

# SOLSTAR Trailer Benefits

## Summary

- Harvests, converts, and stores solar energy into useful on-board power for the trailer and tractor.
- Can be used with conventional, hybrid, all-electric, and tractor-less semi-trailer systems, as well as other fuel-saving technologies.

### Features:

- ▶ Dynamic regenerative braking.
  - ❑ Captures wasted energy.
  - ❑ Reduces brake wear and particulate pollution.
- ▶ Power assisted semi-trailer propulsion system for class 8 tractors.
  - ❑ Motive power to wheels
  - ❑ Reduces wear and tear on the engine and helps reduce fuel consumption.
  - ❑ Saves trucking firms and owner operators money, while also limiting Greenhouse Gas Emissions.
- ▶ Auxiliary powering
  - ❑ Refrigeration support, auxiliary equipment, and hotel load support for the tractor
  - ❑ Helps mitigate the need for idling, which will further reduce costs and emissions.
  - ❑ Can integrate with micro and local power grids for energy-cost reduction and a potential revenue source.

### Potentials:

- ❑ It can provide shore power to warehouses and off grid work sites.
- ❑ It can be combined with other trailer units to create a scalable deployable off grid power source.
- ❑ It can harmonize economic growth, energy independence, and environmental concerns.

