LITHIUM-ION BATTERY RECYCLING PRIZE



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Submission Title:	Cobalt Recovery from Li-Ion Batteries: Turning Cost Drivers into Value Drivers
Submission Track:	Other Ideas

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U.S. DEPARTMENT OF ENERGY

Concept

- · Two innovations are needed
 - Impetus to recycle batteries
 - Technology to maximize critical mineral recovery / minimize reliance on imports

Approach

- · Leverage existing facilities and processes
- · Adapt to serve Li-ion collection market
- Create economic incentive to drive behavior / reduce barrier to inact
- Insert technical solution at recycling plant
- Maximize recovery of cobalt

Potential Impact

- Recovery of latent value of cobalt in homes & garages, heading to landfills across the United States
- Circular economy for cobalt provides economic driver to recover other materials
- An estimated \$570MM opportunity in 2018 alone