## American-Made Solar Prize TECHNICAL ASSISTANCE REQUEST



U.S. DEPARTMENT OF ENERGY

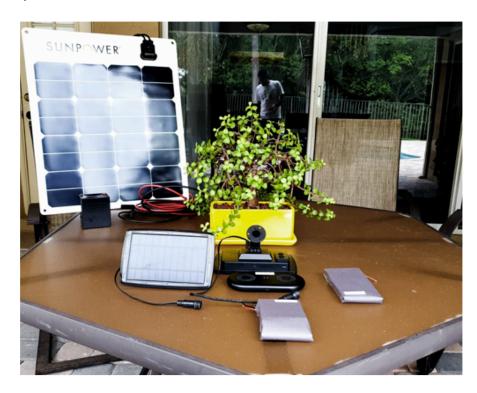
## Easy and simple indoor solar lighting & DC power

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Genergizer LLC intends to build small easy to install DIY solar kits (5V/12V) with wireless power transmission through windows and attractive lighting fixtures. We have currently developed crude but functional prototypes as a proof of concept.



We request the assistance of the American-Made Network in the following areas to help develop the best solution with the fastest path to commercialization.

- The wireless power transfer technology selected at present is inductive resonant coupling. We would like
  expert technical advice on this technology and other wireless power transmission options that may be
  suitable for this application (e.g. capacitive coupling & magnetodynamic coupling).
- Sourcing of samples including solar modules, wireless power transmission devices, batteries, high efficiency LED lighting and Low Power Blue Tooth transmitters
- Access to test facilities for
  - Transmission power, distance and efficiency of devices through different materials
  - Lighting brightness, quality and reliability testing
  - Component testing (i.e. solar modules, charge controllers)
  - Performance testing in differnt conditions (e.g.- temperature, humidity, salinity, wind)
- o Technical and design assistance for integration of
  - Solar, charge controller & power transmitter
  - Lighting and batteries with receiver
- Assistance is sourcing required components from US manufacturers for mass production
- o Guidance and assistance in manufacturing wireless power transmission devices in USA.