

“Discovery” – it’s a gas, gas, gas (liquids) at Carpentaria-1

Empire Energy Group Limited (ASX:EEG) is a junior oil and gas producer and explorer with onshore Northern Territory (NT) and US oil and gas assets. EEG holds the largest acreage position (28.9m acres) in the highly prospective Greater McArthur Basin, which includes the Beetaloo Sub-basin. After a material uplift in its 2C/2U gas/liquids resource base, from the 100% buyout of the Pangaea-EMG JV Beetaloo tenements for ~\$57m (@30cps), 2C Contingent Resources now lie @ 199Bcf gas/3.5mmbbls liquids. The NT region is fast developing as a gas-liquids rich strategic bolster for east coast Australia’s future energy needs plus Darwin’s expanding LNG export terminals, amid strong policy support from both Territory and Federal governments. EEG has lodged a gas Discovery Notice with the NT government from its Carpentaria-1 well, after yielding an instant peak flow rate to surface of >1.6 mmscf/day and stabilised flow rates of 0.37mmscf/day over 72-hours from the vertical fracture stimulation of 4-stacked Velkerri shale targets, with CO₂ levels <1%. This is a positive early sign for the business development case for Carpentaria-1.

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 is the 2nd largest conventional gas producer in the US NY State and holds substantial exploration acreage (28.9m acres) in Australia’s Northern Territory, McArthur-Beetaloo basins, considered world-class. EEG will be looking to generate commercial gas flow rates to underpin reserves bookings and support an early development opportunity. Success could see first cash flow within 24-36 months (RaaS estimate), assisted by liquids “credits”, assuming existing pipeline infrastructure links and upgrades are delivered in parallel; supported by generous Federal government “Basin Strategic Plan” funding.

Hydrocarbon Discovery validates Beetaloo south-east address

EEG has lodged a gas Discovery Notice with the Northern Territory government, following strong hydrocarbon flows to surface (0.37mmscf/day over 72hrs) from the vertical fracture stimulation of the stacked Velkerri A, A+B, B and C, gas-rich target shales of its Carpentaria-1 well on EP187, comparable to other Beetaloo Sub-basin well results and at shallower depths. Better still, CO₂ levels are below 1%. The results add further weight to EEG’s strategy of generating positive future cashflows from horizontal wells on its south-eastern Beetaloo property. The next steps are to complete a 90-day extended test, evaluate the proportionate contribution from each frack zone and determine the relative gas/liquids composition, in preparation for its upcoming horizontal programme. Overhanging this positive development has been the move in the Federal Senate to initiate an inquiry into the economic, social and environmental consequences, including groundwater and aquifer systems, of future Beetaloo developments. This inquiry will be chaired by the Greens. We note that the Federal Government has no jurisdiction over the regulation of the Beetaloo sub-basin; that is the province of the Northern Territory Government which has given bi-partisan support to the development of the Beetaloo.

Valuation is \$0.98/share or \$608m

Our valuation range for EEG is \$385m to \$728m or \$0.62-\$1.17/share with \$608m or \$0.98/share being the mid-point. With several event drivers emerging over the next 6-12 months, there is the potential for further uplifts 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)	4.3
12/20a	6.5	1.2	(7.7)	(0.61)	(2.73)	2.4
12/21e	6.4	1.6	(5.1)	(0.11)	(0.83)	1.8
12/22e	6.6	1.7	(4.8)	(0.08)	(0.77)	1.8

Source: Company data, RaaS estimates for FY21e and FY22e

Energy exploration & production

29th June 2021

Share details

ASX Code	EEG
Share price	\$0.325
Market Capitalisation	\$201.5M
Shares on issue	620M
Net cash	~\$35M
Gross cash	~\$44M

Share performance (12 months)



Upside Case

- EEG’s Carpentaria-1 Velkerri shale production/seismic program creates strong commercial gas/liquids business development case
- Further McArthur-Beetaloo work programs generate significant commercial outcomes
- EEG drilling success generates high-value LT strategic partnership(s) and funding options

Downside Case

- Beetaloo flow rates prove uncommercial, negatively impacting regional 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

Company contacts

Alex Underwood (MD/CEO)	+61 2 9251 1846 info@empiregroup.net
-------------------------	---

RaaS Advisory contacts

Melinda Moore*	+44 7500 227593 melinda.moore@raasgroup.com
Finola Burke*	+61 414 354 712 finola.burke@raasgroup.com

*The analyst holds shares

Exhibit 1: Financial Summary

EMPIRE ENERGY GROUP LTD					EEG					
YEAR END		Dec								
NAV	A\$m	611								
SHARE PRICE	A\$cps	0.33			priced as of close trading	28-Jun				
MARKET CAP	A\$m	202								
ORDINARY SHARES	M	620								
OPTIONS	M	57								
PROFIT & LOSS					A\$000s	2019	2020	2021E	2022E	
Revenue		7,763	6,464	6,375	6,561					
Cost of sales		(6,026)	(5,266)	(4,725)	(4,885)					
Gross Profit		1,737	1,198	1,650	1,676					
Other revenue										
Other income		224	1,039	262	262					
Exploration written off										
Finance costs		(916)	(755)	(747)	(730)					
Impairment		(1,677)	0	0	(2,465)					
Other expenses		(18,806)	(8,682)	(6,749)	(6,460)					
EBIT		(13,783)	(7,013)	(3,868)	(1,121)					
Profit before tax		(17,069)	(7,485)	(5,100)	(4,784)					
Taxes		(194)	(200)	0	0					
NPAT Reported		(17,263)	(7,684)	(5,100)	(4,784)					
Underlying Adjustments		(5,971)	0	0	0					
NPAT Underlying		(23,234)	(7,684)	(5,100)	(4,784)					
CASHFLOW					A\$000s	2019	2020	2021E	2022E	
Operational Cash Flow		1,822	(1,970)	569	618					
Net Interest		(2,712)	(755)	(571)	(556)					
Taxes Paid		(194)	(200)	(50)	(100)					
Other										
Net Operating Cashflow		(1,084)	(2,924)	(51)	(38)					
Exploration		0	(856)	0	0					
PP&E		0	(12)	0	(133)					
Petroleum Assets		(2,658)	(12,841)	(6,061)	0					
Net Asset Sales/other		27,698	0	0	0					
Net Investing Cashflow		25,040	(12,841)	(18,388)	(10,000)					
Dividends Paid										
Net Debt Drawdown		(26,943)	(1,845)	(1,170)	(1,222)					
Equity Issues/(Buyback)		11,562	17,640	35,240	153					
Other										
Net Financing Cashflow		(15,381)	15,795	33,320	(1,069)					
Net Change in Cash		8,575	29	14,881	(11,107)					
BALANCE SHEET					A\$000s	2019	2020	2021E	2022E	
Cash & Equivalents		14,106	14,146	29,027	17,920					
O&G Properties		37,505	46,442	125,485	135,748					
PPE + ROU Assets		711	1,716	1,198	1,181					
Total Assets		56,594	66,563	156,588	155,484					
Debt		9,251	7,824	7,826	7,104					
Total Liabilities		37,089	36,327	45,113	45,461					
Total Net Assets/Equity		19,505	30,236	111,475	110,023					
Net Cash/(Debt)		4,855	6,322	21,201	10,816					
NET PRODUCTION						2019	2020	2021E	2022E	
Crude Oil	kb	89	2	2	2					
Nat Gas	mmcf	1,778	1,630	1,679	1,729					
TOTAL	kboe	385	273	282	290					
Product Revenue	A\$m	7.8	6.5	6.4	6.6					
Cash Costs	A\$m	(6.0)	(5.3)	(4.7)	(4.9)					
Ave Price Realised	A\$/boe	20.16	23.64	22.64	22.64					
Cash Costs	A\$/boe	(15.65)	(19.26)	(16.78)	(16.86)					
Cash Margin		4.51	4.38	5.86	5.78					
COMMODITY ASSUMPTIONS						2019	2020	2021E	2022E	
Realised oil price	US\$/b	59.76	39.48	59.48	56.84					
Realised gas price	US\$/mcf	2.44	1.96	2.71	2.63					
Exchange Rate	A\$:US\$	0.6958	0.6989	0.7644	0.7623					
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						
		0	Mb	24	62					
		0	Mb	24	47					
TOTAL (Mboe)						86	109			
						2P	3P			
US										
Gas			Bcf	34.4	38.2					
EQUITY VALUATION					Low	Mid	High	Low	Mid	High
NT										
Contingent		\$149	\$186	\$214	\$0.24	\$0.30	\$0.34			
Prospective		\$218	\$398	\$485	\$0.35	\$0.64	\$0.78			
US Onshore										
Appalachian		\$5	\$10	\$15	\$0.01	\$0.02	\$0.02			
		\$371	\$594	\$714	\$0.60	\$0.96	\$1.15			
Net Cash (Debt)		\$22	\$22	\$22						
Corporate Costs		-\$5	-\$5	-\$5						
TOTAL		\$388	\$611	\$731	\$0.63	\$0.98	\$1.18			
Shares on Issue		620 mn								
RATIO ANALYSIS					2019	2020	2021E	2022E		
Shares Outstanding	M	263			324	618	619			
EPS (pre sig items)	US\$cps	(0.83)			(0.77)	(0.83)	(0.77)			
EPS	Acps	(9.31)			(2.73)	(0.83)	(0.77)			
PER	x	na			na	na	na			
OCFPS	Acps	0.69			(0.61)	(0.11)	(0.08)			
CFR	x	na			na	na	na			
BVPS	Acps	7.5			13.4	18.0	17.8			
Price/Book	x	4.3x			2.4x	1.8x	1.8x			
ROE	%	na			na	na	na			
ROA	%	na			na	na	na			
Gross Profit/share	Acps	6.6			3.7	2.7	2.7			
EBITDAX	A\$M	2.7			2.9	2.5	2.6			
EBITDAX Ratio	%	34.2%			44.6%	40.0%	39.3%			

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: 6th May 2021

About Us

BR Securities Australia Pty Ltd (BR) is the holder of Australian Financial Services License (“AFSL”) number 456663. RaaS Advisory Pty Ltd (RaaS) is an Authorised Representative (number 1248415) of BR.

This Financial Service Guide (FSG) is designed to assist you in deciding whether to use RaaS’s services and includes such things as

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

Contact Details, BR and RaaS

BR Head Office: Suite 5GB, Level 5, 33 Queen Street, Brisbane, QLD, 4000

RaaS. 20 Halls Road Arcadia, NSW 2159

P: +61 414 354712

E: finola.burke@raasgroup.com

RaaS is the entity providing the authorised AFSL services to you as a retail or wholesale client.

What Financial Services are we authorised to provide? RaaS is authorised to

- provide general advice to retail and wholesale clients in relation to
 - Securities
- deal on behalf of retail and wholesale clients in relation to
 - Securities

The distribution of this FSG by RaaS is authorized by BR.

Our general advice service

Please note that any advice given by RaaS is general advice, as the information or advice given will not take into account your particular objectives, financial situation or needs. You should, before acting on the advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Prospectus, Product Disclosure Statement or like instrument. As we only provide general advice we will not be providing a Statement of Advice. We will provide you with recommendations on securities

Our dealing service

RaaS can arrange for you to invest in securities issued under a prospectus by firstly sending you the offer document and then assisting you fill out the application form if needed.

How are we paid?

RaaS earns fees for producing research reports. Sometimes these fees are from companies for producing research reports and/or a financial model. When the fee is derived from a company, this is clearly highlighted on the front page of the report and in the disclaimers and disclosures section of the report.

We may also receive a fee for our dealing service, from the company issuing the securities.

Associations and Relationships

BR, RaaS, its directors and related parties have no associations or relationships with any product issuers other than when advising retail clients to invest in managed funds when the managers of these funds may also be clients of BR. RaaS’s representatives may from time to time deal in or otherwise have a financial interest in financial products recommended to you but any material ownership will be disclosed to you when relevant advice is provided.

Complaints

If you have a complaint about our service you should contact your representative and tell them about your complaint. The representative will follow BR’s internal dispute resolution policy, which includes sending you a copy of the policy when required to. If you aren’t satisfied with an outcome, you may contact AFCA, see below. BR is a member of the Australian Financial Complaints Authority (AFCA). AFCA provide fair and independent financial services complaint resolution that is free to consumers.

Website: www.afca.org.au; Email: info@afca.org.au; Telephone: 1800931678 (free call)

In writing to: Australian Financial Complaints Authority, GPO Box 3, Melbourne, VIC, 3001.

Professional Indemnity Insurance

BR has in place Professional Indemnity Insurance which satisfies the requirements for compensation under s912B of the Corporations Act and that covers our authorized representatives.

DISCLAIMERS and DISCLOSURES

This report has been commissioned by Empire Energy Group Ltd prepared and issued by RaaS Advisory Pty Ltd. RaaS Advisory has been paid a fee to prepare this report. RaaS Advisory's principals, employees and associates may hold shares in companies that are covered and, if so, this will be clearly stated on the front page of each report. This research is issued in Australia by RaaS Advisory and any access to it should be read in conjunction with the Financial Services Guide on the preceding two pages. All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable. Opinions contained in this report represent those of the principals of RaaS Advisory at the time of publication. RaaS Advisory provides this financial advice as an honest and reasonable opinion held at a point in time about an investment's risk profile and merit and the information is provided by the RaaS Advisory in good faith. The views of the adviser(s) do not necessarily reflect the views of the AFS Licensee. RaaS Advisory has no obligation to update the opinion unless RaaS Advisory is currently contracted to provide such an updated opinion. RaaS Advisory does not warrant the accuracy of any information it sources from others. All statements as to future matters are not guaranteed to be accurate and any statements as to past performance do not represent future performance.

Assessment of risk can be subjective. Portfolios of equity investments need to be well diversified and the risk appropriate for the investor. Equity investments in listed or unlisted companies yet to achieve a profit or with an equity value less than \$50 million should collectively be a small component of a balanced portfolio, with smaller individual investment sizes than otherwise. Investors are responsible for their own investment decisions, unless a contract stipulates otherwise. RaaS Advisory does not stand behind the capital value or performance of any investment. Subject to any terms implied by law and which cannot be excluded, RaaS Advisory shall not be liable for any errors, omissions, defects or misrepresentations in the information (including by reasons of negligence, negligent misstatement or otherwise) or for any loss or damage (whether direct or indirect) suffered by persons who use or rely on the information. If any law prohibits the exclusion of such liability, RaaS Advisory limits its liability to the re-supply of the Information, provided that such limitation is permitted by law and is fair and reasonable. Copyright 2021 RaaS Advisory Pty Ltd (A.B.N. 99 614 783 363). All rights reserved.