

Submission for HeroX - Solar Prize Round 3

Title: SolarPrise: Solar for Small Satellites

Short Description: High density, small scale solar energy technologies to address applications in small satellites (CubeSATS) in low earth orbit and beyond.

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Technical Assistance Request:

The basic objective of the **SolarPrise** proposal is to identify, develop, and bring together high power density, small scale solar energy technologies to address applications related to small satellites (CubeSATS) in low earth orbit. As these technologies come together, however, it is believe they will have applicability to a range of civilian and military applications including the ability to provide solar power to drones and other small, mobile field equipment. Expertise residing within the **SolarPrise** team is principally in the application area. The team will require significant support in defining and exploring the current state of small form factor, high power density solar cell materials and configurations. We will also ask for assistance in evaluating holes in the current market that such devices could fill and turn to available expertise to help identify options to maximize energy output while reducing production and manufacturing costs for these devices.

Within the context of “we don’t know what we don’t know,” we look forward to developing partnerships with organizations with expertise in the field of high-energy density, small format solar cells to provide guidance as we work to develop creative and novel industry specific solutions both for the small satellite marketplace and other similarly constrained industries.