

# Strategic Analysis Paper

2 May 2011

## **Pilbara Prospects 2020: Developments and Challenges for the Region**

**Liam McHugh**

*Strategic Analyst, Northern Australia and Energy Security Research Programmes*

### **Summary**

The Pilbara Cities vision represents a unique and ambitious project. Government and industry have demonstrated a dedication to the development of the region with significant financial and political outlays. Bolstered by the state government's Royalties for Regions and resource developments, the economic and demographic profile of the Pilbara to 2020 seems ostensibly secure.

For the Pilbara Cities vision to be realised solutions to current and forecast challenges must be negotiated. To support the region's continued economic prosperity, a population policy that provides incentives to settle in the Pilbara is urgently required. The complex issues of Indigenous affairs and Native Title require continued focus and dialogue. Finally, current deficiencies in critical infrastructure, water and governance structures must be resolved.

### **Analysis**

Encompassing 507,896 square kilometres (including offshore islands), the Pilbara spans the breadth of central Western Australia.

The region is rich in minerals, hydrocarbons, fisheries, agricultural and tourism assets. Aided by its proximity to emerging and existing high demand markets, the region has been called "*the engine room of the Australian economy*"<sup>1</sup> and is of significant economic and geostrategic importance to state and national interests.

In an effort to expand the resident population and diversify the economic base, the West Australian Government has developed the Pilbara Cities vision. The Royalties for Regions-inspired scheme aims to capitalise on the region's economic credibility, proposed infrastructure provisions, unique character and environment.

Expansion in the resources, agricultural, tourism and fisheries sectors, along with complementary developments in the provision of services, are expected to transform the region from a "residential quarry" to a desirable and resilient population centre.

---

<sup>1</sup> Regional Development Australia, Preliminary Pilbara Regional Plan, August 2010, p.30.

While Niels Bohr's famous adage "*prediction is very difficult, especially if it's about the future*" is apt, current developments provide an insight into policy priorities and challenges for the region to 2020.

### **Developments**

Despite possible market volatilities and new competing sources of commodities, the minerals and energy sector will continue to expand.

Iron ore will remain a high growth industry as market opportunities for emerging "junior" players expand. Current operations will be augmented by the Solomon, Roy Hill and West Pilbara Iron Ore projects, which will serve to meet projected demand from continued urbanisation and industrialisation in Asia.

Industry will place significant emphasis on, and investment in, remote computer access centres for product extraction and management. The "Mining for the Future" initiative, pioneered by Rio Tinto, will streamline mine, plant, rail, port and utility management from a base in Perth, a practice likely to be refined and replicated by others over the next decade.

The oil and gas industry will also continue to expand. The North West Shelf project will be complemented by the Pluto, Gorgon and Wheatstone projects during the next decade. In April 2011, Resources Minister Martin Ferguson announced an increase in the exploration acreage for offshore oil and gas, a development that has the potential to expand the Pilbara's oil and hydrocarbon industry. The search for new reserves will continue to be of the highest national priority, with an increasing trade deficit in the sector projected to reach \$30 billion by 2015<sup>2</sup>.

Other commodities will remain stable, with uranium a potential growth industry.

The agricultural and pastoral industries have the potential to become high growth and employment sectors in the next decade. It must be noted, however, that this is highly dependent on international demand.

Capitalising on its proximity to Asian markets, non-traditional cropping and agricultural supply chain management provide the best prospects for the region.

The region's hinterland has the potential to become a source of biofuels. Mine run-off has been employed in the arid inner Pilbara to produce small agricultural irrigation projects, including a scheme, under the Royalties for Regions program, for the planting of four acres of Moringa shrubs<sup>3</sup>. In addition to providing food for cattle, The Department of Agriculture and Food anticipates the shrubs could be used for biodiesel, providing export opportunities and addressing energy shortages projected for 2020.

The proposed development of an abattoir in Port Hedland to serve the North West could also provide opportunities conducive to the Pilbara Cities vision.

Despite the region's rich natural landscape and cultural heritage, tourism remains a secondary and underdeveloped contributor to the Pilbara economy. A flow on effect of increased tourist numbers is expected from the Pilbara Cities initiative, although this is likely to go beyond the 2020 scope. The Pilbara possesses the potential to become a niche destination, specialising in eco and cultural tourism.

---

<sup>2</sup> Minister for Resources and Energy, New Offshore Petroleum Exploration Areas Released, April 2011

<sup>3</sup> Pilbara Development Commission, Pilbara Water Projects, May 2010

Aviation is projected to continue to grow and to play a more significant role in the development and connectivity of the Pilbara. The region's four air transport hubs will experience higher frequency inter- and intra- state services, based on an increasing fly-in fly-out worker, resident and tourist population.

Despite being dwarfed by the minerals and energy sector, the fisheries and aquaculture industries will continue to generate revenue, employment and provide economic diversification for the Pilbara in the next decade.

The region will continue to be a major contributor to Western Australia's total finfish catch. Climatic variation, however, may threaten the region's prawning industry. The Department of Fisheries has found decreased rainfall negatively impacts upon banana prawn production levels<sup>4</sup>. Recreational fishing activity will rise, with an increased tourist and residential population, subsequently bolstering charter activity. It is imperative that the Department of Fishing develops a regional sustainability plan to promote sustainable yields.

Aquaculture has the potential to become a high growth industry. Private enterprise initiatives in pearl and coral production have the potential to mature, to provide differential employment and economic opportunities in the region. The state government is expected to provide grants to support the fledgling industry.

The promotion of effective water management practices will foster economic and residential growth in the Pilbara. The Department of Water cites demand, availability and quality as potential inhibitors to the development of the region<sup>5</sup>. Demand for water currently exceeds, or is close to exceeding, long term reliable water supply in regional centres. Pressure on surface and groundwater is being further strained by a long-term drying effect, a phenomenon the CSIRO predicts will continue. Predictions of climate change remain vague and understudied.

Over the next five to ten years the West Australian Water Commission will upgrade water infrastructure<sup>6</sup>. Surface water and groundwater resources will be augmented by non-traditional water sources. Increasing cost effectiveness and reduced reliance on rainfall make seawater desalination an attractive option. This has been recognised by the state government, with planning for a plant to support the west Pilbara in the final stages. Third party supply from mine run-off and water extraction from slurry pipelines remains a viable, albeit logistically difficult, option. The Department of Water, in consultation with stakeholders, produced a report in mid-2010 entitled *The Pilbara Regional Water Plan 2010-2030*, detailing future projects and recommendations.

The Pilbara's population and profile are predicted to dramatically change in the next decade. The West Australian Planning Commission ambitiously seeks to create:

*Culturally diverse communities living in environmentally sustainable and economically viable settlements; providing for communities that are safe, healthy and enjoyable places to live and work; and offering a wide range of quality cultural, educational and recreational opportunities.*<sup>7</sup>

---

<sup>4</sup> Dr J W Penn, *State of the Fisheries Report 2001/2002*, Department of Fisheries, Perth 2002

<sup>5</sup> Pilbara Development Commission, *Pilbara Water Projects*, May 2010

<sup>6</sup> Pilbara Area Consultative Committee, *The Pilbara Plan: An Urgent Call to Action to Rescue the Pilbara Communities*, December 2008

<sup>7</sup> Western Australian Planning Commission, *Pilbara Planning and Infrastructure Framework* February 2011, p. 7

The expansion and diversification of the regional economy will compound the Pilbara's annual growth rate to approximately five per cent, supporting a population of 62,000 by 2020. Economic influences will broaden and deepen the demographic character of the population, with the age-gender profile reflecting national characteristics rather than current peculiarities. The challenge of providing adequate and affordable housing remains the government's top priority.

Population growth and changes to demographics will promote the development of better civil facilities and services within the Pilbara. The development of community infrastructure will serve a dual purpose of population retention and resident attraction.

The health sector will parallel economic and demographic changes. Current recruitment and infrastructure issues will be addressed by initiatives from the Royalties for Regions program, the Department of Health, not-for-profit and government sponsored private sector expansion. Further, the Nickol Bay regional hospital upgrades are anticipated to be completed by mid-decade.

Existing social welfare issues will be mitigated in the future through expansion of drug, alcohol and mental health programs and through adopting strategies consistent with the Federal Government's "Close the Gap" campaign.

Current educational shortcomings will be tackled through dynamic primary and secondary education schemes, support for educational professionals and continued development of facilities across all sectors, including tertiary.

### **Challenges**

The Pilbara's population cannot expand without a variety of drivers attracting a substantial and sustainable population. Contrary to the government's projections, forecast population growth and a more complex demographic character are far from guaranteed. Current social, economic and political deficiencies are disincentives to population growth. Paradoxically these issues will not be easily rectified without population and demographic changes.

While critical infrastructure in health, education and basic provision of services, fails to meet community expectations, large scale population growth will not occur. The current inelastic supply of housing and land encourages social polarisation within the Pilbara and makes the region undesirable for potential residents. The perceived lack of a "sense of place" and limited cultural activities must be redressed before expansion can begin. Again, ironically, population growth is required before these issues may be resolved.

The Pilbara Cities vision is inextricably linked to the resources and primary industrial sectors, the current Pilbara workforce is primarily resource sector oriented. To develop the region, a diversification of the economy and employment opportunities is required. Innovative and viable industries are needed to attract and sustain a diverse residential population.

Social and Economic policy must be complemented by Federal and State political support for the Pilbara Cities vision. The Pilbara's continued prosperity relies upon population growth. The December 2010 announcement, that Rio Tinto will require 6000 more employees to meet its 2020 quota, highlights the need for a national population policy that includes incentives to settle in the Pilbara.

Water represents one of the most immediate challenges to future population and economic growth. The state is currently making a considerable investment in capital and operational expenditure to supply water to the region. This will translate to an increased cost to

consumers. Competition for water will rise, with industry and population growth fuelling demand.

The complexity of the land rights debate has the potential to constrain future infrastructure and development projects in the Pilbara. As demonstrated by the current Yindjibarndi/FMG debate<sup>8</sup>, Native Title remains a contentious issue for all stakeholders. Documents associated with Royalties for Regions have drawn a parallel between regional economic growth and Indigenous opportunity, a notion that has so far proven false.

Shortcomings in amenities and livability in the Pilbara cannot be addressed by current governance and program structures. The current silo approach fails to promote integration of policies, projects and programs. The proposed establishment of a “Pilbara Cities Office” within the Department of Regional Development and Lands will simply add another layer of bureaucracy.

As proposed by the Curtin University Sustainability Policy Institute<sup>9</sup> an East Perth Redevelopment model with an autonomous government entity, would promote accountability and efficiency. Benefitting from recruiting expertise from all government departments, with an independent budget and potentially a Pilbara minister, the body would improve regional morale and confidence in the future of the Pilbara Cities vision.

### **Conclusion**

The rudimentary elements to achieve the Pilbara Cities vision already exist. Development over the next decade will strengthen the economic, social and political character of the region. It is imperative, however, that solutions to the challenges the region faces are negotiated, to avoid it becoming a quasi-gated community or a large scale Cossack<sup>10</sup>.

Decision makers must use the expertise from local, state and federal stakeholders to ensure optimal funding and support for the Pilbara development program. The state government should consult with other created urban environments such as Milton Keynes, in the United Kingdom or the geographically comparable Masdar, in the United Arab Emirates.

\*\*\*\*\*

*Any opinions or views expressed in this paper are those of the individual author, unless stated to be those of Future Directions International.*

Published by Future Directions International Pty Ltd.  
Desborough House, Suite 2, 1161 Hay Street, West Perth WA 6005 Australia.  
Tel: +61 8 9486 1046 Fax: +61 8 9486 4000  
E-mail: [lmchugh@futuredirections.org.au](mailto:lmchugh@futuredirections.org.au) Web: [www.futuredirections.org.au](http://www.futuredirections.org.au)

---

<sup>8</sup> Future Directions International, Strategic Weekly Analysis: The Need for Dialogue in the Land Rights Debate, April 2011

<sup>9</sup> Peter Newman, Curtin University Sustainability Policy (CUSP) Institute; Darren Bilsborough and Paul Reed, Parsons Brinckerhoff; & Mike Mouritz, HASSELL, Pilbara Cities: From Projects to Places, July 2010

<sup>10</sup> A Pilbara ghost town abandoned in the 1950s.