

ASX ANNOUNCEMENT AND MEDIA RELEASE

21 September 2022

Avenira signs MOU with Aleees and NT Government to develop downstream manufacturing of LFP cathode material

HIGHLIGHTS

- **Avenira signs tripartite non-binding MOU in relation to the Wonarah Project with global LFP cathode manufacturer, Aleees and the NT Government**
- **The three parties will work together towards a LFP battery cathode manufacturing facility in a phased capacity program starting at 5,000-10,000 tpa in 2023/24 and potentially scaling to 200,000 tpa by 2032**

Memorandum of Understanding (MOU)

Avenira (ASX: AEV) is pleased to advise it has signed a non-binding MOU with world leading LFP battery manufacturer, Advanced Lithium Electrochemistry Ltd (Aleees), (TWSE: 5227) and the Northern Territory (NT) Government to investigate and work towards the development of a Lithium Iron Phosphate (LFP) battery cathode manufacturing plant in Darwin, Australia, leveraging Avenira's flagship Wonarah Phosphate Project.

The NT Government has recognised the potential to leverage the natural resources in the Northern Territory and is marketing itself as a stable supplier of critical minerals. With the Wonarah Project working towards the production of phosphoric acid, and the availability of other abundant battery metals such as lithium and iron in Australia, the next step of producing LFP cathode material is a logical value-add for all parties. The NT Government has indicated as part of the MOU that it will work proactively with Aleees and Avenira to assist and advise where appropriate in relation to necessary infrastructure including water, energy, power, telecommunications, road, port and rail access and service requirements.

Aleees is a globally recognised LFP battery cathode material manufacturer. It is one of the few companies outside China with complete LFP cathode material manufacturing capability and patents for electric vehicle and stationary storage batteries. Aleees owns more than 120 exclusive patents worldwide, with customers including investment grade energy storage battery and EV battery customers across Europe, U.S., Japan, Korea, and Asia. Aleees co-develops various types of LFP products with more than 40 global customers, and produces high-quality, low-cost, and long life-cycle LFP cathode materials.

The potential scale and development timeline under consideration by Aleees and Avenira includes a LFP battery pre cursor cathode manufacturing facility in a phased capacity program as follows:

Phase 1 – 5000 - 10,000 tpa in 2023/24 (First LFP plant module)

Phase 2 – expansion to 30,000 tpa in 2025

Phase 3 – expansion to ~100,000 tpa in 2028

Phase 4 – expansion to ~200,000 tpa in 2032

Avenira has engaged global engineering firm Bechtel to perform a Scoping Study of a Battery Grade Phosphoric Acid Plant and a Battery Grade Lithium Iron Phosphate Powder Plant (LFP). Both plants will source phosphate from the premium grade Wonarah phosphate deposit in the Northern Territory.

Avenira’s Executive Chairman, Mr. Brett Clark commented,

“We are proud to reach this MOU alongside Aleees and the Northern Territory Government as we jointly work towards a Lithium Iron Phosphate (LFP) battery cathode manufacturing facility.

“This MOU opens the door for Avenira to learn from Aleees about LFP battery cathode manufacturing technology and leverage this experience to optimise the production of phosphoric acid from the Wonarah Project and develop downstream assets to produce Australia’s first LFP pre cursor cathode material.

Notthern Territory Chief Minister, Natasha Fyles, commented,

“Today’s announcement is a significant economic and strategic opportunity for the Northern Territory.

“Increasing demand and the transition to renewable energy, battery storage and use of high technology products has resulted in global organisations looking to establish diversified, reliable and stable supply chains.

“The project will position the Territory as the next Australian home of advanced manufacturing, develop new skills and jobs, as well as support our objective to achieve a \$40 billion economy by 2030.

“With the potential to create 1,000 jobs this project will benefit Territorians from the Top End to the Barkly with the manufacturing plant to be built in Darwin, which will exclusively source phosphate from the Wonarah Phosphate Project in the Barkly.”

This announcement has been authorised by the Board of Avenira

Brett Clark
Executive Chairman
+61 8 9264 7000

Wonarah Phosphate Project (Avenira 100%)

Wonarah Project Summary

- High Grade Phosphate Resource of 67Mt @ 30.0% P₂O₅, (27% P₂O₅ cutoff grade).
- Tier 1 large premium grade phosphate deposit in Australia (15% Cut off grade):
 - Measured Resource of 64.9 Mt @ 22.4% P₂O₅;
 - Indicated Resource of 133 Mt @ 21.1% P₂O₅;
 - Inferred Resource of 352 Mt @ 21% P₂O₅.
 - 100%-owned by Avenira.
- Scoping study to develop the Tier 1 Wonarah Phosphate Project and downstream LFP pre cursor cathode manufacturing plants near completion by Bechtel Engineering
- Excellent infrastructure including nearby road, rail, gas, and water.
- Ongoing discussions with strategic downstream industry participants.



FIGURE 1: WONARAH PROJECT LOCATION MAP