

## DoE E-SCRAP Challenge: Solar Cell Recycling



## Problem / Opportunity

- PV Recycling must improve
  - $\circ$  Landfill concern / public perception
  - $\circ\,$  Helps solve supply constraints
  - $\circ\,$  Necessary for circularizing high growth economy
- Recycling currently uses 2 approaches:
  - $\circ\,$  Thermochemical, resulting in toxic waste stream
  - $\circ$  Electromechanical (EM), with incomplete separation
- Better eddy current separation can improve the EM approach to make material recovery more economical

## Team Lunexus Solution

- New eddy current approach to separate smaller particles of metals from silicates
  - $\circ\,$  INCUBATE: Market Analysis, LCA Impact
  - $\circ$  PROTOTYPE: Design & Prototyping
  - $\circ$  DEMONSTRATE: Beta Test at recycler

