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Pure Battery Technologies secures Europe's biggest cleantech investor for eco-friendly battery materials production in Germany

- *EIT InnoEnergy is investing a seven-figure amount and connecting PBT to potential customers and investors*
- *PBT has developed innovative processing technology for the commercial refining of precursor cathode active material (pCAM) that reduce both emissions and costs*
- *The first commercial refinery in Hagen, Germany is to ramp up production to as much as 10,000 tonnes of pCAM by the end of 2023*
- *PBT aims to be producing 250,000 tonnes of pCAM globally by 2027*

Pure Battery Technologies (PBT), the pioneering Australian company with an environmentally superior processing technology for the production of EV battery cathode materials, has secured the support of Europe's biggest cleantech investor ¹ EIT InnoEnergy* to ramp up commercial mass production operations in Germany. PBT's first commercial refinery in Hagen is already in operation. By the end of 2023 it will be producing 10,000t of pCAM with nickel, manganese and cobalt (NMC) chemistry, which is the volume required to make batteries for around 120,000 VW ID.3-type electric vehicles. PBT is aiming for global production of 250,000 tonnes by 2027 and needs investments in the range of EUR 600 to 900 million to achieve that aim. In addition to its seven-figure investment, EIT InnoEnergy is supporting PBT by creating connections with potential bulk purchasers and investors in its partner network. EIT InnoEnergy is a driving force behind the European Battery Alliance (EBA), as well as an early investor in Swedish battery maker Northvolt and Australian green lithium producer Vulcan Energy Resources.

"We're incredibly proud to have this strategic partnership with EIT InnoEnergy and it's a real seal of approval for us," said Björn Zikarsky, CEO of the PBT Group, adding: "Our common aim is to manufacture the most sustainable and powerful batteries in Europe from our own resources and PBT is a key contributor to achieving that objective. Our technology closes the gap and creates a cyclical material supply chain in the battery sector. Our focus markets are Europe in General and Germany in particular."

PBT's patented and commercially-proven processing technology makes it possible to produce pCAM cost efficiently with a low level of emissions. The Selective Acid Leaching (SAL) process is used for the production of NMC cathode material (a mix of naturally occurring nickel, manganese and cobalt). The Combined Leaching (CL) process is used for the production of new pCAM and for industrial battery waste (black mass) recycling.

The main difference between these and conventional processes is their simplicity. They use chemical filtering rather than vast amounts of chemicals, heat and pressure to separate the materials and then combine them again in the required mix ratio. In fact, there are just two process steps that use very low quantities of oxidation and reduction agents. As a result, carbon emissions in the pCAM production process are around 70% lower, which means around 750kg less CO₂ per EV².

¹ According to the [Global Start-Up Ecosystem Report Cleantech Edition](#) by Start-Up Genome.

² VW ID3 with a 62kWh NMC622 battery.

