Research as a Service

Empire Energy Group Ltd

Update Report

…and we're off! Carpentaria-5H has spudded

Energy

21 November 2024

Empire Energy Group Limited (ASX:EEG) is gas development company, with onshore Northern Territory (NT) gas exploration and development assets. EEG has the largest tenement position in the highly prospective Greater McArthur Basin, which includes the Beetaloo Sub-basin. It is our preferred exposure to the gas play potential, with greater leverage to proposed pilot production (holding assets at 100%) and potentially a shorter lead time to first gas. Having secured regulatory approvals for its Environmental Management Plan, Carpentaria-5H (C-5H) has spudded with drilling and casing anticipated to be completed by end-2024. Funding options continue to progress, with EEG selecting its preferred financier. Drilling an extended (3,000m) horizontal well is demonstrably achievable as evidenced in previous EEG works in the Carpentaria area and as noted in concurrent operations in other parts of the basin. We remind that EEG has signed a binding GSA (gas sales agreement) with the Northern Territory Government, for 75 PJ over ten years effectively covering the output of the pilot project through commissioning and ramping to target production, with a buyer option over an additional minimum of 10 TJd on production rates achieving >100 TJd. Importantly, this GSA should be considered bankable and management continues to work towards an FID point. Finalising the debt facilities will be critical to that end. With the commencement of drilling, our confidence in the timing to first gas production is rising. The end game looms large.

Business model

Empire Energy Group Limited (EEG) is a gas exploration and development company, well-funded for in-ground works**,** holding ~$34m as at 18-November. With the signing of a binding GSA with the Northern Territory Government and the commencement of drilling of the Carpentaria-5H well, the path to first gas is clear. Work continues towards delivering the remaining regulatory approvals and we note the engagement of local land-owner groups through the pre-drilling preparation and on-going works. We consider Empire as being in a pre-development phase with a material and growing early-mover advantage. The GSA effectively provides the anchor point on which financing can be completed. The path to growth begins with the first PJ and first gas can unlock the organic opportunities within the Territory and access to eastern coast markets as we see it. The company remains well funded through the development drilling and beneficially holds its licences at 100%.

Drill and frack for gas rates by end-Q1 CY25

That's the plan. We remind that the C-5H well is designed for a 3,000m horizontal (hz) completion with 60 frack stages as a template for future development wells. The operational update from other, concurrent development drilling[1] demonstrates that the well design is deliverable. The company is targeting a drill-stimulate-test (IP30) result by around end Q1 CY25 which should maintain the timeline to first gas in H2 2025. It is worth re-highlighting that the (Rosalind Park) gas processing plant is ready to go with nameplate upside to contract rates. First gas means cashflow and that is a game changer. Our 18 November interview with Managing Director Alex Underwood on C-5H and the Northern Territory Government approvals is available to view here.

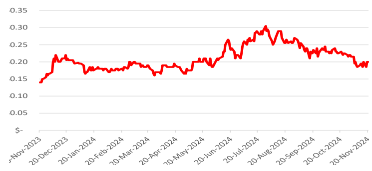
We maintain our NAV outlook with success case upside

The market continues to eschew the small cap gas space, despite EEG being in pre-development with critical drilling (C-5H) now underway. Gas prices point to the commercial opportunity and EEG is set to crystallise an early mover advantage on the success case. Our NAV estimate is $0.81-1.24/share **with a mid-point (base case) of $0.92/share** (on a fully diluted basis). On critical positive outcomes associated with drilling and securing of the remaining regulatory approvals we'd anticipate the share price to better reflect the lower risk and higher value nature of gas reserves, as first production approaches.

Share Details

ASX code	EEG
Share price (20-Nov)	$0.20
Market capitalisation	$203M
Shares on issue (fully diluted)	1,017M
Cash (18-Nov)	~$34M
Free float	~49.5%

Share Performance (12 months)



Upside Case

- Above expectation results from the C-5H well with operational results through 1Q25
- Completing pilot project financing post the signing of the GSA via debt and/or a farm-in partner
- Securing remaining regulatory approvals - this absolutely defines the production case

Downside Case

- Under expectation results from C-5H and look-through results from other development drilling on the play
- Delays to securing the remaining regulatory approvals and financing could push back the timing of first gas
- Higher capex driving expectation of further and potentially material equity capital requirements

Board of Directors

Alex Underwood	Managing Director / CEO
Peter Cleary	Chair
Dr John Warburton	Non-Executive Director
Louis Rozman	Non-Executive Director
Karen Green	Non-Executive Director

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***Analyst holds shares**

Drilling Underway! Things Hotting Up In The Beetaloo

Nothing ever happens in isolation, so in aggregate with other current drilling activity (Shenandoah South project), Empire has commenced drilling operations with the spudding of Carpentaria-5H[2] (C-5H), with works to be undertaken by the Ensign #965 rig, having mobilised to site after completing a campaign of deep, tight gas wells in Central Queensland.

The C-5H well is the key operation underpinning Empire's proposed Carpentaria pilot gas project scheduled to commence production by around mid-2025, supplying gas into its contract with the NT Government.

This well is planned to be drilled with a 3,000m hz section and up to 60 frack stages (every 50m). It's a biggie…and very important in terms of de-risking the development model, but we believe, there are some intrinsic fail-safes in the design for EEG.

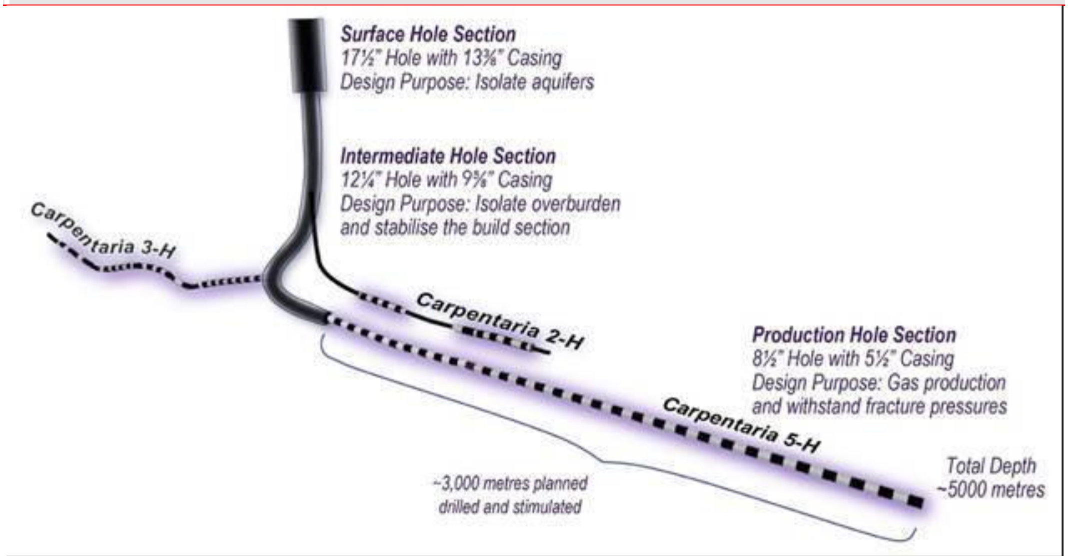
The completed wells C-2H and -3H were drilled back-back from the same pad and we see this acting as a 'synthetic' 3,000m+ well containing a significant number of frack stages approximating the zonal density of the planned evaluation programme.

We would also note that previous stimulation campaigns trialled a number of different styles (more experimental campaigns in nature), whereas C-5H will be stimulated using slick-water operations only.

Additionally, the C-5H well will be completed in 5 ½ " hole (versus 4 ½") delivering a >50% increase in cross-sectional area (multiplied by 3,000m) removing previous capacity constraints.

More steel in the ground (bigger pipe), a longer hz section and greater frack density will mean a higher capital cost than previous drilling campaigns, however, particularly with some $6m already expended on drilling preparations as per the Quarterly operations update, we believe the company should be adequately funded through the C-5H campaign.

Exhibit 1: Connecting the dots for a 3,000m horizontal section



Source: Company data [2]

As at 18-November, the well was at 315m in top hole and drilling ahead.

The Environment Management Plan has been approved[3]

Approval of the Environment Management Plan for the pending pilot project has been received and covers–

- …up to 9 new wells including fracking;
- Four new well pads;
- Production from up to 12 wells (new and existing)
- Installation of the gas plant, water handling facilities and connections to the McArthur River Pipeline.

The remaining regulatory approval needed for the pilot project to reach FID is the "Beneficial Use of Test Gas" to formally allow gas sales which requires finalised agreements with the landowners. We remind that the landowner groups were engaged on pre-drilling site works preparation and we suspect, on on-going maintenance works. The company has indicated that discussions are considered as being 'well advanced'.

We suggest that first gas in H2 2025 is achievable

With the C-5H well now underway, the company has reiterated its target of delivering a drill-stimulate-test (IP30) result by around end Q1 CY25 which should maintain the timeline to first gas in the second half of-2025.

Peer group drilling results have clearly demonstrated that deep wells with 3,000m horizontal sections can be completed in five weeks and for EEG allowing 45 days seems a little conservative. However, we'd rather it takes longer for getting it right the first time. noting that having previously drilled the C-2H and -3H wells from the same pad to the same depths, EEG should be well prepared and experienced with respect to potential geological and operational risks.

Post completion of the frack stimulation campaign, the well will be left to soak (recover frack fluid) before testing, but IP30 numbers should be available well before 30 June 2025.

Assuming a success-case, the pilot will consist of the C-2H, -3H and -5H wells with plant and additional kit expected on site by the beginning of the dry season (say early-April) for first gas production as previously indicated.

Quarterly highlights for period ending 30-Sep…cashed up and ready to go[4]

The focus of activity in the quarter remained directed towards the planning and execution of the administrative requirements towards first gas – regulatory submissions, finalising and commencing the preparation for drilling C-5H, securing development capital and binding gas sales. We can see ticks in all of those boxes, particularly in the securing of a binding GSA with the Territory Government[5],[A]. The key terms are listed following -

- 75PJ over 10 years at up to 25TJd;
- Priced on an ex-field 'take or pay' basis with the pricing point being the connection into the McArthur River pipeline. The price is CPI adjusted (full indexation);
- Contract to commence with first gas in 2025; and
- The NT Government also holds an option (right) to take 10% of any gas from 100 TJd +

The company has also selected its preferred financier, which with binding gas sales, should now provide a clear pathway to finalise debt facilities in support of taking FID.

Whilst there are remaining regulatory approvals to complete, the period out to end-2024 is now about drilling and delivering the development model. We consider the remaining regulatory risks to be low with the key future risk being operational, with respect to the completion and results from C-5H.

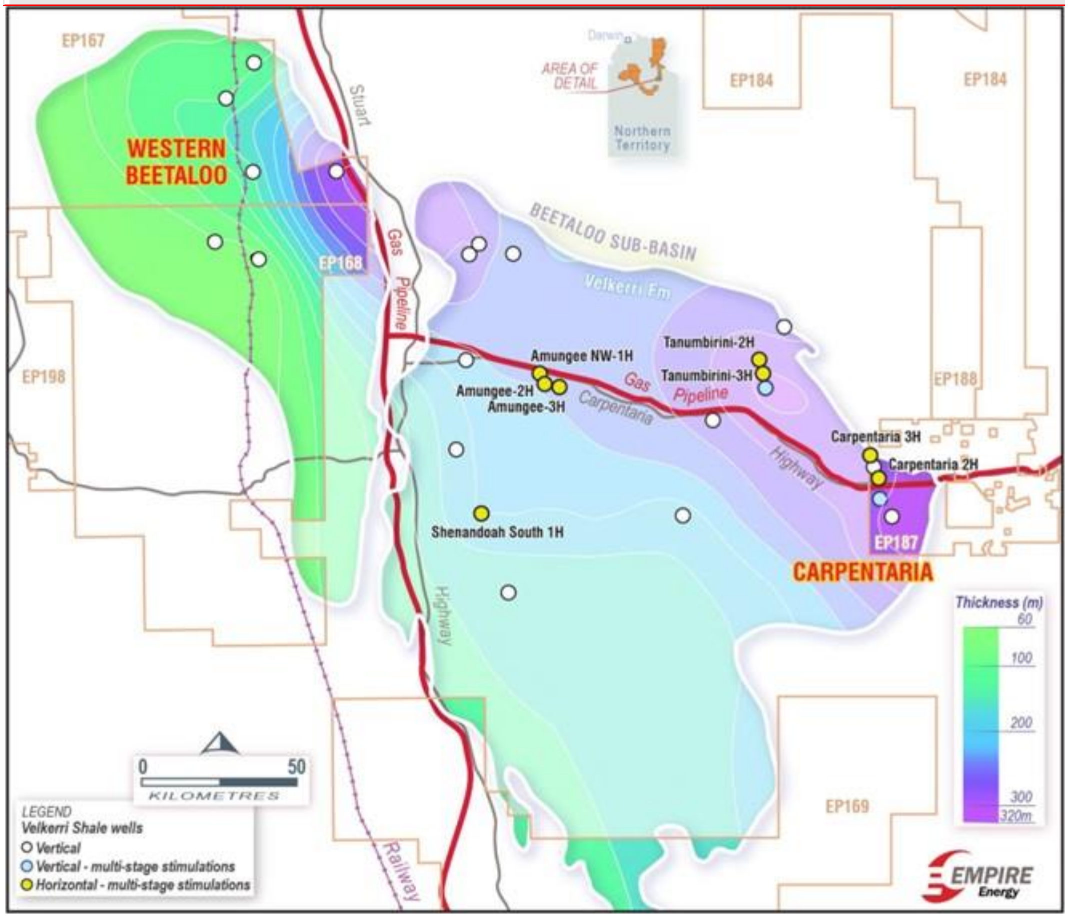
Exhibit 2: Quarterly data for period ending 30 September 2024.

Operations	
Carpentaria-Pilot Project …drilling is underway.	Long lead items (casing and a wellhead) have been secured and drilling services contracted with pre-drill capital expenditure of ~$6mn. *Subsequent to the end of the period -* The Carpentaria-5H well has commenced drilling and as at 18-Nov was drilling ahead at 315m . The company reported[4] that *"…some of the traditional owners are working on (the) well pad site [...] consistent with our strategy to maximise benefits for local landowners and communities".* A number of personnel continue to work on the site.
Corporate	
GSA with the NT Government secured to underpin the pilot project. The company has selected its 'preferred financier'. Environmental plans for EP-167 and -168 have been granted	**Gas sales agreement secured**[5]. **Pipeline access agreements secured** with the NT Government completing the installation of a connection into the McArthur River Pipeline to accommodate gas from the proposed pilot project. With the securing of the GSA the remaining financing should progress noting that a preferred financier has been selected and firm discussions are underway. We have commented on this previously[A], that *"…with offtake secured, the metrics of the project would (likely) be increasingly attractive to prospective partners"*. The remaining **requisite regulatory approval** is for the 'Beneficial Use Of Test Gas' which requires final agreements with the tradional owners. An on-country meeting is scheduled for November. The **Environmental Management Plans** for EP -167 and -168 have been approved (refer **Exhibit 3**) and provide for - - up to 377.5km of 2D seismic acquisition; - 6 drilling pads; and - The drilling of 6 wells (vertical or horizontal) with fracking and testing
Financing position remains strong with **a $4m R&D grant received post 30-Sep**. *Subsequent to the end of the period –* …we note that cash at hand as at 18-Nov was estimated to be ~$34m	Over the period the company – - Capitalised $6.2m on early expenditure related to the Carpentaria Pilot Project - Expensed a further $2.7m related to EP 187 activities - …spent some $9.2m on exploration and evaluation - Received US$0.2m from Deferred Solar payments related to its Mutual Use Agreements with Connect Gen and expect to receive a further US$0.5m at or before 01/06/26.

Period Ending	**30-09-2023**	**31-12-2023**	**31-03-2024**	**30-06-2024**	**30-09-2024**
Cash (A$m)	15.0	17.3	12.0	51.6	39.8
Debt (A$m)	(15.1)	(8.8)	(8.8)	(6.2)	(6.2)
Net cash (A$m)	**na**	**8.5**	**3.1**	**45.4**	**33.6**

Source: Company data; RaaS commentary

Exhibit 3: Working the eastern flank with approvals in place for the western Beetaloo



Source: Company data [4]

Our Risk-Adjusted Valuation At The Asset Level Is Unchanged

Our valuation is set against a risk-weighted gas production success case, assigning a unit NPV based on long-term price assumptions over a 2P equivalent reserve base and applying a conversion ratio on 'C' gas to 2P. We apply our methodology over only that gas attributed to EP-187, being the critical development asset.

Exhibit 4: The NAV range continues to represent a material premium to the market price

		Risked range (A$m)			
		Low	Mid	High	
Northern Territory					
EP-187					
Contingent Resources		$743	$795	$996	EP-187 contains 2C volumes certified to 1,739PJ of which 1,364 PJ are attributed to the Carpentaria area.
Prospective Resources		$43	$107	$229	2U volumes are largely associated with ex EP 187 and ex-Pangaea tenements and represent longer-dated gas potential. The geological confidence level is relatively high on the look-through, but realisation will require extensive drilling campaigns.
		$786	**$902**	**$1,225**	
Net cash/(debt)			$40		As at 30-Sep
Corporate			($6)		
TOTAL		**$820**	**$935**	**$1,258**	
Shares issued (m) -fully diluted	1,017	$0.80	$0.92	$1.24	

Source: RaaS analysis; Risked ranges based on discretionary RaaS risk adjustments

The assumptions applied are discretionary and represent our consideration of the risk factors associated with commodity prices, the timing of commercialisation of long-dated gas and future capital costs. The assumptions and weightings are subject to potentially material change depending on delivered outcomes and actual received gas prices.

An early mover advantage appears there for the taking.

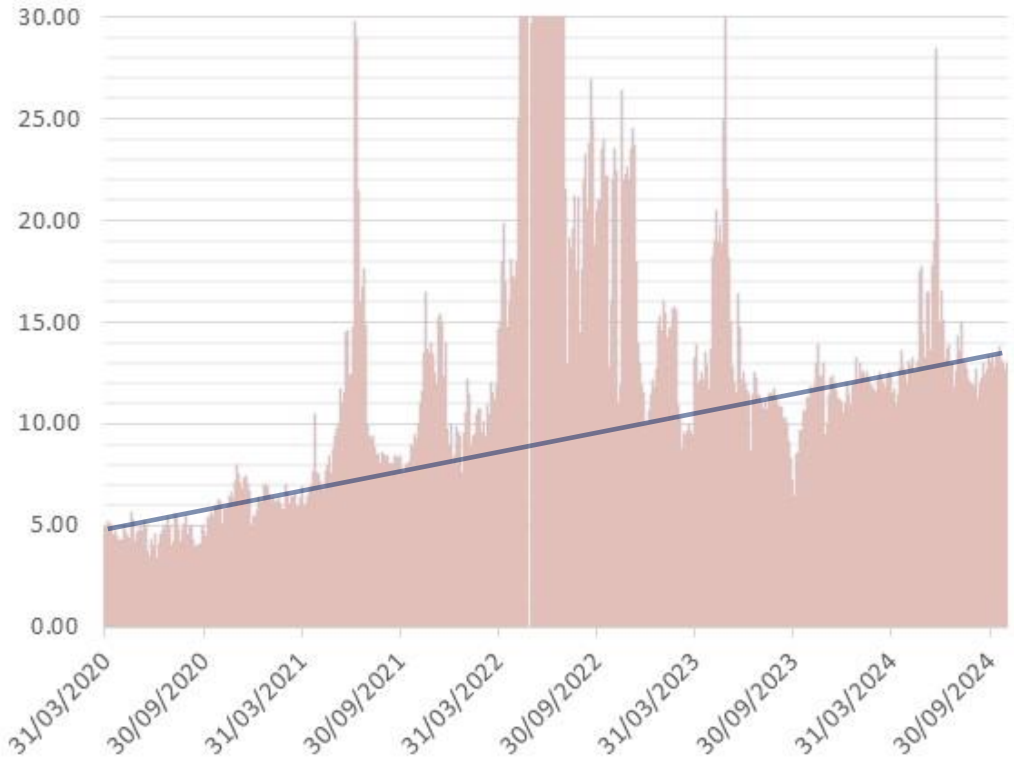
We have noticed increasingly positive anecdotal commentary and data with respect to the gas market model, particularly noting commentary from Woodside (ASX.WDS) as reported in an article in the Sydney Morning Herald (16 October) [6] suggesting that *"…setting up floating gas-import terminals in south-eastern Australia may be the only option left to prevent a domestic gas crisis this decade."*

Whilst we rightly think of Australia as holistically being long gas, the lack of development progress over an extended period means 'that' gas effectively remains locked away, whilst existing fields continue to produce out the developed resource (and NPV).

The commercial benefits to upstream operators of rising gas prices on simple demand-supply economics have not translated to an acceleration of new gas field start-ups, with broadly, increasing regulation (quantity and complexity) offsetting the commercial upside. In the absence of new gas with growth potential at scale, the supply model now appears to view import terminals as a realistic option.

In some respects, the Woodside comments could be considered as talking its own book, by promoting an import terminal leveraging its existing infrastructure in Bass Strait, but from the perspective of a 50% partner in the Bass Strait operations, Woodside is probably in the best position to know about the production decline issues associated with that major east coast gas supply source.

Exhibit 5: The spot gas price reflects the reality - it's on the up



Source: AEMO daily data (SYD ex-post STTM prices); trend line = RaaS estimate

We hold to our view that the projection of the timing and magnitude of gas supply gaps are based on a somewhat flawed model of decline curves and forecasts as provided by operators, where supply projections become inherently riskier the further into the future that data is pushed…the risk envelope grows.

We pose the scenario of a worst case being that demand for gas is more robust and production rates are lower than industry models suggest - decline curves for assets in late life come with potentially material error ranges and production rates can fall away much more rapidly than engineering curves predict.

The underlying pricing pressure is evident in the recent price history of the spot market (see **Exhibit 5**) as represented by the pricing in the Sydney STTM (short-term trading market), where the underlying (adjusted) trend shows a rise in the base trend from ~$5/gj in early 2020 through ~$12/gj 2024 to date.

On a simplistic basis the curve likely represents a faster shift in supply pressures versus any potential offsetting impact from demand destruction.

There likely won't be a better time than now to begin producing gas

Within this underlying thematic, the advantages for developers of new gas into a supply constrained market are very evident particularly when the anecdotal news and noise from industry points to a slowing in the roll-out of renewables projects and continuing reliance on gas as an important part of the energy system.

It's worthwhile noting recent commentary from Origin Energy (ORG.AX) citing *"…strong, medium- to long-term conviction that LNG will play an important role in the energy transition"*, whilst warning *"…of a* **"messy"** *transition to renewables…".* Origin was also quoted as saying that *"…renewable generation projects have been hamstrung by delays in approval and construction"*. [AAP 16-Oct] [7]

We posit that the pathway to the 'exit' of fossil fuels from the energy supply mix is going to be longer and slower than first thought and we like the generic description in the article – it will be **messy.**

Gas in a pre-development stage is valuable and with many projects either mired in the regulatory process or still at a very early evaluation (proof-of-concept) stage, notably the Mahalo, Shenandoah South and Deep Taroom Trough projects.

EEG in seeking to bring first gas to market by mid-2025 appears to hold a strong advantage and as we have stated a number of times – "the path to growth begins with the first PJ".

Beetaloo gas gaining favour as a viable option for gas supply at scale[8], [9]

We believe it is worthwhile appending recent commentary with respect to the Beetaloo as an emerging gas source for the east coast.

Commentary attributed to APA Group (ASX.APA) executive of operations Petrea Bradford suggested that developing gas reserves in the Beetaloo is *"…a potential solution to mitigating the east coast's looming* (supply) *shortfall"* adding that *"…gas is needed in the southern markets* (and) *to decarbonise Australia, we need gas to be there. The Beetaloo in particular provides an opportunity to assist and support in that transition*."

It should be noted that APA has partnered with Empire and Tamboran Resources (ASX:TBN) to 'scope' potential pipeline options to link into eastern markets in the success case.

The commentary can be interpreted as APA promoting its growth strategy. However, there is a growing realisation, both political and operational, that gas remains critically important as a material contributor in providing the nexus to a growing renewables platform for energy supply in Australia.

Interestingly against a background of tightening gas supply, Santos Limited (ASX.STO), in its 2024 Investor Day presentation, specifically highlights the importance of Beetaloo gas supply to its growth outlook, identifying its operated Beetaloo assets as a potential GLNG backfill opportunity from mid-2030 (Slides 51, 59-60) and also highlighting its EP161 permit (STO 75%) as -

- …the recognised sweet spot in the play;
- …being a 'large and scalable' supply option for 'eastern and northern LNG and domestic' markets;
- …with an appraisal campaign planned for 2026

We understand the development plan is targeting first gas in 2030, scaling up to take GLNG to 100% capacity by 2035 and beyond 2040.

References, Data Sources and Glossary

Note Reference	Document Ref	RaaS Reports	Date Published	Title
	[A]	EEG Empire Energy Group RaaS Update Report	05/08/2024	*A gas sales deal is a BIG tick heading towards first gas*
		Data referenced in this Report		
[1]		Tamboran Resources ASX release	13/11/2024	1Q activities report for period ending September-30
[2]		Empire Energy ASX release	18/11/2024	Carpentaria-5H drilling operations commence
[3]		Empire Energy ASX release	13/11/2024	NT Gov. Environmental Approval for Carpentaria received
[4]		Empire Energy ASX release	30/10/2024	Q3 2024 Quarterly Report
[5]		Empire Energy ASX release	30/07/2024	Empire signs Gas Sales Agreement with the NT Government
[6]		Sydney Morning Herald	16/10/2024	*'Gas imports might be Australia's only choice'*
[7]		AAP news	16/10/2024	*www.aapnews.com.au/news/origin-energy-defends-complex-switch-to-renewables-gas*
[8]		The Australian	11/11/2024	*https://www.theaustralian.com.au/business/mining-energy/beetaloo-gas-is-a-viable-option-to-avoid-eastern-seaboard-shortage-says-apa-group*
[9]		Santos Limited ASX release	19/11/2024	2024 Investor Day Presentation

All financial data in Australian currency unless otherwise specifically stated

FEED	Front End Engineering and Design	kb (d)	thousand barrels (per day)
FID	Final Investment Decision	Mb	million barrels
GSA	Gas Sales Agreement	Bb	billion barrels
PEL	Petroleum Exploration Licence	mcf (d)	thousand cubic feet (per day)
PEP	Petroleum Exploration Permit	mmcf (d)	million cubic feet (per day)
EP	Exploration Permit	Bcf	million cubic feet
LNG	Liquified Natural Gas	Tcf	trillion cubic feet
		gj	gigajoules (mcf equivalent)
		TJ	terajoules (mmcf equivalent)
		PJ	petajoules (Bcf equivalent)
		boe	barrel of oil equivalent
		mmBtu	million British thermal units (TJ equivalent)

Conversion factors – note conversion factors may vary from company to company and project to project

Gas	cubic feet to joules	=	1.06	1 Bcf	=	1.06 PJ
	joules to boe	=	0.163	1 PJ	=	0.163 Mboe
	mmBtu to joules	=	0.952	1 mmBtu	=	0.952 TJ
Oil				1 b	=	1 boe
Condensate				1 b	=	0.935 boe

Reserves and resources classification

1,2 3 P	Proven, probable and possible reserves certified as being likely to be in production within five years. 1P = 90% confidence limit; 2P = 50% confidence limit; 3P = 10% confidence limit
1,2,3 C	Contingent resources. As above but nominally higher risk in terms of commerciality; 1= Low, 2 = Best, 3 = High
1,2,3 U	Potential Resources. Largely undefined by drilling and testing. Classification; 1 = Low, 2 = Best, 3 = High

ACCC	Australian Competition and Consumer Commission
AEMO	Australian Energy Market Operator
ADGSM	Australian Domestic Gas Security mechanism
CCS	Carbon capture and storage
CH_4	Methane (natural gas)
CO_2	Carbon dioxide
CO_2-e	Carbon dioxide equivalent
NOPSEMA	National Offshore Petroleum Safety and Environmental Management Authority

Exhibit 6: Financial Summary

EMPIRE ENERGY GROUP LTD		EEG		
YEAR END		Dec		
NAV	A$mn	$0.92		
SHARE PRICE	A$cps	$0.200	intraday	20-Nov
MARKET CAP	A$mn	203		
ORDINARY SHARES	M	1,017		
OPTIONS	M	79		

nm = not meaningful
na = not applicable

COMMODITY ASSUMPTIONS		2022	2023	2024E	2025E
Realised oil price	US$/b	94.25	77.64	80.88	75.17
Realised gas price	US$/mcf	6.42	2.58	2.07	3.49
Exchange Rate	A$:US$	0.6946	0.6657	0.6549	0.6570

RATIO ANALYSIS		2022	2023	2024E	2025E
Shares Outstanding	M	773	773	1017	1017
EPS (pre sig items)	UScps	(0.86)	(2.86)	(1.45)	(1.55)
EPS	Acps	(0.86)	(2.86)	(1.45)	(1.55)
PER	x	na	na	na	na
OCFPS	Acps	9.50	(4.80)	(5.01)	(19.20)
CFR	x	na	na	na	na
DPS	Acps	na	na	na	na
Dividend Yield	%				
BVPS	Acps	24.9	21.8	21.4	19.1
Price/Book	x	0.8x	0.9x	0.9x	1.0x
ROE	%	na	na	na	na
ROA	%	na	na	na	na
(Trailing) Debt/Cash	x				
Interest Cover	x				
Gross Profit/share	Acps	10.0	0.2	(4.8)	-6.1
EBITDAX	A$M	6.8	(12.5)	(5.1)	0.0
EBITDAX Ratio	%				

EARNINGS	A$000s	2022	2023	2024E	2025E
Revenue		13,722	6,086	1,131	0
Cost of sales		(5,961)	(5,892)	(6,000)	(6,250)
Gross Profit		**7,762**	**193**	**(4,869)**	**(6,250)**
Other revenue					
Other income		259	576	50	0
Exploration written off					
Finance costs		(2,259)	(3,636)	(1,581)	(1,000)
Impairment		(2,705)	0	0	0
Other expenses		(13,526)	(12,538)	(5,148)	(6,027)
Profit before tax		**(5,765)**	**(21,831)**	**(14,547)**	**(15,625)**
Taxes		(239)	(251)	(167)	(180)
NPAT Reported		**(6,003)**	**(22,082)**	**(14,714)**	**(15,805)**
Underlying Adjustments		0	0	0	0
NPAT Underlying		**(6,003)**	**(22,082)**	**(14,714)**	**(15,805)**

CASHFLOW	A$000s	2022	2023	2024E	2025E
Operational Cash Flow		**(9,305)**	**(23,624)**	**2,415**	**0**
Net Interest		(679)	(1,631)	175	400
Taxes Paid		(239)	(251)	(250)	(250)
Other					
Net Operating Cashflow		**5,100**	**(2,472)**	**(3,335)**	**(12,832)**
Exploration		(37,356)	(7,025)	0	0
PP&E		0	(137)	(2,500)	(500)
Petroleum Assets		0	0	(20,000)	0
Net Asset Sales/other		0	404	16,661	0
Net Investing Cashflow		**(37,586)**	**(6,758)**	**(3,560)**	**(500)**
Dividends Paid					
Net Debt Drawdown		(1,035)	674	(7,061)	
Equity Issues/(Buyback)		29,412	0	37,050	
Other					
Net Financing Cashflow		**28,377**	**674**	**27,349**	**0**
Net Change in Cash		**(4,109)**	**(8,556)**	**20,454**	**(13,332)**

BALANCE SHEET	A$000s	2022	2,023	2024E	2025E
Cash & Equivalents		21,880	13,627	34,080	20,748
O&G Properties		36,612	38,206	58,206	58,206
PPE + ROU Assets		1,608	1,540	1,500	1,000
Total Assets		**197,650**	**171,503**	**205,951**	**191,624**
Debt		7,823	8,771	7,061	5,389
Total Liabilities		**64,043**	**59,199**	**63,444**	**63,904**
Total Net Assets/Equity		**133,608**	**112,303**	**142,508**	**127,720**
Net Cash/(Debt)		14,057	4,855	27,020	15,359
Gearing dn/(dn+e)					

NET PRODUCTION		2022	2023	2024E	2025E
Crude Oil	kb	2	3	1	
Nat Gas	mmcf	1,727	1,372	303	0
TOTAL	**kboe**	**290**	**231**	**220**	**0**
Product Revenue	A$mn	13.7	6.1	1.1	
Cash Costs	A$mn	(6.0)	(5.9)	(6.0)	
Ave Price Realised	A$/boe	47.32	26.30	5.15	
Cash Costs	A$/boe	(20.55)	(25.46)	(27.31)	
Cash Margin		**26.76**	**0.83**	**(22.16)**	

RESOURCES and RESERVES	Contingent Resources			Prospective Resources		
	1C	2C	3C	1U	2U	3U
Northern Territory						
EP 187						
Carpentaria				566	1,282	2,284
East Carpentaria				1,020	1,878	3,782
South Carpentaria				204	383	668
TOTAL PJ				**1,790**	**3,543**	**6,734**
Carpentaria						
Velkerri C	113	666	846			
Velkerri B	120	678	844			
Intra Velerri A/B		8	16			
Velkerri A/B		12	24			
TOTAL PJ	**233**	**1,364**	**1,730**			
Carpentaria East						
Velkerri C	35	185	871			
Velkerri B	36	190	906			
Intra Velerri A/B						
Velkerri A/B						
TOTAL PJ	**71**	**375**	**1,777**			
Aggregate PJ	304	1,739	3,507			
US Onshore						
Gas (bcf)	28	38	42			

EQUITY VALUATION	Risked Range			Low	Mid	High
A$mn	Low	Mid	High		A$/share	
Northern Territory						
EP-187						
Scenario Weighting	743	795	996	$0.73	$0.78	$0.98
Prospective Resources	43	107	229	$0.04	$0.10	$0.22
US Onshore						
Appalachian	0	0	0	$0.00	$0.00	$0.00
	786	**902**	**1,225**	**$0.77**	**$0.89**	**$1.20**
Net cash/(debt)		40				
Corporate costs		(6)				
TOTAL	**820**	**935**	**1,258**	**$0.81**	**$0.92**	**$1.24**
Shares on issue (mn)	1,017 mn					
Shares on issue (mn)	1,017 mn		(fully diluted)	**$0.81**	**$0.92**	**$1.24**

Source: RaaS Research Group, company data

FINANCIAL SERVICES GUIDE

RaaS Research Group 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: 26th March 2024

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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

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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.

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