# American-Made Solar Prize SUBMISSION FOR READY!



U.S. DEPARTMENT OF ENERGY

### **TrackerSled**

Solar Developers will use TrackerSleds to convert every US farmer to Regenerative Agriculture, reversing climate change. *Agrophotovoltaics, Photovoltaics, Solar Trackers* 

### TEAM

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90-second TrackerSled Video

## TECHNICAL ASSISTANCE REQUEST (2 pages, including images, will be made public)

TrackerSled is in the pre-prototype phase. We are looking for a Chicago area partner to help us construct a partial length working prototype for the Set! demo day (spending \$15k materials/\$35k labor) in June 2020 and a half-length prototype for the Go! demo day (\$25k materials/\$75k labor) in September 2020.

If possible, Argonne would be ideal. We need facilities and staff to engineer, fabricate, and warehouse prototypes that can be transported to local regenerative farms. We need to digitally engineer the mobile sleds, outfitted with pontoon skis fabricated from aluminum, steel, or thermoplastic. Stretchers and posts are likely to be steel or aluminum.

We intend to avoid sophisticated materials to allow myriad fabricators to scale production in parallel while establishing footholds in different growing climates. We need to perfect the hydraulic design of ballasting, while accommodating sloping sites and freezing conditions. We will need to mount NEXTracker Horizon 1P trackers on the sleds. We will also need to develop DC shore power connectors at both ends of the sled.



A detailed view of a field before TrackerSleds are relocated. Each TrackerSled is 245 feet long and has 144 PV panels. Every other aisle is free of obstructions so panels can be maintained and cleaned.

#### www.americanmadechallenges.org/solarprize