## DIRECT ETHANOL FUEL CELL TECHNOLOGY: ETHANOL-BASED, ON-DEMAND POWER GENERATION TO SOLVE GRID RELIABILITY CHALLENGES

Crookston is part of an agriculture-rich region, but Crookston and the region are facing grid reliability challenges and aging energy infrastructure in homes. The Empower Crookston partnership is implementing a number of ambitious strategies, including a new clean technology incubator and a community-wide visioning and planning process centered on decarbonization and electrification. 4H2 will be the first tenant in the clean energy incubator. Partners are ready to engage communities in Crookston, the NW region, and nationally to make direct ethanol fuel cells a reality. The goal is to develop home-grown energy solution to regional energy problems.



## **Lead Partners:**

Empower Crookston and 4H2 Inc.

## **Additional Partners:**

UMN Regional Sustainable Development Partnership

Clean Energy Resource Teams

Fresh Energy

Rural Renewable Energy Alliance

Ottertail Power Company

Location: Crookston, MN

Population 7,500

Empower Crookston with the energy of tomorrow, today!