American Made Solar Round 4: Ready! Solar Panel Thermal Management



Project Summary

- Produce Cost Effective, Commercial Thermal Management Systems for PV cells.
- Produce Solar Panels with Stable Power Output
- Produce Commercial Grade Solar Installation of Over 40% Efficiency

<u>Approach</u>

Product Development

- Optimize individual cooling subsystems
- Integrate and optimize cooling system for worst case climatic scenarios

Testing/Certification

- Weather proof system
- Conduct initial representative testing and optimize to meet/ exceed current standards
- Certify product through National Laboratories

Project Impact

- Improve the Environmental Impact of Solar Industry by increasing efficiency & practicality of solar, while reducing the carbon and ecological footprint
- Expand the Practical Geographical Range of PV technology to include desert and arctic environments
- Enable Commercial use of High Efficiency Photovoltaic Cells
- Foster Global American Solar Manufacturing Dominance

<u>Milestones</u>

SET!

- Achieve a Technology Readiness Level of 5 by Set! Competition.
- Achieve a Manufacturing Readiness Level of 5 by Set!
 Competition.

Go!

- Achieve a Technology Readiness Level of 6 Go! Competition.
- Achieve a Manufacturing Readiness Level of 8 Go! Competition.