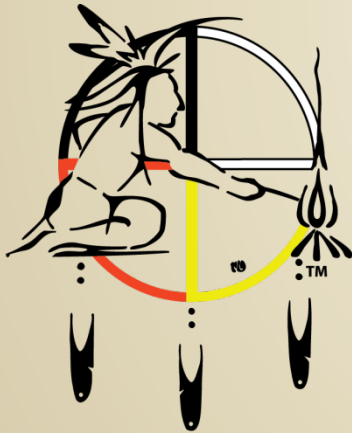


Forest County Potawatomi Community Deployment of Community Scale Solar Photovoltaic Energy Systems

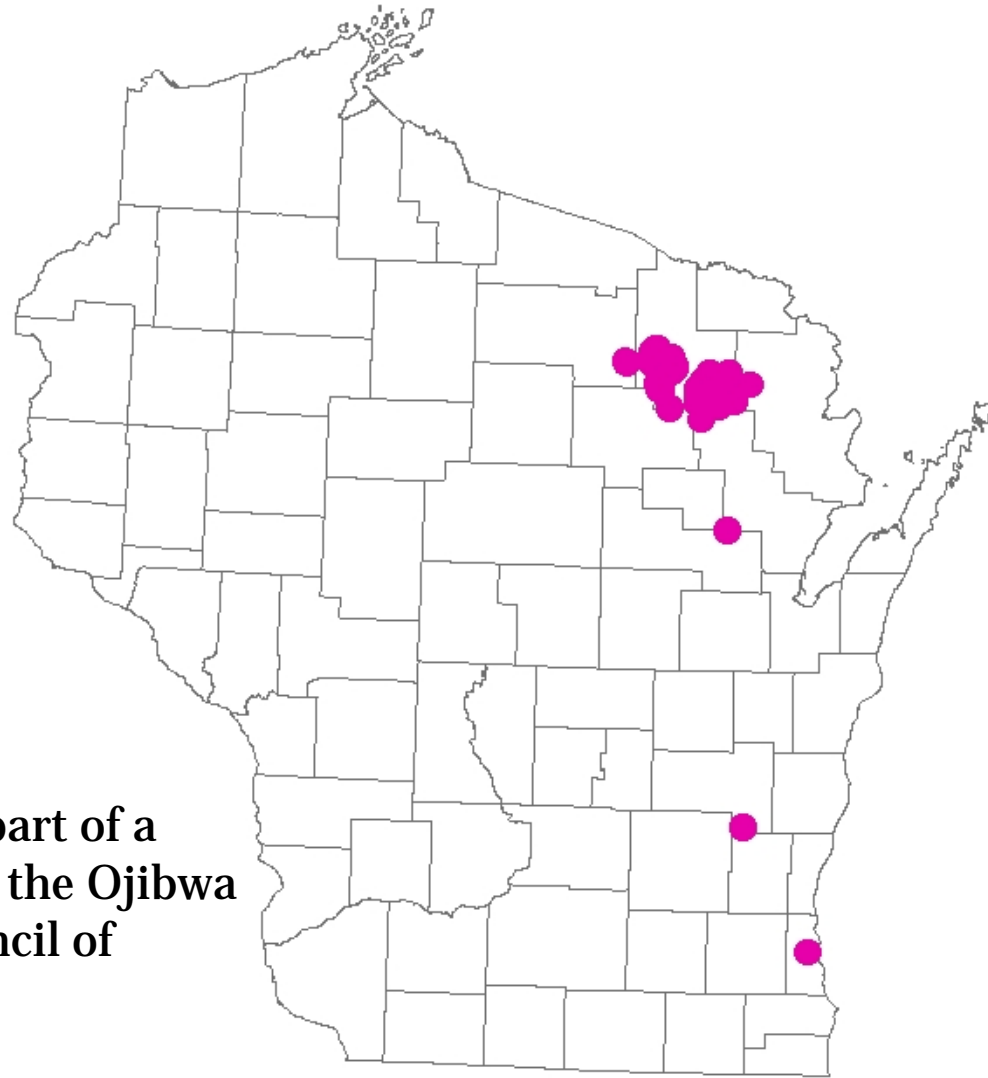


Sara M. Drescher
FCPC Attorney

The People

- Potawatomi are part of a confederacy with the Ojibwa (Chippewa) and Odawa (Ottawa), other Algonquins, called the Council of the Three Fires.
- Potawatomi were designated the “Keeper of the Fire”.
- From 1789 to 1867, through a series of treaties entered into under duress, ceded all lands east of the Mississippi.

Forest County Potawatomi Community Land Base 2015



Potawatomi are part of a confederacy with the Ojibwa and Odawa, Council of Three Fires.



The Tradition

- Tradition and history teach a strong commitment to protecting and preserving the natural environment.
- Environmental Mission Statement:

The traditional values of the Forest County Potawatomi Community teach us to respect all living things, to take only what we need from Mother Earth, and to preserve the air, water, and soil for our children. Reflecting these values, we take leadership in creating a sustainable and healthy world. We resolve to reduce our own environmental impacts and to take steps to remedy the impacts of others. We encourage others to do the same. We also seek legislative and policy changes that protect the environment for all people, including generations to come.

FCPC's Energy Efforts

- Project Greenfire.
- Established goal of energy independence using only renewable carbon-neutral or carbon-free resources.
- Adopted “Environmental Mission Statement” to help implement and institutionalize goal.
- Comprehensive Energy Audit.
 - Established baseline of energy consumption/carbon footprint.
 - Identified “List of 100” facilities improvements.
- RECs purchased to completely offset electric use and serve as bridge to energy independence.
- Resource assessments for potential projects.

Energy Efforts

- Milwaukee Potawatomi Casino LED and HVAC upgrades.
 - Annual use reduction of 4,367,237 kWh.
- Carter Casino and Hotel Lighting and HVAC upgrades.
 - Annual use reduction of 198,931 kWh.
- FCPC Energy efficiency upgrades in Governmental Buildings.
 - Occupancy sensors.
 - Heating setbacks during non-use.
 - LED replacement.
 - Conversion of staff to a 4-day work week on the Reservation.
- LEED Directive passed on May 29, 2013.

Energy Efforts

- Founding Member of the Midwest Tribal Energy Resources Association (MTERA).
- Wgema Campus efficiency upgrades.
- TEDC Tribal Utility Formation Study.
 - Completion September 2017.
- Carter Microgrid/Biomass Feasibility Study.
 - Completion September 2017.
- Wgema Campus Urban Biomass Feasibility Study.
 - Commencing 2018.
- Motions directing solar and green energy consideration for new construction.

Ongoing Projects

- FCPC has conducted numerous feasibility studies to assess renewable energy on Tribal lands.
 - Geothermal systems on several Tribal properties.
 - Currently analyzing the potential for a CHP biomass facility in Crandon, WI.
 - Considered options for Wind Energy Generation.
 - Currently conducting Home Energy Audits.
- Energy efficiency efforts have saved over \$1 million.

Previous DOE Solar Project

- FCPC received a DOE Community-Scale Clean Energy Projects in Indian Country Grant for the Installation of Solar Photovoltaic Systems in November, 2013.
- The \$1.4 million grant provided half of the total project cost.
- The remaining project costs were funded in part through a partnership with a solar company. The company invested 30% of the remaining costs and received the benefit of the solar investment tax credit. The company also received the annual tax depreciation of the system.
- The Tribe's contribution was 20% payable through a Power Purchase Agreement.

Previous DOE Solar Project

- The Tribe installed approximately 922.95 kW of solar PV systems at fifteen tribal facilities in Milwaukee and Forest counties, Wisconsin.
- The individual installations ranged from 9.0 kW to 447.64 kW and displace between 16.9% to in excess of 90% of each building's energy needs.
- The project focused on both government facilities and enterprises and utilized roof and ground mounts depending on site specific needs.

Potawatomi Bingo Casino Event Center and Woodland Dreams Roof



Community Scale Clean Energy Project (2015)



Deployment of Energy Efficiency and Clean Energy on Tribal Lands

- FCPC received a grant from the Department of Energy for Deployment of Community-Scale Solar Photovoltaic Energy Systems in the Forest County Potawatomi Community.
- The DOE \$1 million grant provides half of the total project cost. A \$1 million dollar match will be funded through partner tax credits and a PPA.
- The Project will install and operate nearly 1 MW of solar PV energy systems on 3 FCPC government installations. These sites will be monitored to measure and verify energy savings and economic and environmental costs.

Project Adjustments

- The project initially called for installation of solar PV panels on fifty (50) residential Tribal homes.
- Concerns with home installation identified in project planning.
- FCPC Executive Council approved motions to edit the Statement of Project Objectives to remove Tribal housing and focus on 3 government properties.
- RFP was written to allow contractors flexibility – Give us your best available.

Project Goals

- Install as much solar as possible.
 - Limit number of installations.
 - Use contract, PPA and related documents from previous project.
 - Preserve project funds for solar! Reduce overhead.
 - Do not overproduce.
- Tribal Community Involvement.
- Expedite project – Use past experience to short-circuit problems.