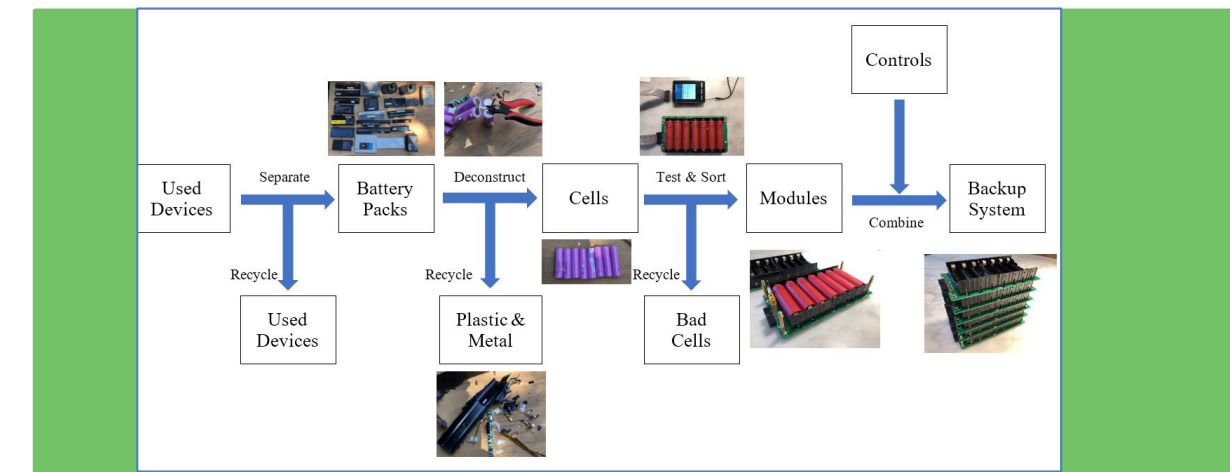


# LITHIUM-ION BATTERY RECYCLING PRIZE



U.S. DEPARTMENT OF ENERGY

## A Public Document



<b>Team Name:</b>	<b>LIBRTE (Li Ion Battery Recycling Training Enterprise)</b>
<b>Primary Submitter Name:</b>	Michael Strauss
<b>City and State:</b>	Newburyport, MA
<b>Member Names (including partners and affiliates):</b>	Michael Strauss, Richard England, Molly Ettenborough Newburyport Energy Advisory Committee, Newburyport Trash Committee, Newburyport Resiliency Committee, Newburyport HS Ecological Club
<b>Submission Title:</b>	<b>Hyper-Local Battery Recycling for Municipal Use</b>
<b>Submission Track:</b>	5 (Other)

### Concept

- Take battery packs from devices dropped off at municipal recycling centers
- Separate, sort, test, and rebuild cells into battery storage modules on-site, using standard equipment and parts
- Use battery storage for municipal projects: buildings, street lights, and traffic lights, etc. helping with energy and resiliency issues
- Create standard operating procedures and how-to videos for the process
- Roll out to other municipalities using YouTube, Facebook, social media, and wikis
- Share best practices with other municipalities
- Create buying group to lower costs further

### Approach

- Use volunteer labor from HS Ecological Club. They get electronics and safety training while giving back to the community
- Use standard testing protocols and parts
- Keep the batteries being recycled in the communities they came from
- Remove the transportation and logistics costs

### Potential Impact

- Cuts out the transportation and logistics issues with centralized facilities.
- Focuses on the large amount of batteries from small devices: laptops, power tools, etc.
- Make municipalities more energy efficient and resilient
- Especially important for isolated areas with high energy and transportation costs and high resiliency needs such as Hawaii, Alaska, Puerto Rico, Guam, American Samoa, Northern Mariana Islands, U.S. Virgin Islands, Martha's Vineyard, Florida Keys, and others.