

**University of Minnesota -  
West Central Research & Outreach Center  
Wind to Hydrogen to Anhydrous Ammonia**



**Project Summary**

The research facility will be capable of converting wind and or waste electric energy into storable hydrogen. This process will be completed by electrolysis of water. The stored hydrogen will be used as fuel for a hydrogen engine generator set or reacted with nitrogen to produce anhydrous ammonia. The anhydrous ammonia will be used for fertilizer on the research farm or for research as a liquid fuel. This \$3.75 million project has several fundamental research objectives, including converting wind and or waste energy into a storable fuel and producing anhydrous ammonia fertilizer for local farms.

**Unique Characteristics**

- Alternate process for the manufacturing of anhydrous ammonia
- Educational and research facility for this emerging technology
- Offers the opportunity for rural economic development