

NT gas policy now set – it's back to EEG

Empire Energy Group Limited (ASX:EEG) is an oil and gas producer/developer, with onshore Northern Territory (NT) and US oil/gas production assets. EEG has the largest tenement position in the highly prospective Greater McArthur Basin, which includes the Beetaloo Sub-basin. The NT energy basins are fast developing as strategic high-calorific gas bolsters for east coast Australia's future domestic requirements, growing Gladstone LNG ullage and potential supply for Darwin's expanding LNG export terminals, amid funding support from Territory and Federal governments. The recent announcement from the NT Government on implementing all of the recommendations of the Pepper Inquiry has paved the way for gas developments to proceed with regulatory certainty – it's now back to EEG to move along the commercialisation pathway. EEG continues to represent a pure, independent, and highly leveraged exposure to the transformational potential of the NT basins. Incremental operational data supports the commercial case. Revised resource certification is under way with results likely to hand by end-May, to underpin FEED planning and the approvals process. We suggest the NT announcement in combination with the tabled Gas Code of Conduct provides the regulatory clarity required for EEG to underpin a final investment decision (FID) and first gas over the next 18 months to two years, on an early-mover gas project.

Business model

Empire Energy Group Limited (EEG) is an oil and gas development and production company, focused on maturing its portfolio of onshore, long-life oil and gas opportunities. The key asset is the substantial tenement holdings across the world-class McArthur-Beetaloo basins in the NT where testing and evaluation data underpins the potential for material increases in gas resource bookings supporting an early gas development option. In practical terms, we suggest the company can be considered to be in a pre-development phase, particularly with stronger regulatory certainty as recently announced. Success from this point should see EEG on an accelerated path to first gas.

The NT development pathway is set

With the announcement of the NT Government that it has implemented all 139 recommendations from the Pepper Inquiry, the regulatory path is clear for a go-ahead of full-scale gas development in the Territory. Importantly, the inquiry found that *"...industry risks could be managed if the recommendations were implemented in full."* EEG is now able to make applications for onshore gas projects and whilst we always considered this to be a lower-risk hurdle, certainty is always a good outcome. The regulations are very specific and should not be considered a rubber stamp by any measure. In combination with the recent release of the federal Gas Code of Conduct and lifting of gas price restrictions for small, domestic-supply projects, EEG projects proceed or not on economic grounds which at least can be considered with a defined and predictable governmental process. Independent technical analyses continue to support commerciality with a high degree of confidence. FEED studies and environmental applications are under way for next phase work and we are increasingly confident a potentially material de-risking across the portfolio can be delivered across the next 12 months. See [Empire Energy Report RaaS Update Report 1 4 May 2023](#) for more detail.

The valuation shows the size of the success case

Data to hand builds confidence in the economic and commercial case with re-rating events to come, particularly upgraded resource estimates to underpin a project sanction by end-2023. We maintain our base-case (mid-point) valuation at \$613mn (\$0.79/share) with an upside case to \$0.99/share). The success case at Carpentaria continues to build and could deliver valuation upside well in excess of our base case.

Energy

4 May 2023

Share Details

ASX code	EEG
Share price (3-May)	\$0.18
Market capitalisation	\$139M
Shares on issue	723M
Cash (current)	\$20.7M
Free float	~47%

Share Performance (12 months)



Upside Case

- Success cases at currently evaluating Carpentaria (-2H, -3H and -4V) wells delivering above-expectation testing data
- Delivery of initial 'P' certification to underpin commercial development case
- Securing a binding off-take agreement and/or a farm-in partner to offset market perceptions of future equity dilution

Downside Case

- Frack performance of C-3H in particular falls below expectations
- Continuing Federal Government development and approval hurdles slowing progress to first gas
- Continuing financing reliance through equity issues on weaker field data resulting in excessive share dilution

Board of Directors

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

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*Analyst holds shares

Regulatory Uncertainty Is Lifting – Now It’s About Technical Delivery

...as it should be.

In previous notes written through 2020 after the lifting of the moratorium on activity in the NT, we raised a number of potential areas of concern related to the Pepper (Fracking) Inquiry and Review, most notably around the seismic limits associated with fracking.

We did highlight at that time the bigger operators (Origin [ASX:ORG] and Santos [ASX:STO]) had both indicated **the new regulations were workable**. We saw the potential operating and capital impacts on smaller explorers given the resources required for community engagement, compliance and regulation, as a critical area of risk.

Since the dates of those notes, EEG and other operators have drilled a number of wells with a high number of frack stages without issue, suggesting our risk concerns were unfounded and the incremental cost to operations as likely only being marginal – a good outcome for the operators and the play.

Whilst it has taken some time for the enacting of the recommendations, work programmes have been continuing in the background, we believe under the premise that the recommendations were in force in practical terms.

A detailed listing of the recommendations and the status of all items can be referenced at -

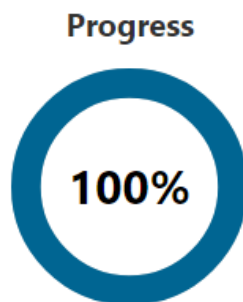
Source: <https://hydraulicfracturing.nt.gov.au/action-items>

Exhibit 1: Done – the framework has been set

Implementation progress

The NT Government accepted all 135 recommendations of the Scientific Inquiry into Hydraulic Fracturing in the Northern Territory. Three of the recommendations were split into two parts, resulting in a total of 138 implementation actions. The NT Government has determined implementation status of all 138 recommendations is now complete on the basis that the risks identified through the Inquiry have been mitigated to the extent that any residual risk is considered acceptable in the Northern Territory context and will be the subject of ongoing management. The detailed Final Implementation Report outlines the risk mitigations put in place and the ongoing monitoring and risk management approach.

Action item 16.1



That the Government implements all of the recommendations in this report.

We highlight and reference Item 5.7 that "...to minimise the risk of occurrence of seismic events during hydraulic fracturing operations, a traffic light system for measured seismic intensity, similar to that in the UK, be implemented."

An [Induced Seismicity Management Guideline 2022](#) (Guideline) has been developed in conjunction with Geoscience Australia. In December 2022, the Minister for Resources directed that all petroleum interest holders must legally comply with the Guideline.

Source: NT Government website; RaaS commentary

While we acknowledge there is continuing specific opposition to Beetaloo activities, we suggest that it is easiest to stop something before it has started. Reported commentary has highlighted recommendation 9.8 as one that has not been addressed:

That "...the NT and Australian governments seek to ensure that there is no net increase in the life cycle GHG emissions emitted in Australia from any onshore shale gas produced in the NT."

We believe this has already been addressed in the Safeguard Mechanism trumpeted by federal Labor and the Greens in March:

- Beetaloo projects **particularly singled out**;
- ...new gas developments supplying into LNG projects (not new LNG projects) need to be net zero from day 1; and
- ...incentives for **on-site abatement**

It's logical that Beetaloo gas at some point will be earmarked for export projects, but as we have commented in previous reports, **EEG with a lower capital and operating base, and exempt from price controls for market directed into domestic supply, can be extremely profitable on local gas sales up to 100PJ pa.**

EEG has an extremely low (<1%) CO₂ content and we can't see any emissions impost other than at the margin and the nominal costs of offsets as likely covered by higher gas pricing in any respect. See our report for more detail : [Empire Energy Group RaaS Update Report 1 4 May 2023](#)

It's Been A Big Two Weeks...And Risk Is Unwinding

With further encouragement from Carpentaria testing, particularly as the development well design is yet to be optimised and the nominal flow-rate threshold for commerciality (on normalisation) having been reached, the in-field activity is delivering the technical confidence.

FEED studies and environmental applications are under way for next phase works and a resources certification process is well advanced with results due by end-May with a significant upgrade to booked resources likely.

Now the regulatory environment looks set – there are always more boxes to tick but in combination with small companies being exempt from gas price restrictions, the pathway (and roadmap) to first gas looks defined.

Exhibit 4: Financial Summary

EMPIRE ENERGY GROUP LTD			EEG				
YEAR END			Dec				
NAV	A\$m		\$0.65				
SHARE PRICE	A\$cps		\$0.18		priced as of close trading 3-May		
MARKET CAP	A\$m		139				
ORDINARY SHARES	M		773				
OPTIONS	M		10				
COMMODITY ASSUMPTIONS							
Realised oil price	US\$/b	2020	2021	2022E	2023E		
		39.48	67.98	94.25	79.69		
Realised gas price	US\$/mcf	1.96	3.72	6.42	2.69		
Exchange Rate	A\$:US\$	0.6989	0.7514	0.6946	0.6757		
RATIO ANALYSIS							
Shares Outstanding	M	2020	2021	2022E	2023E		
		324	612	773	773		
EPS (pre sig items)	US\$cps		(2.41)	(0.54)	(0.64)		
EPS	Acps	(2.73)	(2.41)	(0.54)	(0.64)		
PER	x		na	na	na		
QCFPS	Acps	(0.61)	(5.35)	37.40	2.60		
CFR	x		na	na	na		
DPS	Acps						
Dividend Yield	%						
BVPS	Acps	13.4	23.8	23.7	24.4		
Price/Book	x			0.8x	0.7x		
ROE	%			na	na		
ROA	%			na	na		
(Trailing) Debt/Cash	x						
Interest Cover	x						
Gross Profit/share	Acps	3.7	5.7	5.9	2.7		
EBITDAX	A\$M	2.9	3.0	6.7	3.0		
EBITDAX Ratio	%						
EARNINGS							
Revenue	A\$000s	2020	2021	2022E	2023E		
		6,464	8,502	12,662	7,652		
Cost of sales		(5,266)	(5,005)	(8,135)	(5,585)		
Gross Profit		1,198	3,497	4,527	2,068		
Other revenue							
Other income		1,039	1,606	1,927	296		
Exploration written off							
Finance costs		(755)	(568)	(677)	(669)		
Impairment		0	0	(2,705)	0		
Other expenses		(8,682)	(14,332)	(8,511)	(6,817)		
EBIT		(7,013)	(11,305)	(1,851)	(3,707)		
Profit before tax		(7,485)	(10,835)	(3,983)	(4,749)		
Taxes		(200)	(213)	(213)	(200)		
NPAT Reported		(7,684)	(11,048)	(4,196)	(4,949)		
Underlying Adjustments		0	0	0	0		
NPAT Underlying		(7,684)	(11,048)	(4,196)	(4,949)		
CASHFLOW							
Operational Cash Flow	A\$000s	2020	2021	2022E	2023E		
		(1,970)	(7,044)	13,796	1,701		
Net Interest		(755)	(568)	(677)	(452)		
Taxes Paid		(200)	(213)	(187)	(120)		
Other							
Net Operating Cashflow		(2,924)	(2,460)	20,082	1,356		
Exploration		(856)	0	0	(4,181)		
PP&E		(12)	0	(133)	(5)		
Petroleum Assets		(12,841)	(12,965)	(54)	0		
Net Asset Sales/other		0	0	0	0		
Net Investing Cashflow		(12,841)	(24,443)	(50,419)	(12,000)		
Dividends Paid							
Net Debt Drawdown		(1,845)	(817)	(793)	(500)		
Equity Issues/(Buyback)		17,640	39,359	28,928	0		
Other							
Net Financing Cashflow		15,795	38,542	28,550	(500)		
Net Change in Cash		29	11,639	(1,786)	(11,144)		
BALANCE SHEET							
Cash & Equivalents	A\$000s	2020	2021	2022E	2023E		
		14,146	25,650	24,092	12,948		
O&G Properties		46,442	34,900	85,635	97,931		
PPE + ROU Assets		1,716	1,306	1,328	860		
Total Assets		66,563	158,823	207,710	207,480		
Debt		7,824	8,027	8,127	7,311		
Total Liabilities		36,327	49,502	80,240	80,067		
Total Net Assets/Equity		30,236	109,320	127,470	127,413		
Net Cash/(Debt)		6,322	17,622	15,965	5,636		
Gearing dn/(dn+e)							
NET PRODUCTION							
Crude Oil	kb	2020	2021	2022E	2023E		
		2	2	2	2		
Nat Gas	mmcf	1,630	1,676	1,727	1,727		
TOTAL	kboe	273	282	290	290		
RESOURCES and RESERVES							
		Contingent Resources			Prospective Resources		
		1C	2C	3C	1U	2U	3U
Northern Territory							
Gas (Bcf)		138.8	553.5	1,707.8	12,561	42,928	139,488
Liquids (Mb)		0.9	5.0	14.1	170	797	3,633
TOTAL (Mboe)							
		24.0	97.2	298.8	2,264	7,952	26,881
US Onshore							
		1P	2P	3P			
Gas (Bcf)		28	38	42			
EQUITY VALUATION							
		Risked Range			Low	Mid	High
A\$m		Low	Mid	High	A\$/share		
Northern Territory							
Contingent Resources		320	369	464	\$0.41	\$0.48	\$0.60
Scenario Weighting		3%	2%	1%			
Prospective Resources		144	197	236	\$0.19	\$0.26	\$0.31
US Onshore							
Appalachian		36	44	61	\$0.05	\$0.06	\$0.08
TOTAL		499	610	762	\$0.65	\$0.79	\$0.99
Net cash/(debt)		7					
Corporate costs		(5.0)					
TOTAL		501	613	764	\$0.65	\$0.79	\$0.99
Shares on issue (mn)		773 mn					

Source: RaaS Advisory, company data



FINANCIAL SERVICES GUIDE

RaaS Advisory Pty Ltd

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Corporate Authorised Representative, number 1248415

of

BR SECURITIES AUSTRALIA PTY LTD

ABN 92 168 734 530

AFSL 456663

Effective Date: 6th May 2021

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- complaint processes

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

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