



2018 Group Buy Installation Profile

WILD HOLLOW FARM, LLC

Ashland, WI

Wild Hollow Farm, LLC is a small-scale fruit, vegetable, and cut flower farm near Marengo, WI. The solar installation was sized for a full offset of the annual electricity use of the home and farm. Roughly 40% of the annual electricity is used by the farm for chest freezers, walk-in cooler, irrigation, greenhouse blower fans, and workshop heating. The installation is a Ready-to-Install (RTI) system from Next Energy Solution consisting of 32 Peimar SG270P 270-Watt panels mounted on a treated-wood in-ground frame with a Fronius Primo 8.2-1 Inverter. The array is tied to the grid via a 50amp circuit in a service panel.



32 panel 8.64 kW Solar Array

Construction of the in-ground frame and mounting of the panels was done by the farm owners. Installation of the inverter and connection to the grid was completed by Jolma Electric.

Projected Economic Performance

With a 30% federal tax credit and depreciation, estimated payback for the array is 6.5 years with a 25-year internal rate of return of 16.4%. This assumes a 3% energy cost escalation, which effectively increases the value of the avoided costs.

		Payback	25-Year Savings	IRR
Total Cost	\$17,469	10 years	\$ 62,047	10.1%
30% federal tax credit	\$ (5,241)			
Net Cost	\$12,228	7.5 years	\$ 62,047	14.7%
Farm Use Depreciation (40% of total generation)	\$ (1,307)			
Adjusted Cost	\$ 10,921	6.5 years	\$ 62,047	16.4%

Economic and Performance Assumptions	
Starting electricity rate	\$0.140
Escalation of energy costs/year	3.0%
Production degradation/year	0.50%
PVWatts Solar capacity factor	15%

Costs	Amount
Bayfield Electric Co-op Fee	\$500
Wood Ground Mount Materials	\$879
Cost of Electrician and Materials	\$1403
8.64 kW Panels/Inverter/Mounting Hardware	\$14,688
Total Cost	\$17,469