

Buru Energy Limited (ASX:BRU)

Canning Basin...potential, but still to deliver

Buru Energy (ASX: BRU) controls a significant (22,000km²) package of oil and gas exploration and production permits in the Canning Basin in the west Kimberley region of Western Australia. The Canning Basin is one of the least explored onshore basins in Australia with already producing conventional oil resources and large scale wet gas resources.

In May 2018, BRU sold 50% of its interests in the producing Ungani Oilfield to Roc Oil/ROC (a subsidiary of HKSE-listed Fosun International (0656.HK)) for a cash consideration of A\$64m. Production at Ungani has been disappointing – with average 3Q2018-3Q2019 output of ~1,000 barrels of oil per day (bopd), significantly below levels seen at the time of the transaction (i.e., 2Q2018's output averaged 1,900bopd). However, a recent announcement (17 Nov 2019) states that production has increased to ~1,700bopd following the completion and tie-in of horizontal well U7H. Another horizontal well (U6H) planned in 2020 is expected to further boost production levels. In our model, we assume average 2020E production of 1,500bopd and longer-term (2021E onwards) output of 1,400bopd.

The group's exploration program(s) to date have also, we suggest, largely disappointed. Exploration spend in 2018/2019 of ~A\$24m on geophysical and geochemical analysis, and on exploration wells Ungani West 1, Ungani North 1, Yakka Munga 1, Adoxa 1, Rafael 1, and Miani 1, has not resulted in any significant hydrocarbon intercepts – with the possible exception at Adoxa 1 - and has not resulted in any changes to the group's Resource estimates.

On 5 December 2019, BRU announced that Roc Oil had withdrawn from a farm-in agreement with BRU (part of the May 2018 transaction) for 50% of exploration permits EP428, EP436, and EP391. This may have been prompted by the poor results of the 2018/2019 exploration programs. BRU has thus resumed 100% ownership of these EPs. In the announcement, BRU states that it will commence a wide ranging farmout process early in 2020 once a prospect and regional scale technical review is completed. We believe that successfully finding a committed JV partner will be an important step for BRU's future exploration strategy.

Valuation and Recommendation: A\$0.24ps, Hold

We value the Ungani conventional oilfield's NPV₁₀ at A\$45m (BRU, 50%). This is below the A\$64m paid by Roc Oil for its 50% stake in the field. The lower valuation seems reasonable in our opinion bearing in mind, 1) the higher US\$ oil price environment in mid-2018, 2) the fall-off in field production rates since 2Q 2018 and, 3) the premium that Roc Oil is likely to have paid to get the acquisition across the line. Attaching a A\$50m value to the Butler Sand Prospect (~2,000PJ Prospective Resource @ 2.5c/GJ), A\$44m to the Yulleroo Gasfield (~1,230PJ @ 3.5c/GJe), and a nominal A\$15m for exploration upside, we forecast BRU's SOTP enterprise value at A\$154m. Adjusted for forecast 10-year admin /corporate costs, exploration expenses and FY19E's net cash balance of A\$29m, **we calculate BRU's equity value at A\$103m (equivalent to A\$0.24 per share)**. At current share price levels, our target price offers some 41% upside potential. While this upside is not immaterial, **our recommendation on BRU at this juncture is a Hold (Higher Risk)**. We would prefer to see sustainable production (several quarters) from Ungani of 1,400-1,500bopd, more clarity on the group's 2020 drilling program, and progress on the proposed EP farmout, before upgrading our recommendation.

13 December 2019

Share Price: A\$0.17

Target Price: A\$0.24

Target upside: 41%

Recommendation

Hold

Risk Assessment

Higher

Resources – Oil & Gas

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Senior Investment Analyst

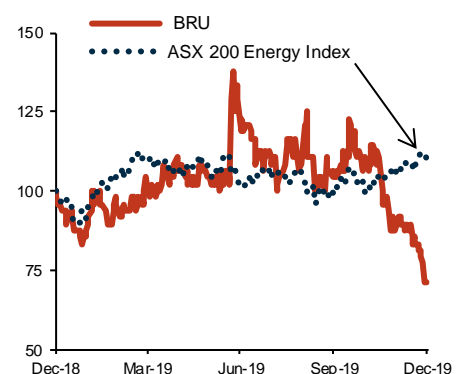
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Buru Energy Limited

ASX Code	BRU
52- week range	A\$0.17-A\$0.36
Market Cap (diluted) (A\$m)	78
Shares (diluted) (m)	447m
Av Daily Turnover (shares)	424k
ASX All Ordinaries	6,811
FY19E BV per share (A\$c)	19
FY19E EPS (A\$c)	-2.2
FY19E Net Cash/(Debt) (A\$m)	29

Relative price performance



Financial Statements

Buru Energy Ltd

Year ending December

Profit & Loss Statement (A\$m)	FY18A	FY19E	FY20E	FY21E	FY22E
Revenue	20	14	21	20	20
COGS	(10)	(7)	(11)	(10)	(11)
Corporate costs	(6)	(5)	(5)	(5)	(5)
Exploration expenses	(5)	(7)	(7)	(7)	(7)
EBITDA	(1)	(6)	(2)	(3)	(3)
Depreciation & Amortisation	(5)	(5)	(3)	(3)	(10)
Operating profit	(7)	(11)	(5)	(6)	(13)
NOI	35.7	(0.9)	(0.9)	(0.9)	(1)
EBIT	29	(12)	(6)	(7)	(14)
Interest income	1.0	1.3	0.7	0.5	0.4
Interest expense	(0.4)	(0.4)	(0.4)	(0)	(0)
Tax expense	0	0	0	0	0
Reported NPAT	30	(11)	(6)	(7)	(14)
Normalised NPAT	(6)	(10)	(5)	(6)	(13)
EBITDA Margin (%)	n/a	n/a	n/a	n/a	n/a
Operating profit margin (%)	n/a	n/a	n/a	n/a	n/a
EPS Reported (A\$c)	6.65	(2.43)	(1.28)	(1.47)	(3.05)
EPS Normalised (A\$c)	(1.33)	(2.23)	(1.09)	(1.28)	(2.85)
EPS growth (%)	n/a	n/a	n/a	n/a	n/a
DPS - Declared (A\$c)	0.00	0.00	0.00	0.00	0.00
Avg. no. of fully-diluted shares (m)	447	447	447	447	447
YE no. of fully-diluted shares (m)	447	447	447	447	447

Cash Flow Statement (A\$m)	FY18A	FY19E	FY20E	FY21E	FY22E
EBITDA	(1)	(6)	(2)	(3)	(3)
Investment in working capital	(5)	0	(1)	0	(0)
Tax expense	0	0	0	0	0
Operating Cash Flow	(7)	(5)	(3)	(3)	(3)
Capex	(13)	(25)	(3)	(3)	(3)
Other investments	0	0	0	0	0
Investing Cash Flow	(13)	(25)	(3)	(3)	(3)
Net interest received / (paid)	1	1	0	0	0
Debt draw down / (repayment)	(3)	(1)	0	0	0
Dividends paid	0	0	0	0	0
Equity raised / (repaid)	0	0	0	0	0
Financing Cash Flow	(1)	0	0	0	0
Non-operating & Other (R&D rebate)	68	(1)	(1)	(1)	(1)
Incl(Dec) in Cash	47	(31)	(6)	(7)	(7)

Balance Sheet (A\$m)	FY18A	FY19E	FY20E	FY21E	FY22E
Cash & Equivalents	64	33	27	20	13
Receivables	3	2	3	3	3
Inventories	2	2	3	2	2
Other Current Assets	0	0	0	0	0
PPE and Exploration & Development	40	60	60	60	53
Deferred tax asset	0	0	0	0	0
Other Non Current Assets	0	0	0	0	0
Total Assets	109	97	92	85	72
Payables and other current Liabilities	6	4	6	6	6
Short Term Debt	3	3	3	3	3
Long Term Debt	2	2	2	2	2
Other Non Current Liabilities	4	4	4	4	4
Total Liabilities	15	13	14	14	14
Total Equity	94	83	78	71	58
Net Cash / (Debt)	59	29	22	16	9

Top 3 Registered Shareholders	%	Date
HSBC Custody Nominees	9.8	
Birkdale Enterprises	8.1	Feb-19
Chemco Pty Ltd	4.0	

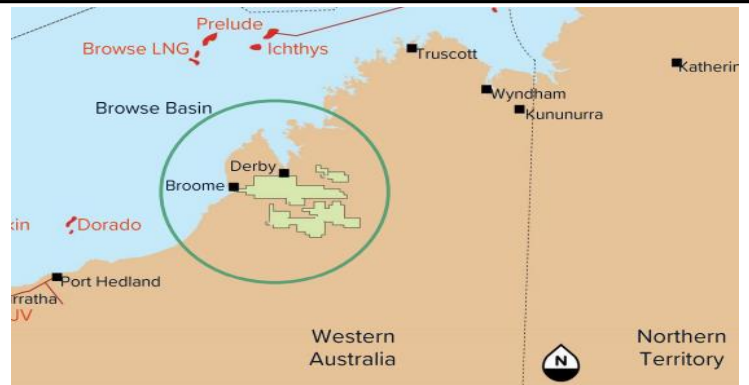
Source: Company, IRESS, State One Stockbroking forecasts

Revenue Forecast (A\$m)	FY18A	FY19E	FY20E	FY21E	FY22E
Gas sales (PJ)	-	-	0.0	0.0	0.0
ARP (A\$/GJ)	n/a	n/a	n/a	n/a	n/a
Revenue - Gas (gross)	0.0	0.0	0.0	0.0	0.0
Oil sales (MMbbl)	-	-	0.54	0.50	0.50
ARP (A\$/bbl)	-	-	78.2	79.8	81.4
Revenue - Oil (gross)	0.0	0.0	42.2	39.9	40.7
Revenue - Gas & Oil (gross)	-	-	42.2	39.9	40.7
BRU % interest	-	-	50%	50%	50%
Revenue net to BRU	19.9	13.6	21.1	3.0	3.0

Gas contribution to sales volume	-	-	0%	0%	0%
Oil contribution to sales volume	-	-	100%	100%	100%
Gas contribution to revenue	-	-	0%	0%	0%
Oil contribution to revenue	-	-	100%	100%	100%

Crude Oil ARP calc	FY18A	FY19E	FY20E	FY21E	FY22E
Brent crude oil price (US\$/bbl)	-	-	61.5	62.7	64.0
AUD/USD exchange rate	-	-	0.7	0.7	0.7
Brent crude oil price (A\$/bbl)	-	-	87.9	89.6	91.4
Marine transport discount	-	-	-11%	-11%	-11%
BRU ARP (A\$/bbl)	-	-	78.2	79.8	81.4

Reserves & Resources	Prospective Resource	2C Resource
Ungani Oilfield (100%) (MMbbls)	0	6.65
Butler Sand Prospect (100%) (BCF)	1,875	0
Yulleroo Gasfield (100%) (PJ)	0	863
Yulleroo Gasfield (100%) (PJ)	374	0
Total (PJ)	2,374	903



Valuation Ratios (x)	FY18A	FY19E	FY20E	FY21E	FY22E
Normalised P/E	2.6	-7.2	-13.7	-11.9	-5.7
Price/OP Cash Flow	-12.0	-14.4	-29.1	-27.8	-27.6
Book value per share (A\$c)	21.1	18.7	17.4	15.9	12.9
EV (A\$m)	19	50	56	62	69
EV/EBITDA	-ve	-ve	-ve	-ve	-ve
ROE (%)	n/a	n/a	-ve	-ve	-ve

SOTP Valuation	A\$m	A\$ps	Comment
NPV Ungani Oilfield (BRU 50%)	45	0.10	Estimated Project NPV
Butler Sand Prospect	50	0.12	2,000PJ @ 2.5c / GJe
Yulleroo Gasfield	44	0.10	1,237PJ @ 3.5c/GJe
Exploration upside	15	0.03	Nominal value
Enterprise value	154	0.36	
Admin/Corporate expenses	(33)	(0.08)	NPV of A\$5mpa for 10 years
Exploration expenses	(46)	(0.11)	NPV of A\$7mpa for 10 years
Net Cash / (Debt) (FY19E)	29	0.07	Estimate
Equity value	103	0.24	

Note: Per share data based on 447m shares

Valuation

Ungani Oilfield NPV₁₀: A\$45m (BRU, 50%)

We estimate BRU's 50% interest in the Ungani Oilfield at A\$45m. This is below the A\$64m paid in May 2018 to BRU by Roc Oil for a 50% stake in the field. The lower valuation seems reasonable in our opinion bearing in mind, 1) the higher US\$ oil price environment in May 2018, 2) the fall-off in field production rates since 2Q 2018 and, 3) the premium that Roc Oil is likely to have paid to get the acquisition across the line. See table below.

Figure 1: NPV of Ungani Oilfield

	Year	1	2	3	4	5	6	7	8	9	10	Total
	FY	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
Gas inventory - opening	PJ	-	-	-	-	-	-	-	-	-	-	-
Gas inventory - closing	PJ	-	-	-	-	-	-	-	-	-	-	-
Saleable gas production (gross)	PJ	-	-	-	-	-	-	-	-	-	-	-
Gas ARP	A\$/GJ	-	-	-	-	-	-	-	-	-	-	-
Revenue: Gas	A\$m	-	-	-	-	-	-	-	-	-	-	-
Oil inventory - opening	MMbbl	5.04	4.50	4.00	3.50	3.00	2.50	2.00	1.50	1.00	0.5	-
Oil inventory - closing	MMbbl	4.50	4.00	3.50	3.00	2.50	2.00	1.50	1.00	0.50	-	-
Saleable oil production (gross)	MMbbl	0.54	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.5	5.04
Oil ARP	A\$/bbl	78	80	81	83	85	86	88	90	92	2,134	-
Revenue: Oil	A\$m	42	40	41	41	42	43	44	45	46	47	431
Revenue Total (gross)	A\$m	42	40	41	41	42	43	44	45	46	47	431
BRU equity interest in Ungani	%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	-
Revenue (net to BRU)	A\$m	21	20	20	21	21	22	22	22	23	23	216
Royalty expenses (State/Other)	A\$m	(3.2)	(3.0)	(3.1)	(3.1)	(3.2)	(3.2)	(3.3)	(3.4)	(3.4)	(3.5)	(32)
Lifting /haulage/ other costs	A\$m	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(76)
COGS (total)	A\$m	(11)	(10)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(108)
EBITDA	A\$m	10	9	10	10	10	11	11	12	12	12	108
PAT	A\$m	10	9	10	10	10	11	11	12	12	12	108
Development capex	A\$m	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(4)	(4)	(33)
Cash flow	A\$m	7	6	7	7	7	8	8	8	8	9	75
Discount rate		10%										
NPV	A\$m	45										

Price and cost assumptions		2020	2021	2022	2023	2024	2025	2026	2027	2028
ARP: Gas	A\$/GJ	-	-	-	-	-	-	-	-	-
Brent crude oil	US\$/bbl	61.5	62.7	64.0	65.3	66.6	67.9	69.3	70.6	72.1
AUD:USD exchange rate	unit	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Royalty expenses	%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Lifting / Other operational costs	A\$/bbl	30.00	30.60	31.21	31.84	32.47	33.12	33.78	34.46	35.15
Price/cost inflation	%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Effective tax rate	%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gas unit data										
Revenue	A\$/bbl	78.19	79.76	81.35	82.98	84.64	86.33	88.06	89.82	91.62
COGS	A\$/bbl	(41.73)	(41.96)	(42.20)	(42.45)	(42.70)	(42.95)	(43.21)	(43.47)	(43.74)
EBITDA	A\$/bbl	36.46	37.79	39.15	40.53	41.94	43.38	44.85	46.35	47.87
EBITDA margin	%	47%	47%	48%	49%	50%	50%	51%	52%	52%

Source: State One Stockbroking forecasts

Key assumptions include:

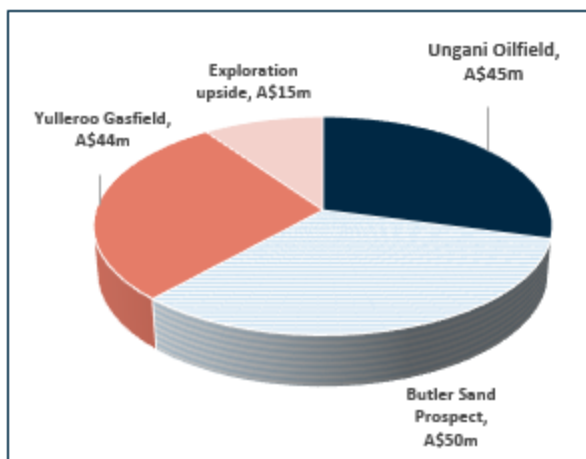
- Oil inventory base of ~5MMbbl (gross) and 10-year production life. The Ungani Oilfield has no Reserves and the most recent Resource statement is a 2C Contingent Resource estimate of 6.65MMbbls in April 2016. Based on our FY20E-29E forecast production of 5.04MMbbl (gross), we calculate that cumulative FY18-FY29E forecast production of 5.75MMbbls is ~85% of the 2016 2C Contingent Resource estimate.
- Brent crude oil price of US\$61.50 (real) and constant exchange rate of US\$0.70. Average received price (ARP) calculated as Australian dollar Brent crude less 11% marine transport discount.
- Cost of goods sold (COGS) includes estimated 15% total royalty expense. Other costs (uplift/haulage) estimated at A\$30/bbl escalated at 2%pa.
- Oilfield development capex (BRU 50% interest) estimated at A\$3mpa.

Sum-Of-The-Parts (SOTP) valuation

Underpinned by our estimated NPV valuation for the Ungani Oilfield, we forecast BRU's SOTP enterprise value at A\$154m. Adjusted for forecast 10-year admin /corporate costs, exploration expenses and FY19E's net cash balance of A\$29m, we calculate BRU's equity value at A\$103m (equivalent to A\$0.24 per share).

Figure 2: BRU - SOTP valuation

	(A\$m)	(A\$/share)	Comments
NPV Ungani Oilfield (BRU 50%)	45	0.10	Estimated Project NPV
Butler Sand Prospect - Prospective Resource	50	0.12	2,000PJ @ 2.5c/GJe
Yulleroo Gasfield - 2C Contingent Resource	35	0.08	863PJ @ 4c/GJe
Yulleroo Gasfield - Prospective Resource	9	0.02	364PJ @ 2.5c/GJe
Exploration upside	15	0.03	Nominal value
Enterprise value	154	0.36	<i>Sum</i>
Admin/Corporate expenses	(33)	(0.08)	NPV of A\$5mpa for 10 years
Exploration expenses	(46)	(0.11)	NPV of A\$7mpa for 10 years
Net Cash / (Debt) (FY19E)	29	0.07	Estimate
Equity value	103	0.24	



Group enterprise value

Ungani Oilfield	A\$45m	29%
Butler Sand Prospect	A\$50m	33%
Yulleroo Gasfield	A\$44m	29%
Exploration upside	A\$15m	10%
		100%

Source: State One Stockbroking forecasts

Assumptions:

- **Ungani Oilfield 2C Resource** valuation based on our estimated NPV₁₀.
- **Butler Sand Prospect** valuation based on its mean un-risked Prospective Resource estimate of 1,875BCF of gas (~2,000PJ) and a proposed unit value of 2.5c/GJ.
- **Yulleroo Gasfield** valuation based on a proposed unit value of 4c/GJ for its 863PJ 2C Contingent Resource and a proposed unit value of 2.5c/GJ for its 374PJ Prospective Resource.
- **Exploration upside** based on a nominal valuation of A\$15m.

EV/GJe peer comparative

We calculate that ASX-listed oil and gas plays trade at a (simple) average of ~A\$0.80/GJe, with large cap producers trading at an average of A\$1.09/GJe and unconventional gas explorers/developers trading at between A\$0.05/GJe and A\$0.25/GJe. See table overleaf. Bearing in mind that the Butler Sand Prospect and the Yulleroo Gasfield are both at relatively early stages of project development (particularly the Butler Sand Prospect), we believe it appropriate that unit valuations for these assets are at a discount to the lower end of valuations attached to ASX-listed oil and gas players.

Figure 3: Selected ASX-listed oil and gas stocks: enterprise value per GJe

Company	Ticker	Share price (A\$)	Total shares (million)	Mkt Cap (A\$m)	Cash (A\$m)	Debt (A\$m)	EV (A\$m)	1P	2P	2C	EV/1P	EV/2P	EV/ (2P+2C)	Gearing D/(D+E) %
								price equivalent basis			A\$/GJe	A\$/GJe	A\$/GJe	
								PJe	PJe	PJe				
Large Cap "Majors"				78,744	6,508	20,802	93,038	17,305	26,057	59,595	5.38	3.57	1.09	21%
Beach Energy	BPT	2.44	2,279	5,561	172	0	5,389	2,201	3,673	2,031	2.45	1.47	0.94	0%
Oil Search	OSH	7.32	1,525	11,163	538	3,531	14,156	2,486	2,887	4,807	5.69	4.90	1.84	24%
Origin Energy	ORG	7.99	1,761	14,070	1,546	7,496	20,020	2,880	4,799	5,166	6.95	4.17	2.01	35%
Santos	STO	8.21	2,100	17,241	1,215	4,251	20,277	3,651	6,376	11,383	5.55	3.18	1.14	20%
Woodside Petroleum	WPL	32.60	942	30,709	3,037	5,524	33,196	6,087	8,322	36,208	5.45	3.99	0.75	15%
Junior Developers/Producers				1,966	265	397	2,098	884	1,458	1,948	2.37	1.44	0.62	17%
Armour Energy	AJQ	0.06	589	35	9	59	85	40	124	149	2.14	0.69	0.31	62%
Central Petroleum	CTP	0.17	774	128	18	82	192	125	152	241	1.53	1.26	0.49	39%
Cooper Energy	COE	0.57	1,700	969	164	214	1,019	256	354	238	3.98	2.88	1.72	18%
Senex Energy	SXY	0.35	1,487	520	63	40	498	463	828	199	1.07	0.60	0.48	7%
Strike Energy	STX	0.19	1,696	314	11	3	305	0	0	1,121	-	-	0.27	1%
CSG/Shale explorers/developers				483	24	0	458	18	172	3,090	25.47	2.67	0.14	0%
Comet Ridge	COI	0.28	751	207	12.9	0	194	18	172	582	10.76	1.13	0.26	0%
Galilee Energy	GLL	0.98	282	276	11.5	0	265	0	0	2,508	-	-	0.11	0%
UCG				124	3.1	4.0	125	0	1,153	1,469	-	0.11	0.05	3%
Leigh Creek Energy	LCK	0.21	605	124	3.1	4.0	125	0	1,153	1,469	-	0.11	0.05	3%

Source: Companies, IRESS, compiled by State One Stockbroking.

Note: for the purposes of the above peer comparison, we have attached more commercial value to liquid hydrocarbons by converting oil to GJ on a price equivalent basis of 1bbl oil = 8GJe, rather than on the calorific conversion rate of 1bbl oil = 6GJe.

Recommendation & Risks

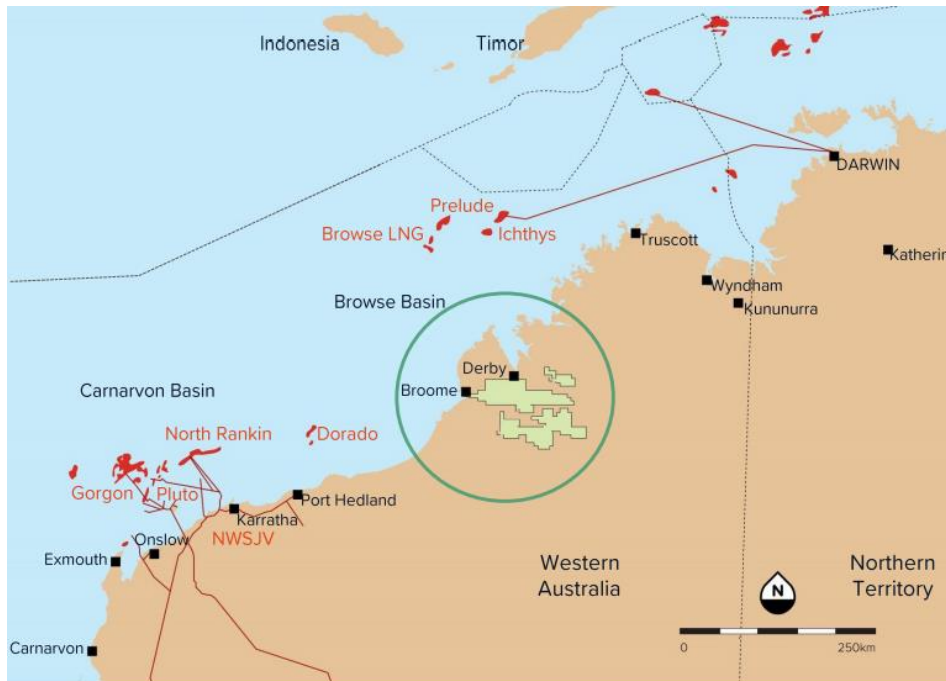
Our SOTP valuation of A\$0.24ps offers some 41% potential upside relative to BRU's current share price levels of A\$0.17. **Recommendation: Hold (Higher Risk)**. Risks to our estimated target price and forecast earnings profile include, but are not limited to:

- **Commodity prices/ exchange rates** – specifically the US dollar Brent crude oil price and the AUD/USD/exchange rate.
- **Ungani Oilfield** – production profile, oil inventory (production life), operating costs, and development capex.
- **Butler Sand Prospect** – a significant portion (33%) of our estimated group enterprise value is based on attaching a valuation of 2.5c/GJ to the Butler Sand Prospect's 1,875BCF Prospective Resource. Exploration programs at the Lennard Shelf (Miani and Butler) are under review.
- **Yulleroo Gasfield** – some 29% of our estimated group enterprise value is based on attaching valuations to the Yulleroo Gasfield's 2C and Prospective (unconventional gas) Resources. There is no guarantee that exploration and development programs at Yulleroo will lead to a commercial Project. In addition, it is uncertain if WA regulations re hydraulic fracture stimulation will impede project development.
- **Exploration upside**. Some A15m or 10% of our estimated SOTP enterprise valuation is derived from exploration upside. Exploration programmes may not result in favourable results relative to expectations.
- **Other**. Regulatory or compliance change, key personnel risk.

Assets

Buru Energy Limited (ASX:BRU) is a Western Australia (WA) oil and gas exploration and production company. Together with its existing 100% and majority owned permits, BRU controls a gross 22,000km² of highly prospective contiguous acreage in the Fitzroy Trough and Lennard Shelf – the northern part of the Canning Basin in the west Kimberley region of WA.

Figure 4: Canning Basin permits - location



Source: Company

Ungani Oilfield

(BRU - 50% interest (and Operator), Roc Oil (unlisted)) - 50%

Ungani is a conventional oil field located in the Canning Basin, approximately 150km east of Broome (WA). When first discovered in 2011, it became the first onshore field to be discovered in the Canning Basin in 30 years. Production at the field commenced in July 2015 at the rate of 1,250bopd, however a fall in oil prices caused production to be suspended in January 2016. Production recommenced in June 2017. On 16 May 2016, BRU announced that independent consultants Gaffney Cline and associates (GCA) estimated recoverable 2C Contingent Resources of 6.65MMbbls (gross). No further Resource (or Reserve) estimate has been made since then.

Figure 5: Ungani Oilfield – Contingent Resource estimate

Ungani Oilfield Contingent Resources (100%WI, MMstb)			
	P90	P50	P10
Original in place	8.99	16.13	32.30
Estimated Ultimate Recovery (EUR)	2.70	7.26	19.41
Production until the 26 of January 2016	0.62	0.62	0.62
Contingent Resources as at 30 April 2016	1C	2C	3C
	2.08	6.65	18.80
For comparison, Buru's estimate of the initial Contingent Resources (EUR) as previously reported as at 28 April 2015 for the Ungani Field	3.90	6.10	9.40

Source: Company (May 2016 announcement)

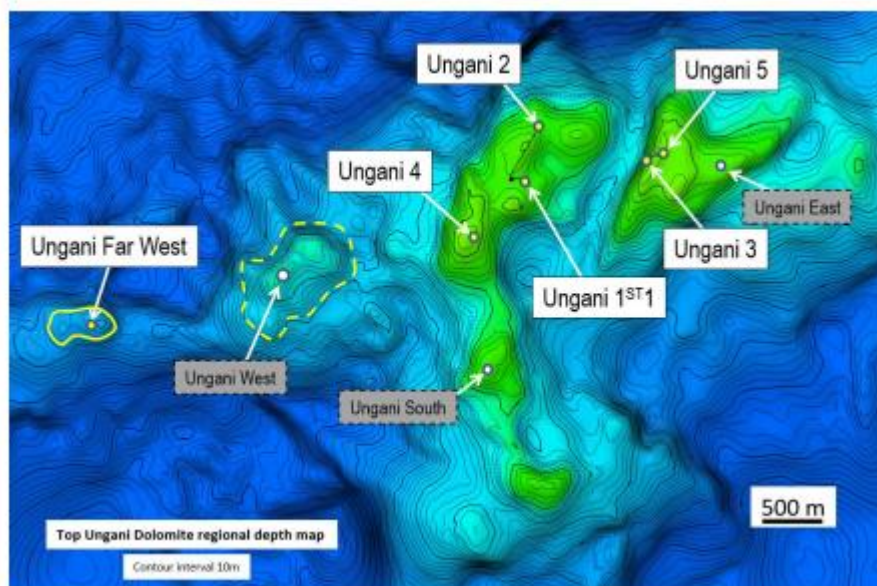
In May 2018, BRU sold 50% of its interests in the producing Ungani Oilfield (production licences L20 and L21) to Roc Oil/ROC (a subsidiary of HKSE-listed Fosun International (0656.HK)) for a cash consideration of A\$64m. The transaction also included a Farm-in Agreement for 50% of exploration permits EP391, EP428, and EP436 in exchange for funding by 30 June 2020, of 80% of a A\$25m four (4) well exploration expenditure program. The farm-in transaction covered conventional oil and gas assets and excluded any unconventional gas accumulations – including the Yulleroo Gasfield in EP436 and EP391. However, on 5 December 2019, BRU announced that ROC had withdrawn from the Farm-In Agreement. As a result, BRU has resumed 100% interest in these EPs. **BRU has stated that it intends to commence a wide ranging farmout process early in 2020 once a prospect and regional scale technical review is completed.**

In early September 2018, the Ungani Oilfield hit an important milestone with production hitting the one million barrels’ mark. Produced oil is road-hauled via tanker to the Port of Wyndham, where it is shipped out from an 80,000bbl storage tank (CGL storage tank 10) by offtake partner Petro-Diamond Singapore. Note: BRU’s two-year oil sales and lifting contract with Singapore-based multi-commodity trader Trafigura expired in June 2019. After a market based tender process, BRU entered into a new contract (on more favourable terms) with Mitsubishi-owned Petro-Diamond Singapore.

Production

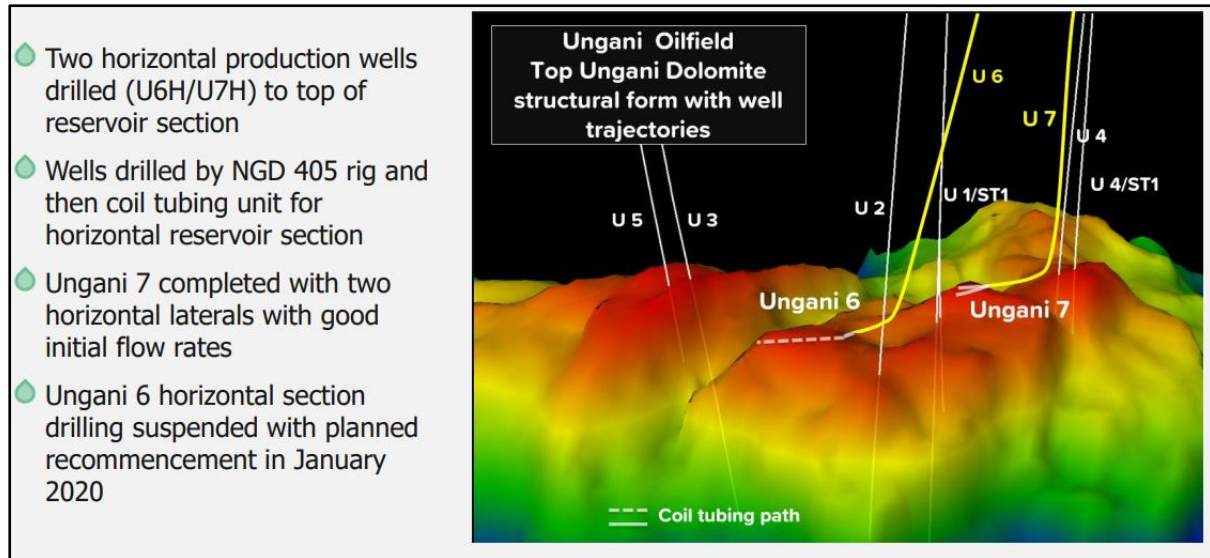
Production peaked at 1,900 barrels of oil per day (bopd) in the June 2018 quarter. Subsequently, lower than expected flow rates and offline production wells (particularly Ungani 4 in 3Q and 4Q FY18) plus ongoing well interventions and maintenance, resulted in production rates dropping to below 1,000bopd. The Ungani 7H well was brought onto production during the December 2019 quarter and, in an Operations Update on 18 November 2019, BRU announced that field production had increased to some 1,700bopd. Following the tie-in of the Ungani 7H well, production from the Ungani field is via six (6) production wells – Ungani 1, Ungani 2, Ungani 4ST1, Ungani 5, Ungani Far West 1, and Ungani 7H.

Figure 6: Ungani Oilfield – well locations



Source: Company (September 2018 presentation)

Figure 7: Ungani Oilfield – development drilling program

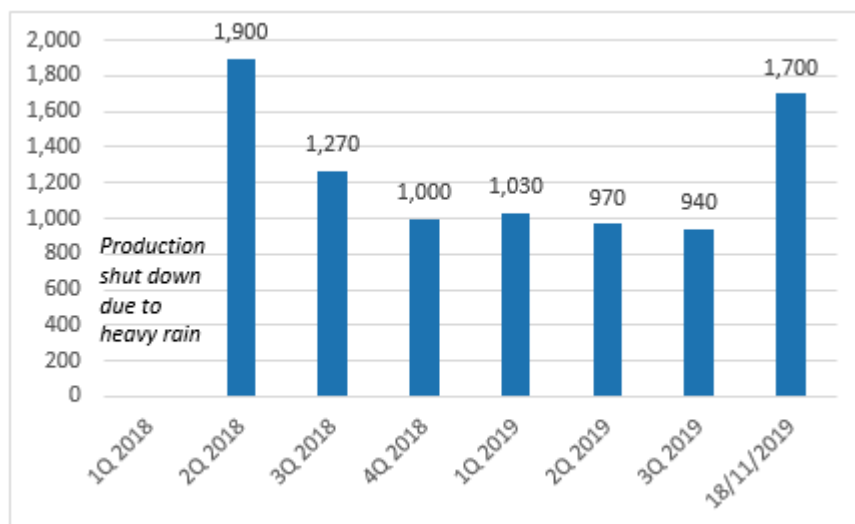


Source: Company (November 2019 presentation)

A proposed additional lateral at Ungani 7H has the potential to increase production further. Another planned horizontal well (Ungani 6H) could also help field production; development of this well was pushed out to 1Q2020 from 4Q2019 due to mechanical issues with the coil tubing unit.

In anticipation of a higher sustained level of output (relative to 3Q2018-3Q 2019 levels of ~1,000bopd) the Ungani Production Facility has been upgraded including the installation of additional fluid separation tanks and associated infrastructure. In addition, BRU is working with the group’s crude offtake partner and trucking contractor to get the right match with ship loadings to ensure production is not curtailed.

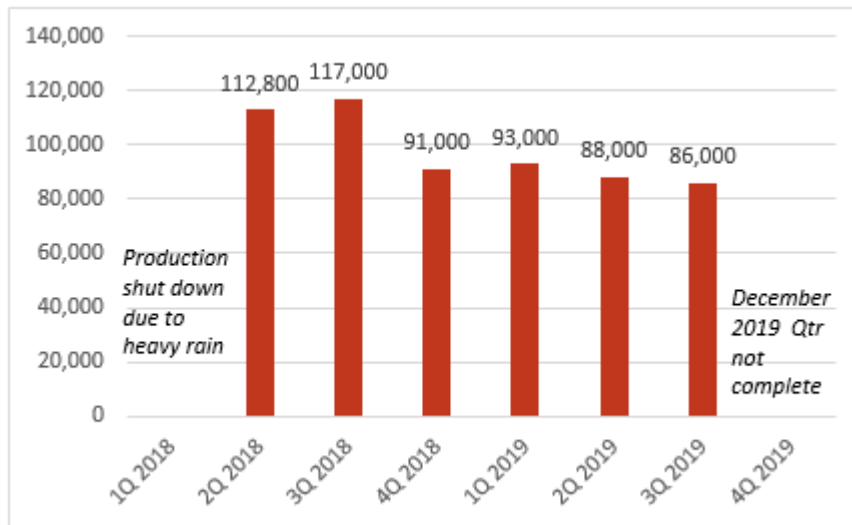
Figure 8: Ungani Oilfield – historical quarterly production (bopd) (gross)



Source: Company, compiled by State One Stockbroking

Note: BRU interest reduced to 50% following sale of 50% interest to Roc Oil effective 21 May 2018

Figure 9: Ungani Oilfield – historical quarterly production (bbls) (gross)



Source: Company, compiled by State One Stockbroking

Note: BRU interest reduced to 50% following sale of 50% interest to Roc Oil effective 21 May 2018

Exploration

Adoxa 1

(EP428; BRU – 100%)

The Adoxa 1 well was drilled in the September 2019 quarter with both BRU and ROC contributing 50% of the cost. Note: both parties agreed that the Adoxa 1 well would be funded outside the 80/20 farmin agreement. The well was drilled to a depth of 2,300m Wireline logs and pressure measurements identified a zone between 1,891 to 1,902m that had the potential to flow oil. All other zones where oil shows were noted were interpreted to be either tight (poor reservoir) or water wet. A 4½ inch casing string was run in the well to allow further testing in due course.

Lennard Shelf - Miani 1

(L8; BRU – 100%)

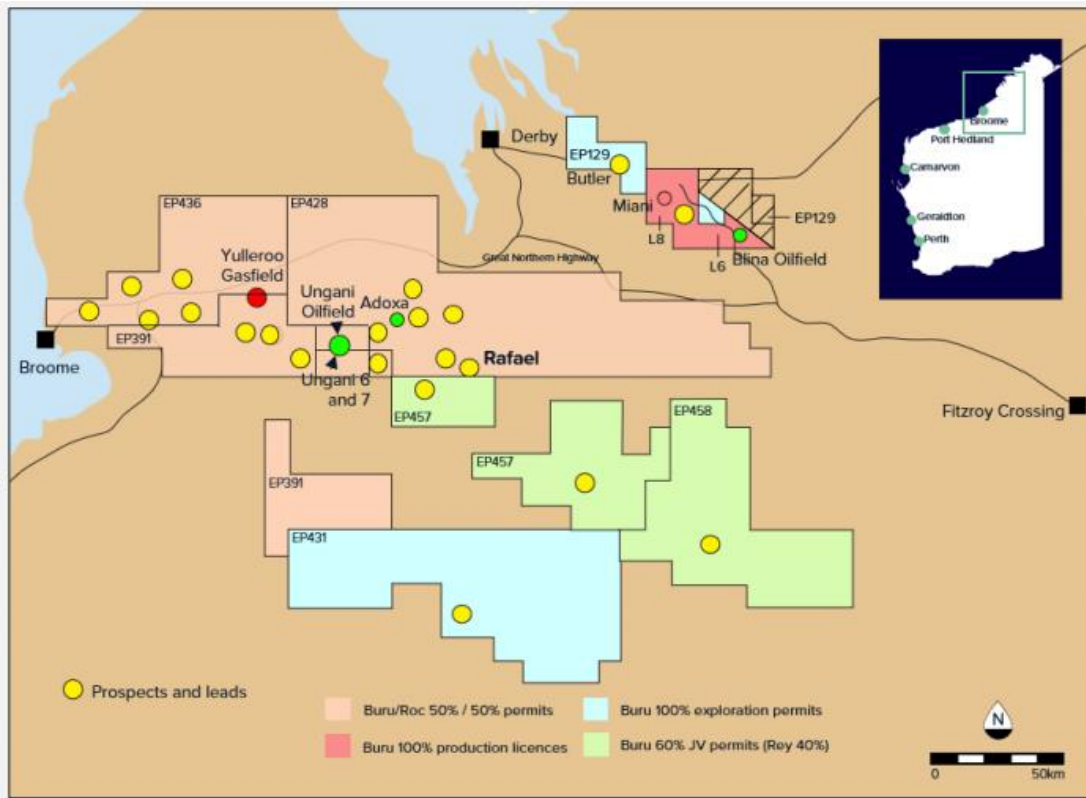
The Miani 1 exploration well, spudded on 2 October and drilled down to a depth of 3,060m. Elevated mud gas readings and oil shows in cutting samples were observed between 2,970m and 2,990m. However, logs have shown that the reservoirs associated with the shows are tight with no producible zones. The results of the well are being analysed further to determine the significance of the hydrocarbon shows and the implications for further exploration in this area. Note: the adjacent Blina and Sundown Oilfields (BRU, 100%) are shut-in and legacy production wells have been decommissioned. However, a reservoir model is currently being built to review the potential for a secondary recovery production operation.

Rafael 1

(EP428 – BRU 100%)

During the September 2019 quarter, and after careful review of the 2019 drilling program progress, BRU took the decision to defer the planned drilling of the Rafael 1 exploration well. The commercial decision to defer the drilling of this higher cost well was driven by several factors including the group's exposure to 100% of the costs of drilling the well under the joint venture sole risk provisions, following ROC's decision not to participate in its drilling this year.

Figure 10: BRU – exploration permits and production licenses



Source: Company

Yulleroo Gasfield

(EP391 & EP436; BRU – 100%)

On 18 January 2018, BRU announced that RISC Advisory (RISC) completed an independent assessment of the tight gas and hydrocarbon liquid resources of the Yulleroo Field within exploration permits EP391 and EP436. RISC estimated 2C Contingent Resources (net to BRU) of 714PJ sales gas and 24.9MMbbls of associated liquids, with additional Prospective Resources (net to Buru) of 303PJ sales gas and 11.9MMbbls associated liquid.

Project development of these unconventional (tight) Resources was put on hold due to the WA Government’s moratorium on hydraulic fracturing (fracking). In September 2019, the moratorium on existing petroleum titles was lifted – however fracking will remain banned over 98% of the state, including the Dampier Peninsula. BRU has been working with the Government to ensure that the boundaries of the “frack free zone” are appropriate in relation to the group’s existing petroleum titles. Agreement has been reached that the Broome township and water supply areas in BRU’s existing petroleum titles will form part of the Dampier Peninsula fracking exclusion zone.

Importantly, a review of the Yulleroo Resource in 2018 identified several horizons where there is potential for conventional gas accumulations. A testing program to evaluate these conventional gas resources is underway.

Butler Sand Prospect

(EP129; BRU – 100%)

The Butler undrilled exploration prospect is an onshore conventional gas, condensate and oil prospect in the Lennard Shelf that straddles BRU’s EP129 and Rey Resources (ASX:REY) and Doriemus’ (ASX:DOR) jointly owned EP487.

In April 2019, independent consulting group ERCE estimated the prospect’s gross un-risked mean Prospective Resource at 3.14TCF of recoverable gas and as associated 42 million barrels of condensate. This equates to a regionally significant Prospective Resource of 3,580PJ_e (gross).

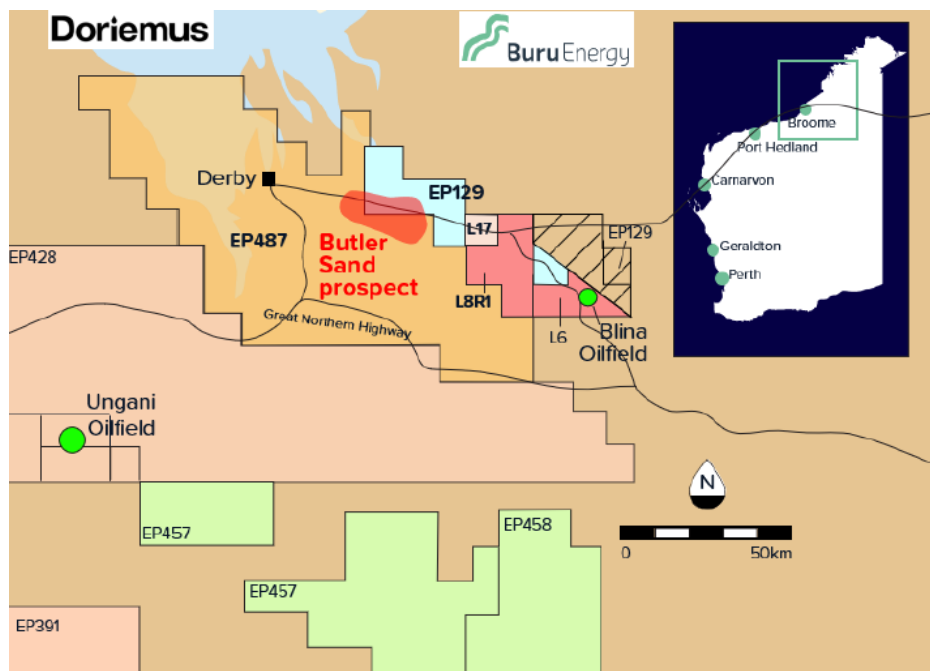
The Prospective Gas Resource at BRU’s EP129 alone is estimated at some 1.875TCF or just under 2,000PJ. Converting even a portion of this to Contingent Resources (and further to Reserves) would add significant value to the group. BRU and DOR have been in discussions on drilling a well (Butler 1) to a total depth of up to 4,000m at a location in EP487 close to the boundary of EP129.

Figure 11: Prospective recoverable gas resources in the Butler Sand Prospect by permit and equity interest

Permit	Butler Sand Gross Unrisked Prospective Gas Resources (Bscf)				Company Equity Interest	Butler Sand Net Unrisked Prospective Gas Resources (Bscf)				COS
	1U	2U	3U	Mean		1U	2U	3U	Mean	
EP487	385	1,055	2,410	1,264	Doriemus 50%	193	528	1,205	632	16%
EP129	581	1,567	3,564	1,875	Buru 100%	581	1,567	3,564	1,875	
Total	966	2,622	5,973	3,139						

Source: Buru Energy and Doriemus joint ASX announcement (11 April 2019)

Figure 6: Location of Butler Sand prospect



Source: Buru Energy and Doriemus joint ASX announcement (11 April 2019)

Forecast revenue - Ungani Oilfield

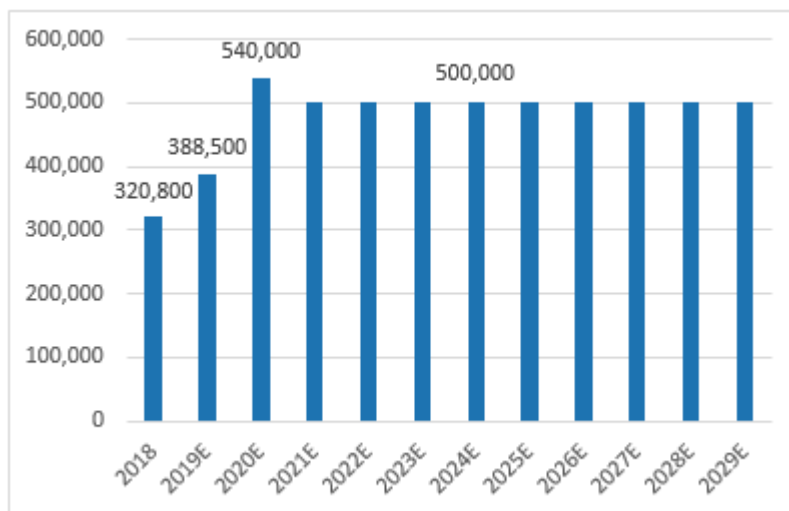
Production

Our forecast oil production and sales figures are for the Ungani Oilfield only. We do not assume commercial hydrocarbon production from any other field over our forecast period.

Based on quarterly reports, we calculate 2019 YTD production (i.e., to September 2019) at some 267,000bbls (gross). Assuming average December 2019 quarter production of 1,350bopd, we calculate full year 2019 production at 388,500bbls (gross) – 192,000bbls net to BRU. Assuming average production at 1,500bopd in FY20E, we calculate FY20E's production at 540,000bbls (gross) – 270,000bbls net to BRU.

For modelling purposes, we assume nine years' production post FY20E at 500,000bbls/per annum (gross). Cumulative FY18-FY29E forecast production of 5.75MMbbls is ~85% of Ungani's April 2016 recoverable 2C Contingent Resource estimate of 6.65MMbbls.

Figure 12: Ungani Oilfield – forecast annual oil production (bbls) (gross)



Source: Company, State One Stockbroking forecasts

Sales

Based on shipment announcements, we calculate sales for 2019 amount to ~316,000bbls (gross) – 23,000bbl on 1 January 2019 (part of a 70,000bbl shipment loaded between 31 Jan 2018 and 1 Jan 2019), 70,000bbl on 12 March 2019, 74,000bbls on 23 May 2019, 75,000bbls on 12 August 2019, and 73,757bbls on 1 November 2019.

The timing of ship loads and storage constraints at the Port of Wyndham mean that sales and production are unlikely to match over any 12-month period. For modelling purposes however, we assume that from FY20E, sales and production are one and the same.

Thus, in FY20E we forecast oil sales of 540,000bbls (gross) – equivalent to 7.2 shipments (of 75,000bbls); in FY21E onwards we assume annual sales of 500,000bbls - equivalent to 6.7 shipments. We note that BRU is currently looking into improving the road haulage and shipping logistics to improve economics and flexibility as production output increases relative to levels seen over the past 12 months.

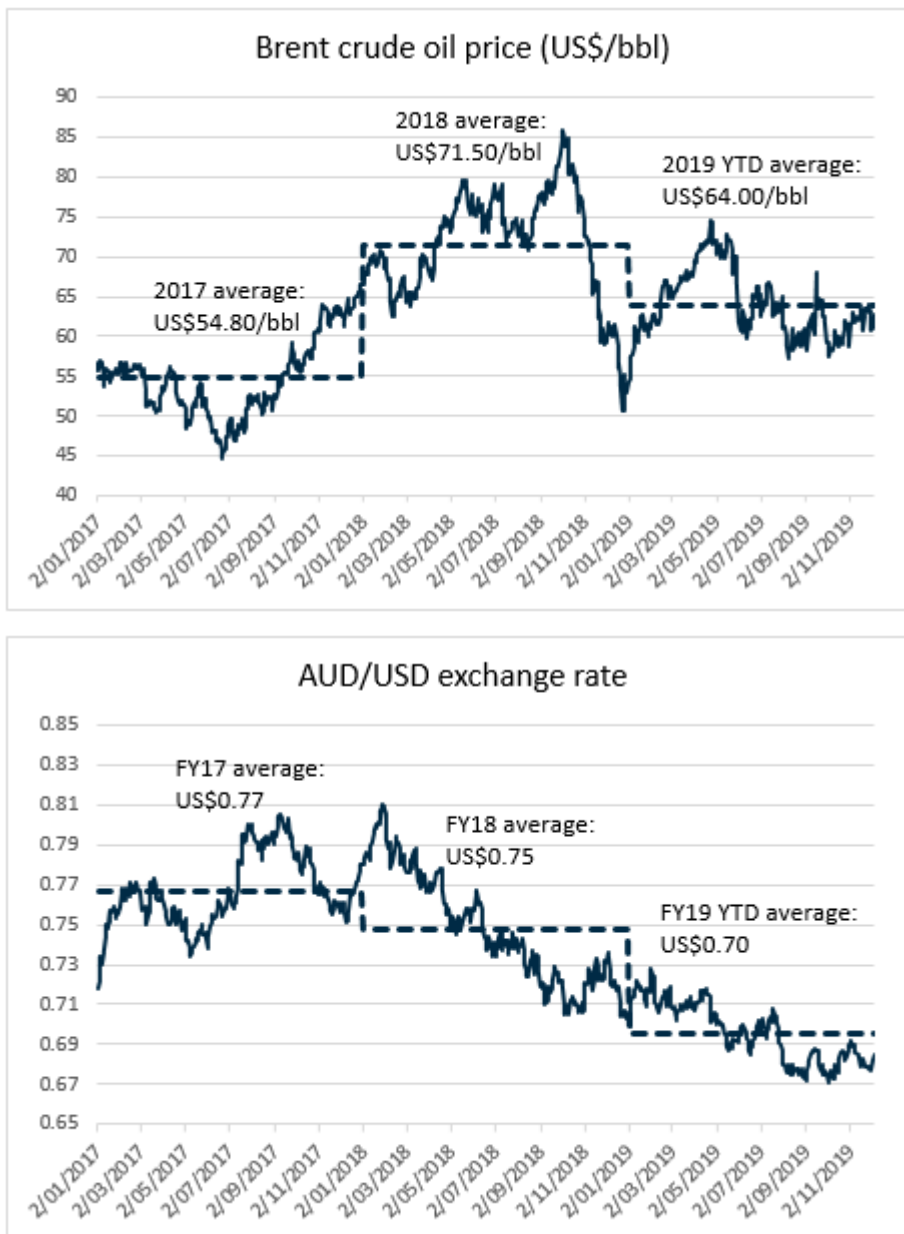
Average received price (A\$/bbl)

The price received FOB Port of Wyndham is the realized Brent linked oil price less the buyer's fixed marine transport discount. Based on the revenue figure disclosed, we calculate that the FOB price for most recent lifting – 73,757bbls (gross) on 1 November 2019 – was A\$80/bbl. Management state that the previous lifting – 75,413bbls (gross) - was completed on 11 August 2019 at a provisional FOB price of (also) A\$80/bbl.

We calculate that the ARP BRU receives is at a 11% discount to the prevailing underlying A\$ Brent crude oil price.

Our base case assumes a flat (real) Brent crude oil price of US\$61.50/bbl (slightly below the current spot Brent) and a constant US\$0.70 exchange rate (slightly stronger than the current spot exchange rate).

Figure 13: Brent crude oil price and AUD:USD (Jan 2017- Present)



Source: IRESS, Sate One Stockbroking

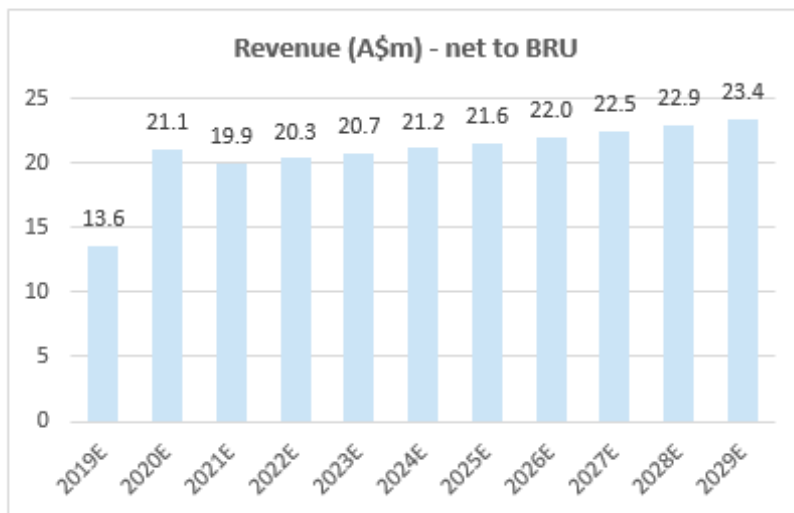
Forecast revenue profile

Predicated on our production and price profiles, we forecast FY20E revenue of A\$21.1m (net to BRU), +55% on FY19E's forecast revenue of A\$13.6m; the increase is due to our forecast uplift in production/sales.

Our forecast revenue profile thereafter is effectively flat (in real terms) on the back of a forecast flat production profile of 500,000bbls per annum and 2%pa escalation in the underlying Brent crude oil price environment.

Figure 14: Forecast revenue profile

	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Brent crude (US\$/bbl)	-	61.5	63	64	65	67	68	69	71	72	73
AUD:USD	-	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Brent crude (A\$/bbl)	-	88	90	91	93	95	97	99	101	103	105
ARP discount (%)	-	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%
ARP (A\$/bbl)	-	78	80	81	83	85	86	88	90	92	93
Production (bbls) (gross)	388,500	540,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Sales (bbls) (gross)	315,757	540,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Revenue (A\$m) (gross)	-	42	40	41	41	42	43	44	45	46	47
BRU interest (%)	-	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
BRU revenue (A\$m)	13.6	21.1	19.9	20.3	20.7	21.2	21.6	22.0	22.5	22.9	23.4



Predicated on a forecast increase in oil production to 1,500bopd in 2020E from an average of 1,079bopd in 2019E, we forecast oil production increasing by 39% to 540,000bbls (gross) in 2020E from 388,500bbls (gross) in 2019E.

This forecast increase in oil production underpins our forecast increase in revenue between 2019E and 2020E.

Note: FY19E revenue calculated from sum of FY19 interim financials, the September 2019 quarter revenue and the 4 November 2019 shipment announcement

Directors Source: Company website.

Mr Eric Streitberg, Executive Chairman

Mr Streitberg has more than 40 years of experience in petroleum geology and geophysics, oil and gas exploration and oil and gas company management. He was a founding shareholder and held the position of Managing Director of ARC Energy Limited from 1997 until August 2008, during which time ARC Energy Limited was transformed from a junior oil and gas exploration company into a mid-size Australian oil and gas producer. He was also the founding shareholder and Managing Director of Discovery Petroleum which was a key participant in the renaissance of the Perth Basin as a significant gas producer until the takeover of that company in 1996. Prior to that he held various senior international exploration roles with Occidental Petroleum and BP. He was a founding shareholder and Non-Executive Director of Adelphi Energy Limited from 2005 until its takeover in 2010. He is a founding shareholder of Buru Energy and has been a Director since its listing in October 2008.



Ms Eva Howell, Independent Non-Executive Director

Ms Howell has over 40 years of experience in the oil and gas industry in several technical and managerial roles, primarily with Amoco Corporation, Apache Energy Ltd and Woodside Energy Ltd. She is currently a director of MMA Offshore Ltd.

Ms Howell has previously served on ASX-listed company boards including Downer EDI Ltd and Tangiers Petroleum (as Executive Chairman). She also served on the boards of the Fremantle Port Authority, the Australian Petroleum Production and Exploration Association, and as a board member and President of the Australian Mines and Metals Association. She is a graduate of the Australian Institute of Company Directors.



Mr Robert Willes, Independent Non-Executive Director

Mr Willes has over 25 years of extensive international experience in the oil and gas and energy industries. He is the Managing Director of Challenger Energy Ltd (ASX:CEL) and has previously served on a number of boards including the Australian Petroleum Production and Exploration Association (APPEA), North West Shelf Gas Pty Ltd, North West Shelf Liaison Co. Pty Ltd, North West Shelf Australia LNG Pty Ltd, North West Shelf Shipping Services Co. Pty Ltd, Carbon Reduction Ventures Pty Ltd and Perth Centre for Photography.



His early career with BP involved several positions in petroleum product supply, trading and marketing, and as a lead negotiator for numerous gas transactions in Europe. He subsequently joined BP's Group Mergers and Acquisitions team, where he led the divestments of Burmah Castrol's Chemicals Division and Great Yarmouth Power Ltd, and advised the Corporation on a number of acquisition opportunities. In Australia, Robert was BP's General Manager of the North West Shelf LNG Project. Robert also had overall accountability for BP's interests in the Browse LNG and Greater Gorgon LNG Projects, and for Business Development activities in Asia Pacific.

Mr Shane McDermott, CFO and Company Secretary

Mr McDermott, CA, AGIA, BComm (Accounting and Finance) has an accounting and auditing background having worked at a large international accounting practice for five years at its Perth office before joining Buru Energy in 2009. He is a member of the Institute of Chartered Accountants Australia and an Associate of the Governance Institute of Australia.



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