

Large-scale lithium-ion battery pack recycling

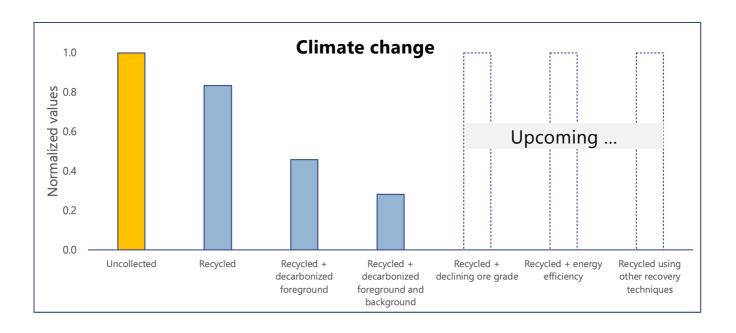
Aim

Evaluate large-scale hydrometallurgical recycling of LIB battery pack in the year 2050.

Method

Prospective LCA of hydrometallurgical recycling of LIB cells.

End-of-life modeling approach with credit for recovered materials.



Highlights

Preliminary results show the potential reduction in climate impacts from:

- (i) recycling,
- (ii) decarbonized energy in the foreground system,
- (iii) decarbonized energy in the background system

Upcoming work

Evaluating the climate and resource impact of:

- (i) declining ore grades,
- (ii) improved energy efficiency
- (iii) other material recovery techniques such as pyrometallurgy

