

LITHIUM-ION BATTERY RECYCLING PRIZE



U.S. DEPARTMENT OF ENERGY

Team Name: Vsevolod Ivanchenko

A Public Document

Primary Submitter: Vsevolod Ivanchenko

City and State: Rochester, NY

Member Names: N/A

Submission Title: Integrated pretreatment complex for Lithium-Ion batteries

Submission Track: Track 2. Separating and Sorting

Abstract:

In this submission, I propose to design and build a fully automated complex for extraction of the cathode material from various LIBs, regardless of their chemical composition; to introduce such pre-processing centers at locations of initial LIBs sourcing; and to provide the economic incentives for LIB collectors in the form of savings and additional revenue streams. If implemented, this solution will increase safety of the existing supply chain, recover 90-92% of cathode material for further recycling, and create new employment opportunities in local communities.

[Empty rectangular box for additional information or comments]

Lithium-Ion Battery Recycling Prize

*Supported by the U.S. Department of Energy Vehicle Technologies Office and Advanced Manufacturing Office;
Administered by the National Renewable Energy Laboratory*