

Meet Gigamine, the startup recovering raw materials from used lithium-ion batteries

As part of our quick fire questions series - or QFQs - we spoke to Jerry Williams, CEO at EV battery recycling startup Gigamine about making lithium-ion batteries more sustainable, saving precious materials and the critical role the circular economy will play in EVs.

Temps de lecture : minute

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Electric vehicles will play an increasingly significant role in our drive towards net zero. But at present, their lithium-ion batteries require vast quantities of metals, and there will not be enough of these natural resources available to satisfy demand in the long term. This is where Gigamine plays a significant role - in making all kinds of transport-related lithium-ion batteries more sustainable.

Investing in recycling technology will be a key step in accelerating the circular economy for electric vehicles and making the technology affordable and sustainable for global use. Gigamine's recycling technology will save precious materials from being spent and wasted (reducing costs for manufacturers and consumers), reduce reliance on delicate supply lines, and help the planet.

Tell me about the business - what it is, what it aims to achieve, who you work with, how

you reach customers and so on?

Gigamine is a UK-based startup developing cutting-edge technology to recycle and reuse lithium-ion EV batteries efficiently, effectively, and sustainably. With help from an automated, modular and scalable approach, we'll recover critical raw materials from used lithium-ion batteries.

We're a team with experience in mining, finance and environmentalism, and our aim is to radically reduce the world's reliance on mining rare and expensive materials, and move key industries towards a more sustainable innovation model.

We're working closely with a network of leaders in key industries around the world, For instance, earlier this year we partnered with InoBat to create a state-of-the-art process to deliver cost-effective collection, processing, and re-utilisation of materials from battery manufacturing and used batteries.

How has the business evolved since its launch? When was this?

When we launched in 2021, it was mostly a matter of pitching our vision to key investors and establishing a footprint in the UK. Now, we've evolved - and we're actively implementing our business strategy. We're excited to soon be opening our first recycling facility in the UK. We've also hired some stellar team members from the automotive industry.

How are you funded?

Gigamine received investment earlier this year from leading VC investors including 7percent Ventures - an ex-founder-led, network-driven, trans-

Atlantic early-stage fund – and *Alejandro Agag*, founder of *Formula E* and *Extreme E*.

What has been your biggest challenge so far and how have you overcome this?

Initially - going back to earlier this year, the challenge was to start to understand a new sector. Whilst I have some experience of vehicle electrification projects from my time working in the advanced technology space, I needed to rapidly build my understanding of battery technology and the battery recycling sector. I've been lucky to be able to draw on the expertise of both the technical experts in the Gigamine team, and the wider UK (and international) academic and industry networks to do that.

How does Gigamine answer an unmet need?

At present, lithium-ion batteries require vast quantities of metals and there simply won't be enough of these natural resources to satisfy demand. Some progress has been made. The world currently has the capacity to recycle 180,000 metric tons of spent batteries – so people are beginning to recognise the problem. But already we buy enough each year to more than double that.

Moreover, the traditional methods of recycling lithium-ion batteries, such as hydrometallurgy, are time-consuming and expensive. In short, there's a need for better technology for EV battery recycling that isn't as costly as the problem it purports to solve. Gigamine has stepped up to the challenge. Our model is based above all on scalability; one of the key areas in which we differ is our commitment in practice – and not just in theory – to the circular economy, in which materials are used again and again.

What's in store for the future?

We're launching our first recycling facility in the UK early next year. As we grow, our main focus is on bringing together the right team with the right experience in leadership and industry. We'll continue to build valuable partnerships for R&D as well as production with organisations and universities.

For EV battery recycling to be truly viable, there needs to be a global effort driving it. We need to raise awareness of the urgency of this problem.

What one piece of advice would you give other founders or future founders?

There will be challenges, and you often feel as though you're juggling too many plates. To borrow a great phrase from Jim Collins' book 'Good to Great' "it's very much a question of keeping the faith with your vision, but always confronting the facts of current reality".

Jerry Williams is CEO at EV battery recycling startup [*Gigamine*](#).

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