

## Liquids-Rich Gas in the offing for Beetaloo-Carp 1 region

Empire Energy Group Limited (ASX:EEG) is a junior oil and gas producer/explorer, with onshore Northern Territory (NT) and US oil/gas assets. EEG has the largest tenement position (28.9m acres) in the highly prospective Greater McArthur Basin, which includes the Beetaloo Sub-basin. The material uplift in EEG's 2C/2U gas/liquids resource base, after the purchase of the Pangaea-EMG JV Beetaloo Sub-Basin acreage lifts stated 2C Contingent Resources to 199Bcf gas/3.5mmbbls liquids, with significant upside potential. The NT energy basins are fast developing as liquids rich gas, strategic bolsters for east coast Australia's future energy needs, and potential supply for Darwin's expanding LNG export terminals, amid strong policy/funding support from Territory and Federal governments. EEG recently lodged a gas Discovery Notice from its EP187 Carpentaria-1 well, after yielding an instantaneous peak flow rate of >1.6 mmscf/day from the stacked Velkerri target shales, with strong, above expectation liquids content. EEG has been awarded up to \$21m in Federal grants, supporting up to three horizontal appraisal wells (25% total costs, including seismic) to advance Beetaloo commercial evaluation.

## Business model

Empire Energy Group (EEG) is a junior oil and gas producer/exploration company, focused on maturing its portfolio of onshore, long-life oil and gas fields. The company holds substantial exploration acreage (28.9m acres) in the world-class, McArthur-Beetaloo basins Northern Territory). EEG is looking to progress evaluation activity to support reserve bookings and underpin early gas development opportunities. Success could see first cash flow within 24-36 months (RaaS estimate), assisted by LPG liquid "credits", assuming existing pipeline infrastructure links and upgrades are delivered in parallel; supported by Federal government "Strategic Plan" infrastructure funds and EEG drilling grants of up to \$21m.

## Liquids-rich gas results progress EEG's LPG business case

EEG has released very encouraging follow-up flow test results from Carpentaria-1, importantly demonstrating a high LPG content (21% of the raw gas stream). The relative zonal contributions from each of the target shale zones (A, Intra A/B, B and C) also support a high confidence level of potentially commercial prospectivity across the entire Velkerri section. Strong gas contributions were reported from both the B and C Velkerri zones, with Intra A/B also exhibiting >20% output. Although noting this is one data point, the liquids content is well above our expectation and offers significant commercial optionality for EEG. A recent Senate Inquiry has upheld the Federal Government's Beetaloo Cooperative Drilling Program aiming to accelerate regional energy developments. Next steps: a) Complete Carpentaria-1 test work (targeting late-September; b) complete regional infill 2D seismic acquisition; c) commence Carpentaria-2 horizontal multi-stage appraisal. The company is well-funded with gross cash ~A\$28m on-hand as at 27-Aug.

## Our midpoint valuation is \$1.04/share (\$622m)

Our valuation range for EEG is \$400m-\$738m (\$0.64-\$1.19/share), with \$622m or \$1.04/share the mid-point. With several event drivers emerging over the next 6-12 months, there is the potential for further uplift to the valuation.

### Historical earnings and RaaS Advisory estimates

Year end	Revenue (A\$m)	Gross Profit (A\$m)	NPAT reported (A\$m)	OCFPS (AUD cps)	EPS Adj (AUD cps)	Price/Book (x)
12/19a	7.8	1.7	(17.3)	0.69	(9.31)	3.9
12/20a	6.5	1.2	(7.7)	(0.61)	(2.73)	2.2
12/21e	7.5	2.8	(4.4)	(0.19)	(0.70)	1.6
12/22e	7.6	2.8	(3.7)	0.09	(0.59)	1.6

Source: Company data, RaaS estimates for FY21e and FY22e

## Energy exploration & production

30<sup>th</sup> August 2021

### Share details

ASX Code	EEG
Share price	\$0.29
Market Capitalisation	\$173M
Shares on issue	597M
Gross cash	~A\$28.0M

### Share performance (12 months)



### Upside Case

- EEG's EP187 Velkerri shale work programs generate substantial Beetaloo energy (gas/liquids) business case
- Further McArthur-Beetaloo work programs generate significant commercial outcomes
- EEG drilling success generates high-value LT strategic partnership(s) & funding options

### Downside Case

- Beetaloo flow rates prove uncommercial, negatively impacting permit values
- Equity issue financing becomes highly dilutive to future share capital growth
- Fracking success in NT/Qld pushes onshore energy prices to sub-economic levels.

### Board of Directors

Alex Underwood	Managing Director/CEO
Paul Espie AO	Non-Executive Chairman
Dr John Warburton	Non-Executive Director
Peter Cleary	Non-Executive Director
Louis Rozman	Non-Executive Director
Paul Fudge	Non-Executive Director

### Company contacts

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\*The analyst holds shares

## Exhibit 1: Financial Summary

EMPIRE ENERGY GROUP LTD		EEG			
YEAR END		Dec			
NAV	A\$mn	622			
SHARE PRICE	A\$cps	0.29			
		priced as of close trading			
MARKET CAP	A\$mn	173			
ORDINARY SHARES	M	597			
OPTIONS	M	57			

PROFIT & LOSS	A\$000s	2019	2020	2021E	2022E
Revenue		7,763	6,464	7,460	7,637
Cost of sales		(6,026)	(5,266)	(4,684)	(4,831)
Gross Profit		1,737	1,198	2,776	2,806
Other revenue					
Other income		224	1,039	263	267
Exploration written off					
Finance costs		(916)	(755)	(808)	(790)
Impairment		(1,677)	0	0	(2,505)
Other expenses		(18,806)	(8,682)	(7,133)	(6,502)
EBIT		(13,783)	(7,013)	(3,004)	122
Profit before tax		(17,069)	(7,485)	(4,357)	(3,696)
Taxes		(194)	(200)	0	0
NPAT Reported		(17,263)	(7,684)	(4,357)	(3,696)
Underlying Adjustments		(5,971)	0	0	0
NPAT Underlying		(23,234)	(7,684)	(4,357)	(3,696)
CASHFLOW	A\$000s	2019	2020	2021E	2022E
Operational Cash Flow		1,822	(1,970)	573	735
Net Interest		(2,712)	(755)	(614)	(593)
Taxes Paid		(194)	(200)	(50)	(100)
Other					
Net Operating Cashflow		(1,084)	(2,924)	(92)	42
Exploration		0	(856)	0	0
PP&E		0	(12)	0	(133)
Petroleum Assets		(2,658)	(12,841)	0	0
Net Asset Sales/other		27,698	0	0	0
Net Investing Cashflow		25,040	(12,841)	(18,390)	(10,000)
Dividends Paid					
Net Debt Drawdown		(26,943)	(1,845)	(723)	(1,233)
Equity Issues/(Buyback)		11,562	17,640	36,782	153
Other					
Net Financing Cashflow		(15,381)	15,795	35,309	(1,080)
Net Change in Cash		8,575	29	16,827	(11,038)
BALANCE SHEET	A\$000s	2019	2020	2021E	2022E
Cash & Equivalents		14,106	14,146	30,973	19,935
O&G Properties		37,505	46,442	125,488	135,755
PPE + ROU Assets		711	1,716	1,199	1,181
Total Assets		56,594	66,563	158,648	157,613
Debt		9,251	7,824	8,284	7,551
Total Liabilities		37,089	36,327	45,537	45,857
Total Net Assets/Equity		19,505	30,236	113,112	111,757
Net Cash/(Debt)		4,855	6,322	22,689	12,384

NET PRODUCTION		2019	2020	2021E	2022E
Crude Oil	kb	89	2	2	2
Nat Gas	mmcf	1,778	1,630	1,646	1,663
TOTAL	kboe	385	273	276	279

Product Revenue	A\$mn	7.8	6.5	7.5	7.6
Cash Costs	A\$mn	(6.0)	(5.3)	(4.7)	(4.8)
Ave Price Realised	A\$/boe	20.16	23.64	27.02	27.40
Cash Costs	A\$/boe	(15.65)	(19.26)	(16.96)	(17.33)
Cash Margin		4.51	4.38	10.05	10.07

nm = not meaningful  
na = not applicable

COMMODITY ASSUMPTIONS		2019	2020	2021E	2022E
Realised oil price	US\$/b	59.76	39.48	67.00	66.39
Realised gas price	US\$/mcf	2.44	1.96	3.26	3.17
Exchange Rate	A\$:US\$	0.6958	0.6989	0.7603	0.7502

RESOURCES and RESERVES		assumed post transaction					
		Contingent Resources		Prospective Resources			
		1C	2C	3C	1U	2U	3U
Northern Territory							
Gas (Bcf)		58.1	198.5	501.9	11,979	42,124	138,006
Liquids (Mb)		1.0	3.5	14.2	169	792	3,608
TOTAL (Mboe)		10.6	36.6	97.8	2,165	7,813	26,609
US Onshore		1P	2P	3P			
Gas (Bcf)		24	34	38			

PRODUCTION		2019	2020	2021E	2022E
Year end Dec					
Crude oil	kboe	89	2	2	2
Natural Gas	mmcf	1778	1630	1646	1663
Total	kboe	385	273	276	279

EQUITY VALUATION		Low	Mid	High	Low	Mid	High
NT							
Contingent		\$153	\$191	\$220	\$0.26	\$0.32	\$0.37
Prospective		\$223	\$402	\$485	\$0.37	\$0.67	\$0.81
US Onshore							
Appalachian		\$5	\$10	\$15	\$0.01	\$0.02	\$0.03
		\$381	\$603	\$720	\$0.64	\$1.01	\$1.21
Net Cash (Debt)		\$23	\$23	\$23			
Corporate Costs		-\$5	-\$5	-\$5			
TOTAL		\$400	\$622	\$738	\$0.67	\$1.04	\$1.24
Shares on Issue		597 mn					

RATIO ANALYSIS		2019	2020	2021E	2022E
Shares Outstanding	M	263	324	622	622
EPS (pre sig items)	US\$cps			(0.70)	(0.59)
EPS	Acps	(9.31)	(2.73)	(0.70)	(0.59)
PER	x			na	na
OCFPS	Acps	0.69	(0.61)	(0.19)	0.09
CFR	x			na	na
BVPS	Acps	7.5	13.4	18.2	18.0
Price/Book	x	3.9x	2.2x	1.6x	1.6x
ROE	%			na	na
ROA	%			na	na
Gross Profit/share	Acps	6.6	3.7	4.5	4.5
EBITDAX	A\$M	2.7	2.9	3.7	3.7
EBITDAX Ratio	%	34.2%	44.6%	49.3%	48.5%

Source: RaaS Advisory

# FINANCIAL SERVICES GUIDE

RaaS Advisory Pty Ltd

ABN 99 614 783 363

Corporate Authorised Representative, number 1248415

of

BR SECURITIES AUSTRALIA PTY LTD

ABN 92 168 734 530

AFSL 456663

Effective Date: 6<sup>th</sup> May 2021

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- our services
- how we transact with you
- how we are paid, and
- complaint processes

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