

# APPEA 2013

## The next wave?

The Australian Petroleum Production and Exploration Association (APPEA) 2013 conference provided much food for thought. Unlike past years when the sense of collective buoyancy was palpable, this year there was a definite theme of reflection. The sector is now deeply aware that much of its cost structure is no longer globally competitive. With the current fleet of mega-liquefied natural gas (LNG) projects now each well advanced towards completion, there was much talk about needing to prepare for 'the next wave' of investment. In our view, the next wave is likely to look very different to the last. We think the smaller and more nimble players are best placed to benefit from market dynamics over the next five or more years.

### Reflection, circumspection towards 'the next wave'

The mood at this year's APPEA was notable for its circumspection. Whereas sentiment in past years was far more upbeat, largely on the back of A\$200bn of new-build (LNG) projects, there is now much pause for thought as the Australian sector grapples with its cost base in the face of intensifying competition from other big-gas nations, particularly in North America and East Africa. It looks increasingly likely that once the current cycle of LNG investment is complete in 2015-16, the next wave of world-scale LNG projects will not be built in Australia. If they are, they are much more likely to be sited on water rather than on land.

### Looming Eastern gas demand overhang dominates

The contrasting demand- and supply-side pictures in the bellwether East Australian gas market make for difficult local digestion. We expect to see an anticipated demand-side overhang to materialise as gas pull from three separate but adjacent LNG mega-projects currently being built on Queensland's Curtis Island struggles to be met by new Surat and Bowen Basins coal seam gas (CSG) deliverability.

East Coast gas prices have already been in sharp ascent for the past two years as the local market has begun to price-in what looks likely to be a material supply-side squeeze once the combined 25mtpa of new LNG capacity arrives to market in 2015-16. Energy users are already struggling with the effects of the internationalisation of the Australian gas sector and the pace with which the sector is moving towards export-parity pricing. Federal and state governments have ruled out domestic gas market reservation policies as being too interventionist and discouraging of investment. Near term, it appears there is little to stand in the way of prices continuing their trajectory towards A\$9-10/GJ.

### Much opportunity for smaller, more nimble players

In the face of supply-led pressure, the LNG majors have already begun implementing gas-gathering strategies to support their own forward supply lines. Although the focus of the first deal push has been on major incumbent producers, in our view this is likely to become increasingly fertile ground for smaller producers with gas to offer. In this space we favour players with established positions in proven basins with ready access to transmission infrastructure.

Oil & gas

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#### Companies in this report

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### APPEA: As big as it gets for oil and gas down under

APPEA is the advocacy body that represents the Australian upstream oil and gas sector. It also hosts the annual pan-industry conference of the Australian oil and gas sector. This year, attracting 3,600 delegates from 30 countries, there is no bigger oils gathering down under. It is a melting pot where players from all parts of the Australian oil and gas value chain come together to table and discuss sector issues and direction. Representatives and exhibitors stretched from each of the six oils super majors (BP, Chevron, ExxonMobil, Shell, Total and ConocoPhillips) through to regional service companies and equipment suppliers and everything in between. On the side lines we met with a number of small- to mid-cap E&P companies. This note serves to aggregate our takeaways from the three-day event ahead of a pan-sector report on the Australian onshore sector we intend to release in the coming months.

### Sector spend: Gargantuan, but nearly all LNG

Unsurprisingly, given the extent of activity and spend being directed towards the space over the past half-decade, gas was a central theme for the event. As the route-to-market for much of those gas projects currently being developed, LNG was also a key focus, and it's not difficult to understand why:

- Of the twelve global-scale LNG projects currently being constructed, seven are in Australia.
- Capital spend across these seven projects totals c A\$200bn.
- By 2018, Australia is expected to overtake Qatar as the world's largest LNG exporter.

### Under the LNG hood, less impressive

It is very easy to get carried away with big numbers. Lifting the hood reveals some more sobering themes and statistics. The most striking, and the one that accounted for much discussion at APPEA, is the burgeoning cost of doing oil and gas business in Australia. As new-build projects have competed for resources, cost curves have skyrocketed. As just one of many examples, in 2007 the build component of the Chevron-led Gorgon project on the North West Shelf was estimated at US\$15bn. By the time of the FID in Q409, this had risen to US\$37bn. In Q412 the JV announced an updated estimate of US\$52bn. Similar increases are evident across most projects, particularly the three separate CSG-to-LNG projects being built alongside each other on Curtis Island near Gladstone.

Cost matters came to a head in April when a Woodside-led JV decided not to proceed with its US\$45bn Browse project, which otherwise would have been another world-scale greenfield LNG development. The JV attributed its decision squarely to cost, stating the design concept was not economic. While it is looking at other options, including a floating concept akin to Shell's world-first 3.6mtpa Prelude FLNG project, it appears the case that cost reductions into the many billions of dollars will need to be found for any revised Browse concept to be viable.

A separate greenfield project, a potential 9.2mtpa plant also being scoped for a new standalone build on Curtis Island by an Arrow Energy-led JV, is also being affected by cost pressures. Arrow has recently conceded that as well as considering the greenfield option, the JV is also now considering options to partner with and supply gas to one of the three competitor-operated plants already under construction on Curtis Island. Under a partner option, the Arrow-led JV would potentially supply CSG from its own Surat Basin acreage to one or more of the BG-, Santos- or ConocoPhillips-led Curtis Island plants for processing and export, either for an initial period (as ramp-up gas) or long term.

McKinsey research concludes that the Australian sector must reduce its cost base by 20-30% to remain competitive, which broadly aligns with an assertion made by Chevron Australia's MD, during the event, that building a brownfield expansion project in Australia is more expensive than building a greenfield project in another country. With oil price outlook expected to remain subdued (see our [latest oil & gas macro outlook](#)) the cost side of project economics will define the future competitiveness of future project builds.

The broad fear is loss of momentum and ascendancy as other big-gas supply-side nations bring new resource to market. In the short term, the North American market poses the greatest threat on its new-found shale backbone and more favourable fiscal terms. Towards the turn of this decade, new entrant big-gas regions such as East Africa pose a very serious threat.

With Australia also expected to account for 25% of world LNG trade by 2018, there is an acknowledgement that buyers are likely to continue to seek to diversify their supply portfolios across sovereigns. Furthermore, buyers in future will likely push much harder for gas-linked pricing to replace traditional oil-priced structures (eg Japanese Crude Cocktail), which US-domiciled suppliers operating under Henry Hub pricing would likely be more prepared to consider.

## **Front-end exploration disconnect**

Despite the scale of LNG development build underway, an aspect that stood out to us was the relative shallowness of onshore exploration activity taking place. While the enormous Surat and Bowen Basin CSG development drilling programmes provide an outwardly deep baseline of gross onshore drilling metrics, in 2012 fewer than 60 onshore exploration wells were drilled across the country – around the same number as will be drilled in fledgling New Zealand this year. In 1997, more than 110 onshore wells were completed, since which the trend has been one of steady decline. The number of offshore wells is also on a downwards tangent.

## **Eastern gas market demand-side overhang**

Another theme to stand out was the reaffirming of what appears increasingly certain to become a material gas supply crunch in eastern Australian gas markets as the Curtis Island LNG plants come online in 2015-16. Executives updating progress on their Curtis Island mega-projects were noticeably light on detail in discussing progress with the upstream components of their projects, leaving many unknowns. What is known is that once all are operating, the three Curtis Island plants will collectively have capacity installed to accept more than 1,500PJ (c 1,415bcf) pa of Queensland-fed gas. In effect, the new plants will serve to triple the size of the eastern Australian gas market to c 2,300PJ (c 2,170bcf).

While the separate upstream Surat and Bowen Basin programmes being advanced by each project JV will clearly rise to meet most of this demand, increasingly it appears that the collective upstream deliverability from new capacity will not be sufficient to meet target plant utilisation rates, making for a potentially material demand overhang. The question isn't one of likelihood as much as it is of extent. Curtis Island operators have already begun procuring third-party gas from existing independent producers, with deals announced to date centring on contracting gas from established conventional plays in the mature Cooper Basin. The likelihood is strong that LNG buyers will continue to pursue gas-gathering strategies to support their own supply lines.

Eastern gas markets started pricing-in a squeeze scenario some time ago. Benchmarks of around A\$5.50/GJ in Q113 are up c 50% since 2011. Among users, there is growing unease that local market gas prices are marching towards an export (ie LNG) equivalent of >A\$10/GJ. For their part, the sell-side of the sector is signalling that buyers must accept that the cost of bringing new gas to market is now much higher and that they must adapt to the international setting in which the gas sector now operates.

The contradiction of an East Coast gas market in the midst of bringing many thousands of PJ of new gas to market while also delivering a sharply positive wholesale gas pricing path has drawn much outcry from the buy side of the sector, particularly in the manufacturing, electricity generation and mass market segments. Among the lobbying, some have called for a domestic gas reservation policy response from government to ring fence cheaper gas for local use – an option that has been ruled out by each of the Federal, Queensland, New South Wales and Northern Territory governments as too interventionist, requiring of subsidy and discouraging of investment. Instead, at APPEA the Federal government announced its commitment to undertake a “comprehensive” domestic gas market study to better understand the supply and demand outlook.

## **Federal election in Q413 likely to deliver significant change**

With the Federal election to be held on 14 September 2013, the opening session saw addresses from each of the incumbent Labor and potential Liberal Minister for Resources. If the polls are to be believed it would take something very unexpected for the government not to change in September. The centre-right Liberal opposition has already committed to three separate but major policy steps of direct bearing to the E&P sector:

- Repealing the carbon tax imposed by the Labor government in 2012;
- Repealing the Minerals Resources Rent Tax (and, possibly, the onshore extension to the existing Petroleum Resources Rent Tax) also introduced in 2012; and
- Establishing a one-step environmental approvals process, both onshore and offshore.

Collectively, these steps mark a major programme of reform that compared to the status quo would deliver significant benefits to the E&P sector. For the onshore sector, the move to streamline the environmental consent process is potentially particularly significant.

## **East Coast gas supply-side: What next?**

The looming demand overhang on the East Coast raises the question of how the supply side will or can respond. This picture is also complicated. An outright ban on fracking in the state of Victoria and heavy restrictions on land use for oil and gas purposes imposed by the NSW government, have served to undermine the ability of those states to be able to attract the investment necessary to meaningfully increase local supply, at least from onshore sources. While the South Australian and Queensland governments have to date taken a more pragmatic approach, the supply burden inferred on these two states is enormous. Queensland already supplies most of NSW's gas.

The mix comes across as a disjointed muddle, but one that also presents a number of clear and potentially significant opportunities for players, which we discuss below.

## **What about liquids?**

Such was the extent of conference energy expended on traversing gas and LNG issues that it was often easy to forget the significance of Australia's liquids sector. Although also on a steady downwards trend since the turn of this century, in CY12 more than 150mmbbl (420kbbbl/d) of oil, condensate and LPG was produced, placing Australia in the top-30 oil-producing nations. While most production is centred in offshore basins, there remain significant contributions from the mature but still prolific onshore Cooper Basin, which has been in production since 1963.

Further afield, there are a number of potentially very large, new, early-stage plays being revealed in emerging and frontier liquids-rich basins, which we also discuss below.

## What we see

Distilling our APPEA takeaways produces a number of clear investment themes:

- New mega-scale greenfield LNG build is unlikely onshore until cost curves have settled and, on the East Coast, the upstream performance of existing projects is understood. Further capacity increments are likely to be by way of brownfield expansions to existing sites.
- The eastern gas market is likely to continue to become more attractive to sellers as ongoing supply-side uncertainty, constraints to onshore land access in key CSG regions and ongoing market migration towards export-parity pricing serve to lift gas returns.
- Onshore players that can demonstrate lower cost structures are much more favourably placed to progress exploration and appraisal projects towards and beyond development.
- Similarly, players with acreage convenient to existing infrastructure are far better placed to take advantage of medium-term, demand-led pressure by being able to commercialise resource quickly.
- We also think the uplift trend in sector M&A and farm-in activity seen over the past 12-18 months in the onshore sector will likely continue, as players with balance sheet capacity continue to be drawn to acquire strategic positions in early-stage prospects.

## What we like: A first cut

We will be issuing a detailed report focusing on the onshore Australian sector in the coming months, when we will take a much closer look at the key plays and players. As a first pass, the top-down criteria we are likely to be drawn to are:

- In the **gas** space, players with material positions (conventional or unconventional) in acreage that demonstrates:
  - Strong gas prospectivity based on established production and/or exploration success;
  - Convenient to existing infrastructure to streamline commercialisation; and
  - Lower-impact footprint, preferably outside the current onshore hotbeds of NSW and Victoria.
- In the **oils** space, we look to the same criteria; however, we place a lower emphasis on infrastructure access, which we consider to be significantly more manageable in a liquids-rich setting.

Applying our gas filter narrows to regions including the Cooper, Bass Strait (Otway, Bass and Gippsland), Perth and Carnarvon basins. Although not as well furnished with existing transmission and handling infrastructure, we also see early-stage appeal in the Amadeus, Beetaloo, Galilee, Eromanga, Georgina, Officer, McArthur and Pedirka basins as emerging, longer-dated and potentially gas-rich plays. We note that a number of these regions also house conventional oil and/or gas-condensate plays.

Applying our oils filter extends this list to include the Canning, Arckaringa and Amadeus basins. Again, we note these plays tend to have associated gas components to their makeup, which would potentially further lift attractiveness if gas streams can be monetised.

In our analysis we will be focusing a closer lens on the small- to mid-cap listed players that are active in these regions.

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