

The Australian Upstream Oil and Gas Industry

Touch Oil and Gas speaks to Belinda Robinson of the Australian Petroleum Production and Exploration Association about the exciting prospects ahead for Australia's oil and gas industry, and to Robert Walsh of Fragomen Global about the visa requirements of the globalised workforce.

Australia's Energy Production

Belinda Robinson, APPEA

Energy is crucial to almost every aspect of our daily lives. As with other countries around the world, Australia desires competitively priced and reliable energy supplies for its industries, homes and transport. The nation's upstream oil and gas industry plays a vital role in meeting these energy supply needs.

The upstream oil and gas industry has a long and proud history in Australia and continues today to make a significant contribution to the wellbeing of all Australians. Oil and gas account for 33 and 21%, respectively, of Australia's primary energy consumption. In 2006, the estimated value of oil and gas production in Australia was A\$22.7 billion, while tax and royalty payments to the Australian, State and Territory Governments totalled more than A\$8.1 billion.

The local production of oil and gas is also a source of highly skilled employment, education, training and research.

The upstream oil and gas industry's peak representative body, the Australian Petroleum Production and Exploration Association (APPEA), estimates that the Australian upstream industry directly employs more than 15,000 people. Indirect employment is even more significant, with estimates of 30,000 indirect jobs in Western Australia alone.

Exports of petroleum – including crude oil, liquefied natural gas (LNG) and refined petroleum products – totalled A\$13.2 billion in 2005–2006 and are Australia's second largest export income earner after coal. LNG exports are increasing rapidly and are estimated to increase to A\$8.5 billion by 2011.

Australia's national geological survey organisation, Geoscience Australia, estimates that on 1 January 2005 Australia's oil and condensate resources were 1,496 and 2,475 million barrels, respectively. The oil resources are equivalent to 10 years of production at 2005 production rates.

Australia's gas resources were estimated to be 146 trillion cubic feet as of 1 January 2005. This is equivalent to 110 years of production at 2005 gas production rates. In addition to conventional natural gas, Australia has extensive deposits of coal seam methane, although the ultimate value of this resource is not yet clear given the recent emergence of this sector. However, there is clearly a valuable coal seam methane industry developing (particularly in the eastern

Australian States of New South Wales and Queensland) to help service the needs of eastern Australian gas consumers.

In five years, the Australian coal seam methane sector has grown from nothing to more than 15% of the east coast gas market, with most of this production occurring in Queensland. This sector is expected to continue to grow strongly.

More than 90% of Australia's liquid hydrocarbon production is located in offshore areas, with most coming out of the North West Shelf and the Gippsland Basin (59 and 24%, respectively). Around 74% of Australia's gas production occurs in offshore areas (predominantly in the Carnarvon and Gippsland Basins). Onshore production from the Cooper Basin is declining but, as noted above, onshore coal seam methane production has increased rapidly over recent years.

A number of new opportunities and challenges have emerged for the industry in recent years. For example, in the Asia-Pacific region there is huge demand for Australia's natural gas, while at the same time Australia is becoming increasingly dependent on imported liquid fuels from that area.

The industry also has a significant contribution to make in tackling one of the largest economic and environmental challenges facing the world today – global climate change.

Australia's contribution to dealing with global climate change could involve harnessing more of our substantial natural gas resources if exploration and development could be pursued more aggressively. The use of natural gas instead of coal for electricity generation and manufacturing processes within Australia is estimated to have avoided greenhouse gas emissions of around 60 million tonnes carbon dioxide equivalent (CO₂-e) in 2006.

If the industry achieves its goals in relation to increased natural gas exports and increased gas use domestically, global emissions of another 180 million tonnes CO₂-e per annum by 2017 could be saved compared with a coal alternative. Gas technology is available now to economically deliver immediate reductions in Australia's greenhouse gas emissions, whereas low-emission technologies for most other energy sources will become economically viable only in the longer term.

The future contribution of the industry will largely be determined through a combination of factors, ranging from successful

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exploration in new frontier areas through to technological developments that will unlock the full potential of new and existing discoveries and, finally, to capturing new market opportunities, particularly for natural gas.

As part of this, the industry in Australia has also recognised that we face a number of difficult challenges. In particular, our remoteness drives up the cost of mobilising essential equipment and personnel. Perceptions of low oil prospectivity are discouraging exploration even though much of Australia's offshore and onshore areas are largely unexplored.

Relatively low domestic gas prices, limited success in attracting new gas-based processing industries and our failure to commercialise a number of big gas discoveries have tended to slow exploration and development investment. The reality is that Australia is competing with a variety of other host nations where exploration risk, underlying economics and time to development can be more attractive.

However, overall it is an exciting time for the industry in Australia. To realise the full potential of the Australian upstream oil and gas industry, challenges and opportunities must be grasped by governments (on behalf of the community) and industry alike.

To achieve this, the industry embarked on the Upstream Oil and Gas Industry Strategy, announced by the Minister for Industry, Tourism and Resources, the Honourable Ian Macfarlane, MP, in March 2006.

The Upstream Oil and Gas Industry Strategic Leaders' Report, Platform for Prosperity, was launched in April 2007, and was prepared by APPEA with the assistance of the Australian, State and Territory Governments, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and other major stakeholders. It aims to provide an overview of the opportunities and challenges facing the Australian oil and gas industry, the concerns that could prevent opportunities from being fully realised and the options for addressing those matters.

Having now released the report, APPEA is working with governments and other stakeholders in the further development of the options for change and, where agreed, their implementation. ■

The Right People in the Right Place at the Right Time

Robert Walsh, Fragomen Global.

The offshore oil and gas industry in Australia has experienced – and will continue to experience for many years to come – unprecedented levels of activity, with major projects such as Woodside's Enfield, Browse, Vincent and Pluto projects and BHP Billiton's Stybarrow and Pyrenees, requiring unprecedented numbers of skilled and specialist workers. On the horizon are even bigger schemes, including world-class projects such as Inpex Ichthys and Chevron's Gorgon JV.

One of the most significant challenges for the oil and gas industry in Australia and indeed worldwide is being able to access the number of skilled and specialised workers required for these future and ongoing projects. The need for facilitated movement of skilled

workers, which enables skilled people from all countries to seek out global opportunities, must be balanced against legitimate national concerns to ensure that domestic skill development and work opportunities are not sacrificed for an 'easier' solution. It is also important that national security and health and safety concerns are appropriately recognised.

For the oil and gas industry, which reaches into the four corners of the world and consequently has a globalised workforce, the most pressing matter is to have the right people in the right place at the right time. Fragomen Global is a visa expert in the field of migration, providing international and local companies with expert advice to work through the processes with the Department of Immigration and Citizenship (DIAC) to obtain the correct visas to live and work in Australia.

In Australia, the Government has recognised some of these concerns in its commitment to introduce fast tracking of the processing of subclass 457 work visas for employers with a good record in sponsoring overseas workers and for key employees in highly skilled occupations. The announcement of the fast-tracking initiative was made in April 2006 and it is expected that it will be in operation by early 2008.

However, this incentive coincides with the introduction of new legislation to strengthen the obligations on employers of overseas workers and to introduce financial penalties for failures to adhere to important obligations. These include payment of the minimum salary level and payment of certain costs, notably return travel, medical and recruitment costs for the employee and accompanying family members taking up a temporary assignment in Australia. This legislation could be in operation by late 2007.

The announcement of an English language requirement for applicants for subclass 457 visas is understandable for dealing with situations where employees are put in danger through a lack of English language ability. However, the current exemptions based on the level of skill and salary and the restriction on methods for testing English language ability may need to be revised. This requirement could become an impediment to the availability of staff in the oil and gas industry in Australia, when at the same time large and small Australian and overseas companies operate successfully and safely in multilingual environments around the world.

The current debate in Australia on the operation of the subclass 457 visa is of particular importance to the oil and gas industry. As a concept the subclass 457 visa provides a set of rules that represents the world's best practice in enabling skilled workers to be in the right location at the right time. In practice, it is clear that it is difficult for governments to balance competing policy objectives for this visa category.

For companies operating in the oil and gas industry in Australia, but at the same time facing the challenges of being part of a worldwide industry with a highly globalised workforce, there is a need for ongoing consultation with government to ensure that the subclass 457 rules are able to facilitate having skilled workers in the right place at the right time. ■