

Petroleum Exploration Up 21% To \$1.2 Billion: ABARE report

Expenditure on petroleum exploration rose by 21% in 2005-06, to around \$1.26 billion, according to the latest minerals and energy report released by the Australian Bureau of Agriculture and Resource Economics.

The Major Development Projects, October 2006 Report, said expenditure in 2005-06 was the highest since 1985-86 and was around 9% higher than the annual average expenditure in real terms over the past 25 years (\$1.16 billion). "The increase in petroleum exploration expenditure in 2005-06 is likely to have been encouraged by significant rises in world oil prices during the year", the report said.

"However, short term oil prices are only one factor in determining exploration expenditure in any particular period. A range of other factors also have a significant bearing on exploration expenditure decisions. These include: longer term oil price trends; Australia's relative prospectivity for petroleum; the prospect for Australia's share of growing global LNG trade; the need for long term planning, particularly for relatively expensive offshore petroleum exploration; cost increases; and shortages of skilled labour and the concurrent commitment of resources (funds, equipment and labour) to other activities such as project development."

The report said the substantial number of energy projects indicates that there will be robust growth in the resource sector's productive capacity over the medium term. But it warned that continued growth over the longer term will require levels of real average annual exploration expenditure around, or higher than 2005-06 to increase the resource base needed to underpin future development.

Two major energy development projects, the \$750 million BassGas project and the \$1.4 billion Enfield project were commissioned during the six months ended October 2006 while 46 projects with a total estimated capital cost of \$16.5 billion were in the advanced stage of development.

"Six large petroleum developments — four of them Woodside operated — together with two natural gas pipeline projects, account for just over half of the total value of energy projects", it said. "The largest of these projects is the \$2.4 billion North West Shelf Extension Project which involves the construction of a fifth LNG processing train with gross annual

capacity of 4.2 MMt of LNG. The fifth train is currently under construction and is expected to be completed toward the end of 2008."

Two new offshore oilfield developments in the Carnarvon Basin — Vincent (\$1 billion) and Stybarrow (\$803 million) — are expected to add around 180,000 bopd of crude oil production capacity. Vincent (Woodside operated) and Stybarrow (BHP Billiton operated) are expected to begin production in 2008.

The other three petroleum projects are the \$1.6 billion Angel gas and condensate field in the Carnarvon Basin, scheduled for completion in 2008; the \$1.1 billion Otway gas project in offshore Victoria, expected to be completed early in 2007; and the \$620 million offshore Blacktip gasfield project in the Bonaparte Basin south west of Darwin scheduled for completion in 2009.

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The two advanced gas pipeline projects are separate stages of the Dampier—Bunbury pipeline expansion. Stage 4 (capital cost of \$433 million) is expected to be completed early in 2007, while stage 5A (\$700 million) is expected to be commissioned in 2008. Each stage is expected to add 100 TJ a day of carrying capacity.

The report said projects in the less advanced planning category are either still undergoing feasibility study (in some selected cases, pre-feasibility study), or no definite decision has been taken on development following the completion of a feasibility study.

“Exploration expenditure in 2005-06 was the highest since 1985-86 and was around 9% higher than the annual average expenditure in real terms over the past 25 years.”

"Some of these projects cannot proceed for several years and may confront changes in economic or competitive conditions, or may be targeting the same emerging market opportunity, necessitating rescheduling", it said.

"In addition, securing finance for project development — even for high quality projects that have a high probability of success —

Energy projects

State	No.	\$m
New South Wales	11	1,415
Victoria	3	1,212
Queensland	18	5,661
Western Australia	11	7,929
South Australia	1	56
Tasmania	0	0
Northern Territory	2	201
Australia	46	16,474

can present problems, particularly when there is perceived to be excess global supply and/or an uncertain demand outlook."

"Also, with an exceptionally large number of minerals and energy projects currently committed or under development in the next few years, competition for skilled labour and materials and the attendant cost pressures are unlikely to ease in the short to medium term. This makes it likely that the feasibility of many less advanced projects will need to be re-examined. It may also mean that, from a market perspective, some project developments may be deferred beyond their optimal startup dates."

However, the report said despite the uncertainty that attaches to projects at these earlier stages of consideration, the significant number of large scale projects at less advanced planning stages that are under active consideration for development is expected to provide a firm platform for future growth in the medium term and beyond.

"Among the more notable large scale projects in ABARE's October 2006 list that are still undergoing feasibility studies are seven proposed LNG developments that, collectively, could add around 50 MMt of annual LNG production capacity in the medium to long term. The largest of these LNG projects is Chevron Texaco's proposed \$15 billion, 10 MMt a year, Gorgon development on Barrow Island that is currently at the front end engineering and design stage." ■