

SPEECH FOR
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SPEECH TITLE
QUEENSLAND, AUSTRALIA – THE CLEAN COAL
LEADER

EVENT
4TH INTERNATIONAL CONGRESS ON MINING, OIL &
GAS

VENUE
CARTAGENA, COLOMBIA

DATE
FRIDAY, 4 JULY 2008

SPEECH: 3.30 PM – 4.00PM
Q & A: 4.00PM – 4.15 PM

ACKNOWLEDGEMENTS

- **TBC**
- **Ladies and Gentlemen**

DRAFT - check for final delivery

It is a great pleasure to speak at this congress this afternoon.

Queensland is a state of Australia, occupying the north-eastern corner of the mainland continent. It is bordered by the Northern Territory to the west, South Australia to the south-west and New South Wales to the south. To the east, Queensland is bordered by the Coral Sea and Pacific Ocean. The state is Australia's second largest by area, following Western Australia, and the country's third most populous after New South Wales and Victoria.

Queensland is the fastest growing state in Australia, with over 1500 people moving to the state per week; 1000 in the southern part of the state alone. Predictions show that Queensland will become Australia's second most populous state by the late 2020s. According to Queensland's Office of Economic and Statistical Research the estimated population of the state at the end of 2007 was 4,228,290 which is almost 20% of Australia's total.

Climate Change is one of the greatest challenges facing Queensland and the world.

The connection between global warming and use of fossil fuels has been reinforced in the Intergovernmental Panel on Climate Change in its Fourth Assessment report.

This report states that there is a 90 per cent chance that, since 1750, human activities have caused warming of the atmosphere due to the burning of fossil fuels and land-use changes.

The use of coal as a fuel poses significant challenges in these days of global climate change for coal-fired power stations as they are the world's largest emitters of greenhouse gases.

ClimateSmart 2050 is the Queensland Government's flagship response to climate change and contains the Government's energy strategy. It outlines a long term strategy to secure clean energy for the State based on investing in accelerating the development and deployment of clean coal technologies (CCT) in a portfolio of renewable energy and energy efficiency targets.

Coal plays a central role in the Australian and Queensland economies particularly as Australia's single largest merchandise export item. Coal is also the primary fuel source for electricity generation in Queensland and the relative cost of base load power in Queensland has enhanced the standard of living and provides a comparative advantage for energy intensive minerals processing and manufacturing further enhancing Queensland's strong economy.

The development, demonstrations and accelerated deployment of clean coal technologies are an imperative for Queensland.

Queensland's annual greenhouse gas emissions amount to about 158 million tons (Mt) or 28 per cent of total emissions in Australia.

This has to be kept in perspective of the global scene, based on International Energy Agency and Inter-Governmental Panel on Climate Change estimates, Australia's share of world emissions was 1.5 per cent in 2005.

By showing leadership in Queensland on this critical issue, the State is in a better position to assist the largest emitters to reduce their greenhouse gas emissions. This includes nations such as China, India, Europe and the United States.

The good news is Queensland is playing a pivotal role in the research and development of clean coal and low emission technologies. This is coupled with the Queensland Government's support of demonstration projects, policy initiatives for low carbon energy technologies and investment in developing CO₂ storage solutions.

The Queensland Government is committed to developing reliable and environmentally sustainable energy sources for the future.

Over the past decade, a range of clean coal related research activities has taken place in leading universities and research establishments and also within State and privately owned-energy companies.

As a result, Queensland is one of the international leaders in this field; along with research and development partners in Europe, China and the United States.

These are collaborative efforts with various international organizations, who are investing heavily in leading edge clean coal projects.

The US Department of Energy sought industry input on costs and the feasibility of building multiple clean coal facilities as a restructure of the FutureGen project goals and has released its solicitation for funding opportunity application.

While the US rethinks its position on FutureGen as a demonstration project, the Queensland Government is committed to ensuring Queensland's energy security, environmental sustainability and continued economic prosperity.

There are however some significant challenges in reducing total domestic emissions.

The State's level of emissions coincides with strong state economic and population growth, as well as a strong global demand for Queensland's mineral resources. All are driving a voracious demand for new electricity generation in Queensland.

Economic growth

Queensland's economic growth has outstripped the nation for the twelfth consecutive year.

The Queensland economy grew in the past financial year at a rate of 5 per cent, while Australia came in 3.15 per cent.

Employment in Queensland has increased by 3.3 per cent in the year to September 2007, and the unemployment rate is now 3.6 per cent compared to a national rate of 4.2 per cent.

One third of all population growth in Australia in the past five years has happened in Queensland, with 1800 new Queenslanders each and every week.

Demand for electricity in Queensland

It is expected that by 2015–16, Queensland will require more than 13 500MW of grid-connected installed generation capacity with total sent-out generation (on a medium growth projection) of more than 66 000GWh.

Current installed generation, grid-connected capacity is more than 11 200MW (including Kogan Creek) and sent-out generation in 2005–06 was 47 322GWh.

With medium growth in both demand and electricity consumption the Department of Mines and Energy has estimated that by 2026, Queensland will require about 17 000MW of installed capacity with a sent-out generation of nearly 100 000GWh.

Assuming Queensland continues to draw a significant portion of its electricity from coal-fired generation, this strong economic growth induced electricity demand highlights the magnitude of the challenge in terms of reducing our greenhouse gas emissions.

Strong global demand

Much of Queensland's economic growth is also linked to the strong global demand for minerals.

Queensland has an abundance of coal resources. Drilling has identified resources of about 33 billion tons, with much more below current mine depth.

The State is the world's largest exporter of seaborne coal, with international sales of more than 150Mt/a in the year to 30 June 2007.

In the past 10 years, Queensland has doubled its coal exports of coking and thermal coal.

Such is the world's demand for Queensland coal that industry analysts predict international sales will reach 300Mt/a by 2015.

There are planned investments of up to \$10 billion in expanded coal mining capacity to match potential throughput of more than 300Mt/a of coal exports.

The success of the coal industry is a key ingredient of Queensland's economic success story.

Industry authorities do not believe coal's importance as an energy source is likely to change in the next 30 years, primarily because it is an abundant, easily transportable and reliable energy source.

But this is also because alternatives like biomass and renewables have not yet shown an ability to provide an uninterrupted supply to major consumers like energy intensive smelters and meet industry expectations of cost, reliability and scale.

To put it another way, these alternatives cannot currently fuel economic growth in the same way coal does, however significant research and development is also going into renewables from these sectors.

There is no doubt that these renewable alternatives will play a part in diversifying Queensland's mix of energy towards low carbon energy sources and meeting the market needs of some customers, but coal will retain its integral role because of the huge existing investment in coal-based power generation and technology.

Established technical capability is tried and tested providing a stable base for financiers and investors. To enable investment in new technology in the de-regulated marketplace will require continued investment in demonstration projects that provide experience to reduce risk and provide certainty for owners and financial investors.

Indeed, global demand for coal is projected to increase throughout the next three decades.

According to the International Energy Agency 2006 World Energy Outlook, global electricity demand is projected to virtually double over the next 25 years, from 14 376 terrawatt hours (TWh) in 2004 to more than 28 000 TWh in 2030.

Therefore, from a purely practical and realistic perspective, coal will continue to play a key role as an energy source.

This is why the development, demonstrations and accelerated deployment of clean coal technologies are an imperative for Queensland.

Clean coal research

The engineering challenges to improve the efficiency, reduce costs and uncertainty associated with clean coal technologies are immense.

It is one thing to capture the greenhouse emissions, it goes much further to identify suitable storage areas in the Earth's geology, and to do all this with great technical efficiency and cost effectiveness.

Global carbon dioxide emissions from power stations with no carbon constraints are likely to increase by about two-thirds over the next 25 years so success is critical.

Government action

Queensland's *Smart Energy Policy*, outlines the State's climate change policy, *ClimateSmart 2050*, launched in June 2007.

This document sets the direction for meeting the State's energy and emissions challenge now and into the future.

The *Smart Energy Policy* recognizes power stations are responsible for about 40 per cent of Queensland's total greenhouse gas emissions, ahead of land use, agriculture and transport.

Finding ways to reduce emissions from power stations is therefore paramount in a carbon-constrained future.

The government has set a clear target it will cut greenhouse gas emissions from energy generation in Queensland to 60 per cent below 2000 levels by 2050.

Low-carbon energy technologies

Low-carbon energy technology solutions like clean coal, solar thermal and geothermal are key to achieving the deep cuts in greenhouse gas emissions.

There is no quick fix for reducing greenhouse gas emissions. Both short term and long-term initiatives are required.

The government's *Smart Energy Policy* addresses both short-term and long-term greenhouse gas emissions.

Climate change experts such as David Gershon says emission reductions can be achieved through energy efficiency and behavioral change initiatives.

According to Gershon's *Low Carbon Diet* program communities can achieve between 25 per cent and 40 per cent reductions in carbon emissions from their normal activities in the short-term through behavioral change.

Energy efficiency improvements can be achieved very quickly delivering short term emissions savings and can be done in a sustainable way contributing to the long term targets. Having this strategy for the short term improvements gives us the advantage of some time to develop technology to achieve deep cuts in the long term.

To achieve greenhouse cuts in the short-term, the Queensland Government is encouraging consumers and industry users to reduce reliance on power through programs such as ClimateSmart Living, Smart Energy Saving Program, and Ecobiz.

- *ClimateSmart Living* –
 - In September 2006, the Queensland Government's Environmental Protection Agency asked Queenslanders about climate change. No less than 84 percent believe that

the Government should encourage people to make changes to reduce climate change impacts. Through the ClimateSmart Living campaign, the EPA has taken up the challenge.

- ClimateSmart Living uses the simple idea “It’s the little things we do, that make the world of difference” to focus on individual actions and the combined effect that individual actions will make statewide.
- The ‘ClimateSmart Living’ campaign will promote ways to live sustainably. The campaign will focus on energy efficiency, sustainable living, water conservation, waste minimisation and other environmental issues that begin at home.
- *Smart Energy Savings Program*
 - Queensland's Smart Energy Savings Program is a new legislative initiative that aims to drive energy saving improvements in Queensland businesses.
 - The program requires participating businesses to undertake an energy audit, develop and implement an Energy Savings Plan and publish the outcomes for each relevant site, on a five-yearly cycle.
 - The Smart Energy Savings Program seeks to:
 - increase the adoption of energy efficient technologies and practices
 - drive organizational behavior change towards positive energy management practices
 - reduce growth in Queensland's electricity demand

- improve business competitiveness by reducing energy costs
 - reduce greenhouse gas emissions from Queensland's commercial and industrial sectors.
- The Smart Energy Savings Program will position the state as a leader in promoting sustainable energy management practices in business and industry.
- **ecoBiz**
 - **ecoBiz** is the Environmental Protection Agency's signature partnership program with Queensland business and industry.
 - **ecoBiz** assists businesses identify efficiencies in waste, water and energy for financial and environmental benefits.
 - **ecoBiz** rebates provide funding assistance for Queensland businesses to implement eco-efficiency improvements as part of the ecoBiz program. Rebates are available to businesses that clearly demonstrate the benefits of conserving, reusing and recycling resources, energy and water in a manner that delivers economic, environmental and social benefit to the business, the wider community and the state.

Long-term solutions

The Queensland Government is pursuing research, development and deployment of clean coal, solar thermal and geothermal technologies.

These initiatives aim to:

- significantly reduce the level of greenhouse gas emissions generated from coal-fired power stations
- secure the energy future for Queensland industry and consumers
- support strong economic growth
- preserve a quality lifestyle
- assist large greenhouse gas emitting economies to reduce emissions.

Leadership

Queensland is building on existing expertise in research and development institutions.

The State is an early adopter of high-efficiency supercritical technology in coal-fired steam-cycle power stations in Australia.

In greenhouse gas emission terms, that efficiency equates to a reduction of at least 50 kilograms of greenhouse emissions per megawatt hour of electricity produced.

This is about 40 per cent (or 450 kilograms per megawatt hour) less than the emissions currently produced by some brown coal generators elsewhere in Australia.

Emission rates will reduce even further as new technology is developed and applied.

Our power generating companies are world renowned operators regularly improving international benchmarks for availability and efficiency. This will ensure the greenhouse gas emission improvements from this technology will have the maximum benefit towards reducing our overall carbon intensity.

Queensland has all four of Australia's supercritical coal-fired power stations, which includes the recently commissioned 750MW Kogan Creek Power Station.

These generators can be described as best practice mature steam turbine technology, and the reduced rates of emissions represent a transition to the commercial deployment of emerging technologies with significant cuts in emission rates.

It is also important to note that the higher efficiency, lower emission rate technology will also reduce the rates of CO₂ to be captured and stored, reducing the cost and efficiency penalty of installing post-combustion capture plant.

In another example of leadership, in September 2007, the Queensland Government formalized a flagship venture with the Queensland coal industry.

This is a \$900 million joint commitment to fund accelerated research, development and deployment of clean coal technology in Queensland.

This partnership is by far the most significant commitment in the region to clean coal technology development.

The outcomes of these low carbon emission energy research, development and demonstration projects will provide industry with the vital scientific and technical knowledge and skills for the future.

But importantly, they will also lay the foundation on which investors can base future commercial decisions.

Clean coal technologies

Clean coal technologies achieve deep cuts in greenhouse gas emissions by capturing and removing the carbon dioxide for safe and secure storage. There are a number of technologies being developed and they generally fall into the category of pre and post combustion capture. It is important to consider that at this stage it would be premature to pick any one technology over the others and in fact there may always be a need for different technology approaches. In this area Queensland is continuing its portfolio approach with investments in key technologies that will benefit the State's industry and those of our trade partners.

Clean coal technologies being developed in Queensland focus on modifying the way coal is utilized to generate electricity to allow the efficient capture of carbon dioxide emissions. The pre-combustion coal gasification process will even provide a pathway to the hydrogen economy by producing hydrogen and carbon compounds in a synthetic gas that allows the different products to be stripped out.

The other critical component is the storage of the captured carbon in deep underground rock formations.

When combined with carbon capture and storage, clean coal technologies have been found to be capable of achieving cuts of more than 75 per cent in greenhouse gas emissions and in fact, the commercial deployment of these clean coal technologies is targeting 90 per cent capture, reducing emissions down to the level of 150 to 200 kg of CO₂ per megawatt hour delivered to the market.

Put simply, only clean coal technology provides the kind of deep cuts that are necessary at state, national and global levels.

The challenge for government, the coal mining and energy industries, researchers and developers is to convince the community that this technology can deliver the desired cuts safely, that it can be widely applied including retro-fitting to existing plant, and that in the long term it can be made cost-effective.

Clean coal technology research

Queensland is at the cutting edge of global clean-coal technology development and offers exciting prospects for international investors and strategic partnerships.

The Queensland Government provides funding to the \$26 million Centre for Low Emission Technology (cLET) and the Cooperative Research Centre for Coal in Sustainable Development (CCSD), as a collaborative investment with industry.

Queensland's research and development capability for clean coal also includes collaboration with:

- The University of Queensland
- Australian Institute of Bioengineering and Nanotechnology, and
- Australian Research Council Centre for Functional Nanomaterials;

Demonstrating the diversity of development being undertaken to achieve break through in technology that will significantly improve the cost and efficiency of clean coal technology.

In addition, Queensland has strong links with international organizations and jurisdictions associated with the development of clean coal technology. We have active relationships with Germany, particularly with North Rhine Westphalia; China through the Chinese Minister of Science and Technology; USA with South Carolina and Wyoming, Japan and an increasing number of nations.

The Queensland Government is maintaining the momentum of this research effort and is considering ways to improve the efficiency and coordination of the various research groups to better target its objectives.

CCT projects

Queensland's significant commitment to clean coal technologies is underscored by demonstration projects of national and international significance.

They use integrated carbon capture and storage, the key technology recommended by the Intergovernmental Panel on Climate Change.

They are:

ZeroGen in central Queensland. This is a more than \$1 billion demonstration project that integrates coal-based gasification for pre combustion carbon capture and storage.

The ZeroGen Project has recently been reconfigured to a two stage project to better address the objectives of accelerating deployment of clean coal technology to achieve deep cuts in greenhouse gas emissions (ZeroGen Mark II).

Stage One of ZeroGen Mark II now involves an 80MW net Integrated Gasification Combined Cycle power plant (IGCC) with Carbon Capture and Storage (CCS) demonstrating the integration of the full range of technologies available to achieve up to 75 per cent capture of carbon. The timing of this project is for it to be operational by 2012.

It is vitally important that projects like ZeroGen are able to demonstrate the technical capability and commercial viability of clean coal technology to reduce the risk new investors seen in this technology going forward.

Stage One will be located at the Stanwell power station and subject to the feasibility study and ZeroGen achieving funding milestones it will be a world-first base load electricity demonstration plant that integrates a coal gasification power plant with the capture and storage of carbon dioxide emissions by end 2012.

The feasibility study for the Stage One Project is due for completion at the end of 2009.

The reconfigured Stage One is to demonstrate a more advanced gas turbine technology that will be more applicable in a commercial scale plant bringing forward the possibility of deployment of IGCC with CCS before 2020.

An important aspect of the ZeroGen project has been the investigation and assessment of the storage capacity of geological formations that could provide significant storage capacity in Queensland. ZeroGen has teamed with Shell Global Solutions to introduce its significant experience with successful storage of carbon dioxide associated with enhanced oil and gas

recovery. ZeroGen has been undertaking a drilling and assessment program in the Northern Denison Trough in central Queensland.

Stage Two of the project is to be a commercial scale IGCC with CCS project and will draw on the experience and technical improvements gained with Stage One project.

With additional funding in place planning for Stage Two of the proposed project can occur concurrently with Stage One. Depending on further development work Stage Two is expected to have a net output approaching 300 MW, operate with 90 per cent and be operational as early as 2017. The Stage Two project will capture and store approximately 2 million tons per annum of carbon dioxide.

It's interesting to note that Japanese organizations are conducting research along the same lines as ZeroGen and we would welcome collaboration between these parties.

The ZeroGen Project is at an important stage of its capital raising process and is active with international organizations.

Callide Oxy-fuel project

At Callide A Power Station in central Queensland has the potential to significantly reduce the cost of capturing carbon dioxide from conventional coal-fired plants.

It has been endorsed by the Asia Pacific Partnership on Clean Development and Climate, reflecting the project's international importance.

The technology is of particular importance to the coal and electricity industries because it can ultimately be deployed in new generating plant and retrofitted to existing boilers, and is one of the two approaches being developed for this purpose.

The technology utilizes oxygen to combust the coal producing a concentrated stream of CO₂ significantly reducing the cost of flue gas clean-up and storage compared to typical post combustion capture technologies.

The Callide Oxyfuel project will utilize an existing, retired 30 megawatt coal fired power station and retrofit the oxyfiring plant as part of the demonstration project.

It is very pleasing to see a strong and diverse consortium, including Japanese and other global partners, support the Callide Oxyfuel project. The project has finalized its joint venture arrangements, its capital formation and is currently finalizing plant supply contracts. Refurbishment work is set to commence late this year with operation in oxyfiring mode to commence in early 2011.

The Callide Oxyfuel project will operate over a five year demonstration period and during that time will operate its CO₂ capture plant for a period of three years and demonstrate storage in geology in the Northern Denison Trough and other prospective areas in the central Queensland region.

From work undertaken by the Queensland Government's Department of Mines and Energy and from consulting with industry and plant suppliers we expect that with the benefit of further technology development and

demonstration, efficient and large scale clean coal technologies should be available in the second half of next decade and we will be working with developers to achieve deployment in Queensland by 2020.

Solar thermal technologies

Solar energy is a key opportunity in Queensland and we are working with the CSIRO to demonstrate its SolarGas technology. The solar technology uses solar thermal energy to re-form natural gas (or other sources of methane) into a synthetic combustible gas (carbon monoxide and hydrogen) with a higher heating value than the original natural gas effectively storing the solar energy.

SolarGas has a 25 per cent higher heating value than natural gas and when used as a combustion fuel for electricity generation is expected to have at least 25 per cent lower carbon dioxide emissions.

The Queensland Government has committed \$7.5 million towards SolarGas One a solar thermal demonstration plant in Queensland by CSIRO. The 4MW plant will consist of at least five solar towers and mirrors, gas handling and electricity generation equipment.

The project is an opportunity for the Government, CSIRO and private enterprise to work together to build solid scientific and engineering capabilities in Queensland on the application of solar thermal energy to reduce greenhouse gas emissions from the use of natural gas.

The Queensland Government has also recently announced a ground-breaking \$7 million, 10 MW solar thermal power station for the town of Cloncurry in the far north-west of the State.

Essentially, it will become the first town in Queensland with the potential to use solar power for all of the town's electricity needs, 24 hours a day.

This project will use solar thermal energy to store heat in graphite blocks that enables a conventional steam turbine to run round the clock.

Solar thermal energy also has the potential to be able to improve the performance of natural gas electricity generation and be used as the source for the energy intensive post combustion capture of carbon dioxide emissions in existing coal-fired power stations.

Geothermal technologies

Geothermal energy or hot rocks energy is produced from heat generated and captured deep inside the earth.

Queensland's hot rock resources in south-west Queensland have the potential to position the State to take advantage of this greenhouse friendly form of energy generation in the long-term.

The Queensland Government has announced four more geothermal exploration permits.

This is again a new frontier, in terms of developing the technical and commercial expertise to harness the potential of these energy resources.

There are some exciting prospects on this front – and the government is moving forward with drafting the regulatory framework to support the shift from geothermal exploration to geothermal energy production.

Geothermal technologies are already commercially operational in countries such as Iceland and New Zealand.

The government wants to accelerate development of this technology to achieve commercial viability in the much deeper Australian heat resource, as quickly as possible.

Geothermal research

To aid this objective, the Queensland Government has committed \$15 million over the next five years to establish the Queensland Geothermal Energy Centre of Excellence.

The University of Queensland has committed a further \$3.3 million.

The Centre will establish scientific and engineering expertise in geothermal power generation, providing the field data required for a greater participation in geothermal technology development by industry.

By current estimates, solar thermal and geothermal technologies will be commercially operational by 2030.

It is part of the low carbon energy solution which in the long-term will reduce the State's reliance on traditional coal-fired power stations.

Queensland Gas Scheme

The government's 13% Gas Scheme has also had extraordinary success in reducing the carbon profile of its electricity generation sector.

Gas used in electricity production produces 50 per cent less greenhouse gas emissions than the equivalent coal-fired plant.

Therefore gas is a key transitional fuel source for reducing emissions, while the government continues to develop and demonstrate the emerging renewable and low carbon energy technologies.

The 13% Gas Scheme will help Queensland to transition to whatever national carbon trading scheme is developed in the future.

But, most importantly, this scheme has proven that we can make low carbon energy schemes like into a commercially viable reality.

The 13% Gas Scheme has built a multi-billion dollar industry from an almost standing start in 2000. It is a significant achievement.

Smart policy

The Queensland Government has committed to a number of energy-related initiatives in the Smart Energy Policy as outlined in ClimateSmart 2050.

Additional low carbon energy technologies include:

- \$50 million Queensland Renewable Energy Fund to provide support for the development of proven renewable energy technologies including \$7.5 million towards the CSIRO SolarGas demonstration

- \$10 million seed funding to identify carbon storage (geosequestration) sites, particularly in the Galilee Basin and Denison Troughs
- Developing a legislative framework to support the carbon capture and storage industry
- increasing the Queensland Gas Scheme from 13% to 18% by 2020
- the feed-in tariff for solar power where residential energy users that have a solar panel system can contribute to the electricity grid and receive a fee for their contribution
- a commitment to research hydrogen fuel cell technologies — the direct conversion of hydrogen into energy is more efficient than burning fuel in an internal combustion engine or other heat engine
- new energy generation that meets strict low emission criteria.

At a federal level, there are signs of leadership in the area of renewable energy with both the Commonwealth Government and Opposition incorporating targets into its election commitments.

Storage of CO₂

The safe and secure storage of CO₂ the common and critical component of successfully maintaining a sustainable future for coal in a carbon constrained economy.

The Queensland Government has also committed \$10 million funding to undertake an assessment of the State's carbon storage capacity. The Carbon Geostorage Initiative (CGI) will assess the geological storage

potential of Queensland through the identification, characterization and evaluation of geological sites that have the potential for long-term, safe and secure storage of carbon dioxide emissions from a large scale clean coal technology power plant(s) or other stationary energy emissions sources in the future.

CGI Stage 1, is underway and will undertake a state-wide basin characterization review with Stage 2 to commence in parallel that will focus on a number of prioritized basins for more detailed review.

The Queensland Government has committed \$10 million to this initiative and has received good support from the Australian Coal Association, which has committed \$20 million. The State will also seek significant Commonwealth Government support.

The Queensland Government is currently developing a regulatory framework for carbon storage, including addressing liability and monitoring (during and post-closure). Drafting instructions are underway with a carbon storage bill likely to be introduced in early 2008.

New energy generation

So where does that leave coal and gas-fired power generation in Queensland?

While low-emission coal and next generation renewable energy technology projects are being demonstrated, coal and gas will continue to provide base load power generation in Queensland.

Under the Queensland Government's Smart Energy Policy any new base load electricity generation application will be required to balance economic and environmental outcomes.

Conclusion

The Queensland Government is committed to assisting the State's coal industry develop a commercially and environmentally sustainable future, with a very low carbon profile.

It is ensuring the prospects for Queensland's coal export industry are not limited by either demand or resources, or by lack of infrastructure planning and construction.

The question mark that hangs over the future of the coal industry (particularly steaming coal) is its ability to sharply reduce, or eliminate, greenhouse gas emissions.

Both the Queensland Government and the coal mining industry are 100 per cent committed to doing so.

Industry and government have committed \$900 million to the development of clean coal technology, and researchers are collaborating with other experts around the world to achieve this great objective.

Queensland's objectives are to accelerate the deployment of clean coal technologies to achieve deep cuts in greenhouse gas emissions from the electricity generating sector. International collaboration will be a key component of achieving this objective.