



## NORTHERN TERRITORY RESOURCE UPDATE

**Empire Energy Group Limited (“Empire” or “the Company”) is pleased to announce an independently assessed prospective resource estimate for its 100% owned Northern Territory Beetaloo sub-Basin and McArthur Basin properties.**

The prospective resource estimate was prepared by Netherland, Sewell & Associates, Inc. (“NSAI”), a worldwide leader of petroleum property analysis to industry, financial organizations and government agencies.

The results of the NSAI report have been summarised by Empire in the table below. A detailed summary of the NSAI prospective resource estimates can be found at Appendix A.

Reservoir	Undiscovered Original Gas-in-Place (BCF)			Unrisked Gross (100%) Prospective Gas Resources (BCF)			Unrisked Gross (100%) Prospective Oil Equivalent Volumes (MMBOE)		
	Low Estimate (1U)	Best Estimate (2U)	High Estimate (3U)	Low Estimate (1U)	Best Estimate (2U)	High Estimate (3U)	Low Estimate (1U)	Best Estimate (2U)	High Estimate (3U)
Lower Kyalla	496	724	1,073	24	72	161	5	14	34
Middle Velkerri*	9,303	12,516	16,597	1,283	2,339	4,751	215	397	825
Barney Creek*	17,667	59,652	155,058	1,633	11,053	45,380	274	1,886	8,011
<b>Total*</b>	<b>27,466</b>	<b>72,892</b>	<b>172,728</b>	<b>2,940</b>	<b>13,464</b>	<b>50,292</b>	<b>494</b>	<b>2,297</b>	<b>8,870</b>

*\*Note: Empire has aggregated the OGIP and prospective resources estimated by NSAI by arithmetic summation*

*\*Note: NSAI did not evaluate the Wollogorang Formation*

### Commenting on the results, Empire Managing Director, Alex Underwood said:

“The prospective resources assessed by NSAI are exciting, with a total best estimate prospective resource of 13.5 TCF. This is a substantial resource for a company of our size. The results of Empire’s recent 2D seismic program have enabled NSAI to evaluate prospects in EP187 which have a best estimate prospective gas resource of over 2.3 TCF in the Velkerri Shale and 14 million barrels of oil equivalent in the liquids rich Kyalla Shale. This represents a near doubling of Empire’s Velkerri Shale independent prospective resource estimate and is the first time that the Kyalla Shale has been independently assessed as a prospective resource in our properties. The plays evaluated by NSAI in our McArthur Basin properties have substantial resource potential. Our exploration activity to date is yielding strong results and we look forward to continuing to enhance the value of our properties through measured exploration investment.”

## CORPORATE UPDATE

### NT Operations

Empire is working closely with the Northern Territory Government and the Northern Land Council to facilitate a recommencement of work program activities in the Northern Territory.

Empire has submitted a COVID-19 Management Plan to the Northern Territory Government for approval by the Chief Medical Officer. Once approved, the Plan would give Empire and its employees and contractors exemptions to border restrictions to allow Empire employees and contractors to resume activities in the field.

Empire continues discussions with drilling contractors regarding the drilling of Carpentaria-1 in EP187. Availability of rigs and oilfield service companies in Australia has improved over the course of the year due to the material decline in oil and gas prices which has reduced industry activity.

### US Operations

In its most recent Quarterly Activities Report, Empire advised shareholders that it had applied for a forgivable loan under the US Paycheck Protection Program (“PPP”) which forms part of the *US Coronavirus Aid, Relief and Economic Security Act* (the “CARES Act”).

The PPP has been legislated by the US Federal Government to incentivise small and medium sized businesses to keep employees during the COVID-19 pandemic. Empire has 33 employees located in the United States.

The loan has been approved and Empire has received US\$552,600 under the program.

PPP loans can be applied to business expenses including payroll, interest, rent and utilities.

Empire has placed the funds in a segregated account and it intends to use the funds for forgivable purposes.

### Liquidity

Following receipt of the US PPP funding, Empire has a total of A\$11.3m cash at bank. Of this, A\$9.5 million is held in Australian dollars and US\$1.1 million is held in US dollars.

This ASX release has been approved by the Board of Directors

For queries about this release, please contact:

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### Disclosures under ASX Listing Rule 5

**LR 5.25.1** OGIP and Prospective Resource estimates for EP187 were assessed as of April 30, 2020

OGIP and Prospective Resource estimate for EP(A) 180, EP(A) 181, EP(A) 182, EP(A) 183 and EP(A) 188 were assessed as of May 15, 2020

Empire confirms that it is not aware of any new information or data that materially affects the information included and that all the material assumptions and technical parameters supporting the estimates continue to apply and have not materially changed

**LR 5.25.2** Petroleum resources are classified in accordance with the Petroleum Resource Management System (PRMS) sponsored by the Society of Petroleum Engineers (SPE)

**LR 5.25.5** All references to petroleum resource quantities in this announcement are Empire's 100% share

**LR 5.25.6** The probabilistic method was used to prepare the estimates of prospective resources in the NSAI report. These estimates are presented herein using arithmetic aggregation as required by the PRMS.

**LR 5.25.7** Prospective resources reported in units of equivalency used a conversion factor of 6,000 cubic feet of gas per barrel of oil equivalent

**LR 5.28.2** The estimated quantities of petroleum that may potentially be recovered by the application of future development projects relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration, appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons

**LR 5.36** The independently assessed volumes of OGIP and prospective resources for the Velkerri Shale and Kyalla Shale have increased materially since the last independent assessment of Empire's Northern Territory properties by Muir & Associates Pty Ltd and Fluid Energy Consultants. The new data that supports this change is a 2D seismic program carried out by Empire in late 2019, and information regarding other exploration results across the Beetaloo sub-Basin which is now publicly available including 3<sup>rd</sup> party seismic data and well completion reports. The new data has affected the estimates of prospective resources by providing greater clarity regarding the extension of the Velkerri Shale and Kyalla Shale into EP187, including depth, thickness and faulting.

**LR 5.41** The estimates of prospective resources contained in this report were prepared in accordance with the SPE-PRMS guidelines and are based on, and fairly represent, information and supporting documentation under the supervision of Geologist David Evans, Chief Operating Officer, Empire Energy Group Limited, a qualified person as defined under ASX Listing Rule 5.11. Mr Evans has consented to the use of the resource estimates figures in the form and context in which they appear in this release.

Mr Evans is a full-time employee of Empire Energy Group Limited. Mr Evans earned a Bachelor of Science with Honours in Geology from the University of London, United Kingdom, a Post Graduate Diploma, Petroleum Exploration from Oxford Brookes University, United Kingdom and a Master of Applied Science, Geology from the University of Canberra, ACT, Australia. Mr. Evans is a Fellow of the Geological Society of London and has more than 30 years of relevant experience. Mr. Evans has sufficient experience that is relevant to the company's resources to qualify as a Reserves and Resources Evaluator as defined in Chapter 19 or the ASX Listing Rules.

The resource assessment was independently carried out by Mr John G. Hattner, Senior Vice President, and Mr Joseph M. Wolfe, Vice President, of Netherland, Sewell & Associates, Inc. in accordance with the SPE-PRMS guidelines. Messrs Hattner and Wolfe meet the requirements of Qualified Petroleum Reserve and Resource Evaluator as defined in Chapter 19 of the ASX Listing Rules. Mr Hattner is a Licensed Professional Geophysicist in the State of Texas, USA and Mr Wolfe is a Licensed Professional Engineer in the State of Texas, USA. Messrs Hattner and Wolfe have consented to the use of the resource estimates figures in the form and context in which they appear in this release.

Mr Hattner has over 39 years of relevant experience. His qualifications include an MBA from Saint Mary's College of California, Master of Science in Geological Oceanography, Florida State University, and a Bachelor of Science in Geology from University of Miami.

Mr Wolfe has over 15 years of relevant experience. His qualifications include a Master of Petroleum Engineering from Texas A&M and a Bachelor of Science in Mathematics from Northwestern State University.

**APPENDIX A – EMPIRE ENERGY ORIGINAL GAS-IN-PLACE AND UNRISKED GROSS (100%) PROSPECTIVE GAS RESOURCES ASSESSED BY NETHERLAND, SEWELL & ASSOCIATES, INC.**

EP187		Undiscovered Original Gas-in-Place (BCF)			Unrisked Gross (100%) Prospective Gas Resources (BCF)			Unrisked Gross (100%) Prospective Oil Equivalent Volumes (MMBOE)		
Prospect	Reservoir	Low Estimate (1U)	Best Estimate (2U)	High Estimate (3U)	Low Estimate (1U)	Best Estimate (2U)	High Estimate (3U)	Low Estimate (1U)	Best Estimate (2U)	High Estimate (3U)
Carpentaria	Lower Kyalla	387	540	768	19	54	115	4	11	24
Carpentaria	Mid Velkerri A	868	1,220	1,616	43	122	323	7	21	56
Carpentaria	Mid Velkerri B	3,796	4,715	5,808	569	943	1,743	95	160	303
Carpentaria	Mid Velkerri C	2,669	3,379	4,178	400	676	1,254	67	115	218
East	Lower Kyalla	109	184	305	5	18	46	1	4	10
East	Mid Velkerri A	247	421	678	12	42	136	2	7	24
East	Mid Velkerri B	1,012	1,631	2,534	152	326	760	25	55	132
East	Mid Velkerri C	711	1,150	1,783	107	230	535	18	39	93

Table 1: EP187 OGIP and Unrisked Prospective Resource Estimates delineated by prospects identified by recent 2D seismic program

		Undiscovered Original Gas-in-Place (BCF)			Unrisked Gross (100%) Prospective Gas Resources (BCF)			Unrisked Gross (100%) Prospective Oil Equivalent Volumes (MMBOE)		
EP	Basin	Low Estimate (1U)	Best Estimate (2U)	High Estimate (3U)	Low Estimate (1U)	Best Estimate (2U)	High Estimate (3U)	Low Estimate (1U)	Best Estimate (2U)	High Estimate (3U)
180	Northern McArthur	2,626	8,780	22,983	232	1,557	6,632	39	267	1,182
181	Northern McArthur	3,589	12,120	31,376	342	2,315	9,273	57	394	1,626
182	Northern McArthur	9,998	33,939	88,327	940	6,396	25,995	158	1,090	4,572
183	Northern McArthur	260	856	2,243	23	150	645	4	26	115
184	Northern McArthur	746	2,494	6,356	59	395	1,771	10	68	323
188	Southern McArthur	448	1,463	3,773	37	240	1,064	6	41	193

Table 2: OGIP and Unrisked Prospective Resource Estimates delineated by exploration permits (excl. EP187 which is detailed in Table 1)