

Reserves Drilling Kicks Off as the Bowen Gets a Resources Upgrade A Low-Cost Resource Upgrade for the Bowen

The independent reserves certifier for Blue Energy (BLU) has reviewed the Sapphire Block (PL1034) within the Bowen Basin permits and has upgraded the reserves and resources (R&R) of the permit. This has resulted in an increase in 2P and 3P gas reserves of 13% and 17% respectively, and increases in 1C, 2C and 3C Contingent Resources of 134%, 98% and 15%, respectively. This is the first update to reserves and resources for the Bowen Basin permits since 2013. The increase is due to the information gleaned from the large amount of production and drilling adjacent to the block by Arrow Energy: an increase that we refer to as ‘drilling with other people’s money’.

Reserves Drilling Begins in the Bowen

BLU’s North Bowen gas appraisal drilling program is designed to build the 2P gas reserve base and establish flow capacity to underpin the Energy Australia and Origin Energy gas supply heads of agreements (HOAs). BLU commenced drilling on 13 July 2022, spudding the Sapphire V vertical well. The well intersected 45m of net coal (20% greater than expected) and is in the same production seams as the Moranbah gas project 2km away.

Upping the Ante – A\$20m Capital Raising Accelerates the Bowen and Surat Programmes

BLU has 100% ownership of its key assets, giving it control and optionality in the future development of its assets. The upgrade at PL1034 adds to the earlier upgrade of BLU’s Surat Basin permit (ATP854), which now has a resource of 398 PJ (sufficient to supply an average Gladstone LNG train for 4 years). Resource upgrades, early drilling success and strong gas markets has led BLU to raise A\$20m at A\$0.062 to accelerate pilot gas production. Key programs include additional lateral and vertical wells at Sapphire as well as a pilot well programme in the Surat. Early flow results and reserves opens options for BLU to accelerate gas sales to a strong east coast gas market (ECGM).

East Coast Gas Market Remains Extremely Strong

ECGM spot prices and LNG netback prices remain strong as global energy markets continue to be tight. BLU is looking to enter the ECGM at the right time – the domestic market is desperate for more gas and supply is waning. The spot Wallumbilla netback price on 29 July is A\$33/GJ with the LNG netback price at A\$29/GJ.

Valuation A\$0.49 – Large Reserves and Resources – Significantly Undervalued

We believe BLU represents a unique opportunity to obtain exposure to gas assets with significant reserves and resources in proven basins. Our valuation is derived by estimating the value of developing the Sapphire project in the Bowen Basin in addition to EV/2P+2C valuation of the remaining permits in the Bowen, Surat and Galilee Basins. The valuation of this asset implies a substantial discount with exposure to upside from drilling and resource upgrades. Our previous valuation showed a range of A\$0.25 to A\$0.58 (the low end being the Sapphire unrisked standalone valuation and the upper end being the EV/2P+2C for the entire company). We have now merged that into one valuation. 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

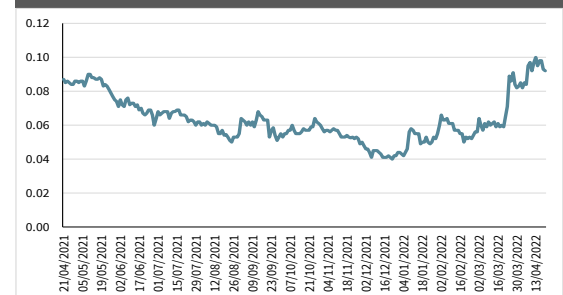
<https://blueenergy.com.au/>

Stock	ASX: BLU
Price	A\$0.07
Market cap	A\$126m
Valuation	A\$0.49 (previous \$A0.25 -\$0.58)

Next steps

Reserves drilling	Ongoing
Signing of further gas sale agreements	

BLU share price (A\$)



Source: FactSet.

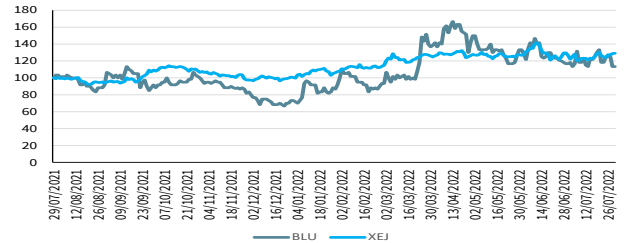
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Exhibit 1 – Company summary – year-end 30 June

Blue Energy Limited (ASX:BLU)

Price	0.07
52 week high / low	0.09 / 0.04
Valuation (diluted)	0.49
Market Capitalisation	126
Enterprise Value	119.0
Shares on issue (basic)	1850.7
Other equity	0.5
Fully Diluted Equity	1851.2



Ratio Analysis	2021A	2022	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	2022	2023	2024
Oil / Condensate Revenue	-	-	-	-
LPG Revenue	-	-	-	-
Gas Revenue	-	-	-	-
Total Sales	-	-	-	-
Operating Costs	-	-	-	-
Government Resource Taxes	-	-	-	-
Exploration & Development Expenses	(0)	(4)	(8)	(2)
Other Net Income / Expense	(1)	1	1	1
EBITDA	(1)	(3)	(7)	(1)
EBITDAX	(1)	1	1	1
Depreciation & Amortisation	0	0	0	0
EBIT	(1)	(3)	(7)	(1)
Net Interest Expense	0	0	0	0
Pretax Profit	(1)	(3)	(7)	(1)
Tax Expense / Benefit	-	-	-	-
Net Attributable Profit	(1)	(3)	(7)	(1)
Reported Profit	(1)	(3)	(7)	(1)
Cash Flow (A\$m)	2021A	2022	2023	2024
Pretax Profit	(1)	(3)	(7)	(1)
D&A & Other Non-Cash Items	0	-1	-5	-1
Tax Paid	0	0	0	0
Cash from Operating Activities	(1)	(5)	(12)	(3)
Development Capex	-	-	-	-
Exploration Capex	(0)	(6)	(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	2022	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	62	72	74
Intangibles and Goodwill	-	-	-	-
Other assets	0	0	0	0
Total assets	63	72	86	85
Creditors	0	0	0	0
Borrowings	-	-	-	-
Other liabilities	1	1	3	3
Total liabilities	2	1	4	3
Shareholder equity	62	71	83	81
Shareholder Equity + Total Liabilities	63	72	86	85

Source: BLU, MST Access.

Bowen Basin Gets a Reserves and Resources Upgrade: Lowest-Cost Addition – ‘Drilling with Other People’s Money’

First Upgrade to Sapphire Permit Since 2013

Since the initial reserves and Contingent Resources were reported for the Sapphire Block on 26 February 2013, a better understanding of the data has been developed, leading to the current interpretation and reserve and resource estimate. BLU’s independent reserves certifier, Netherland, Sewell & Associates, Inc. (NSAI), undertook a review as part of the regular block assessment of BLU’s assets, in conjunction with technical work completed by BLU on the location of its current pilot well drilling locations and also subsequent to a regional review of data by NSAI in the North Bowen Basin.

BLU’s Sapphire permit (ATP814P) was subsequently upgraded with the following results (see Exhibit 2):

- increase in 2P and 3P gas reserves of 13% and 17%, respectively
- increase in 1C, 2C and 3C Contingent Resource categories of 134%, 98% and 15%, respectively

Exhibit 2 – Sapphire’s updated reserves and resources position

Permit	2P (PJ)		3P (PJ)		1C (PJ)		2C (PJ)		3C (PJ)	
	New	Old	New	Old	New	Old	New	Old	New	Old
ATP 814P Sapphire	66.5	59	253.2	216	154.3	66	213.9	108	214.4	186
% Change	12.7%		17.2%		133.7%		98.1%		15.2%	

Source: BLU

Exhibit 3 – BLU’s net total reserves and resources position

Bowen					
Permit	Block	2P (PJ)	2C (PJ)	Av. EV/2P+	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
Galilee					
Permit	Block	2P (PJ)	2C (PJ)		
ATP813P	Galilee	-	62	0.52	32
Total		12	1,206	0.52	633

Source: BLU.

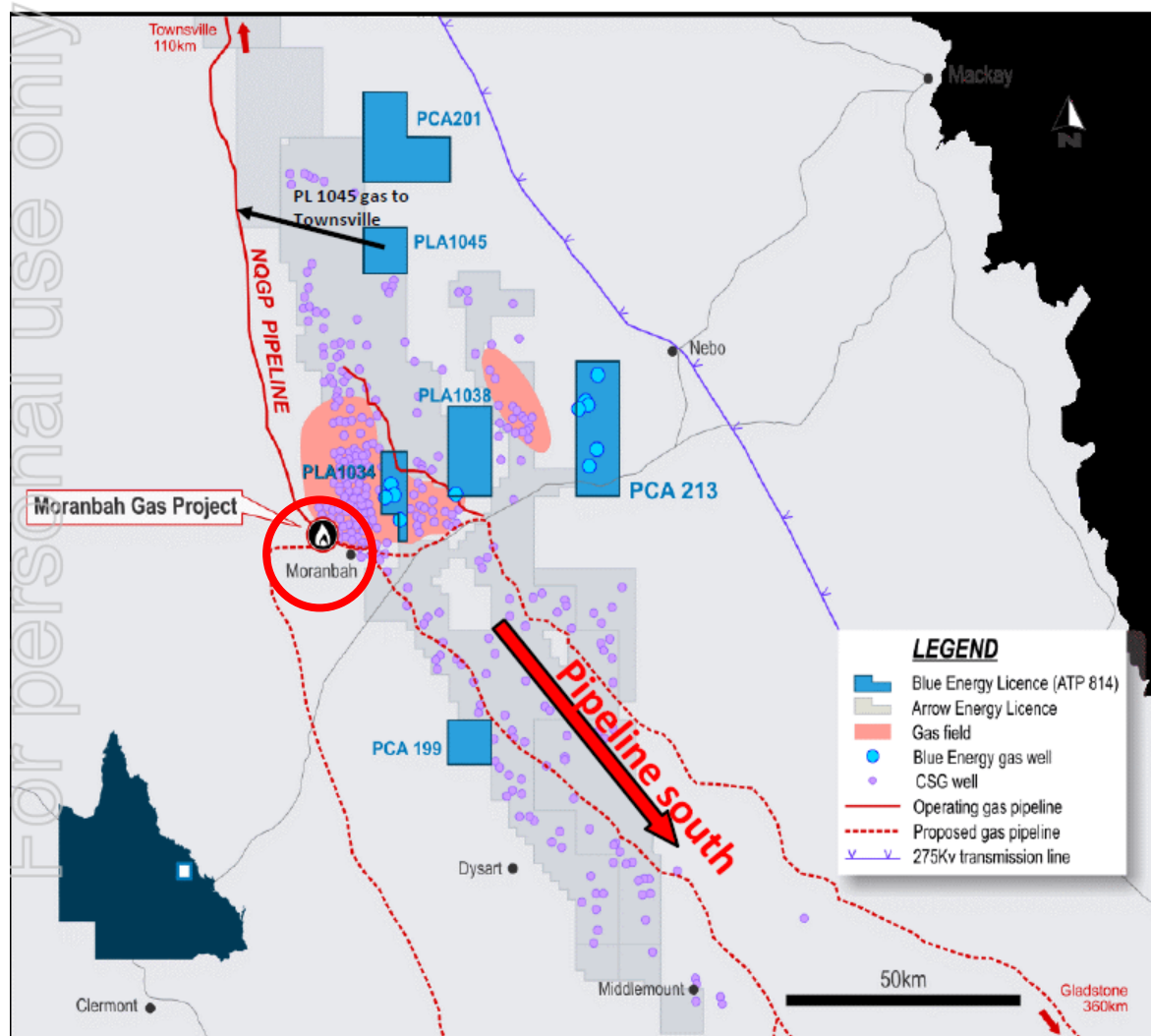
Addition to Resources at Lowest Possible Cost – ‘Drilling with Other People’s Money’

We think the reserve and resource additions were achieved at the lowest possible cost, as they were independently assessed predominantly using data from adjoining fields which sit within the same coal seams and are technically similar to the Sapphire field (see Exhibit 4). We refer to an increase in reserves and resources using this method as ‘drilling with other people’s money’.

The key driver for the increased reserves and resources was the asset’s proximity to Arrow Energy’s Moranbah Gas Project and associated infrastructure. This project has supplied gas to the Townsville market since 2006. It consists of a large producing well field; gas-gathering, gas-conditioning and compression facilities; and a connection to the Moranbah-Townsville pipeline. NSAI was able to use the exceptionally large database of information provided by this project to estimate the economic thresholds for BLU’s gas reserves and resources.

The additional blocks in the Bowen Basin permits are also under review and may lead to further reserve and resource increases for BLU.

Exhibit 4 – BLU’s Bowen permits showing proximity to Arrow’s Moranbah Gas Project and Pipeline Route



Source: BLU

Bowen Upgrade Adds to Surat Resource Increase – BLU in a Perfect Spot

BLU has announced that in January 2022, its solely owned permit ATP854 in the Surat Basin had a 300% upgrade in 3C net recoverable gas resource (to 398 PJ from 101 PJ), with 1C and 2C also increasing over 300%. The increase is based on a review by NSAI as at 31 December 2021 using BLU data together with available industry data, which has been established since the initial gas resource estimate in March 2013.

The resource upgrade makes BLU's Surat basin permit a significant size. This amount (398 PJ) of gas is sufficient to supply one average LNG train at Gladstone for 4 years.

Two existing gas pipelines pass through ATP854, allowing direct access to the Wallumbilla gas hub and Curtis Island LNG facilities at Gladstone. This provides BLU with a number of options:

- to supply new ECGM contracts that may be signed
- to supply to Gladstone LNG.

Along with the Bowen Basin permits, BLU is perfectly positioned to benefit from buoyant conditions in the ECGM.

Bowen Starts Reserves Drilling – Off to a Good Start

Bowen Starts Reserves Drilling – Off to a Good Start

BLU's North Bowen gas appraisal drilling program is designed to build the 2P gas reserve base and establish flow capacity to underpin the Energy Australia and Origin Energy gas supply HOAs. The program has been formulated in conjunction with NSAI.

First Vertical Well Completed

BLU commenced drilling on 13 July 2022, spudding the Sapphire V vertical well. The well intersected 45m of net coal (20% greater than expected) and has the same qualities as the production seams at the Moranbah gas project 2km away. The rig is now drilling the next vertical well.

Next Vertical Well in Progress

The second vertical well, Sapphire 6V, was spudded on 20 July 2022. The proposed total depth for Sapphire 6V is 900m. Following the completion of the Sapphire 6V well, a series of lateral wells will be commenced and drilled in batch format, with the vertical sections of each well drilled first followed by the lateral sections for each well.

Upping the Ante – A\$20m Capital Raise to Accelerate the Drilling

BLU's recent resource upgrades, early drilling success at Sapphire and strong gas markets has led the company to raise A\$20m at A\$0.062 to accelerate pilot gas production in both basins.

- \$8.0m towards Bowen Basin Drilling – a second Sapphire Pilot well set including up to 4 lateral wells
- \$5.3m towards Surat Basin Drilling – including a vertical and up to two lateral wells in the Permian coals
- \$3.6m for 2D Seismic acquisition in the Greater McArthur Basin assets in the Northern Territory
- \$3.1m Working capital and offer costs

Bowen Basin – Sapphire Drilling Expanded – Potential to Accelerate and Increase Reserves

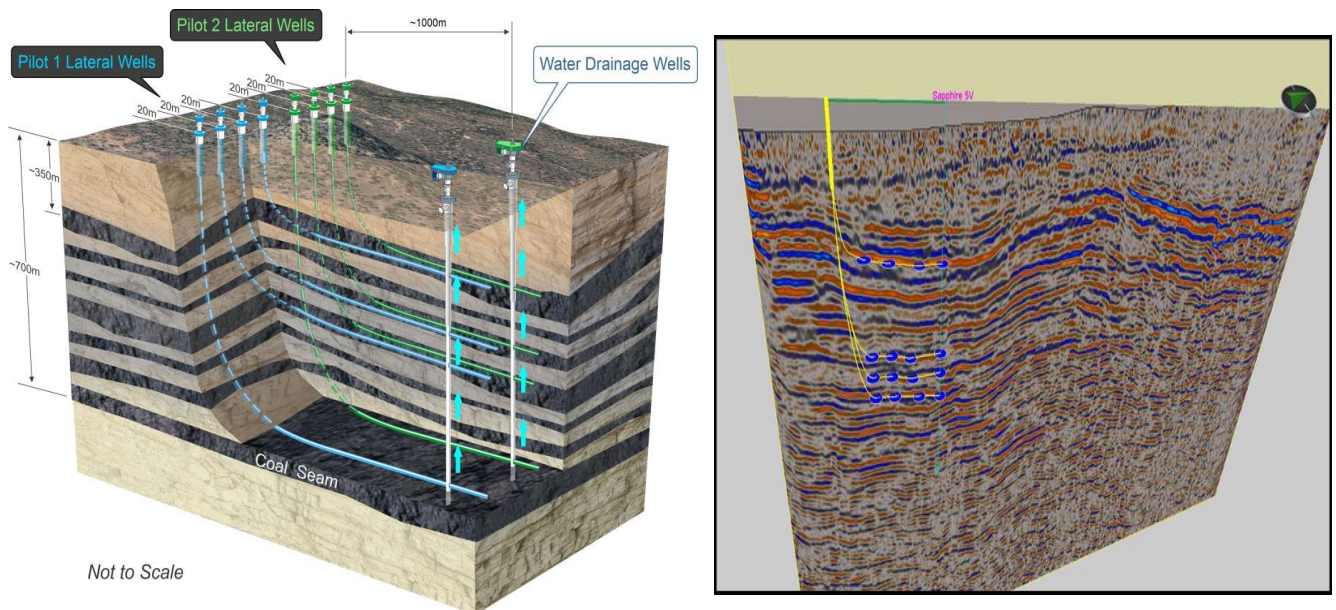
The Bowen Basin has ~300 existing gas wells and 16 years of historical production with 15,000 PJ of discovered resource, equivalent to 30 years of domestic demand.

BLU is currently drilling up to 4 lateral Coal Seam Gas (CSG) wells and a vertical well in PL 1034 (Sapphire). As a result of the better-than-expected results from the Sapphire V vertical, BLU will accelerate pilot gas production and will drill an additional 4 lateral CSG wells and a vertical well in PL 1034.

The increased and accelerated programme at Sapphire (provides BLU with the opportunity to bring pilot production wells forward, increase flow rates and create the potential to book reserves at an earlier time and increase the size of the reserves. There are several potential substantial upside scenarios;

- Underpins the Heads of Agreements (HOAs) with Origin and Energy Australia (EA) and converts them to full binding Gas Sale Agreements (GSA).
- Higher potential to sign further GSAs with other parties and / or sell into high priced spot market
- Successful programme de-risks the pipeline from the Bowen Basin to connect to the East Coast Gas Market
- Opens options to fund the development of the permits and pipeline
- Increases the attractiveness of potential JV partners to farm into the BLU's permits and provide funding for development of the gas assets

Exhibit 5 – Sapphire Accelerated Drilling Program



Source: BLU

Surat – Accelerating the Pilot Programme – Gas Infrastructure Advantage

BLU will embark on a pilot drilling program at ATP 854 to establish reserves and demonstrate deliverability of commercial flow rates. The accelerated pilot drilling program will involve drilling one vertical well and up to two in seam lateral wells.

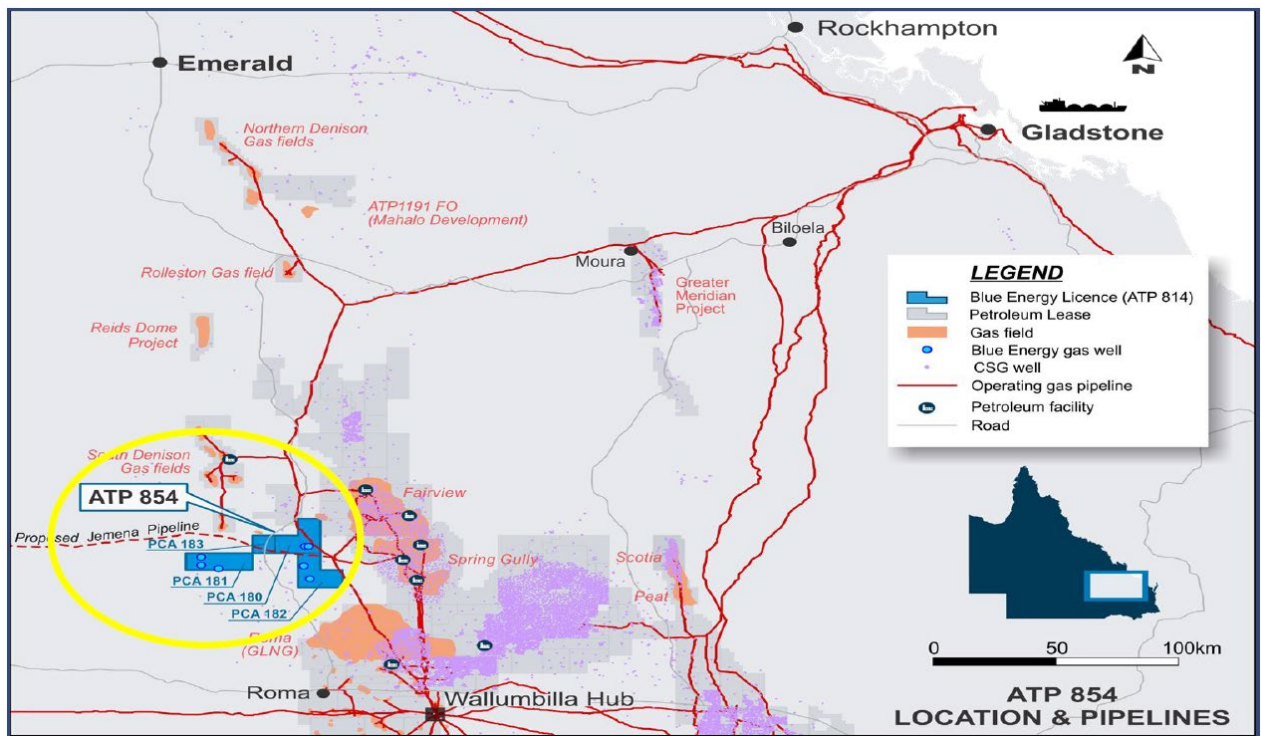
The acceleration of the programme was prompted by the recent upgraded contingent resource by ~300% solidifying the projects status as a material gas resource with a 398 PJ contingent resource. The resource is large enough to provide an average Gladstone LNG train for 4 years. ATP 854 is along the same Permian CSG target as GLNG’s Fairview gas field.

The accelerated programme at ATP854 provides BLU with the opportunity to bring pilot production wells forward, establish flow rates and to book reserves at an earlier time.

There are several potential substantial upside scenarios:

- ATP 854 has two gas pipelines passing through the permit providing the opportunity to supply gas into both Gladstone & Wallumbilla. ATP 854 is in close proximity to Wallumbilla.
- All gas for ATP 854 is uncontracted allowing early gas delivery into high priced spot gas markets
- Signing new customer GSAs
- Opens options to fund the development of the permits
- Increases the attractiveness of potential JV partners to farm into the BLU’s permits and provide funding for development of the gas assets or make asset sales

Exhibit 6 – BLU’s Surat Basin Permits – Proximity to Pipelines and Wallumbilla Hub



Source: BLU

\$3.6m for 2D Seismic acquisition in the Greater McArthur Basin Northern Territory

With the ECGM requiring significant new supply, BLU has allocated \$3.6m to acquire 2D Seismic in the McArthur Basing in the Northern Territory.

East Coast Gas Market Update

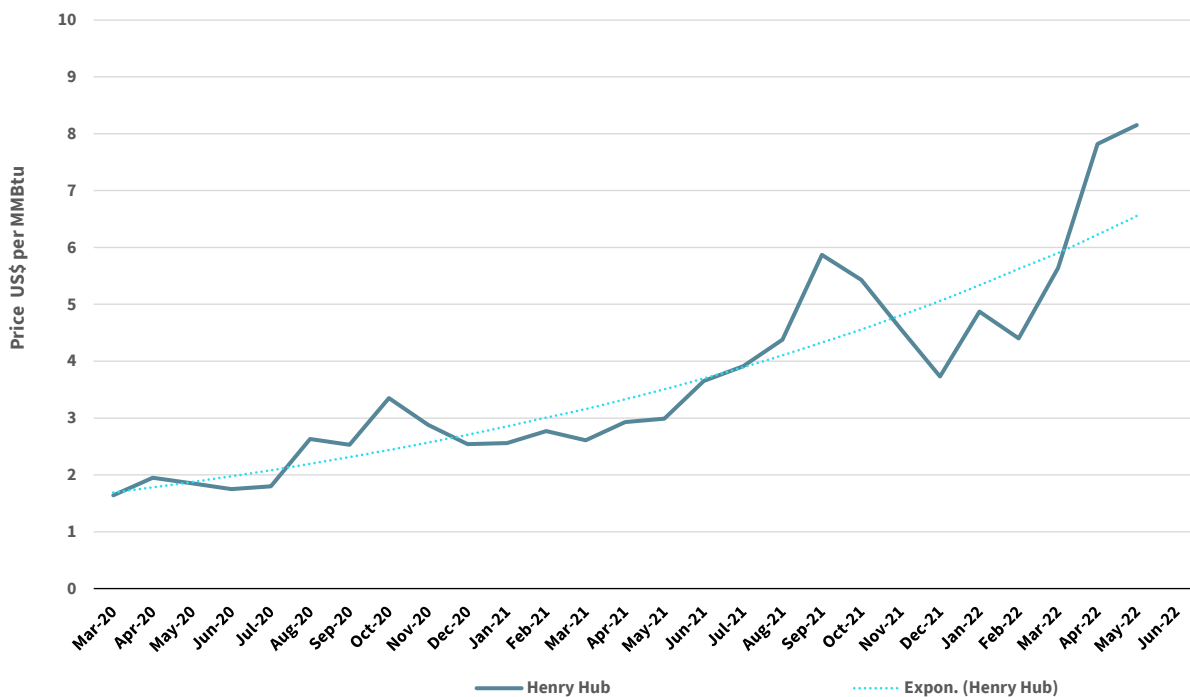
Global Gas Market Continues to Be Challenged

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, sitting some 165% above the price a year ago. 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: AER.

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.

From a supply point of view, the ACCC has forecast a potential domestic gas supply shortfall of 30 PJ pa as early as 2024 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) for July 2022 is A\$29/GJ. August forward prices indicate a higher price of A\$49.16/GJ.

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

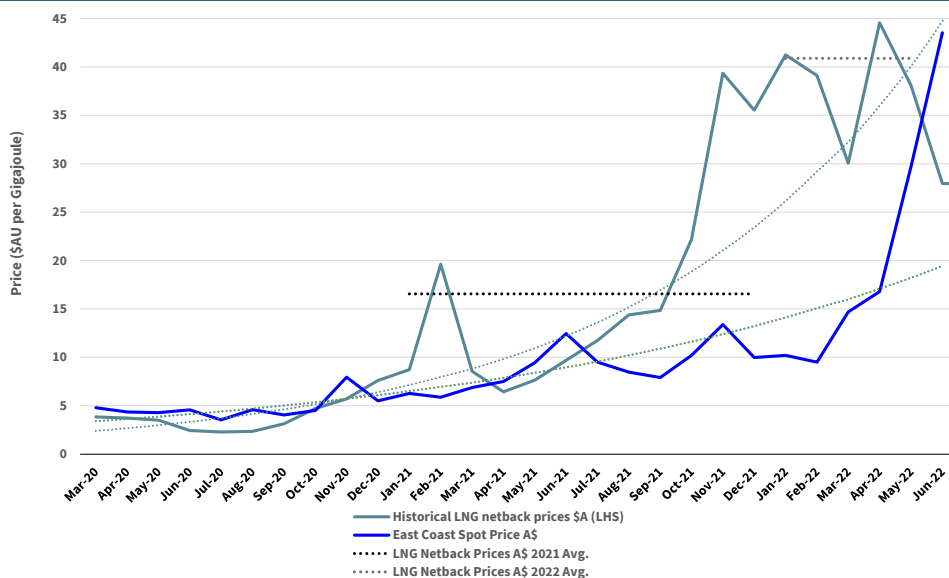
The confluence of global supply side issues and increasing demand, coupled with a tight domestic supply demand scenario, has naturally put upward pressure on domestic pricing. An added recent local dynamic is the emergence of shortfalls in the dispatchable electricity generation capacity and demand brought 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\$33/GJ.

Exhibit 7 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.

Central Petroleum (CTP) reported in its June Quarterly report receiving average spot prices of \$A34/GJ for the June quarter.

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.

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 (~\$110m) over the years. 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 Sapphire/Monlatt 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. Our previous valuation showed a range of A\$0.25 to A\$0.58 (the low end being the Sapphire standalone valuation and the upper end being the EV/2P+2C for the entire company). We have now merged that into one valuation.

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 2C resources in the Bowen (Central, Monlatt, 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)	26	1	26	0.01
Admin / Corporate	-26	1	-26	(0.01)
TOTAL VALUATION	1077		847	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) under various scenarios 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. # Low: assumes ~0.53 TJ/d well productivity. High: assumes ~1.06TJ/d productivity, as per BBCS (table 13).

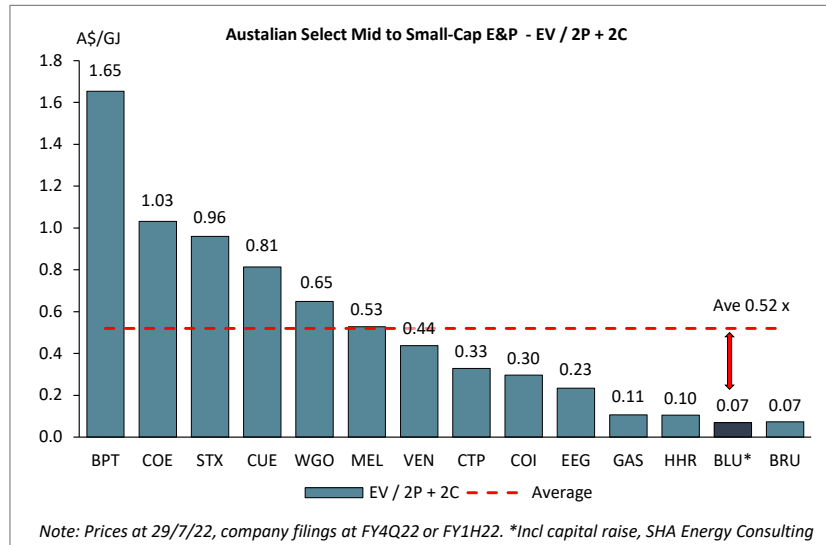
Our indicative, preliminary valuation of a potential Sapphire development is based on modelled cash flows (post-tax, ungeared) using DCF analysis. We will refine this further once more information is made public as the project is gradually de-risked. It ignores future funding requirements (debt, equity, 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 ~36 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 \$0.07/GJ–\$1.65/GJ. (Most of BLU’s peer group report a 2C figure but some do not have 2P.) BLU’s A\$0.07 per GJ EV/2P+2C is ~13% 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: SHA Energy Consulting, MST. Note: prices as at 20/4/22, company filings at 2QFY22 or 1HFY22. Calculations ignore liquids.

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 comparables. Exhibit 12 shows the valuation of these permits:

Exhibit 12 – Average EV/2P+2C, select Australian-listed small–mid energy companies widen columns so can 2P+2C

Bowen					
Permit	Block	2P (PJ)	2C (PJ)	Av. EV/2P+	Valuation
ATP814P	Central	12	99	0.52	58
ATP814P	Monslatt	-	619	0.52	322
ATP814P	Lancewood	-	23	0.52	12
ATP814P	Hillalong	-	182	0.52	95
ATP814P	South	-	27	0.52	14
Total (PJ)		12	950		500
Surat					
Permit	Block	2P (PJ)	2C (PJ)		
ATP854P	Surat	-	194	0.52	101
Galilee					
Permit	Block	2P (PJ)	2C (PJ)		
ATP813P	Galilee	-	62	0.52	32
Total		12	1206	0.52	627

Source: SHA Energy Consulting, MST. Note: prices as at 20/4/22, company filings at 2QFY22 or 1HFY22. Calculations ignore liquids.

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 9.

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.

Further resource potential in the Bowen Basin – potential valuation uplift

As discussed, we see potential for an uplift to BLU's Bowen Basin resource base. Any resource uplift would give a larger base on which to apply the EV/2P+2C multiple and lead us to further lift the upper end of our valuation.

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.

Reversal of government backing of gas for a post-COVID recovery would be a negative.

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.

Financials – Development Funding Options and Potential Cash Flow

Options to Fund Asset Development

Currently BLU does not generate any revenue as it has no production.

BLU’s cash balance on 30 June 2022 was A\$6.8m. Staff and administrative costs are well controlled, with spend for the full year around A\$1.5m.

As detailed earlier, BLU raised \$20m in a capital raising in July to fund an accelerated drilling programme in the Bowen and Surat.

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 11 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

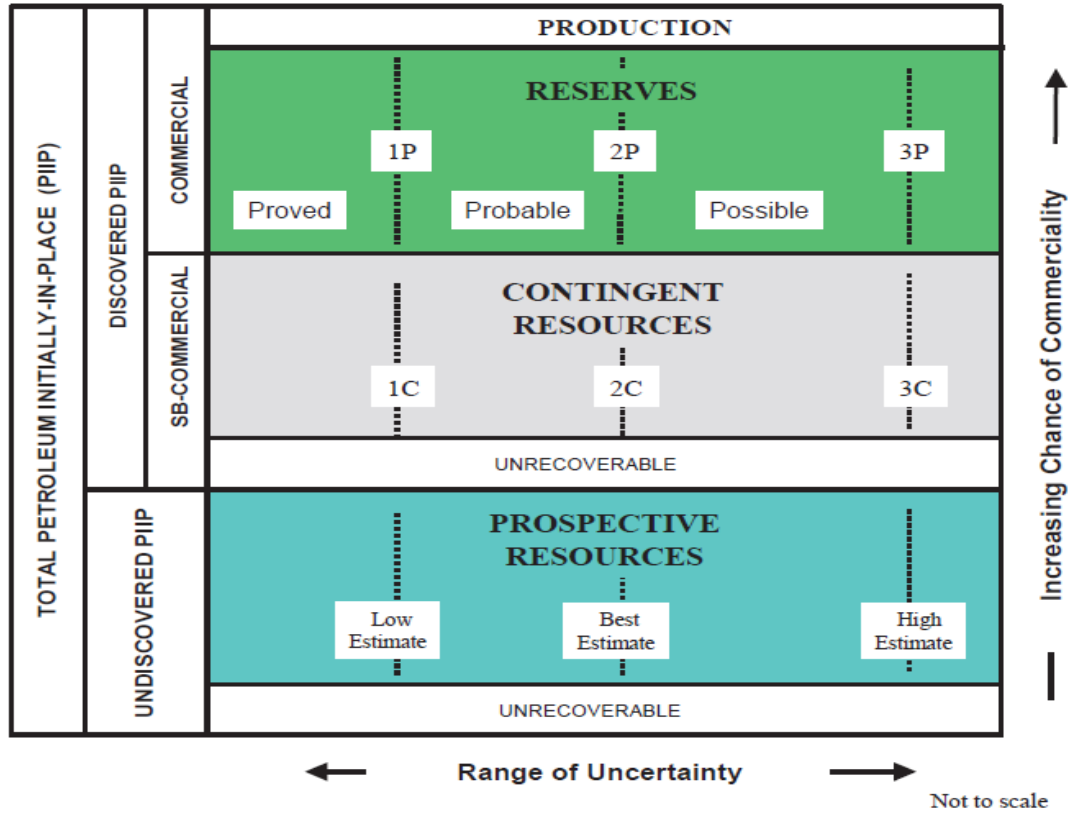
Gas Price Assumption A\$/GJ	Potential Revenue A\$m	Assumed Production Cost A\$/GJ	Potential Total Cash Flow A\$m	Potential Annual Cash Flow A\$m
8.00	4,040	4.00	2,020	188
9.00	4,545	4.00	2,525	235
10.00	5,050	4.00	3,030	282

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.

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