American-Made Solar Prize Round 7 Ready! Contest Submission

Thee Solar Roofing

254 Evans Avenue, Mt Sterling, Kentucky 40353



Technical Assistance Request

We are attempting to manufacture a unique solar panel in the USA. One of our major costs is glass.

We recently purchased 1,400 sheets of Low Iron, Prismatic, Tempered glass that was 14.24" \times 27" \times 4mm thick for \$1,800 cost at the factory (\$1.90 per sheet). However, shipping, duty, and other taxes were an additional \$2,900 (\$2.62/sheet). Glass is our largest expense. If hostilities ever occurred with China, it would end all supplies from that country.

Therefore, we must find (we need assistance in finding) a supplier of glass from a non-BRICS country. But shouldn't America have it's own glass plant for the solar panel manufacturing industry? We must find (we need assistance in finding) investors should are willing to open a glass plant locally.

BTW: The largest Gorilla Glass plant in USA is located in nearby Harrodsburg, Kentucky.

We Request Technical Assistance from our national labs:

We need a Technical Viability Analysis conducted on our Solar Panel that will show:

- 1. How well can Thee Solar Panels be scaled?
- 2. Demonstrate the ease of Installation of **Thee Solar Panels** on an Unoccupied Test Home.
- 3. Determine how novel is the idea.
- 4. The Multiple Benefits of our product
 - a. Can solar panel last >100 years as roofing material?
 - b. How long will **Thee Solar Panels** function as roofing materials and/or produce electricity?
 - c. How do we achieve long-term waterproofing?