

## **Australian Geographer**

# **Delivering enduring benefits from a gas development: Governance and planning challenges in remote Western Australia**

Submission from:

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## Abstract

*This paper reviews the complex and multifaceted adjustment pressures being experienced by Onslow, a small, remote town in Western Australia's Pilbara due to a large gas development. Some members of the community are enthusiastic about the opportunities that the gas industry will bring although the majority are wary of the negative impacts of rapid growth and corporate dominance observed in other Pilbara towns during the mining boom.*

*The paper reports on the strategies being utilised by the company, the different spheres of government and the local community representatives to come to an agreement about how to achieve enduring community value so that the aesthetic attributes of the town and quality of life in Onslow will be enhanced, while also accommodating a large constructive workforce which will leave within a short time (four years). Using data collected about the Pilbara and the socio-economic impacts of the mining industry on other towns, the lessons learned from rapid growth elsewhere were applied in Onslow and the outcomes assessed and reported. It is evident that the community engagement strategies and the collaborative planning processes have been undermined by disconnects between commercial imperatives, governance frameworks, investment risk and timeframes.*

## Introduction and Background

The Australian resources sector has experienced sustained growth since 2001, underpinned by demand from China for commodities creating boom conditions for the national economy which have continued, largely unabated, while many other economies have suffered recession (Bureau of Resources and Energy Economics 2012). The extractive industries have been particularly important for the Western Australian economy (Western Australian Government 2012). For most of the last decade iron-ore has been the most lucrative commodity export with the largest and richest deposits located in the remote Pilbara region of Western Australia (See Figure 1).

**Figure 1: The Pilbara Region of Western Australia showing four local government authorities**

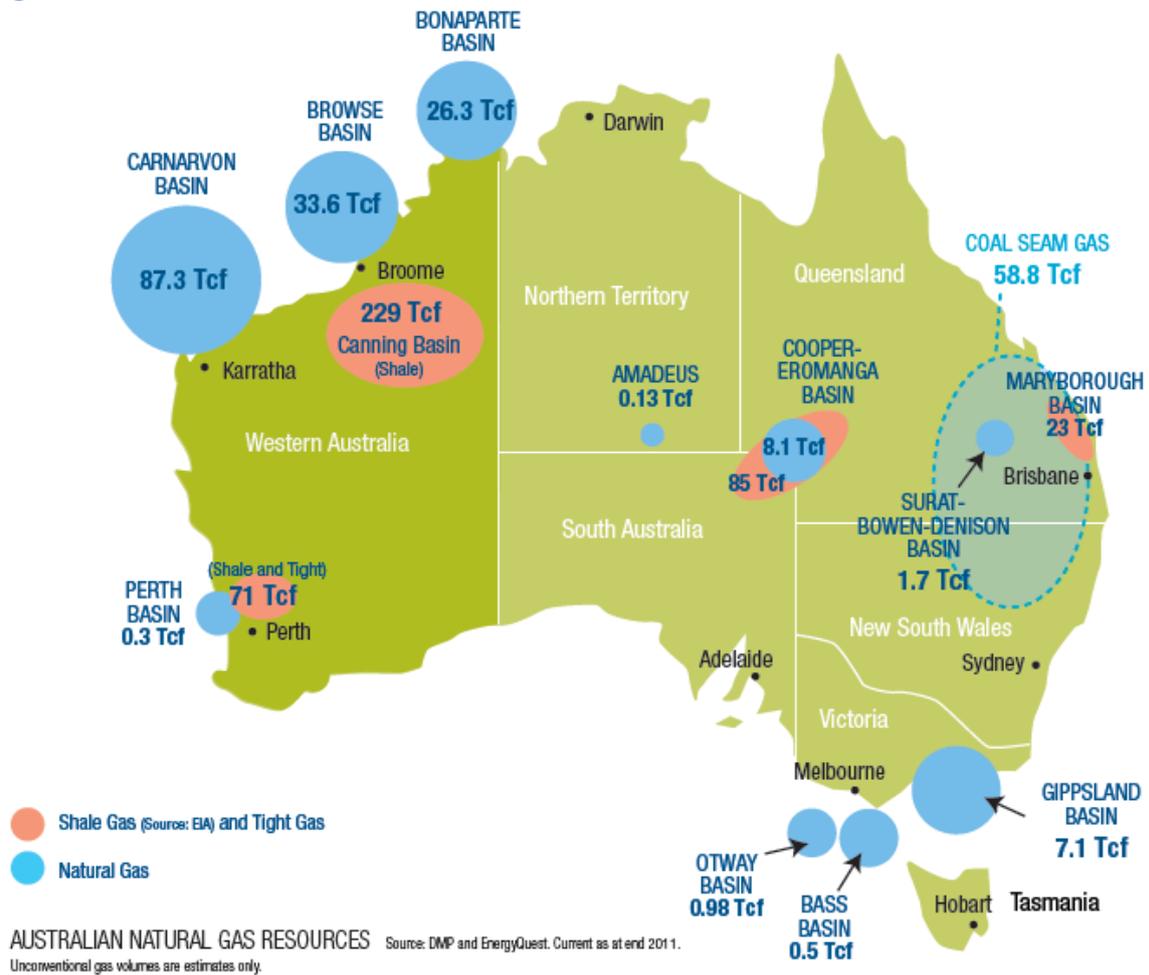


Source: The Pilbara Regional Development Commission 2009

Earlier in 2012, the iron-ore price began to slide back to 2009/10 prices and economic confidence was shaken as large projects such as port enlargements were stalled and companies announced retrenchments and halts on project expansions. There were concerns that the significant investments made in the Pilbara by mining companies, support services companies and the government would be hit hard. However, Western Australia is one of the most productive and diversified mineral regions in the world and while iron-ore and some other mineral resources declined in value, oil and gas markets remain buoyant. Market volatility is a hallmark of the resources industries and companies work quickly when they can to take advantage of markets and prices when they are high. It was announced in 2011 that Chevron would develop large gas reserves which have been identified off the Western Australian Pilbara coast. While coal seam gas production is well established elsewhere, that industry has not been without considerable conflict with the agricultural industries and regional citizenry due to issues associated with noise, dust and the impacts of hydraulic fracturing (fracking) (Rolfe *et al.* 2007; Petkova *et al.* 2009). The Western Australian gas industry on the other hand is different; the dominant resource is liquefied natural gas (LNG) from off-shore reserves which is refrigerated, and condensed into colourless, odourless liquid onshore and then transported by ship to international markets.

LNG is in high demand because it is a lower carbon emission alternative. Western Australia has significant conventional gas reserves as shown in Figure 2.

**Figure 2: Australian Natural Gas Resources**



Source: Western Australian Department of Minerals and Petroleum 2012 (with permission)

The North West Shelf gas project off the coast of Karratha was commissioned in 1984 and has contributed to building the town as a regional centre in the Pilbara. Since then, several large scale LNG projects have been announced, including the Browse Basin, 60 kilometres north of Broome and the Carnarvon Basin off Onslow all of which are highly valued and expected to bring economic benefits, jobs and infrastructure to the State (Department of State Development 2011). Although the Pilbara region is an important hub for the resources extraction industries, it has a very small population with a few small towns and remote settlements scattered over very large distances. Remoteness has presented a challenge for servicing and sustaining these towns and corporate investment has been important during successive resource booms.

There have been numerous boom periods since the embargo on iron ore exports was lifted in 1959 (Battellino 2010; Measham *et al.* 2013 ) but until the 1970s, mining companies operating in remote areas were largely responsible for the construction and maintenance of

towns and communities servicing the nearby mining operations (Haslam McKenzie 2011). Increasingly towns have 'normalised' meaning they are no longer owned by a mining company and now have the usual governance structures of any other community with no restrictions regarding who can live there or do business in them (Thomas *et al.* 2006).

Despite demand for housing, serviced land and services exceeding supply, government has been, until recently, reticent to release Crown Land for development purposes. As early as 1974 (Government of Western Australia Department of Industrial Development 1974) and many times since, (Department of Planning and Urban Development 1992; Ministry for Planning 1997) various petitions, housing and infrastructure assessments and government reports have identified the need to invest in the Pilbara towns (Pick *et al.* 2008; Haslam McKenzie *et al.* 2009; Lawrie *et al.* 2011). Demand for accommodation, services and key workers has been unrelenting, pushing housing prices to unprecedented levels. In the Pilbara the lack of housing and land supply has been a culmination of problems with native title, an unresponsive planning system, a State government unwilling to address the problem, a resources industry unable to inform planning authorities of anticipated demand and competition for skilled labour with the mining industry (Haslam McKenzie and Rowley 2013).

In 2008 a new Western Australian government was formed whose pivotal electoral commitment was a Royalties for Regions program which quarantined 25 per cent of the State's mining and onshore petroleum royalties for additional investments in projects, infrastructure and community services in rural, regional and remote communities – over and above the State government service obligations (Department for Regional Development and Lands 2012). A centrepiece of the Royalties for Regions program was the Pilbara Cities Blueprint, an ambitious plan to revitalise towns in the Pilbara capable of housing at least 50,000 people and with amenities comparable to places such as Darwin and Cairns. The towns identified for renewal were Karratha, Port Hedland and Newman. Notably, even though new LNG projects off-shore from Onslow had been announced and committed, Pilbara Cities investment in the town was projected to be modest. Despite considerable academic (Solomon *et al.* 2007; Haslam McKenzie *et al.* 2009; Hajkowicz *et al.* 2011; Lawrie *et al.* 2011) and public policy attention (Department of Treasury and Finance 2007; Senate Select Committee on Housing Affordability in Australia 2008; Department of Planning and Infrastructure 2009; Department for Regional Development and Lands 2012; House of Representatives Standing Committee on Regional Australia 2013) paid to the cost of poor planning for resource boom towns and rapid population growth, it appears that despite a long lead time and the projected growth, there is minimal projected public investment in Onslow.

This paper will review the anticipated impacts of gas development in Onslow. It will examine the strategies being utilised by the gas company, the different spheres of government and the local community representatives to achieve enduring community value

from the LNG investments while also preserving the aesthetic attributes of the town and the quality of life enjoyed by the small but longstanding population of Onslow. It will assess whether the recommendations of numerous reports and studies from a variety of jurisdictions advocating improved preparedness for rapid growth and the socio-economic impacts of escalated resource company activities in rural, regional and remote locations have been adopted or applied in this particular community.

The next section will discuss the merits of regional investment in remote communities where growth has been prompted by high value resource extraction, in light of the conflicting arguments regarding the 'resources curse' and enduring community value which could be derived from mining. The recent experiences of the Pilbara will then be reviewed within the context of prolonged growth pressures prompted by high commodity prices and the ensuing socio-economic consequences experienced by a range of residents, businesses and workers. A variety of policy responses to the pressures and subsequent regional development strategies will also be appraised.

Next, the town of Onslow will be introduced in more detail; its current role as a Pilbara town and its intended development as a gas hub. Qualitative data from a variety of sources will be discussed to gain an understanding of whether new policies and strategies to ensure that regional economic development are able to proceed in a timely manner in concert with community and corporate plans. These will include public consultation reports and planning documents, the Minutes of the Onslow Community Reference Group and information from face to face interviews over the planning and early construction phases. They will be examined to develop an understanding of the community's preparedness for change and gain insight to their expectations and level of resilience. This includes an assessment of the community's social and physical resources and the capacity and willingness to develop as a resource hub town.

The final section will discuss whether the lessons learned from other communities, particularly those in other parts of the Pilbara region which have experienced rapid growth, have been applied in Onslow. The outcomes will be assessed and reported.

### **The Costs and Benefits of Resource Development: a brief review**

There is considerable literature debating the local and regional costs and benefits of resource development, particularly around the resources industries. Much has been written about the 'resource curse' and the 'paradox of plenty', suggesting that a dependence on mining is often associated with slower economic growth (after controlling for the usual determinant of growth) due to uneven social and economic benefits, unstable institutional and political systems and marginalisation of minority groups and the environment in the midst of resource abundance (Freudenburg 1992; Auty 1993; Humphreys *et al.* 2007). It has been argued that countries that specialise in primary products are prone to suffer Dutch disease problems and rent-seeking behaviour (Sachs and Warner 2001), prompting

conjecture whether an abundance of natural resources is a blessing or a boon for local socio-economic development (Davis and Tilton 2005; Maconachie and Binns 2007; Pineda and Rodriguez 2010). There have also been counter arguments which show that 'rich countries' such as Canada, Norway and Germany have benefited from natural resource wealth due to well-designed public policy and strong institutions and institutional frameworks (Davis and Tilton 2005; Larsen 2005; Brunnschweiler 2008; Brunnschweiler and Bulte 2008).

Gilmore (1976, p. 535) stated that "the energy boom town in western United States is apt to be a bad place to live and a bad place to do business" because inevitably, there will be unmanaged growth which results in a "cumulative result of many different corporate, governmental and individual decisions, mostly made in isolation from each other, .... And which are the source of upsets and conflict". Although public policy analysts and prominent economists (Deloitte 2010; Edwards 2011; Sheehan 2011; Taylor *et al.* 2012) argue that Australia has not been a victim of Dutch Disease or the resource curse, the Australian experience has, in many remote areas, been as dire as Gilmore claims. During boom times when there is high demand for raw materials and global markets are paying high prices, towns near to resource developments are often under considerable housing, infrastructure and services pressure with a sudden influx of population and businesses supporting the resources industries. As a consequence there is competition for housing and labour and the scale of the large mining companies can have a significant and damaging effect on these communities which struggle to retain non-resource businesses, key workers associated with health, education, policing and childcare, casual labour and the essential services that make a community liveable (Haslam McKenzie *et al.* 2009).

Australian governments and policy makers have been mindful of the risks of 'too much wealth' and applied political and monetary interventions in an endeavour to redistribute the proceeds of resource wealth across the economy (Conley 2011; Edwards 2011). Continuous growth and a sustained resources boom have improved Australia's fiscal position and terms of trade immeasurably since the 1980s (Reserve Bank of Australia 2009). Public management of national wealth has been astute with macroeconomic stability and the benefits being dispersed widely across the national economy (Stevens 2011). Over the last decade, there has been growth in employment and real household disposable incomes throughout Australia with "average real income gains to mining state residents only moderately greater than those accruing to residents of other states. Much of the surge in mining-related incomes has been distributed elsewhere through mining company shareholdings and increased Commonwealth tax revenues" (Garton 2008, p. 9). It appears however, that while Australia has competent institutions and strong fiscal and legal frameworks with broad benefits, the public policy frameworks have struggled to manage prosperity at the micro-scale, especially in remote and regional locations where resources extraction has reached unprecedented levels. In the past, governments have been reluctant to invest in resource towns for a number of reasons. The economic rationalist

policies since the 1980s have not favoured public spending on communities such as remote towns near to resource operations, which are presumed to be there principally for the purpose of servicing large, multi-national resources companies. Instead, the Western Australian government has devised State Agreements between the government and proponents of major resource projects which are ratified by an Act of State Parliament. State Agreements outline the terms and conditions of a project and outline the framework for ongoing investment and operational obligations thus ensuring some continuity and agreed procedural guidelines.

The degree of remoteness of a community appears to have some influence over the (un)willingness of governments to spend on infrastructure, services and community development. The Australian Bureau of Statistics has developed a Remoteness Structure based on the Accessibility/Remoteness Index of Australia (ARIA) scores (Australian Bureau of Statistics 2010). Generally it is assumed that 'remote' is four hours' or more drive from an urban centre. 'Very remote' is usually more than four hours' drive from a range of services and is generally inaccessible by ordinary car, implying a non-bitumen road. There has been a general assumption of successive governments since 1983 that the supply of resources is finite and investment in infrastructure and housing for small communities is not an efficient use of public monies. Consequently, governments have looked to resource companies for the provision of key infrastructure such as potable water, energy supply, waste management and roads as well as significant investment in housing stock, health and education facilities, local government projects and town beautification programs (Cheshire *et al.* 2011; Morrison *et al.* 2012). Resource companies have been loath to invest arguing that they already pay royalties, grants and taxes to government and they and their employees should be treated equitably and hence receive the same level of infrastructure and services as other communities and towns. However, the intransigence of government, the strong demand for Australia's resources and high global prices have prompted resources companies to fill the gaps in services and infrastructure, especially in remote areas. As a result, growth is rarely scheduled in these communities and there has been limited co-ordination and planning between resource companies and government (Gramling and Brabant 1986; Haslam McKenzie *et al.* 2009; Morrison *et al.* 2012). Further, when global markets rise resource companies are usually able to outbid smaller businesses and service providers for labour, housing and other necessities, limiting competition through sheer size and domination and creating a mono-economy. This often results in the marginalisation of those who are not involved in the industry (Langton 2010; Taylor 2012) and the eventual transition to resource dependency (Freudenburg 1992; Stedman *et al.* 2004; Humphreys *et al.* 2007).

In response to inadequate infrastructure and accommodation shortages, mining companies have taken advantage of tax incentives and the relative efficiencies, flexibility and low costs of air travel to establish long distance commuting (LDC) workforce arrangements. The mining companies provide contained, high density worker accommodation, usually of a

temporary nature, close to the mine site. In return for extended shifts and compressed work weeks (where workers work longer shifts, compressing their standard work week in fewer days, enabling them to have more leisure time in their time off), LDC workers usually receive a higher wage or salary. The use of non-residential workforce involving block shifts and long distance commuting (LDC) is now common in the resources sector and associated industries across Australia.

In Australia in particular, there is considerable debate regarding the socio-economic costs and benefits associated with LDC or transient workers (Haslam McKenzie 2011; AEC Group 2012; Chamber of Minerals and Energy 2012; Tonts *et al.* 2012). Fly-in fly-out (FIFO) work arrangements, in particular, utilised by many resource companies and increasingly other service providers, have attracted considerable antagonism. Local government authorities and regional councils argue that LDC workers use hard (roads, water, sewage) and social (services such as health, police, leisure) infrastructure for which they pay very little (see submissions to the House of Representatives FIFO Enquiry, 2013). Small business is adversely affected when 'overflow' accommodation such as hotels, caravan parks and camp grounds is fully occupied by contractors and resources service industry workers, thus limiting tourism, casual visitors and other business people (AEC Group 2012; Morrison *et al.* 2012). There are counter arguments however. Resources peak industry organisations argue vigorously that their investment in purpose-built accommodation facilities reduces pressure on government, community infrastructure and services (Acil Tasman 2011; Chamber of Minerals and Energy 2012). Mine licence agreements usually require significant community and infrastructure investment by the resources companies and they view this contribution as both a corporate social responsibility but also a payback for the disruption to local communities. A further disincentive to the establishment or expansion of townships is the cyclical vagaries of international resource prices and the increasingly shorter mine life of many projects (Haslam McKenzie *et al.* 2013). LDC arrangements are a cost effective means of supplementing a skilled labour force (Lawrie *et al.* 2011) and are likely to be the only practical arrangement for very remote sites and for operations with only short to medium time horizons. The resources labour force is increasingly mobile (Thompson 2013). Many workers prefer long distance commuting because it gives them and their families' flexibility and choice regarding where and how they live (Haslam McKenzie *et al.* 2013).

Resources companies' workforce strategies are likely to have considerable social and economic implications in small, remote communities, but local and state governments also have a role in setting local and regional development policy objectives and planning regimes. The challenge is to provide an integrated policy environment that is responsive to industry needs while simultaneously ensuring the environmental and social sustainability needs of the broader community are met. It is important for government agencies and community decision-makers to have access to the appropriate tools to accurately measure and assess the impacts and contributions of different workforce patterns to local economies.

## The Pilbara Region in Boom Conditions

The Pilbara region is responsible for a major portion of Australia's production, value, exports and investments of extraction industries commodities, particularly iron-ore and LNG (Department of Mines and Petroleum 2011). In the decade 2001 to 2011, the Pilbara region, stretching over 400,000 square kilometres, recorded the largest and fastest population increase (59%) outside of Perth, the State's capital city (Australian Bureau of Statistics 2012). Importantly however, the growth was coming off a low base in 2001 of 39,461 people for the entire region. The increase in population was entirely due to the scale of the resources boom which has placed enormous pressure on housing, infrastructure, human resources and public service provision (Senate Select Committee 2008; Haslam McKenzie *et al.* 2009). It is estimated that an additional 55,000 long distance commuter workers, especially fly-in/fly-out (FIFO) from Perth, are also working in the Pilbara (Chamber of Minerals and Energy 2012). After decades of neo-liberal government policies with a central aim being the efficient allocation of resources, there was almost no government financial support for new town development (Storey 2001). The Pilbara had experienced substantial project-to-project led investment by the international resources sector with limited co-ordination causing cumulative impacts on local and state infrastructure and community resources. This project-led development occurred in the context of a reactive State government with limited strategic response applied to crisis levels of societal impact in the region (Singleton and Haslam McKenzie 2008). The scale of the recent boom placed enormous pressure on infrastructure, human resources and public service provision. As noted earlier, accommodation, or rather its lack, was a critical weakness. Demand for housing and a slow supply response forced prices to rise by around 200 per cent in five years (Pilbara Development Commission 2004; Pilbara Industry's Community Council 2008; Senate Select Committee on Housing Affordability in Australia 2008). These price increases had a detrimental effect on the labour market, particularly for those firms trying to attract staff from outside the mining industries. The lack of suitable, affordable housing has been cited as the biggest challenge facing businesses and the Pilbara region more generally (Haslam McKenzie *et al.* 2009), thus limiting economic diversity and the opportunity for the towns to develop mature, functioning housing and labour markets.

A range of mostly government reports over a thirty year period from 1974 regarding projected future land and infrastructure requirements have examined the opportunities for future development and in some cases, modelled the implications on industry and regional development if land was not made available. It would appear however, that despite the recognition of a need to address land availability and planning for future industry, population and infrastructure needs in the Pilbara, the plethora of reports were largely ignored until it was too late. Rather than delivering a steady supply of developable land, government has tended to react to market signals.

Key themes emerging from an Australian Housing and Urban Research Institute study (Haslam McKenzie *et al.* 2009, p. 97) identified the importance of cumulative, regional

planning that acknowledges the temporal and spatial characteristics of the resources industry. It emphasised the specific context of mining towns and the importance of governance structures that actively engage all the key stakeholders in determining appropriate local and regional housing solutions. It also stressed the need for flexible approaches to housing density, diversity and adaptability in order to respond to changing housing needs over time. This and other reports (Rolfe *et al.* 2007; Esteves 2008; Hajkowicz *et al.* 2011; Lawrie *et al.* 2011) acknowledge the importance of appropriate housing strategies (and the necessary services and utilities to support them,) for mining towns which take into account the immediate housing needs of a community as well as the longer term scenarios for the town and the region. Timing of development was identified as critical, given the often complex and time consuming approvals processes that must be undertaken, most of which are sequential rather than simultaneous. The involvement and co-ordination of multiple government agencies and some community based organisations, especially in boom conditions, creates delays and heightened levels of frustration for developers, resource companies, local authorities and residents. Native Title clearance on land can take up to ten years for Crown Land to be released to the market (Haslam McKenzie and Rowley 2013) and mining clearances and environmental approvals must all be attained before necessary infrastructure such as roads, power, sewage and water supply can be installed. The level of remoteness is also likely to add to planning approval complexity, cost schedules and delivery. Such delays are critical when housing markets are required to respond to very rapid employment growth scenarios.

The Pilbara is now too expensive for a range of past and potential residents; it is too expensive for most retirees, thus removing a large proportion of the volunteering sector and preventing the community functioning in a traditional manner. Indigenous residents often live in overcrowded squalor in and around Roebourne. The retail and service workforce who are not on high salaries report being pushed into tents, caravans or subletting garages for lack of affordable accommodation. Due to long term housing and social infrastructure shortfalls in the Pilbara region over several decades, the communities complain of constant population churn, with most people and particularly families tending to stay in the region for only as long as a job lasts and then moving away because housing costs erode the high wages paid in the Pilbara. Community leaders complain that there is limited sense of place or community commitment, thus contributing to a sense of transition and 'shallowness'.

The Pilbara Cities Initiative was therefore a very welcome, and many would argue, long overdue, regional economic development program with broad social benefits. This initiative focused on transforming the two largest Pilbara towns, Karratha in the Shire of Roebourne and Port Hedland, in the Shire of Port Hedland (see Figure 1), channelling \$1.2Au billion to upgrade their town centres, the capacity of the local utilities and services and the development of adequate housing and accommodation. Not only are Port Hedland and Karratha both coastal towns with important port facilities for the iron-ore and salt industries but they also have airports for helicopter services to the gas platforms and are hubs for long

distance commuting workforces. A budget allocation was also made for the revitalisation of the Newman town centre in the Shire of East Pilbara; a small inland town and a hub for long distance commuting iron-ore workers. As identified earlier, it would appear that these strategic developments have had only limited application in the case of Onslow.

## Onslow

Onslow is a small remote, coastal town in the Pilbara Shire of Ashburton, 1,400 kilometres north of Perth. As shown in Figure 1, it is located 83 kilometres off the main highway and the closest town, Karratha, is more than 300 kilometres distant. The original town of Onslow was established in 1885 to support pastoral stations along the Ashburton River and goldmines in the hinterland. Due to silting at the river mouth, the town was moved in 1925 to its current location at Beadon Point 18 kilometres east along the coast. In 2011, the census recorded the local population as 667 people, 27% of whom were Aboriginal and Torres Strait Islander, a relatively high proportion of the local population. The population had increased by 16% since the previous census taken in 2006, although the population recorded at the 2001 census show the population to be considerably higher with more than 800 residents. Due to its remoteness and isolation, Onslow has never been a big town. It continues to support several pastoral stations, a small fishing industry and tourism during the winter months. Until now, the largest local employer was Onslow Salt which produces approximately 2.5 million tonnes of salt per annum.

The off-shore region around Onslow, the Carnarvon Basin, is estimated to hold 70% of Australia's natural gas (Department of State Development 2011). In 2011 Onslow was selected by a multi-national oil and gas consortia headed by Chevron as the most appropriate site for a large-scale liquefied nature gas hub for the Wheatstone gas field, after a lengthy feasibility assessment. It is projected that the project will create approximately 6,500 direct and indirect jobs at the construction peak and a permanent operational workforce of 300 people when the first of the gas goes online in 2016. This project will undoubtedly have complex and multifaceted impacts on such a small, remote community, which will likely be amplified by the extreme remoteness of Onslow. Nonetheless, the project has been welcomed by most people who anticipate infrastructure upgrades and enhanced services with an increased population. Rather than a State Agreement, the project is administered by a State Development Agreement which is **not** ratified by an Act of Parliament but rather, a series of contractual agreements between the government and corporate partners. Onslow is one of the first projects not to be underpinned by a State Agreement, but rather, a contractually based State Development Agreement.

There has been some apprehension regarding growth, particularly at the local level, with concerns that the negative impacts experienced by other Pilbara communities associated with rapid expansion must be avoided. This was underscored when, in 2009, contractors associated with the early stages of the project bought several houses in the town and there was an immediate spike in the advertised price of housing. The Shire of Ashburton and local

Onslow residents were concerned that the price of accommodation would go the same way as Karratha, Newman and Port Hedland, squeezing out those not involved in the resources and related industries. Once the project was formally ratified, Chevron committed to work with the community to ensure the potential negative impacts of growth would be minimised while enhancing opportunities for the enduring community value from gas expansion into the town. As part of the formal Development Application plan, the Wheatstone Workforce Management Plan required that Chevron employees and those of their contractors sign a 'Code of Conduct' agreement to ensure appropriate behaviour in the town.

In 2011, the Onslow Community Reference Group (CRG) was formed, constituted of Shire, community and company representatives with members co-opted from state government agencies, and more recently, contractors. Community reference groups have been used by Chevron in the Pilbara with some success as a means to formalise community engagement strategies. It established the Gorgon CRGs in Onslow and Karratha in 2005. The Onslow CRG, comprising of community, local government and regional body representatives, consented to become a Chevron Onslow CRG in February 2008. CRG meetings are held every two months to discuss the Project's progress and update the community on the Wheatstone and Gorgon Expansion (a large gasfield further north) projects, share community engagement activities and provide a forum to air concerns, facilitate feedback and generally enhance communication between corporate activities and the community.

Bechtel, an engineering, construction and project management company, has been contracted by Chevron to develop the downstream operations for the Wheatstone LNG project. Bechtel is committed to growing local economies around its operations and honouring Chevron's social license to operate. Consequently, an early decision was made, in consultation with the community, to separate the project, and hence its impacts, from the town. Ashburton North, an area of 8,000 hectares and 12 kilometres from the town is the industrial area site chosen for the multi-user port, a 3,800 bed village and the onshore processing facility. Initially this separation from the town was welcomed, but as time has gone on, the Onslow business community complain they receive little in the way of increased business due to the contained nature of the project's living arrangements.

On the company side, it is not easy to contract work to local suppliers because of the scale of development for the LNG plant. Local people seeking work opportunities were required to meet strict contractor readiness requirements including health, safety and environment pre-requisites. In such a small community, there are not a lot of opportunities to spend locally without compromising service delivery to the community. For example, earlier in 2012 there were community complaints that contractors were purchasing fuel from the only service station leaving the isolated town's fuel supply vulnerable. Similarly, when a cyclone threatened, the community criticised contractors for overwhelming the only supermarket and emptying out supplies. The company has endeavoured to address the complaints but it

is difficult to balance the commitment to 'buy local' without incurring 'resource dependency' or compromising long term residents' access to goods and services.

The company and its contractors have made other commitments to the community through the social impact package, negotiated between the local government and the state. The Shire of Ashburton has taken the view that this is a rare opportunity to garner for the community a range of infrastructure and services which are unlikely to be provided by state government for such a small, remote community. The Shire has consequently prepared a social impact package adequate for a town of 3,000 people, (more than triple the current population), "rather than providing for adequate infrastructure suitable for the short term" (Onslow Community Reference Group 2011a) based on comprehensive community consultation. Chevron has committed to provide approximately \$187 million towards community infrastructure and public infrastructure with an expectation that government will also contribute to these infrastructure projects. The social infrastructure projects Chevron has agreed to support include:

- Airport
- Four Mile Creek picnic area
- Community Development Fund
- Onslow Access Road
- Town Master Plan and improvements
- Wheatstone Public Visitors Centre; customer service centre; visitors centre, Council chambers and library
- Onslow Aquatic and Recreational Centre
- Old Onslow Conservation and Tourism Development

The critical service infrastructure projects Chevron has agreed to support include:

- Power station
- Water supply – desalination plant
- Health services - hospital expansion and refurbishment
- Wastewater services expansion
- Onslow Road upgrade
- Land development – new residential subdivision
- Housing for Government workers
- Waste management – new site
- Expansion of School and Childcare
- Emergency Services expansion

For most of the projects, Chevron will provide funding to other parties to deliver the projects and will take a 'fund and assure' role. For example, Chevron will provide \$22 million to the Department of Health to assist the upgrade of the Onslow hospital, and \$30 million to the Shire of Ashburton to upgrade the airport. Many of these commitments, in any other circumstances other than a large-scale and highly profitable resources project,

would be the sole responsibility of the government. Without this gas project, it is very unlikely that the government would fund these upgrades for such a small community.

However, despite this project being in the planning stages for more than three years with strong indications that it would go ahead more than a year before final ratification by the company, the Western Australian government does not appear to have heeded earlier advice regarding co-ordinated or timely infrastructure provision, particularly power and water supply and land banking for housing and commercial development. Within months of the construction phase commencing at Ashburton North, power and particularly adequate water supply became critical issues for the project and the community at Onslow. While the company has undertaken to provide its own water for the gas plant through the construction of a desalination plant, its installation is still years away. In the meantime however, the State government's commitments to provide power and water for the town have lagged and the situation has become critical since the construction workforce has placed unplanned-for pressure on local water supplies. The State utility, Water Corporation, indicated in 2011 they expect to address water issues by 2014, by increasing the uptake of water from the Cane River. The community is unsatisfied given that the BHP Billiton Macedon Project has planned for that additional water capacity. BHP Billiton is currently drawing water from an aquifer but indications suggest that this is not a sustainable solution. In early 2013 the Water Corporation and Horizon Power (a State power utility) each stated at an Industry Forum in Onslow they would be able to provide interim supplies to bolster power and water supplies to meet need. However, it would appear that the State has decided not to follow through on these offers, but rather, to avoid the cost risk associated with these upgrades, has shifted the responsibility to Chevron, effectively seeking to bring forward Chevron's power and water upgrade obligations. Chevron has not planned for the construction of this infrastructure yet, and does not have the necessary approvals or corporate imprimatur. Without the government making its contribution, development will be thwarted, creating a classic 'chicken and egg' scenario. In the meantime, the liveability of the town is declining and community more broadly is experiencing frustration and growing concern at the impasse.

Furthermore, it would also appear that the sequencing of land release has not been carefully planned. The Department for State Development began the projections for population growth and government services, (power supply, schools, health infrastructure, emergency response, waste management and water supply) for Onslow **after** the project was announced in 2011. It has indicated that there is a five year plan to implement the infrastructure and services required (Onslow Community Reference Group 2011b). Industrial land is likely to be released before residential land because water and power are not in place, but it is residential land that is necessary to accommodate the workforce necessary for the development of the industrial land and infrastructure. The company and its contractors have therefore put in place an interim plan to accommodate workers in

temporary accommodation – exactly the scenario the Onslow community was keen to avoid prior to the announcement of the project.

The Minutes from the June 2011 meeting of the Onslow Community Reference Group (2011c) indicate that the presence of temporary and transient worker accommodation in Onslow drew mixed responses from the community despite the Shire agreeing to transient worker accommodation in the town and minor amendments being made to Shire policy. The decision to agree to transient worker accommodation was to encourage the workforce to be part of the local community, encourage greater expenditure in the town and increase contribution to community infrastructure and services. The community was adamant it did not want poorly designed, low quality, donga-style accommodation. However, appropriate land was not available, despite Landcorp, the government land development agency being approached to provide a service workers' camp. Once again, tardy land release by the State government has created bottlenecks. However, an innovative compromise has been achieved. With the Discovery Holiday (caravan) Park almost full, three large tourism boats, transferred from the Queensland Great Barrier Reef have been moored in the Beadon Creek with accommodation capacity for more than 100 workers. These boats, referred to as 'floatels' or 'boatels' are largely self-contained, providing their own dock, water and waste management (see Figure 3).

Figure 3: 'Floatel' worker accommodation in Onslow, 2012.



Despite attempts to contain speculation and minimise the negative impacts, local residents complain that Onslow is changing with limited opportunity for local entrepreneurs to take advantage of opportunities due to a large multi-national company with limited empathy for small-town Australian conditions, tardy land release, hold ups with native title processes and the provision of utilities; the same problems which have been experienced by the other Pilbara communities and which have stymied orderly regional economic development elsewhere. There are also concerns for the corporate partners. Development delays mean

that gas production and sales will take longer to offset the high production costs causing concern for shareholders, banks and international interests. Corporate threats were not taken seriously by the Western Australian government in 2008 and concessions given by the Northern Territory government to Inpex, a Japanese oil and gas company, meant that valuable business bypassed Western Australia, even though the gas reserves are off the Western Australian coast. While Chevron and other oil and gas companies have committed to Western Australia for the time being, rising costs, poor infrastructure planning and stalling productivity do not auger well for the future unless these issues are urgently addressed.

## Conclusion

The small, remote community of Onslow has the potential to play an important role in the next phase of Australia's resource development through the establishment of a gas hub on its perimeter. The local community is keen to garner from the development, a population base and infrastructure which will bolster its long term sustainability. When Onslow was first mooted as a possible hub, the community was determined to preserve the features of the town which they valued and consequently worked with government and corporate representatives to plan for enduring benefits and avoid the problems experienced in other Pilbara communities due to rapid growth with inadequate planning and poor infrastructure. The company has worked closely with the community and government as it moved through the approvals process ensuring that the goals were clear, anticipating that with mutually agreed commitments, economic, social and environmental sustainability would be the outcome.

It would appear however, that as the construction phase gathers pace, cracks are emerging in what was envisaged would be a respectful community engagement whereby all parties (the community, local and State government and the corporate partners) clearly understood the different goals, aspirations and priorities. The State government has been slow to honour its key leadership and partner role and international market imperatives and government/corporate manoeuvring to avoid expensive infrastructure obligations have left the community with less than satisfactory outcomes: escalating housing costs, business closures and power and water shortages. Factors including access to power, water, health and education services, the natural and built environment and social connectedness, all have important bearings on business performance, people's quality of life, the social functioning of communities and worker and resident retention.

Government has a critical role in providing leadership on these issues. "Prescient planning, leadership, mutual respect between governments, resource companies, their employees and local community, and open and ongoing communication are imperative if towns dominated by mining and the extractive industries are to build resilience, thus enabling them to successfully change and endure" (Measham *et al.* 2013 ). If this is not achieved, the social and economic impacts are far reaching and can have dire consequences for a range of

people, businesses and the region as has been witnessed elsewhere and which has been described as 'the paradox of plenty' and 'the resource curse'. Furthermore, without a ratified State Agreement, governance is based on contractual agreements rather than legislated foundations and is therefore open to legal interpretation and manoeuvring.

It is evident that companies and governments operate on entirely different timeframes and within unlike governance structures. Corporations, even large multinationals, must be responsive to market needs and environmental conditions or risk commercial failure. Governments on the other hand, respond to a widely divergent range of ideas, concepts and approaches, shaped by policy and decision-making processes with the accompanying influences, challenges and constraints of a democratic government. They are deliberative, negotiative and networked. Despite the best of intentions, it appears that the differences are intractable and many in Onslow are wondering where is the enduring community value from this development?

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