# Bowen Basin gems: Sapphire polishing up well

## Sapphire 5 done, Sapphire 6 in progress.

BLU has outlined significant drilling progress on its Sapphire field in the Qld Bowen Basin, with the 4 lateral wells at Sapphire 5 successfully completed and Sapphire 6 underway. Equipment to begin the test phase, firstly at Sapphire 5 is being mobilised with the test phase expected to begin mid-November.

## Engineering risks abating

The Sapphire 5 & 6 pilot CSG wells are complex and at the cutting edge of technology in terms of precision drilling. The laterals in each of the 4 separate coal seams are each about 1300m and these intersect a vertical well of radius about 15 cm. Sapphire 5 now has 5000m of well-bore in contact with coal. Sapphire 6 will double that. The more well-bore that is exposed to coal, the higher the production potential. The successful completion at Sapphire 5, and success to date with two laterals completed Sapphire 6, substantially de-risks the complex drilling phase and paves the way for flow rate testing.

## If this works, the prize is huge

Blue has MoU's for the sale~505 PJ of gas to Origin Energy, Energy Australia and QPM. At current east coast gas contract prices of ~$10/GJ, the revenue opportunity is ~$5B. Current spot gas prices are > $20/GJ, and should these prevail by the time Blue enters production then the revenue opportunity is obviously far greater. There are other small companies trying to develop for supply into eastern Australia, and none have MoU's or gas contracts approaching this scale. The size of Blue's opportunity differentiates it from peers and underpins a potentially very large valuation.

## But the gas industry faces headwinds

The current East Coast Gas Market spot prices continue to be high driven by global demand and a tight supply situation, with spot prices sitting around A$22/GJ. However, Natural gas has been put under climate change pressure as well as political pressure to lower household energy bills. Policy settings are in a flux at the State and Federal levels and this creates an uncertain investment environment.

## Valuation A$0.49

Blu has the largest undeveloped 2C and 3C gas resource close to the gas-short east coast. Our A$0.49 valuation is unchanged, and will be reviewed as the test results come in. The gap down to the share price is likely due to the market ignoring the drilling phase, and discounting the production opportunity. Flow rate testing could catalyse a material re-rating. Key risks relate to drilling programs in the Bowen and Surat, potential delays for a pipeline in the Bowen Basin and non-completion of further gas sales.

Blue Energy (BLU) explores, evaluates and develops conventional and unconventional oil and gas resources solely in Australia, principally in Queensland and the Northern Territory. BLU's diverse portfolio involves five key geographical basins, the main and most developed of which is the Bowen Basin in Queensland.

**Key investment highlights:**

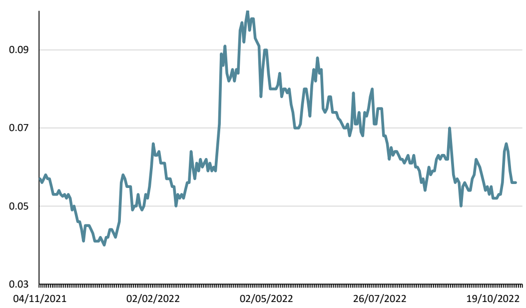
- Exposure to new gas basin plays
- BLU is operator – controls own destiny
- BLU has 100% in key tenements
- Large gas resource and 2P reserves
- Low finding cost

https://blueenergy.com.au/

| | |
|---|---|
| **Stock** | ASX: BLU |
| **Price** | A$0.06 |
| **Market cap** | A$104m |
| **Valuation** | A$0.49 (Unchanged) |

| **Next steps** |
|---|
| Complete Sapphire 6. Commence Pilot production |
| Reserves determination<br>Conversion of MoU's for gas sale to binding |

**BLU share price (A$)**

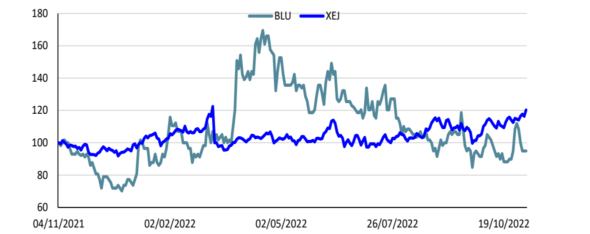



Source: FactSet.

**Stuart Baker**
stuart.baker@mstaccess.com.au
**Michael Bentley**
michael.bentley@mstaccess.com.au

## Exhibit 1 – Company summary – year-end 30 June

| Blue Energy Limited (ASX:BLU) | |
|---|---|
| **Price** | **0.06** |
| 52 week high / low | **0.10 / 0.04** |
| **Valuation (diluted)** | **0.49** |
| **Market Capitalisation** | **104** |
| Enterprise Value | 96.8 |
| Shares on issue (basic) | 1850.7 |
| Other equity | 0.2 |
| Fully Diluted Equity | 1850.9 |




| Ratio Analysis | 2021A | 2022A | 2023 | 2024 |
|---|---|---|---|---|
| EPS (A¢) | (0.07) | (0.22) | (0.42) | (0.07) |
| CFPS (A¢) | (0.07) | (0.32) | (0.74) | (0.15) |
| P/CF (x) | (95.9) | (21.0) | (9.2) | (44.7) |
| EV / EBITDA (x) | n/m | n/m | n/m | n/m |
| Net Debt / Net Debt + Equity (%) | 3% | 9% | 14% | 12% |
| EBIT / Interest (x) | 0.0 | 0.0 | 0.0 | 0.0 |
| Current (x) | 2.1 | 7.6 | 26.8 | 20.7 |

| NPV | A$m | Risking | A$m | A$ps |
|---|---|---|---|---|
| ATP 814P (Sapphire) - Risked NPV | 443 | 60% | 266 | 0.14 |
| ATP 814P Other Permits EV/2P+2C Average Comparables | 500 | 100% | 500 | 0.27 |
| ATP 854P Surat EV/2P+2C Average Comparables | 101 | 100% | 101 | 0.05 |
| ATP 813P Galilee EV/2P+2C Average Comparables | 32 | 100% | 32 | 0.02 |
| **Enterprise Value** | **1076.6** | | **899.3** | **0.49** |
| Net Cash / (Debt) | 26 | 100% | 26 | 0.01 |
| Admin / Corporate | (26) | 100% | (26) | (0.01) |
| **TOTAL VALUATION** | **1076.6** | | **847.3** | **0.49** |

| Reserves and Resources (25 January 2022) | Working Interest | 1C Gas (PJ) | 2C Gas (PJ) | 2P Gas (PJ) | 3C Gas (PJ) | 3P Gas (PJ) |
|---|---|---|---|---|---|---|
| ATP 854 P (Surat) | 100% | 90 | 194 | - | 398 | - |
| ATP 813 P (Galilee) | 100% | - | 61 | - | 830 | - |
| ATP 814 P (Bowen) | 100% | | | | | |
| Sapphire | | 154 | 214 | 67 | 214 | 253 |
| Central | | 50 | 99 | 12 | 306 | 75 |
| Monslatt | | - | 619 | - | 2,054 | - |
| Lancewood | | 5 | 23 | - | 435 | 1 |
| South | | 15 | 27 | - | 30 | 6 |
| Hillalong | | - | 182 | - | 237 | - |
| Sub total | | 224 | 1,164 | 79 | 3,276 | 335 |
| **Total** | | **314** | **1419** | **79** | **4504** | **335** |

| Profit & Loss (A$m) | 2021A | 2022A | 2023 | 2024 |
|---|---|---|---|---|
| Oil / Condensate Revenue | - | - | - | - |
| LPG Revenue | - | - | - | - |
| Gas Revenue | - | - | - | - |
| **Total Sales** | **-** | **-** | **-** | **-** |
| Operating Costs | - | - | - | - |
| Government Resource Taxes | - | - | - | - |
| Exploration & Development Expenses | (0) | (2) | (8) | (2) |
| Other Net Income / Expense | (1) | 0 | 1 | 1 |
| **EBITDA** | **(1)** | **(2)** | **(7)** | **(1)** |
| **EBITDAX** | **(1)** | **(2)** | **1** | **1** |
| Depreciation & Amortisation | 0 | 0 | 0 | 0 |
| EBIT | (1) | (2) | (7) | (1) |
| Net Interest Expense | 0 | 0 | 0 | 0 |
| **Pretax Profit** | (1) | (2) | (7) | (1) |
| Tax Expense / Benefit | - | - | - | - |
| **Net Attributable Profit** | **(1)** | **(2)** | **(7)** | **(1)** |
| Reported Profit | (1) | (2) | (7) | (1) |

| Cash Flow (A$m) | 2021A | 2022A | 2023 | 2024 |
|---|---|---|---|---|
| **Pretax Profit** | (1) | (2) | (7) | (1) |
| D&A & Other Non-Cash Items | 0 | 0 | -5 | -1 |
| Tax Paid | 0 | 0 | 0 | 0 |
| **Cash from Operating Activities** | **(1)** | **(2)** | **(12)** | **(3)** |
| Development Capex | - | - | - | - |
| Exploration Capex | (0) | (3) | (13) | (4) |
| Acquisitions/Other (Net of Sales) | - | - | - | - |
| Dividends Paid | - | - | - | - |
| **Free Cash Flow** | **(2)** | **(5)** | **(12)** | **(3)** |
| Cash Provided by Financing | (0) | 10 | 19 | - |
| **Net Change in Cash** | **(2)** | **5** | **7** | **(3)** |

| Balance Sheet (A$m) | 2021A | 2022A | 2023 | 2024 |
|---|---|---|---|---|
| Cash & short term deposits | 2 | 7 | 14 | 11 |
| Receivables | 0 | 0 | 0 | 0 |
| Inventories | - | - | - | - |
| Property, Plant and Equipment | 0 | 0 | 0 | 0 |
| Capitalised exploration | 61 | 65 | 72 | 74 |
| Intangibles and Goodwill | - | - | - | - |
| Other assets | 0 | 0 | 0 | 0 |
| **Total assets** | **63** | **72** | **86** | **85** |
| Creditors | 0 | 1 | 0 | 0 |
| Borrowings | - | - | - | - |
| Other liabilities | 1 | 1 | 3 | 3 |
| **Total liabilities** | **2** | **2** | **4** | **3** |
| Shareholder equity | 62 | 70 | 83 | 81 |
| Shareholder Equity + Total Liabilities | 63 | 72 | 86 | 85 |

Source: BLU, MST Access.

## Bowen Basin: Sapphire drilling well advanced and successful so far

### The technical achievement needs to be understood

Exhibit 2 from from the Q3 report is important, because it shows what BLU are doing on the ground. Laterals are effectively horizontal wells steered through the coal seams, and 1200-1300m laterals of this length are rare in Australia and a relatively new technical innovation. Keeping the well trajectory within the coal seam is a major achievement, to be followed up by then intersecting the 7-inch diameter vertical well.

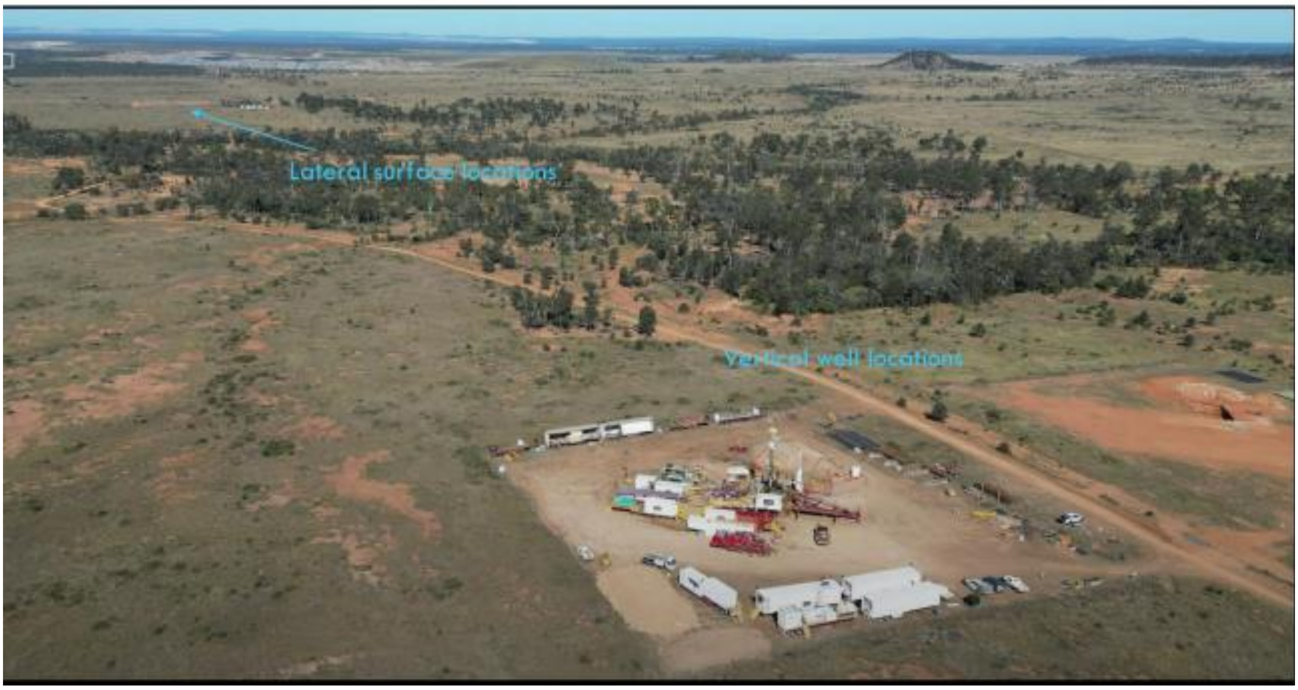
At Sapphire 5, there are 4 laterals each of about ~1300m, for a total of 5055m of well-bore in contact with the coal seams, which we believe is unrivalled in the industry at this time. Each of these four laterals have intersected the vertical Sapphire 5 well.

The vertical well is designed as a sink to drain water from the laterals allowing these to produce gas. These lateral wells have been completed and kited-out with production tubing. The vertical well has been kitted with production tubing & down-hole pumps, while installation of surface facilities such as metres, and gas flare are close to completion. Blue advise that Sapphire 5 will begin de-watering in mid-November

The successful execution of Sapphire5 drilling is a major de-risking event in an engineering sense, and opens the way for the production phase.

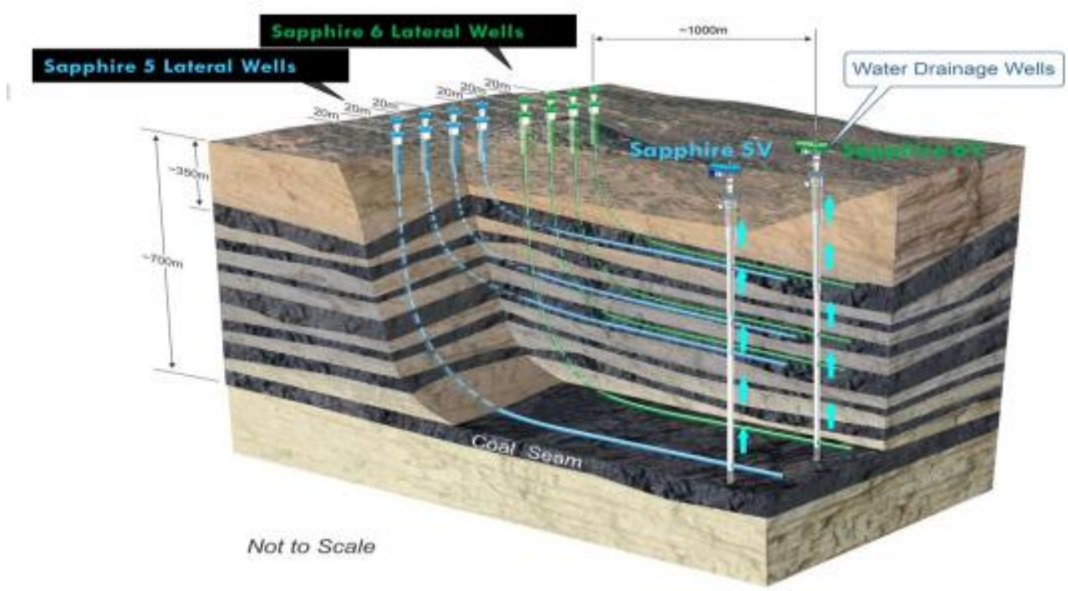
As at November 1, Blue has completed two of 4 planned laterals at the Sapphire 6 location. The two wells combined drilled 2526m "in -seam" and successfully intersected the Sapphire 6V- vertical well.

Exhibit 2 – Ariel view of Sapphire vertical and lateral well locations




Source: BLU Energy third quarter report

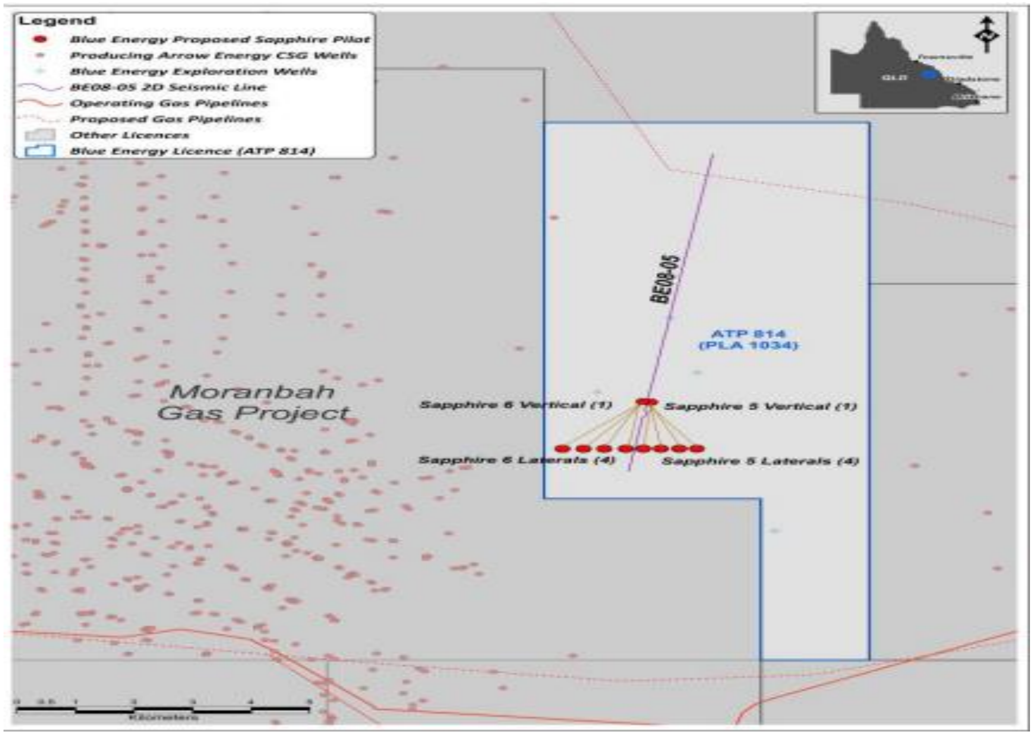
Exhibit 3 – Schematic of Sapphire 5 & 6 lateral and vertical wells within the coals.




Source: BLU.

Exhibit 4 shows the layout of the wells, two vertical and 8 laterals in total.

Exhibit 4 – Well layout and proximity to the established Moranbah CSG field



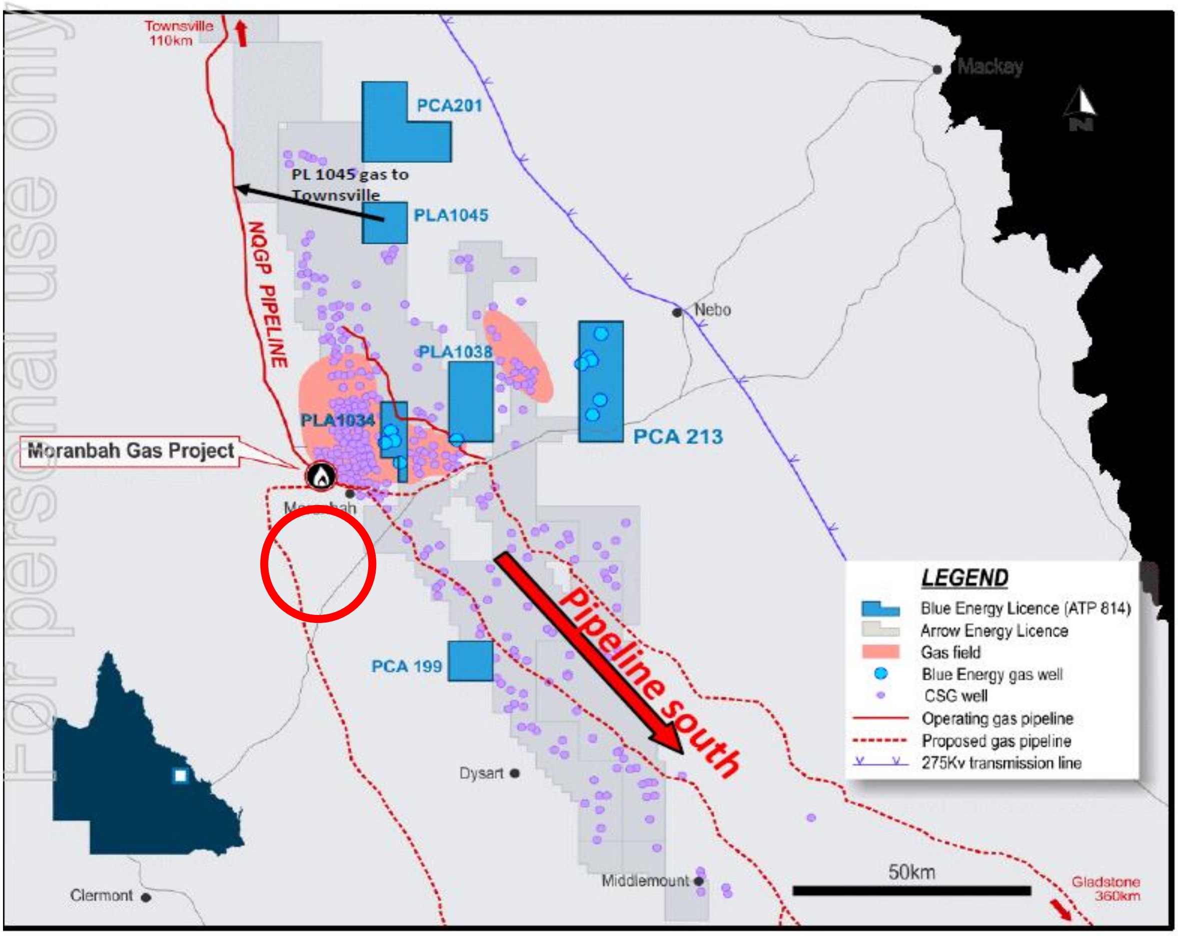

Source: BLU.

## Infrastructure recap. A pipeline is needed

The Bowen basin is already an established gas production region, but it is not connected to the east coast, only to Townsville. There are 4 pipeline routes proposed to get gas to the Wallumbillah gas hub and gateway to the east coast gas market.

We expect infrastructure developers will step into the picture, once BLU has proved production and has binding gas agreements in place

Exhibit 5 – BLU's Bowen permits showing proximity to Arrow's Moranbah Gas Project and Pipeline Route




Source: BLU

## The prize is huge & differentiates Blue

BLU's main game at this time, and the focus of its investment is the Bowen Basin, but it also has resources in the Galilee Basin and the Surat Basin.  These are documented in Exhibit 6. We expect the proven and probable reserves in the Bowen Basin will be re-determined at the conclusion of the testing phase.  The Sapphire 5 & 6 pilots are fully designed to convert sufficient of the contingent resource to proven and probable, to trigger conversion of the ~500 PJ of MoU's to binding Gas Sale Agreements.

### Exhibit 6 – Reserves and Resources

| Reserves and Resources (25 January 2022) | Working Interest | 1C Gas (PJ) | 2C Gas (PJ) | 2P Gas (PJ) | 3C Gas (PJ) | 3P Gas (PJ) |
|---|---|---|---|---|---|---|
| ATP 854 P (Surat) | 100% | 90 | 194 | – | 398 | – |
| ATP 813 P (Galilee) | 100% | – | 61 | – | 830 | – |
| ATP 814 P (Bowen) | 100% | | | | | |
| Sapphire | | 154 | 214 | 67 | 214 | 253 |
| Central | | 50 | 99 | 12 | 306 | 75 |
| Monslatt | | – | 619 | – | 2,054 | – |
| Lancewood | | 5 | 23 | – | 435 | 1 |
| South | | 15 | 27 | – | 30 | 6 |
| Hillalong | | – | 182 | – | 237 | – |
| Sub total | | 224 | 1,164 | 79 | 3,276 | 335 |
| **Total** | | **314** | **1419** | **79** | **4504** | **335** |

Source: Blue Energy

## Funding: Still $19M in the bank

Given the high level of field activity in the September 2022 quarter, and the amount of equipment required for these completions plus surface facilities, we anticipated that much of the $20M equity raising in August 2022 would be rapidly depleted, but that is not the case.

In the September quarter 2022, approximately A$6M was spent of drilling, as well as payment for completion equipment and procurement of log-lead items.   Admin and staff costs were ~$430k, demonstrating continued frugality when it comes to head-office.

## East Coast Gas Market

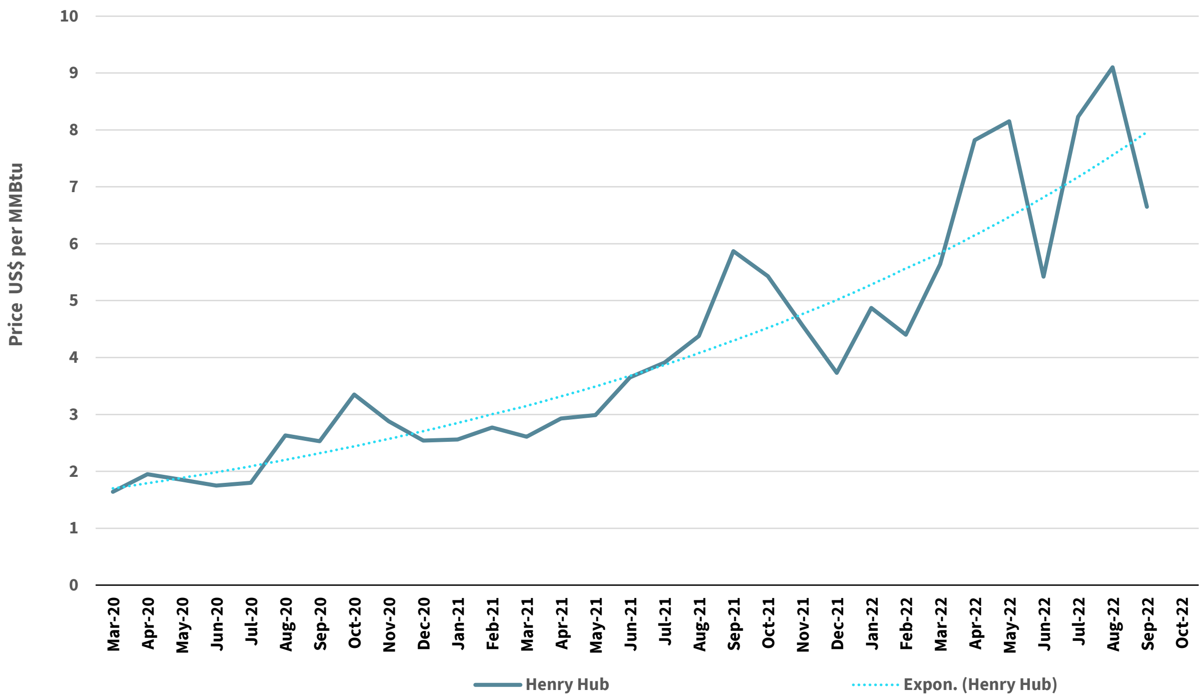
### Global Gas Market Continues to Be Challenged

The focus of the global gas market remains on supply to Europe. Russia's Ukraine invasion and the subsequent sanctions enforced upon Russia, as well as Russia's political movements with regards to cutting off supply, have exacerbated an already tight situation in Europe. The US continues to work to shore up gas supply for Europe through LNG imports from the US and allied nations, including Australia.

The US gas market has also increased substantially. The tight global supply situation, coupled with the US being viewed as a supplier of choice to Europe and with a relatively inelastic demand picture in the US, have combined to see a 'fear premium' being priced into the US gas price.

Exhibit 7 shows the US gas price over the last 2 years.

Exhibit 7 – US Henry Hub gas price, 2 years




Source: Nymex for Henry Hub gas prices

## East Coast Gas Market – Australian LNG Seen as Part of the Global Solution; Pressure Building on Local Supply

Spot contract prices have strengthened over the past 12 months, with LNG pricing increasing as Northern Hemisphere demand coincided with supply tightening as discussed above. Local demand has increased from Queensland LNG projects looking to supply into a global market. Domestic East Coast demand has also increased, and government policy has been put in place looking at gas as a key energy component for domestic manufacturing and as a transition fuel into renewable energy sources.

In July 2022, the ACCC released its "Gas Inquiry 2017-2025) and it forecasts in the "base case" a potential domestic gas supply shortfall of 56 PJ pa in 2023, before a much greater potential shortfall of 358 PJ pa in 2032.

## Domestic Gas Pricing – LNG Netback – Export Parity

### What is the LNG netback price?

The LNG netback price is a measure of an export parity price that a gas supplier can expect to receive for exporting its gas. It is calculated by taking the price that could be received for LNG and subtracting or 'netting back' the costs incurred by the supplier to convert the gas to LNG and ship it to the destination port. When adjusted for these factors, an LNG netback price represents the price that a gas supplier would expect to receive from a domestic gas buyer so as to be indifferent to a choice between selling the gas to the domestic buyer and exporting it as LNG. LNG netback prices based on Asian LNG spot prices currently play an important role in influencing ECGM gas prices.

### LNG netback price recently hit highest level since records began in 2016

Tightening global gas conditions, particularly in Europe, have put upward pressure on LNG prices, leading to a strong upward movement in the LNG netback price. The LNG netback price per the Australian Competition & Consumer Commission (ACCC) in its November 1 update is predicted to be A$46.95/GJ in CY 2023.

### What does this mean for the spot price of East Coast gas?

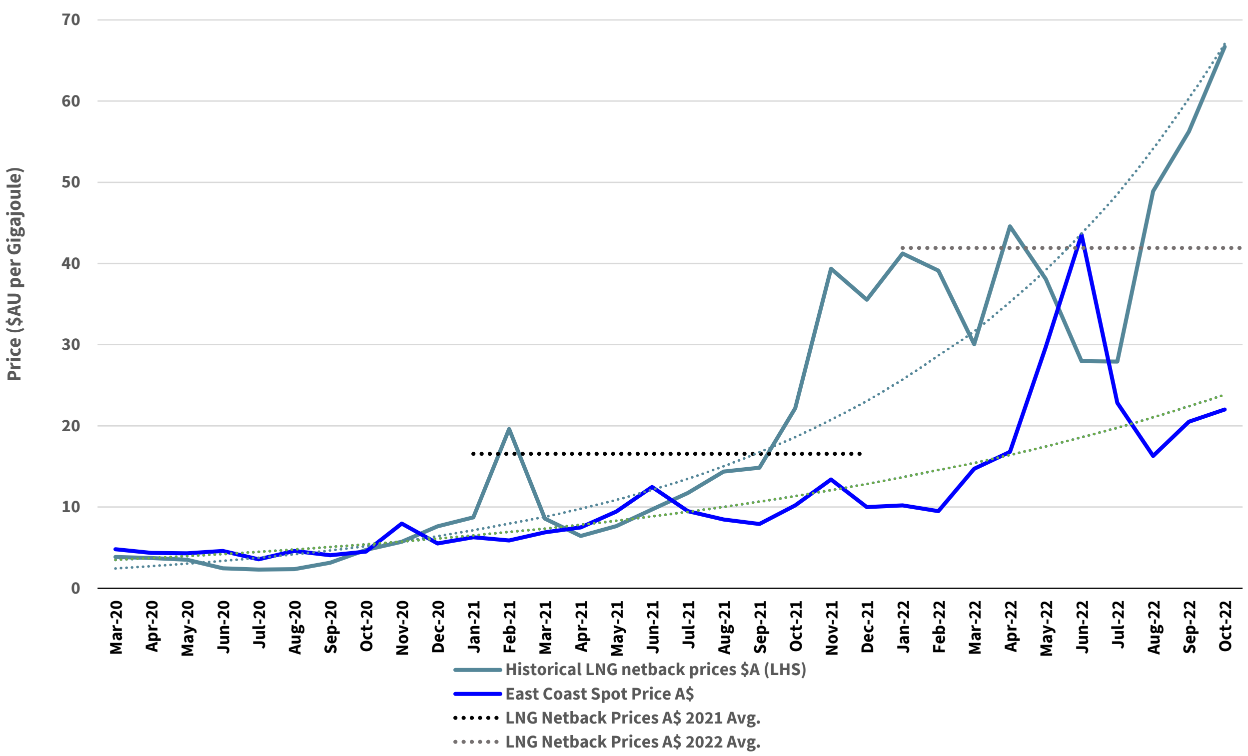
The confluence of global supply side issues and increasing demand, coupled with a tight domestic supply demand scenario, has naturally put upward pressure on domestic pricing. An added recent local dynamic is the emergence of shortfalls in the dispatchable electricity generation capacity and demand brought on by downtime in key base load electricity plants, a gap that is projected to widen with scheduled retirement of coal-fired plants.

The spot (Wallumbilla netback) ECGM has seen significant pricing moves in CY2022, having begun the year around A$10/GJ, with current pricing at over A$22/GJ.

Exhibit 8 shows the current ECGM spot vs LNG netback prices. It shows a distinct breakout of LNG netback prices from late 2021 and spot price movement from February 2022.

Prices peaked at $40/GJ in the June quarter but have since abated with winter's passing, but are still in the A$20-30/GJ range. Tight markets are forecast in 2023 according to the ACCC with AEMO documenting potential market shortfalls in the 2023 winter.

## Exhibit 8 – LNG netback prices vs prevailing spot ECGM prices




Source: ACCC, AEMO STTM.

## Spot pricing will influence future contract pricing

Large contracts in the Australian gas market are typically at negotiated prices and over terms of 3–5 years. The prevailing spot market price inevitably influences contract pricing arrangements. Continued high spot prices may lead to higher contract prices.

## Government policy is in a state of flux

Energy prices have been rising for years, with large industrial users flagging price and availability issues several years ago, but rising household energy bills are now a key electoral issue. State and Federal energy ministers have met a number of occasions to try and come up with a plan to "solve" the problem, but nothing has been finalised.

Some ideas have been circulated, such as price caps, regulation of exports to prioritise domestic supply, and yet more renewables, and Hydrogen. So far, we have not seen anything that is workable from an engineering, technical and economic perspective. Unfortunately, pro-active policy settings to encourage supply and infrastructure have not been forthcoming.

## Valuation of A$0.49; With Further Upside from Surat

### Valuation Methodology – Developing Sapphire – EV/2P+2C for the Remaining

BLU's assets have benefitted from significant capex (~$115m) over the past decade. The Bowen Basin assets have independently assessed 2P reserves and 2C resources, and BLU has signed several HoAs with gas buyers. The company continues to seek further potential buyers.

A pipeline needs to be constructed to transport gas from the Bowen Basin assets to the ECGM and thus commercialise the assets. An agreement is in place with APA Group to investigate building, owning and operating a gas pipeline to connect BLU's Bowen Basin CSG fields to tie into APA's network running into Gladstone. The MoU includes the option for APA to build, own and operate specific gas processing facilities in the field. The Bowen Basin Concept Study (BBCS) has also assessed several options for a pipeline to connect the Bowen Basin to the ECGM.

We have valued BLU as a blended valuation for the value of 2P +2C reserves and resources, and a potential Sapphire project, appropriately risked.

We have formed a simple development scenario to focus on BLU's most advanced asset, the Sapphire Gas Project, in the North Bowen Basin (ATP814P). This scenario highlights that one standalone development using a fraction of BLU's current resource base. We have risked this scenario at 60% probability reflecting mainly the risk of developing the pipeline. As the drilling and appraisal program develops further, we envisage that this probability rating will increase.

In addition we have applied the average comparable EV/2P+2C for the remaining 2P reserves and 2Cresources in the Bowen (Central, Monslatt, Lancewood, Hillalong and South). Given the recent upgrade to the 2P and 2C at Sapphire we see strong potential of the reserves and resources on the additional permits to increase as well.

We also apply the same EV/(2P+2C) valuation to the Surat Basin and Galilee Basin permits. As we see the Surat drilling programme progress, we see potential upside from the applying a similar development scenario to the Surat Basin as we have Sapphire.

We have not ascribed any upside value to further exploration success in the Queensland or Northern Territory assets.

Exhibit 9 – BLU Blended Valuation – Sapphire at a Discount – Remaining Assets a Free Option

| Blue Energy Valuation | A$m | Risking | A$m | A$ps |
|---|---|---|---|---|
| ATP 814P (Sapphire) - Risked NPV | 443 | 60% | 266 | 0.14 |
| ATP 814P Other Permits EV/2P+2C Average Comparables | 500 | 100% | 500 | 0.27 |
| ATP 854P Surat EV/2P+2C Average Comparables | 101 | 100% | 101 | 0.05 |
| ATP 813P Galilee EV/2P+2C Average Comparables | 32 | 100% | 32 | 0.02 |
| **Enterprise Value** | **1077** | | **899** | **0.49** |
| Net Cash / (Debt) | 19 | 1 | 19 | 0.01 |
| Admin / Corporate | -26 | 1 | -26 | (0.01) |
| **TOTAL VALUATION** | **1070** | | **854** | **0.49** |

Source: ACCC, AEMO STTM.

## Development of Sapphire Project Asset – Risked Valuation of A$0.14 per share

We have formed a simple development scenario to focus on BLU's most advanced asset, the Sapphire Gas Project, in the North Bowen Basin (ATP814P). This scenario highlights that one standalone development using a fraction of BLU's current resource base achieves a valuation of almost 3x the current share price. The remainder of the BLU portfolio is effectively 'free', including the Surat assets, for which the resource base increased recently by 300%.

We chose Sapphire because it has existing defined reserves and thus is more mature in terms of likely commercial development given the MoU that underpins a potential future development. This lets us ascribe some risk-adjusted value to BLU's CSG asset portfolio. We looked at several scenarios for a valuation estimate. Our Sapphire scenarios are preliminary and hypothetical including low and high estimates using the information provided by the QLD government in the BBCS, BLU's public filings, a gas offtake MOU of ~500 PJ, QLD Government data, internal estimates, industry benchmarks, and QLD CSG developments (e.g. Range, Mahalo, Denison Trough).

A preliminary, indicative, post-tax, NPV (10) for a potential future Sapphire development based on current stated 2P+2C volumes (~278 PJ) is shown in Exhibit 10. We estimate A$0.25 for our base case.

Exhibit 10 – Sapphire Valuation NPV

| Cash flow - A$m | Total |
|---|---|
| Oil / condensate revenue | – |
| Gas revenue | 3,900 |
| Total Sales Revenue | 3,900 |
| Operating costs | (598) |
| Tolling / tariff | (237) |
| Royalties | (393) |
| PRRT | – |
| Other payments | – |
| Income Tax Paid | (624) |
| Net Operating Income | 2,047 |
| Exploration Capex | (8) |
| Development Capex | (519) |
| PP&E Capex (incl SIB) | (137) |
| Abandonment / Site Restoration | (108) |
| Net cash flow (ungeared) | 1,461 |
| **NPV (A$m) - 100% risked** | **443** |

| Core Assumptions | |
|---|---|
| **East Coast Gas Price A$/GJ FY2024** | $11.50 |
| **East Coast Gas Price A$/GJ (LT from 2025) Escalated** | $12.00 |

Source: SHA Energy Consulting, MST. *BBCS, Qld Govt Dept Resource, KPMG, 2 Dec 2021. NSAI analysis. **Indicative tariff from SHA energy pipeline infrastructure model, referencing BBCS comments (p. 8). ***escalated at 1.8-2.0 pa. MST gas price assumes delivered (incl transport charge), escalated at 3.0 pa.

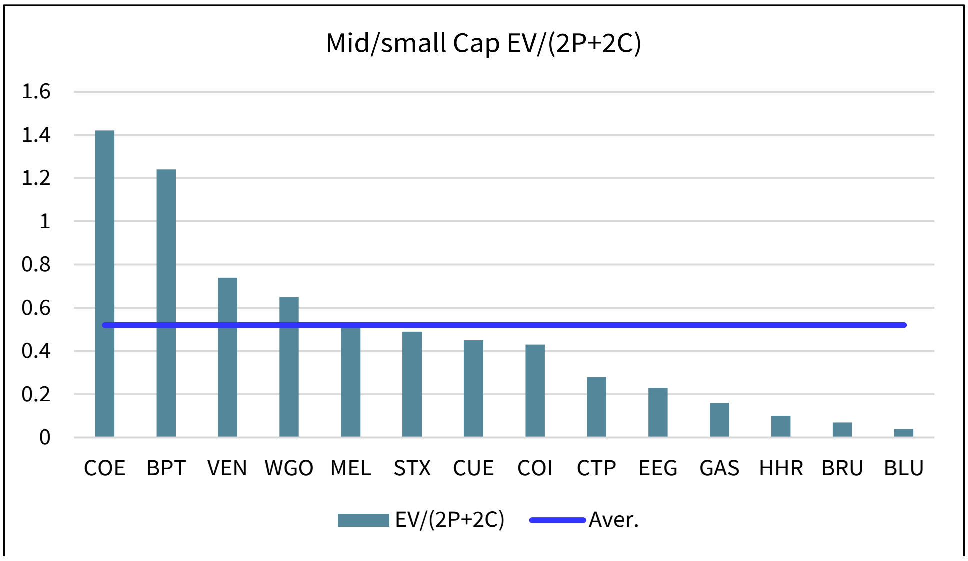
Our indicative, preliminary valuation of a potential Sapphire development is based on modelled cash flows (post-tax, ungeared) using DCF analysis. We will refine this further once more information is made public as the project is gradually de-risked. It ignores future funding requirements (debt, equity, or a combination, as well as a potential future sell down to assist a development). The timing and contribution of first production and cash flow is subject to uncertainty at this stage, as ATP814P does not yet have a Production Licence, is not in FEED, and has yet to formally agree a date for final investment decision or first gas. As project definition is immature at this stage, capex assumptions and valuation are subject to uncertainty and therefore refinement over time. We assume first gas in 2024, which implies ~24 months of appraisal, delineation, permitting, construction and marketing.

Our valuation attempts a bottom-up, standalone basis referencing other CSG developments in Queensland and assumes the development pays a pipeline tolling charge to the Wallumbilla gas hub.

## EV/(2P+2C) Valuation of Remaining Bowen Assets plus Surat and Galilee

A commonly used valuation methodology is to compare the value attributed by the market to the reserves and resources in the ground for different companies, usually using EV/(2P+2C). The average EV/(2P+2C) is $0.52/GJ (see Exhibit 11), with a very wide range of $0.04/GJ–$1.42/GJ. (Most of BLU's peer group report a 2C figure but some do not have 2P). BLU's A$0.05 per GJ EV/2P+2C is ~10% of the peer average. If we value the entirety of BLU's 2P+2C Reserves and Resources and applying the peer average of A$0.52/GJ to BLU's 2P+2C of 1499GJ implies an EV of A$779m or A$0.45/share, fully diluted. While this is an un-risked number, the market could be seen as applying a 'risk factor' to the multiples.

### Exhibit 11 – Average EV/2P+2C, select Australian-listed small–mid energy companies




Source: MST database, updated for EV's as at September 30 2022 .

## Valuation of BLU's ex-Sapphire Permits at EV/2P+2C

As described above we have valued the Sapphire permit using an NPV valuation. For the remainder of the assets, we are ascribing a valuation based on the EV/(2P+2C) average for BLU's comparable peers. Exhibit 12 shows the valuation of these permits:

### Exhibit 12 – Average EV/2P+2C – Other Blue Permits

| Bowen | | | | | |
|---|---|---|---|---|---|
| Permit | Block | 2P (PJ) | 2C (PJ) | Av. EV/2P+2C | Valuation |
| ATP814P | Central | 12 | 99 | 0.52 | 57.72 |
| ATP814P | Monslatt | - | 619 | 0.52 | 321.88 |
| ATP814P | Lancewood | - | 23 | 0.52 | 11.96 |
| ATP814P | Hillalong | - | 182 | 0.52 | 94.64 |
| ATP814P | South | - | 27 | 0.52 | 14.04 |
| Total (PJ) | | 12 | 950 | | 500 |
| Surat | | | | | |
| Permit | Block | 2P (PJ) | 2C (PJ) | | |
| ATP854P | Surat | - | 194 | 0.52 | 101 |
| | | | | | |
| Permit | Block | 2P (PJ) | 2C (PJ) | | |
| ATP813P | Galilee | - | 62 | 0.52 | 32 |
| | | | | | |
| Total | | 12 | 1,206 | 0.52 | 633 |

Source: SHA Energy Consulting, MST.

## Valuation uplift potential – what if BLU were valued with the upper end of peers? – A$1.25/share

We argue that BLU's 2P+2C should be valued at a premium to its peers as it has several gas sales HoAs in place and a large resource in the Surat that can be brought to market relatively quickly at low brownfield capex. A number of its peers are less advanced and are at the exploration stage of their development cycle.

We look at the potential uplift to BLU's valuation if valued at similar levels to its comparables in Exhibit 13.

Exhibit 13 – Potential BLU valuation uplift

| Company | EV/2P+2C A$/GJ | Blue EV at same Multiple A$m | Blue Valuation A$ per share at same Multiple |
|---|---|---|---|
| BPT | 1.65 | 2,285 | **1.25** |
| COE | 1.03 | 1,427 | **0.78** |
| STX | 0.96 | 1,330 | **0.73** |
| CUE | 0.81 | 1,122 | **0.62** |
| WGO | 0.65 | 900 | **0.50** |

Source: SHA Energy Consulting, MST.

## Positive Catalysts for Share Price and Valuation

**Acceleration of Surat:** The Surat Basin represents a significant option for BLU. Any acceleration of the Surat permits towards production would be very positive for BLU.

**Signing of further gas agreements:** The signing of more HoAs would demonstrate further interest by gas buyers and would be a positive for the share price.

**Reserve upgrades:** These fields will be further tested and appraised using the proceeds of the raising. Conversion of prospective resources to Contingent Resources or Contingent Resources to reserves could boost the stock.

**Pipeline for Bowen Basin:** BLU has an MoU for the construction of a pipeline to the Wallumbilla gas hub, a key to getting BLU's gas to market. A firm commitment to develop the pipeline would be a positive catalyst for BLU.

**Conversion of HoAs to binding gas sales agreements:** Binding gas sales agreements are key to obtaining funding for the project as well as attracting potential JV partners.

**Project financing:** Obtaining project financing is key to the development of the assets into commercialisation.

**Early project delivery:** The early commencement of any of the projects would mean cash flows were generated sooner and would reflect positively on management, which would likely boost the valuation.

**Joint venture deals:** Intelligent and innovative JV deals could add potential value to the portfolio of assets.

**Gas price increases:** Strong gas prices will be positive to commercialising the project. Once commercial, gas price increases would have a positive effect on the valuation and share price.

**Government incentives:** The Federal Government wants gas to lead a post-COVID recovery. Further government assistance (e.g., underwriting of the North Bowen pipeline, incentives to develop projects) would be positive for BLU.

## Risks to Share Price and Valuation

**Delayed signing of gas agreements** would add risk to the commercialisation of the projects.

**Disappointing appraisal results:** The fields will be further tested and appraised using the proceeds of the raising, with conversion of Contingent Resources to reserves a key outcome. Disappointing conversion would be a negative.

**Delay to pipeline for Bowen Basin:** BLU has an MoU for the construction of a pipeline to the Wallumbilla gas hub. A key to getting BLU's gas to market is this pipeline construction. If this does not happen, it would be negative for BLU.

**Non-conversion of HoAs to binding gas sales agreements:** Binding gas sales agreements are key to obtaining funding for the project. Lack of conversion would increase the risk of the project not being funded.

**Project financing delays** are a key risk, as they are critical for developing and commercialising the assets.

**Gas price decreases:** Weakness in gas prices would be negative to commercialising the project. Once commercial, gas price increases would have a positive effect on the valuation and share price.

**Key person dependence:** BLU's future success depends, to a significant extent, upon the continued services of the members of its management.

**Community opposition:** Any failure to adequately manage and meet community expectations with respect to issues such as compensation for land access, exploration activity, employment opportunities, and impact on local business may lead to local dissatisfaction, disruptions in the exploration program and potential losses to the company.

**Delays to any project delivery** would have a negative effect on the valuation.

**Regulatory/moratoria risk:** BLU has assets in multiple Australian jurisdictions. Changes to relevant legislation could create more onerous conditions (financially and in management time) or impact operational/financial performance.

**Potential for Government intervention into the gas market**, with unknown consequences long term for gas demand, supply and price.

# Financials – Development Funding Options and Potential Cash Flow

## Capex to date: lower than we expected. Still $19M in the bank

Given the significant level of field activity, and the amount of equipment required for these completions, we rather feared that much of the $20M equity raising in July would be rapidly depleted, but that is not the case.

In the September quarter 2022, approximately A$6M was spent of drilling as well as payment for completion equipment and procurement of log-lead items. Admin and staff costs were ~$430k, demonstrating continued frugality when it comes to head-office.

Currently BLU does not generate any revenue as it has no production, so in order to move into commercial production, BLU will need to raise finance. We see several options:

- **debt:** conversion of the HoAs/MoUs to binding gas sale agreements may open up the option for BLU to acquire debt finance or put in place forward sale agreements
- **equity capital:** BLU has relied on equity capital to fund the portfolio to date. Development of that portfolio would logically include equity capital in the mix
- **sell-down of acreage:** a sale for cash or farm-out in order to fund the development of the project. BLU's 100% ownership, particularly of the key Bowen Basin assets, offers potential JV partners substantial positions.
- **pre-paid gas contracts:** recent transactions have taken place in the gas market where the buyer of the gas will prepay for gas in order to fully or partly fund the project.

## Potential Cash Generation from the HoAs in Place

BLU has signed a number of HoAs and MoUs with gas buyers. These agreements are non-binding but demonstrate interest from key market players in BLU's gas. The agreements also demonstrate recognition by key market participants that want to shore up future supply by putting gas supply agreements in place. It should be noted that two of Australia's largest retail gas suppliers, Energy Australia and Origin, have signed agreements with BLU. Potential upside for further HoAs exists as current agreements represent approximately 15% of BLU's total resource.

### Total volumes signed under HoAs/MoUs = 505 PJ

- Total contract volume of 300 PJ: non-binding HoA with Origin Energy for gas supply to Wallumbilla. The agreement is for the supply of up to 30 PJ of gas pa for 10 years.
- Total contract volume of 100 PJ: non-binding HoA with Energy Australia for the supply of a total of 100 PJ of gas at Wallumbilla over 10 years from BLU's Northern Bowen Basin ATP814 CSG tenure.
- Total contract volume of up to 105 PJ: an MoU with Townsville gas consumer Queensland Pacific Metals for the supply of 7 PJ of gas pa for 15 years for a proposed battery metal refinery in Townsville, to be sourced from BLU's Sapphire Block.

Exhibit 14 demonstrates the potential cash flow from the MoUs/HoAs signed by BLU.

Exhibit 14 – Potential revenue and pre-tax cashflow from BLU's MoUs and HoAs

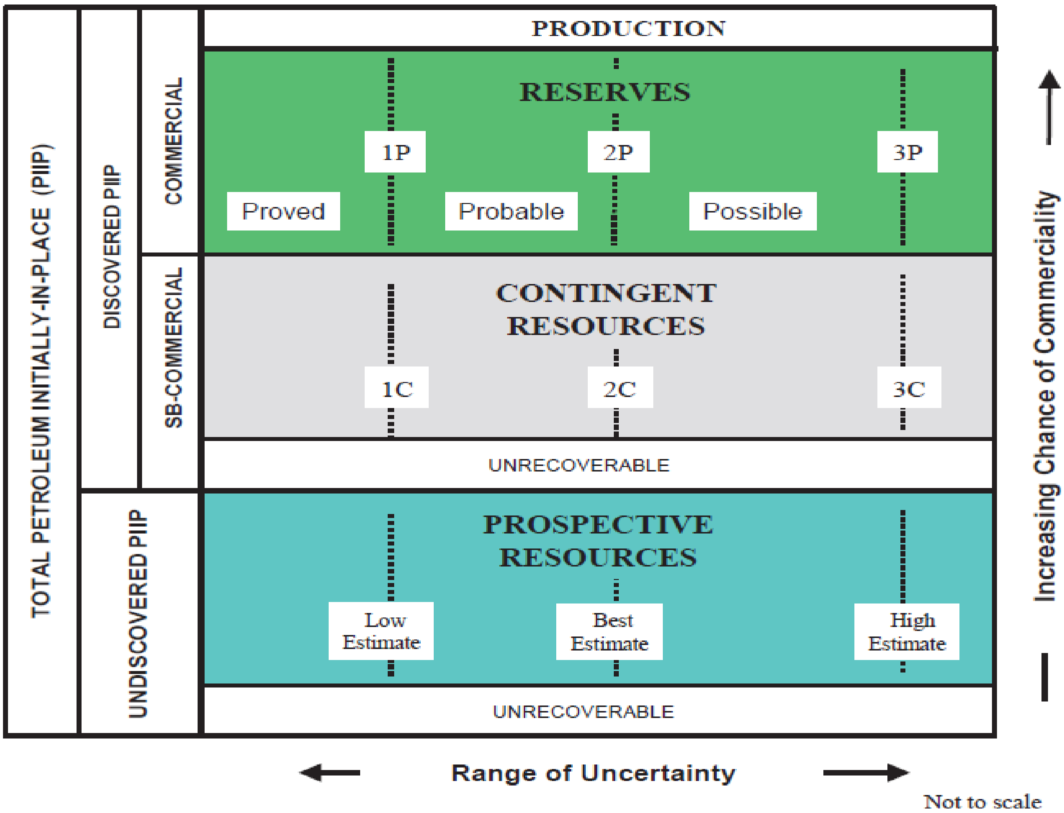
| Gas Price Assumption A$/GJ | Potential Revenue A$m | Assumed Production Cost A$/GJ | Potential Total Cash Flow A$m | Potential Annual Cash Flow A$m |
|---|---|---|---|---|
| 8.00 | 4,040 | 4.00 | 2,020 | 188 |
| 9.00 | 4,545 | 4.00 | 2,525 | 235 |
| 10.00 | 5,050 | 4.00 | 3,030 | 282 |

Source: MST estimates.

## Appendix: Reserves and Resources Classification

Reserves and resources are classified according to range of certainty and chance of commerciality. Exhibit 12 is a 'ready reckoner' that outlines the classification of reserves and resources.

Exhibit 15 – Classifying resources and reserves




Source: Industry.

## Disclaimers and Disclosures

MST Access is a registered business name of MST Financial Services Pty Ltd (ACN 617 475 180 "MST Financial") which is a limited liability company incorporated in Australia on 10 April 2017 and holds an Australian Financial Services Licence (Number: 500 557). This research is issued in Australia through MST Access which is the research division of MST Financial. The research and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by MST Access is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a financial product you should read any relevant Product Disclosure Statement or like instrument.

This report has been commissioned by Blue Energy Limited and prepared and issued by Michael Bentley of MST Access in consideration of a fee payable by Blue Energy Limited. MST Access receives fees from the company referred to in this document, for research services and other financial services or advice we may provide to that company.

MST Financial also provides equity capital markets ("ECM") and corporate advisory services through its capital markets division, MST Capital Markets ("MST Capital"). MST Capital provides these services to a range of companies including clients of the MST Access service. As such, MST Capital may in future provide ECM and/or corporate advisory services to the company that is the subject of this research report and, accordingly, may receive fees from the company for providing such services. The Company that is the subject of this report has, within the last 12 months, engaged MST Capital to provide ECM services, including acting as Joint Lead Manager for the September 2021 capital raising of approximately A$10 million for the subject company. However, MST Financial has measures in place to ensure the independence of its research division is maintained, including information barriers between its Capital Markets and Research teams. In addition, neither MST Access, not any of its research analysts, receive any financial benefit that is based on the revenues generated by MST Capital Markets or any other division of MST Financial.

The analyst has received assistance from the company in preparing this document. The company has provided the analyst with communication with senior management and information on the company and industry. As part of due diligence, the analyst has independently and critically reviewed the assistance and information provided by the company to form the opinions expressed in the report. Diligent care has been taken by the analyst to maintain an honest and fair objectivity in writing this report and making the recommendation. Where MST Access has been commissioned to prepare content and receives fees for its preparation, please note that NO part of the fee, compensation or employee remuneration paid will either directly or indirectly impact the content provided.

Accuracy of content: All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently certified. Opinions contained in this report represent those of MST Access at the time of publication. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results and estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations.

Exclusion of liability: To the fullest extent allowed by law, MST Access shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out or in connection with the access to, use of or reliance on any information contained in this report. No guarantees or warranties regarding accuracy, completeness or fitness for purpose are provided by MST Access, and under no circumstances will any of MST Financials' officers, representatives, associates or agents be liable for any loss or damage, whether direct, incidental or consequential, caused by reliance on or use of the content.

## General Advice Warning

MST Access Research may not be construed as personal advice or recommendation. MST encourages investors to seek independent financial advice regarding the suitability of investments for their individual circumstances and recommends that investments be independently evaluated. Investments involve risks and the value of any investment or income may go down as well as up. Investors may not get back the full amount invested. Past performance is not indicative of future performance. Estimates of future performance are based on assumptions that may not be realised. If provided, and unless otherwise stated, the closing price provided is that of the primary exchange for the issuer's securities or investments. The information contained within MST Access Research is published solely for information purposes and is not a solicitation or offer to buy or sell any financial instrument or participate in any trading or investment strategy. Analysis contained within MST Access Research publications is based upon publicly available information and may include numerous assumptions. Investors should be aware that different assumptions can and do result in materially different results.

MST Access Research is distributed only as may be permitted by law. It is not intended for distribution or use by any person or entity located in a jurisdiction where distribution, publication, availability or use would be prohibited. MST makes no claim that MST Access Research content may be lawfully viewed or accessed outside of Australia. Access to MST Access Research content may not be legal for certain persons and in certain jurisdictions. If you access this service or content from outside of Australia, you are responsible for compliance with the laws of your jurisdiction and/or the jurisdiction of the third party receiving such content. MST Access Research is provided to our clients through our proprietary research portal and distributed electronically by MST to its MST Access clients. Some MST Access Research products may also be made available to its clients via third party vendors or distributed through alternative electronic means as a convenience. Such alternative distribution methods are at MST's discretion.

## Access and Use

Any access to or use of MST Access Research is subject to the Terms and Conditions of MST Access Research. By accessing or using MST Access Research you hereby agree to be bound by our Terms and Conditions and hereby consent to MST collecting and using your personal data (including cookies) in accordance with our Privacy Policy (https://mstfinancial.com.au/privacy-policy/), including for the purpose of a) setting your preferences and b) collecting readership data so we may deliver an improved and personalised service to you. If you do not agree to our Terms and Conditions and/or if you do not wish to consent to MST's use of your personal data, please do not access this service.