

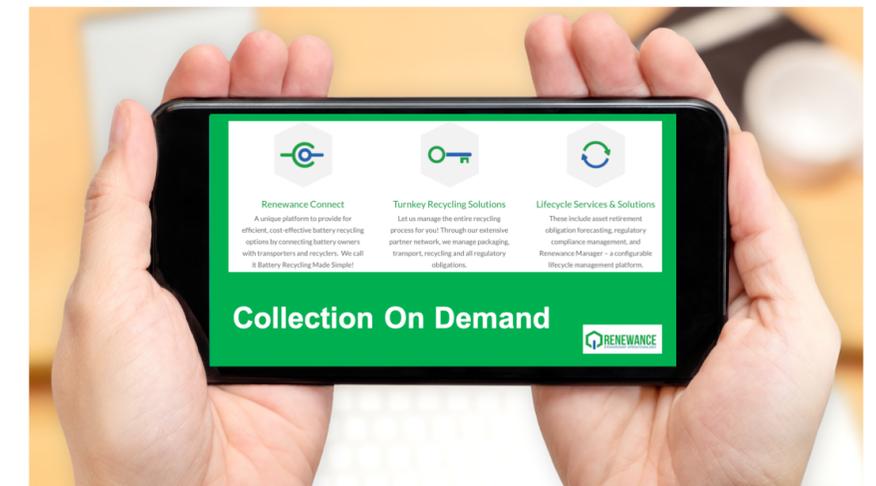
LITHIUM-ION BATTERY RECYCLING PRIZE



U.S. DEPARTMENT OF ENERGY

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Submission Title:	Collection On-demand
Submission Track:	Track 1 - Collection

A Public Document



Concept

- **Improving access to and utilization of the existing infrastructure** ... ‘on-demand collection at your fingertips’. A marketplace where certified participants bid on battery collection and recycling. Platform enables battery owners to easily place collection requests, and collection providers can optimize collection route and thus cost.
- **Boosting awareness** for the cause to recycle through education on liability from regulations, environmental impact and the need for limiting dependence of import from geopolitically challenging countries.
- **Minimizing collection and recycling cost** through facilitating competitive bidding, identifying nearby service providers and providing insights to volume aggregation opportunities.

Approach

- **The Uber app for waste battery collection:** a conveniently accessible, industry wide waste batteries collection and recycling marketplace app which enables easy access to market participants and connects owners of waste batteries with collection services and recycling providers.
- **Cradle-to-grave tracking closed-loop execution model** for liability management, regulatory compliance and end-of-life management.
- **Battery registry** for batteries placed on market combined with smart algorithms enable reliable projections for recycling volumes by chemistry, form factor and location, facilitating volume aggregation and thus lower cost.

Potential Impact

- Facilitating easy access to cost effective collection and recycling services providers will ultimately result in higher % recycling rate.
- Boosting awareness on liabilities and consequence of non-compliance which will stimulate higher % recycling rate.
- Insights to projected battery waste streams will encourage recycling infrastructure development, which in turn will enable higher recycling rate.
- Comprehensive tracking platform enables accurate recycling statistics tracking and planning future improvement initiatives to reach 90% goal.