

TECHNICAL ASSISTANCE REQUEST

for Team Buck Boost

Solar Prize Round 7

Keywords

Solar Insolation Data, Rooftop Solar Installation Structures and Materials, Solar Inverters, Power Electronics for Solar PV Applications, Electronics Manufacturing

Key Needs

- Procurement of Raw Materials (1 / 5): The Team can manage raw materials procurement.
- Manufacturing (5 / 5): Proposed solutions are hardware intensive involving both electronics manufacturing and mechanical devices.
- Product Design (3 / 5): Product design services such as CAD for mechanical elements and PCBs for electronics may be needed.
- Fabrication & Prototyping (3 / 5): The Team Captain owns a power electronics laboratory and can manage electronics fabrication, however the team needs help with CNC tools and machinery for mechanical parts.
- Business Development & Commercialization (3 / 5): Entry into a mature market with novel offerings will be challenging.
- Strategy (3 / 5): Need help with make vs build strategy, initial market segment selection, partnerships and so on.
- Testing and Validation (4 / 5): Team will appreciate the availability of sites in the field or similar settings.
- Product Development (3 / 5): This will be similar to Hardware Development
- Utility Scale (1 / 5): Initial target market will be residential.
- Science, Research and Development (3 / 5): Guidance from U.S. Govt. R&D Labs will be appreciated.
- Technical Analysis (2 / 5): Verification of proposed technical analysis by government research labs will be appreciated.
- Funding & Investments (3 / 5): Additional funding will be appreciated and will allow for quick experimentation and outsourcing of design and development.
- Hardware Development (3 / 5): The team will be capable of putting together prototypes, however will need help with CAD for machined parts and electronics assembly as required.
- System Design (3 / 5): System design assistance will be needed mainly from compliance or safety testing requirements.
- Software Development (1 / 5): Developing GUI for monitoring, collecting and analyzing the energy generation and health of the system will be needed but will be optional for the prototyping phase.

Robotics (1 / 5): *No explanation*

- Legal, Insurance, and Public Policy (3 / 5): The team does not have expertise in this area however this area is not essential for the first two phases.

Marketing & Promotion (2/5): The team can explore available social media channels.

PROPOSED PRODUCT DEVELOPMENT IS SIMILAR TO EXAMPLES BELOW

