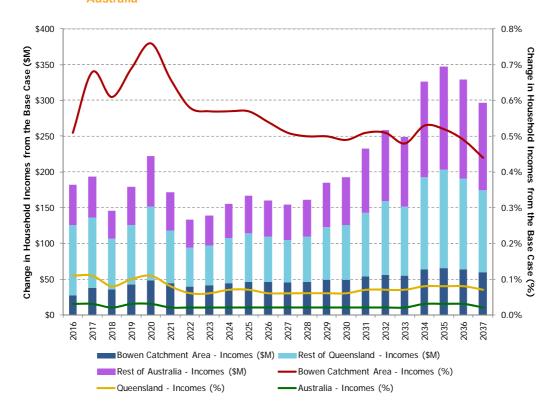


Figure 23-4 Impact of the Project on Household Incomes in the Catchment Area, Queensland and Australia

23.6 Potential Adverse Impacts

The Project will likely result in some adverse impacts on the identified environmental values of the region. Results of economic modelling are discussed below in terms of the predicted adverse impacts of the Project. Modelling results are all represented in terms comparable to the baseline scenario (where this is the anticipated economy modelled without the Project). Peak economic impacts of the Project in terms of industry output will occur during steady state operations. Modelling results have only been presented to 2036-37 as economic impacts are expected to remain relatively stable once steady state production is achieved.

The following discussion of adverse impacts comprises an overview. Greater detail on the modelled impacts is presented in the Economics Technical Report (Appendix T of this EIS) and Table 23–1 presented in Section 23.8.



23.6.1 Impacts on Business

The Project is likely to adversely impact on some businesses and industry in the Catchment Area and the rest of Queensland as a result of:

- Competition for and draw of labour to the Project and its supply chain. This has the potential to
 intensify skills shortages in the region and Queensland (for construction and energy related skills)
 and place upward pressure on labour prices;
- Escalating costs of labour and other inputs to production could reduce business profits and viability for some businesses / industries, particularly for local business already operating at, or near, "the margin"; and
- Support for the Australian dollar as a result of the high level of LNG exports generated using gas
 extracted by the Project, which may adversely impact on those sectors that are trade exposed
 including agriculture, manufacturing and tourism. A rising Australian dollar would see these
 products and services becoming more expensive for foreign buyers.

23.6.2 Impacts on Agricultural Production

Some productive capacity, including activities on pastoral and horticultural good quality agricultural land (GQAL) and strategic cropping land (SCL) may be impacted by the Project. Impacts to pastoral land and grazing activities are expected to be less significant than impacts to horticulture. Arrow has committed to working with landholders to minimise the disturbance of GQAL and SCL and have developed policies and procedures highlighting an intent to place gas wells and associated infrastructure in areas that avoid or minimise impacts on high quality agricultural land to the extent practical and possible. Where this cannot be delivered, it is almost certain this will result in some diminished productive capacity in the areas impacted during the Project's life. However, Arrow is required to compensate landholders for any impacts on productivity. The scale of impacts on agricultural productivity will vary across the development area according to specific local characteristics. Any impacts are expected to be temporary in nature, since it is expected that all land impacted by gas wells and associated pipeline and other infrastructure will be able to be rehabilitated to a pre-development standard following gas well closure.

23.6.3 Impacts on Housing Prices

Residential property impacts from the Project are expected to be minor as temporary workers' accommodation facilities will be used to accommodate imported construction and operational labour where necessary. Even so, it is possible the Project could contribute to an increase in local housing demand, which would place additional upward pressure on housing prices. This may occur through permanent migration of workers to the region to take up direct or flow-on employment opportunities.



23.6.4 Impacts on Industrial / Commercial Land Prices

The Project has the potential to increase demand for industrial / commercial land as a result of flow-on supply chain and support service development. The Catchment Area is likely to experience shortages of industrial land as growth in resource support industries continues. Suitable land could become an issue in Mackay, Clermont and Moranbah in particular. This will lead to price increases, which the Project is likely to contribute to as a consumer of support services.

23.6.5 Impacts on Rural Property Values

The potential for reduced grazing or horticultural productive capacity in some landholdings may result in a decline in the value of these properties. Uncertainty currently exists regarding the impacts on agricultural production from the CSG sector, which may be affecting agricultural property values. In particular, the unknown, long term impacts of CSG drilling on soil quality and water supply and quality appear to negatively affecting some sales of agricultural properties containing petroleum leases in the Catchment Area.

23.6.6 Impacts on Future Coal Mining Development

The Project may delay coal mining activity on the same tenements while the gas is extracted. However, since the coal is left intact, there should be no permanent economic losses resulting from the delay. Arrow has also designed infrastructure placement to avoid existing mining lease or existing mineral development lease tenements, and given the significant volume of coal resources available in the Bowen Basin it is not anticipated the overall coal development profile of the region will be materially affected.

23.6.7 Impacts on Local Infrastructure and Service Capacity

Infrastructure constraints are likely to become intensified by growth in the resources sector. The Project will place additional demand on this infrastructure. This is likely to contribute to capacity issues, which will require infrastructure upgrades and maintenance, particularly roads and air infrastructure.

23.7 Environmental and Social Protection Objectives

The environmental and social protection objectives for the economy are to:

- Develop the local / regional skills base to support the CSG industry and assist existing local business retain skills and back-fill vacated roles;
- Provide opportunities for local business to secure supply contracts for the Project;
- Minimise impacts on agricultural production;
- Minimise impacts on local property markets (residential, industrial / commercial and rural);
- Minimise the Project's impact on existing socio-economic infrastructure; and
- Minimise the impact of multiple projects competing for resources.



23.8 Mitigation Measures and Residual Impacts

The avoidance, mitigation and management measures outlined above will avoid adverse impacts to, or reduce the severity of the magnitude of potential impacts on economic values. Table 23–1 summarises the potential impacts prior to mitigation, along with proposed avoidance, mitigation and management measures and the subsequent residual impacts assuming implementation of proposed avoidance, mitigation and management measures.



Table 23-1 Summary of Economic Impact Assessment

		Pre Mitigated Impact				Residual Impact		
Potential Impacts	Existing Environment	Likelihood	Consequence	Risk	Summary of Avoidance, Mitigation and Management Measures	Likelihood	Consequence	Risk
The Project will contribute to a deepening of existing skills shortages in the	Skilled labour	Almost certain	Moderate	High	 Encourage contractors engaged by the Project to use Australian and Queensland government skills and training programs where possible, including the apprenticeship programs [B617]. 	Almost certain	Minor	Medium
construction and CSG industries.					 Continue working with Construction Skills Queensland to identify potential strategies for increasing the capacity of local job seekers to develop appropriate skills for construction [B618]. 			
					 Collaborate with other CSG proponents and Energy Skills Queensland to identify opportunities for securing funding through the Skills Queensland Strategic Investment Fund [B619]. 			
					Continue to support programs such as the CSG / LNG Industry Training Program to develop CSG industry skills in the local workforce [B620].			
					Collaborate with state government, local councils, local industry, industry organisations, and CSG proponents to develop programs and strategies aimed at addressing issues of skill retention and back-filling vacancies as a result of labour being drawn to the Project from other sectors [B621].			



		Pre Mitigated Impact				Resi	dual Im	pact
Potential Impacts	Existing Environment	Likelihood	Consequence	Risk	Summary of Avoidance, Mitigation and Management Measures	Likelihood	Consequence	Risk
Local business has been developing to supply the industry. However, local supply chains may not have reached maturity to maximise local benefits in terms of supplying the industry.	Local business	Almost certain	Moderate	High	 Inform local business of the goods and services required of the Project, service provision opportunities and requirements of business to secure contracts [B622]. Establish and implement a local business development strategy that assists qualified local and regional businesses to tender for provision of goods and services that support the Project [B623]. Develop an Australian Industry Participation Plan in 	Almost certain	Minor	Medium
The CSG / gas extraction industry is an emerging industry in the Catchment Area and local business may not be able to maximise local benefits in terms of supplying the industry.	Local business	Almost certain	Moderate	High	consultation with AusIndustry and the Department of State Development, Infrastructure and Planning that is consistent with state and federal industry participation frameworks. It should include the development of relevant networks to assist qualified local and regional business tender for provision of goods and services to support the Project. The benefits of such a network could be enhanced where all CSG proponents in the Catchment Area participate, linking the CSG industry to local service providers through a common pathway such as a web portal operated by relevant economic or industry organisations [B624]. Examine options for establishing a local cooperative service or network / alliances to connect local business	Almost certain	Minor	Medium
					service or network / alliances to connect local business and enable collaboration in meeting service supply requirements of the CSG industry [B625]. Inform local councils, economic development organisations, the Industry Capability Network and state government of goods and services required by the Project that are not currently available or underserviced from within the Catchment Area [B626].		arrov	⊳>>> Wenerqy

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	Existing	Pre Mitigated Impact				Residual Impact		
Potential Impacts		Likelihood	Consequence	Risk	Summary of Avoidance, Mitigation and Management Measures	Likelihood	Consequence	Risk
The Project has the potential to impact on agricultural production in the Project area.	Good quality agricultural land (GQAL)	Likely	Moderate	Medium	 Where suitable proponent-owned land is available, consider leasing to farmers to support agricultural production of that land [B627]. Consult with landowners on the most appropriate method to minimise disruption (including the introduction of additional headlands) to cultivation paddocks, and loss of productive land in controlled traffic paddocks [B628]. Work with landholders to configure well development plans to minimise impacts on prime agricultural land to the extent practical, including placement of gas wells and infrastructure in areas that avoid high quality agricultural land to the extent practical and possible [B629]. Negotiate and provide appropriate compensation for landholders where impacts cannot be avoided. This will also provide funds to allow farmers to re-adjust their farm models to increase productivity, to some extent offsetting the decline associated with the Project [B630]. Ensure all disturbed land is rehabilitated as appropriate when gas facilities are decommissioned [B631]. 	Likely	Minor	Medium



Potential Impacts	Existing	Pre Mitigated Impact				Residual Impact		
		Likelihood	Consequence	Risk	Summary of Avoidance, Mitigation and Management Measures	Likelihood	Consequence	Risk
The Project has potential to, either directly or indirectly, increase demand for residential property and thereby inflate prices.	Property that maintains or grows affordably in economic value	Possible	Minor	Low	 Consider building construction worker camps prior to construction of production facilities [B632]. Accommodate workers required to construct camps in temporary accommodation wherever possible [B633]. Maintain dialogue with construction industry bodies, state government and local councils regarding timing and scale of anticipated worker accommodation requirements [B634]. 	Possible	Minor	Low
The Project has potential to directly or indirectly increase demand for industrial / commercial property and thereby inflate prices. There is also some potential for the Project to impact on rural property values as a result of disturbance of agricultural lands and any reduction in productive capacity.	Property that maintains or grows affordably in economic value	Likely	Minor	Medium	 Inform relevant councils, state government departments, local businesses and industry of goods and services needs of the Project to allow appropriate planning and release of required industrial and commercial land [B635]. Collaborate with state government and local councils to assess the suitability of current planning arrangements to handle a likely increase in demand for industrial and commercial developments, and position themselves to reduce response times to planning applications, particularly as the number of planning applications is likely to increase [B636]. 	Possible	Minor	Low



		Pre Mitigated Impact				Residual Impact		
Potential Impacts	Existing Environment	Likelihood	Consequence	Risk	Summary of Avoidance, Mitigation and Management Measures	Likelihood	Consequence	Risk
The Project will require upgrades and maintenance to a range of economic infrastructure types. In addition there may be a need for additional social infrastructure to support the needs of direct and indirect migration to the region due to the Project.	Adequate socio-economic infrastructu re to service the needs of the community and industry	Likely	Minor	Medium	 Inform local councils of anticipated increases in demands on roads and other transport infrastructure from the Project, and identify appropriate contributions for upgrades and maintenance [B637]. Identify and communicate anticipated population growth and associated infrastructure requirements and impacts as early as possible to relevant government authorities [B638]. Provide information as needed to enable relevant government authorities to investigate and develop anticipated cost estimates to provide social and economic infrastructure required to meet demand generated by the Project, and identify appropriate cost recovery strategies for developing this infrastructure [B639]. 	Possible	Minor	Low



23.9 Monitoring and Inspection

Monitoring and inspection of avoidance, mitigation and management measures will be implemented to ensure the impacts and residual risks continue to be low throughout the lifetime of the Project. Monitoring will also be undertaken to demonstrate achievement of objectives [B640].

23.10 Conclusion

The economic impact assessment indicates that the Project will generate a positive economic benefit for the regional (Bowen Catchment Area), state and national economies. These include increases in industry output, GRP, employment, business activity skills development and government tax revenues. A cost benefit analysis of the Project outlined in the Economics Technical Report (Appendix T of this EIS) indicates the benefits generated by the Project outweigh the costs and is economically desirable for Queensland.

