## LEECH LAKE CLEAN ENERGY WORK

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# 1. Solar Master Plan

Leech Lake Band of Ojibwe





# Purpose

Determine solar PV capacity and energy potential for Leech Lake Band of Ojibwe's Tribal Government facilities.



# Process

• 75 Sites assessed based on:

#### Solar Suitability:

University of Minnesota's solar suitability tool, obstructions, duration of direct sun.

#### Estimated Energy Production:

Based on solar suitability, type/size of proposed array

#### **Total Project Cost:**

Array, installation, cost/benefit based on solar suitability, production, and energy usage.

#### Annual Energy Use:

More efficient buildings are better, determines the size of the array.

30 of the most promising sites assessed in further detail.

# Conclusions

15 of the 30 sites were chosen for structural integrity assessments

Future solar capacity could be used for:

**Energy Assistance:** Existing solar arrays pay heating bills for low income residents. What about those who don't quite qualify?

**Solar Subsidies:** A rebate could help encourage the adoption of residential solar.

# 2. Guiding Leech Lake to Sustainability

Leech Lake Band of Ojibwe

# Purpose:

 Develop policies and guidelines to advance the adoption of sustainability measures on the Reservation.



# Process

- Solar Readiness for all new construction and major renovations.
- EV Readiness and infrastructure support.

Approaching Net Zero and overall sustainability of new construction and major renovations.



# Where we are now

Beginning stages of research on solar ready construction.

Project completion date:

June 2020

# Going Forward

Solar Master Plan has already given us more sites to build solar capacity.

Policies developed through "Guiding Leech Lake to Sustainability" project will increase this capacity rapidly through solar and EV ready buildings while eliminating waste in construction.