BHP shifts to liquids to bolster flagging US shale income

Faced with uncertain income from its newly acquired US shale gas assets, due to low gas prices, BHP Billiton is hurriedly refocusing efforts on shale liquids plays, which it hopes will prove more profitable, writes Damon Evans

UNTIL last year, the words shale gas and BHP Billiton would almost never be seen in the same sentence. The Anglo-Australian resource giant was thought to be more interested in liquefied natural gas (LNG) plays than North American domestic gas production. Yet in the space of a few months, BHP spent $20 billion buying into US shale gas and all but locked itself into splurging between $60 billion and $80 billion on further capital investment out to 2020. US shale gas came from nowhere to be the biggest thing that BHP was likely to do over the next five years and more.

But US gas prices have since plummeted and the company is now doing everything it can to dampen market speculation that a humiliating big-ticket write-down is coming on its newly acquired unconventional assets.

BHP first paid $5 billion for Chesapeake Energy's Fayetteville shale-gas assets, then it bought Petrohawk Energy, a US oil and gas outfit, for about $15 billion, including debt.

Twelve months on, and with US gas prices now less than half their level when BHP bought Petrohawk, the company is facing embarrassing markdowns on those businesses and accusations that it bought at exactly the wrong time.

Nevertheless, the Petrohawk deal has given BHP access to the shale formations of Louisiana and Texas, delivering both material bulk as well as commodity diversification to a play sustained by confident assertions that gas will become the fuel of choice in the US energy markets, particularly for the electricity sector.

> **Large chemical companies are in the odd position of siding with environmental groups against LNG exports**

The logic underlining that part of the acquisition narrative has proved pretty accurate. Domestic coal demand in the US has dropped around 18% over the past year or so on the back of a very mild winter. At the same time, gas demand from the power sector rose 8%.

However, the immediate challenge for BHP is that this switch has been triggered to a large extent by the sustained fall in gas prices resulting from an increase in US shale-gas output.

Pricing concerns

Unusually low winter demand coupled with rising production pushed US gas prices down to $1.95 per million British thermal units (Btu) and with forward price projections falling, speculation about a write-down has been rife. Figures bandied about range from $2 billion to $10 billion with the larger sum based on a sustained collapse in gas prices.

Any write-down will be decided in conjunction with BHP's auditors, KPMG. And the resources giant has one year from the date of an acquisition to allocate the carrying value between various assets. With Fayetteville, that process will be done by the time the 30 June financials are compiled, but with Petrohawk, KPMG may not have finished the task.

Positively, BHP has one of the strongest balance sheets in Australia. But another big hit to its assets would raise questions about

Drilling ahead: BHP Billiton purchased the Fayetteville Shale facility in Arkansas, USA for $5 billion the tenure of chief executive Marius Kloppers and his chairman, Jac Nasser.

However it's worth bearing in mind that the assessment of BHP's assets and the market outlook for shale is complicated.

US gas prices have been hovering near historic lows after hitting a record high of $13.69/million Btu in 2008. And the US manufacturing industry is enjoying the benefits of cheap gas.

This has not been lost on US policymakers who are scrutinising a raft of new permit applications for LNG export plants to enable gas producers to tap into more lucrative international markets, particularly Asia, where LNG can fetch almost $20/million Btu.

The argument goes that US politicians, who are already under pressure to promote domestic industry and create jobs, will find it convenient to go slow on approvals for LNG export projects in order to keep gas prices soft.

On the other side of the fence, more producers are claiming that without LNG there is no hope for North American shale gas. Unfortunately for the producers, LNG cannot be exported from the US right now.

And there is a growing opposition to LNG export plans as well. Despite the rush of overseas buyers to sign supply contracts and invest in US liquefaction facilities, large chemical companies are in the odd position

Shale gas is considered low risk and low cost and can thus provide substantial reserves replacement to producers

of siding with environmental groups against LNG exports. Fuelled by cheap gas, the industrial sector is experiencing a renaissance and petrochemical producers want to see natural gas exported as products rather than in liquid form. They also fear high US LNG export volumes would raise domestic gas prices to international levels, which, in turn, would curb industrial activity.

With gas prices at such low levels relative to oil, BHP, like other energy companies operating in North America, is shifting its focus from dry, gas-rich plays such as the Fayetteville to liquids-rich basins, such as the Eagle Ford and Permian shales in Texas.

Numbers that Petrohawk dispatched to its US bond holders earlier in May show the firm managed to mostly offset the effect of slumping US gas prices in the March quarter by boosting liquids-rich shale production to reap the benefits of higher oil prices.

The report reveals Petrohawk's average price for its oil and gas slid just 2.8% in the March period from a year earlier to $4.57/million cubic feet (cf) equivalent of production, despite a 37% drop in the average gas price received to just $2.49/million cf.

Rise in revenues

The figures revealed a 43% rise in Petrohawk's quarterly oil and gas revenues to $500.2 million on the back of a 46% jump in average daily production. Oil production tripled to 2.2 million barrels in the period, while production of lucrative natural gas liquids more than doubled to 1.24 million barrels. This trend to liquids will continue with BHP signalling that oil will be the dominant operation by the end of this year – a move that would seem likely to mitigate the risk of a Petrohawk write-down.

And with oil trading over $100 a barrel, the value of those Petrohawk assets could help to offset a markdown to the gassier Chesapeake deal, say analysts at the Commonwealth Bank of Australia.

But the pillar of BHP's US shale business generated a net loss of $55 million, wider than the $31.88 million of a year-earlier, pressured by higher depletion, depreciation and amortisation costs, as well as an increase in interest expenses.

Some shareholders remain sanguine. They understand these potential write-downs are based on a formula, and assets could be marked up in future, delivering a strong return on capital. While the expertise gained through its US shale assets will be usable elsewhere to expand the business in the longer-term. But that argument has tended to be drowned out by aggressive fund managers that want BHP to return capital to shareholders and lift returns.

The official line is that BHP is investing for the long term and, while the current gas pricing environment is more challenging than it was when its shale acquisitions were made, the total value proposition remains unchanged. That the US gas market was a volatile place was well appreciated by BHP when it took its position in shale. That the price might topple as far as it did was not.

Yet, Mike Yeager, head of BHP Billiton Petroleum, predicts that the mining group's shale investments will drive rates of return to among the highest in the group. He concedes that his division got it wrong about the gas side, given the collapse in prices, but countered that liquids will provide a lucrative alternative.

Yeager says that BHP will get $1.5 billion back in year one. That compares with $2.2 billion spent on US onshore drilling and development in the nine months to end-March. Yeager says the company now expects to spend a little less in onshore US than the $4 billion it had been predicting for the year as a whole, due to the scaling back of its shale gas activity. However, he expects spending to pick up in the next financial year, with around 85%-90% of US onshore investment destined for the liquids sector.

Yeager adds that the business provides significant flexibility, with the ability to slow down and ramp-up, or switch between gas and liquids. And the firm says that with 7.6 billion barrels of oil equivalent, its gas and liquids resource is high quality.

Speaking at the Australian Petroleum Production and Exploration Association (APPEA) conference in Australia in mid-May, Yeager reported a half-a-billion barrel rise in the volume of liquids BHP expects to extract from the Eagle Ford and Permian shales to 1.5 billion barrels, compared to what he was telling investors last November, as the firm shifts its focus from gas to liquids.

Bringing an extra 500 million barrels online is akin to two more projects the size of the huge Shenzi development in the deepwater Gulf of Mexico, according to Yeager.

Of course, shale gas is considered low risk and low cost and can thus provide substantial reserves replacement to producers, as investment bank Credit Suisse said when the deals were struck. Nevertheless, it is hard to believe the latest Petrohawk numbers are not at least indicative of immediate pressure on BHP's books, especially the valuation of the gas-only fields in Fayetteville.

With hindsight it is easy to criticise BHP's investment timing, however, it seems unlikely Petrohawk would have been willing to sell in the current low gas-price environment.

Potential write-downs aside, it seems clear that BHP's bold shale move was based on the relatively flexible production profile, short payback period on investment, as well as the long-term strategic importance of shale expertise. ●