

## BLU Positioned Perfectly in the Bowen Surat Assets Get a Big Resource Upgrade

### Bowen a Key to Australia's Future Gas Supply, and BLU is Perfectly Positioned – Drilling Mid-2022

The Queensland Government has conducted a concept study into the feasibility of developing gas and an associated pipeline in the North Bowen Basin. The study endorses the economic case and future need for Bowen gas, which it sees as being in prime position to deliver gas into a market that requires additional supply. The report follows the Federal Government's National Gas Infrastructure Plan, which recognises the North Bowen Basin as one of three key areas for new gas supply. Blue Energy (BLU) will commence drilling in the Bowen mid-CY2022 and will define reserves as well as productivity test the asset and refine the development plan for the supply of gas into BLU's offtake agreements to Origin Energy, Energy Australia and Queensland Pacific Minerals. Blue has previously drilled 17 wells in the north Bowen asset to establish the current reserve and resource base.

### Surat Basin Assets Get a Big Resource Upgrade

The total recoverable Contingent Resource (3C) base of BLU's wholly owned ATP854 permit in the Surat Basin has increased by 300% to 398PJ. The increase is based on a review by the independent reserve Netherland Sewell. Two gas pipelines pass through ATP854, allowing direct access to both the Wallumbilla gas hub and Curtis Island LNG facilities at Gladstone. The resource is of sufficient size to augment BLU's Bowen Basin gas supply agreements and adds a further gas option for BLU to supply the East Coast gas market.

### East Coast Gas Market – Global Energy Crunch; Local Supply Tight

The focus of the global gas market is presently focused on supply to Europe. With the Russia-Ukraine conflict adding to already existing supply shortages in Europe, the US is attempting to avert a further crisis in European gas supply and shore up gas supply through LNG imports from the US and allied nations, including Australia. LNG netback prices are over A\$30/GJ. Local supply is tightening from declining Queensland and Victorian production.

### Valuation Range of A\$0.25–A\$0.51

BLU represents a unique opportunity to obtain exposure to gas assets with significant reserves and resources in proven basins. The lower end of our base-case valuation range (A\$0.25 previous A\$0.18) is derived by estimating the value of developing just the Sapphire project in the Bowen Basin. The valuation of this asset implies a BLU shareholder obtains this project at a substantial discount and has exposure to the remainder of BLU's substantial gas resources in Queensland and exploration potential in the Northern Territory for free. The upper end of our valuation range (A\$0.51 previous A\$0.40) is derived from market average EV/resource multiples. Key risks relate to the development of 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 is the Bowen Basin in Queensland.

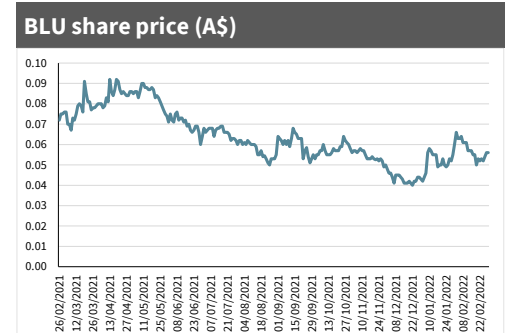
#### Key investment highlights:

- 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\$0.064
Market cap	A\$98m
Valuation (per share)	\$0.25–\$0.51

Next steps	
Signing of further gas sale agreements	Ongoing
Reserves drilling	H1 CY 2022



Source: FactSet.

**Michael Bentley**

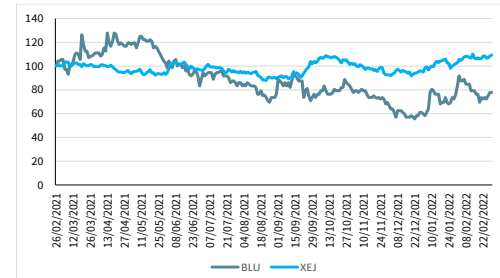
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## Exhibit 1 – Company summary – year-end 30 June

Blue Energy Limited (ASX:BLU)					
<b>Price</b>	\$	<b>0.064</b>			
52 week high / low	\$	<b>0.09 / 0.04</b>			
<b>Valuation (diluted)</b>	\$	<b>0.25-0.51</b>			
<b>Market Capitalisation</b>	\$m	<b>98</b>			
Enterprise Value	\$m	92			
Shares on issue (basic)	m	1528.2			
Options / Performance shares	m	0.0			
Potential shares on issue (diluted)	m	1528.2			
Ratio Analysis					
	2019A	2020A	2021A	2022	2023
EPS (A¢)	(0.48)	(0.39)	(0.07)	(0.27)	(0.03)
P/E (x)	(9.2)	(9.9)	(85.5)	(20.7)	(166.2)
EPS Growth (%)		n/a	n/a	n/a	n/a
CFPS (A¢)	(0.09)	(0.08)	(0.07)	(0.39)	(0.07)
P/CF (x)	(51.6)	(50.5)	(95.9)	(14.4)	(80.4)
DPS (A¢)	-	-	-	-	-
Dividend Yield (%)	-	-	-	-	-
EV / EBITDA (x)	-8.6	-8.9	-78.3	-20.5	0.0
EV / boe (x)	-	-	-	-	-
EV / PJe (x)	-	-	-	-	-
FCFPS	-	-	-	-	-
FCF Yield (%)	-	-	-	-	-
Profitability Ratios					
	2019A	2020A	2021A	2022	2023
EBIT / Sales (%)	0%	0%	0%	0%	0%
PBT / Sales (%)	0%	0%	0%	0%	0%
Return On Assets (%)	-9%	-8%	-2%	-6%	-1%
Return On Equity (%)	-9%	-8%	-2%	-6%	-1%
Liquidity Ratios					
	2019A	2020A	2021A	2022	2023
Net Debt / Net Debt + Equity (%)	7%	6%	3%	8%	7%
EBIT / Interest (x)	0.0	0.0	0.0	0.0	0.0
Current (x)	10.2	9.7	2.1	12.1	9.7
Assumptions (Yr end Jun)					
	2019A	2020A	2021A	2022	2023
Brent Oil Price (US\$/bbl)	69.6	46.2	46.0	70.0	70.0
Exchange Rate (A\$1:US\$)	0.715	0.671	0.740	0.700	0.700
Gas Price (A\$/GJ)	7.97	8.00	8.00	9.00	10.00
Reserves and Resources					
25 January 2022 1C, 2C, 2P	Working Interest	1C Gas (PJ)	2C Gas (PJ)	2P Gas (PJ)	
ATP 854 P (Surat)	100%	90	194	-	
ATP 813 P (Galilee)	100%	-	61	-	
ATP 814 P (Bowen)	100%	-	-	-	
Sapphire		66	108	59	
Central		50	99	12	
Monslatt		-	619	-	
Lancewood		5	23	-	
South		15	27	-	
Hillalong		-	182	-	
Sub total		136	1,058	71	
<b>Total</b>			226	1,313	71
Production					
	2019A	2020A	2021A	2022	2023
Gas (TJ/d)	-	-	-	-	-
Gas (PJ)	-	-	-	-	-
LPG (kt)	-	-	-	-	-
Oil / Condensate (mmbbl)	-	-	-	-	-
<b>Total (mmboe)</b>	-	-	-	-	-
Gas (mmboe)	-	-	-	-	-
LPG (mmboe)	-	-	-	-	-
Oil / Condensate (mmboe)	-	-	-	-	-
<b>Year End Reserves 2P (mmboe)</b>	<b>12.2</b>	<b>12.2</b>	<b>12.2</b>	<b>12.2</b>	<b>12.2</b>

Source: BLU, MST Access.

12 Month BLU v XEJ Relative



	2019A	2020A	2021A	2022	2023
Profit & Loss (A\$m)					
Oil / Condensate Revenue	-	-	-	-	-
LPG Revenue	-	-	-	-	-
Gas Revenue	-	-	-	-	-
<b>Total Sales</b>	-	-	-	-	-
Operating Costs	-	-	-	-	-
Government Resource Taxes	-	-	-	-	-
Exploration & Development Expen:	(4)	(4)	(0)	(5)	(2)
Other Net Income / Expense	(2)	(1)	(1)	1	1
<b>EBITDA</b>	<b>(6)</b>	<b>(5)</b>	<b>(1)</b>	<b>(4)</b>	<b>(1)</b>
<b>EBITDAX</b>	<b>(6)</b>	<b>(5)</b>	<b>(1)</b>	<b>1</b>	<b>1</b>
Depreciation & Amortisation	0	0	0	0	0
EBIT	(6)	(5)	(1)	(4)	(0)
Net Interest Expense	0	0	0	0	0
<b>Pretax Profit</b>	<b>(6)</b>	<b>(5)</b>	<b>(1)</b>	<b>(4)</b>	<b>(1)</b>
Tax Expense / Benefit	-	-	-	-	-
<b>Net Attributable Profit</b>	<b>(6)</b>	<b>(5)</b>	<b>(1)</b>	<b>(4)</b>	<b>(1)</b>
Reported Profit	(6)	(5)	(1)	(4)	(1)
Cash Flow (A\$m)					
	2019A	2020A	2021A	2022	2023
<b>Pretax Profit</b>	<b>(6)</b>	<b>(5)</b>	<b>(1)</b>	<b>(4)</b>	<b>(1)</b>
D&A & Other Non-Cash Items	5	4	0	-2	-1
Tax Paid	0	0	0	0	0
<b>Cash from Operating Activities</b>	<b>(1)</b>	<b>(1)</b>	<b>(1)</b>	<b>(6)</b>	<b>(1)</b>
Development Capex	-	-	-	-	-
Exploration Capex	-	-	(0)	(7)	(2)
Acquisitions/Other (Net of Sales)	0	-	-	-	-
Dividends Paid	-	-	-	-	-
<b>Free Cash Flow</b>	<b>(2)</b>	<b>(2)</b>	<b>(2)</b>	<b>(6)</b>	<b>(1)</b>
Cash Provided by Financing	4	1	(0)	10	-
<b>Net Change in Cash</b>	<b>2</b>	<b>(1)</b>	<b>(2)</b>	<b>4</b>	<b>(1)</b>
Balance Sheet (A\$m)					
	2019A	2020A	2021A	2022	2023
Cash & short term deposits	5	4	2	6	5
Receivables	0	0	0	0	0
Inventories	-	-	-	-	-
Property, Plant and Equipment	0	0	0	0	0
Capitalised exploration	62	59	61	60	60
Intangibles and Goodwill	-	-	-	-	-
Other assets	0	0	0	0	0
<b>Total assets</b>	<b>68</b>	<b>64</b>	<b>63</b>	<b>67</b>	<b>66</b>
Creditors	0	0	0	0	0
Borrowings	-	-	-	-	-
Other liabilities	1	1	1	(1)	(2)
<b>Total liabilities</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>(1)</b>	<b>(1)</b>
Shareholder equity	66	63	62	67	67
Shareholder Equity + Total Liabilities:	68	64	63	67	66

## Study Makes the Case for Bowen Gas – BLU in Prime Position to Deliver

The Queensland government has handed down the results of the Bowen Basin Concept Study (‘the study’) into the feasibility of developing gas and an associated pipeline in the North Bowen Basin<sup>1</sup>. These results clearly endorse the economic case and show a future need for gas from the Bowen Basin. The report is key to BLU as it sets out a clear path for future development of gas from the Bowen and how the government can assist and enhance that pathway. BLU is well positioned to deliver with independently assessed reserves and resources, several agreements signed with gas buyers, and a drilling campaign planned for mid-2022.

### The Bowen Basin Concept Study: Underpinning Future Decisions on the Basin

The Queensland and Federal Governments jointly funded the study in order to understand how Bowen Basin supply could improve the delivery of gas to domestic and export markets. The study aimed to ensure that the Queensland Government has the appropriate information to support future decisions about developing the Bowen Basin.

#### Purpose of the study: eight key areas assessed

Exhibit 2 – Summary of the Study’s Key Areas

STUDY GOAL	STEPS TAKEN AS PART OF STUDY
Understanding future global and local energy markets	Assessed global energy demand, the East Coast gas market supply and its ability to meet demand over a 10-year time horizon, and the
Confirming the need to unlock the Bowen Basin	Assessed Australia’s gas reserves and alternate sources of supply to confirm the need to unlock the Bowen Basin further and to prioritise
Understanding the resource potential	Assessed potential gas production volumes from the Bowen Basin.
Developing production scenarios	Developed production scenarios to determine the readiness of gas resources in the Bowen Basin to produce.
Understanding the role of coal mine methane	Quantified incidental coal mine methane and identified potential methods of capture and viability to be used.
Developing solutions	Identified the infrastructure required to bring the Bowen Basin resources to market.
Identifying impact	Explained the factors influencing the activation of the Bowen Basin.
Defining next steps	Summarised the necessary roles of government, industry and stakeholders; defined logical next steps to progress the unlocking of the

Source: BLU.

### Study finds risk of shortfalls in East Coast gas supply with the Bowen a clear potential fix

The study concluded that:

- there is a **strong risk of shortfalls** in gas supply to the East Coast gas market (ECGM) and a clear need for additional production from the mid-2020s
- there is **obvious potential to develop the Bowen Basin and related pipeline infrastructure** to provide a new source of gas
- **the gas in the Bowen Basin is economically recoverable** based on reasonable assumptions on cost, revenue, well design and coal geology
- **current fugitive emissions can be reduced by including coal mine methane via pre drainage projects** (like commercial CSG). This would far outweigh GHG emissions from developing the Bowen Basin as a primary CSG play.

<sup>1</sup> KPMG, GHD, NSAI, Queensland Government Department of Resources 2021, *Bowen Basin Concept Study – Final Report*, [https://www.resources.qld.gov.au/\\_\\_data/assets/pdf\\_file/0008/1592855/bowen-basin-study-final-report.pdf](https://www.resources.qld.gov.au/__data/assets/pdf_file/0008/1592855/bowen-basin-study-final-report.pdf)

## How Does the Federal Government National Gas Infrastructure Plan (NGIP) Tie In?

The results of the study tie in strongly with the Federal Government’s NGIP, which has identified the North Bowen Basin as one of three key areas for new gas supply (along with the Beetaloo and Galilee Basins).

The NGIP sets out a long-term development pathway that locks in supply for households and manufacturers with priority actions for East Coast gas supply and infrastructure out to 2040. It highlights the following needs:

- **new basin:** at least one new basin will need to be brought online before 2030 to meet projected East Coast gas demand
- **new pipeline capacity:** existing pipeline capacity will need to be strategically expanded and entirely new pipelines will need to be built to transport gas supplies to East Coast markets
- **more north-south transportation capacity:** expanded transportation capacity from north to south is required as northern supply expands and southern supply declines.

### Recognition of Bowen Basin by Federal and State Governments – looking at next steps

Both the Queensland and Federal Governments clearly see supply issues developing in the ECGM and strongly support the Bowen Basin as a near-term solution. Gas has been produced out of the Bowen Basin for over a decade (with the gas heading north), which significantly de-risks this supply solution.

The study indicates that the development of the Bowen Basin should help drive Queensland’s economic recovery as it transitions to a low-carbon, clean growth economy, and demonstrates the critical nature of pipeline infrastructure to further unlocking the basin. The government therefore plans a market engagement process with industry participants to integrate the roles of government and industry to develop the basin. The collaborative process will involve identifying key stakeholders, refining the government’s potential role in supporting industry over the short to medium term, testing and refining a commercial model and process for government support, identifying key thresholds for investment decisions, and establishing indicative timetables, milestones and development costs.

## The Study Is a Game Changer for BLU, Which Is Perfectly Positioned to Deliver

### BLU has established resources and sales Heads of Agreements in Bowen Basin

BLU’s assets have had a significant capital expenditure (~\$110m) over the years. Its Bowen assets have independently assessed reserves and resources (see Exhibit 2) and BLU has signed several HoAs with gas buyers, including:

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

Exhibit 3 –BLU’s Bowen Basin reserves and resources – estimates by blocks

Permit	Block	1C (PJ)	2P (PJ)	2C (PJ)	3P (PJ)	3C (PJ)
ATP814P	Sapphire	66	59	108	216	186
ATP814P	Central	50	12	99	75	306
ATP814P	Monslatt	-	-	619	-	2,054
ATP814P	Lancewood	5	-	23	1	435
ATP814P	Hillalong	-	-	182	-	237
ATP814P	South	15	-	27	6	30
<b>Total (PJ)</b>		<b>136</b>	<b>71</b>	<b>1058</b>	<b>298</b>	<b>3248</b>

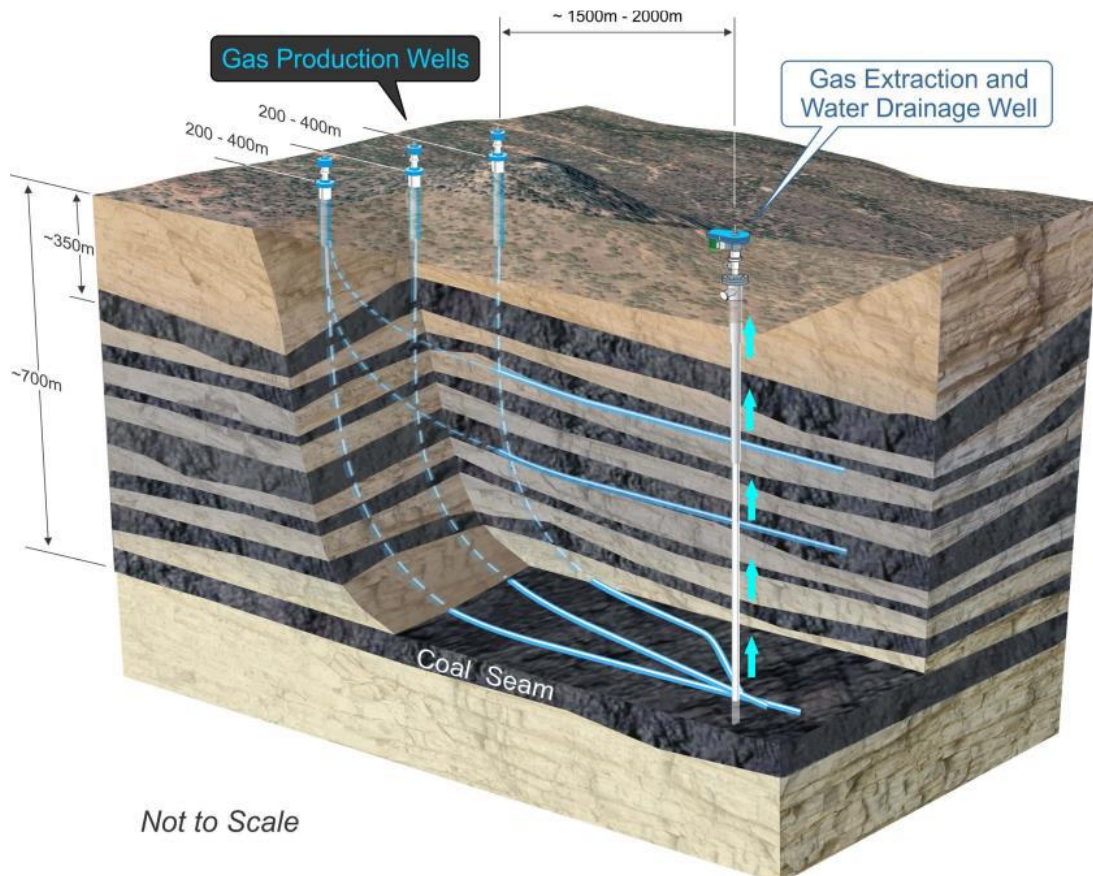
Source: BLU.

**BLU has reserve drilling and gas productivity confirmation planned for mid-2022**

The drilling campaign's key focus is on a reserve build (conversion of 3C to 2P) and productivity test of the asset and is scheduled to commence in mid-2022. The 2022 drilling program has been formulated in conjunction with Netherland Sewell and Associates Inc to refine the development plan for the supply of gas into BLU's offtake agreements to Origin Energy and Energy Australia.

Well design and configuration concepts for the drilling campaign are being worked on.

Exhibit 4 – BLU's Bowen Basin well design concept



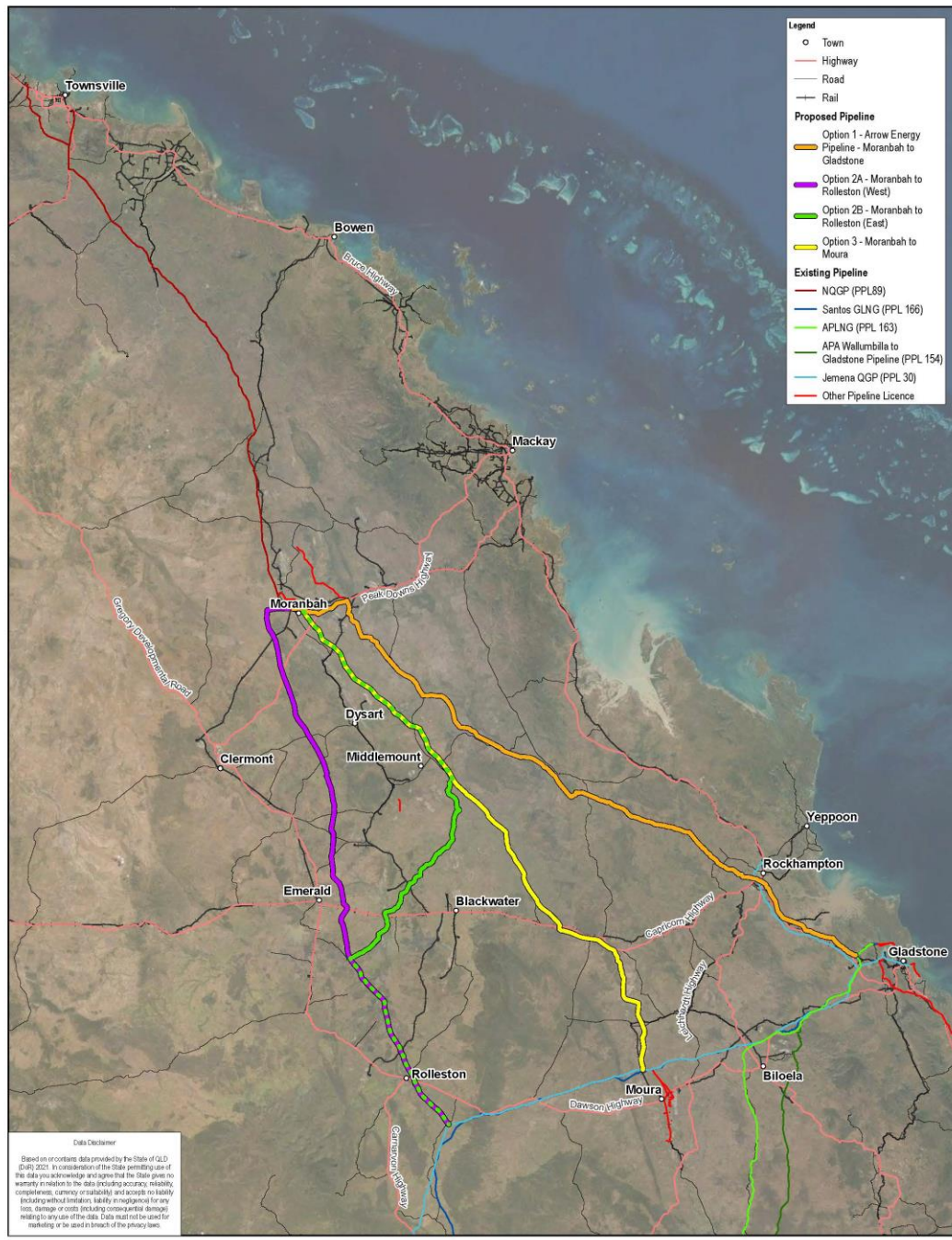
Source: BLU.



## Pipeline the Key

The key to initiate significant gas development in the Bowen Basin is the construction of a pipeline south to connect to the ECGM. BLU’s agreements with Origin and Energy Australia underpin the viability of the North Bowen Basin Gas pipeline. The study has looked at a number of pipeline route options for the gas pipeline from Moranbah. BLU’s nominated pipeline route is route from Moranbah to Rolleston via Emerald (Exhibit 4: Option 2A).

Exhibit 5 – Pipeline options for Bowen Basin gas to ECGM



Source: Bowen Basin Concept Study.

## Resource Upgrade, Surat Basin – Potential Near-Term Supply to Market

BLU’s solely owned permit ATP854 in the Surat Basin has had a 300% upgrade in 3C net recoverable gas resource from 101 PJ to 398 PJ, with 1C and 2C also increasing over 300%. The increase is based on a review by independent reserve certifier Netherland Sewell and Associates Inc 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.

Exhibit 6 – Surat Basin resources

		1C (PJ)			2C (PJ)			3C (PJ)		
		Old	New	Change	Old	New	Change	Old	New	Change
ATP 854P	Surat Basin Qld	22	90	309%	47	194	313%	101	398	294%

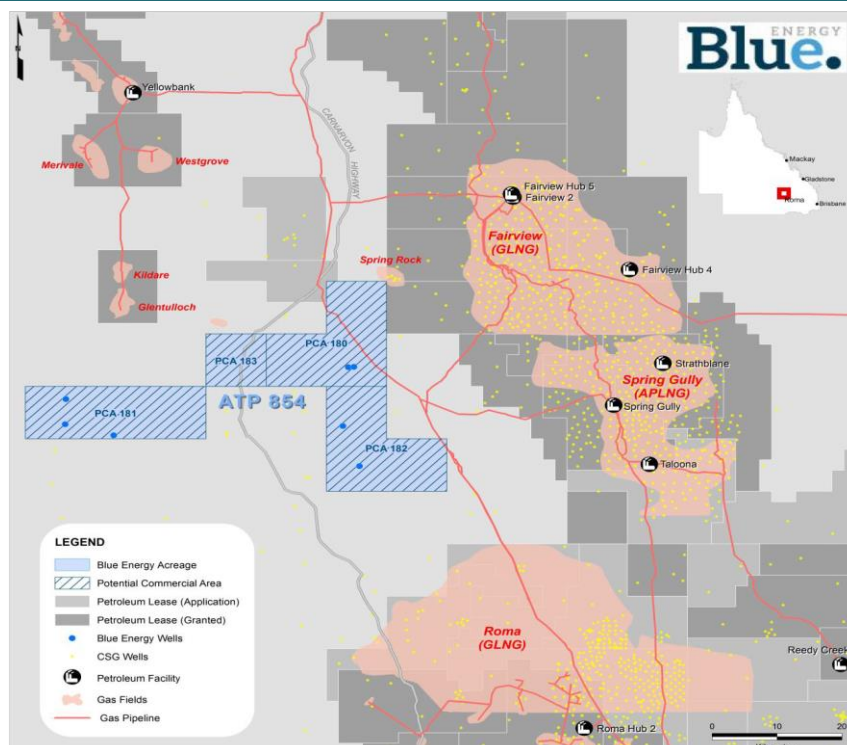
Source: BLU.

Two existing gas pipelines pass through ATP854, allowing direct access to the Wallumbilla gas hub and Curtis Island LNG facilities at Gladstone. It is now a substantial gas resource and a potential initial supply option to service the agreements with Origin and Energy Australia and to augment the company’s North Bowen Basin Gas reserves and resources. The resources therefore have clear potential for near-term economic development using this existing infrastructure.

There is strong potential for significant new gas supply from this permit, with further appraisal to be undertaken so any new supply can be assessed and brought to the ECGM as soon as possible.

Recent developments in the Surat point to potential to develop the asset rapidly. A key example is the Atlas block awarded to Senex; the first awarded block in Atlas is already at its initial 12PJ pa capacity just two years after being awarded. More recently, the second block awarded to Senex within Atlas is set to see production at Atlas rise to 18PJ pa by late 2022, an increase of some 50%. BLU’s experience would suggest a similar ability to develop assets rapidly.

Exhibit 7 – Surat Basin pipeline infrastructure (2 pipelines run through BLU’s Permits)



Source: BLU.

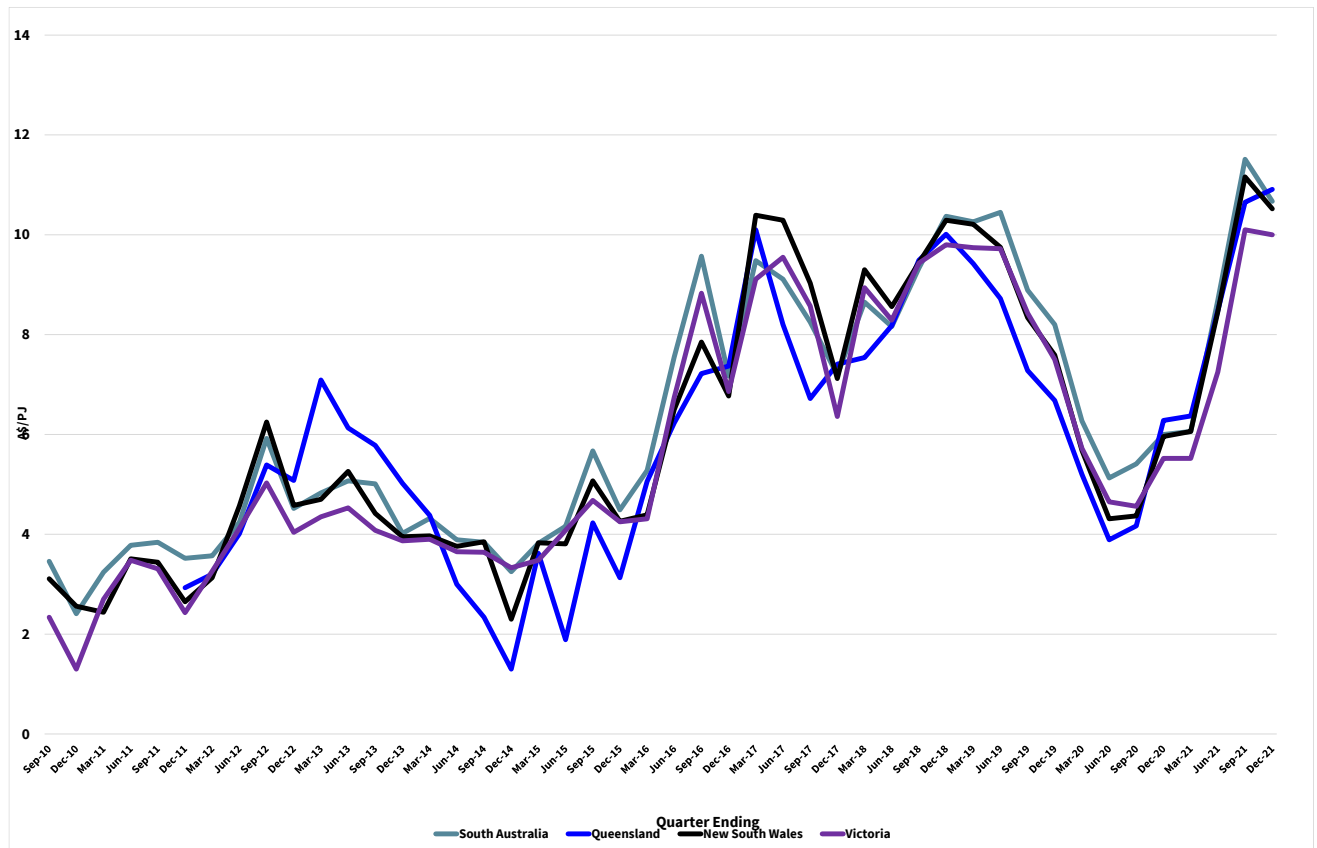
## East Coast Gas Market: Global Gas Shortage Driving High LNG Prices

### East Coast Gas Pricing – Spot and Contract

Spot contract prices have strengthened after weakening significantly in the first half of 2020 off the back of COVID. Demand has recovered and LNG prices have increased due to higher Northern Hemisphere demand, and supply has tightened, particularly in Europe, driving a higher LNG netback price. Local demand has increased from LNG projects, and southern supplies continue to tighten.

The focus of the global gas market is presently on supply to Europe. Supply shortages in parts of Europe can be traced to a shortage of gas from Russia into Europe, the absence of full nuclear generating capacity, intermittency of wind and solar energy and the banning of the shale gas sector in Europe. Relations between the US and Russia, now at a low due to Russia’s Ukraine invasion, have led the US to attempt to avert a further crisis in European gas supply. The US has been working to shore up gas supply for Europe through LNG imports from the US and allied nations, including Australia. The US gas price is up almost 60% on a year ago.

Exhibit 8 – Spot domestic gas prices



Source: AER.

Contract gas prices fell with spot prices in 2020, but spot prices recovered in the second half of 2020 and through 2021. Anecdotal evidence suggests that contract prices have firmed with significant interest in 3- to 5-year terms.



## LNG Netback – Volatile, Prices Up Sharply

### What is the LNG netback price?

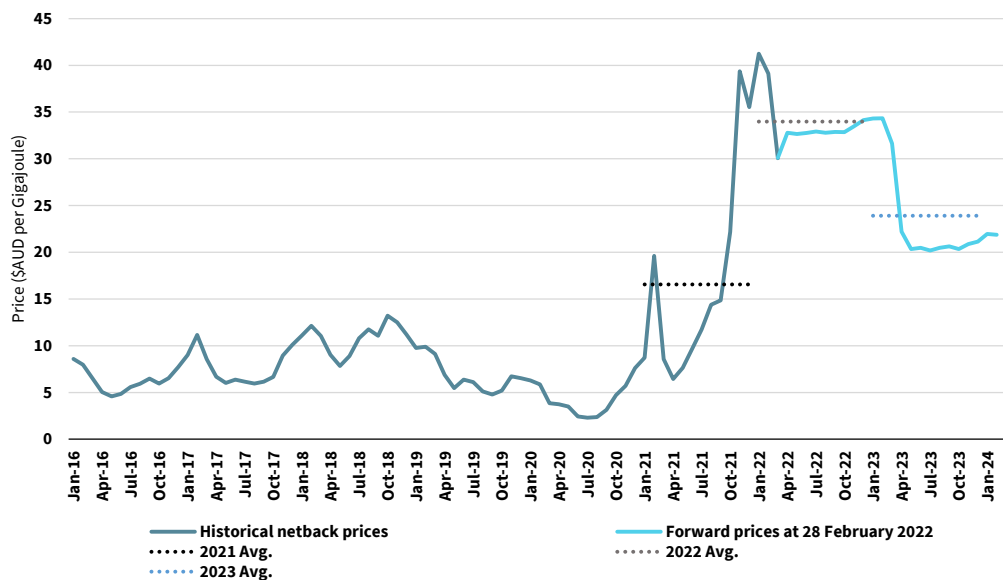
The LNG netback price is a measure of an export parity price that a gas supplier can expect to receive for exporting its gas. It is calculated by taking the price that could be received for LNG and subtracting or ‘netting back’ the costs incurred by the supplier to convert the gas to LNG and ship it 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 conditions in gas, particularly in Europe, have put upward pressure on LNG prices leading to a strong upward movement in the LNG netback price. **The current LNG netback price per the Australian Competition & Consumer Commission (ACCC) is A\$30.06/GJ.**

Exhibit 9 – Historical and forward LNG netback prices (A\$ per GJ)



Source: ACCC.

## Supply-Side Shortage

In its recent gas inquiry, the ACCC 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.

Supply is easier to forecast than demand and it looks limited, due to:

- **declining production in Queensland:**
  - CSG for LNG is experiencing higher rates of decline than originally forecast, and this is unlikely to change unless new sources of gas are discovered
  - producers are projecting a slower development schedule
- **declining production in Victoria:** Victoria’s previous excess production of gas, which previously supplied Tasmania, New South Wales and South Australia, will decline if no new reserves or resources are developed, which means customers will need to source more gas from the northern states/territories.

While new gas supplies will help improve the adequacy of supply, they are likely to be more costly than existing production given the cost to discover and develop.

## Valuation Range of A\$0.25–A\$0.51: Potential Upside - Any Scenario

### Valuation Methodology – Looking at 2 Different Angles

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/Monslatt 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 has also assessed several options for a pipeline to connect the Bowen Basin to the ECGM.

We focus on two key valuation methodologies in order to derive a risk-based valuation range for BLU:

- **The upper end of our range: EV/2P+2C resources – valuation A\$0.51.** Here we use a common valuation method: assessing the value attributed by the market to combined 2P and 2C reserves and resources.
- **The lower end of our range: development of Sapphire Gas Project – valuation A\$0.25.** We use a simple development NPV estimate for the Sapphire Gas Project in the Bowen Basin to ascribe some value to the CSG assets.

The key risks relate to the development of a pipeline in the Bowen Basin and non-completion of further gas sales.

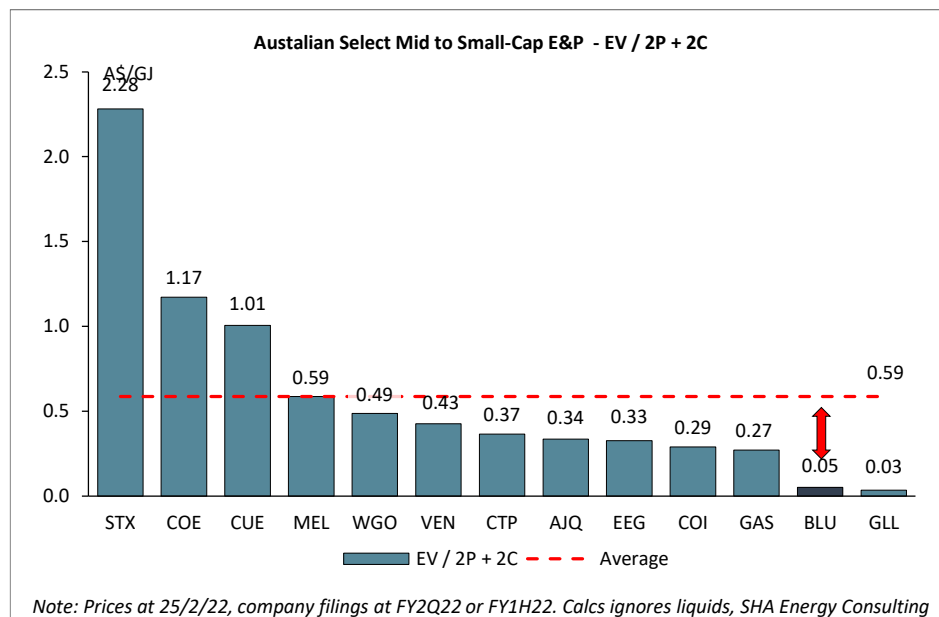
### Valuation Scenario 1 (Upper End of Range): EV/(2P+2C) A\$0.51 (Prior \$A0.40)

A commonly used valuation methodology is a comparison of 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 \$0.59/GJ (see Exhibit 9), but with a very wide range of \$0.03–\$2.28/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 ~8.5% of the peer average. Applying a peer average of A\$0.59/GJ to BLU’s 2P+2C of 1385GJ implies an EV of A\$817m or A\$0.51/share, fully diluted. While this is an un-risked number, it could also be considered that the market applies a ‘risk factor’ to the multiples.

We argue that BLU’s 2P+2C should be valued at a premium above its peers as it has several HoA gas sales agreements in place, as opposed to a number of its peers who are at the exploration stage of their development cycle.

Exhibit 10 – Average EV/2P+2C, select Australian-listed small energy companies



Source: SHA Energy Consulting, MST.

## Valuation Scenario 2 (Lower End of Range): Development of Sapphire Project Asset – Valuation of A\$0.25 (Prior A\$0.18)

We have formed a simple development scenario to focus on BLU’s most advanced asset, the Sapphire Gas Project, in the North Bowen Basin. The key message from this scenario is that one standalone development using a fraction of BLU’s current resource base achieves a valuation of 4x the current share price. The remainder of the BLU portfolio is effectively “free”, including the Surat assets, whose resource base increased recently by 300%.

We have chosen Sapphire in ATP 814 P because it has existing defined reserves and therefore is more mature from a likely commercial development given the MoU that underpins a potential future development. This allows us to ascribe some risk-adjusted value to BLU’s portfolio of CSG assets.

We have looked at several scenarios for a valuation estimate. Our valuation scenarios for Sapphire are preliminary and hypothetical including a low and high estimate utilising the information provided by the Queensland government in the Bowen Basin Concept Study, BLU’s public filings, a MoU for gas offtake of ~500 PJ, Queensland Government data, internal estimates, industry benchmarks, and Queensland 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 detailed in Exhibit 11. For our base case valuation we estimate A\$0.25

### Exhibit – 11 – Sapphire Valuation Scenarios

	Previous estimates (Oct 2021)	Revised estimates* (Feb-2022)	Bowen Basin Concept Study (Low) #	Bowen Basin Concept Study (High) #
Well count (number)	130	242	450	231
Per well capex (A\$m)	2.0	1.5	1.0	2.0
Well tie-in & pad construction (A\$m)	0.7	0.7	0.7	0.7
Assumed tariff**	0.93	0.70	0.70	0.70
Gas price (A\$/GJ real, 2022)***	9.0	MST	MST	MST
NPV (10) - A\$m (gross)	272	383	205	335
IRR	44.2%	46.5%	22.0%	36.7%
BLU shares on issue (m)	1,528.2	1,528.2	1,528.2	1,528.2
A\$ps (unrisked)	0.18	0.25	0.13	0.22

\* Bowen Basin Concept Study, Qld Govt Dept Resource & KPMG, 2 December 2021. NSAI analysis

\*\* indicative tariff from SHA energy pipeline infrastructure model, and referencing BBCS comments (page 8)

\*\*\* esc at 1.8-2.0% pa. MST gas price assumes delivered (including transport charge), esc at ~3.0% pa.

# Low: - assumes ~0.53 TJ/d well productivity, High assumes ~1.06 TJ/d productivity, as per BBCS (Table 13)

Gas Price Assumptions	
East Coast Gas Price A\$/GJ FY2023	\$10.00
East Coast Gas Price A\$/GJ FY2024	\$11.00
East Coast Gas Price A\$/GJ (LT from 2025)	\$11.50

Source: SHA Energy Consulting, MST.

Our indicative, preliminary valuation of a potential Sapphire development is based on modelled cash flows (post-tax, ungeared) using DCF analysis. This will be subject to future refinement once more public information comes to light 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, given that ATP 814 P 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.



## 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 31 December 2021 was A\$9.6m. Staff and administrative costs are well controlled by BLU, with spend for the last quarter at around A\$0.3m (adjusted for a one-off payment of \$0.16m). BLU have recently employed a full-time geologist.

Historically, BLU has relied on equity capital, with ~90% of all capital raised spent on exploration and evaluation. The recent capital raise will be predominantly used to convert resources to 2P reserves. BLU's major focus recently has been on gas commercialisation, demonstrated by the signing of MoUs and HoAs.

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 in the key Bowen Basin assets, offers potential JV partners substantial positions

### 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 the 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 p.a. for 10 years.
- Total contract volume 100 PJ: non-binding HoA with Energy Australia for the supply of 100 PJ of gas at Wallumbilla over 10 years from BLU's Northern Bowen Basin ATP814 coal seam gas 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 p.a. for 15 years for a proposed battery metal refinery in Townsville, to be sourced from BLU's Sapphire Block.

Exhibit 12 demonstrates the potential cash flow from the MoUs/HoAs signed by BLU.

Exhibit 12 – 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.

## Positive Catalysts for Share Price and Valuation

### Signing of further gas agreements

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

### Reserve upgrades

Further testing and appraisal of these fields will be conducted using the proceeds of the raising. Conversion of prospective resources to contingent resources and contingent resources to reserves could be positive for 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 is the construction of the pipeline. Firm commitment for the development of 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 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 has backed gas to lead a post-COVID recovery. Further government assistance such as underwriting of the North Bowen pipeline or incentives to develop projects would be a positive catalyst for BLU.

## Risks to Share Price and Valuation

### Delayed signing of gas agreements

Delayed signing of further HoAs would add risk to the commercialisation of the projects.

### Disappointing appraisal results

Further testing and appraisal of these fields will be conducted using the proceeds of the raising. Conversion of contingent resources to reserves is a key outcome. Disappointing reserve conversion would be negative for the share price.

### 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 the construction of the pipeline. A lack of development of the pipeline 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

Obtaining project financing is key to developing and commercialising the assets. Delay to this is a key risk.

### 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

The Federal Government has backed gas to lead a post-COVID recovery. Change in the government stance risks this backing being removed.

### 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 project delivery

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

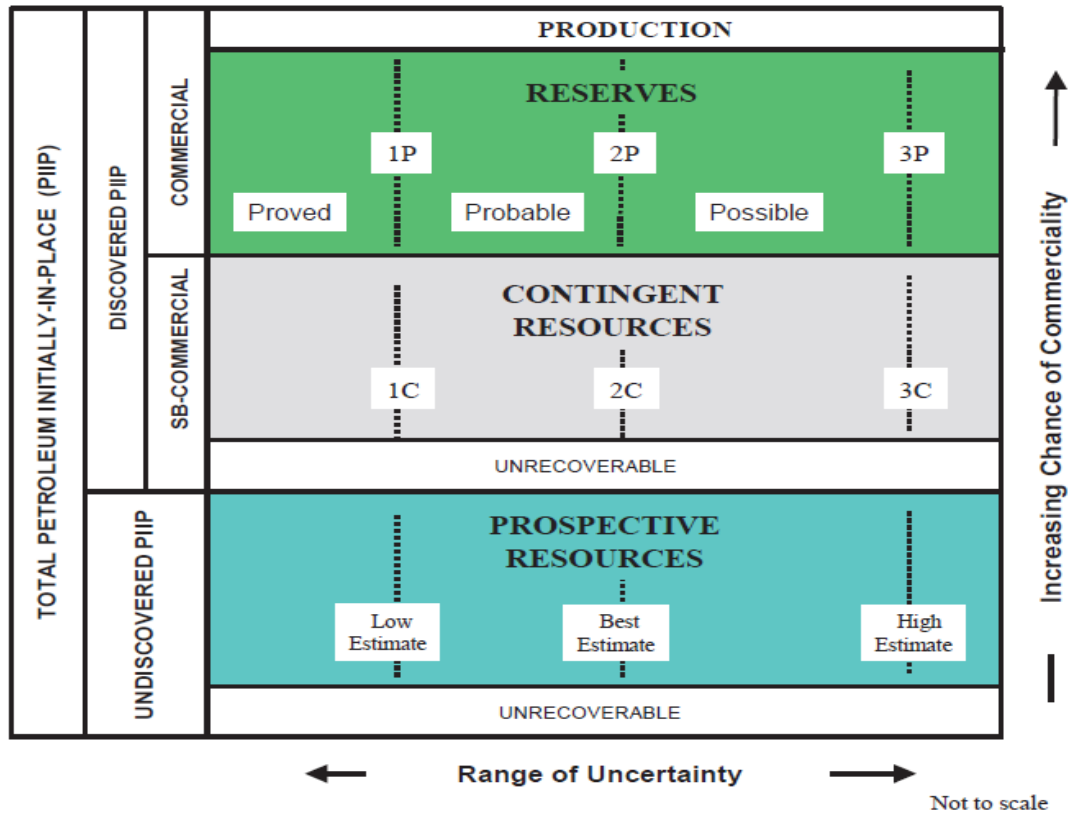
### Regulatory and moratoria risk

BLU has assets in multiple Australian jurisdictions. Any changes to relevant legislation may create more onerous conditions (both financially and in management time). Such changes may also impact the company's operational and financial performance.

## 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 13 – Classifying resources and reserves



Source: Industry.



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