



## Discussion Paper – Northern Bowen Basin and Mackay Regional Master Planning Exercise

February 2009, edition one

### Purpose

To propose a six to twelve month Government funded regional economic and social infrastructure master planning exercise encompassing the Northern Bowen Basin and Mackay, taking into account the strong medium and long-term coal industry growth outlook.

### Queensland Government policy context

The Queensland Government has set ambitious targets through its *Toward Q2, Tomorrow's Queensland Plan* to be achieved in partnership with industry and the community. The mining industry in the Northern Bowen Basin and Mackay is playing its part to assist the Queensland Government reach its target of *Queensland being Australia's strongest economy, with infrastructure that anticipates growth*. This is being achieved through strong mining industry export, employment and productivity gains for Queensland.

There is a significant and concerning lag however between the rate of industry growth and social and economic infrastructure provision by the Queensland Government which is having an adverse impact on the Queensland economy and Northern Bowen Basin and Mackay communities. This regional economic and social infrastructure planning exercise will assist to address this gap by:

- Providing a framework for the identification of Northern Bowen Basin and Mackay social and economic infrastructure priorities.
- Providing priority projects for consideration by the Sustainable Resource Communities Partnership Group.
- Components having applicability as a pilot regional planning approach that can be replicated across other regions forecast to experience the impacts of intense and sustained growth, including the Surat Basin and the North West Minerals Province.
- Providing preparatory planning to complement, feed into and assist to accelerate statutory regional land use planning for the Whitsunday, Hinterland and Mackay Regional Planning Project.
- Informing the State Government's social impact assessment function and assist with the analysis of the cumulative impacts of mining.

This initiative is consistent with and supports the State Government's Sustainable Resource Communities Policy *to accelerate the preparation of regional and local strategies covering the Bowen Basin, the Surat Basin and the North West Minerals Province*.

There is also a precedent for this type of master planning exercise in relation to previous and ongoing development in Gladstone around the Gladstone State Development Area.

### Background

The Northern Bowen Basin, Mackay and Whitsunday regions are experiencing a period of sustained, intense and overwhelming growth associated with the continuing 'resources super-



cycle'. This has resulted in the region's Gross Regional Product (GRP) growing significantly over recent years. This growth in GRP is well beyond that contemplated in current infrastructure and service industry planning. While the level of growth has slowed in the last few months as a result of the current global economic downturn, the longer term projections remain very strong.

Current trends suggest these regions, within the Isaac Regional Council, Whitsunday Regional Council and Mackay Regional Council areas and encompassing the centres of Mackay, Sarina, Moranbah, Dysart, Bowen, Nebo and Clermont, will continue to benefit from such growth for at least the next decade supported by confirmed growth in the coal sector. Such development will come from a number of substantial mining and infrastructure developments either underway, or planned, to increase coal production and throughput.

The need for improved understanding and planning has already been recognised within the area and beyond. The Queensland Government's *Coal Infrastructure Program of Actions 2008*, identified the need to undertake industry-wide strategic planning for future growth in coal demand and production. In response, the Coal Infrastructure Taskforce is developing the Queensland Coal Infrastructure Strategic Plan for the provision of infrastructure to meet the coal industry's need to 2028.

However, to realise the potential of this growth and the subsequent flow-on benefits to the state and national economies, urgent attention to social and economic infrastructure provision and macro planning in these regions is required.

Without this focus, current shortfalls in hard and soft infrastructure and flow on impacts will be exacerbated, and significant ongoing growth compromised. The current economic climate provides a window of opportunity for the Queensland Government to proactively undertake this planning and to play 'catch-up' prior to the rapid demand acceleration forecast in the longer term from emerging economies.

There is strong support for a collective approach, as demonstrated through progress to date in establishing the "Sustainable Resources Communities Partnership Agreement", a compact between State and Local Government and industry to provide a forum to identify and discuss strategies to address current and emerging social issues facing resource companies.

Local regional development leader, Mackay Whitsunday Regional Economic Development Corporation (REDC), has also identified managing future growth as a regional priority in a strategic approach to long term sustainability.

In addition there are strong links to the existing Northern Economic Triangle (NET) the State Regional Development Strategy and the WHAM Regional Plan initiatives. It is envisaged that the proposed master planning exercise would compliment these current initiatives, particularly the WHAM regional planning work where it may assist in accelerating the transition of this plan to a statutory document.

### **Objective**

To ensure industry growth opportunities across the Northern Bowen Basin and Mackay are taken advantage of in a timely manner in a way that effectively and sustainably manages growth.

### **Proposed actions**



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It is proposed that an extensive, likely six to twelve month, master planning exercise involving Federal, State and Local Government, REDC and industry representation be undertaken. Key proposed actions are as follows:

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## **1. Possible and probable scale of future cumulative growth in the region**

The Planning Information and Forecasting Unit (PIFU) in the Queensland Department of Infrastructure and Planning (or equivalent) develop resident and non-resident workforce population projections based on industry growth plans to be used as an official estimate and endorsed and used by Government and industry for planning purposes. These estimates to be updated on a bi-annual basis but reviewed annually in periods of high anticipated growth.

## **2. Quantifying the flow on impacts of this growth**

A guideline and table be developed identifying the key impacts and multiplier effects of growth across a range of economic and social infrastructure categories related back to resident and non-resident populations. E.g. for every 1,000 resident workers the community will need XX secondary school placements and XX secondary school placements for every transient worker.

Key economic and social growth impacts related to industry growth projections and resident and non-resident workers to be identified and the impact quantified. A formalised link is required with existing Government agency planning mechanisms to ensure that the flow on impacts and guidelines are included in Government service planning, budgeting and decision-making.

## **3. Audit of infrastructure and capacity assessment**

Identify those audit tools and models that are already in existence that could be adapted for use. Determine best practice in the field of economic and social infrastructure planning and delivery through identification and review of all recent examples including:

- Documentation relating to social infrastructure planning and delivery including the SEQ Regional Plan Implementation Guideline Number 5, the Northern Gold Coast Social Infrastructure Plan, the Department of Communities Needs Based Planning and Resource Allocation Framework and Regional Planning Framework, the Strong Communities Handbook and Guideline for Integrating Community Well-being in Planning.
- Research projects and related reports and findings completed by universities and other research institutions with particular reference to recent initiatives of the Central Queensland University (Institute for Sustainable Regional Development) and best practice examples from other states such as the Liveable Neighbourhoods Framework (West Australian Planning Commission) This could include research on Sustainable Development/Living Models.
- Relevant reports and plans prepared by Queensland Government agencies, local Government and the Regional Economic Development Corporation (such as the recently completed Liveability Report).

Of particular relevance is the Social Infrastructure Model recently developed for the Mackay Whitsunday Region as a part of the WHAM Regional Planning initiative. This Model, which may be readily expanded to incorporate Economic infrastructure, provides a tool for spatially assessing future regional infrastructure requirements and how growth may be directed so as to maximise the utility of existing infrastructure.

Drawing upon the results of the 2007 Social Facilities Infrastructure Audit, along with information produced by the Bowen/ Abbott Point Accommodation and Community Infrastructure Study and

the Social Facilities Infrastructure Model, a full Audit and Needs Assessment of Social and Economic Infrastructure will be completed. The Audit and Needs Assessment will:

- Describe and quantify existing economic and social infrastructure
- Determine infrastructure catchment areas and rates of utilisation
- Determine capability levels and how projected demand may best be met by specific infrastructure types.

It is important to note that a Needs Assessment and Capacity Analysis relating to either social or economic infrastructure have NOT yet been completed. In order for other initiatives such as the Bowen/ Abbott Point Accommodation and Community Infrastructure Study and the Social Infrastructure Model to be effective, it is vital that a regional Needs Assessment and Capacity Analysis is completed. Information derived through the Needs Assessment and Capacity Analysis will inform modeling of the social and economic infrastructure which will identify present gaps in infrastructure provision along with where and when infrastructure is required to service future growth scenarios.

Ensure that the audit links with existing planning mechanisms like the Coal Infrastructure Taskforce.

#### **4. Timing of growth impacts**

The same groups involved in steps 1. and 2. above be involved in determining the timing of social and economic infrastructure requirements.

#### **5. Government modeling tool and analysis**

Undertake an analysis and modeling of social and economic infrastructure requirements involving the Sustainable Resource Communities Partnership and Leadership groups, Coal Taskforce and others. Firstly consider mission critical areas as follows:

- **Tier 1** –Hard infrastructure assessment via the Coal Taskforce in addition to service industries and social facilities.
- **Tier 2** – Evaluate the merit of a gap and near capacity assessment for social services and networks. The Social Infrastructure Model is designed to perform this task. All it requires is data derived through the Needs Assessment and Capacity Analysis.

This analysis to flow through to Government service provision, planning, budgeting and decision-making. It is acknowledged that this stage is in many ways the most important, yet most difficult, component. A key learning from the Northern Gold Coast Social Infrastructure Plan, is that it has taken in excess of 12 months to get the Agencies to begin to co-ordinate and integrate their planning- and this is for a relatively small area.

#### **6. Industry decision-making**

Industry to come together to consider potential partnership solutions for infrastructure via the Sustainable Resource Communities Leadership group and/or other appropriate mechanisms. This will also inform industry in order to facilitate better business decisions in line with expected

growth, including decisions on workforce sourcing / location, transport and accommodation and sourcing of other key inputs.

## **7. Critical path modeling**

A critical path to be identified for economic and social infrastructure provision with the key items flowing from steps 5. and 6. above. Step 3 (determining the timing of social and economic infrastructure requirements) would be performed at this point, utilizing the information produced in steps 4 and 5.

## **8. Coordinated and strategic approach to mission critical infrastructure**

Government and industry to proactively explore and develop strategies to address mission critical infrastructure requirements. E.g. potentially Government funded, public/private partnerships and leveraging off industry's international partnerships and linkages.

## **9. A model for ongoing calculation of growth impacts as new projects are identified**

Throughout this project a uniform and simple model will be developed to ensure that it is easy to continue to collate, review and project baseline and cumulative growth in order to make reliable social and economic infrastructure decisions.

## **10. Pilot approach**

The Northern Bowen Basin and Mackay Regional Master Planning exercise will be a pilot approach that will be established and then reviewed for potential application in other high-growth regions.

## **Outcomes**

Key outcomes of the project will include:

1. A detailed understanding of growth projects and associated labour force and population increases.
2. An identification of key soft and hard infrastructure requirements to meet these increases.
3. Strategic plans to assist Government and other infrastructure providers to deliver on the provision of increased services and develop the required infrastructure.
4. A clearly defined process and methodology for the provision of data and information to assist decision-making by all three levels of Government, and ensure industry support and participation in this process.

## **Next steps**

1. Convene industry meetings with Federal, State and Local Government representatives (March/April 2009).
2. Formation of a steering committee with support from REDC, to ensure local ownership of the project.
3. Determine methodology and scope for the study, incorporating a desktop study of existing relevant work in the region.



## **Budget**

The estimated budget required by the Queensland Government for this initiative is \$300,000.

## **For additional information contact**

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