Demetral Field

Madison East

RENEW WISCONSIN

06.01.2018

weather

Atwood Ave

S (OL

OlPlay

DARBO -WORTHINGTON

East High S

SASY GOES SOLAR

Hawthorne Park

Solar Stories from the Schenk-Atwood-Starkweather-Yahara Neighborhood in Madison, Wisconsin.

www.renewwisconsin.org/SASY-Goes-Solar

100l (=)

Evergreen

Circle Park Hudson Park

INTRODUCTION

In recent years a quiet revolution has been brewing in the Schenk-Atwood-Starkweather-Yahara (SASY) neighborhood, powered principally by the improving economics of solar energy. As of today, more than 40 solar electric systems have sprouted up to supply clean energy to neighborhood homes, apartment buildings, and businesses. Most of the solar photovoltaic (PV) systems in the SASY neighborhood came online after 2014, driven by a convergence of lower equipment costs, federal tax credits, state incentives, and the City's MadiSUN program, which provides attractive financing options for participating residents. With these elements in place, the cost of going solar is now on par with standard electricity service, and it should remain an affordable option through the remainder of this decade.

The increasing popularity of solar generation in the SASY neighborhood also reflects a communitywide commitment to fostering sustainable living efforts and providing a welcoming environment for locally produced clean energy. In showcasing the current crop of solar energy installations in the area, the SASY neighborhood hopes to continue this quiet revolution, and encourage a new cohort of residents and businesses to invest in solar energy and avail themselves of the benefits currently being reaped by the pioneering households and nonprofits profiled in these case studies.





BRIAN LAVENDEL

"RENEW and the MadiSUN project made me feel more secure about jumping in [to install a solar panel system]. My friends saw me installing the panels, which in turn took a lot of the uncertainty away for them," said SASY resident Brian Lavendel.

For Brian, installing solar panels on his home was something he wanted to do for some time, and the availability of state Focus on Energy incentives and the 30% federal tax credit helped make that happen. Since going live in the fall of 2016, Brian's solar system has offset about 75% of his electricity use. "Getting free energy is awesome and being at the forefront of the movement was another reason for the decision to install the system," Brian said.

Regarding the solar contractor he worked with, Brian added: "Full Spectrum Solar was very open and transparent about the process and did not bog me down with specific details. When the MadiSUN program came together, it made it much easier because RENEW did all the work and I knew the economics were fair."

SOLAR PROJECTS CAN NOW SATISFY A PROPERTY'S ELECTRICITY BOTTOM LINE WHILE SATISFYING THE NEEDS OF THE TENANTS.

JENNIFER OWENS PRESIDENT/CO-OWNER PRIME URBAN PROPERTIES

ASANA APARTMENTS

In early 2017, Full Spectrum Solar reached out to Prime Urban Properties, located on Eastwood Avenue, about the prospect of installing solar panels on an apartment building that was soon to break ground. President and Co-owner, Jennifer Owens found the idea to be intriguing for a variety of reasons. "For us it came down to cost first and foremost, and the savings projections were certainly our first consideration," said Jennifer, adding "the solar panels on our building is a point of difference for us, we are constantly thinking about how we can be different from other developers and property management companies."

Prime Urban Properties' decision to power Asana Apartments (on Atwood Avenue) with solar is indicative of the company's commitment to reduce its carbon footprint. Asana boasts a variety of energy-saving features that sets it apart from other multi-family dwellings, and its 26.4 kilowatt (kW) solar array is, in Jennifer's estimation, a prime point of difference.

Prime Urban Properties is pleased with the system's performance. "Solar projects can now satisfy a property's electricity bottom line while satisfying the needs of tenants" Jennifer said. "One goal for us is to set a certain standard for other businesses and I know that the way we do things and the way we market our brand, we have changed the market."

STEVE SOMERSON AND HELENA TSOTSIS

"We have the power of the sun, so my question is, why are we not using that to its fullest extent?" asked SASY resident Steve Somerson who, along with his wife, Helena, installed a 2.6 kW solar panel system on their home in April 2017.

Long interested in a solar system, Steve and Helena made the jump in 2016 after a solar energy information session at the Willy Street Co-op. They took full advantage of state and federal incentives as well as the discount price leveraged through the MadiSUN program.

Steve and Helena are pleased with Full Spectrum Solar's work. "Mark [Warnick from Full Spectrum] let us know all the steps and told us specifically what we had to do with Madison Gas and Electric to get our system online," said Steve, adding, "MGE was helpful. They walked me through the bill and answered any questions I may have had."

Their solar system produced all of the electricity they used in June 2017, and more than 95% of the electricity consumed in July and August. "Seeing the bill getting smaller and smaller is a great feeling, and the cash flow is nice," Steve said.



WE HAVE THE POWER OF THE SUN SO MY QUESTION IS, WHY ARE WE NOT USING THAT TO ITS FULLEST EXTENT?

PAT WATHEN

"I have been thinking about installing solar panels for years, and between the federal tax credit and Focus on Energy incentives, it was a good time to install," said long-time SASY resident Pat Wathen.

Installed in May 2017, the Wathens' 11-panel solar array took less than a week to complete. Their system produced enough energy that June to supply 100% of the electricity consumed at their house. Pat went out of her way to emphasize her positive experience with the solar contractor. "Full Spectrum Solar was incredible, really, and very kind and very helpful. Burke [of Full Spectrum Solar] upped my level of trust by going the extra mile to provide cut sheets, a file that gives you detailed information and specs on the whole system."

Pat's final thought on her experience is telling. "I would encourage everyone to get solar panels because you are putting your money in a place that is ultimately going to benefit you and one becomes more self-sufficient while simultaneously contributing to the future." OUR SYSTEM PRODUCED ENOUGH ENERGY IN THE MONTH OF JUNE THAT 100% OF THE USED ELECTRICITY CAME DIRECTLY FROM OUR NEWLY INSTALLED SOLAR PANEL SYSTEM. THE EDUCATIONAL BENEFIT HAS BEEN GREAT, GRADE SCHOOLS COME TO TAKE A TOUR OF OUR SOLAR PANEL SYSTEM AND IS A NICE LEARNING OPPORTUNITY FOR THEM.

DEREK KRUZICKI DIRECTOR OF OPERATIONS



GOODMAN COMMUNITY CENTER

As a focal point of the SASY neighborhood, the Goodman Community Center (GCC) supports a diverse population through the many social services it provides. In keeping with its commitment to sustainability, the GCC moved into a renovated industrial building in 2008 featuring LED lights, lowflow faucets, waterless toilets, argon gas windows, and a 10 kW solar panel system. Taking advantage of a pilot program offered by Madison Gas & Electric (MGE), GCC receives 25 cents/ kilowatt-hour for the electricity produced by its nearly 10-year-old PV system. Director of Operations Derek Kruzicki says that Goodman sees on average \$ 125 worth of savings each month resulting from the special rate offered by MGE.

Apart from the economic benefit, Derek highlighted other benefits the GCC's sustainable approach has brought their community center over the years. "The educational benefit has been great, grade schools come to take a tour of our solar panel system and is a nice learning opportunity for them." He added, "We have structured classes taught by over 20 teachers that utilize the sustainable approach we've taken to teach our students." Having integrated sustainability into its operations in 2008, Goodman continues to set an example for other nonprofits, residences and businesses to follow.



IT WAS SO EASY. IT TOOK THEM (FULL SPECTRUM) TWO DAYS TO INSTALL THE PANELS, AND THEY WERE VERY FLEXIBLE AND VERY ACCESSIBLE THROUGHOUT THE PROCESS.

DAVID TOLAND & THAIS PASSOS

For David Toland and Thais Passos, installing a solar panel system had been on their radar for some time. After they attended a 2016 solar energy information session at Willy Street Co-op, David and Thais felt it was time to make the switch to renewably sourced energy.

In April 2017, after only two days of installation, David and Thais were the proud owners of a 2.2 kW solar electric system. "It was so easy. It took Full Spectrum two days to install the panels, and they were very flexible and very accessible throughout the process," Thais said.

According to David, the seven-panel system accounts for 93% of their monthly usage on average. As with their neighbors, David and Thais took advantage of the fiscal incentives and financial opportunities at their disposal. "It was great, and everything was clear. We had a firm understanding of our financial options," Thais said.

They know that their decision to invest in solar energy may lead others, including their neighbors, to do the same. Their advice to those still on the fence: "It's great, we are even happier than we thought."



TRINITY LUTHERAN CHURCH

In late 2014, Trinity Lutheran Church agreed to host a new 20 kW solar array on its roof, as part of a package of energy projects designed and managed by project manager Kurt Reinhold, founder of Madison-based Legacy Solar Cooperative. Kurt said, "The intention was to improve the energy profile of the church, and to act as better stewards of the environment and better stewards for god's bounty."

Kurt was hired to install new LED lights and occupancy sensors throughout the church as well as manage the installation of the church's solar array. The installation of the solar array took one week to complete, and was online by December 2014.

Legacy Solar Co-op solar bonds played a big part in financing the project. "If we sponsor this project we can keep things moving and a part of it was doing good for the community as well." Said Kurt: "Our model allows for someone in the community or congregation to act as a tax sponsor primarily responsible for the costs for the first six years. After those six years are up, the array can be bought out by the church."

Legacy's model has a solid track record of performance and has piqued interest from other nonprofits around the state. Noted Kurt: "Two representatives from a congregation in Oshkosh came to visit the church and the neighborhood. There is certainly a lot of interest around what is happening here and we continue to see solar grow."

Having refined a creative financing model for nonprofit customers that cannot take advantage of federal tax credits, Legacy Solar Co-op has been a significant contributor to the growth of solar energy in Madison and beyond. Trinity Lutheran Church still serves as a model for combining energy efficiency and on-site solar in a way that can work for every house of worship in Wisconsin.

MAP OF SASY NEIGHBORHOOD BUILDINGS USING SOLAR PANELS (DECEMBER 2017)

Average Residential Solar Panel Size: **3.2 kWh**

Average Business/Non-Profit/Multifamily Solar Panel Size: 11.5 kWh



Demetral Field

East High

PREPARED BY

Jadison Fast



Funded through a grant from the SASY Neighborhood Association.

Interviews and stories by William Dean, with contributions from Jodi Jean Amble and Michael Vickerman.

We would like to sincerely thank Brian Lavendel, Pat Wathen, David Toland, Thais Passos, Steve Somerson, Helena Tsotsis, Kurt Reinhold, Jennifer Owens and Derek Kruzicki for taking the time to discuss their solar experience with us.

www.renewwisconsin.org/SASY-Goes-Solar

Evergreen

Circle Park Hudson-Park veather

IwoodAve

Pla

ARBO

ORTHINGTON