



Ganawenimang
Gimaamaaminaan
awe Aki
Taking Care of Our Mother Earth



FOND DU LAC BAND OF LAKE SUPERIOR CHIPPEWA

GREETINGS

The Fond du Lac Band of Lake Superior Chippewa (Band) is pleased to present its Energy Vision & Profile. In the following pages, we will take a closer look into the Band's accomplishments in energy efficiency and conservation, energy generation, and sustainable economic development. We also preview the Band's future projects and next steps toward achieving its energy vision.

Energy conservation is essential to preserve and protect the Fond du Lac Reservation and the Band's ceded territories. The Band continues to lead the region in energy efforts, as we strive to remain the caretakers of Mother Earth.



Kevin R. Dupuis, Sr.
Chairman



MISSION STATEMENT

The Fond du Lac Reservation Business Committee, through a continuing dialogue with the people, shall develop ways to improve the health and well-being of the people of Fond du Lac Reservation by ensuring the quality delivery of services, maintaining a continuing commitment to quality education, striving for economic development that will be both financially sound and provide long term employment, ensuring safe and affordable housing, and providing an environment for the people that reflects professionalism and encourages and supports training and career development opportunities.

We shall protect and defend our sovereign rights as a Tribe, protect and promote tribal self-determination, enhancement of individual opportunities of its members and participate with its members in promoting and preserving Ojibwe tradition while being fiscally responsible and accountable.

Throughout the brochure the Ojibwe language is used. The Ojibwe word(s) is followed by the English translation.

The Fond du Lac Band is one of six Chippewa Indian Bands that make up the Minnesota Chippewa Tribe. The Fond du Lac Reservation was established by the La Pointe Treaty of 1854. Today, our Band includes over 4,200 members. The Ojibwe name for the Fond du Lac Reservation is “Nagaajiwanaang” [“Where the Flow of the River Stops”].

The following pages share our journey for “Ganawenimang Gimaamaaminaan awe Aki” [“Taking Care of Our Mother Earth”] and fulfilling a strategic vision centered on community vitality, self-reliance, and sustainable reservation development.



2020 ACCOMPLISHMENTS:

- Adoption of the Kyoto Protocol - the Fond du Lac Reservation Business Committee deemed it to be the moral responsibility of every sovereign nation on earth to uphold the spirit of the Kyoto Protocol and therefore pledged that it shall work to obtain 20% of the electricity from renewable energy resources.
- Adopted an energy vision to maximize the efficiency of energy usage and develop energy resources in ways that will sustain current and future generations by addressing the economic, environmental, and social issues of energy within the context of the Fond du Lac Band's culture, traditions and established tribal policies for the wise use of our sun, forest, water, and wind resources.
- 50% reduction in fossil fuels and 80% reduction in carbon emissions through renewable energy, energy efficiency and carbon sequestration from Fond du Lac Reservation forests.
- 70% broadband deployment across the reservation through Aaniin, the Fond du Lac Communications Fiber to the Home project. Future plans call for 100% coverage of the reservation with speeds up to 1 gigabit.
- Improvements to community vitality and self reliance through food sovereignty initiatives and activities that promote overall health and well-being.
- Midwest Regional leadership and education for sustainable energy and economic development, including:
 - + Founding member of the Midwest Tribal Energy Resource Association (MTERA) and Heating the Midwest.
 - + Partnerships with local colleges, educational institutions and state advisory boards.
 - + Energy and sustainable project advocacy to energy development organizations and climate change advisory groups.
 - + Guided tours of energy efficiency and renewable energy operations.



ENERGY EFFICIENCY AND CONSERVATION

The Fond du Lac Band's Environmental Program has advocated to reduce their carbon footprint by using the energy conservation approach on tribally owned buildings.

ENERGY EFFICIENCY

2003

Built 25 energy efficient homes with Minnesota Power under the Triple E New Construction Program. Triple E New Construction homes average a 25% reduction in space heating costs.

Triple E



RESOURCE MANAGEMENT BUILDING

2010

Resource Management Division constructed the first LEED building in Carlton County. The building has offset its energy use by installing a 12-kW solar system, employed passive lighting, and solar reflective tubes for interior lighting.



ENERGY SAVINGS PERFORMANCE CONTRACT

2016

The Environmental Program partnered with Noresco, a qualified energy service company, to perform an investment grade audit on tribally owned buildings.

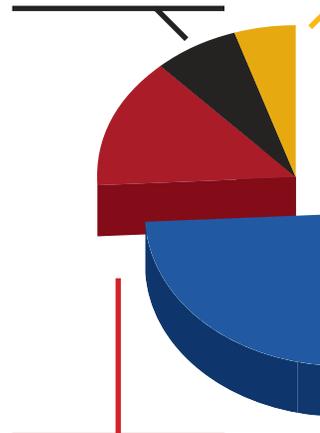
Twenty four buildings were identified with the greatest need for energy efficiency and conservation measures.

The energy efficiency and conservation measures included water-wise products, interior/exterior LED lighting, and efficient boilers, controls, and air handling units.

Noresco Savings Breakdown:

- + The total annual savings equates to \$772,403.
- + That means the Fond du Lac Band will save approximately \$64,366 per month.
- + The total payback of the project is 6.1 years.
- + The project alone can account for up to 24% energy savings.

Interior & Exterior Lighting
\$52,894

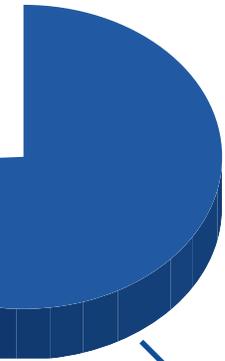


Water Conservation Measures
\$107,217

TOTAL ANNUAL SAVINGS
\$772,403

SAVINGS PER MONTH
\$64,366

Natural Gas Conservation Measures \$38,233



Building Automation System \$574,059

TRANSPORTATION

2008

Twelve construction fleet vehicles and eleven school buses were retrofitted with diesel oxidation catalysts.

2012

Fond du Lac Ojibwe School installed engine coolant preheaters in five school buses to reduce extended idling and reduce fuel consumption.

2014

Black Bear Casino Resort separates out food wastes and scraps for composting, reducing garbage tonnage.

2016

Environmental Air Program sponsored the no-idling policy.

2017-2020

Fond du Lac Environmental Program staff initiated a VW diesel replacement program.

2019

Fond du Lac Transit reduced emissions by transporting 26,828 people by bus 305,890 miles.

2019

Fond du Lac Waste Transfer Station installed garbage compacting dumpsters reducing tractor trailer trips to Duluth, MN.

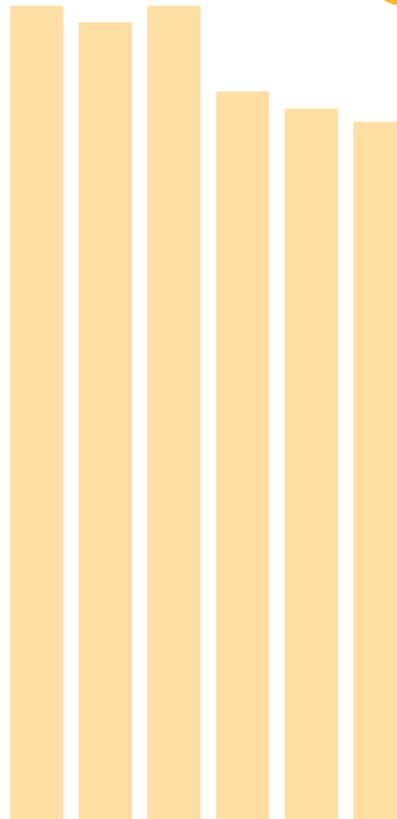
2020

Fond du Lac Environmental Program staff initiated electric vehicle charger stations at three locations.

ENERGY AUDITS

2009-2010

Partnered with Minnesota Power to conduct energy audits on tribally owned buildings. LED and high bay light retrofits resulted in 15% reduction in energy use.



ENERGY GENERATION AND MANAGEMENT

Striving to maximize the efficiency of energy use and develop energy resources that will sustain current and future generations.

BLACK BEAR CASINO RESORT SOLAR ARRAY

2016

Black Bear Casino Resort 1 MW, 5 acre solar array went online August 22, 2016.

Utilizing 3,230 solar panels, the solar field has offset Black Bear Casino's total energy use by about 10%. First year energy production totals exceeded 1.2 GWh of energy.

First midwest project installed using smart inverter technology as a control measure.

The solar site has saved Black Bear Casino Resort approximately \$320,000.



CARBON REDUCTION
Reduces 743 tons of CO₂ on average per year by reducing the use of electricity from the incumbent utility

BIOMASS HEATING

2018

Sawyer Community Center District Heating project, commissioned:

- + 1.7 MMbtu biomass boiler.
- + 138 tons of wood chips replace over 13,000 gallons of propane annually.
- + Award winning, fully automated design with in-floor wood chip air drying system.



CARBON REDUCTION
Offsetting the use of 13,000 gallons of propane annually reduces 85 tons of CO₂ on average per year.

ENERGY AND COST SAVINGS
Approximately \$22,000 annual fuel cost savings.

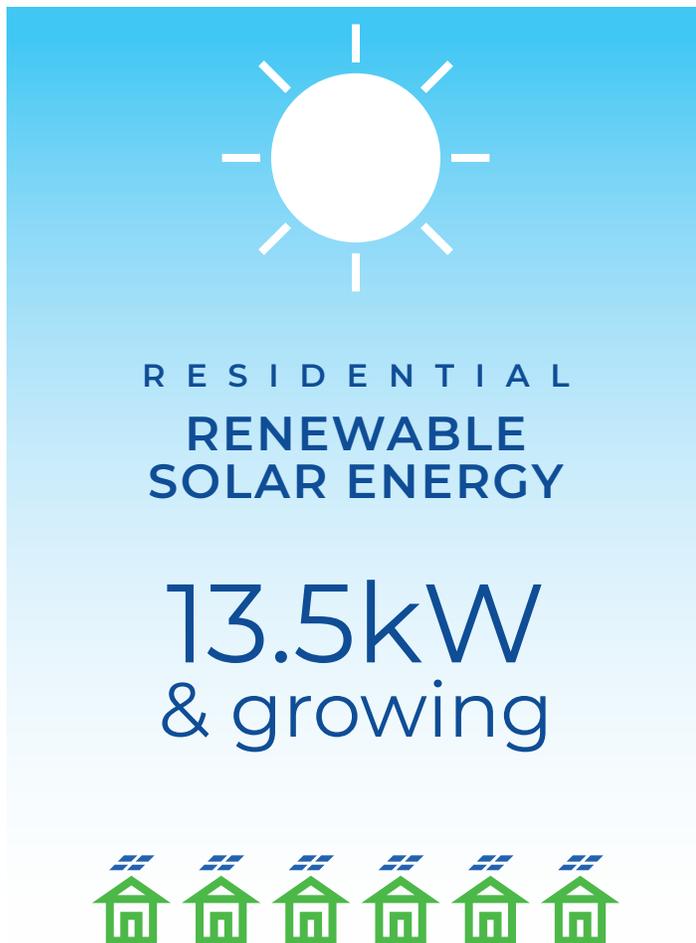
RESIDENTIAL ENERGY

The Fond du Lac Environmental Program developed strategies to bring renewable energy to residential properties that are located inside the reservation borders.

To date 5-residential solar electrical and 7-solar hot air systems have been installed.

Out of the 5 solar electrical systems, 4 systems are 3kW total energy offset systems.

The 5th system is unique because it's a 1.5kW DC system that feeds a domestic hot water tank.



ENERGY MANAGEMENT

The Fond du Lac Band owns and manages a total of 9 MW of energy generation assets

2004

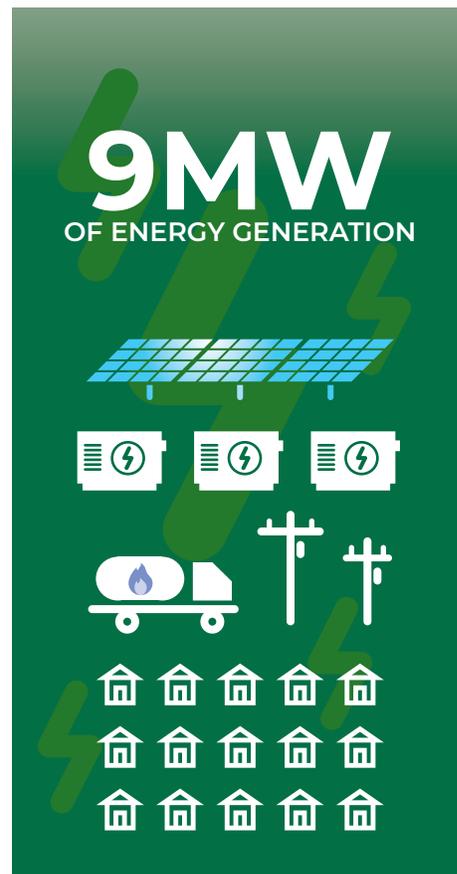
Fond du Lac Propane was started to bring affordable, quality service to customers.

2012-2014

Fond du Lac Band participated in the Minnesota B3 Benchmarking Program to determine energy consumption and baseline.

2020-2021

Chartered Tribal Utility.



COMMITMENT TO SUSTAINABLE ECONOMIC DEVELOPMENT

The Fond du Lac Band is continuously envisioning strategies in which we can build community vitality, empower self-sufficiency and drive sustainable economic development in ways that align with our culture, our traditions and our Mother Earth.

AANIIN BROADBAND

Access to reliable, high speed internet is vital in today's digital economy and lifestyles, allowing access to health care, education, business and entertainment. Through partnerships with the United States Department of Agriculture, Minnesota Department of Employment and Economic Development, Housing and Urban Development, and the Fond du Lac Business Committee, the Band's telecommunications company Aaniin is currently providing high speed internet access to 525 customers, with deployment continuing to expand. With access to local, reliable, high speed connectivity, a plethora of community and economic development opportunities are now available that previously were not.

"GITIGAANING" ["THE PLACE OF THE GARDENS"]

Always having recognized the critical link between food, health and tradition, the Fond du Lac Band is developing a 36 acre plot of land into a food sovereignty haven. "Gitigaaning" provides an abundance of opportunities that allow the community to take control of their nutrition, reconnect to traditional growing and harvesting practices and support local food-centered businesses. "Gitigaaning" not only provides access to growing plots for food and medicine, an heirloom seed library, and educational opportunities, but just as vital, it has become a communal gathering place focused on nourishing the soil to nourish hearts and minds in return.

Through the Fond du Lac Band's food sovereignty initiatives, the Band is building a community kitchen and cannery that includes a food processing station. The kitchen incorporates a staging area for demonstrations and educational purposes, as well. Since Minnesota's growing season is short by comparison to other latitudes, a growing dome has been constructed to extend the growing season.



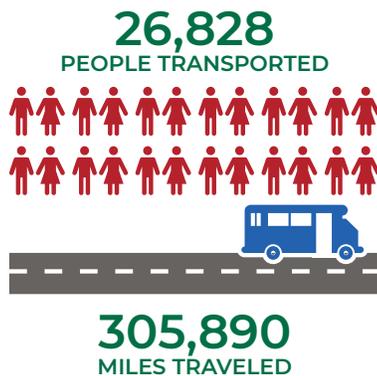
TRANSPORTATION

Electric Vehicle Charging Stations

- + 2 charging stations at Black Bear Casino Resort with plans for future expansion.
- + 1 charging station at the “Mino aya win” [“state of well-being”] clinic.
- + 1 charging station at the administration building.

Bus Fleet

- + Fond du Lac Transit provides on-demand and fixed route transportation for Band members in the region. This program not only improves access and mobility for the community, but also helps reduce CO2 emissions. In 2019 alone, Fond du Lac Transit reduced CO2 emissions by approximately 139 tons.



FOOT PATHS AND BIKE TRAILS

Newly constructed walking trails and bike lanes encourage healthy lifestyles, connect community and provide safe paths for walking, jogging and cycling.

- + Big Lake Trail.
- + Mahnomen Road Walking/Bike Lanes.
- + Safe Routes to School Demonstration Projects will install safe pedestrian spaces at multiple intersections along Big Lake Road.

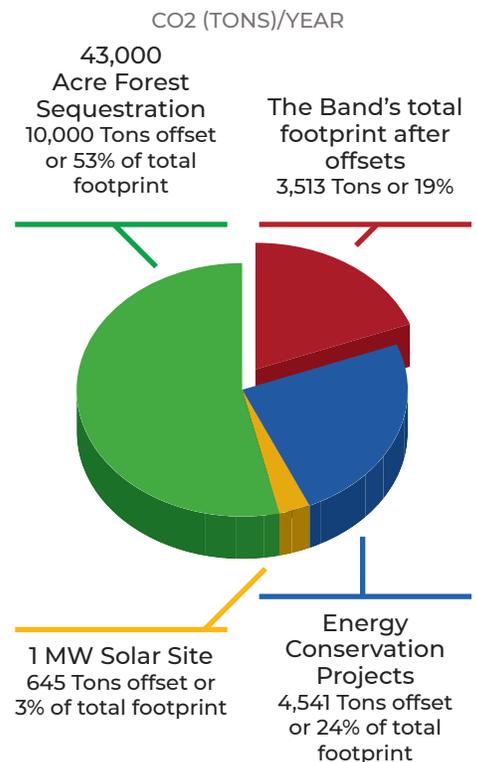


FOREST CARBON SEQUESTRATION

Project partnership with the National Indian Carbon Coalition

Fond du Lac Forestry Division manages approximately 43,000 acres of forest that sequesters 53% of the Tribe's total carbon footprint, or 62.4 metric tons of carbon dioxide equivalent (MTCO₂e).

The National Indian Carbon Coalition partners with tribes to verify forest inventory data, determine carbon dioxide sequestration levels, and develop forest carbon sequestration projects that generate revenue while preserving the forest and reducing carbon dioxide.



NIIGAAN INAABIYANG

AS WE LOOK AHEAD



NIIGAAN INAABIYANG

AS WE LOOK AHEAD

FOND DU LAC UTILITY/MICROGRID/ NET ZERO BUILDINGS

The Fond du Lac Band is developing energy infrastructure to promote tribal development and stabilize energy costs with a reliable and resilient power grid, renewable energy generation and back-up power for community resilience.

ELECTRIC CARS/TRANSPORTATION

Future plans for expansion of electric vehicle fleets, public transportation, charging stations.

SOLAR GARDEN

Community solar garden to provide utility offset.

BIOMASS DISTRICT HEATING FACILITY

A new woody biomass heating facility will serve the Brookston Community Center and 54 homes.

BROADBAND ACCESS

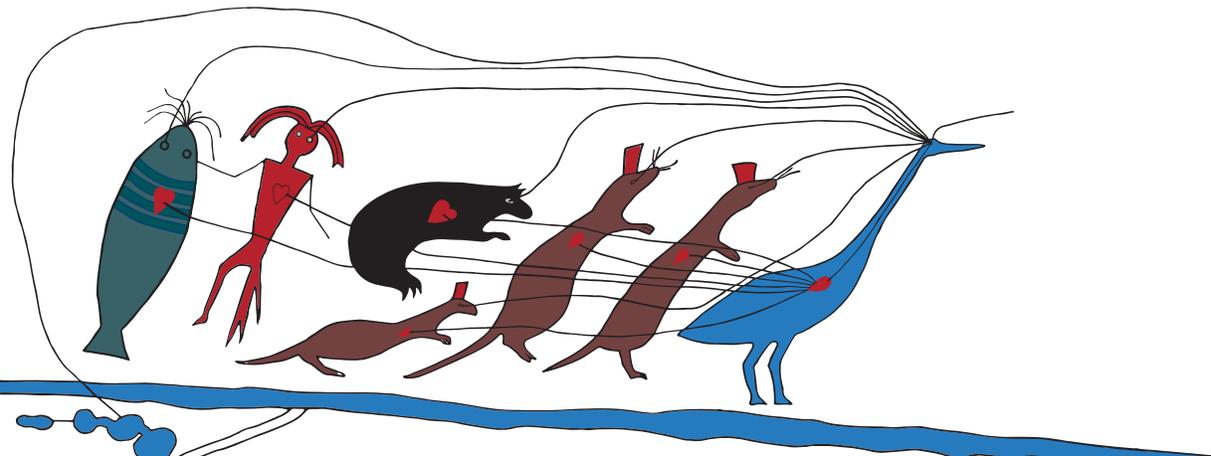
Future plans include providing high speed internet access to entirety of the reservation.

ADDITIONAL WALKING AND BIKE TRAILS

Connecting the community to promote healthy lifestyles, increase safety, and enhance accessibility.

ADDITIONAL FOOD SOVEREIGNTY INITIATIVES

Including apple orchards, high tunnels, and water resource infrastructure development.





PARTNERS



NO RESCO





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