

BAYFIELD COUNTY: 25 x25 ENERGY CONSERVATION COMMITMENT



In 2007 Bayfield County adopted the State of Wisconsin's 25 by 25 goal, pledging to strive for 25% of the County's energy usage would come from renewable sources by the year 2025. Between County Solar, Xcel Energy Solar and a small carbon credit purchase Bayfield County, in 2020 Bayfield County achieved a 100% carbon neutral status for county facilities. The Governor's Certificate of Commendation is shown below.



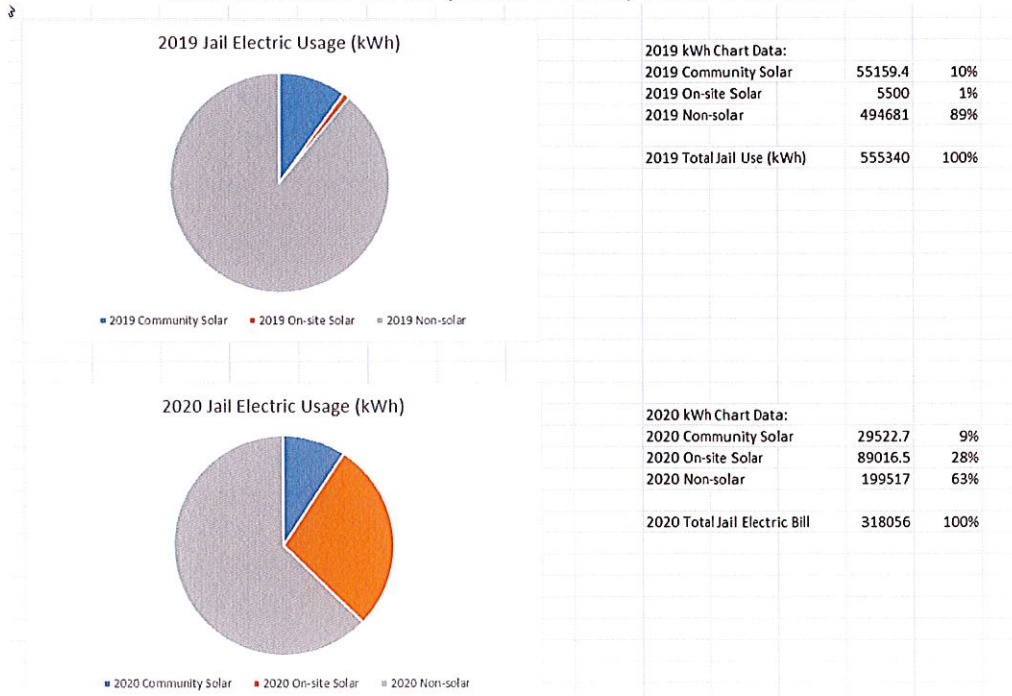
Over the past decade the county has incrementally added conservation practices, renewable energy and alternate energy to reduce carbon emissions and save county tax payers dollars. Nine different solar projects were implemented over this time with funding coming from both grant and county budgets. A listing of the projects is shown here:

Bayfield County Solar PV

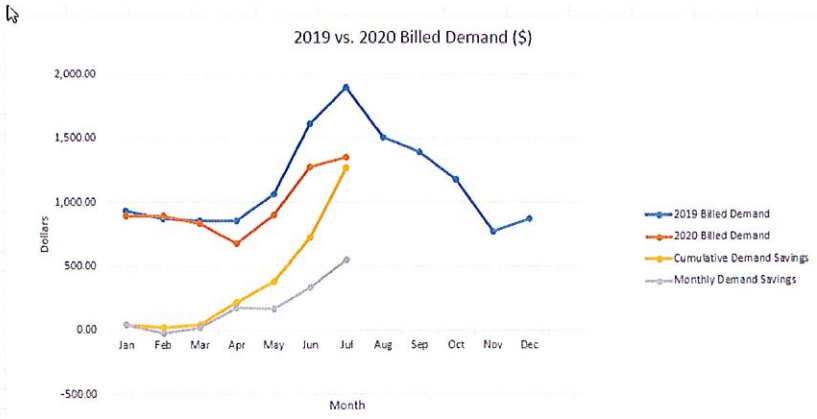
Site	Type	kW dc	kWh/kW/yr	El. Rate	1st yr savings
County Jail pre-2019	on-site	5	1200	\$0.08	\$480
Town of Russel County Garage	off-site	5.1	1200	\$0.13	\$796
Xcel Community Solar	off-site	300	1200	\$0.075	\$27,000
Mason County Garage	on-site	4.9	1200	\$0.08	\$470
County Forestry Garage	on-site	8.4	1200	\$0.08	\$806
County Jail 2019	on-site	111.4	1200	\$0.08	\$10,694
Washburn County Garage	on-site	44.3	1200	\$0.08	\$4,253
Total		479.1			\$44,500

2020 was a big year for solar at the Jail complex. Solar contributions to Jail electrical usage increased from 11% of overall usage to 37% in the first eight months of the year. These charts highlight the change seen from 2019 to 2020.

JAIL ELECTRIC USAGE, 2019 V 2020, FIRST 8 MONTHS

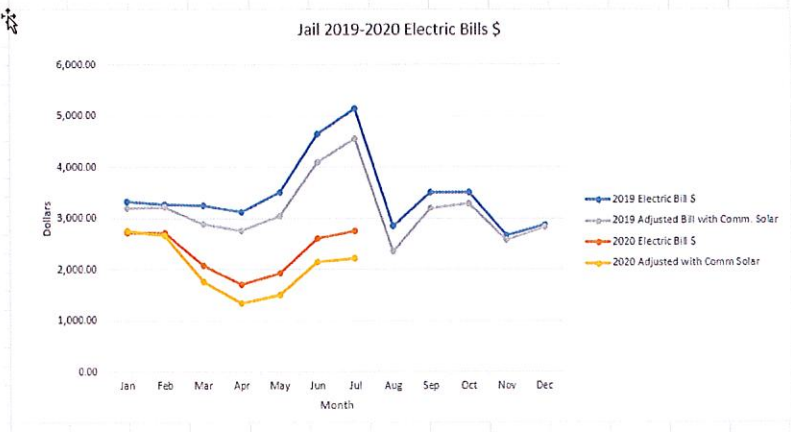


In addition to actual energy produced, solar together with conservation practices has helped reduce utility “demand” charges, another component of an electric bill. This chart shows this impact of new solar and conservation efforts that went live in 2020 and the reduction on monthly bills.



The chart below highlights monthly bills before and after solar at the jail. The July 2019 electric utility bill was over \$5000, the July 2020 bill less than half that.

2019-2020 ELECTRIC BILLS AT THE BAYFIELD COUNTY JAIL



The value of Solar to date (Jan-July 2020) is estimated at \$9735 for the first seven months of the year.

