

# Elixir Energy Limited (ASX: EXR)

Continued positive results from 2021 drilling program

## Overview

Elixir's first well in its 2021 drilling program, Yangir-2, has identified a new sub-basin that appears promising for coal bed methane (CBM). Good coal thickness (>17 m), evidence of natural fracturing (-> permeability), good gas contents (5.3 m3/t raw) and, importantly, very high methane content (99%), are positive and indicate minimal gas processing will be required to achieve sales quality. With continuing good results we expect EXR will expand its planned exploration and appraisal program to increase resources and derisk its project. Our mid-point valuation has increased to \$0.45/sh (prev. \$0.29), with a range from \$0.18 to \$0.79/sh, depending on derisking outcomes.

## Key points

**Background: Large gas resource close to China:** Elixir holds 100% of the Nomgon IX CBM production sharing contract (PSC), covering ~30,000 km<sup>2</sup> adjacent to the border with China. The prospective gas resource is large, with a risked best (mid) case independent estimate of 14.6 Tcf recoverable.

**2021 drilling program delivering results:** The 2021 planned program is more than double the size of the 2020 program and includes 13 wells, 200 km seismic and 1 pilot production test. All major identified exploration CBM depocentres will be drilled, together with testing designed to prove commercial resources in the Nomgon sub-basin. The first 2021 well, Yangir-2, has delivered strong initial results from the Yangir sub-basin.

**Expanded program likely:** We think EXR will seize the initiative offered by continuing positive drilling outcomes and seek additional funding to expand the 2021 program to increase resource definition and advance project derisking work from 2022, including, perhaps, extended production testing in the Nomgon area. Management has demonstrated it can execute programs on schedule and budget in difficult times.

**Initial contingent resources:** EXR announced an initial independent contingent resource estimate for the Nomgon sub-basin of 5/24/104 bcf for 1C/2C/3C on 7<sup>th</sup> April 2021. Resources have been assessed only for the area immediately adjacent to a proposed 10 MW power station project to be developed in conjunction with Clarke Energy, an experienced CBM-to-power project developer in Australia and China. EXR has executed a MOU with the Mongolian Ministry of Energy for project evaluation. We expect expansion of contingent resources with ongoing appraisal drilling.

**Likelihood of commercialization increasing:** Early results continue to be promising, with multiple areas demonstrating seam thickness, gas contents and gas composition potentially attractive for CBM development. Repeatability through further drilling and testing and demonstration of well deliverability through pilot test in 2H 2021 will continue to derisk a potential multi-tcf resource.

**Price catalysts:** Exploration drilling results in further sub-basins, well repeatability, Nomgon area extensional drilling, commencement of pilot program, contingent resource assessment upgrades.

## SHARE PRICE PERFORMANCE



Closing price as of 14<sup>th</sup> Apr 2021

CAPITALIZATION	
Last price	\$0.45
52-week range	\$0.02-0.51
Capitalization	\$346m
Cash: 31 <sup>st</sup> Dec	\$9.2m
Debt: 31 <sup>st</sup> Dec	nil
EV	\$337m
Shares	814.9m
Options/rights	23.7m
Conv Notes	-
Balance date	June
RESERVES AND PRODUCTION	
1P (31 Dec 21)	0.00 MMboe
2P "	0.00 MMboe
3P "	0.00 MMboe
2C "	4.00 MMboe
FY20a	0.00 MMboe
FY21e	0.00 MMboe
FY22e	0.00 MMboe
SHAREHOLDERS (%)	
Board/mgt	~4
Retail/insto	96
LEADERSHIP	
Chairman	Richard Cottee
MD/CEO	Neil Young
NED	Steve Kelemen
NED	Anna Sloboda

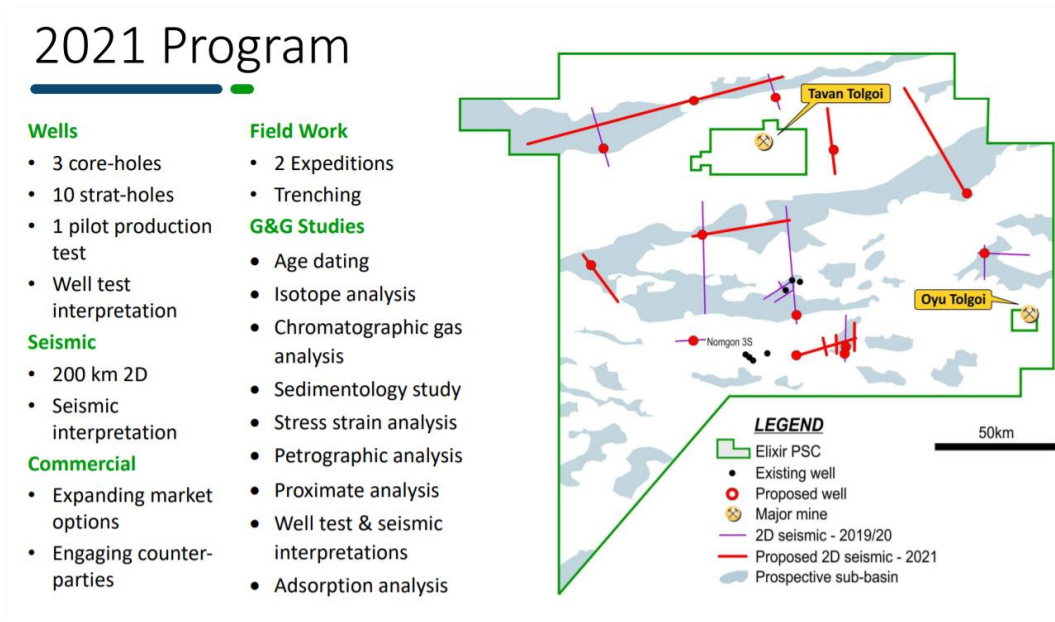
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# 1. 2021 exploration and appraisal program

The 2021 program comprises stratigraphic and core hole drilling to extend identified CBM areas and test new sub-basins, additional seismic to identify prospective areas and a pilot production test of the Nomgon sub-basin. The pilot production test will provide information on well productivity (gas and water flow rates and decline parameters) to enable assessment commercial development options. This, combined with progress on gas sales options, will enable conversion of contingent resources to reserves at an appropriate time.

Figure 1 2021 drilling program and well locations



Source: Elixir Energy Limited, 2021 Work Program, 15<sup>th</sup> February 2021, p 3

Work program activity is planned to increase throughout the year, with drilling now underway and the Nomgon pilot program commencing in H2.

Figure 2 2021 work program timetable

Activity	Q1 2021	Q2 2021	Q3 2021	Q4 2021
Regulatory & Community	<ul style="list-style-type: none"> <li>• National Approvals</li> <li>• Local Govt Permitting</li> </ul>	<ul style="list-style-type: none"> <li>• Local Govt Permitting</li> <li>• Community Liaison &amp; Investment</li> </ul>	<ul style="list-style-type: none"> <li>• Community Liaison &amp; Investment</li> </ul>	<ul style="list-style-type: none"> <li>• Community Liaison &amp; Investment</li> </ul>
G&G Studies and Analysis				
Seismic Acquisition		200km		
Drilling		~4 wells	~4 wells	~5 wells
Production Testing			<ul style="list-style-type: none"> <li>• Drilling</li> <li>• Testing</li> <li>• Monitoring</li> <li>• Measuring</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling</li> <li>• Testing</li> <li>• Monitoring</li> <li>• Measuring</li> </ul>

*Timelines are estimates only and could be subject to change due to issues such as COVID related restrictions*

Source: Elixir Energy Limited, 2021 Work Program, 15<sup>th</sup> February 2021, p 10

## 2. Contingent resource assessment

The initial contingent resource assessment was undertaken by ERC Equipoise, the same assessor for the two prospective (i.e. undiscovered) resource assessments in November 2018 and December 2020. The resource assessment is only for the area immediately adjacent to the proposed gas fired power project. Mid-case (i.e. 2C) gas recovery is estimated to be ~40%. Key contingencies relate to the ability to flow gas at commercial rates, and the finalization of and financing of a development plan to feed the proposed power generation project. EXR is planning a pilot production test to demonstrate gas flow rates in the second half of 2021. This will be followed by a longer-term pilot program in 2022 (or perhaps earlier if the 2021 program is expanded).

Figure 3 Current Nomgon IX Prospective Resource assessment (9<sup>th</sup> December 2020)

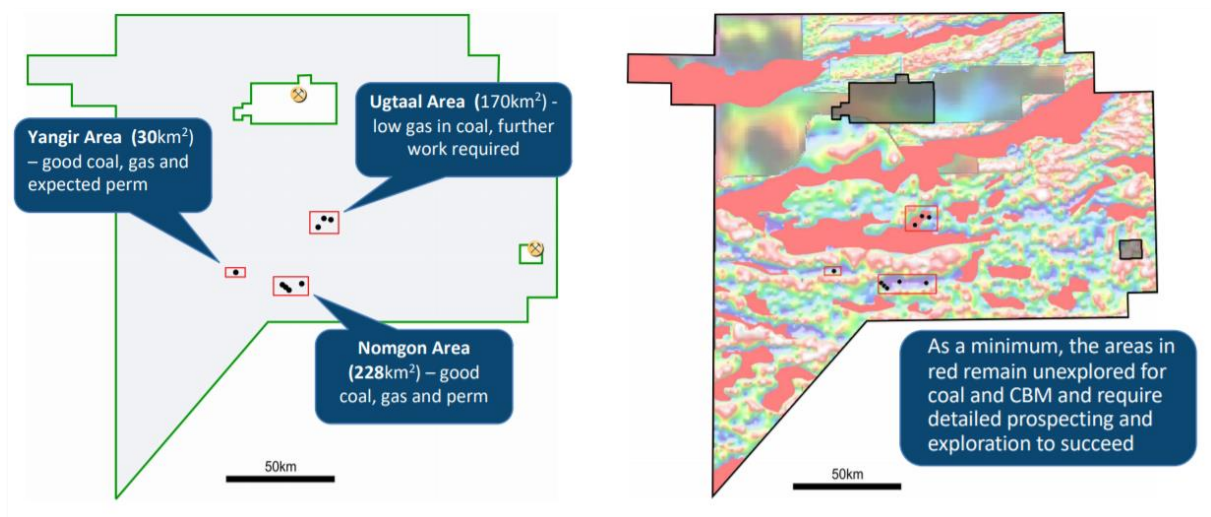
Contingent Resources (100% WI)			
Bcf	1C	2C	3C
Gas initially in place (GIIP)	13	60	242
<b>Recoverable Gas</b>	<b>5</b>	<b>24</b>	<b>104</b>

Source: Elixir Energy Limited, "Nomgon Gas Fired Power Project & Initial Contingent Resource Booking", 7<sup>th</sup> April 2021, p 2

## 3. Drilling program results

Elixir has drilled two core holes and seven stratigraphic holes in one sub-basin in Nomgon IX PSC and a further one stratigraphic hole (Yangir-1S) and core hole (Yangir-2) in the Yangir sub-basin. Well locations and drilling results are shown below in Figure 4 and Table 1 respectively. Given the size of the PSC (30,000 km<sup>2</sup>) we expect other areas are likely to host suitable coals.

Figure 4 Nomgon IX PSC well locations



Source: Elixir Energy Limited, 2021 Work Program, 15<sup>th</sup> February 2021, p 6

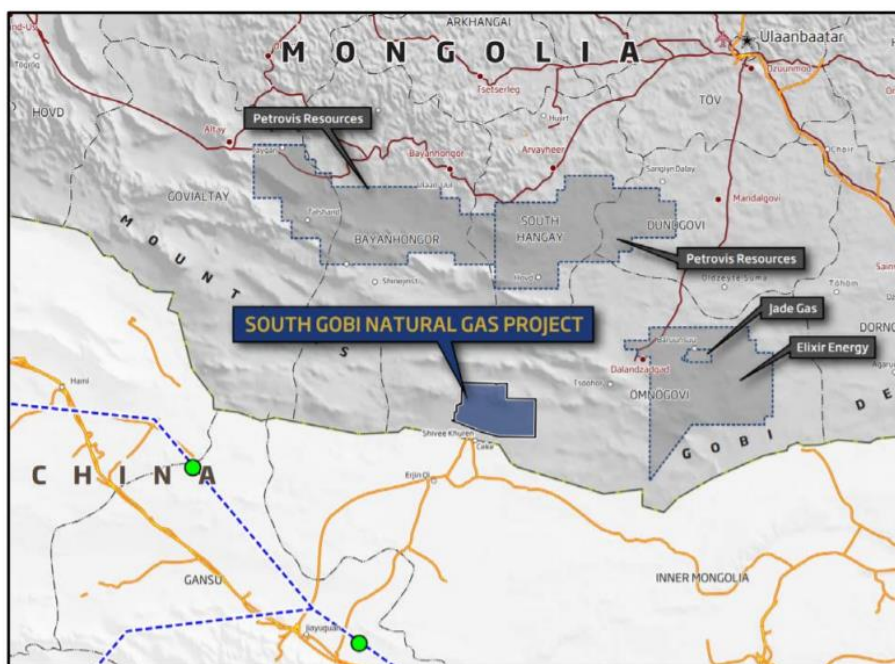
Table 1 Nomgon IX PSC drilling program results

Parameter well type	Units	Nomgon-1 core hole	Nomgon-2 core hole	BO-CH1 strat hole	BO-CH2 strat hole	Nomgon-S3 strat hole	Nomgon-S4 strat hole	Nomgon-S5 strat hole	Hutul-1S strat hole	Yangir-1S strat hole	Yangir-2 core hole
Country		Mongolia	Mongolia	Mongolia	Mongolia	Mongolia	Mongolia	Mongolia	Mongolia	Mongolia	Mongolia
Basin		South Gobi	South Gobi	South Gobi	South Gobi	South Gobi	South Gobi	South Gobi	South Gobi	South Gobi	South Gobi
Exploration phase	-	Phase 1	Phase 2	Phase 1	Phase 1	Phase 2	Phase 2	Phase 2	Phase 2	Phase 2	Phase 2
Spud date	d-m-y	16-Jan-20	09-Jul-20			Aug 20	Aug 20	~Oct 20	~Oct 20	Nov 20	06-Mar-21
TD date	d-m-y		~28-Jul-20								14-Apr-21
Drilling time	days		~21								39
Total depth	m	491	550	738	890	644	202	450	560	347	578
Coal depth	m	~270-400	~320-480								
Coal thickness	m	71	92	7	6	88	35	47	6	27	>17
Thickest seam	m	49	51								
Net coal thickest seam	m	37	51			22	27				
Permeability	mD	0.1-2.4	2.1-91.5								
Perm * height (kh)	mD.m	1.2-23.3	19.7-640.3								
Gas content (raw)	m3/t	2.4-7.5	3.4-7.4								4.2-7.0
Gas content (raw) - avg	m3/t	5.3	5.3								5.3
Gas content (DAF)	m3/t	8.9	8.6								
Ash	%	19									
Moisture	%	9									
Gas composition - CH4	vol %	81	tba								99
Gas saturation	%	~100	~100								

Source: Elixir Energy Limited, ASX announcements

### 3.1 Other industry activity

Interest in Mongolian CBM exploration continues to build, with at least four companies, progressing exploration programs. Three of these have ASX connections (Elixir, Talon Petroleum (ASX: TPD) and High Grade Metals (ASX: HGM), through Jade Gas. Talon has recently raised additional capital to progress exploration drilling of the South Gobi Natural Gas Project. High Grade Metals is currently suspended from trading pending completion of its proposed acquisition of Jade Gas. Petrovis Resources is a Mongolian company seeking funding to commence exploration of its large tenements to the northwest of Elixir's PSC.

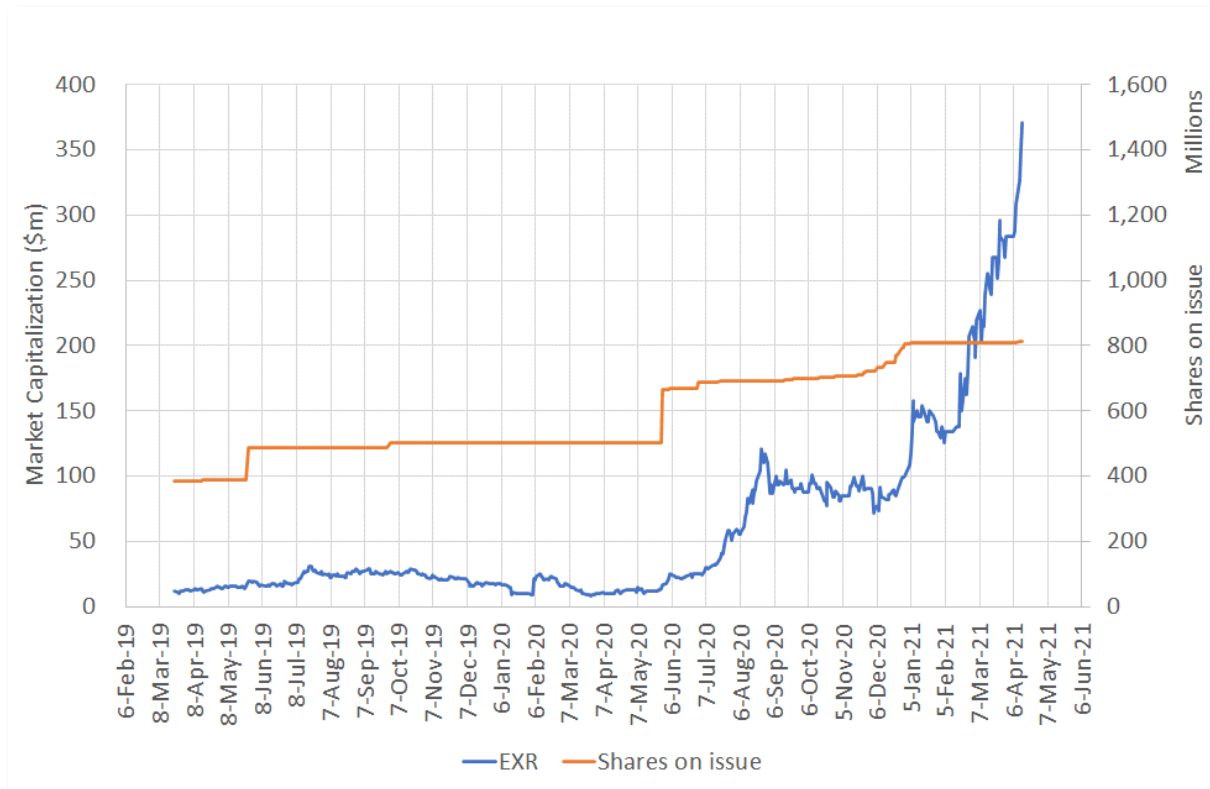


Source: Talon Petroleum Limited, "Annual Report for the Year Ended 31 December 2020", p 9

## 4. Share price and market capitalization

Elixir’s share price and market capitalization have responded strongly to field activity and drilling program results. This resulted in exercise of the December 2020 options, delivering a year end cash balance of \$9.2m to support near term exploration.

Given the scale of PSC area and positive results thus far we expect Elixir will expand its planned 2021 exploration and appraisal program. We expect this will require additional capital.



Source: K1 Capital analysis

## 5. Valuation

### 5.1 Methodology

Our equity valuation for Elixir is based on the risked project value for the Nomgon IX PSC and includes dilution for expected follow-on exploration. Underlying resource metrics are drawn from market trading and transaction multiples, shown in Appendix 1. Trading and transaction metrics are subject to wide variability, reflecting project differences, other portfolio assets and varying commodity prices.

Table 2 CBM resource valuation metrics summary (EV/2P+0.8\*2C)

Metric	Low	Mid	High	Comment
Trading metrics				
Aus domestic producers	0.70	0.98	1.11	Beach, Cooper, Senex
Aus domestic explorers	0.09	0.11	0.20	Excludes Carbon Minerals (illiquid)
International projects	0.04	0.16	0.26	Small sample set.
Transaction metrics				
Project control	0.07	0.23	0.57	Excludes non-concluded offers
China-related CBM	0.50	0.88	1.47	Limited recent transactions
<b>Assumed CBM</b>	<b>0.05</b>	<b>0.15</b>	<b>0.50</b>	Before risking and time value adjustment

Source: K1 Capital analysis of ASX and AIM-listed companies and historical transactions

### 5.2 Risked project value and company valuation

Our risked project value for the Nomgon-IX PSC is based on the following assumptions.

- Resource estimate: December 2020 independent prospective resource estimate and 7<sup>th</sup> April 2021 initial contingent resource assessment (minor increase from our 9<sup>th</sup> Dec 2020 valuation).
- Resource quality: gas composition increased from 81% (previous Nomgon value) to 90% (average of Nomgon and Yangir values); increasing recovered gas quantity by 10% on an energy basis.
- EV/resource metrics: mid-case value increased from \$0.15/GJ to \$0.20/GJ reflecting higher market trading metrics post COVID-19 recovery due to increasing global oil prices.
- Risk adjustment: project value adjusted for reserve conversion risk, project maturity (technical and commercial considerations), time value to achieve reserve status and country risk. No change from prior valuation.
- Time value adjustment: reduced the low, mid and high cases by 1 year, reflecting continued progress.

Variable input ranges and Monte Carlo simulation results are summarized in the following tables.

Table 3 Nomgon IX PSC risked project valuation (risked gas resource value)

Parameter	Units	Value	Low	Mid	High	Comment
<b>Risked exploration: Nomgon IX PSC</b>						
triangular distributions assumed for simplicity						
Working interest	%	100.0	100.0	100.0	100.0	per Elixir, Nomgon IX PSC
Prospective resources (gross, unrisked)	tcf	48.0	17.0	48.0	133.0	per ERP Equipoise, 9 Dec 2020
Geological risk factor	%	30.0	25.0	30.0	35.0	30% mid per ERP Equipoise, 9 Dec 2020
Gas content	vol %	90.0	81.0	90.0	99.0	per Elixir, average ASX release 15 Jul 2020, 14 Apr 2021
Prospective resources (net, risked)	PJ	13,537				= unrisked * geological risk factor * heating value
Conversion to contingent resources	%	60	30	60	70	assumed longer run value (initial assessment will be less)
Estimated contingent resources	PJ	8,122	1,332	9,025	34,037	= Prospective * resource conversion factor
Existing contingent resources	PJ	24	5	24	104	per EXR, 7 Apr 2021
Conversion to reserves	%	60	40	60	80	upper case per K1 Capital analysis of Australian CBM
Estimated future reserves	PJ	4,888				= Contingent * reserves conversion factor
Commercial chance of success	%	50.0	40.0	50.0	60.0	mid-case per ERP Equipoise, 19 Nov 2018
Gas resource unit value (energy equiv't)	\$/GJ	0.20	0.05	0.20	0.35	K1 Capital analysis of ASX companies with international ops
Time value adjustment	years	3.0	2.0	3.0	5.0	K1 Capital estimate, yrs to similar maturity as peers
Base nominal discount rate	%	10.0	8.0	10.0	12.0	K1 Capital estimate
Country risk premium	%	5.0	1.0	5.0	9.0	per Damodaran, NYU Stern: low = China, high = Mongolia
Time value adjustment factor	-	0.658				= (1+rb+rc)^-t
Risked gas resource value	\$m	321				based on median cell values
<b>Monte Carlo valuation</b>						
		Mean	P90	P50	P10	
Estimated future reserves	PJ	6,026	2,931	5,600	9,780	per Monte Carlo simulation, 10,000 trials
Risked gas resource value	\$m	380	148	336	670	per Monte Carlo simulation, 10,000 trials
Implied unit gas value (risked)	\$/GJ	0.063	0.050	0.060	0.069	after project risking and time value discounting

Table 4 Elixir equity valuation (company valuation)

Parameter	Units	Value	Low	Mid	High	Comment
<b>Valuation</b>						
		Mean	P90	P50	P10	
Risked gas resource value	\$m	380	148	336	670	from Monte Carlo simulation (see Section 4 of report)
Existing cash	\$m	9.1				per Dec 2020 quarterly
Existing debt	\$m	0.0				"
G&A costs	\$m	-2.2				~\$1.1m/yr, per FY19/FY20 avg, Jan 2021 to Dec 2022
2020/21 work program	\$m	-2.0				estimate (core hole, chip holes, seismic)
2021/22 work program	\$m	-9.0				estimate (pilot), core/strat drilling, new basins
Options: Nov 2024	\$m	0.8				exclude from near term capital due timing
New capital required (inc. fees)	\$m	5.3				Maintain min \$1.0m working cap (excludes incentive options)
<b>Total</b>	\$m	<b>382</b>	<b>150</b>	<b>338</b>	<b>672</b>	(mean)
<b>Existing capital structure</b>						
Current share price	\$/sh	0.450				14 Apr 2021 closing price
Shares on issue	000,000	814.9				per 12 Apr 2021 ASX release (App. 2A)
Incentive options	000,000	7.7				exercise price \$0.10, expire 25 Nov 2024
Performance rights - Class C	000,000	16.0				FID approval or CBM pilot program, expire 16 Dec 2023
<b>Estimated additional dilution</b>						
Assumed 2021 pre-raising price	\$/sh	0.450				assumed 2021 capital raising post current program
Pre-raising market capitalization	\$m	366.7				assume current share price
Future new capital required	\$m	5.3				assume current share count
Assumed raising discount to TERP	%	11.0				from above
Estimated capital raising discount	%	11.1				per K1 Capital industry analysis
Estimated price at which capital raised	\$/sh	0.400				relative to pre-raising share price
New shares issued	000,000	13.3				based on assumed pre-raising share price
Diluted share count	000,000	851.9				associated with assumed capital raising
						includes incentive options and perf rights
<b>Estimated share price</b>	\$/sh	<b>0.448</b>	<b>0.176</b>	<b>0.397</b>	<b>0.789</b>	

Source: K1 Capital analysis. Valuation range as of 15<sup>th</sup> April 2021.

### 5.3 Valuation discussion

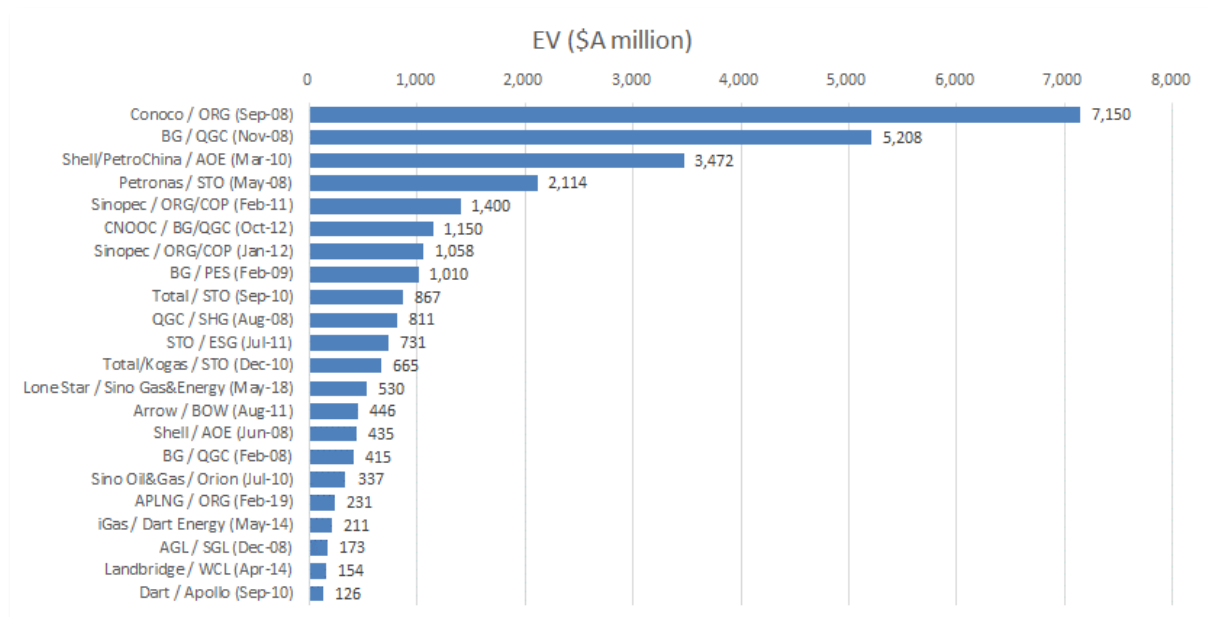
Our company valuation ranges from \$148m to \$670m (previously \$96-454m), driven by the range in potential resource size and EV/resource estimates. The primary drivers of the increase from the prior valuation are, in decreasing order, (1) the increase in EV/resource valuation metric, (2) increase in gas composition and (3) reduction in time adjustment discount.

The wide valuation range is a direct reflection of the still relatively early-stage nature of exploration, leading to uncertainty in the volumes of gas that may be commercialized. The applicable resource valuation multiple is also subject to uncertainty. Tighter estimates will require discounted cash flow analysis of potential projects once larger quantities of contingent resources are certified and well productivity parameters are identified through pilot testing.

Different investors will consider valuation cases differently. Without doubt some investors participate in exploration companies for the upside presented by the success case, rather than the risk-adjusted mid-case. In our view, assuming discovered resources continue to increase and project risks continue to diminish, EXR's value is ultimately likely to be set by acquisition by a large national or international energy company, with the financial, organizational and operational resources to develop a multi-tcf gas project to supply domestic and Chinese export demand. Such a company will have a lower cost of capital than that assumed in our current valuation. The resource valuation metric is also likely to be higher than we have assumed. However, the contingent resources or reserves to which the metric is applied is likely to be less than the range we have assumed, reflecting the likelihood of acquisition occurring before full project derisking has eventuated.

Putting aside EV/resource assumptions and reserve and resource metrics, examination of past CBM transactions provides an indication of the transaction sizes that have previously occurred. These values, shown below, provide a sense-check on the market capitalization of CBM companies for various levels of maturity. It should be noted that many of these transactions occurred at a time of historically high commodity prices (oil prices > \$US100/bbl) and future transactions may occur in a different environment.

Table 5 CBM transaction values for ASX-listed companies/projects



Source: K1 Capital analysis



## 6. Appendix 1: CBM valuation metrics

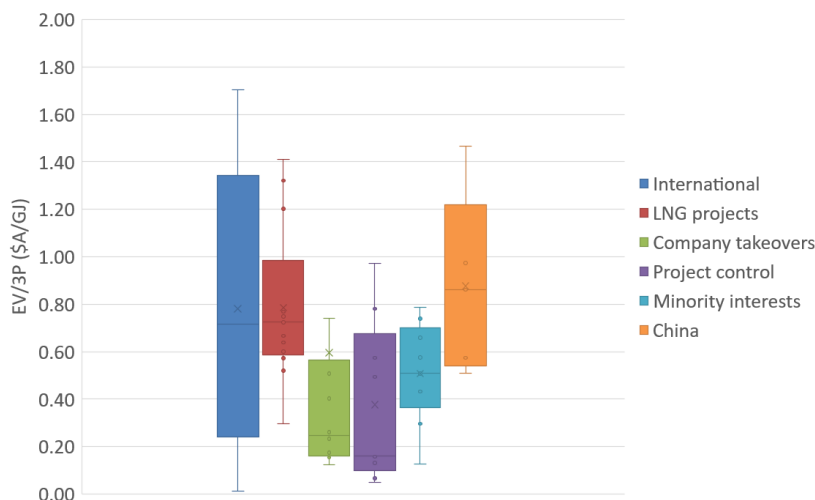
### 6.1 CBM transaction metrics

Our data base includes over 40 CBM transactions from early 2008 to 2019. In our view EV/3P metrics have generally been more representative than EV/2P, given the limited reserve maturity for early transactions. Transaction prices have generally declined over time, in line with declining global oil and LNG prices over the 2008-2019 period, but also with increasing maturity of CSG reserves. The metrics also depend upon the nature of the interest acquired, with assets linked to LNG projects achieving a premium. On average, EV/3P metrics have averaged ~45% of EV/2P metrics (i.e. 3P reserves have on average been ~2.2x as large as 2P reserves, for reported transactions).

We are not aware of any previous ASX-listed CBM transactions in Mongolia. Transaction metrics for interests in companies or CBM projects in China have ranged from ~\$0.50/GJ to ~\$1.50/GJ 3P reserves, with an average of \$0.88/GJ 3P. Four out of five of these transactions occurred in 2009 or 2010 and hence may no longer be relevant. The most recent transaction occurred in May 2018 (Lone Star acquisition of ASX-listed Sino Gas & Energy Limited at \$1.47/GJ 3P).

All other things being equal, transaction metrics are expected to be higher than trading metrics due to acquiring companies paying a premium for control. Asset maturity of acquired projects is also typically higher (i.e. acquisitions tend to occur after a degree of project derisking has occurred).

Figure 5 Box and whisker plot of ASX-listed CBM transaction metrics (EV/3P)



Source: K1 Capital analysis of market transactions from February 2008 to April 2019.

International: acquisition of companies or projects with international CBM operations (8 transactions, includes China)

LNG projects: acquisition of companies or projects related to Queensland CBM to LNG projects (13)

Company takeovers: acquisition of companies not related to LNG projects (10)

Project control: acquisition of a controlling/operating interest in CBM projects (9)

Minority interests: acquisition of minority interest in CBM projects (9)

China: transactions specifically related to CBM assets in China (5 transactions from the International category above)

N.B. the B&W plot shows the minimum, first quartile, median, third quartile and maximum value of each data set

## 6.2 Equity market trading metrics

Our market multiples are based on price adjusted reserves and resources to better account for the value differences between oil and gas, and gas prices in different markets.

Table 7 below list current trading metrics for Elixir and selected peer companies, described on the following page. Trading metrics for ASX-listed CBM companies are indicative at best, due to different maturities and jurisdictions, with some having significant non-CBM projects within their portfolios.

Trading metrics for ASX-companies with international CBM operations range from \$0.04 to \$0.26/GJ 2P+0.8\*2C for the three most active companies, Kinetiko, Tlou and Renergen. Domestic focused CBM companies have generally traded at higher levels, in part due to lower perceived country risk and more mature projects, although this is currently not the case. The only domestic mid-cap producing CBM company, Senex, currently trades at \$0.52/GJ 3P+2C, and \$0.70/GJ 2P+0.8\*2C.

Table 6 Reserve & resource spot price equivalence factors

Commodity	units	Price 15-Apr-21	Price \$US/boe	Price factor	Source
USD/AUD forex	\$US/\$A	0.7672	-	-	Reserve Bank of Australia
Brent	\$US/bbl	66.68	66.68	1.00	Bloomberg
WTI	\$US/bbl	63.17	63.17	0.95	"
Henry Hub	\$US/mmBtu	2.62	15.20	0.23	"
EC Australia	\$A/GJ	6.70	31.46	0.47	AEMO Wallumbilla firm bench'k 14 apr
WC Australia	\$A/GJ	4.53	21.27	0.32	gasTrading spot price Mar '21
Europe	\$US/mmBtu	6.13	35.55	0.53	World Bank, Netherlands TTF, Mar '21
LNG	\$US/mmBtu	9.77	56.68	0.85	85% of Brent (14.7% slope)
LNG JPN/KOR spot	\$US/mmBtu	6.60	38.28	0.57	Mar 2021 contract price
SAfrica	\$US/mmBtu	7.00	40.60	0.61	est. field gate price @ \$US52 Brent
LPG	\$US/t	545	47.81	0.72	Saudi Contract Price - Feb '21
Helium	\$US/kscf	210	1,183	17.73	USGS Mineral Comm Summary 2020

Source: K1 Capital analysis

Table 7 Reserve and resource trading metrics

Company	Code	Last Price 15-Apr-21	Total Shares (million)	Mkt Cap M\$A	EV M\$A	2P PJe'	3P PJe'	2C PJe'	EV/2P \$/GJe	EV/ (2P+0.8*2C) \$/GJe	EV/ (3P+2C) \$/GJe	Gearing D/(D+E) %
Elixir Energy	EXR	0.450	733	330	321	-	-	-	-	-	-	-
<b>Australian CBM (5)</b>				<b>504</b>	<b>458</b>	<b>177.0</b>	<b>481.0</b>	<b>5,182.5</b>	<b>2.59</b>	<b>0.11</b>	<b>0.08</b>	-
Blue Energy	BLU	0.086	1,327	114	111	71.0	298.0	1,166.0	1.56	0.11	0.08	-
Comet Ridge	COI	0.069	791	55	51	106.0	183.0	286.0	0.49	0.15	0.11	-
Carbon Minerals	CRM	0.370	19	7	4	-	-	183.0	-	0.02	0.02	-
Galilee Energy	GLL	0.780	295	230	207	-	-	3,011.5	-	0.09	0.07	-
State Gas	GAS	0.565	173	98	85	-	-	536.0	-	0.20	0.16	-
<b>ASX International CBM (7)</b>				<b>610</b>	<b>624</b>	<b>461.6</b>	<b>1,305.0</b>	<b>4,323.8</b>	<b>1.35</b>	<b>0.16</b>	<b>0.11</b>	<b>7</b>
Kinetiko Energy	KKO	0.120	588	71	70	-	-	2,463.3	-	0.04	0.03	0
Pure Hydrogen	PH2	0.210	304	64	64	-	-	389.3	-	0.20	0.16	-
NuEnergy Gas	NGY	0.048	1,481	71	72	89.2	89.2	44.1	0.81	0.58	0.54	4
Tlou Energy	TOU	0.065	600	39	32	54.3	569.9	285.6	0.58	0.11	0.04	-
High Grade Metals	HGM	0.000	566	0	-0	-	-	-	-	-	-	-
Talon Petroleum	TPD	0.012	5,856	70	61	-	-	-	-	-	-	-
Renergen	RLT	2.510	118	295	325	318.0	645.9	1,141.5	1.02	0.26	0.18	12
<b>ASX oil &amp; gas producers (3)</b>				<b>4,863</b>	<b>5,075</b>	<b>3,856.6</b>	<b>1,546.4</b>	<b>1,632.8</b>	<b>1.32</b>	<b>0.98</b>	<b>0.92</b>	<b>9</b>
Beach Energy	BPT	1.675	2,281	3,821	3,867	2,716.2	-	1,287.6	1.42	1.03	0.97	4
Cooper Energy	COE	0.280	1,631	457	571	316.8	422.8	244.1	1.80	1.11	0.86	33
Senex Energy	SXY	3.190	184	585	637	823.6	1,123.5	101.1	0.77	0.70	0.52	16

Source: K1 Capital analysis of company data. Expressed relative to the spot east coast Australian gas price of \$6.70/GJ. High Grade Metals currently suspended.

Table 8 Peer company descriptions

Company as of 15-Apr-21	Code	Mkt Cap M\$A	EV M\$A	Description
Elixir Energy	EXR	330	321	Nomgon IX CBM PSC, South Gobi Basin, Mongolia
<b>Australian CBM (5)</b>				
Blue Energy	BLU	114	111	Conv. & unconv oil & gas exploration in Qld/NT (Bowen, Surat, Cooper, Maryborough, Wiso, McArthur Basins). ATP 814P CSG block adjacent to Arrow's Moranbah field.
Comet Ridge	COI	55	51	CSG in Bowen Basin (Mahalo JV with Santos & APLNG, Mahalo Nth, Mahalo East), Galilee Basin (own and JV with Vintage), and Gunnedah Basin (JV with Santos).
Carbon Minerals	CRM	7	4	NSW CSG exploration, Gunnedah Basin JV with Santos
Galilee Energy	GLL	230	207	CSG expln/appraisal Glenaras (ATP 2019, Galilee Basin, Qld), Springsure conv. Gas (ATP 2050, Bowen Basin, Qld), Kumberilla (ATP 2043, Surat Basin, Qld).
State Gas	GAS	98	85	100% interest in the Reid's Dome Gas Project (PL 231), Rolleston Wests (ATP 2062) central eastern Queensland.
<b>ASX International CBM (7)</b>				
Kinetiko Energy	KKO	71	70	CBM exploration in South Africa. 49% interest in the Amersfoort Project. Suspended since late 2017, pending resolution of funding issues with JV partner Badimo Gas.
Pure Hydrogen	PH2	64	64	Merger with Strata-X 2021. Qld Cooper Basin Patchawarra basin-centred gas and Surat Basin CBM; plus proposed hydrogen business (JVs with Hyzon and Liberty)
NuEnergy Gas	NGY	71	72	Indonesian CBM; six PSCs in South Sumatra, Central Sumatra and East Kalimantan, including 45% Tanjung Enim PSC and 100% Bontang Bengalon PSC (East Kalimantan)
Tlou Energy	TOU	39	32	CBM exploration in Botswana. 100% interest in the Lesedi and Mamba CBM projects. Low initial gas flowrates; successful tenderer for gas and power supply to government.
High Grade Metals	HGM	0	-0	Acquiring 100% of Jade Gas Pty Ltd, which has interests in Mongolian CBM PSCs. 100% of brownfields Kreuzeck gold and Leogang cobalt projects in Austria.
Talon Petroleum	TPD	70	61	Onshore Perth Basin conv gas exploration (Walyering), UK North Sea oil exp'n, agreement to farm in for 33% of Telemen's Mongolian CBM block (Gervantes XXXV)
Renegen	RLT	295	325	Helium and biogenic gas E&P, Freestate, South Africa
<b>ASX oil &amp; gas producers (3)</b>				
Beach Energy	BPT	3,821	3,867	Cooper Basin oil and gas E&P (with Santos, Cooper, Senex, Strike, Icon), Otway exploration, acquired Lattice Energy (Waitsia gas project (WA), BassGas (Tas), Kupe
Cooper Energy	COE	457	571	Cooper oil, Otway (Casino/Henry/Minerva) gas production, onshore Otway expl'n (JVs with Beach, Vintage), offshore Gippsland gas production (Sole & Manta gas fields).
Senex Energy	SXY	585	637	Oil & gas exploration and production in the Cooper Basin (JVs with Cooper and Beach) and CSG in the Surat Basin of Queensland (WSGP and Atlas domgas project).

Source: K1 Capital

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