

ACTIVITIES REPORT FOR THE QUARTER ENDED 31 MARCH 2022

Highlights

- **Completion of acquisition of Telmen Energy Limited on 14 February 2022**
- **Commencement of high impact drilling program at Gurvantes XXXV Coal Seam Gas (CSG) Project in Mongolia**
- **Four well program commenced with the drilling of Snow Leopard – 1 intersecting a total of 56 metres of coal within CSG depth window**
- **Initial gas content and gas composition results provide positive indications for future gas field development**
- **Completion of \$1.96 million capital raise resulting in cash on hand as at 31 March 2022 of approximately \$3.7 million and no debt**

Executive Summary

This most recent quarter ended 31 March 2022 has been a transformational one for TMK Energy Limited (**ASX:TMK**) (“TMK” or the “Company”) (formally Tamaska Oil and Gas Limited) with the acquisition of Telmen Energy Limited (Telmen) which holds a 100% Working Interest in the Gurvantes XXXV Coal Seam Gas (CSG) project in the South Gobi Basin of Mongolia.

Since completion of the acquisition on 14 February 2022, the Company has commenced a high impact maiden drilling program within the Nariin Sukhait area with the first well named Snow Leopard -1 spudded on 15 March 2022. The well has intersected a total of 56 metres of gassy coal with drilling in the well nearing completion. On completion of drilling in the well, the Company plans to complete downhole geophysical surveys and drill stem testing (DST) across identified coal intervals

The well has been cored and coal seams intercepted have been sampled and subjected to gas desorption and gas composition analysis. Initial data from this testing has provided important information on gas content, gas saturation and gas composition, all of which are positive for future development of the significant prospective resource already identified in the Project area.

Concurrent with the completion of the acquisition of Telmen, TMK raised \$1.96 million (before costs) through the issue of 245 million shares resulting in cash on hand as at 31 March 2022 of approximately \$3.7 million with no debt.

The first US\$1.5 million of the initial exploration program is being funded by Talon Energy Limited (ASX: TPD) under an existing two stage farmout agreement, the second stage of US\$3.15 million subject to a positive election by Talon to proceed after the initial stage.

Gurvantes XXXV Coal Seam Gas Project Overview

During the quarter ended 31 March 2022, TMK completed the acquisition of Telmen which holds a 100% Working Interest in the Gurvantes XXXV Coal Seam Gas (CSG) project located in the South Gobi Basin of Mongolia (refer Figure 1). The Project covers a very large area of 8,400 km² in what is considered one of the most prospective basins for CSG globally. Within the Project area, multiple very thick, high quality coal seams outcrop at the surface and extend along an east-west strike for approximately 150kms. Within the Project area



there are six active coal mining operations, twenty-six coal mining leases and numerous coal exploration licenses with a substantial amount of exploration for coal having been completed. Preliminary exploration for CSG was initially completed in 2004-2005 and CSG test work characterised the coal as containing high gas quantities of ~10 m³/t with very high methane concentration of >95% CH₄.

The Gurvantes XXXV CSG Project area is situated less than 20 km from the Chinese-Mongolian border and close to the extensive Northern China gas transmission and distribution network. Notably, it is the closest of Mongolia's CSG projects to China's West-East Gas Pipeline. Likewise, it is proximate to several large-scale mining operations with high energy needs. As such, the Gurvantes XXXV CSG Project is ideally situated for future gas sales to satisfy both local Mongolian, as well as Chinese, energy requirements.



Figure 1 - Gurvantes XXV Project General Location Plan

Gurvantes XXXV 2022 Exploration Program

The first phase of the exploration program will include the drilling of at least 4 fully tested cored holes where important data will be gathered to confirm coal thickness, gas contents, gas composition and permeability. The drilling program is expected to allow for the estimation of contingent resources and allow for the design of a pilot well program. The current plan for the second phase of the exploration program is to undertake a pilot well program, which is expected to commence on completion of the initial drilling program.

TMK has commenced the first phase of the exploration program with drilling of the first well at the Gurvantes XXXV CSG Project spudding on 15 March 2022. As of Saturday 30 April 2022, Snow Leopard – 1 was at a depth of 636 metres with drilling expected to continue to a total depth of around 675 metres. The well has intersected approximately 56 metres of gassy coal including a single coal seam of 44.4 metres between the depths of 406 metres and 461 metres.

Gas desorption measurements from 47 individual desorption samples collected to date, is ongoing, however preliminary results indicate that the coal seam has high gas content (in the order of 7.5m³/t to 12.5m³/t on an as received basis) and high gas saturation, consistent with the Company's current geological understanding.

Gas samples were obtained from coal core during the desorption process and were sent to a laboratory in Ulaanbaatar for testing using gas chromatography. Results of the gas composition analysis confirm that the

coal seam gas has high methane (CH₄) concentrations between 94.4% and 98.8% (average 96.0%), and low carbon dioxide (CO₂) values between 0.3% and 5.1% (average 3.0%).

DST testing to determine the permeability of the coal intervals, was initially planned to be completed during the drilling of the well, however mechanical issues with third party contractor equipment has meant that the drill stem tests (DST's) are now planned to be completed after the well has reached total depth. The contractor has confirmed that an alternative tool is available and will be used to complete the DST. Based on visual assessment of the coal core, the coal is considered to have a well developed cleat system (natural fracture network) which is a positive indicator for permeability.

Following completion of Snow Leopard - 1, a further three core holes spaced approximately 3.5km apart (see Figure 2), are expected to be drilled and tested over the next 2-3 month period. These drill holes will continue to target the highly prospective coal seams identified at Nariin Sukhait from existing exploration data and coal mining activities and now further validated by the initial results from Snow Leopard-1.

On completion of the drilling program, the resulting data is expected to enable the Company to convert a portion of the independently certified 5.96 TCF (2U risked) Gross Prospective Resource into a maiden contingent resource for the Nariin Sukhait area in 2H 2022. This will be a major milestone in the potential establishment of a world class gas project adjacent to one of the world's largest gas markets, China.



Figure 2 - 2022 Drilling Program drill hole locations

Talon Farmout Agreement

The exploration program is majority funded via a farmout agreement with ASX-listed Talon, which requires Talon to spend US\$4.65 million to earn a 33% Working Interest in the PSA via a two-stage Farmout Agreement.

The Farmout Agreement requires Talon to fund 100% of the costs of an agreed budget for an initial work program including the drilling of at least four core holes up to an amount of US\$1.5 million. At the conclusion of the initial work program, Talon shall have 90 days during which it may elect to either terminate the Farmout Agreement or elect to enter the second stage of the agreement by spending 100% of the costs of a secondary work program up to an amount of US\$3.15 million. Talon will be assigned its Working Interest in the Gurvantes

XXXV CSG Project only after it has made the election to proceed with the secondary work program. Following completion of the first and second stage of the exploration program, TMK will be required to contribute 67% of the costs towards any subsequent work programs and will retain a 67% Working Interest in the PSA, with Talon having the remaining 33% Working Interest.

Independent Prospective Resource Assessment

The Gurvantes XXXV CSG Project is highly prospective for coal seam gas and a maiden independent prospective resource assessment was completed in August 2021 by NSAI and delivered a risked 2U (best case) resource of 5.96 TCF (see table over page and methodology in Appendix 1).

Gurvantes XXXV CSG Project - Gross (100%) Prospective Gas Resources (TCF)*

Region	Unrisked Prospective Resource (TCF)			Risked Prospective Resource (TCF)		
	1U (Low)	2U (Best)	3U (High)	1U (Low)	2U (Best)	3U (High)
Prospect Area	1.30	2.02	3.38	1.17	1.82	3.04
Lead Area	6.89	17.94	38.24	1.95	4.14	8.21
Total	8.19	19.96	41.62	3.12	5.96	11.25

Gas volumes are expressed in the table above are in trillion cubic feet (TCF) at standard temperature and pressure basis.

**Cautionary Statement: The estimated quantities of petroleum that may be potentially recovered by the application of a future development project relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration, appraisal and evaluation are required to determine the existence of a significant quantity of potentially movable hydrocarbons.*

***Totals of unrisked prospective resources beyond the prospect and lead levels are not reflective of volumes that can be expected to be recovered and are therefore not shown in the NSAI report.*

The prospective resources shown in the table above have been estimated by NSAI using probabilistic methods and are dependent on a CSG discovery being made. If a discovery is made and development is undertaken, the probability that the recoverable volumes will equal or exceed the unrisked estimated amounts is 90 percent for the low estimate, 50 percent for the best estimate, and 10 percent for the high estimate.

The above table represents 100% of the Gurvantes XXXV CSG Project which is TMK's current Working Interest. However, as disclosed above, TMK has entered into a Farmout Agreement with Talon that will entitle Talon to a 33% Working Interest in the Gurvantes XXXV CSG Project if, after completion of the initial work program, Talon elects to proceed to the second stage work program. During the initial work program, TMK retains 100% Working Interest and will continue to report prospective resources on a 100% basis. If Talon elects to enter the second stage work program, then Talon will earn a 33% Working Interest and accordingly TMK's Working Interest thereafter will reduce to 67%.

Additionally, the above table represents TMK's current Working Interest in the Gurvantes XXXV CSG Project and PSA of 100% before any Government share. As royalties are not payable in kind in Mongolia, no netting-out adjustment has been made. The Gurvantes XXXV PSA has terms that determine Government share in various ways. At this stage of the asset life, it's not possible to determine the level of Government take given significant uncertainty over possible gas prices, development and operating costs, and production rates. TMK therefore currently considers it more appropriate to report Prospective Resources on a Working Interest basis until there is more certainty with respect to the many variables that affect the overall Government share in the production from the Gurvantes XXXV CSG Project.

Competent Persons Statement

The information in this report that relates to Prospective Resource information for the Gurvantes XXXV CSG Project was performed by NSAI on behalf of TMK and Talon.

The resources included in the report have been prepared using definitions and guidelines consistent with the 2007 Society of Petroleum Engineers/World Petroleum Council/American Association of Petroleum Geologists (AAPG)/Society of Petroleum Evaluation Engineers 2018 Petroleum Resources Management System (PRMS). The resources information included in this report are based on, and fairly represents, information and supporting documentation compiled by Mr. John Hattner, an employee of NSAI. Mr Hattner is a Qualified Petroleum

Reserves and Resources Evaluator (QPRRE) and is qualified in accordance with the requirements of ASX Listing Rule 5.41 and consents to the inclusion of the information in this report of the matters based on this information in the form and context in which it appears.

Napoleon Prospect (TMK 20% Working Interest)

TMK holds the right to a 20% working interest in the Napoleon prospect contained in offshore Western Australia production licence WA-8-L at depths below 2,700m. An Independent geological assessment by ERCE has certified undiscovered recoverable resources (Prospective Resources) and geological chance of success for multiple stacked prospective intervals at Napoleon, with the principal target being the 197T interval.

Napoleon is located in WA-8-L, in the premier Barrow-Dampier sub-basin on Australia's North West coast. The lead is an upthrown tilted fault block with closure in the prolific North Rankin, Brigadier and Mungaroo Formations. Recent seismic mapping and geo-technical studies suggest a large unrisked volume of hydrocarbons, a target of similar significance to the Dorado, Wanaea and Angel discoveries.

Extensive 3D seismic reprocessing by Downunder Geosciences (to improve the imaging of the structure) and basin analysis studies have been completed. Results of the reprocessed 3D seismic indicate evidence of reservoir and hydrocarbon charge (including the presence of hydrocarbon escape features).

The geochemical modelling suggests (mostly) in-situ hydrocarbon charge from Lower to Middle Jurassic (mostly) marine source rocks that remained in the liquid maturity window for a significant period of geological time.

The main target is estimated to be at a total vertical depth of approximately 4,500 meters, located in about 80 meters of water depth. Accordingly, the target can be drilled by a jack-up rig. Detailed well planning and cost estimates for a 4,900m exploration well to intersect the four targets has been undertaken, with a preliminary dry-hole cost estimate of AU\$41.1 million.

The Company continues to work with the other partners in this prospect to either fund or farm-out the well.

Changes to the Capital Structure

TMK completed the acquisition of Telmen Energy Limited on 14 February 2022 through the issue of 1.6 billion shares and 1.6 billion performance shares issued to Telmen shareholders on a pro-rata basis to their shareholding in Telmen. The performance shares consist of three tranches, each with certain performance hurdles to be met.

In addition, TMK issued 210 million performance rights to the management and board members of Telmen. These performance rights will also consist of three tranches and have the same performance hurdles as the performance shares.

On completion of the Telmen Energy Limited acquisition, TMK raised \$1.96 million (before costs) with Chieftain Securities Pty Ltd (**Chieftain**) acting as lead manager to the capital raising, and paid fees of 5% of the funds raised to Chieftain Securities.

Management and Board Changes

Following completion of the acquisition of Telmen Energy Limited, Mr Brendan Stats was appointed CEO of TMK. Mr Brett Lawrence stepped down as Managing Director and assumed a non-executive director role in the Company.

Ms Gema Gerelsaikhan and Mr Stuart Baker, two of the existing non-executive directors of Telmen were appointed to the Board of TMK and Mr Logan Robertson resigned as a director.

On 4 April 2022, Mr Dougal Ferguson was appointed Company Secretary following the resignation of Ms Sylvia Moss.



ASX Listing Rule 5.3.3 Tenement Summary

At 31 March 2022 the Company held the following interests in tenements and/or licenses:

Project	Percentage Interest	Number of Tenements
Fusselman Project	12.5%	7
West Klondike	11.36%	6
Gurvantes XXXV	100%	1

Related Party Payments

During the quarter ended 31 March 2022, the Company made payments of \$33,000 to related parties and their associates. These payments relate to Directors fees.

Authorised for release to ASX by the Board of Directors.

For further information please contact TMK Energy at:

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ABOUT TMK ENERGY LTD

TMK Energy Limited is listed on the Australian Stock Exchange (ASX:TMK) and holds a 100% interest in the Gurvantes XXXV Coal Seam Gas Project located in the South Gobi Basin of Mongolia. TMK also holds 20% interest of the Talisman Deep Project, which contains the Napoleon structure. TMK is led by an Australian and Mongolian team bringing together the expertise and experience to develop of the Gurvantes XXXV Project.

TMK is focused on the development of the Gurvantes XXXV South Gobi Natural Gas Project located in the South Gobi basin of Mongolia. TMK is committed to responsibly developing this Project into a world class producing gas field on behalf of and for the benefit of Mongolia.

For more details on the Company please visit www.tmkenergy.com.au

Disclaimer: This announcement may contain forward looking statements concerning projected costs, approval timelines, construction timelines, earnings, revenue, growth, outlook or other matters ("Projections"). You should not place undue reliance on any Projections, which are based only on current expectations and the information available to TMK. The expectations reflected in such Projections are currently considered by TMK to be reasonable, but they may be affected by a range of variables that could cause actual results or trends to differ materially, including but not limited to: price and currency fluctuations, the ability to obtain reliable gas supply, gas reserve estimates, the ability to locate markets for CNG and hydrogen, fluctuations in gas and hydrogen prices, project site latent conditions, approvals and cost estimates, development progress, operating results, legislative, fiscal and regulatory developments, and economic and financial markets conditions, including availability of financing. TMK undertakes no obligation to update any Projections for events or circumstances that occur subsequent to the date of this announcement or to keep current any of the information provided, except to the extent required by law. You should consult your own advisors as to legal, tax, financial and related matters and conduct your own investigations, enquiries and analysis concerning any transaction or investment or other decision in relation to TMK. \$ refers to Australian Dollars unless otherwise indicated.

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Directors

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Brett Lawrence	Non-Executive Director
Tim Wise	Non-Executive Director