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HOW MUCH OF THE BUDGET WILL BE FOR YOU?
OFFSHORE EXPENDITURE IN THE ASIA-PACIFIC

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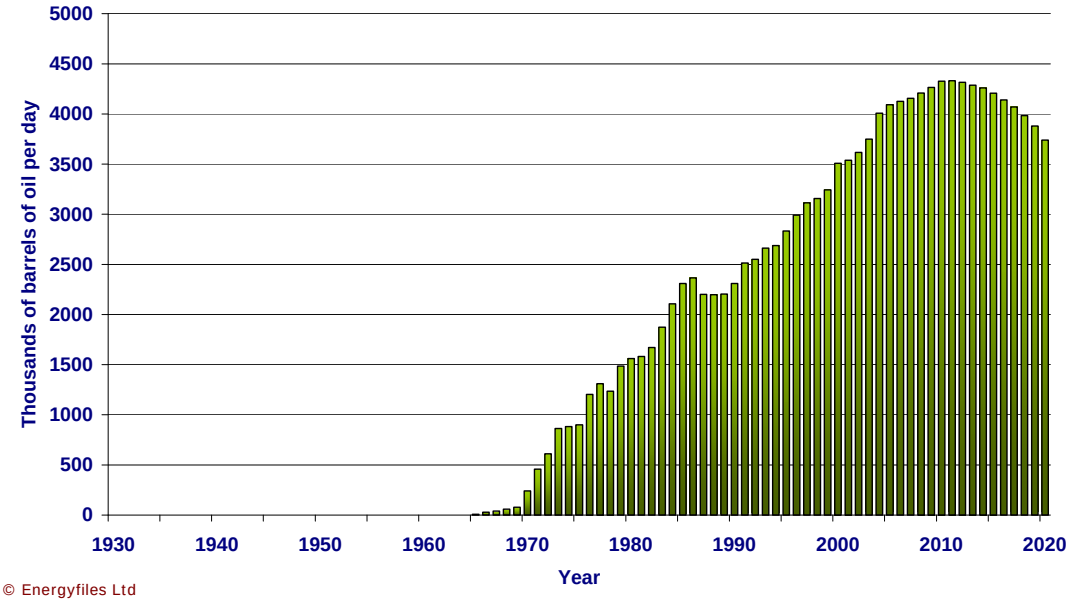
The oil price is relatively high but is this translating into budgets for exploration and is the Asia-Pacific receiving its fair share? Assuming that the oil price stays high, and there are strong reasons for thinking it will, the money that will be available to geologists and geophysicists over the coming years is closely dependent on how much new production is forecast to be developed.

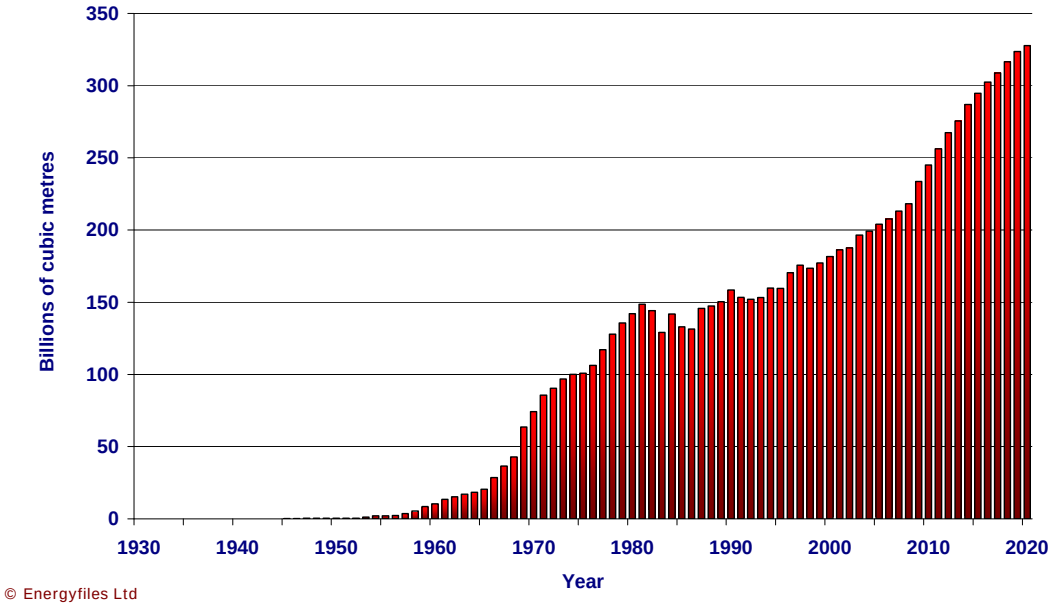
Except for oil in China the Asia-Pacific is now dominated by expenditure on offshore production and this is where the bulk of capital will be spent. Production of offshore oil in the Asia-Pacific is set to grow from around 4 to 4.5 mm bbls per day up to 2010 before levelling off and then declining. The lack of opportunity will severely restrict expenditure levels in the region, especially in new exploration, since much of the new oil will be retrieved from existing fields by better engineering methods.

THE ASIA-PACIFIC: Offshore oil production forecast to 2020



Conversely gas production is on a constant upward path. Exploration for gas will require significant expenditure. Will this be sufficient to ensure that geoscientists remain fully employed?

THE ASIA-PACIFIC: Offshore gas production forecast to 2020

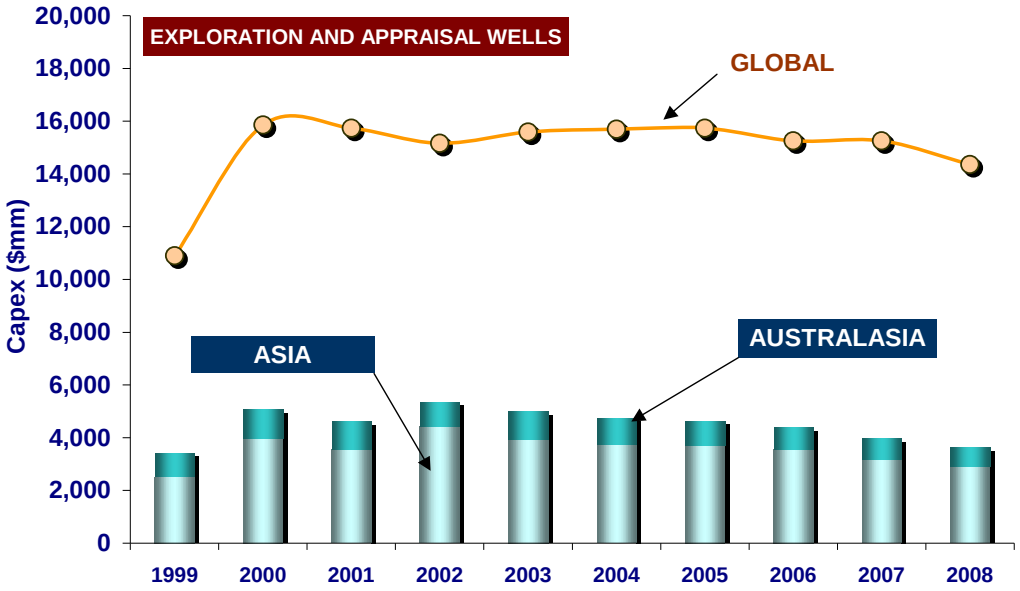


On average just under 1000 exploratory offshore wells are drilled globally each year of which a quarter are located in this region. Drilling costs vary enormously but the cost of the rig is usually between 25% and 30% of the well cost. The engineering programme makes up between 35% and 45%, depending on the total depth of the well and whether drilling problems are encountered.

Support services, including transport such as boats and helicopters, make up between 20% and 30% of total costs which leaves the cost of the geological programme, depending on well objectives, at just 5-10% of the total.

Globally, exploration drilling levels have now stabilised, boosted by higher oil prices and the appearance of new opportunities through improved technology, but limited by the disappearance of drilling prospects in mature regions. In the last decade reductions in available targets in shallow waters have been counter-balanced by moves towards increasing water depths. Exploration drilling levels in the Asia-Pacific are thus heading downwards as the deepwater regions do not match those of Brazil, the Gulf of Mexico and West Africa.

Seismic expenditure on an exploration project, including acquisition, processing and interpretation, is roughly a third of that allocated to drilling exploratory wells. Thus it attracts around four times as much spending as the geological part of a drilling programme. Furthermore although drilling activity is forecast to decline, seismic activity is expected to remain stable as improved data quality raises success rates.



It is now forecast that around US$22 bn will be spent over the next 5 years on all offshore drilling in the Asia-Pacific region and an additional $7bn will be spent on seismic data. Around $8.5 bn will thus be allocated to geologists and geophysicists. Meanwhile another $30 bn will be spent on other capital expenditure and another $40 bn will be spent on operating and producing fields. The allocation to the geosciences for these activities is only around 5% or around $3.5 bn.

In conclusion whilst the Asia-Pacific region attracts just under 20% of global expenditure, this is set to reduce over the next decade as deepwater developments elsewhere attract more capital. Meanwhile the share associated with services provided by geoscientists will be less than 10% of this money - in a region that consumes more oil and gas than any other in the world.

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