



27 July 2018

About Marenica Energy

- Marenica Energy Limited (ASX: MEY) is a minerals exploration company holding a portfolio of mineral tenements in Namibia and Australia.
- Marenica is actively looking to increase these tenement holdings.
- Marenica has developed its proprietary uranium **U-pgrade™** process and has been granted Patents to protect the process.
- **U-pgrade™** is a beneficiation process for upgrading secondary uranium deposits. It has the potential to transform the economics of uranium production.

Investment Summary

- 100% interest in Uranium **U-pgrade™** Process.
- 75% interest in the Marenica Uranium Project in Namibia.
- 100% interest in Mile 72 Uranium Project in Namibia.

Contact

Murray Hill
Managing Director & CEO
T: +61 8 6555 1816
E:
murray.hill@marenicaenergy.com.au

Quarterly Activity Report for the period ending 30 June 2018

Highlights

Uranium **U-pgrade™** Process

- Discussions continue to progress the potential application of **U-pgrade™** to Langer Heinrich.
- The Company continues to engage with other resource owners with the aim of applying **U-pgrade™** to their projects.
- The Company continues to undertake due diligence on projects for acquisition or application of **U-pgrade™**, or both.

Acquisition

- The Company acquired the Mile 72 Uranium Project, a highly prospective advanced exploration project, covering 2,692 hectares within the world class Erongo uranium province in Namibia.

Uranium **U-pgrade™** Process

Discussions with Paladin Energy Limited (“Paladin”) on the application of **U-pgrade™** to the Langer Heinrich Uranium mine in Namibia continued during the quarter. Paladin placed the mine into care and maintenance during the quarter and Marenica see this as an opportunity to optimise the application of **U-pgrade™** at Langer Heinrich. Both parties have publicly acknowledged the potential benefit of **U-pgrade™** to Langer Heinrich and Marenica looks forward to being part of the restart of the operation.

Marenica continues in various stages of discussion with a number of resource owners regarding the benefits of **U-pgrade™** to their projects. Marenica also continues due diligence on a number of projects either for acquisition or application of **U-pgrade™**. The due diligence being undertaken on projects is confidential, however, as an example, one project that has been acquired from such due diligence was the Mile 72 Uranium Project (Mile 72) in Namibia, the acquisition of which was announced during the quarter:

- The Mile 72 Uranium Project is a calcrete hosted uranium source;
- It is ideally suited for Marenica’s proprietary **U-pgrade™** beneficiation process;
- It is located in the world class Erongo uranium province in Namibia; and
- Marenica considers the project to have significant exploration potential.

Marenica acquired 100% of Mile 72 (EPL3308) from Metals Australia Limited by payment of A\$30,000 cash, plus a preferential dividend of 1% of gross production income from the project.

The Project covers 2,692 hectares within the world class Erongo uranium province in Namibia (Figure below). Namibia has a stable, supportive mining culture with excellent infrastructure. The acquisition of Mile 72 strengthens Marenica’s position in this uranium province. It is located within close proximity to the Marenica Uranium Project and near the coastal town of Henties Bay.

The mineralisation at Mile 72 is calcrete hosted, very similar to the Marenica Uranium deposit, Langer Heinrich Project (Paladin) and Tumas deposit (Deep Yellow), all in Namibia. Past testwork on these projects has confirmed the amenability of **U-pgrade™** and indicated that the **U-pgrade™** process potentially reduces project development costs by about 50% and operating costs by about 50%. It is expected that the Mile 72 calcrete mineralisation will be amenable to **U-pgrade™** in a similar manner as all other Namibian calcrete deposits that have been tested, resulting in a low mass concentrate for leaching.

Marenica believes that Mile 72 has been underexplored for calcrete uranium mineralisation and presents a great opportunity for the Company to potentially delineate a high-grade resource, in a world class uranium province.

The first stage for Marenica will be validation of available exploration data. Upon receipt of an environmental clearance, initial exploration will use non-invasive ground penetrating radar to locate the calcrete palaeochannels, before undertaking a low-cost drilling program.

Due diligence on other projects is progressing, with the outcome dependent upon application of **U-pgrade™** to value add.

Tenement Schedule

The Group holds the following mineral tenements at the end of the quarter.

Namibia

Marenica Minerals (Pty) Ltd (Marenica 75%)

- MDRL 3287

Metals Namibia (Pty) Ltd (Marenica 100%)

- EPL 3308 acquired during the June quarter

Expenditure

The Group incurred exploration expenditure of \$16,125 during the quarter.

Project Location



What is U-pgrade™?

Marenica has developed ***U-pgrade™*** as a potential industry leading and economically transformational beneficiation process for upgrading surficial uranium ores.

Marenica developed this potentially disruptive process on ore samples from its namesake Marenica Project in Namibia and since then testwork been undertaken on ore samples from a number of other sources.

The Company has demonstrated in bench scale testwork that it can concentrate the uranium from its calcrete hosted uranium project in Namibia (Marenica). In summary, ***U-pgrade™*** has demonstrated that it;

- Concentrates the uranium by a factor of 50
- Rejects ~98% of the mass prior to leaching
- Produces a high grade concentrate in a low mass of ~2% (leach feed)
- Rejects acid consumers
- Reduces operating costs by ~50% and capital costs by ~50% compared to conventional processing