

# Revolutionary Australian Battery Recycling Technology Startup Advances Its Breakthrough Battery Metals Recovery Process

*Australian Startup Battery Pollution's collaboration with the University of Newcastle on Black Mass processing & refinement revealed*

SYDNEY, NEW SOUTH WALES,  
AUSTRALIA, June 2, 2023  
/EINPresswire.com/ -- Australian  
Battery Recycling Technology Company  
[Battery Pollution](#) today revealed a co-  
operation agreement with Australia's  
[University of Newcastle](#) focussed on

the development of proprietary processes for the recovery of cobalt, lithium, graphite and nickel from spent Electric Vehicle and Energy Storage System batteries. With its innovative and environmentally responsible approach, Battery Pollution aims to address the growing demand for sustainable cobalt & battery metals sourcing and contribute to a greener future.

Cobalt and various battery metals, critical components in lithium-ion batteries, are known for their scarcity and complex supply chain challenges. The state-of-the-art recycling approach being developed with the University of Newcastle utilises advanced chemical processes and proprietary methodologies to extract battery metals, minimising waste and maximising resource recovery. By doing so, this novel scientific approach significantly reduces the need for traditional mining operations, thereby reducing the environmental impact associated with mineral extraction.

The solution being developed by Battery Pollution & The University of Newcastle leverages pyrometallurgy and hydrometallurgy processes, combined with certain pre-treatment strategies, to deliver high quality separated battery metals fit for reintroduction into the battery manufacturing supply chain – targeting 95% plus recovery of key battery metals through the combined mechanical shredding and chemical engineering process.



Dealing with the dark side of the battery revolution®

battery pollution



university of newcastle



## Progress & Success

The work under this strategic collaboration commenced in October 2022 and has progressed through to pilot testing of the battery metals recovery processes. Whilst there is no fixed timetable for the completion of the development, both parties are satisfied with the progress to date including achieving effective separation & recovery at a small scale.

Prior to the opening of its own mechanical shredding facilities, Battery Pollution has established a two-way commercial agreement with a major Japanese Trading house, that is supplying high quality Black Mass to advance its Australian based commercial pilot activities. Design of a demonstration battery metals recovery & separation plant is underway with commissioning of that processing capability targeted for late Q4 2023.

Additionally, discussions with OEMs on the procurement and commissioning of an initial mechanical shredding plant are well advanced.

"Our team is thrilled to be heading towards what we hope will be the introduction of a proprietary high value battery metals recovery process," said [Nicholas Assef](#), Founder & CEO of Battery Pollution.

"We are committed to revolutionising the battery recycling industry and providing a sustainable solution for the increasing global demand for all battery minerals but in particular cobalt, nickel, lithium & copper. Our innovative technology being developed in collaboration with the University of Newcastle not only reduces reliance on virgin mining activities but also helps prevent hazardous & often toxic battery waste from ending up in landfills." Nicholas Assef concluded.

## Exportable Technology

The development of battery metal recoverable technology is an exportable product, with particular relevance to economies that are considering the development of battery manufacturing "gigafactories". Battery Pollution's strategic vision is for stand-alone Black Mass processing hubs to be able to provide "processing as a service" to third party recyclers that do not have the in-house technology to process & recover battery metals.

This battery metals separation technology is being developed independently of the mechanical shredding capabilities, with a significant part of the current process focussed on ensuring that the final technology solution can be scaled successfully to deal with large volumes of Black Mass.

## Access to Property & Research Facilities

Under the arrangement with the University of Newcastle, Battery Pollution forms part of a network of industry partners engaged through the University's Newcastle Institute for Energy and Resources (NIER). NIER leads the way in collaborative research that provides sustainable

solutions to the energy, resources, food and water sectors.

This model enables significant strategic advantage through the convergence of operational and scientific development aspects of business, and through this partnership adds to Australia's sovereign capabilities in the domestic production of battery manufacturing.

For media inquiries please contact:

Phone: + 61 2 7257 2508

Fax: + 61 2 8072 1893

Email: [ventures@batterypollution.com](mailto:ventures@batterypollution.com)

Web: [www.batterypollution.com](http://www.batterypollution.com)

## About Battery Pollution

Battery Pollution is an Australian battery recycling technology company developing proprietary capabilities to reduce the waste impact from spent & damaged lithium based batteries.

The company is focused on the development of technology in a number of operational areas including:

- Management of hazardous waste resulting from both damaged and spent batteries via a series of proprietary industrial products
- Effective disassembly of complex battery packs through the use of automation & robotics
- The development of 2nd life batteries from spent units with a high State of Health level
- Shredding and reprocessing of large-scale battery waste (EVs & BESS Units)
- The production & trading of battery metals from the "Black Mass" residual product extracted from the mechanical shredding process

Battery Pollution is partnering with leading Australian Universities to advance its technology in dealing with the dark side of the battery revolution®

## About the University of Newcastle

The University of Newcastle is a research-intensive university focused on developing innovative solutions to national and global challenges. Through the expertise of our researchers, and the support of our collaborators, we're making discoveries that matter – to our communities, our economy, and our planet.

With a long track-record of industry collaboration, the University of Newcastle is well positioned to partner with industry to provide technological advancement and commercial solutions through our innovative research.

Public Relations

Battery Pollution

+61 2 7257 2508

[email us here](#)

Visit us on social media:

[Twitter](#)

[Instagram](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/637259562>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.