

Solar Photovoltaic Project Services

La Crosse County and City of La Crosse

We completed a handful of co-owned solar projects using third party participant – green-minded investors assisting tax exempt organizations – in WI.

Past Projects

- Holy Wisdom Monastery (Middleton)
- Madison County Day School (Madison)
- Darlington School District (Darlington)
- Northland Pines School District (Eagle River).

Current Projects

- Sauk County (installation this spring and summer)
- Sinsinawa Dominicans (installation this summer and fall)
- Bayfield and Washburn City, County, School District and Housing Authority (Phase 1 feasibility study; installation in 2019)
- City of Milwaukee (request for proposal issued soon)

Team

- **Niels Wolter** – energy analysis, financial analysis, schematic design, grant writing, RFP process, etc.
- **Mark Hanson** – project management, client relations, reports/presentations to County Boards, committees, etc.
- **John Young** – financing/legal, one option for the TPP
- **Steve Carlson** and/or **Mike Tatkow** – energy efficiency and demand side management modeling, systems fine tuning systems, and RFP process)

Services

All Phases

- Client relations - presenting results, recommendations, responding to questions, supporting their decision process, etc.

Phase 1

- Site visits and pre-feasibility review; site selection
- Site feasibility studies of the likely sites
- Energy analysis to optimize kilowatt hour and kilowatt savings considering net metering rules and customer rates
- Schematic design, system siting, sizing/racking/orientation
- Site structural analysis working with County/City's staff or preferred firms
- Assess energy efficiency and demand side management options and their impacts on kilowatt hours and kilowatt savings
- Financial analysis, considering different ownership options (e.g., direct owned and co-owned with third party participant); can run scenarios with varying system cost, energy escalation rate, site owner cost share, grant amounts, etc.
- Reporting and presentation of findings
- Supporting the decision to go forward with solar projects

Phase 2

- Preliminary bids for grant applications
- Preliminary interconnection request with the local electric utility – to better estimate interconnection costs and notify the utility of City/County's plans
- Public Service Commission of Wisconsin approval of financing strategies that use third party investors
- Grant writing (e.g. Focus on Energy, USDA Solar for Good, local foundations)
- Write the request for proposal, select bidders, distribute RFP, respond to bidders questions, host site visits, etc. (for solar, energy efficiency and demand side management and financing)
- Bid review and support Contractor selection
- Installation, financing and demand side management / energy efficiency contract review and supporting negotiations
- Help with component selection, warranty/component replacement strategies, determining operation and maintenance needs, monitoring/kiosk strategies
- Utility and Public Service Commission of Wisconsin relations, interconnection process support
- Grant funder relations and paperwork
- Installation review, energy efficiency / demand side management implementation oversight
- Community relations, monitoring system support, curriculum support
- System/project monitoring

Basic concepts for third party participated (TPP) funded co-owned projects

- The goal is for the County/City to be cash flow positive from year one
- While the third party participant owns the system they take care of operation and maintenance, cover insurance costs, take all the technical risks
- Site only pays for the energy produced
- Focus on Energy Grant funding allows the site owner to be a co-owner of the systems
- Site owner has the option to take ownership, as early as year 7 and up to year 25
- Site owner typically does not have to take ownership; at end of contract term (17 to 25 years), the PV system can be removed at no cost to the site owner
- System purchase costs is at least the "system's fair market value" as required by the Internal Revenue Service
- Interconnected with the utility as a co-owned system

Other Comments

- Energy efficiency and demand side management integration is simply the right thing to do and helps the projects reach the goal of being cash flow positive from year one
- Typically the site owner pays the Phase 1 costs, Phase 2 costs can be rolled into the project's financing
- The Focus on Energy Grant applications probably won't be out until late summer and due mid fall with selection in early winter 2018. Thus installation would be in 2019.