

Friday, 18 August 2006

Mr Petro Georgiou, MP
Chair, House of Representatives Science and Innovation Committee
Inquiry into Geosequestration Technology
Parliament House, Canberra
ACT 2600
Via: scin.reps@aph.gov.au

Dear Mr Georgiou,

The Queensland Resources Council (QRC) is Queensland's peak industry body for the mining and energy industries. QRC's mission is to secure an environment conducive to the long term sustainability of the mineral and energy resources sector in Queensland.

QRC welcomes the establishment of your Committee's inquiry into the geosequestration technology. There is a need for a much greater public awareness of the promise of geosequestration and QRC hopes that the Committee's work will help bring these technologies to the attention of more Australians.

The Queensland Resources Council (QRC) is a non-government organisation representing the interests of companies that are involved in exploration, mining, minerals processing and energy production in Queensland. The QRC works with governments, community groups and non-government organisations to ensure that the state's resources are developed profitably and competitively, in a socially and environmentally responsible way.

The resources sector lies at the heart of the Queensland economy. It is the foundation around which modern life revolves – providing the incomes, jobs, government revenues and infrastructure services needed for much of the state's unique quality of life. Minerals and energy production in Queensland is an economic powerhouse, valued at more than \$16 billion in 2004-05. Confirming its faith in the future, the sector invested \$1.5 billion in 2004-05, almost 20 per cent of Queensland's total capital investment.

The resources sector is the leading provider of jobs in rural and regional Queensland. It employs more than 40,000 Queenslanders directly. Add the employment flow-on effects and the sector accounts for one in every eight Queensland jobs. In central Queensland – the focus of the state's \$11 billion a year coal mining industry – it is estimated to generate, directly or indirectly, one in every four jobs.

Queensland has a particular interest in the potential of geosequestration because of its rich endowment of world-class energy resources, particularly coal. On the basis of current known reserves, Queensland has over 800 years of coal to continue to fuel affordable energy production.

In addition, mining and minerals processing are energy intensive processes, so as well as having an interest in continuing to sell coal to electricity generators, the mining industry also has an interest in seeing the relatively low-cost of electricity continue.

On the foundation of low-cost fuels, Queensland has invested in a substantial electricity generation and transmission infrastructure. Since the creation of the National Electricity Market in 1998, Queensland has had the greatest level of investment in committed generation of any State or Territory - equal to almost 3,500 megawatts of generation capacity. Similarly, almost a third of transmission investment under the National Electricity Market has occurred in Queensland.

In many ways, Queensland's growing demand is a microcosm of the global outlook. The world's demand for energy is forecast to double over the next 30 years, with much of that growth occurring in developing economies, where this energy has the potential to dramatically transform the average standard of living.

As a result, geosequestration has important implications for both the mining and energy industries in Queensland, both directly and indirectly. Queensland's coal industry is export focussed; the state is the world's largest supplier of seaborne coal. However, while the foreseeable global demand for coal is positive, in the medium term, concerns over the greenhouse gas emissions associated with burning coal are likely to dampen demand.

Geosequestration offers an important mechanism to break the nexus between accessing the abundant energy stored in Queensland coal and the greenhouse gas emissions which are currently released when coal is burnt. Geosequestration is also important because it is a technology which can potentially be retrofitted to existing power stations, steel mills and other industrial uses to prevent these emissions from being released into the atmosphere. As these capital-intensive plants can have an economic life of forty to fifty years, it is important to avoid the economic dislocation of having these assets made abruptly obsolete.

The challenge of reducing global greenhouse gas emissions will require an integrated portfolio of solutions. It is important to recognise that geosequestration is one of this set of solutions rather than a standalone panacea. To achieve the deep and sustained emissions reductions that have been suggested by the Intergovernmental Panel on Climate Change of 60% by 2050 will also require consideration of other solutions including some combination of:

- Greater efficiency (or reduced emission intensity) of transportation;
- Energy efficiency of heating and cooling our homes, schools and industry;
- Alternative fuels – including gas, nuclear, and hydrogen;
- Generating electricity from renewable sources – wind, hydro, biomass, solar and tidal; and
- Biosequestration – fostering carbon absorption in plants and oceans.

One of the difficulties in selecting the appropriate mix between these complementary abatement solutions is to identify the least-cost path for the Australian economy. This is only possible when real alternatives exist concurrently so that avenues exist for behaviours to be modified or for substitute technologies to be practically accessible. This is important to recognise at a time when price signals are being contemplated for emissions.

While geosequestration is technically possible; until it has been implemented and demonstrated on a large commercial scale, any figures relating to cost and efficiency can only be estimates. As a result, the dearth of information will impede the market's allocative efficiency.

QRC submits that until emission reduction technologies such as geosequestration have been researched and demonstrated, markets can not be expected to choose between current known technologies and emerging yet-to-be proved technologies. Before assessing incentives or price signals for motivating greenhouse gas reductions, there is a need to develop a suite of technologies which can deliver the necessary deep and sustained reductions in emissions.

In the absence of new solutions, imposing a carbon price will simply act as a largely inefficient tax. If carbon prices are not introduced on a wide (preferably global) basis and across a broad cross-section of the economy, then a premature carbon price risks introducing distortions which could see economic activity move jurisdictions to avoid the cost impost. For this reason, QRC favours the development of geosequestration and other solutions before any carbon pricing is considered in Australia.

QRC is a member of the Australian Coal Association (ACA) and supports the more detailed submission which the ACA is preparing for this Inquiry. QRC suggests that the achievements of the ACA in cohering the first whole-of-industry voluntary levy for greenhouse gas abatement in the world - the COAL21 fund - should be heralded as a major milestone in Australian public policy.

The COAL21 fund aims to raise up to \$300 million over the next five years to support the demonstration of clean coal technologies such as geosequestration. The scale of the initiative demonstrates the seriousness with which industry regards the challenges of reducing greenhouse gas emissions. More details on the COAL21 fund are available at www.coal21.com.au

QRC also welcomed the Queensland Government's recent commitment to provide a matching \$300 million in funding for clean coal technology. Between the industry's \$300 million funding, the \$300 million funding from the Queensland Government and the Federal Government's \$500 million Low Emissions Technology Demonstration Program, and investments by corporations such as electricity generators, Australia is starting to gather the critical mass necessary for the type of large scale demonstration of geosequestration which will be necessary to prove the viability of the approach and generate reliable estimates of the cost.

Thank you for the opportunity to provide comments against the Inquiry's terms of reference from the perspective of QRC's members – i.e. companies engaged in exploration, mining, minerals and metals processing and energy production in Queensland. If you have any questions about any points raised in this submission, or would like any further information, please don't hesitate to contact QRC's Andrew Barger on 3216 2502 or via email at andrewb@qrc.org.au

Yours sincerely



Michael Roche
Chief Executive