

## Technical Assistance Request EcoBattery

The primary goal of this proposal is developing a 12 volt energy storage “battery” using the aid of a solar tracker, compressed air and heated air. The system is intended to be in a 6' x 4' footprint with a height of 4'.

We anticipate three areas in the Set! And Go! Phases of the project that will require assistance from American-Made partners and connectors:

- Evaluation of the technical engineering plan set including power electronics design to suggest alternatives and improvements. Some technologies have been identified but other suggestions to acquire needed components will be appreciated.
- Assistance will be needed at various times during first generation prototyping. Observations and feedback would be appreciated.
- Potential referral partners including technical testing capabilities, with their experience in battery storage systems. Other referrals would be from companies or technical advisors on air compression systems, thermal systems and tracking devices.
- Independent third-party testing of the breadboard and prototype phases. This will include testing of the appliance by itself and testing of the integrated system.
- Development of the market and potential clients of a ground mount solar energy systems. Contacts to large scale solar farm developers, utility companies or government energy agencies would be appreciated. These referrals will be for sales and product development feedback from industry leaders.
- Specific technical assistance on compressed air system, air compressors and turbines, heat generators, solar collectors, heat-to-electricity devices and thermal energy components.
- Electrical assistance on devices such as motors, 12 volt management, power lines, transformers and grid-tie management. Familiarity with solar farm interconnection would be helpful.
- Supplier acquisition to help locate component sources such as electrical motors, air compressors, heat-to-electricity devices, metal supply and air storage containers.