

**River Falls, Wisconsin is a community of nearly 15,000 residents, plus approximately 7,000 college students at the University of Wisconsin - River Falls (UW-RF).**<sup>i</sup> Located on the Kinnickinnic River on the western border of Minnesota and Wisconsin, the city is within commuting distance of the Minneapolis and St. Paul (Twin Cities) metropolitan area. The community is served by River Falls Municipal Utility (RFMU), which services approximately 5,800 customers, the largest being UW-RF.<sup>ii</sup> Together, the utility, the local government, and the citizens of River Falls have made energy conservation and renewable energy a priority in the town, developing a suite of energy programs for the community over the past 12 years.

### Inspiring Interest in Renewables

River Falls' energy conservation efforts benefit from RFMU's membership in WPPI Energy, a regional wholesale power company operating in the Midwest. Through its membership in WPPI, RFMU has access to a network of renewable energy projects throughout the region. In 2001, RFMU began offering the Renewable Energy Block Program, a voluntary green power purchase program for residents and businesses.<sup>iii</sup> This program has been very successful, sitting high in national rankings of similar green power purchase programs and boasting a 6.4% participation rate as of December 2010 (the 9<sup>th</sup> highest participation rate in the

country at that time).<sup>iv</sup> Though only a small percentage of projects supported through the program are solar (most are biogas and wind), the program has helped to raise awareness and interest in renewable energy within the community.<sup>v</sup>

### Bringing Solar to River Falls

The success of the River Falls Renewable Energy Block Program led to the development of a feed-in tariff (FiT) program called the Solar Renewable Energy Buyback Rate.



*Figure 1: A 2.6 kW array installed at a local plumbing and electric shop. The system provides 25% of the shop's electricity (photo courtesy of RFMU).*

Program development began in 2005; RFMU worked directly with WPPI Energy to design a FiT program tailored to River Falls residents that would aggressively advance small-scale projects in the City and stimulate the local solar photovoltaic (PV) market. The Solar Renewable Energy Buyback Rate allows residents to install

<sup>i</sup>U.S. Census Bureau. Accessed January 2013.  
<http://quickfacts.census.gov/qfd/states/55/5568275.html>

<sup>ii</sup>River Falls Municipal Utility. Accessed May 2013.  
<http://www.rfmu.org/>

<sup>iii</sup>U.S. DOE, Energy Efficiency & Renewable Energy.  
<http://apps3.eere.energy.gov/greenpower/resources/tables/topten.shtml>

<sup>iv</sup>Ibid.

<sup>v</sup>WPPI Energy. Accessed May 2013.  
[http://www.rfmu.org/media/Product\\_Content\\_Label.pdf](http://www.rfmu.org/media/Product_Content_Label.pdf)

their own PV systems and sell the power to back to RFMU. Proceeds from the Renewable Energy Block Program fund the feed-in tariff programs offered by the WPPI Energy members (a total of 32 WPPI member utilities currently participate in the FiT program). The feed-in tariff has been the primary driver for PV installations in River Falls, according to Mike Noreen, who oversees the program as RFMU's Conservation and Efficiency Coordinator.

"We're just trying to make it easier for solar installations to go up here," says Mr. Noreen. River Falls FiT rate is \$0.30/kWh – one of the highest rates offered in Wisconsin. The \$0.30/kWh rate initially gave the Wisconsin Public Service Commission (PSC) pause; however, WPPI worked with the PSC to move the tariff through the PSC process and the River Falls tariff was eventually approved in 2008.

WPPI Energy originally allocated 10 kW to RFMU's program, evenly distributing capacity to member utilities based on population. The RFMU program was fully subscribed within a year and a half. However, because the River Falls community has contributed significantly to the Renewable Energy Block Program, and RFMU has consistently filled their allocated capacity, WPPI Energy allocated additional capacity to RFMU's FiT for a total of 14.4 kW. In addition, 12 kW of capacity are in queue to be installed in 2013. In 2012, systems installed as part of the FiT program produced over 22 MWh of electricity, about 0.02%<sup>vi</sup> of the retail sales from RFMU, which is on par (as a percentage) with some

states' solar carve-out goals. As more projects come online in 2013, this percentage will likely continue to increase. In part due to its commitment to the FiT programs offered by its member utilities, WPPI met its state-mandated renewable energy requirement six years ahead of schedule.<sup>vii</sup>

### Educating the Community

The River Falls program supports systems spanning the commercial, residential, multifamily residential and municipal sectors, including the new community-based system on River Falls High School.



*Figure 2: The 3.7 kW PV system installed at the River Falls High School (photo courtesy of RFMU).*

The River Falls High School PV system was part of an initiative known as "POWERful Choices!," the citywide brand for all conservation, efficiency, and renewable energy programs. In 2007, the RFMU and River Falls School District signed a Memorandum of Understanding in order to identify a framework of cooperation for the

<sup>vi</sup> U.S. Energy Information Administration. Accessed April 2013.  
<http://www.eia.gov/electricity/data.cfm#sales>

<sup>vii</sup> Public Service Commission of Wisconsin. June 22, 2011.  
<http://psc.wi.gov/hotTopics/documents/complianceReport.pdf>

deployment of a solar PV resource in the community. The result is a 3.7 kW PV system that produces 5,236 kWh per year, funded in part by a grant from WPPI Energy.<sup>viii</sup> The PV system is located to maximize visibility to the community, and its electrical general statistics and environmental benefits are available on an online portal for anyone to view. The system is utilized as a learning tool, incorporated into classwork and used for community service learning, student projects, and other demonstrations.

Systems installed through the FiT program are required to go through the Focus on Energy incentive process in order to guarantee the quality of the system, reliability of the installer, and to take advantage of state incentives offered through Focus. These state rebates have helped to encourage other systems too large for the FiT program. In addition to the statewide incentives, one residential customer of the FiT program was also the sole participant in the town's Property Assessed Clean Energy (PACE) program, known as the Renewable Energy Finance Program. The financing program was created after Wisconsin enacted PACE legislation in 2009. The Wisconsin program survived the residential PACE shutdown by the Federal Housing Finance Agency (FHFA) in 2010 because the PACE loan was considered a secondary lien, unlike most PACE programs.<sup>ix</sup> Though it survived the

FHFA, the program did not thrive in River Falls. Mr. Noreen stated that River Falls residents have not shown an interest in a loan program, but that the City was going to try replacing the PACE program with a loan program similar to the Milwaukee Shines program. That program has been very successful in Milwaukee, and avoids the mortgage-related concerns that have arisen with residential PACE programs.

### Looking Forward

One of the main lessons learned for Mr. Noreen and the City of River Falls is that it is perfectly fine to copy successful programs from other cities.

“Milwaukee is doing it right,” he says. “Even though there aren't a lot of examples of people doing this, there are examples, and we're all working toward similar goals.”

Although there are only a handful of efforts similar to River Falls' in Wisconsin, there is a network of renewable energy program coordinators that work together and learn from each other's successes and struggles. River Falls has been building off the success of the FiT program, and is now working closely with the Wisconsin SunShot Initiative Rooftop Solar Challenge team and local building inspectors to streamline permitting and interconnection processes for PV.

Though political support may wax and wane and funds may come in fits and starts, the City of River Falls is growing its solar industry. Despite a low quantity of roofs to work with (Mr. Noreen estimates that only 30% of residential homes have a decent solar resource), River Falls continues to find different ways to keep advancing the

<sup>viii</sup>River Falls Municipal Utilities. Accessed April 2013.

<http://www.rfmu.org/environment/default.asp?CategoryNumber=2>

<sup>ix</sup>Database of State Incentives for Renewables and Efficiency. Accessed April 2013.

[http://dsireusa.org/incentives/incentive.cfm?Incentive\\_Code=WI82F&re=0&ee=0](http://dsireusa.org/incentives/incentive.cfm?Incentive_Code=WI82F&re=0&ee=0)

industry. River Falls has demonstrated that even a small city can promote and accelerate the development of a solar industry with innovative and well-planned policies.

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