

## ASX RELEASE

21 September 2022

# CAPEX FINALISED FOR STAND-ALONE LAKE MAITLAND URANIUM-VANADIUM OPERATION

## HIGHLIGHTS

- Scoping level estimation of CAPEX for the proposed stand-alone Uranium-Vanadium operation at Lake Maitland has been completed by SRK Consulting Australasia and Strategic Metallurgy.
- Entire proposed operation is estimated to have a total build price of AUS\$270 million or US\$202.5 million (based on a US\$:AUS\$ 0.75 exchange rate), inclusive of a 20% contingency and 15% allowance for engineering, procurement and construction management (EPCM).
- New CAPEX estimate delivers a AUS\$45 million reduction compared to the estimation of AUS\$315 million for the entire Wiluna Uranium operation with processing based at the Centipede-Millipede deposit, undertaken almost 10 years ago (see ASX announcement of 30 January 2014).
- Latest CAPEX estimation includes all infrastructure for the proposed stand-alone Lake Maitland Uranium-Vanadium operation, inclusive of the entire processing facility with beneficiation plant and the ability to produce both a uranium and vanadium product, all mining and administration related infrastructure, access roads, power plant, borefield and a reverse osmosis desalinisation plant for water supply.
- Estimated that total processing infrastructure will have a build cost of AUS\$133 million (or AUS\$95.8 million excluding contingency and EPCM) and the total non-processing infrastructure will have a build cost of AUS\$137 million (or AUS\$99.2 million excluding contingency and EPCM).
- Proposed stand-alone Lake Maitland Uranium-Vanadium operation will have a mine life of approximately 17 years, will process some 1.94 Mt of ore per annum (front of beneficiation plant) and will produce approximately 23.5 million pounds (Mlbs) of U<sub>3</sub>O<sub>8</sub> and 12.2 Mlbs of V<sub>2</sub>O<sub>5</sub> over its 17 year life (the latter calculation is still being adjusted around C1<sup>1</sup> operating expenditure (OPEX) calculations).
- SRK is currently estimating the overall and year by year OPEX based on the proposed new mining schedule that resulted from the recently completed re-optimisation of the Lake Maitland mining pit. This OPEX estimation is expected to be completed soon.

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<sup>1</sup> C1 operating cost includes all mining, processing, site administration and transport costs but excludes royalties and any sales adjustments.

Toro Energy Limited (ASX: TOE) ('the **Company**' or '**Toro**') is pleased to announce that the scoping level capital expenditure (**CAPEX**) estimation for its proposed stand-alone Lake Maitland Uranium-Vanadium operation has now been completed by mining engineers at SRK Consulting Australasia (**SRK**) and metallurgical and processing engineers at Strategic Metallurgy.

The total CAPEX for the Lake Maitland mining and processing operation has been estimated at **AUS\$270 million or US\$202.5 million** (assuming a US\$:AUS\$ 0.75 exchange rate) inclusive of a 20% allowance for contingency and 15% allowance for EPCM.

Toro is pleased to highlight that this CAPEX estimate is **AUS\$45 million less than the previous CAPEX estimate of AUS\$315 million**, which was for the entire Wiluna Uranium operation with processing based at the Centipede-Millipede deposit, despite the latter being estimated almost 10 years ago (see ASX release of 30 January 2014).

**Commenting on Toro's CAPEX estimate for a proposed stand-alone Lake Maitland Uranium-Vanadium operation, Toro's Executive Chairman, Richard Homsany, said:**

*"We are delighted to release a very competitive US\$202.5 million CAPEX estimate for our proposed Lake Maitland Uranium-Vanadium operation. After the outstanding pit re-optimisation results, the CAPEX estimate is an excellent and economically significant milestone towards delivering our strategy to advance the Wiluna Uranium Project so that it is optimised when conditions are favourable for its financing and construction.*

*The Wiluna Uranium Project is an asset of global significance, and our clear focus is on the long-term feasibility of uranium production from the asset as global uranium markets continue to strengthen. Toro's view is that we are in the early stages of an increasingly upward uranium market with peak uranium prices still to come.*

*Toro has invested significantly in the Wiluna Uranium Project and through our patient and focussed approach our team has delivered significant potential improvements in both the capital and operating costs of the entire Wiluna Uranium Project.*

*Lake Maitland represents a significant proportion of the Wiluna Uranium Project's resources of both uranium and vanadium. The US\$202.5 million CAPEX for Lake Maitland compared to the CAPEX estimation of AUS\$315 million for the entire Wiluna Uranium Project prepared almost 10 years ago is an outstanding result given inflationary pressures, and significantly improves the economics of the entire project.*

*This CAPEX estimate is a key milestone that demonstrates that Lake Maitland could itself be a viable stand-alone uranium-vanadium operation over an approximate 17 year mine life, processing 1.94 Mt of ore per annum (front of beneficiation plant) and producing approximately 23.5 Mlbs of U<sub>3</sub>O<sub>8</sub> and 12.2 Mlbs of V<sub>2</sub>O<sub>5</sub>.*

*This is an exciting result for Toro shareholders. Further optionality and economic upside exists for Toro given the proximity to Lake Maitland of the Centipede, Millipede and Lake Way uranium deposits that could increase the production of uranium and vanadium. We look forward to announcing the C1 operational expenditure estimate from the scoping study, which is expected to be completed soon."*

## **CAPEX ESTIMATION**

The total infrastructure spend for the processing plant is estimated to be AUS\$95.8 million with contingency and EPCM allowances bringing it to a total of AUS\$133 million. The total infrastructure spend for non-processing items of the proposed operation is estimated to be AUS\$99.2 million with contingency and EPCM allowances bringing it to a total of AUS\$137 million. It should be noted that these estimations are at a scoping study degree of accuracy.

The stand-alone mining and processing operation at Lake Maitland has been designed to accommodate the recent re-optimisation of the Lake Maitland mining pit where the associated rescheduling of mining will deliver 1.94 Mt of ore to the beneficiation plant, which is the front end of the newly designed processing plant annually. This figure is a slight reduction from that announced on 1 September 2022, after refining it to align mining and processing throughput. As outlined in the re-optimisation, based on a US\$70/lb U<sub>3</sub>O<sub>8</sub> sale price, it is estimated at a scoping study degree of accuracy that the Lake Maitland stand-alone operation will produce approximately 23.5 Mlbs of U<sub>3</sub>O<sub>8</sub> (the compound uranium is measured in for buying and selling) and 12.2 Mlbs of V<sub>2</sub>O<sub>5</sub> (the compound vanadium is measured in for buying and selling) over a total operation life of 17.6 years (refer to ASX announcement of 1 September 2022).

This is a substantial improvement from what could be produced from the deposit as part of the Wiluna Uranium operation, where only 15.8 Mlbs of U<sub>3</sub>O<sub>8</sub> could be produced with no V<sub>2</sub>O<sub>5</sub> production over 10.1 years. It is important to note that the proposed mine life of the Lake Maitland stand-alone operation is now similar to the mine life of the previously proposed Wiluna Uranium operation, which included the mining of the Lake Maitland, Centipede-Millipede and Lake Way deposits (refer to ASX announcement of 30 January 2014), and also has a substantial increase in ore feed to the front end mill, from 1.3 Mtpa to 1.94 Mtpa, yet is estimated to cost AUS\$45 million less to build. These savings are a direct result of the improvements and changes made to the processing flow sheet after the many recent years of research and development by Toro.

### **Cautionary Statement**

The studies referred to in this announcement are based on lower-level technical & economic assessments and are insufficient to provide certainty that the conclusions of the studies will be realised. Further, the Company cautions that there is no certainty that the forecast financial information contained in the studies will be realised. All material assumptions underpinning the forecast financial information are set out in this announcement. This forecasted financial information is deduced from an underlying mining production rate deemed possible due to the size of the Mineral Resources at Lake Maitland. Refer ASX announcements dated 1 February 2015, 1 February 2016 & 14 December 2021 showing the Lake Maitland deposit has sufficient Mineral Resources to support a 2 Mt/pa mining operation.

The key parameters and assumptions included in CAPEX estimation are as follows:

- the processing CAPEX includes all infrastructure required for the processing of the Lake Maitland ore and the production of a uranium product and a vanadium by-product based on the processing flowsheet design as outlined in the ASX announcement of 1 September 2022 which includes a beneficiation plant and an ion exchange facility with no need for a counter current decantation circuit or evaporation pond;
- the processing plant has been sized accordingly to accept 1.94 Mt of ore per annum into the beneficiation plant at the front end of the processing circuit;
- all non-processing infrastructure has been based around the mining of 76.2 Mt of ore and waste from the Lake Maitland re-optimised pit over the life of proposed mine and ensuring an ore feed of 1.94 Mtpa to the beneficiation plant;
- the non-processing infrastructure assumes a contractor based mining fleet;
- the CAPEX has included an accommodation village to accommodate all staff needed for the mining and processing operation as well as a gravel access road to the proposed mine;
- there will be no need for the construction of an aerodrome with the ability to negotiate access to the numerous landing strips in the area;
- a power plant capable of powering all processing and non-processing operations has been included; and
- the construction of a bore field and a reverse osmosis desalination plant has been included for all water supplies.

### **THE NEXT STEPS**

SRK is currently developing a financial model for the proposed stand-alone Lake Maitland operation which will enable a C1 operational expenditure to be estimated at a scoping study level of accuracy. This is expected to be finalised ready for announcement in the coming weeks and will allow Toro's management and board to consider the way forward for the proposed stand-alone Lake Maitland mining and processing operation based on the full knowledge of the project's economic viability and current economic outlook for uranium and vanadium.

As previously advised, 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 Toro's studies may also necessitate an amendment to the proposal the subject of each environmental approval received.

## **WHY A STAND-ALONE LAKE MAITLAND MINING AND PROCESSING OPERATION?**

The proposed stand-alone Lake Maitland Uranium-Vanadium operation is based around the Lake Maitland Uranium Deposit, which was the largest of the uranium deposits proposed to be mined as part of the Wiluna Uranium operation. However, Toro's research and development studies over many years have successfully identified and evaluated the opportunity to significantly enhance the technical and financial feasibility of the Wiluna Uranium Project through a redesign of the proposed plant and processing flowsheet, which includes an initial beneficiation step. The new processing flowsheet was found to improve efficiency the most in lithologies with high clay content and so Toro found an opportunity in the Lake Maitland Deposit, which is clay dominant and so the most amenable to the processing improvements, as a potential stand-alone operation and possible 'spearhead' of a future greater Wiluna Uranium Project.

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

Katherine Garvey  
Legal Counsel and Company Secretary, Toro Energy Limited.  
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### **FURTHER INFORMATION:**

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### **Competent Persons' Statement**

#### **Wiluna Project Mineral Resources – 2012 JORC Code Compliant Resource Estimates – U<sub>3</sub>O<sub>8</sub> and V<sub>2</sub>O<sub>5</sub> for Centipede-Millipede, Lake Way and Lake Maitland.**

The information presented here that relates to U<sub>3</sub>O<sub>8</sub> and V<sub>2</sub>O<sub>5</sub> Mineral Resources of the Centipede-Millipede, Lake Way and Lake Maitland deposits is based on information compiled by Dr Greg Shirliff 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 Shirliff takes responsibility for the integrity of the data supplied for the estimation. Dr Shirliff 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.