



14 October 2021

\$460M WA refinery to produce world’s cleanest battery materials

FOR IMMEDIATE RELEASE

Australian tech company Pure Battery Technologies has announced plans for a flagship \$460 million NMC battery material refinery in Western Australia to meet increasing global demand for Electric Vehicle (EV) batteries.

Over 1,100 jobs will be created during the construction and operation of the low-emission refinery, which is set to become one of the most sustainable facilities of its kind in the world.

The NMC (nickel, manganese and cobalt) refinery hub will be established in Kalgoorlie and will initially produce 50,000tpa of precursor Cathode Active Material (pCAM) per year – enough to produce up to 500,000 lithium-ion EV batteries.

Pure Battery Technologies Managing Director and Chief Executive Officer, Bjorn Zikarsky, said the investment will take Australian technology and commercialise it on a global scale.

“This is Australian technology addressing a global demand, using advanced Australian manufacturing and sustainable downstream processing facilities,” Mr Zikarsky said.

“The Kalgoorlie pCAM hub is ground-breaking in terms of the green technology it will use and its role in the future of domestic and overseas EV markets.

“Compared to typical pCAM production processes, our advanced processing technology uses clever chemistry to reduce CO2 emissions by between 70 and 85 per cent, making the batteries 6-12kgCO2/kWh less carbon-intensive.

“The facility will have the capacity to double its production within five years of being operational and will place Australia at the forefront of sustainable, environmentally-sound refining practices.”

Mr Zikarsky said the company’s advanced processes don’t require high pressure or heat, which means critical minerals such as nickel and cobalt can be processed more efficiently to create a cleaner end-product than typical EV batteries.

“We also have the capability to recycle end of life batteries and return them to the supply chain, further reducing our carbon footprint,” he said.

Managing Director and CEO of Poseidon Nickel (ASX: POS), Peter Harold, said they looked forward to working with PBT to determine if their potential concentrate production could be feed for PBT’s pCAM hub.

“Should we decide to proceed with development of our projects, this could be a great way for us to improve the payability of the nickel in our concentrates and improve the margins of our projects,” he said.

Dr. Jens Goennemann, Managing Director of Advanced Manufacturing Growth Centre Ltd., said Pure Battery

Technologies is well positioned to become a critical global supplier within the battery value chain.

“Australia sits on the largest critical mineral resources base in the world,” Dr Goennemann said.

“Pure Battery Technologies is able to access and refine these resources using clean, clever technologies and this is incredibly appealing for top tier automotive brands.”

Pure Battery Technologies’ highly specialised and patented processing techniques, which eliminates environmentally demanding chemical pollutants from the extraction process, was developed by the University of Queensland.

Mr Zikarsky said the technology has been successfully proven in the company’s first commercial refinery in Hagen, Germany – the automotive capital of the world – and is now “coming home” to Australia.

“There’s an incredible ecosystem of innovation and technology in Western Australia. It’s very exciting, and we want to contribute to it,” he said.

“This refinery will be ideally located on the doorstep of one of the largest nickel deposits in the world and will use advanced Australian manufacturing facilities to export pCAM to the world.

“In every sense, this technology and its application aligns with global aspirations of net-zero emissions and Australia’s own important role in this process.”

Construction of the pCAM refinery is planned to commence next year, with the first materials to be processed in early 2024.

###

Media Contacts:

Sarah Dixon, Urbaine Communications | P 0418 748 892 | E sarah@urbainepr.com.au

Collette Hetherton-Gwinn, PBT | P 0419 728 690 | E collette@purebatterytech.com

About Pure Battery Technologies - <https://purebatterytech.com/>

Pure Battery Technologies (PBT) was established in 2017 in response to global demand for more environmentally friendly processes for minerals refining to create the world’s cleanest Electric Vehicle batteries.

PBT uses a simple, environmentally superior processing technology which is commercially proven to produce high-quality, more affordable nickel and cobalt battery materials. PBT’s patented Selective Acid Leaching (SAL) process can refine intermediate nickel and cobalt products more flexibly with a lower environmental footprint than other processing methods.

The company’s first commercial refinery in Germany produces nickel and cobalt products from intermediate materials and black mass feeds.

PBT is replicating this business globally, utilising its repeatable plant design to capture the growth in the pCAM and LIB markets.

PBT’s ability to refine raw materials and recycle from existing battery stocks is a game changer for the drive towards a truly circular economy.

About Poseidon Nickel Limited - <https://poseidon-nickel.com.au/>

Poseidon Nickel Limited (ASX Code: POS) is a nickel sulphide exploration and development company with three projects located within a 300km radius of Kalgoorlie in the Goldfields region of Western Australia and a resource base of around 400,000 tonnes of nickel and 180,000 ounces of gold. Poseidon owns the Windarra, Black Swan and the Lake Johnston Nickel Projects.