

30<sup>th</sup> April 2019

## QUARTERLY ACTIVITIES REPORT

To 31<sup>st</sup> March 2019

**Blue Energy Limited (ASX: "BUL")** is pleased to report on activities during the March 2019 quarter across its exploration acreage in Queensland and the Northern Territory in which the Company's key gas and oil projects are located.

### Key points on latest progress

- **Federal ALP pledges \$1.5 billion to build critical Bowen and Galilee Basin gas infrastructure if elected**
- **Blue Increased its Gas Resource in the *Bowen Basin* by 237 Petajoules (PJ) to 3,248 PJ<sup>+</sup>**
- **Total corporate gas resources across acreage = 4,179 PJ**
- **Pipeline Survey Licence lodged for linkage of Bowen Basin gas to southern market**
- **GSA discussions continue**
- **Cash position – \$1.44 million as at 31 March 2019**
- **Change of ASX ticker Code to BLU**
- **The Company has zero debt**

In a significant development - recognizing the plight of Australian manufacturing, the ACCC's call for more gas and the lack of connecting gas infrastructure - the Federal ALP as part of its election campaign has pledged to revamp the Northern Australia Infrastructure Fund.

The new ALP commitment includes setting aside \$1.5 billion specifically for the construction of new gas pipeline infrastructure to connect the Galilee and Bowen Basins to the east coast gas market in Queensland, plus connecting the fledgling Beetaloo Basin in the Northern Territory to Darwin and the east coast gas market.

This is a game changer for the east coast gas market and has the potential to underpin domestic gas supplies (and the thousands of jobs that rely on gas being available) for the next 30-50 years.

Blue has for many years been steadily and cost effectively adding to its North Bowen gas reserve and resource base in the belief that this gas province will play a significant part in the solution to the east coast gas imbalance.

The Hillalong Block in ATP814P for instance (see Figure 1) is the latest part of Blue's North Bowen portfolio to have a resource review and upgrade. Dallas based Netherland Sewell and Associates Inc (NSAI) which has undertaken all of Blue Energy's reserve and resource assessments, reviewed geological and geophysical data from the Hillalong Block and assessed a Contingent Gas Resource (recoverable volumes) was present in both the Rangal and Moranbah Coal Measures, with further potential assessed in the Fort Cooper Coal Measures in the Prospective Resource category.

This new upward revision brings Blue Energy's total gas resource base to 4,179 PJ<sup>+</sup> of recoverable gas in the Contingent Resource category using PRMS/SPE, methodology.

<sup>+</sup> Please refer to the Listing Rule 5.42 Disclosure on page 11

## Proven Basins

### Bowen Basin, Queensland

#### ATP814P (Blue Energy 100% and Operator)

During the quarter, Blue Energy's independent resource and reserve certifier, Netherland Sewell & Associates Inc (NSAI), reviewed seismic and well data from the Hillalong block and adjacent regional areas and assessed that a Contingent Gas Resource of 236 PJ (3C) is present with the Rangal and Moranbah Coal Measures and is technically recoverable. In addition, NSAI assigned a Prospective Gas Resource of 286 PJ (recoverable) to the Fort Cooper Coal Measures across the Hillalong Block.\*\*

The Hillalong Block is the most northern of the ATP814P blocks and is currently the subject of an application to the Qld Government for a Potential Commercial Area licence by Blue Energy (PCA 201). Its location provides an opportunity to access the 275 KV high voltage Gladstone-to-Townsville electricity transmission line and connection to the Glenden substation to provide more local power to various adjacent coal mine operations. It also could provide synchronous generation to firm up new renewable capacity and stabilize the grid as more intermittent and asynchronous solar generation capacity is rolled out (See Figure 1).

Other administrative matters pending on ATP814 include the four Production Licence Applications (PLA) lodged by Blue Energy which are with the Queensland Government and are progressing. Renewal of the underlying ATP is also on foot with the Government, as are the four Potential Commercial Areas applications to cover the remaining resource base in the permit. These tenure activities are being undertaken in parallel with the ongoing commercial negotiations.

The permit currently has 2P reserves of 71 PJ and 3P reserves of 298 PJ (as independently estimated by Netherland, Sewell and Associates (NSAI)). As mentioned above, there is also significant upside within the other constituent blocks comprising the Permit with a combined 3,248 PJ of Contingent Resources estimated by NSAI.

The broader Northern Bowen Basin Gas Province has a discovered resource of approximately 15,000 PJ of gas which is sufficient to underpin the domestic gas market for the next 30 years. Blue's component of this estimate is currently 3,248 PJ.

Development of this basin wide resource and a pipeline connection to the south would provide security of supply for east coast manufacturers and with additional supply, will put downward pressure on prices. The additional gas available would also promote expansion of industry in the greater North Queensland region. In this regard, Blue is awaiting Government approval of the Pipeline Survey Licence 2037 from ATP814P to the Wallumbilla connection near Rolleston.

\*\* Refer to ASX announcement 28 February 2019

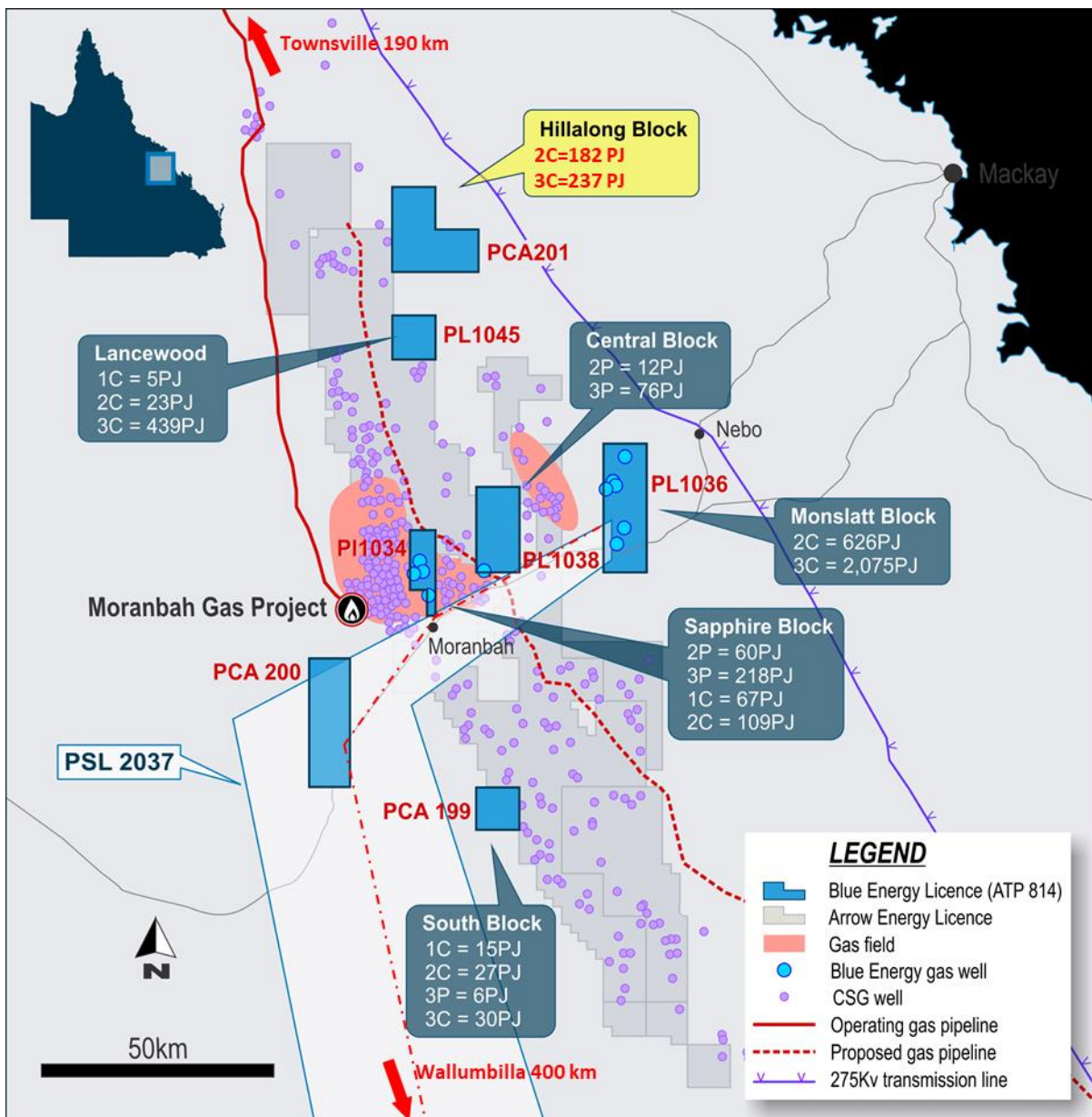


Figure 1: ATP814 Bowen Basin Queensland showing PL, PCA and PSL Applications

## Surat Basin, Queensland

### ATP854P (Blue Energy 100% and Operator)

Blue has four Potential Commercial Area Applications (PCA's) over the permit which will secure the acreage and allow work to be undertaken to grow gas reserves and resources in parallel to the continued marketing of the gas resources to potential buyers.

Jemena's PSL 2033 for the proposed pipeline linking the Galilee Basin to Wallumbilla overlays ATP854 and is conveniently located for Blue Energy to potentially utilize for gas export across the ATP in due course.

## Cooper Basin, Queensland

### ATP656P, 657P, 658P and 660P (Blue Energy 100% and Operator)

Blue has lodged renewal applications for these permits and is awaiting responses from the Qld Government.

## Emerging Basins

### Greater McArthur Basin

#### (various permits and equities levels - Blue Energy Operator)

The Northern Territory Government has now legislated many of the 135 recommendations from the Pepper Inquiry. This new legislation is designed to allow the re-commencement of (initially) exploration activities within the Beetaloo Basin initially but then flow onto the broader oil and gas tenements outside the Beetaloo Basin. Codes of Conduct have been drawn up and implemented for industry to comply with, and changes to the Water Act and Petroleum Act are now in place to permit some operators to start the approval process to gain permission to drill, fracture stimulate/complete and production test during the coming 2019 dry season. These initial approvals will give an indication of the efficiency of the new Legislation, land access and environmental approval processes and related timelines.

A suspension of Work Program activity in Blue's three awarded tenures in the Northern Territory until February 2020 by the NT Government is still in effect, and until such time as there is more clarity surrounding "no go" areas and the ramifications of the rules governing oil and gas exploration activities are more explicitly known to industry outside the Beetaloo Basin.

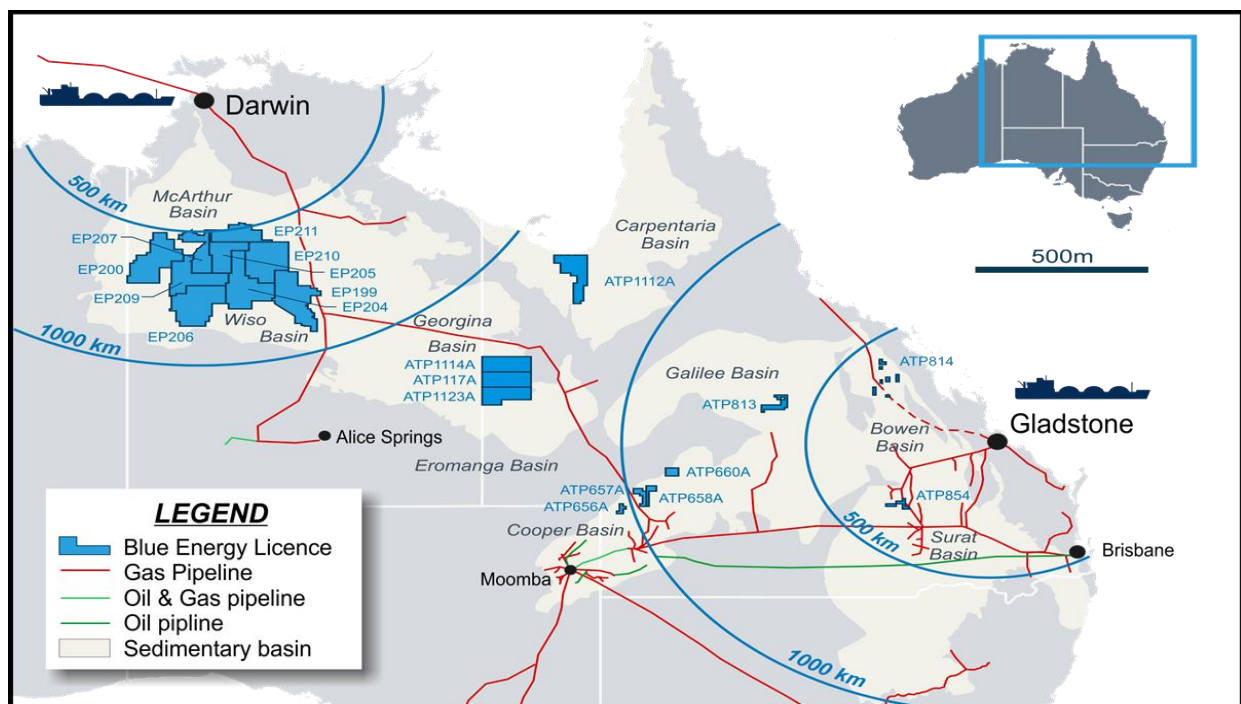


Figure 2: Blue Energy's acreage portfolio highlighting the large McArthur Basin position in the NT

## Galilee Basin Queensland

### ATP813P (Blue Energy 100% and Operator)

Applications for Potential Commercial Areas (PCA's), have been lodged with the Qld Government together with an application to renew the ATP. These applications are on foot with the Qld Government. The activity conducted by Blue Energy to date has resulted in the delineation of 838 PJ (net to Blue Energy) of Contingent gas Resources within the Betts Creek CSG play in ATP813P. Whilst there has not been any commercial gas production in the Galilee Basin to date, from any tenement, new coal seam gas pilot wells being drilled by Galilee Energy to test its Glenaras CSG play (adjacent to Blue Energy's ATP813P – see Figure 3) will provide proof of concept and de-risk the broader play to give confidence to Blue to conduct appraisal activities on its gas discoveries already made in ATP813P.

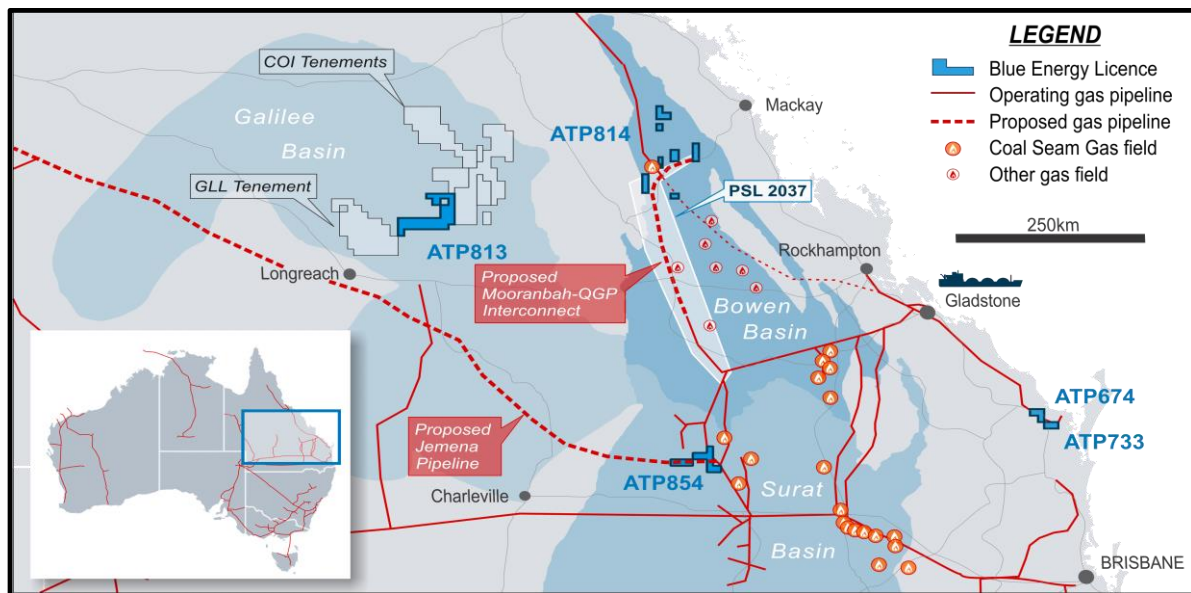


Figure 3: Bowen, Surat and Galilee Basin acreage

## Maryborough Basin

### ATP613P (Blue Energy 100% and Operator)

The last remaining tenure in the Maryborough Basin held by Blue Energy (ATP613P) expired 31<sup>st</sup> March 2019. Blue elected not to renew this permit and as a result has exited the Maryborough Basin.



## Energy Trends

Australians are told constantly of our apparent need to ever reduce our CO2 emissions and then link this to a tardiness in our rate of roll out of more renewable energy sources to satisfy our need for “guilt free” energy (if solar and wind are silver bullets for a supposed CO2 problem). The logic for this is simplistically but emotionally communicated to the population as a need for Australia to “do our bit to reduce the global carbon emissions” from our terrible human activities so that we will avoid catastrophic man made climate change for our grandchildren to still have a world to enjoy. So, the guilt foisted on the masses that we are recklessly accelerating the destruction of the planet by using cheap and reliable fossil fuel, becomes an unchallengeable ideological dogma.

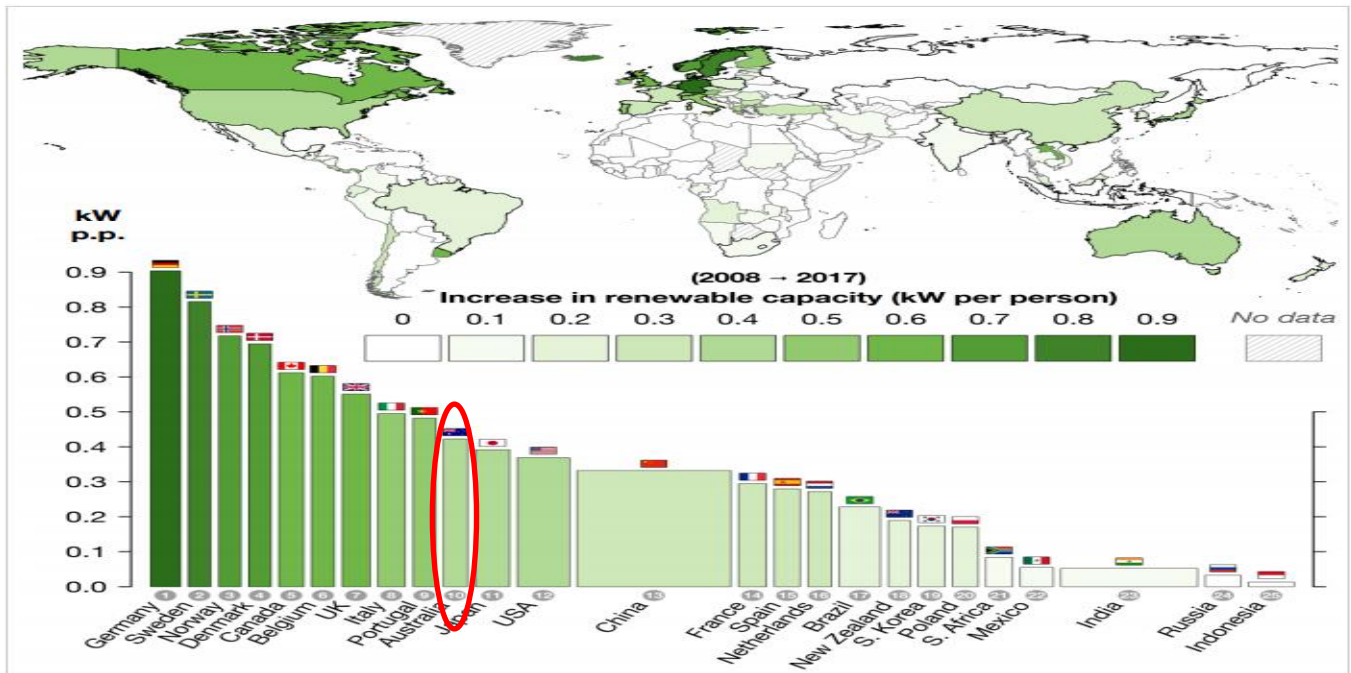


Figure 4: Per capita increase in renewable energy. Source: drax.com “Energy Revolution: A Global Outlook”

It would appear however from Figure 4 above that Australia is in fact in the top 10 countries in the league table for our rate of change in renewable energy capacity per capita, and well ahead of three of the top contributing nations in green-house gas emissions, namely China, India and the USA, none of whom are required by the Paris Agreement to cut their emissions at all. So our continual self-flagellation that we aren’t doing enough to combat the global scourge, that is apparently atmospheric CO2 levels and climate change, appears to be misplaced. The price we will pay however by increasing our renewable energy levels even beyond our current levels, is telegraphed in the comparison of electricity prices amongst countries with renewable energy in their energy mix and in the economies of our western European cousin nations. As can be seen in Figure 5, there is a direct correlation between the level of renewable energy penetration into the grid and higher electricity costs. To be continually told (patronizingly) that solar and wind energy are the lowest cost energy sources around is deceptive at best, and the proof of this is the ever rising costs of household power bills over the last decade, and in turn the level of energy poverty being experienced by Australian households – surely a national disgrace.

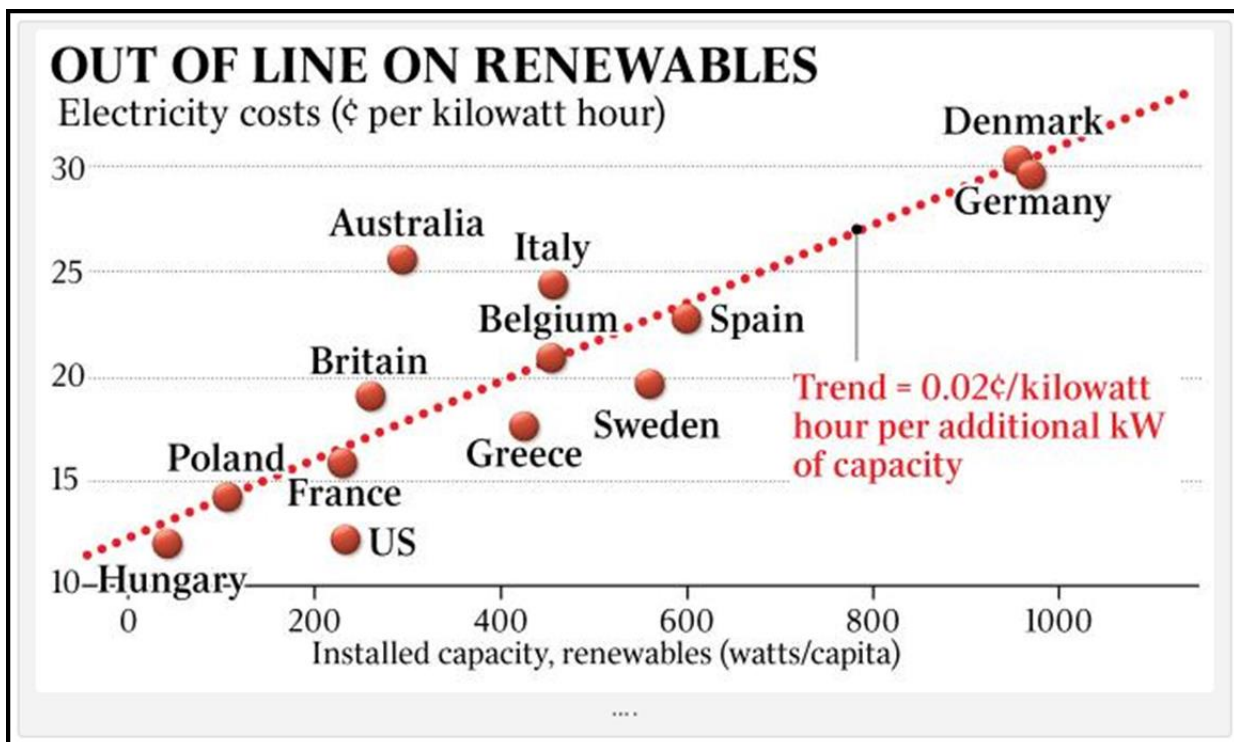


Figure 5: Comparison of installed Renewable capacity versus electricity costs. Source: The Australian

So for Australia to be (still) rushing headlong into massive solar and wind energy capacity and subsidized build out over the next few years (see Figure 6) is breathtakingly foolish from an economic point of view. Not content with destroying our baseload capacity (all coal and gas fired) and in the absence of green nuclear options, we are actually told to believe there will not be serious consequence to the economy through skyrocketing electricity prices which will undoubtedly occur based on the domestic and international evidence to date. This is not only arrogantly breathtaking but a misuse of taxpayers funds through subsidies.

As can be seen from the Table below (Figure 6) the proposed NEM renewable energy build out is staggering. It is effectively duplicating the existing generation capacity, but providing asynchronous unconnected generation (with a 30% capacity factor compared to nameplate) that will destabilize the grid and require expensive grid connections which will need synchronous generation for back up and grid stability

As further evidence of the cost impact on electricity prices of greater renewable penetration into the grid, is a recent University of Chicago Study (by Greenstone, McDowell and Nath 2019) of the 29 US states that have mandated the Renewable Portfolio Standards (RPS) – which is the equivalent of the RET in Australia. The study's findings, which looked at retail electricity prices, state by state over 7 years, revealed that a mere 4% increase in the amount of renewable energy fed into the electricity grid resulted in a 17% rise in retail electricity prices. Australia is mandating a 23.5% renewable energy component in the electricity generation mix by 2020.

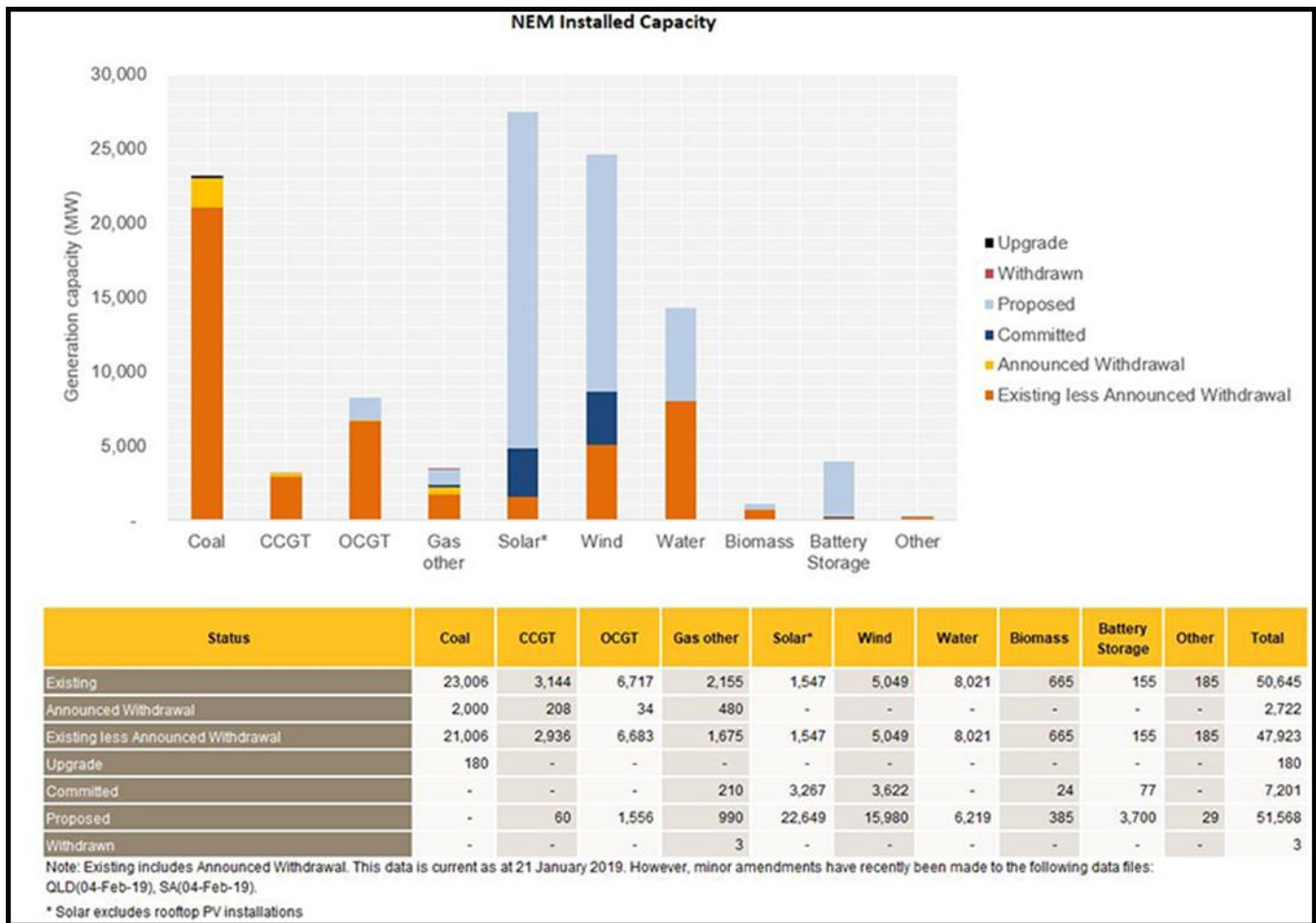


Figure 6: AEMO NEM installed generation capacity and proposed additions

## East Coast Australian Gas Market

### East Coast Supply and Demand

AEMO's 2019 Gas Statement of Opportunities (released in March of this year) highlighted the sharp decline in Bass Strait gas production forecast to occur over the next 4 years. This forecast decline re-affirms the growing reliance of Victoria and NSW on gas imports (coal seam gas) from Queensland. This reliance is exacerbated by the continued ban on onshore exploration in Victoria and the effective ban in NSW (notwithstanding efforts to resurrect the Narrabri Gas Project in the Pilliga and the Andrew Forrest led LNG import project in Port Kembla). Energy Quest's interpretations of the supply side data furthermore suggests that the supply of Queensland gas to the southern states will be achievable up until about 2023, at which time there will be a need by the Curtis Island LNG exporters to redirect the gas supplied to the southern states, to their Curtis island liquefaction plants to meet their export contract requirements, as production from the dedicated Surat Basin CSG fields begins to decline. This is a sobering forecast because even as of today, there needs to be significant drilling (thousands of wells per annum) in these CSG fields to simply convert the undeveloped 2P reserves into developed and producing reserves (see Figure 7). Compounding this we are seeing reserve write downs in some of these Surat CSG fields as the rolling development programs step out into less certain areas.



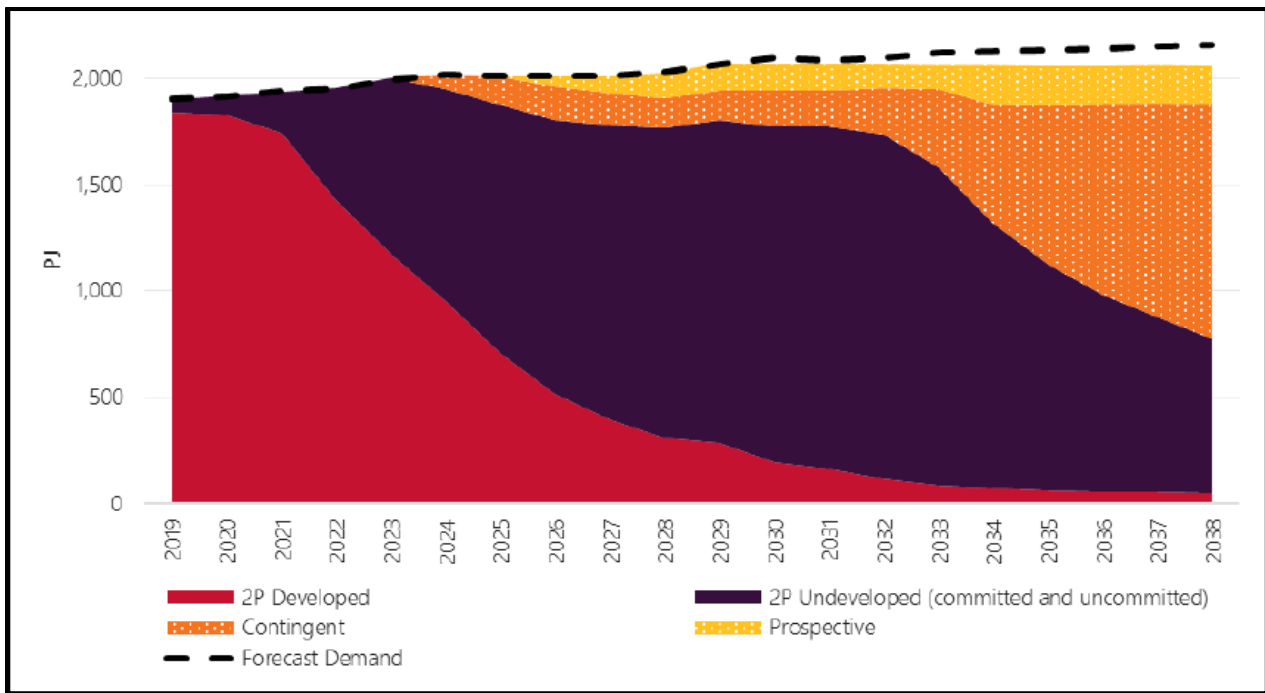


Figure 7: AEMO's 2019 Gas Statement of Opportunity shows East Coast gas demand and supply for the combined domestic and export LNG markets out to 2038

## Global Energy

### LNG and Global Gas Pricing

It is clear from many sources (BP, Shell, EIA) that globally, gas is the fastest growing fossil fuel out to at least 2040. Coupled with this, there is a significant build out rate of new LNG regasification capacity occurring in China and India over the next 5 years. The forecast of solid gas growth is therefore well founded and that the LNG demand will be an appropriately large component of the future gas growth. The global LNG players are positioning themselves for this growth, and with the continued growth (1% annually) in global oil consumption, and supply disruptions (Venezuela, Libya and Iran) oil price will likely remain above the long-term average. This will play into robust average LNG price forecasts (notwithstanding seasonal price variation).

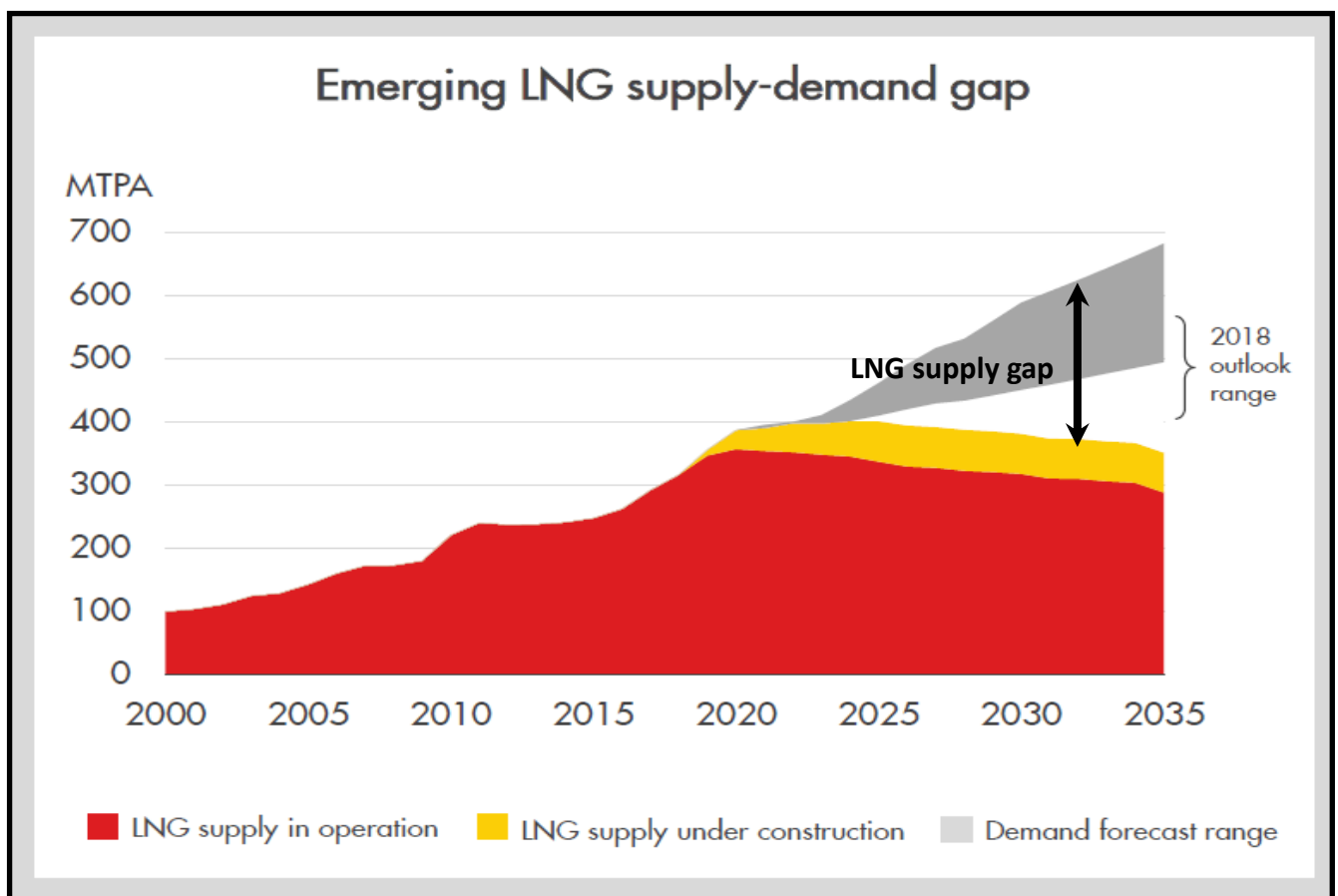


Figure 8: LNG demand and supply picture through to 2035. Source: Shell LNG Outlook 2019

### Oil price

Waivers on the sanctions on Iranian oil production by the US have now ceased and as a result supply is again being curtailed. This, in conjunction with the abject failure of the Venezuelan state to arrest production decline and the further destabilization of Libya has seen oil prices firm to 12 month highs.

## Corporate

### Cash Position

Cash on hand at 31 December 2018 was \$1.44 million.

The company has zero Debt

### ASX Ticker

Blue Energy changed its ASX ticker code to BLU effective 15 April 2019

Permit	Block	Assessment Date	Announcement Date	Methodology	Certifier	1P (PJ)	1C (PJ)	2P (PJ)	2C (PJ)	3P (PJ)	3C (PJ)
ATP854P		30/06/2012	19/03/2013	SPE/PRMS	NSAI	0	22	0	47	0	101
ATP813P		29/10/2014	30/10/2014	SPE/PRMS	NSAI	0	0	0	61	0	830
ATP814P	Sapphire	5/12/2015	8/12/2015	SPE/PRMS	NSAI	0	66	59	108	216	186
ATP814P	Central	5/12/2015	8/12/2015	SPE/PRMS	NSAI	0	50	12	99	75	306
ATP814P	Monslatt	5/12/2015	8/12/2015	SPE/PRMS	NSAI	0	0	0	619	0	2,054
ATP814P	Lancewood	5/12/2015	8/12/2015	SPE/PRMS	NSAI	0	5	0	23	1	435
ATP814P	Hillalong	6/02/2019	7/02/2019	SPE/PRMS	NSAI	0	0	0	182	0	237
ATP814P	South	30/06/2013	29/07/2013	SPE/PRMS	NSAI	0	15	0	27	6	30
<b>Total (PJ)</b>						<b>0</b>	<b>158</b>	<b>71</b>	<b>1,166</b>	<b>298</b>	<b>4,179</b>
<b>Total</b>						<b>0</b>	<b>27</b>	<b>12</b>	<b>199</b>	<b>51</b>	<b>714</b>

Table 1: Blue Energy net Reserves and Resources

### Listing Rule 5.42 Disclosure

The estimates of reserves and contingent resources noted throughout this Quarterly Activities report have been provided by Mr John Hattner of Netherland, Sewell and Associates Inc (NSAI) and were originally reported in the Company's market announcements 25 January 2012, 26 February 2013, 19 March 2013, 8 December 2015 and 28 February 2019. NSAI independently regularly reviews the Company's Reserves and Contingent Resources. Mr Hattner is a full time employee of NSAI, has over 30 years' of industry experience and 20 years' of experience in reserve estimation, is a licensed geologist and a member of the Society of Petroleum Engineers (SPE), and has consented to the use of the information presented herein. The estimates in the reports by Mr Hattner have been prepared in accordance with the definitions and guidelines set forth in the 2007 Petroleum and Resource Management System (PRMS) approved by the SPE, utilizing a deterministic methodology. Blue Energy confirms that it is not aware of any new information or data that materially affects the information included in any of the announcements relating to ATP 813P, 814P or 854P referred to in this report and that all of the material assumptions and technical parameters underpinning the estimates in the announcements continue to apply and have not materially changed.

## Petroleum Tenements Held

Permit	Location	Interest Held Previous Quarter	Interest Held Current Quarter
ATP656P	Cooper Basin (Qld)	100%	100%
ATP657P	Cooper Basin (Qld)	100%	100%
ATP658P	Cooper Basin (Qld)	100%	100%
ATP660P	Cooper Basin (Qld)	100%	100%
ATP813P	Galilee Basin (Qld)	100%	100%
ATP814P	Bowen Basin (Qld)	100%	100%
ATP854P	Surat Basin (Qld)	100%	100%
ATP1112A	Carpentaria Basin (Qld)	100%	100%
ATP1114A	Georgina Basin (Qld)	100%	100%
ATP1117A	Georgina Basin (Qld)	100%	100%
ATP1123A	Georgina Basin (Qld)	100%	100%

*Permit	Location	Interest Held Previous Quarter	Interest Held Current Quarter	Comment
EP199A	Wiso Basin (NT)	10%	10%	See Note 1
EP200	Wiso Basin (NT)	10%	10%	See Note 1
EP205	Wiso Basin (NT)	10%	10%	See Note 1
EP206A	Wiso Basin (NT)	10%	10%	See Note 1
EP207	Wiso Basin (NT)	10%	10%	See Note 1
EP208A	Wiso Basin (NT)	10%	10%	See Note 1
EP209A	Wiso Basin (NT)	10%	10%	See Note 1
EP210A	Wiso Basin (NT)	10%	10%	See Note 1
EP211A	Wiso Basin (NT)	10%	10%	See Note 1

**Tables 2 and 3: Petroleum Tenements held by Blue Energy and its subsidiaries**

\*Exploration blocks Blue is farming into

Note 1: Subject to Farm in Agreement which upon completion of the seismic work program will result in Blue Interest becoming a 50% equity participant

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