ReJoule Inc. ~ Second Life Solar

Converting Hazardous Waste into an Integrated Solar Solution

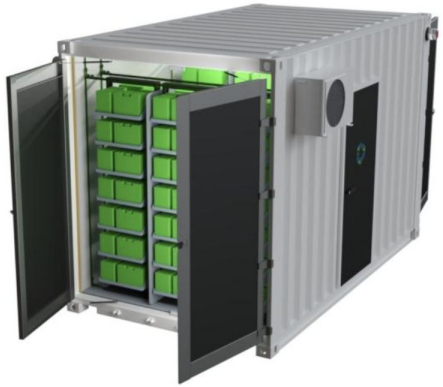
Our Purpose

ReJoule's technology makes it possible to convert an impending flood of hazardous waste into solar storage. Lithium batteries in electric vehicles (EVs) have a finite life on the road. But they typically retain about 80% of their initial capacity when retired. ReJoule converts this waste stream into solar storage and deploys it in disadvantaged communities.

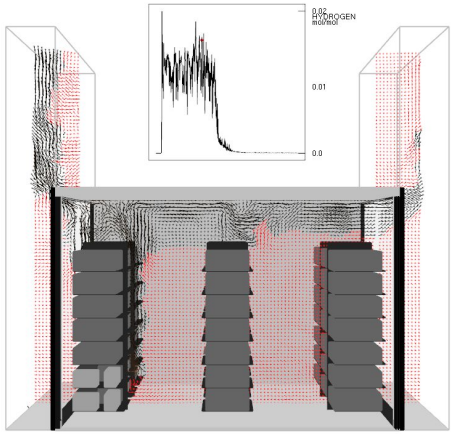
Our Technology

ReJoule's suite of solutions can help to unlock the second-life EV battery industry:

1. A battery enclosure and computational fluid dynamic (CFD) model developed with guidance from Pacific Northwest National laboratory.
2. Robust hardware that can integrate EV battery control electronics into commercial solar inverters.
3. A device to rapidly grade batteries in as less than 30 seconds, as compared to over 10 hours using traditional methods.
4. Battery matching algorithms to extend the life of EV batteries and lower the cost of energy storage.



ReJoule's Battery Enclosure



CFD simulation of an unlikely thermal event

Our Pilot

The host site for ReJoule's proof of concept is the American Museum of Ceramic Art in Pomona, California. The solar powered battery system will power a community resilience center. ReJoule has partnered with Grid Alternatives and Sigway Energy to install the system.

Funded by the California Energy Commission

Partnerships and Commitments

ReJoule has built multiple partnerships reflecting it's JEDI principles:

- Native Sun, for outreach with Native American Communities
- Redwood Energy for outreach with affordable housing developers,
- Rising Sun Center for Opportunity for workforce Development
- CollectiveSun for finance solutions
- Solar Bear, a Native American-led installation company