

# Lee Ervin's challenge details for challenge: [Solar](#)

## [Prize Round 6](#)

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### Explanation

I am a garage inventor and have invented a thermovoltaic engine that can convert heat into mechanical or electrical energy. Foremost, I need guidance to research and develop my idea beyond computer models. The device is nanotech and can be fabricated using MEMS technology. There are a variety of simple experiments that can demonstrate the device prior to fabrication.

I currently have three patents on the device and I am looking for suggestions and direction to bring it into production.

Specific needs that I have already identified:

- 1) Peer-review of the physics behind my invention.
- 2) A lab capable of fabricating and evaluating a device at the sub-millimeter scale.
- 3) Contact with a MEMS fabricator - for small-scale prototyping

### Key Needs

- Procurement of Raw Materials (2 / 5): *No explanation*
- Manufacturing (4 / 5): *No explanation*
- Product Design (3 / 5): *No explanation*
- Fabrication & Prototyping (5 / 5): *No explanation*
- Business Development & Commercialization (2 / 5): *No explanation*
- Strategy (2 / 5): *No explanation*
- Testing and Validation (5 / 5): *No explanation*
- Product Development (3 / 5): *No explanation*
- Utility Scale (2 / 5): *No explanation*
- Science, Research and Development (5 / 5): *No explanation*
- Technical Analysis (3 / 5): *No explanation*
- Funding & Investments (3 / 5): *No explanation*
- Hardware Development (4 / 5): *No explanation*
- System Design (3 / 5): *No explanation*
- Software Development (1 / 5): *No explanation*
- Marketing & Promotion (2 / 5): *No explanation*
- Robotics (1 / 5): *No explanation*
- Legal, Insurance, and Public Policy (2 / 5): *No explanation*

### Matches

1. [IoT Conduit](#): 90.44%
2. [Solar Inventions](#): 90.27%
3. [Membrane Development Specialists](#): 89.69%
4. [Georgia Institute of Technology](#): 89.59%
5. [BleebSoft Technologies Inc](#): 89.50%

6. [Circuit Launch](#): 89.36%
7. [Positive Deviancy](#): 89.12%
8. [Swift Coat Inc](#): 88.93%
9. [GoSun](#): 88.83%
10. [University of North Dakota Energy and Environmental Research Center \(EERC\)](#): 88.73%