

Global Acceleration Hubメンバーインタビュー: Inketsu Okina



Inketsu Okina
Chief Intelligence Officer, PJP Eye
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1. Thank you for agreeing to participate in this interview. First, if you could start off with giving an introduction.

I'm Inketsu Okina and I'm the Chief Intelligence Officer and Director of PJP Eye. We mass produce plant-based carbon batteries that do not use rare metals such as cobalt or manganese. The batteries are not explosive, can be charged 10-times faster than those made with heavy metals and they have an expected life span of more than 30 years. We use these batteries for micro mobility and energy stretches. Our vision is to provide sustainable energy to everyone on this planet.

2. Would you please tell us about how PJP Eye was founded?

PJP Eye was established in 2017. Before that, our CEO, Hiroaki Nishina, was a director of two NGOs. Through these organizations, he visited Iraq in 2015 to provide supplies to children who were negatively impacted by the actions of ISIS in the country. These children, many the same ages as his daughters, did not have regular access to healthcare, education, nor electricity. He was shaken to his core by all of this.

At that time, he was an investor of a battery company that had fallen into a financial crisis. He really believed in the company's technology, so he purchased the rights to it and started PJP Eye to continue its development. From his experience in Iraq, the idea of our company became providing portable, sustainable energy around the world. The core technology is carbon and we obtain this carbon from plants. I keep a sample on

me that's made using cotton, but we can use a variety of agricultural organic waste products, such as from olive and sugar cane production, to make the carbon that goes into these batteries. We essentially make batteries from plants.

3. That's certainly a unique product! How do batteries play into the current push towards renewable energy? How does your carbon-based battery differ from a traditional lithium battery?

Current market batteries have the problem of needing rare heavy metals that are monopolized by certain countries. This monopoly has disrupted global battery production as the supply chain has crumpled due to multiple factors. Electric Vehicles and most forms of renewable energy rely heavily on batteries, so the current global production issues are directly affecting those initiatives. If the world wants to shift to a more climate friendly model, current lithium-ion batteries are not the solution. Even the supply chain of the raw materials is heavily controlled, but with these carbon batteries, we can completely circumvent the current pipeline.

The US government and some European countries are injecting money into jump-starting their own battery production pipeline, but complete independence will take 8 or so years and a lot of money to replicate the current most efficient avenues. However, because our battery's technology is available and ready to use, we're trying to persuade different parties to consider investing in us. Our batteries are made with carbon produced from agricultural products including even waste, they don't have the risk of exploding, and due to this, we're able to charge them 10 times faster than current lithium-ion batteries. Our batteries also have an expected lifespan of 30 years compared to the 3 of a lithium-ion battery.

Because of all these factors, we promote our technology's sustainability, safety, and longevity. The long life span of our batteries saves our customers money as they don't have to buy a replacement battery after 3 years like they would with a lithium battery. The 40 year lifespan of our batteries allows us to produce fewer replacements which directly correlates to less CO2 production. Lastly, because the batteries last for so long, we are able to finance them, making them more affordable to interested buyers. The longevity also creates a solid and consistent market for used electric vehicles. Current EVs are a risk to buy used due to the likelihood of needing to buy a replacement battery soon after purchasing the vehicle.

4. How does PJP Eye differ from other battery startups?

A lot of innovative battery companies love to talk about how they're better than lithium-ion, but in most cases, they only have a concept to show. We already have the batteries built and can prove that we're better. An important distinction is that we don't want to be like Tesla or another big manufacturing company. We do want to R&D effectively in order to make the best battery in the world, but , we'll be making our batteries open source. In order to do away with the current battery monopoly, we want to teach the whole world how to make our batteries. Once mass production facilities are set up in different countries, we can use the network of factories to collect data and obtain carbon credits. With that, we will be able to effectively finance the sales of new batteries. Manufacturing is hard and expensive and investors aren't a big fan of it because of the lack of cash flow, so this is our plan for getting around that hurdle. We want to be able to deliver renewable energy to everyone, but if we only stick to manufacturing, it would be impossible, so that's why the data and financing is important.

5. What motivated you to expand PJP Eye globally to the US?

That's easy, it's the biggest market. When it comes to investments, US investors pay 10-to-100 times that of Japanese investors. So if we're aiming for an investment, we're spending the same amount of time and effort for a theoretical 100 million dollar investment here rather than 1 million from Japan. Second, in terms of the market, it's the biggest market and it would be foolish to ignore that.

6. What challenges did you face when expanding PJP Eye globally?

The supply chain is the biggest issue for us when doing international work. Also, batteries are considered hazardous goods for shipping, so the extra regulations and expenses mean that we have to think carefully about where we are going to locate our assets and partners. Also, finding trustable and reliable regional manager is difficult and it is difficult to control the activities from Japan due to the time difference.

7. Why did PJP Eye choose to join GAH?

It was actually my decision, I was curious about Boston. I used to live in the US, so I kind of know the dynamics of business over there. Boston is very unique, especially academically. The level of education and sophistication here really stick out compared to a lot of other places in the country. I also have an interest in getting connected with MIT because our technology is very unique. MIT has the image of being the best technology focused university in the world, so I saw the potential in connecting with them through joining GAH.

8. How have you taken advantage of the coworking, mentoring, and matching services provided by the Global Acceleration Hub?

I have talked to a couple mentors over the past few years. I talked with our first mentor about fundraising and what sort of steps to take going into series B. The other one I actually talked to recently for the purpose of introducing us to investors.