

## **Public Document**

Q-LNG01-15-MP-0126

# **Australia Pacific LNG**

**Integrated Housing and Accommodation Strategy Gas Fields and Pipeline** 

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### **Executive Summary**

#### **Context**

The following strategy outlines how Australia Pacific LNG will mitigate potential project impacts on the supply and demand for housing and accommodation in the towns of Miles, Chinchilla and Roma. It seeks to fulfil the Co-ordinator Generals condition that Australia Pacific LNG prepare an Integrated Housing and Accommodation Strategy (IHAS).

The IHAS has been prepared in consultation with Local Government, community groups, DEEDI, Department of Communities, local developer groups and community stakeholders.

The housing markets in Miles, Chinchilla and Roma are typical of most regional Queensland towns. The current demand and supply pressures are borne out of long periods of stable growth where the communities have been able to adapt existing community and physical infrastructure to absorb small and incremental population increases. While future growth is generally unconstrained by physical, environmental or social factors, each of the townships face distinct challenges when faced with the delivery of housing and accommodation at an increased intensity and scale.

This IHAS proposes a broad range of direct and indirect investment strategies which aim to mitigate potential impacts associated with Australia Pacific LNG's project. The key function of the strategies is to offset any potential short term impacts and to stimulate and stabilise the local housing market in the medium to long term.

While investment in the suite of Australia Pacific LNG's strategies will commence immediately, the lead ti mes a ssociated with planning and final delivery mean that the benefits of the stimulus strategies will be experienced in the medium to long term. On that basis, direct investment to offset immediate and short term impacts is also needed. Through short term targeted investment in existing community support structures the housing and accommodation requirements for those most vulnerable in the communities can be adequately managed.

A summary of the direct and indirect strategies are provided below:

Table 1 Summary of proposed housing and accommodation strategies

Short Term	Medium Term	Long Term
Delivery Immediately following FID	Delivery 12 – 24 months post FID	Delivery 24 months post FID and beyond
Fund the RentConnect Program	Facilitate and fund development Partnerships	Monitoring Program
Implement and fund a housing support case management program	Develop infrastructure investment	
Fund council town planning capacity		

Australia Pacific LNG will, subject to a financial investment decision for a second LNG train, invest \$10M during the first 5 years of the Project across the Western Downs Regional Council and Maranoa Regional Council areas to finance these strategies.

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#### **Current State of the Market**

In recent times, new housing stock has been constructed in large lots typically with 4 to 5 bedroom dwellings. House and land packages have been developed on the back of speculation associated with the impending delivery of major mining and energy projects in the region.

The towns are characterised by talk of property prices now, as compared to what they will be in the future. Examples are lots which were in the \$70,000 - \$90,000 range in 2009/2010, are now expected to move to \$120,000 - \$150,000, and building prices which are currently \$1,200 per square metre moving to \$1,600 per square metre.

Demand for rental accommodation and housing within the Western Downs and Maranoa is currently high. The announcement of the CSG to LNG projects along with a range of other mining and energy projects has added heat to the market with speculative investors taking up housing stock, workers moving to the area and economic activity increasing.

The I ocal b uilders a nd I and de velopment p rojects w ork to gether to p roduce a fairly s tandard product, which is often retained for rental by the developer, marketed through investment marketers to primarily southern markets or sold locally. The housing product is generally not sophisticated and does not seek to address local climatic factors.

While at the retail end of the market, conditions are strong, the market has nonetheless been impacted by the Global Financial Crisis and a general lack of finance available from the major banks for property construction. There are a number of projects which, while approved, are not expected to be built until these conditions ease, or more substantial buyers are found for the development sites.

Land supply in Chinchilla is abundant with many years supply available. However, a significant constraint to delivery exists due to the inadequacy of existing infrastructure and the cost to deliver or augment existing systems. Housing diversity is improving, however recent medium density projects are targeted at the upper end of the market and outside of the affordable price range.

Land su pply in M iles is a lso a bundant. I nfrastructure c apacity c onstraints a lso e xist. P roduct supplied to the market is almost exclusively houses on large allotments.

Land supply in Roma is also abundant. Infrastructure capacity constraints exist, however significant progress has been made by local developers and Council to resolve these constraints and increasing supply and product diversity is expected to substantially improve market conditions through both private developers and the Urban Land Development Authority (ULDA) proceeding with projects.

#### **Local Resources/Builders/Trades People/Civil Contractors**

There is a shortage of established businesses serving the property industries in Miles, Chinchilla and Roma. U nlike other regional coastal towns, or the major centres in South East Queensland there are not a series of civil contractors and builders vying and competing for work. Similarly these civil and building contractors have a limited pool of local sub-contractors with whom they can carry on business with. This dynamic has an impact on construction costs, and also time lines.

The product typology of the local builders is also fairly standard will little incentive or know how for builders and developers to deliver a greater diversity of dwellings.

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#### Conclusion

The markets for purchase and rental of properties in Miles, Chinchilla and Roma are currently constrained by an undersupply of dwellings and affordability for low income and key workers. This is exacerbated by a mismatch between need and product type.

The m arkets are characterised by s peculation in a nticipation of the g rowth expected in Miles, Chinchilla and Roma emanating from a number of large scale projects proposed for the area.

The direct and indirect investment in housing and accommodation outlined in this report seeks to achieve the following objectives:

- Implement and fund key partnerships to offset short-term impacts on low to medium income households;
- Fund and facilitate the delivery of quality affordable housing to fill a gap not currently provided by the market;
- Unlock obstacles to development, supporting sustainable market led growth, and;
- Monitor the housing market activity to determine the efficiency and success of strategies in limiting the impact on the housing market to allow for adaptive management.

Through the ongoing monitoring of demand and supply conditions for each market sector in the impacted communities, Australia Pacific LNG will ensure that the investment strategies proposed will substantially offset any potential impact associated with the construction and ongoing operation of their project.

### 1. Introduction and Overview

#### 1.1. Introduction

This report forms Volume 1 of the Australia Pacific LNG Integrated Housing and Accommodation Strategy (IHAS). Volume 1 responds to the gas fields operations of Australia Pacific LNG's Project, primarily occurring with the Western Downs and Maranoa Regional Council areas. The Australia Pacific LNG IHAS has been prepared in response to conditions of approval for the Australia Pacific LNG Project issued by the Queensland Coordinator-General (CG) in November 2010.

Australia Pacific LNG is developing a project which will contribute to the creation of a world scale, long-term industry in Queensland, utilising Australia Pacific LNG's substantial coal seam gas (CSG) resources. This will generate jobs and further investment in Queensland. The 30 year Project has the following objectives:

- Development of the Project's gas fields in the Bowen and Surat Basins in south central Queensland
- Construction and operation of a 520km main gas pipeline to connect the gas fields with an LNG facility on Curtis Island, Gladstone
- Construction and operation of an LNG facility on Curtis Island with an initial production and export capacity of 9 Mtpa of LNG

The j oint v enture p artnership p rovides O rigin w ith t he r esponsibility f or t he c onstruction a nd operation of the gas fields and associated infrastructure, and the gas pipeline to the LNG facility. ConocoPhillips will be responsible for the construction and management of the LNG facility.

## 1.2. Purpose and objectives

The purpose of the Australia Pacific LNG IHAS is to respond to the CG's conditions of approval for the Project, specifically pertaining to housing and accommodation related matters. In particular, this report addresses Condition 4 in appendix 1, part 3 of the Coordinator Generals' report. Australia Pacific LNG will submit this I HAS to the CG no later than 3 0 days after project commitment, together with the project's final Social Impact Management Plan (SIMP). This second version was submitted to the Coordinator General's office in June 2012.

The IHAS seeks to achieve the following objectives:

- Implement and fund key partnerships to offset short-term impacts on low to medium income households;
- Fund a nd facilitate the delivery of quality affordable housing to fill a gap not currently provided by the market; and
- Unlock obstacles to development, supporting sustainable market led growth.
- Monitor the housing market activity to determine the efficiency and success of strategies in limiting the impact on the housing market to allow for adaptive management.

The investment strategies seek to a chieve a balanced approach to housing development and support mechanisms which ensure the housing markets can operate effectively and efficiently and not be negatively influenced by excessive direct investment methods.

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#### 1.3. Stakeholder consultation

This I HAS has been prepared in collaboration and consultation with key stakeholders to ensure a sustainable and holistic strategy is formed that responds to the key issues and concerns of stakeholders, whilst achieving compliance with the CG's conditions of approval. The stakeholder engagement process was undertaken between October 2010 and July 2011. This stakeholder engagement process was undertaken subsequent to the stakeholder engagement carried out for the Australia Pacific LNG Environmental Impact Statement (EIS).

The purpose of the IHAS stakeholder engagement process was to:

- Increase stakeholder awareness and understanding of APLNG's project impact on the housing market within the Western Downs and Maranoa region;
- Create collaborative strategies with local and regional stakeholders that respond to identified areas of need and which build on the capacity within each community;
- Educate stakeholders about lessons that have been learnt from previous experience;
- Inform the development of strategies to address localised impacts on the housing market, and;
- Test and modify the strategy framework developed by the project team.

Whilst seeking to achieve the above objectives this strategy provides for well formed strategies that meet t he n eeds a nd requirements of t he c ommunities a nd a chieve c ompliance w ith t he C G conditions.

### 1.4. Cumulative impact considerations

Any fundamental shift in the housing market will be a combination of exogenous elements which occur externally to the market (e.g. macro-economic factors, business activities from mining and energy companies) and endogenous impacts which will be derived internally within the specific market (e.g. delivery of housing, demographics, speculation, workforce mobilisation from energy companies). Accordingly, the current state of the housing market at any one time will be a result of a broad range of alternating factors. The accumulation of both internal and external impacts will inadvertently have an impact on the housing market.

Australia Pacific LNG understand the cumulative nature of housing market impacts and the need to understand the impact of other project proponents who may have operations within Australia Pacific LNG's operational regions. Australia Pacific LNG have prepared a housing strategy that addresses their impact on the housing market within the Western Downs and Maranoa Region.

The Australia Pacific LNG IHAS has been prepared with a focus on providing a balance between indirect and direct investment measures that will assist in stimulating the sustainable growth and operation of the housing market. Accordingly, a balanced and sustainable approach which incorporates indirect measures is likely to mitigate not only Australia Pacific LNG's impacts, but also impacts caused by other proponents.

APLNG have proposed strategies which set the framework for progressing transparent and open communications with all project proponents in the region in an effort to monitor cumulative impact and deliver integrated solutions.

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In the Roma community, Australia Pacific LNG is an active participant in the Joint Maranoa Regional Community Consultative Committee together with fellow CSG company Santos. Through this committee, and through direct dialogue with Maranoa Regional Council and Santos, Australia Pacific LNG has expressed its preference for contributing to joint industry strategies where that is likely to produce better outcomes for the community. Australia Pacific LNG, Santos and council are engaging in a continued close dialogue to ensure strategies implemented in Maranoa are either collaborative or complementary.

Australia Pacific LNG also notes that Western Downs Regional Council has recently developed a council housing affordability strategy. Australia Pacific LNG commits to collaborating with WDRC and other proponents throughout the development of the housing model and other initiatives. Australia Pacific LNG also remains committed to implementing commercially sound partnerships and will continue the dialogue with council and other CSG proponents to ensure collaborative and complementary measures are implemented where that leads to better outcomes for the community, and where proponents' and council's objectives align.

### 1.5. Outline of report

Volume 1 of the IHAS focuses on the gas fields region. This report will therefore, focus solely on housing and accommodation impacts and associated strategies for this region. Volume 2 of the IHAS forms a response to APLNG's Gladstone operations.

This report has been structured as follows:

- Section 1 Introduction and Overview
- Section 2 Australia Pacific LNG Housing Markets Impacts
- Section 3 Summary of Housing Market and Demographic Analysis
- Section 4 Housing and Accommodation Strategies
- Section 5 Conclusion and Summary

## 2. Australia Pacific LNG Housing Market Impacts

#### 2.1. Context

During the environmental impact assessment of the Australia Pacific LNG project, the social impact assessment undertaken for the gas fields component of the project concluded that there was a medium to high probability that the construction and operation of the project would cause affordability and availability impacts to the housing market in the gas fields. Impacts will be directly linked to the project through increased demand for housing arising from project workforce and contractor usage of the private housing market, and indirectly linked through associated support business growth, general economic growth and speculation.

This section outlines a forecast of the project's construction and operational in-field workforces, their likely geographic dispersion, and an outline of likely accommodation arrangements.

### 2.2. Construction workforce and housing requirements

Construction of the gas fields will be undertaken via a rolling process, is expected to begin in 2011, and be largely completed by 2027. The workforce will peak in 2012 with an estimated 2,100 workers in the gas fields. The construction workforce hours of work and rotational rosters vary between e ach of the segments of the workforce and will be developed by the construction contractors.

The construction workforce will be accommodated in camps and operate on a fly-in/fly-out or drive-in/drive-out basis. Australia Pacific LNG is currently planning for construction camps located on the Condabri and Reedy Creek permits during first five years of the project (see map below). Australia Pacific LNG expects that the number of construction workers relocating to the Surat region to work on the project will be negligible. The construction contracts generally have short time frames and construction workforces typically commute between their homes and the worksites/camps for the duration of the contract. Whilst camps will be constructed prior to workforces reaching peak, there is likely to be some usage of commercial camps, motels and dwellings rented before the main camps are constructed, causing shorter term impacts to affordability and availability on local housig markets.

Construction of the gas transmission pipeline is expected to take approximately two years, commencing around mid 2012 and concluding around mid 2014. Construction of the gas pipeline will require an estimated peak workforce of 1,000 employees, split into two spreads around 800 for the main pipeline to Gladstone and around 200 for the infield pipelines. The construction of the main gas pipeline will commence in the vicinity of Miles, working northwards for completion in Gladstone. As the same time the infield pipelines will commence around the Condabri area and move to the Spring Gully/Reedy Creek area in mid 2013. The majority of the construction workforce will work on a 28 days on – 9 days off roster.

The majority of the pipeline construction workforce will be housed in temporary camps on or near the pipeline right of way. It is currently planned for 5 camps along the main gas pipeline, located between Miles and Mt Larcom, and three camps in the gas fields. Each camp will be operational for a short time, up to approximately 7 to 8 months, and have an average capacity of 600 persons for the main gas pipeline and 200 for the infield pipelines. In addition to these, up to 20 people will be based in the Biloela support base during the construction phase. Most of these are likely to be recruited locally, and will continue to use their existing dwellings. A very small number of senior staff will relocate to Biloela and may access accommodation on the private housing market, either motel style accommodation, or short term rentals.

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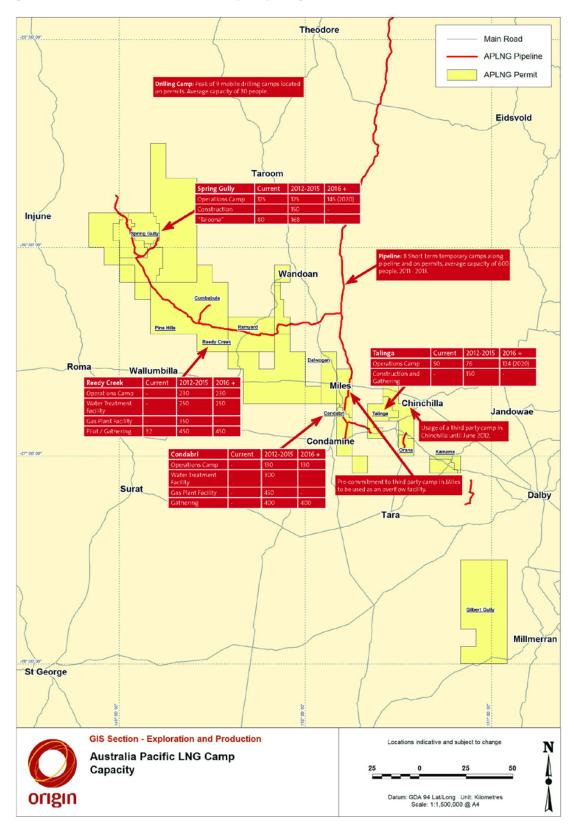
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**Figure 1** below shows a map of the Australia Pacific LNG permits and proposed camps, including operations and gathering camps.1 The camps will be constructed to be able to cater for the needs of all of the construction workforce. The direct housing market impact attributable to construction of the A ustralia P acific L NG p roject is hence I ikely to be negligible. Any housing market impact associated with the construction of the project, after camps are constructed, is likely to arise out of indirect mechanisms such as speculation, or demand arising from indirect economic growth.

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 $<sup>^{1}</sup>$  Note that the map does not show the exact location of the camps. Controlled Document number: Q-LNG01-15-MP-0126

Figure 1 Australia Pacific LNG Camp Capacity



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### 2.3. Operational workforce and housing requirements

Operational workforce requirements will increase from 130 (including approximately 100 existing Taligna and Spring Gully employees) in year one of the project to a peak of 636 workers in year 12. Workforce requirements beyond this are anticipated to remain comparable. In addition to the gas fields operational workforce there will be requirements for a small number of workers in the logistics hubs in Brisbane, Miles and Roma. A variety of rosters will be utilised to accommodate the local and non-local workforce.

Australia Pacific LNG expects that the operational workforce will be made up of a fly-in/fly-out component which will be accommodated in operations camps near the gas processing facilities (see map above), a component of locally recruited workers who will continue to live in their dwellings (workers at remote sites will still require camp accommodation), and a component of relocating workers, accessing housing on the private housing market. It is the latter that will have a direct impact on the local housing markets.

The proportion of relocating or locally hired workers is difficult to predict, as it depends on a range of factors external and internal to the project. Nevertheless, A ustralia Pacific L NG is currently expecting an incrementally increasing proportion of locally recruited and relocated operational workers (as depicted in Figure 2) Australia Pacific L NG anticipates approximately 40% of its workforce living locally around 2025, consisting of approximately 130 workers who have relocated to live in the region and 130 workers who have been recruited regionally. It is Australia Pacific LNG's ambition to, where possible, increase the proportion of locally recruited and locally living operational workers, whilst being mindful of impacts that may create on the local housing and labour markets.

700 600 500 Projected FIFO personnel Norkforce 400 Projected Relocating 300 Personnel ■ Projected Personnel 200 recruited locally 100 0 2 3 5 8 9 10 11 12 13 14 15 16 1 **Project Year** 

Figure 2 Indicative operations workforce, relocation and regional recruitment projections<sup>2</sup>

In addition, current forecasts suggest that operation of the pipeline will require a field based staff of 29 persons. Of these, 18 will be based in Miles, and 11 in Biloela. As with the gas fields operational staff, it is difficult to predict how many will be recruited locally, how many will commute and how many will relocate to live permanently in the area. Current estimates indicate that the majority will be either recruited locally, or commute and be housed in gas field operations camps (for some of the Miles based staff) or in housing rented on the private housing market.

### 2.4. Impact areas

As indicated above, Australia Pacific LNG expects about 130 workers to relocate to live in the Surat incrementally until 2025. It is impossible to predict with a great degree of certainty where these will settle, and what type of accommodation they will be seeking. However, Australia Pacific LNG expects that for health and safety reasons, workers would not commute more than 50 kilometres one way on a daily basis.

Figure 3 below shows 50 kilometre radii around each proposed gas processing facility, which is where the majority of the operational workforce will be based.

Assuming that one of the major reasons workers would consider relocating is to avoid spending their whole roster in camp and long times commuting, it is reasonable to conjecture that the incentive to relocate to locations further than 50 kilometres away from their place of work would be minimal. This seems to indicate that Miles and Chinchilla are the towns most likely to a ttract relocating workers, and Roma to a lesser degree.

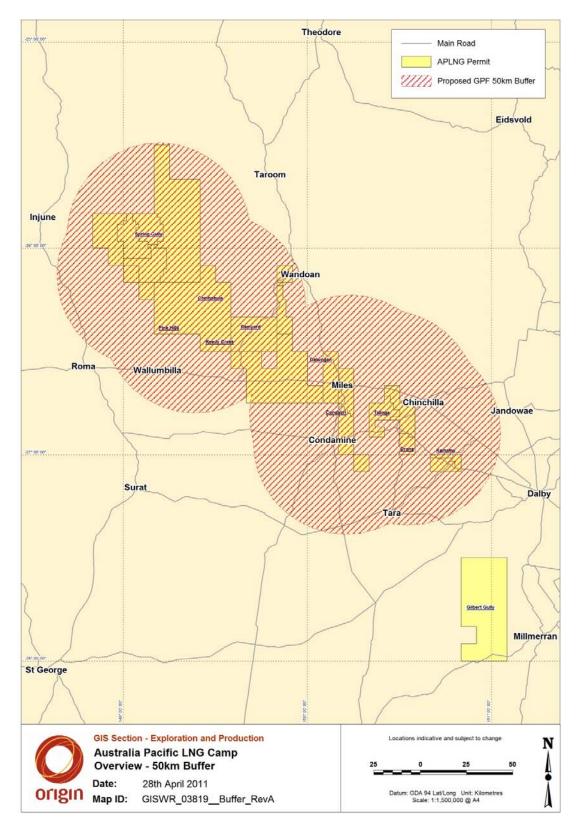
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<sup>&</sup>lt;sup>2</sup> Note that the figure is based on estimates at the time of writing. These are subject to change due to a range of internal or external factors. The figure also presents an indicative and stylized workforce requirement profile. The actual numbers may hence vary somewhat.

Figure 3 Likely impacted areas – 50 kilometre buffer around gas plants



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In summary, the above indicates that 130 workers may relocate to the Surat over the next 14 years, and that these are likely to primarily settle in the towns of Miles and Chinchilla, and to a lesser degree Roma and Dalby, accessing housing on the private housing market in these towns. The relocation rate is however likely to be slow and incremental, with no more than a handful workers with families relocating per year.

It will primarily be these relocating workers and families who drive direct project induced housing demand. This seems to indicate that the permanent housing market impacts directly caused by the project should be small and incremental.

### 2.5. Australia Pacific 'living local' Strategy

Australia Pacific LNG has developed a range of measures to support operational workers living locally or seeking to settle in the Surat region.

#### 2.5.1. Relocation assistance

Origin, the upstream operator for the Australia Pacific LNG project, provides practical assistance to workers who are relocating to a regional location. The assistance typically involves engaging removalists to transport the employees' belongings to then ewlocation as well as paying for transport of the worker and family to the location. The assistance can also involve supporting the employee to find appropriate permanent accommodation suitable to his or her needs. Support can also be offered for spouses of employees relating to finding new employment, or finding education for children.

#### 2.5.2. Living local incentives

Origin will offer workers who are relocating or living locally a range of financial incentives as part of their total remuneration. Importantly, there is no one single solution that will meet the housing needs of a diverse workforce. Origin has therefore elected not to own and manage permanent housing stock for its workers, except for workers camps. Rather, it expects its employees to find suitable housing, and will support them in the process.

Workers relocating to live locally may be eligible for a variety of financial subsidies, including a mortgage interest subsidy or a rent subsidy for a period of time. These are aimed at ensuring relocating workers can maintain their current housing circumstances. Some senior roles may also be eligible for a further subsidy supporting a home purchase in the region.

In a ddition, a ll o perational w orkers w hose principal p lace o f r esidence is lo cated w ithin 1 50 kilometres of a gas plant will receive an annual location allowance.

## 3. Summary of Housing Market and Demographic Analysis

The purpose of the following section is to provide a brief overview of key features of the housing markets in Miles, Chinchilla and Roma, as well as a summary of issues identified during stakeholder consultation. In doing so, an analysis has been undertaken of key demographic indicators and key housing market indicators with respect to supply and demand parameters.

Demographic characteristics are based on the 2006 Australian Bureau of Statistics (ABS) Census, the most current data available. New data from the 2011 ABS Census is not anticipated to be released until mid to late 2012.

The current state of the housing market in these towns can be summarised as follows:

- Miles, Chinchilla and Roma all suffer from a lack of housing diversity. The predominant form of dwellings within these communities is detached dwellings suitable for large families.
- The m edian p rice f or a u nit a nd d etached d welling w ithin t he to wnships h as increased significantly over the last five years. The increase in prices has grown at a steady and consistent p ace. The increase h as kept m any l ow-income families out of the h ousing purchase market and in rental accommodation.
- Median advertised rents are currently very high due to speculative investment in anticipation
  of high rental returns paid by resource companies. Advertised rents are however showing
  some signs of downward movement as more rental stock is coming on to the market.
- The demand for housing within these townships will continue to rise at a steady pace.
- The current's upply of vacant urban land is capable of meeting housing demands from population growth over the long term, irrespective of increased population growth directly and indirectly attributed to Australia Pacific LNG's operations in the surrounding area or any cumulative impact associated with other energy and mining projects.
- Both Miles and Chinchilla are considered slow growth markets and are relatively affordable
  by state and local standards. However, the new residential product being delivered to the
  market is generally on edimensional and not marketed towards low to medium income
  earners.
- There is a large proportion (32.4% in Chinchilla, 34% in Miles and 25.7% in Roma) of low income households within the respective townships. Low income households are defined as a weekly income of less than \$800. A ccordingly, any increase in the cost of living for these households would a ffect a large p roportion of the community. The supply of modern, adequate and affordable dwellings for purchase by this income group is limited.

Throughout the stakeholder engagement process a variety of issues were identified with respect to the s pecific e lements and b roader a spects of the housing market in the region, which both confirmed and supplemented the data described above. The issues noted below either represent a current or future impediment to the housing market in the region:

Council and Community Resources

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- Lack of Town Planning and Engineering resources within Western Downs Regional Council to cater for increased activity to process both Infrastructure Agreements and Operational Works applications.
- The potential for resources to become constrained when community members seek assistance from the local government or local community organisations (i.e. rental assistance, displacement from homes).

#### Infrastructure Capabilities

- Lack of Local Government funding to cater for key trunk infrastructure upgrades that effectively restrict new developments occurring in a timely and efficient manner.
- Developer's inability to finance the cost of trunk infrastructure from the outset of a project causing the project to become unfeasible.

#### • Affordable Housing Provision and Housing Affordability

- There is a distinct lack of affordable housing within the regions to cater for lower income earning community members.
- The majority of product being delivered to the market is targeted towards the upper spectrum of the market. There is a lack of product being delivered to the lower spectrum of the market.
- According to most stakeholders, rental and purchase affordability has already hit a crisis point in the communities of Roma, Miles and Chinchilla.

## 4. Housing and accommodation strategies

#### 4.1. Overview

This section addresses the strategies proposed by Australia Pacific LNG for the gas fields operations to a ddress h ousing a ffordability a nd a vailability. The proposed strategies are a product of a comprehensive stakeholder engagement process and a detailed housing and demographic analysis of the Western Downs and Maranoa region which align strategy delivery with potential impact.

The methodology of the IHAS has been to adopt a collaborative consultative approach with key stakeholders to form strategies that will address both current and potential impacts pertaining to the gas fields housing markets.

The proposed strategies form an integrated, sustainable and holistic response to Australia Pacific LNG's gas fields operations. With a focus on achieving sustainable "organic" growth in the housing market, the strategies provide a balance of both indirect and direct investment mechanisms.

The difference between the respective investment methods is described below:

- **Indirect I nvestment M echanisms:** The purpose of an indirect investment strategy is to stimulate the housing market without having to directly deliver housing to the market. An indirect investment strategy will primarily seek to alleviate those pressures that hinder the ability to deliver housing to the market. The advantage in implementing indirect measures is that the housing market has the ability to a djust and function on its own without the impediments of bringing product to the market.
- **Direct Investment Mechanisms**: A direct investment approach seeks to physically deliver housing to the market which will impact upon the supply and demand parameters that influence the housing market within the region. Providing a heavily weighted response to Australia Pacific LNG's housing and accommodation impacts via direct investment methods will u nduly in fluence the market equilibrium of the housing market. Hence, the direct strategies will focus investment on identified areas of need and improve the capacity within each community.

This IHAS has sought to deliver a balanced and sustainable approach to address Australia Pacific LNG's housing market impacts on the gas fields region.

## 4.2. Objectives and mitigation strategies

As described in section 1.2, the objectives of this IHAS are to:

- Implement and fund key partnerships to offset short-term impacts on low to medium income households;
- Fund and facilitate the delivery of quality affordable housing to fill a gap not currently provided by the market;
- Unlock obstacles to development, supporting sustainable market led growth, and;

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Monitor the housing market activity to determine the efficiency and success of strategies in limiting the impact on the housing market to allow for adaptive management.

To meet these objectives, a suite of strategies have been developed. These propose a balanced integration of both direct and indirect investment mechanisms to address housing and accommodation related impacts.

Table 2 Objectives and strategies

Objective	Strategy
Implement and fund key partnerships to offset short-term impacts on low to medium income households	Strategy 1 - Fund the RentConnect Program  Strategy 2 - Implement and fund a housing support case management program
Fund and facilitate the delivery of quality affordable housing to f ill a g ap n ot c urrently p rovided b y t he market	Strategy 4 - Facilitate an df und dev elopment Partnerships
Unlock ob stacles to d evelopment, s upporting sustainable market led growth	Strategy 3 - Fund council town planning capacity  Strategy 5 - Develop infrastructure investments which facilitate private housing development
Monitor the housing market activity to determine the efficiency and success of strategies in limiting the impact on the housing market to allow for adaptive management	Strategy 6 - Monitoring Program

### 4.3. Strategies and Key issues

A variety of issues were identified that currently impact the housing market within the Western Downs and Maranoa regions. Any worsening of these issues will significantly impact upon the housing market and potentially cause even greater supply and demand imbalances within the housing market.

The p roposed strategies h ave b een formulated to respond to t he i ssues i dentified d uring th e development of this strategy whilst also addressing the CG conditions.

The proposed strategies seek to address the following issues by implementing a balance between indirect and direct investment methods.

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Table 3 Key issues addressed by the strategies

Issue	Housing and Accommodation Impacts	Strategy Reference
Rental pressures on low to moderate income earners	Potential for short term increases in rental prices after FID is made and project construction commences. This will have an impact on low to moderate income earners and their ability to service rental payments.	Strategy 1 - RentConnect Program Strategy 2 - Housing support case management program
Human resource constraints	Lack of Town Planning and Engineering resources within the Council to cater for increased activity directly and indirectly associated with resource growth.	Strategy 3 – council capacity
	The potential for community services resources to become constrained when increasing numbers of community members seek assistance from local organisations.	Strategy 1 - RentConnect Program Strategy 2 - Housing support case management program
Affordable housing and appropriate	There is a distinct lack of affordable housing within all towns in the region to cater for lower income earning households.	Strategy 4 – Development Partnerships
housing	The majority of product being delivered to the market is targeted towards the upper spectrum of the market. There is a lack of product being delivered to the lower spectrum of the market.	
	There is a lack of diversity in the type of housing product available, particularly in Miles and Chinchilla, but also in Roma, albeit to a lesser degree.	
Infrastructure investment	Lack of Local Government funding to cater for key trunk infrastructure upgrades that effectively restrict new developments occurring in a timely and efficient manner.	Strategy 5 – Infrastructure Investment
_	Developer's inability to finance the cost of trunk infrastructure from the outset of a project causing the project to become unfeasible.	
Sustainable and collaborative monitoring	Australia Pacific LNG will seek to manage the effectiveness of the strategies and work with council and state government departments to monitor the housing market within the region.	Strategy 6 - Monitoring Program

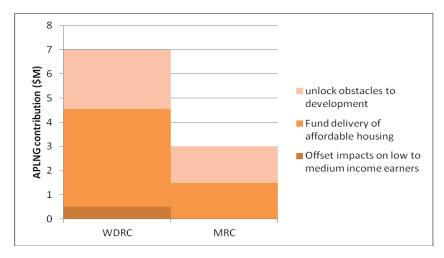
In total, Australia Pacific LNG proposes to spend \$10M, subject to a financial investment decision for a second LNG train, to address housing affordability in Western Downs and Maranoa between 2011 and 2016, of which \$5M will be drawn from community investment contributions. Figure 4 displays approximately how this contribution will be spent across the local government areas and stated objectives.

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Figure 4 APLNG approximate contribution to housing affordability per local government area and objective



### 4.4. Timing and implementation

The strategies will be implemented under short, medium or long term timeframes. Strategies are proposed to be implemented so that potential impacts are addressed in a timely and efficient manner.

Those s trategies that have p otentially I onglead in times (e.g. d evelopment related projects, infrastructure investment etc.) will be initiated during early phases and then implemented when final planning and procurement is complete.

On-going m anagement a nd c o-ordination of t he s trategies w ill b e u ndertaken t hrough a collaborative approach with Australia Pacific LNG and key stakeholders. Strategies will be reviewed on an annual basis and if necessary, refined to suit changing circumstances.

The strategies will adhere to the following timeframes:

- **Short T erm Timeframe:** for those s trategies envisaged under a short term t imeframe implementation will commence immediately and up to 12 months of the FID. The implementation of short term strategies will require co-operation and co-ordination between Australia P acific L NG, C ouncil, s tate g overnment d epartments and p otentially o ther community partners as they are intended to occur within the shortest possible timeframe.
- **Medium Term Timeframe:** those strategies envisaged under a medium term timeframe will commence to be implemented within 12–24 months of the FID. Medium term strategies are generally construction based mechanisms and will require a more substantial lead in time and a greater implementation and management timeframe.
- Long Term Timeframe: those strategies envisaged under a long term strategy will be implemented and maintained throughout the life of the project. The timeframes are

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dependent on the outcome and delivery program for nominated projects. Indicatively, long term timeframes refer to strategies which will be implemented beyond 24 months after FID.

### 4.5. Australia Pacific LNG Housing Strategies

The following section discusses the proposed strategies in detail. The strategies have been divided in to their proposed delivery phases. Each strategy has been discussed in terms of its contextual background, the deliverable, objective, geographic area, and the timing for implementation.

It is noted that most of the strategies apply to the Western Downs region, and that only few are proposed for the Maranoa Region. This is due to the fact that Australia Pacific LNG will have a greater impact on the Western Downs region when it comes to housing related matters. Also, the housing strategy proposed by Santos for the Maranoa region is based on a very similar philosophy as Australia Pacific LNG. Many of the strategies proposed by Australia Pacific LNG are therefore already f unded b y S antos a nd u nder i mplementation. M aranoa R egional C ouncil h as a dvised Australia Pacific LNG that their key priority is increasing the stock of affordable dwellings and address infrastructure bottlenecks.

#### 4.5.1. Short Term Strategies

Strategy 1	Fund the RentConnect Program
	As detailed in Section 4 of this report, there is a large proportion (32.4% in Chinchilla, 3 4% in M iles a nd 2 5.7% in R oma) of la rge I ow in come households within the r espective townships. Low in come households a re defined as a weekly income of less than \$800. Accordingly, any increase in the cost of living for these households would affect a large proportion of the community.
Context to Strategy	This strategy will use an existing program to provide immediate assistance to those members of the community who are at risk of getting displaced from their homes as a result of increased rents. It is reasonably expected that im mediately following A ustralia P acific L NG's FID, r ental p rices will increase. This has been evident in other resource communities such as Gladstone, where r ental v alues have increased by 20 % s ince the announcement of energy company's investment decisions.  This s trategy will a ssist p eople to f ind and r etain s ustainable accommodation in the private rental market.
Objective	Implement and fund key partnerships to offset short-term impacts on low to medium income households.
Financial Commitment	Australia P acific L NG has c ommitted \$ 67,000 to D epartment of Communities to deliver the program for six months
Deliverable	The Department of Communities RentConnect Program is delivered out of the neighbourhood centres in Miles and Chinchilla as an outreach service.
Area	Miles and Chinchilla
Timing	Australia Pacific LNG committed to fund the RentConnect program to be delivered in Miles and Chinchilla in October 2011.

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Strategy 2	Implement and fund a housing support case management program
Context to Strategy	Rental stress is often a complex social issue with causes and effects across a range of personal and social factors, some within the influence of the renter. To assist these, an intensive case management program is proposed, which will a ssess the at risk tenants social situation, set joint goals, and provide support to reach these goals.  Also, there may be a need for immediate rental relief or rental assistance to alleviate direct pressures, whilst working with the client to id entify longer term sustainable housing solutions.  Australia P acific L NG will develop a housing support case management program to address these issues. The program will be delivered as a nintensive case management program, taking a holistic view on the challenges required to overcome rental stress. Australia Pacific LNG will work with neighbourhood centres in Miles and Chinchilla to develop and deliver the program  For the strategy to be effective, it will need to appropriately assess the need of the clients, be able to link them to a suit of targeted strategies, and have the ultimate goal of assisting clients to find a sustainable rental situation.
Objective	Implement and fund key partnerships to offset short-term impacts on low to medium income households.
Financial Commitment	Australia Pacific LNG has committed \$150,000 to Murilla Community Centre and Chinchilla Family Support Centre to implement the program for nine months
Deliverable	The deliverable will be the establishment of an intensive case management program to be delivered by the neighbourhood centres in Miles and Chinchilla. Australia Pacific LNG will fund brokerage and staff costs for the program.
Area	Miles and Chinchilla
Timing	Australia Pacific LNG committed funds to this program in October 2011.

Strategy 3	Fund council town planning capacity
Context to Strategy	During t he s takeholder engagement process C ouncil acknowledged t hat human resources, especially with respect to engineering and town planning related disciplines, were scarce. In particular, council noted that there was an immediate need for a technical officer. As the development and construction industry continues to grow within the region Council will inadvertently be in a position where the demand for their services substantially outstrips their supply capacity. Accordingly, it is important that Council is internally equipped with the resources to cater for any future increase in activity.  Providing for a dditional human resources in this in stance will a ssist in

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	maintaining e fficient C ouncil a ssessment tim eframes f or d evelopment a nd operational works applications. This will assist in the sustainable and efficient delivery of housing to the market and assist in maintaining a strong economic environment the region. The procurement of a dditional resources to a ssist with the processing of development and operational works application is an indirect investment approach.
Objective	Unlock obstacles to development, supporting sustainable market led growth
Financial Commitment	Australia Pacific LNG has committed \$260,000 to Western Downs Regional Council to employ a technical officer for two years
Deliverable	Australia Pacific LNG will provide a direct offering of funds to WDRC for the procurement of a technical officer for a period of up to two years to assist in the processing of development and operational works applications.
Area	Western Downs Regional Council
Timing	Australia Pacific LNG committed funds to council in October 2011

### 4.5.2. Medium term strategies

Strategy 4	Facilitate and fund development Partnerships
Context to Strategy	The Western Downs and Maranoa housing markets have experienced significant increases in housing prices. For example, during the ten year period between 2000 and 2010 the median price for houses in Chinchilla increased by 258% from \$83,250 to \$298,000. The increase in the median sales prices for houses in Chinchilla has occurred steadily and consistently. Over the same ten year period the median price for houses in Miles has increased 370% from \$50,000 to \$235,000.  Further to the above, the housing market analysis of Roma, Miles and
	Chinchilla provided in Section 3 of this report indicates that the markets are showing signs of a ffordability is sues. It is likely that housing prices will continue to rise as the energy and mining industry continues to grow within the region and as impediments to the delivery of housing within the sea reas remain.
	In addition to affordability issues, the lack of diversity of housing types within these towns is also causing discomfort within the community. The predominant dwelling type in both Miles and Chinchilla is separate houses, representing over 80% of the market in both loc ations. Whilst diversity is somewhat more apparent in Roma, there is still a distinct lack of quality affordable dwellings.
	The provision of a more diverse and affordable housing product can usually be attributed to local developers lack of knowledge in the market place and the untested nature of providing new product to the market.
	By w orking c ollaboratively w ith the c ouncils and n ot for profit housing companies A ustralia P acific L NG r ecognise that it is important that a contribution is made to the provision of more affordable dwelling types for low to moderate income earners.

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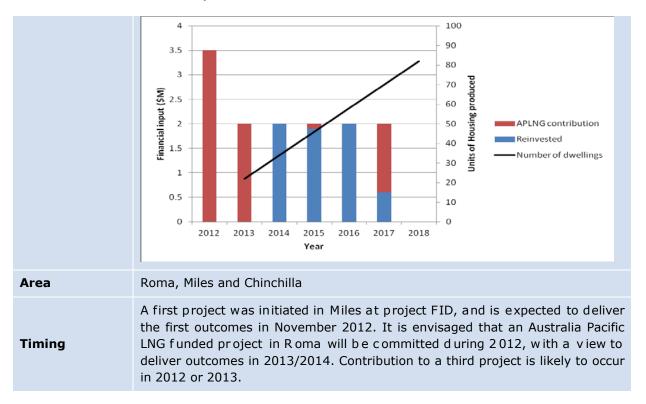
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Objective	Fund and facilitate the delivery of quality affordable housing to fill a gap not currently provided by the market.
Financial Commitment	Australia Pacific LNG has committed \$2.05M to Horizon Housing Solutions for an initial development project in Miles  Australia Pacific LNG has committed \$1.5M to Maranoa Regional Council for an affordable housing development project in Roma  Australia Pacific LNG proposes to allocate \$2M to collaborative mechanisms in the Western Downs developed following the Western Downs Housing Strategy, provided a commercially viable model which addresses Australia Pacific LNG induced impacts can be developed.
Deliverable	Australia Pacific LNG will work in partnership with the councils and not for profit companies to deliver three affordable housing projects in Maranoa and Western Downs. The strategy will ultimately deliver affordable housing projects that provides for an affordable residential product. The product will typically be one, two, a nd t hree bedr oom u nits / t ownhouses and be o f a design and function that meets the requirements of the target market.  The partnership model will ultimately depend on the specific circumstances of the project at the time when a decision is made to proceed. However, APLNG envisages partnerships models where APLNG provides project finance and the partners contribute finance, land or other in-kind contributions. APLNG also expects there will be sales component in each project to offer a ffordable product for sale, and provide finance for reinvestment into future projects.  Australia P acific L NG envisages financing the following development partnerships during phase one of the project:  Development of 9 units of a ccommodation in Miles with Horizon Housing Company, on land made available by Department of Communities (already committed)  Development of a ffordable a ccommodation with Horizon Housing Company and Maranoa Regional Council in Roma (under negotiation)  Contribution to a collaborative model in Western Downs to fund one additional project (under negotiation)  Turther projects during phase 1 are expected to be primarily funded through reinvestment of proceeds from sales and mortgaging of retained properties.  Figure 5 below shows a hypothetical model demonstrating the financial input from APLNG, reinvestment, and number of dwellings produced. Ultimately, the number of units produced will depend on demonstrated need, the size of the sales components and financial performance of the early projects. Under the hypothetical model, A PLNG's contribution could, if reinvested a ppropriately, generate in the order of 80 dwellings.
	Figure 5 Hypothetical development model and housing output

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Strategy 5	Develop infrastructure investments which facilitate private housing development
Context to Strategy	During h igh g rowth p eriods, s mall r egional c ommunities, like that of M iles, Chinchilla a nd R oma often r equire a substantial in vestment in in frastructure (e.g. r oad, w ater, s ewer) as p re-existing s ystems become o verloaded a nd unable to manage the increased demand. The extension of existing systems is also r equired to s ervice new u rban a reas w ithin the township. G iven the funding constraints of local authorities, the delivery of key infrastructure is often d elayed w hich r estricts the efficient r elease of new housing and key development areas. In some instances, the cost and responsibility of delivering new trunk infrastructure is often transferred to a developer. Such infrastructure upgrades a re often r equired at the outset of a project and a re thus a substantial financial burden for the developer causing the project to become unviable.
	During the stakeholder engagement process council acknowledged that substantial investment is required to u pgrade n ew a nd ex isting s ystems to facilitate the ongoing growth of the townships. This issue was further supported by opinions raised by local developers whereby the need to upgrade trunk infrastructure is im peding their a bility to proceed on existing a nd p lanned projects. Subsequently restricting the supply of new housing to the market and placing increased pricing pressures on current stock.  The funding of infrastructure such as roads, water, sewer and stormwater

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	networks would constitute an indirect in vestment mechanism from Australia Pacific LNG. Dependent on the final resolution of the type of infrastructure investment required, this will allow local developers to proceed on development projects without having to burden the cost of the upgrade on their projects. This strategy would be seen as an indirect investment from Australia Pacific LNG as it would allow the existing development industry to proceed with
	current projects and subsequently increase the supply of housing. This strategy has clear benefits for a variety of stakeholders.
Objective	Unlock obstacles to development, supporting sustainable market led growth
Financial Commitment	Australia Pacific L NG has committed $\$1.5M$ to Maranoa Regional Council to, together with Santos, part fund infrastructure upgrades in Roma.
	Australia P acific L NG p roposes to al locate $\$$ 2M t o i nfrastructure u pgrades in Miles and/or Chinchilla.
Deliverable	Provide funding to Maranoa Regional Council and Western Downs Regional Council to d eliver trunk in frastructure (e.g. r oad, s ewer, w ater a nd/or stormwater). The funding arrangement with Councils would be provided under an in frastructure a greement w ith A ustralia P acific L NG, w hereby f uture headworks contributions paid by developers would be credited back to APLNG or reinvested in other affordable housing projects.
Area	Miles, Chinchilla and Roma
Timing	Australia Pacific LNG envisages entering into an infrastructure agreement with Maranoa R egional C ouncil d uring 2 012 or 201 3. Australia P acific LNG i s currently in n egotiations w ith W estern D owns R egional C ouncil a bout infrastructure agreements and envisage committing to infrastructure upgrades during 2013.

## 4.5.3. Long term strategies

Strategy 6	Implement a m onitoring pr ogram / sy stem to a ssess t he o n-going state of the housing market.
Context to Strategy	The Coordinator General's conditions of approval stipulate that Australia Pacific LNG m ust p rovide s ix monthly r eports on the affordable and community housing solutions implemented under the IHAS. This monitoring program will act as a gauge to assess the effectiveness of the strategies and to provide Government with an up to date overview of the housing market within the region.  Whilst the p roposed monitoring p rogram will a ssist in r esponding the CG conditions, model will also seek to determine the impact on the housing market triggered by Australia Pacific LNG activities and workforce in the region. The scale of these impacts will be measured over time to allow for scenario modelling and mitigation strategies.
Objective	Monitor the housing market activity to determine the efficiency and success of strategies in limiting the impact on the housing market to a llow for adaptive management

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Financial Commitment	Australia Pacific LNG will provide timely information to the monitoring program
Deliverable	The deliverable for Australia Pacific LNG will be monitoring program which can ultimately report on the state of the housing market, affordability situation and effectiveness of mitigation measures.
Area	Western Downs Regional Council and Maranoa Regional Council.
Timing	Australia Pacific LNG is currently discussing with the Coordinator General's office, OESR, councils and other proponents about a joint monitoring program.

## 5. Conclusion and Summary

The direct and indirect investment in housing and accommodation outlined in this report seeks to achieve the following objectives:

- Implement and fund key partnerships to offset short-term impacts on low to medium income households;
- Fund a nd facilitate the delivery of quality affordable housing to fill a gap not currently provided by the market; and
- Unlock obstacles to development, supporting sustainable market led growth.
- Monitor the housing market activity to determine the efficiency and success of strategies in limiting the impact on the housing market to allow for adaptive management.

Through consultation and research in all of the potentially impacted communities, Australia Pacific LNG have devised a series of strategies which are responsive to immediate need and which will facilitate and deliver sustainable solutions in the medium to long term.

The short term strategies provide a clear mandate to manage and mitigate any potential impact arising from the outset of the project to ensure that those most vulnerable in the communities are not disadvantaged or displaced by acute and short term market impacts.

The m edium to long term s trategies p rovide s ensible a nd t argeted i nvestment w hich s eek to stabilise h ousing and accommodation m arkets, b uild c apacity w ithin the host communities a nd ensure that any project related and possible cumulative impacts can be managed through-out the operational life time of the project.

Australia Pacific LNG is committed to the ongoing monitoring and management of supply and demand for housing and a ccommodation within the impacted communities. The formation of partnerships with key stakeholders in the communities will assist in the monitoring process and will allow investment by Australia Pacific LNG to be adaptive to acute or emerging issues within host communities.

