



Minister for Natural Resources, Mines and Energy and Minister for Trade

4 AUG 2009

MC4022 ME/09/1678

Senator Mathias Cormann Chair Senate Select Committee on Fuel and Energy PO Box 6100 Parliament House CANBERRA ACT 2600

Dear Senator

Thank you for your letter dated 18 June 2009, on behalf of the Select Committee on Fuel and Energy (the Committee), regarding its Inquiry into Fuel and Energy (the Inquiry). The Queensland Government acknowledges the role of the Committee's Inquiry in examining the potential issues Australia faces in ensuring secure, reliable and affordable fuel and energy supplies in an environmentally sustainable manner into the future.

Queensland's coal industry is a major contributor to the economy, with exports valued at approximately \$14.6 billion in 2007-08. Queensland's low cost, high quality coal has underpinned the State's competitive electricity prices, and in turn, attracted significant investments in energy intensive industries, creating jobs and stimulating economic development in regional Queensland.

In addition, Queensland's ongoing growth, a regionally distributed population and industry base and extensive urban development all contribute to Queenslanders having a disproportionate reliance on transport energy. Australian Bureau of Agricultural and Resource Economics projects that transport use of energy in Queensland will grow by 93 per cent between 2005 and 2030, compared with an Australian growth of 61 per cent.

Fossil fuels, particularly coal, will continue to have a key role in meeting growing global stationary energy demand. However, global carbon dioxide emissions from power plants are also projected to increase by about two-thirds in the next decade. Significantly reducing emissions from global coal-fired power stations is one of the most critical actions required to mitigate climate change impacts.

Similarly, Australia will need to substantially transform its transport energy use, driven primarily by the global imperative to rapidly "de-carbonise" transport because of increasing emissions and oil demand challenges expected to increasingly manifest from around 2025-30 onwards. During this period, there is likely to be considerable upwards pressure on the cost of transport energy.

Level 17
61 Mary Street Brisbane Qld 4000
PO Box 15216 City East
Queensland 4002 Australia
Telephone +61 7 3225 1861
Facsimilie +61 7 3225 1828
Email nrmet@ministerial.qld.gov.au

Renewable energy is a fundamental component of the Queensland Government's response to climate change. The significance of this industry will grow in the medium to long term as improvements in technology make renewable energy more reliable and economically competitive. The Queensland Government's approach to advancing the renewable energy industry outlined in the Queensland Renewable Energy Plan (the Plan) (released on 21 June 2009) is a comprehensive economic and industry development strategy aimed at accelerating the growth of the renewable energy sector by adopting wide ranging initiatives that support research and development, industrial demonstration and commercialisation of a range of technologies. I have attached a copy of the Plan for your information.

The need to reduce greenhouse gas emissions is also likely to drive increased demand for gas as a fuel for electricity generation as gas-fired generators emit approximately half as much carbon pollution as conventional coal-fired generators. In coming years, gas could also become a significant energy source for both heavy vehicle and urban passenger transport. The development of a liquefied natural gas (LNG) export industry in Queensland will result in strong demand for Queensland's gas resources from a growing global energy market. According to forecasts, demand growth from domestic markets and the LNG industry could increase annual demand for gas in Queensland by more than 15 times by 2033, depending on the size of the LNG industry.

Until a carbon pricing regime is implemented, the Queensland Government remains committed to the Queensland Gas Scheme (the Scheme). The Scheme currently mandates that electricity retailers source 13 per cent of their sales from gas-fired generation. The target for the Scheme will increase to 15 per cent in 2010, with the option of a further increase to 18 per cent beyond 2010. The Queensland Government is committed to transitioning the Scheme once it is satisfied that the objectives of the gas scheme are efficiently serviced through the Carbon Pollution Reduction Scheme (or a similar scheme).

The Queensland Government remains committed to the prohibition of nuclear energy in Queensland. In 2007, the Queensland Parliament passed the *Nuclear Facilities Prohibition Act 2007* to prevent the construction or operation of nuclear reactors, nuclear waste storage sites and other nuclear facilities. This position reflects community concerns relating to the location of major facilities close to population centres, the management and disposal of high-level radioactive waste and the view of the Queensland Government that clean coal technologies and renewable energy are safer and more economically sensible options for Queensland than nuclear power.

Taking full advantage of Australia's energy resource potential is vital to enable the transition to a lower carbon economy and ensuring secure fuel supplies for Australia. The Queensland Government supports the identification of energy resources through initiatives such as the Smart Mining – Future Prosperity initiative, the Coastal Geothermal Energy Initiative and the Carbon Geostorage Initiative. These programs support the collection and distribution of precompetitive geoscientific data collection, and are crucial to identifying largely untapped energy sources and areas with potential for safe long term geological storage of carbon dioxide.

Expanded geoscientific data will contribute to enhancing Australia's security of energy supply through the discovery of new reserves, and the mineral resources important to developing clean energy technologies.

The Queensland Government is also committed to providing a regulatory environment that supports the development of resource projects, while meeting strict environmental and land use approval processes. An initiative to streamline the approval processes for exploration and production tenure for minerals and petroleum is currently being undertaken, which will improve the efficiency of regulatory and other approval processes for resource projects. In this way, the Queensland Government is supporting the development of resource projects from exploration to production, which will assist in maintaining the momentum of the economy.

The Queensland Government will also work at the national level to identify opportunities to streamline regulatory processes across jurisdictions, and to promote investment attraction initiatives in order to encourage investment in the energy resources sector. To this end, the Queensland Government is strongly advocating for the introduction of a flow through shares scheme by the Commonwealth Government to stimulate investment in junior exploration companies.

The Queensland Government is an active participant in the energy market reform and energy efficiency activities of the Ministerial Council on Energy . The energy market reform process continues towards the development of efficient national energy markets in both electricity and natural gas. Significant progress has been made in the implementation of the Australian Energy Markets Agreement, with the commencement of the amendments to the National Electricity Law and the new National Gas Law, and of other Council of Australian Governments initiatives, most recently the establishment of the Australian Energy Market Operator.

Energy efficiency is seen by the Queensland Government as a major contributor to greenhouse gas abatement targets, frequently at a "negative cost", or net financial benefit even in the absence of a carbon price. Such initiatives should be supported simply on the basis of improvements to productivity and competitiveness. In addition to its own energy efficiency initiatives, such as the Smart Energy Savings Program for larger users and Climate Smart homes for residential customers, the Queensland Government has been a strong supporter of the National Framework for Energy Efficiency delivered through the Ministerial Council on Energy and the National Strategy on Energy Efficiency recently agreed to by the Council of Australian Governments.

Securing domestic energy supplies that are affordable for consumers and allow increasingly important environmental obligations to be met offers a number of specific challenges, including:

Competition with export markets

The emerging LNG industry may place pressure on the ability for domestic demands to be met. There is evidence that some local gas users are currently having difficulty securing gas supply contracts as LNG proponents focus on setting aside reserves to secure their investment. However, there are strong indications that there will be sufficient gas to meet demand from all markets for decades to come. The Queensland Government continues to monitor the gas supply/demand balance to ensure this is the case.

Delivering appropriate infrastructure

Queensland has excellent potential solar and geothermal resources but the best sites are likely to be located in remote regions and away from traditional load centres. Current regulatory arrangements, whilst enabling the provision of a robust network, may not allow for infrastructure to be developed in a manner that recognises the future demand for these resources or the most economic development of the necessary infrastructure. In addition, a proliferation of electric vehicles (EVs) has significant implications for the capacity and the functionality of the national electricity grid, particularly if the suggested potential of EVs to serve as distributed power storage and discharging units is to be realised. Issues such as this give impetus to the development of so-called "smart grids" to provide maximum flexibility and control to both suppliers and users.

I would point the Committee to the Australian Energy Market Commission's Review of Energy Market Frameworks in Light of Climate Change Policies for an analysis of the challenges facing electricity network development and operation in the future.

Similarly, the delivery of infrastructure to allow for the effective storage of captured greenhouse gas emissions is also likely to require specific regulatory arrangements, such as the Greenhouse Gas Storage Act 2009 passed in Queensland earlier this year.

Developing new energy technologies

To allow Queensland (and the world) to continue to take advantage of its vast coal resources, new technologies will be required. The most promising breakthroughs are likely to come from low emission coal technologies (LECTs) that include the integration of advanced power generation systems with the capture of carbon dioxide and subsequent storage in geologically safe underground reservoirs. These LECTs include Integrated Gasification Combined Cycle, Oxyfuel Combustion and Post-Combustion Capture.

I wish the Committee well in its Inquiry.

Should you have any queries regarding my advice to you, Mrs Jenny Downie, Assistant Policy Advisor, will be pleased to assist you and can be contacted on telephone (07) 3225 1861.

Yours sincerely

STEPHEN ROBERTSON MP

Att