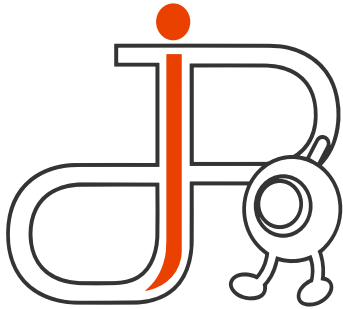


# Future50

Energy

Energy Storage (thermal or electricity)



PJP Eye LTD.



<https://pjpeye.com/>

#GreenManufacturing

## Highlights

PJP Eye claims to be the first innovator to make a dual carbon battery (currently in prototype). The company won the **Most Disruptive Technology Prize**<sup>129</sup> from TechX Accelerator, a UK-based programme for innovative start-ups supporting new solutions for sustainable development and decarbonisation, through the public **funding of more than US\$100,000** to each start-up. PJP Eye also took second place in the Net Zero Technology Centre's Clean Energy Start-Up pitch battle at COP26 in 2021.<sup>130</sup>

## Strategic alliances:

- Universities
- ATM Manufacturers
- Mobility Companies
- Energy Companies
- Telecommunication Data Centres

## List impact technologies

Light Duty Battery EVs, Low-GHG Air Travel, Low-GHG Heavy Duty Vehicles, Micro Mobility

## Headquarters:

Japan

## Middle East operational countries:

United Arab Emirates

## Summary

PJP Eye seeks to produce patented and rare **metal-free, plant-based carbon batteries** that are non-explosive, charge 10 times faster, and have a lifespan of more than 20 years. The batteries have potential integrations with e-bikes, e-scooters, and energy storage systems. PJP Eye has also developed technology that they claim can **convert organic industrial waste to carbon**, which is then used as a raw material for batteries.

## Impacts

PJP Eye indicates that their single carbon battery has the potential to directly and **significantly reduce CO2 emissions per 100 MW of electricity generated**. CO2 emissions during the manufacture of a typical lithium-ion battery are defined by car manufacturers, such as Mazda,<sup>128</sup> as 200 kg or less for a 1KWh battery.

The prototype dual-carbon battery is expected to have even greater CO2 reduction potential due to its further **long life and metal-free characteristics**.

