

## ACTIVITIES REPORT FOR THE QUARTER ENDED 30 SEPTEMBER 2022

### Highlights

- **100% success rate from the five exploration sites drilled in 2022 exploration program at the Gurvantes XXXV Coal Seam Gas project in Mongolia**
- **World class results with coal thickness, gas content and composition in all wells at or above expectations**
- **Memorandum of Understanding signed with PetroChina to explore opportunities to “enhance and accelerate” the Gurvantes Project**
- **Talon Energy’s 90-day election period to proceed with Stage 2 of the farmin agreement commenced on 26 September 2022**
- **Independent Contingent Resource assessment underway and expected to be completed in early November**

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### Executive Summary

This quarter ending 30 September 2022 has been an active and successful period for TMK Energy Limited (**ASX:TMK**) (“TMK” or the “Company”) with the completion of the 100% successful exploration drilling program at the 100% owned Gurvantes XXXV Coal Seam Gas (CSG) project in the South Gobi Basin of Mongolia.

The Company commenced its high impact maiden drilling program within the Nariin Sukhait area on 16 March 2022 and completed its fifth and final well in the 2022 exploration program on 11 October 2022. The exploration drilling program consisted of seven exploration wells drilled on 5 sites approximately 2.5 kilometres apart over a 10-kilometre strike. Each well encountered thick coal seams within the CSG depth window, with high gas contents and high methane gas composition. Following completion of the initial drilling program, Talon Energy Limited (“Talon”) now has up to 90 days from 26 September 2022 to elect to proceed with Stage 2 of the farmin agreement by funding the next US\$3.15 million of the pilot well program.

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 and 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.

PetroChina had shown interest in the Project and has been in discussions with the Company over recent months which resulted in the signing of a Binding Memorandum of Understanding (MOU) being signed between TMK and PetroChina Daqing Tamsag LLC (“DATAMO”), a wholly owned subsidiary of PetroChina. The MOU allows DATAMO to proceed with further detailed review of all technical data with a view to participating in the appraisal or development of the Project.

The Company’s maiden independent contingent resource assessment is currently underway and is expected to be completed in early November 2022 with the final pieces of data required to complete the assessment now available. The assessment is being undertaken by Netherland, Sewell and Associates (NSAI) which is a world-renowned petroleum consulting firm specialising in resource assessments, based in Texas.

As of 30 September 2022, the Company had approximately \$2.5 million and no debt.



## Gurvantes XXXV 2022 Exploration Drilling Results

As at the date of this report, TMK has completed drilling and testing of five exploration wells in the Nariin Sukhait area of the Gurvantes XXXV CSG Project which marks the end of the 2022 exploration drilling program. A summary of each of the wells is provided in the table below.

**Table 1 - 2022 Exploration Drilling Results Summary**

		SL-01	SL-02	SL-03	SL-03R	SL-04	SL-05	SL-05R
Drill hole Details	Date Completed	May-22	Jun-22	Jul-22	Sep-22	Aug-22	Aug-22	Oct-22
	Total Depth (metres)	675	540	348	558	348	354	511
Coal	Net Coal Thickness (metres)	60	91	60 (Upper Seam)	175	40 (Lower Seam)	40 (Upper Seam)	69
	Top Coal Intersection (metres)	405	170	190	175	290	160	190
Gas Content	Gas Content m <sup>3</sup> /t average (as received)	13.2	9.3	9.8	7.5 - 12.5	5 - 7.5	5 - 7.5	5 - 7.5
	Gas Content average m <sup>3</sup> /t (daf basis)	15.7	10.6	11.8	In Progress	In Progress	In Progress	In Progress
Adsorption	Gas Saturation	High (>80%)	High (>80%)	High (>80%)	In Progress	In Progress	In Progress	In Progress
Gas Compositions	Methane (CH <sub>4</sub> ) % (average)	96%	97%	95%	92%	98%	97%	96%
	Carbon Dioxide (CO <sub>2</sub> ) % (average)	3.0%	1.4%	2.8%	5.5%	1.1%	0.7%	1.7%
Permeability (Upper Seam)	Flow Capacity mD.m	4.1	3,184-3,313	760-910	Not Tested	n/a	Not Tested	1,965
	Coal Permeability mD	0.1	45-47	16-19	Not Tested	n/a	Not Tested	56
Permeability (Lower Seam)	Flow Capacity mD.m	Invalid Test	0.79	n/a	Invalid Test	5.21	n/a	Invalid Test
	Coal Permeability mD	Invalid Test	0.04	n/a	Invalid Test	0.13	n/a	Invalid Test

### Detailed Evaluation Program

Each of the seven wells completed over five individual sites, have been cored and intersected thick coal units, with net coal thickness in each well ranging from 40m to 175m. The coal units are contained in either the upper coal seam or lower coal seam. The roof of the upper coal seam has been intersected between the depths of 160m and 405m, while the lower coal seam has been intersected from depths of 290m and 575m. Coal seams intersected have been sampled and subjected to gas desorption test work to determine the gas content of the coal. It should be noted that SL-03 and SL-05 only intersected the upper seam in each well, before issues with hole conditions required abandoning the well prior to reaching the lower seam. The SL-03R and SL-05R wells were spudded on the same drill sites as SL-03 and SL-05 respectively, to ensure both the upper and lower seams were intersected at these locations. SL-04 only intersected the lower seam as it was specifically located to target the lower seam at a relatively shallow depth, which meant that the upper seam was located above the sub crop and therefore not intersected in the well.

A total of 194 individual gas desorption samples have been collected from exploration program to date. Final gas content values are available for samples from Snow Leopard – 01 (SL-01), Snow Leopard – 02 (SL-02) and Snow Leopard – 03 (SL-03) and indicate high gas contents averaging 13.2 m<sup>3</sup>/t, 9.3m<sup>3</sup>/t, and 9.8m<sup>3</sup>/t on an as received basis respectively. Testing on desorption samples from Snow Leopard – 03R (SL-03), Snow Leopard – 04 (SL-04), Snow Leopard – 05 (SL-05) and Snow Leopard – 05R (SL-05R) are ongoing however preliminary

results can reliably estimate that the final gas contents will be in the moderate to high range (in the order of 5.0m<sup>3</sup>/t to 12.5m<sup>3</sup>/t on an as received basis).

Gas samples were obtained from coal core during the desorption process for all seven wells and were sent to a laboratory in Ulaanbaatar for testing using gas chromatography to determine the gas composition. Results from a total of 50 individual samples confirm that the coal seam gas has high methane (CH<sub>4</sub>) (averaging 95%) and low carbon dioxide (CO<sub>2</sub>) (averaging 2.8%) and is broadly consistent from each well and across both the upper and lower coal seams.

Samples from SL-01, SL-02 and SL-03 have completed adsorption isotherm testing in Australia. The results of the adsorption isotherm testing indicate that the coal has high gas saturation with an average gas saturation above 80%. It is noted from the available results that the upper seam appears to have higher gas saturation than the lower seam, however further testing is required to better understand the characteristics of each seam or spatial trends. Samples from SL-03R, SL-04, SL-05, and SL-05R will be selected and despatched to Australia for adsorption isotherm testing in order to confirm gas saturation once the desorption testing of samples from these holes is completed.

Permeability testing of the coal intervals has been attempted on all of the wells using a combination of Drill Stem Tests (DST) and Injection Fall Off Testing (IFOT). The intention of the permeability testing was to obtain representative data over both the upper and lower coal seams at each drill site. A combination of mechanical issues and hole conditions has meant that testing of each coal interval has not been possible or successfully completed, in some of the wells, particularly in the lower seam. Permeability testing results on the upper seam from SL-02, SL-03, SL-05R indicates high permeability, which combined with the very thick net coal intersections and should translate to low development costs and strong flow rates.



**Figure 1 - 2022 Drilling Program drill hole locations**

### Forward Exploration Program

With the completion of the highly successful initial exploration program, the Company is now planning its 2023 exploration program to further define the resource with the objective of converting further prospective resources to contingent resources as the exploration program extends eastwards along strike where coal is known to outcrop.

In addition to and to complete the 2022 exploration program, the Company is also planning a small 2D seismic acquisition over prospective areas. The seismic survey is expected to cost approximately US\$50,000 and should be completed prior to the end of the calendar year.

## Contingent Resource Assessment

Following completion of the exploration program, the Company has collated all the data and has engaged NSAI to undertake an independent resource assessment and convert a portion of the already independently certified 5.96TCF of risked prospective 2U (best case) resource (refer to ASX Announcement dated 16 December 2021) to a maiden contingent resource. This process has commenced and is expected to be completed in the first week of November.

## Pilot Well Program

The Company has significantly advanced the planning and design process for the pilot well program, which includes up to three production wells, metering, production and testing facilities, as well as ancillary equipment required to produce gas to surface.

The pilot well program represents Stage 2 of the farm-in agreement with Talon, which requires Talon to fund the first US\$3.15 million of the total expected cost of circa US\$3.5 million. Until such time as Talon elect to proceed (which must be done within 90 days of 26 September 2022), the Company is funding 100% of the design, engineering and long lead items of the pilot well program which will be reimbursed by Talon upon its election to proceed.

## Napoleon Prospect (TMK 20% Working Interest)

There was limited activity during the quarter with respect to the Napoleon Prospect during the quarter with the focus being on the drilling activities in Mongolia. The Company continues to work with the other partners in this prospect to either fund or farm-out the well.

## Corporate Activity

During the quarter, the Company became aware of some historical issues with respect to an inadvertent administrative oversight to lodge a cleansing notice under section 708A(5)(e) of the Corporation Act in relation to the prior issue of shares and accordingly, it requested a suspension of its shares from trading whilst the matter was dealt with by the Court. On 22 August 2022, the Court provided the Company with orders to rectify the prior oversights and the suspension from trading of its shares was lifted by the ASX. There are no long-standing ramifications of the orders other than the need for the Company to lodge a cleansing prospectus.

## Changes to the Capital Structure

There were no changes to the capital structure during the quarter, other than 6,718,750 Performance Rights being cancelled due to forfeiture of those rights under the terms of their award.

On 31 August 2022, 192,131,500 fully paid ordinary shares were released from voluntary escrow. In addition, 52,399,500 Class A Performance Shares (out of a total of 600,000,000 Class A Performance Shares) and 34,933,000 Class C Performance Shares (out of a total of 400,000,000 Class C Performance Shares) were released from escrow on 31 August 2022. However, none of the Class A or Class C Performance Shares have vested and accordingly, no fully paid ordinary shares have been issued for these Performance Shares.

## 2022 Annual Report and Annual General Meeting

The Company released its 2022 Annual Report on 3 October 2022 and announced that its 2022 Annual General Meeting will be held at 11am on Friday, 25 November 2022 at 1202 Hay Street, West Perth, Western Australia. The Notice of Meeting was lodged with ASX on 19 October and is available on the Company's website.

## ASX Listing Rule 5.3.3 Tenement Summary

At 30 June 2022 the Company held the following interests in tenements and/or licenses:

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

## Related Party Payments

During the quarter ended 30 September 2022, the Company made payments of \$44,700 to related parties and their associates. These payments relate to the 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](http://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.

