toro energy
AUSTRALIA'S URANIUM

ASX: TOE

ASX RELEASE
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LAKE MAITLAND URANIUM PROJECT EXTENSION TO INCREASE VALUE OF ENTIRE WILUNA URANIUM PROJECT

Extension of the Lake Maitland Processing Operation to include Lake Way and Centipede-Millipede Uranium Deposits

- **Toro commences Lake Maitland Extension Study to incorporate material from Lake Way and Centipede-Millipede uranium deposits into proposed processing operation at Lake Maitland.**

- **Pilot plant design underway to test new processing flow sheet for both uranium & vanadium products – processing revisions resulted in the very strong estimated financial outcomes of the Lake Maitland Scoping Study (excludes Lake Way & Centipede-Millipede):**

  - ***$NPV_{8\%}$ pre-tax*** *of approximately* ***A$610M*** *at a discount rate of 8%*
  - ***IRR 41%*** *- Mine Life 17.5 years –* ***Short Payback 2.5 years***
  - ***Total EBITDA $1,768.6M***
  - ***Average EBITDA $1.95M per week*** *(****$101M pa****)*
  - *Modest capex of* ***US$140M*** *plus 20% contingency and 15% EPCM allowance*
  - *Low operating cost estimates for Life of Mine:*
    - *C1 cash operating cost* ***US$23.10/lb U_3O_8***
    - *AISC of* ***US$28.02/lb U_3O_8***
  - ***C1 US$15.84/lb U_3O_8 & AISC US$20.32/lb U_3O first 7 years provide very strong margins***
  - *Low average strip ratio of 1.17*
  - *Annual average production 1.3Mlbs U_3O_8 and 0.7Mlbs V_2O_5*
  - ***Total production 22.8Mlbs of U_3O_8*** *and* ***11.9Mlbs of V_2O_5***
  - *Estimates assume US$70/lb U_3O_8 and US$5.67/lb V_2O_5 price, and US$:A$0.70 exchange rate*

- **Phase 1 of the Extension Study will include a pit optimisation of the Lake Way and Centipede-Millipede uranium deposits.**

- **The Lake Maitland pit optimisation was successful to increase potential production by 8mlbs U_3O_8 and 11.9Mlbs v2O5 – over US$625M of additional product value based on the above price assumptions.**

The first 7 years of the proposed Lake Maitland Uranium Vanadium operation is proposed to process high grade uranium material – new study will test whether this high grade operation can extend for well beyond the first 7 years and have a transformational effect on the value of the broader Wiluna Uranium Project.

ASX Listing Rule 5.19.2

The Company confirms that all material assumptions underpinning the production target and the derived forecast financial information disclosed in the Lake Maitland Scoping Study announced by the Company on 24 October 2022 continue to apply and have not materially changed.

Management Commentary

Commenting on this exciting initiative Toro's Executive Chairman, Richard Homsany, said

"As strengthening uranium market conditions continue to align with valuable technical and development improvements at the Wiluna Uranium Project, the Board is delighted to report this initiative to add significant value to Wiluna via the extension of our Lake Maitland uranium vanadium processing operation.

The quality and valuation of Toro's uranium assets are expected to enhance and progress rapidly. Whilst Lake Maitland represents a significant proportion of the Wiluna Uranium Project's resources, and the Scoping Study results clearly illustrate the transformational effect of the stand-alone Lake Maitland operation on the potential economics of the entire Wiluna Uranium Project. The uranium resources at Lake Way and Centipede-Millipede are very substantial and naturally need to be evaluated for viability as additional material at any Lake Maitland uranium vanadium processing operation.

Aside from the strong potential to increase production at Lake Maitland, in particular Toro looks forward to evaluating whether this may extend the processing of high-grade uranium resource well beyond the 7th year of production.

Global uranium markets are strengthening. With Toro's continuing work streams at Wiluna, Toro is confident that there is significant scope to comprehensively build upon the foundations of the strong Lake Maitland Scoping Study outcomes. This is driven by Lake Maitland's close proximity to Toro's 100% owned Centipede-Millipede and Lake Way uranium deposits within the Wiluna Uranium Project.

Toro remains committed to demonstrating that its Wiluna Uranium Project is an asset of global significance that can be brought into production when government policy and uranium markets align."

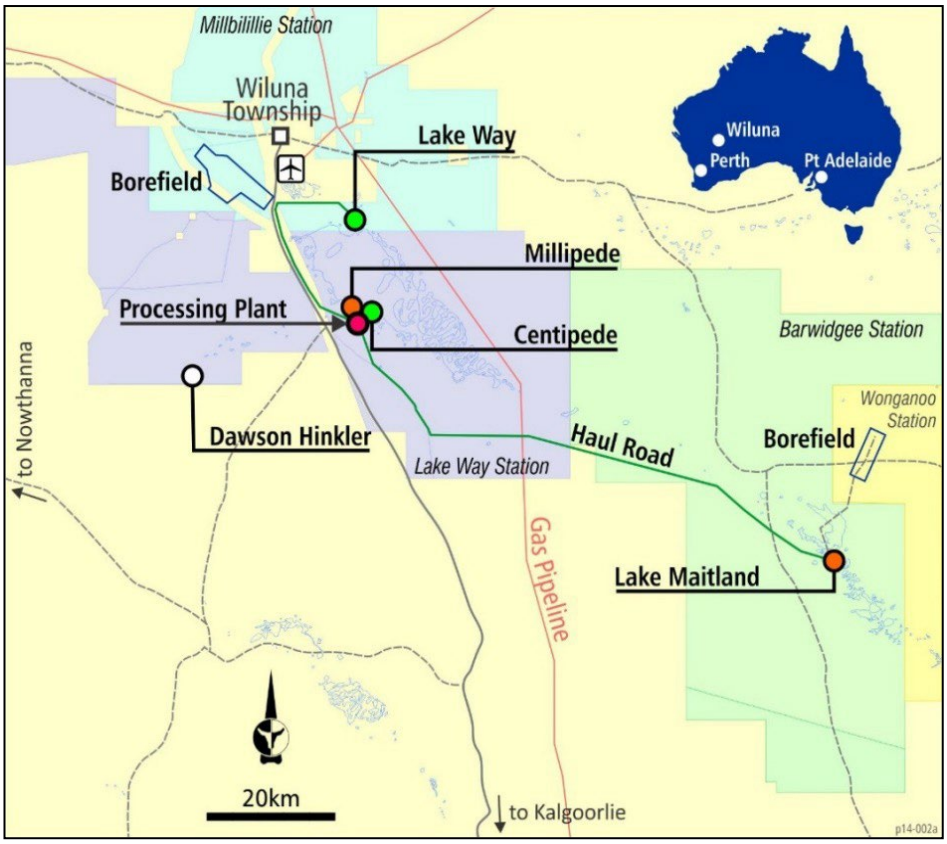

Figure 1: Wiluna Uranium Project

Toro Energy Limited (ASX: TOE) ('the **Company**' or '**Toro**') is pleased to announce the initiation if its Extension Study to the proposed Lake Maitland Uranium-Vanadium operation, located approximately 105 km southeast of the Wiluna township in Western Australia and 730 km NE of Perth. The Study will be completed by mining engineers at SRK Consulting Australasia (**SRK**). SRK and metallurgical and processing engineers at Strategic Metallurgy prepared the Scoping Study for Lake Maitland which highlighted the project's potential to deliver robust financial returns.

One of the stand-out growth opportunities identified from the Lake Maitland Scoping Study is that the proposed production schedule does not include any Mineral Resources from Toro's other wholly owned uranium deposits comprising the broader Wiluna Uranium Project namely, ***Centipede-Millipede*** and ***Lake Way***. This could lead to increased mine life, total production and revenue therefore adding considerable value to the entire Project. The extension Study will aim to provide updated pit inventories at Centipede-Millipede and Lake Way from pit optimisation outcomes. These would be used as inputs into a future updated scoping study for the entire Wiluna Uranium Project which incorporates all of Centipede-Millipede and Lake Way in addition to Lake Maitland.

Scoping Study Background

The potential stand-alone Lake Maitland operation contemplates the possible viability of only mining potential uranium ore from the Lake Maitland Uranium Deposit and processing it in a facility directly on site, next to the mining pit. None of the other uranium deposits owned by Toro in the region would be utilised. The potential stand-alone Lake Maitland operation would contemplate a different processing flow sheet with less capital intensive items and lower reagent volumes, and a simpler more conventional mining method. For further information concerning the results of the Scoping Study please see the Company's announcement of 24 October 2022.

The Lake Maitland Scoping Study also contemplates producing a uranium peroxide product (yellow cake) for sale. This would involve stripping vanadium from the uranium processing flow stream, which is liberated

from the uranium ore mineral, a potassium uranium vanadate, along with the uranium during leaching, to produce a low value sodium hexavanadate, as a by-product.

A potential stand-alone Lake Maitland Uranium (with vanadium by-product) operation was scoped for contemplation as a potential viable alternative to the already proposed greater Wiluna Uranium Project that had previously received state and federal environmental approval (refer to ASX announcements of 9 January 2017, 21 June 2017 and 10 July 2017). In that project the Lake Maitland Uranium Deposit is one of three (3) uranium deposits whereby potential uranium ore is planned to be mined from the Lake Maitland Uranium Deposit and trucked some distance north to a processing plant at the Centipede-Millipede Deposit. The potential stand-alone Lake Maitland operation would also differ from the greater Wiluna Uranium Project in that it contemplates a different processing flow sheet with major changes to the processing plant and reagent volumes (see below), and a simpler more conventional mining method.

The Lake Maitland Uranium Deposit and proposed operation is located approximately 730km NE of Perth or 50km directly east of 50km Mt Keith nickel operations. Access to the deposit is via the Goldfields Highway, turning east at Leinster along the access road to the Bronzewing Gold Mine and then north along the Barwidgee Road. An alternative route is along the Barwidgee Road from the north, via the township of Wiluna.

The Scoping Study focusses solely on the Lake Maitland uranium resource which has been estimated to contain 22Mt at 545ppm U_3O_8 for 26.4Mlbs of U_3O_8 at a 200ppm U_3O_8 cut-off. All of the Lake Maitland uranium resource (as U_3O_8) is in Indicated status according to JORC 2012. More information on this resource and the JORC Table 1 for this resource can be found in the ASX announcement of 1 February 2016. Also see Table 1 below. Inherent within this resource as part of the uranium 'ore' mineral, is vanadium, which, as would be expected, is extracted along with the uranium in the leaching process and found to be still present in pregnant leach solution downstream in the ion exchange (**IX**) process. Toro has decided to strip this from the IX resin for a low value, but worthwhile, by-product. Given this, Toro has also estimated the amount of V_2O_5 within the Lake Maitland Uranium Deposit and integrated it into the uranium resource being contemplated in this scoping study.

The mining technique proposed to be used at the stand-alone Lake Maitland operation is conventional open cut using truck and shovel but with pre-mine dewatering where necessary. Although not targeted specifically in any detail, the higher grade central parts of the deposit are proposed to be mined first so that the average grade of the potential ore decreases over time.

The new proposed processing plant, developed over the recent years of research, will include a beneficiation plant using conventional coarse screens and desliming, pre and post-leach pressure filtration, alkaline leach, IX, sodium diuranate (**SDU**) precipitation, redisolution and uranium peroxide precipitation (yellow cake). To take advantage of the vanadium inherent in the pregnant leach solution due it being a fundamental part of the uranium ore mineral targeted in the leach, vanadium is proposed to be separated in the IX plant and stripped from the IX resin prior to striping uranium, before being precipitated as a red cake (sodium hexavanadate -NaVO) prior to final product preparation as a by-product of the operation.

The date for the substantial commencement condition contained in the State environmental approval for the Wiluna Uranium Project, granted pursuant to Ministerial Statement 1051 (**MS 1051**), has passed. Toro considers, and has sought advice to confirm, that the environmental approval granted by MS 1051 will remain valid notwithstanding that substantial commencement did not occur by the date specified in MS 1051, and that it will be open to the Company to apply under the *Environmental Protection Act 1986* (WA) for an extension of time for that condition at a later time during the life of the approval. It is also envisaged that favourable results from the studies detailed in this announcement may also necessitate an amendment to the proposal the subject of each environmental approval received.

All key aspects of the Lake Maitland uranium-vanadium project pertaining to environmental considerations and external relations are captured in the Environmental Protection Authority (**EPA**) report 1580, which is publicly available on the EPA's website at https://www.epa.wa.gov.au/proposals/extension-wiluna-

uranium-project.

Lake Maitland Open Pit Optimisation

Details on the open pit optimisation for the stand-alone Lake Maitland operation being considered in this scoping level study were presented in the ASX announcement of 4 May 2022, and this should be referred to for further information. GEOVIA'S Whittle™ software (Whittle) was used to undertake open pit optimisation for the project. Whittle™ generates nested pit shells with different revenue factors, based on the highest project cashflow.

This announcement was authorised for issue by the board of Toro Energy Limited.

Katherine Garvey
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FURTHER INFORMATION:

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Table 1 – Wiluna Uranium Project Resources

Wiluna Uranium Project Resources Table (JORC 2012) At 200ppm cut-offs inside U_3O_8 resource envelopes for each deposit - Proposed Mine Only									
		Measured		Indicated		Inferred		**Total**	
		U_3O_8	V_2O_5	U_3O_8	V_2O_5	U_3O_8	V_2O_5	U_3O_8	V_2O_5
Centipede / Millipede	Ore Mt	4.9	-	12.1	-	2.7	53.6	**19.7**	**53.6**
	Grade ppm	579	-	582	-	382	327	**553**	**327**
	Oxide Mlb	6.2	-	15.5	-	2.3	38.6	**24**	**38.6**
Lake Maitland	Ore Mt	-	-	22	-	-	27	**22**	**27**
	Grade ppm	-	-	545	-	-	303	**545**	**303**
	Oxide Mlb	-	-	26.4	-	-	18	**26.4**	**18**
Lake Way	Ore Mt	-	-	10.3	-	-	15.7	**10.3**	**15.7**
	Grade ppm	-	-	545	-	-	335	**545**	**335**
	Oxide Mlb	-	-	12.3	-	-	11.6	**12.3**	**11.6**
Total	Ore Mt	4.9	-	44.3	-	2.7	96.3	**52**	**96.3**
	Grade ppm	579	-	555	-	382	322	**548**	**322**
	Mlb	6.2	-	54.2	-	2.3	68.3	**62.7**	**68.3**

Competent Persons' Statement

Wiluna Project Mineral Resources – 2012 JORC Code Compliant Resource Estimates – U_3O_8 and V_2O_5 for Centipede-Millipede, Lake Way and Lake Maitland.

The information presented here that relates to U_3O_8 and V_2O_5 Mineral Resources of the Centipede-Millipede, Lake Way and Lake Maitland deposits is based on information compiled by Dr Greg Shirtliff of Toro Energy Limited and Mr Daniel Guibal of Condor Geostats Services Pty Ltd. Mr Guibal takes overall responsibility for the Resource Estimate, and Dr Shirtliff takes responsibility for the integrity of the data supplied for the estimation. Dr Shirtliff is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and Mr Guibal is a Fellow of the AusIMM and they have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012)'. The Competent Persons consent to the inclusion in this release of the matters based on the information in the form and context in which it appears.