

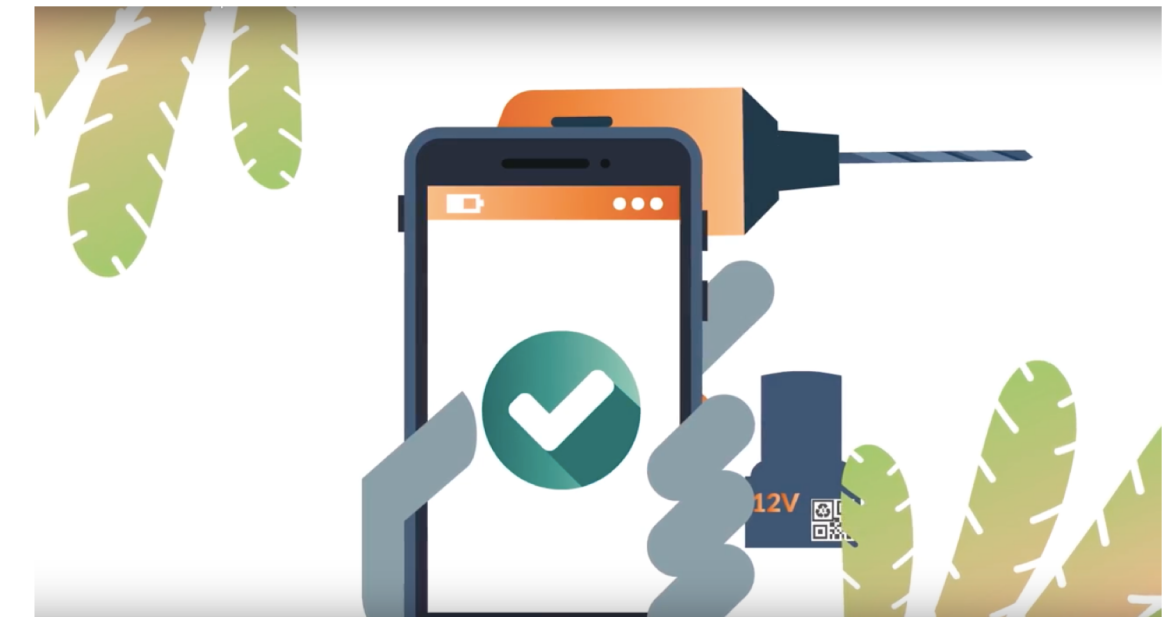
LITHIUM-ION BATTERY RECYCLING PRIZE



U.S. DEPARTMENT OF ENERGY

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Submission Title:	Reward to Recycle – Closing the Loop on Portable Lithium Ion Batteries
Submission Track:	5

A Public Document



Concept

- Team Portables proposes a demonstration whereby portable lithium ion batteries and the products they power will be given a digital identity to support a consumer awareness and reward system to capture > 90% of portable lithium ion batteries produced for responsible recovery at end of life.

Approach

- **Objective 1:** Develop and implement a standardized Provenance and Compliance Platform for electronics containing LIBs and for free-standing LIBs such as those used for e-bikes and much more.
- **Objective 2:** Enhance the traceability of material flows throughout the LIB product lifecycle by working with OEMs to establish a labeling standard (AIDC) for portable LIBs and LIB powered products.
- **Objective 3:** Create a digital reward that would help close the loop of spent LIBs.
- **Objective 4:** Implement a pilot project on the Everledger Platform with OBADA protocols for open participation to support marketplace creation for spent LIBs.
- **Objective 5:** Test B2B and B2C promotional avenues/adoption motivations for a full scale program.

Potential Impact

- Consumers become aware and motivated to recycle LIBs
- Number of LIBs and LIB products captured and recycled significantly increases
- Critical metals for LIBs are secured
- Working model for circular economy for portable LIBs is demonstrated