



Support mechanism

TOGY talks to

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ORIGIN ENERGY

Formed in February 2000 as a result of the demerger of Boral Limited, the Sydney-based company has a presence all over the oil and gas industry, with interests in exploration and production, energy retail, renewables, power generation and gas transportation and distribution. And it owns a hefty slice of New Zealand's Origin energy. ■

THE OIL & GAS YEAR: *How did Origin Energy evolve to become Australia's leading coal seam gas (CSG) producer?*

GRANT KING: Origin Energy is Australasia's leading integrated energy company focused on gas and oil exploration and production, power generation and energy retailing. Listed in the Australian Securities Exchange top 20, the company has approximately 4,000 employees. It is a leading producer of gas in eastern Australia, the largest owner and developer of gas-fired electricity generation in the country and a leading wholesaler and retailer of energy. The company serves more than 3.5 million electricity, natural gas and LPG customers throughout Australia, New Zealand and the Pacific.

Origin Energy's strategic positioning and portfolio of assets provide flexibility, stability and significant opportunities for growth in the ever-changing energy industry. Through Australia Pacific LNG, Origin Energy's 50/50 incorporated joint venture with ConocoPhillips, the company is developing one of Australia's largest CSG to LNG projects based on Australia's largest CSG reserves base. In New Zealand, Origin is the major shareholder in Contact Energy, the country's leading integrated energy company, operating geothermal, thermal and hydro generation facilities and servicing electricity, gas and LPG customers across both the North and South Islands.

Origin Energy also operates several oil and gas projects in New Zealand and has one of the largest petroleum exploration acreage holdings in the country. Origin Energy has a strong focus on ensuring the sustainability of its operations. It is the largest green energy retailer in Australia and has significant investments in renewable energy technologies.

TOGY: *Now that CSG represents more than 70 per cent of your proved and probable (2P) reserves, is it fair to call Origin Energy a predominantly CSG*

company and how does this affect the company's energy market profile?

GK: Following rejection of the unsolicited approach to Origin Energy by the BG Group in April 2008, the company began a process of looking for the best global partner to assist us in monetising our large CSG reserves and resources. An international process culminated in the Australia Pacific LNG transaction with ConocoPhillips in October 2008, which clearly demonstrated the value of Origin's CSG assets and, in conjunction with the independent expert's valuation of the company, confirmed the inadequacy of BG Group's hostile takeover offer.

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Origin Energy's annual review included a significant increase in CSG reserves held by Australia Pacific LNG, with 2P reserves increasing by more than 50 per cent to 7,265 petajoules equivalent (PJE) or about 7 trillion cubic feet (196 billion cubic metres). As a result of the dilution of Origin Energy's CSG interests following the Australia Pacific LNG transaction, 2P reserves directly attributable to Origin Energy and inclusive of its Australia Pacific LNG interest declined from 5,770 PJE on June 30, 2008, to 4,484 PJE on June 30, 2009.

The growth in our CSG business, both domestically and as part of the Australia Pacific LNG joint venture with ConocoPhillips, highlights Origin Energy's continuing development of Australian

gas resources and creates a major opportunity for growth by establishing a new channel to export markets.

TOGY: *Given that CSG has yet to be tested on an international scale, what drives your confidence to bring an LNG plant of this kind into operation? How much is ConocoPhillips's global LNG experience integral to your plans?*

GK: The initial investment by ConocoPhillips of A\$8 billion (\$5.94 billion) for a 50 percent share of Australia Pacific LNG comprised an upfront cash payment of A\$6.9 billion (\$5.16 billion) and an additional fixed contribution of A\$1.15 billion (\$860 million) to Australia Pacific LNG. The fixed contribution is part of A\$2.3 billion (\$1.72 billion) that ConocoPhillips is investing to enable Australia Pacific LNG to reach a final investment decision for a CSG-to-LNG project by the end of 2010. This will include development of the CSG fields to service existing contracts, increasing the CSG reserves base to underpin the signing of LNG export contracts and undertaking LNG marketing activities.

Australia Pacific LNG will target a development of up to four LNG trains. On the final investment decision for each train ConocoPhillips will invest a further \$500 million to partly carry Origin Energy's share of costs, up to a total of \$2 billion. Origin Energy will continue to manage the development of Australia Pacific LNG's CSG operations and, with the longest history of CSG production experience in Australia, we believe we are well placed to develop these resources.

Origin has investments in both mature and new producing areas and is a major producer of gas in Australia. Origin Energy and ConocoPhillips are leaders in the development of CSG and Australia Pacific LNG is already producing more than one third of Australia's total CSG production to meet domestic market requirements.

TOGY: *The four major CSG to LNG projects currently being touted will place a heavy burden on the local resources of eastern Australia. In light of this, how important is it for you to be at the head of the LNG race? Could you be in favour of merging your project with another of the major players?*

GK: The Australia Pacific LNG joint venture between Origin Energy and ConocoPhillips is working effectively towards the development of a CSG to LNG project in Queensland. The increase in Australia Pacific LNG's reserves demonstrates the size and quality of the CSG resource available to the joint venture.

Australia Pacific LNG has secured a site for development of its LNG processing facility at Laird Point on Curtis Island in the Port of Gladstone from the Queensland government. The project continues to target final investment decision by the end of 2010 with production commencing at the end of 2014.

We look forward with confidence to the continuing development of this project, and the major



Construction of Origin Energy's 630-MW Darling Downs gas-fired power station commenced in 2007

opportunity it provides to increase Origin Energy's earnings in the years ahead.

While it is not opposed to the sharing of infrastructure, Australia Pacific LNG believes there is a strong future for its project on a stand-alone basis. For Origin Energy, it is about being the best long-term project, not about being the first. Australia Pacific LNG is on schedule. The joint venture was only announced in September 2008 and we have achieved a great deal since then. Our timing is our own and we are in line with our original expectations.

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TOGY: *How can Origin Energy leverage its investments in coal seam gas and renewable energies in light of a fast-approaching emissions trading scheme in Australia?*

GK: Origin Energy supports the view that an emissions trading scheme should be the central policy mechanism to guide the investments and behavioural changes required to address the long-term challenge of climate change.

The carbon pollution reduction scheme is the government's proposed mechanism for introducing an economy-wide price on carbon. Without a carbon price there is no incentive for electricity generators to shift over time from carbon-intensive coal to lower-emission fuels such as gas for baseload electricity. Without such a

shift, there is no chance of Australia meeting its emission reduction goals.

In the big picture, the world must transition away from high emission fuels to lower emission fuels, for example in the fast-growing economies of China and India. Natural gas produces approximately half the carbon emissions of coal when used for the generation of electricity. Australia's vast supplies of gas have the potential to create a stable supply to these countries for years to come and to underpin a major Australian export industry. Origin energy continues to work with the national government within the framework set out by the carbon pollution reduction scheme legislation on how to ensure all contributions to reducing emissions are fully recognised.

TOGY: *What is the progress being made with the Kupe Gas project in New Zealand and do you see this venture as a platform for increasing your involvement there?*

GK: The producing assets in New Zealand's Taranaki Basin (situated offshore of the north-west coast) also provided their first full year of production, while development of the Ahuroa gas storage project on behalf of Contact Energy is well underway, with the facility expected to be operational in 2010. On behalf of its joint venture partners, Origin is developing the Kupe Gas Project in New Zealand, which will make a significant contribution to securing the country's future gas supply needs.

Over the life of the project, Kupe will provide in the order of 254 PJ of natural gas, as well as 1.1 million tonnes of LPG and 14.7 million barrels of condensate. This will meet approximately 15 percent of New Zealand's current annual demand for gas and 50 percent of its LPG demand. Origin Energy expects to open the wells and bring the first raw gas ashore in the final quarter of 2009. Kupe, together with expansion of the

company's CSG production through Australia Pacific LNG, will see production continuing to grow in the year ahead.

New Zealand has excellent renewable energy generation, which continues to grow. Approximately 50 percent of the country's electricity is generated through large hydroelectric power stations. Contact Energy's two large hydro-electric dams harness the power of the Clutha River, which is one of New Zealand's largest rivers, and provide around 10 percent of New Zealand's total electricity capacity.

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New Zealand has also been a world leader in the development of geothermal electricity generation, and Contact Energy is the country's largest producer of geothermal electricity. The construction of the first phase of the Tauhara geothermal project (on the North Island), a 23-MW binary power station, is on schedule and budget for commissioning in mid-2010. In total, Contact energy has 500 MW of geothermal generation under development. The 200-MW gas-fired peaking plant at Stratford and the Ahuroa gas storage project are progressing on schedule and are also expected to be operational in mid-2010. Gas storage will restore valuable flexibility of gas supply, enabling Contact Energy to turn off its gas-fired power stations, when market conditions do not support them running, and store the gas for use when it is most required. ■

Origin Energy's Kupe project in South Taranaki on New Zealand's North Island is scheduled to come online by the end of 2009

