# Arif Rahman's challenge details for challenge:

## Solar Prize Round 6

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## Explanation

We are developing a small-scale, low-cost, off-grid, deployable CSP solar thermal desalination system that uses a parabolic trough for direct thermal evaporation and MEDAD (Multiple Effect Distillation Absorption Desalination) for condensation. We need help with the business development. Also, we need help to integrate adsorption desalination (AD) for boiling point elevation and vapor pressure lowering into the MED system. Specifically, prototyping / designing the silica gel sub-system as a stand-alone module to integrate with the current MED design.

### **Key Needs**

Product Design (4 / 5): We have designed the 90% of the system except for the silica gel module. We need some consultancy to design the sub-system as a stand-alone module that can be retrofitted in the current design.

- Business Development & Commercialization (5 / 5): We need help to identify potential customers and commercialization partners.
- Manufacturing (3 / 5): Although we have identified manufacturing partners, we need help and consultancy from experienced manufacturers to set up a robust supply chain.

#### Matches

- <sup>1</sup>. <u>University of North Dakota Energy and Environmental Research Center (EERC)</u>: 87.70%
- <sup>2.</sup> <u>New Mexico Clean Energy Resilience and Growth</u>: 87.67%
- 3. Solar Inventions: 87.61%
- <sup>4.</sup> <u>GoSun</u>: 87.61%
- 5. Filtration Energy Solutions Inc: 87.61%
- 6. Positive Deviancy: 87.61%
- <sup>7.</sup> <u>Zpryme</u>: 87.61%
- 8. EST Venturi Systems LLC: 87.61%
- <sup>9.</sup> Larta Institute: 87.56%
- <sup>10.</sup> <u>Center for Future Energy Systems (CFES) at Rensselaer</u>: 87.56%