



— EST. 2008 —

Presentation to North Carolina General Assembly's Environmental Review Commission

February 7th, 2024

powerhouse RECYCLING

— EST. 2008 —

- Founded in 2008
- Headquartered in Salisbury, NC
- Maintain both major electronics recycling certifications (R2 and eStewards)
- Service 3 statewide contracts (North Carolina, Kentucky, Virginia)
- Started recycling solar panels in 2018
- 2023: Solar panel recycling machine and brand

Solar  Panel
RECYCLING.COM



Investment in North Carolina

- 200+ jobs created through organic growth
- \$35m in assets in Salisbury, NC
- 250,000 Facility Square Footage
- \$7m investment in buildout of new shred and sort capabilities
- Fleet based here - 36 trucks and 70 trailers



Solar Panel Recycling: Objective

- ▶ Divert panels from NC landfills to our recycling process to obtain clean, separated, final products (commodities) to be sold back into various supply chains.
- ▶ Solar panel recycling technology is proven and effective in generating cleanly separated glass, metals, aluminum, silicon, and plastic.
- ▶ These products recovered through recycling are important feedstock to current and future manufacturers throughout the state.



ALUMINUM



GLASS



METALS



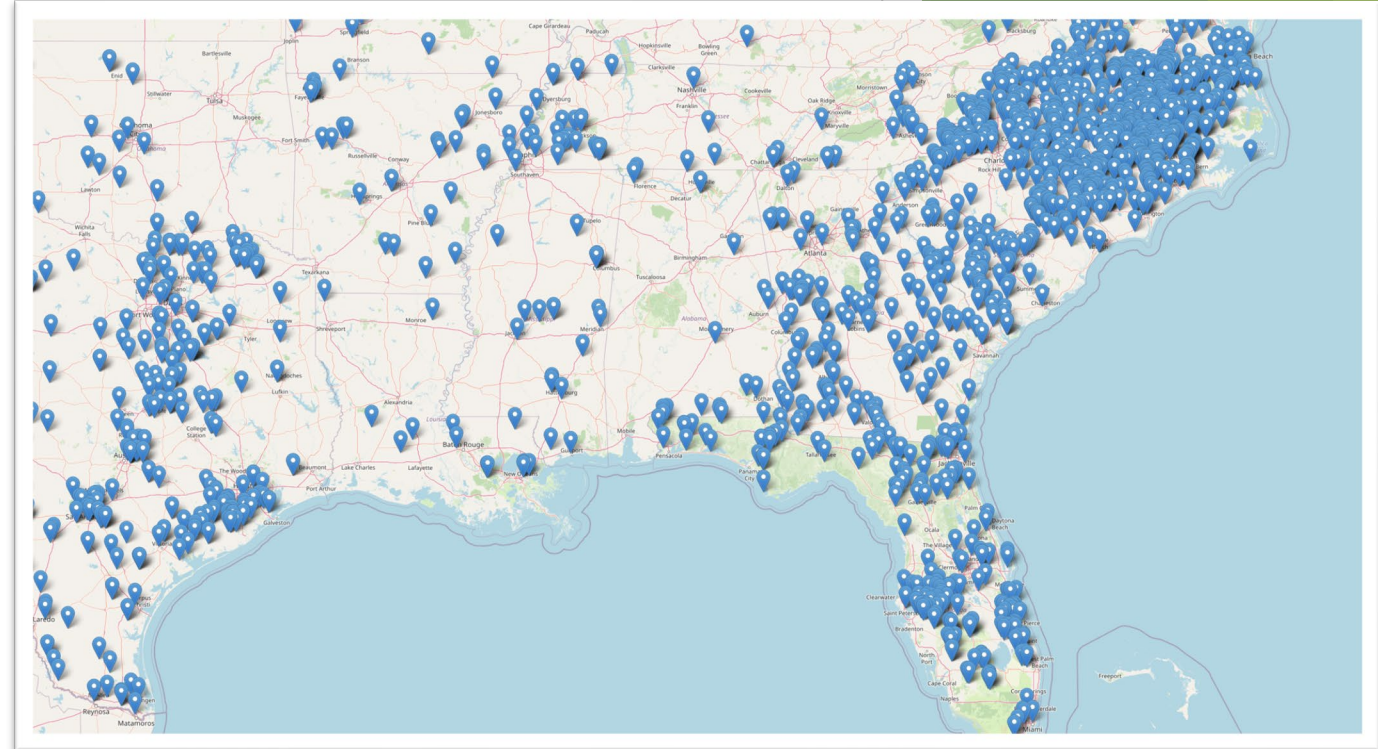
PLASTICS



SILICON

Why North Carolina

- Flagship Facility in North Carolina
 - Diverted from Florida due to NC HB 130/ S.L 2023-58
- First advanced solar recycling line in Eastern USA
- Regional Plants throughout USA feeding our NC Plant
- Major solar investment and development in NC, 4th in the country



Economics of Panel Recycling

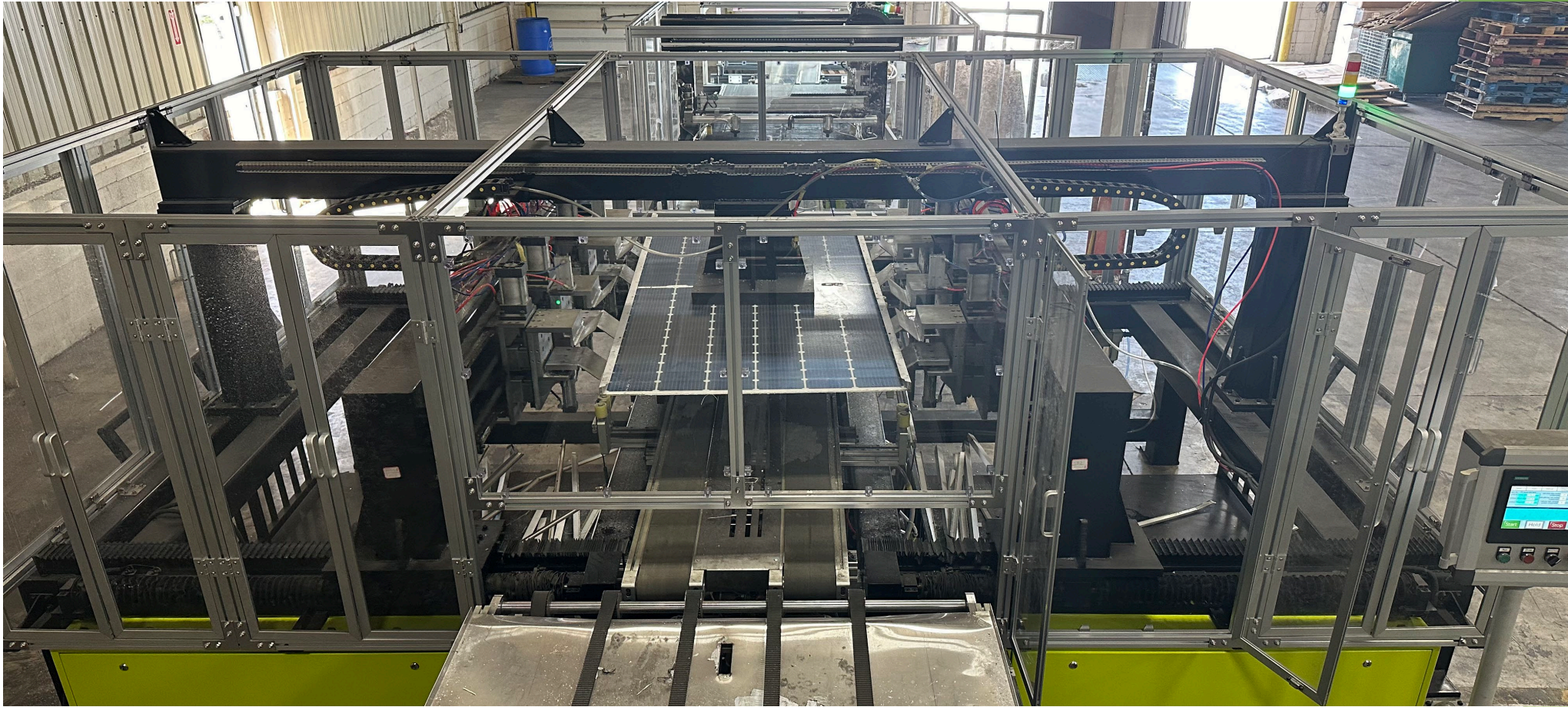
- Currently receiving panels from:
 - Breakage during installation
 - Weather events
 - Technology upgrades
- Positive valued products are being recovered and sold with increasing demand
- More panels recycled will increase Economies of Scale leading to further price reductions
- Continued direct/indirect investment and job creation in North Carolina to increase recycling capacity





Junction Box Removal Machine

Camera sensor system automatically detects junction box locations and fully removes for further recycling



Solar Panel Frame Removal Machine

Aluminum frame is mechanically removed from the PV module to be reintroduced into supply chain



Remaining materials are shredded and sorted

Multiple shredders and grinders downsize the remaining components which are then sorted into clean commodities for resale

Thank you
Please let us know if you have any questions

