

08JAN19 Overview of Escanaba Solar Project – Panel Purchase Program

The Escanaba Solar Project is:

- A 1.16 MW solar generation facility owned by the **City of Escanaba**
- Located at the Delta County Airport
- Designed to allow City of Escanaba electric customers to purchase solar panels and associated equipment, and receive a credit on their electric bill for a proportional amount of electricity that the entire Escanaba Solar Project produces.

The brief Fact Sheet, Directions for Purchase, and FAQ section below, should help answer some of the basic questions associated with the Escanaba Solar Project-Panel Purchase Program.

Escanaba Solar Project FACT SHEET

Size of array: 3510 panels

Panel Wattage: 330 watts per panel

kWh per panel per year: 435 kWh per year in the first year of operation. This is **estimated production** and could be higher or lower depending on level of sun received over the course of on year. Panel production is expected to decrease slightly over time, less than 0.7 % each year. Solar generation is highest in the months of May through August, and lowest in the months of November and December.

Panel Cost: one-time payment of \$407 per panel.

All City of Escanaba electric Residential, Commercial, Municipal and Large Power customers, including Ford River customers, will be eligible to purchase panels. For the first 6 months of the Panel Purchase Program, January 1st through June 30th, 2019, the available solar panels for purchase will be allocated as follows:

Electric Customer Category	Number of Solar Panels Available for Purchase
Delta County – Lease Agreement Option	500
Residential	783
Commercial	813
Large Power	1294
Municipal	120
Total Number of Panels Available	3510

This initial sales allocation is based on the relative electricity consumption in the customer categories during the last fiscal year.

After June 30th, 2019, any unsold solar panels will be available to any category of customer on a first come first served basis.

Panel limit: The number of panels available to any one customer will be limited by their annual electric usage. **Customers should not buy more panels than required to meet their electric needs in 2019 and into the future.** For example, increased efficiency of electric lighting and appliances may reduce your electric loads, or you may significantly reduce your electric load by becoming a “Snow

Bird". The Solar electric energy credit will be zeroed out at the end of each fiscal year for each customer. A customer cannot receive more Solar electric energy credit than their actual usage during a fiscal year.

Panel quantities may require a brief customer usage history review.

The Escanaba Utility Office at City Hall can provide customer usage data.

Billing Credit per kWh of Solar Generation:

Dates	\$/kWh
1/1/2019 – 6/30/2019	.062
7/1/2019 – 6/30/2020	.074
7/1/2020 – 6/30/2021	.072
7/1/2021 – 6/30/2022	.064
7/1/2022 – 6/20/2023	.068
7/1/2023 – 6/30/2024	.070
7/1/2024 and beyond	~ 0.070 expected.

The exact Billing Credit will primarily depend on future Electric Department purchase contracts for energy and capacity. The Escanaba Electric Department will update and extend the Billing Credit as new future contracts are obtained, and the extended performance history of the Escanaba Solar Project is established. **The Billing Credit is based on the Avoided Costs after subtracting Operating & Maintenance Costs for the Escanaba Solar Project. This Avoided Cost basis results in a fair bill for customers who purchase panels, and those who do not purchase panels.**

Solar Generation Credit Carry Over: Solar Generation Credits will carry over from month to month for a 12 month period from July 1st to June 30th, the fiscal year. **If any carry over exists on the last day of the 12 month period it will be zeroed out.**

The Billing Credit is based on Avoided Costs of the electric cost components listed below with the Escanaba Solar Project:

- **Energy**
- **Capacity**
- **Transmission**
- **Renewable Energy**

The Billing Credit is less than the Residential or Commercial rates because the Escanaba Solar Project does not avoid:

- Escanaba Distribution costs (e.g., Linemen, poles, wires, sub-stations, transformers, etc.)
- MISO fees
- Administrative and other overhead costs

Location of Panels: All panels will be located on the Escanaba Solar Project site adjacent to the Airport Road. Each panel will be allocated to each customer by a number once their purchase has been approved.

Length of Agreement: 25 years, or December 31, 2044; whichever comes first.

Solar Land License and Management Agreement: This agreement sets the legal guidelines required for participation in the Escanaba Solar Project program. This will be signed by the customer and a City of Escanaba representative.

Ownership: Each customer who signs the Solar Land License and Management Agreement form and pays the required \$407 per panel will own the panel and associated equipment that is on the property.

Directions for panel purchase:

Please contact the City of Escanaba Utility Office at City Hall (1st floor) for printed information on the **Escanaba Solar Panel Purchase Program**, and a copy of the **Solar Panel License and Management Agreement**. After reading the printed material, any additional questions should be directed to:

City of Escanaba, Electric Department
1711 Sheridan Road
Escanaba, MI 49829
Phone: (906) 786-0061
Fax: (906) 786-0791
E-Mail: cityelectric@escanaba.org
Website: <http://www.escanaba.org/electric>

To proceed with the Escanaba Solar Panel Purchase Program,

1. Read and sign the **Solar Panel License and Management Agreement**
2. Submit your signed **Solar Panel License and Management Agreement** and payment of **\$407 per solar panel** by mail or in person to:
City of Escanaba Utility Office <http://www.escanaba.org/billing>
410 Ludington Street
P.O. Box 948
Escanaba MI 49829
906-786-0552
Office Hours: Monday thru Friday 7:30 a.m. to 4:00 p.m.
3. **Please make checks payable to:** City of Escanaba
4. If the necessary information in your Agreement is not verified by the **City of Escanaba**, you will receive a **FULL REFUND**. You will be notified if your application has been accepted or deferred within a month of submittal.
5. As the **City of Escanaba** receives signed agreements and payments, the following data will be tracked via a spreadsheet to include:
 - a. Customer Name
 - b. Customer Address and contact Telephone and/or e-mail address
 - c. Customer Account number
 - d. Number of Panels requested
 - e. Payment Received by the **City of Escanaba**

Frequently Asked Questions

What is the Escanaba Solar Project?

The Escanaba Solar Project will give Escanaba electric department customers the opportunity to benefit from renewable energy without having to install and maintain solar panels on their property. Instead, the solar panels will be located on site at the Delta County Airport. Participants in this voluntary program will be able to license property and purchase solar panels for a term of 25 years. The renewable energy generated by these panels will be reflected as a Billing Credit on their electric utility bill from the Escanaba Utility Department.

What are renewable energy certificates?

By using renewable resources to produce electricity, the Escanaba Solar Project becomes eligible for renewable energy certificates (RECs). A REC is created by every megawatt-hour of electricity generated from the Escanaba Solar Project. The RECs generated from this project belong to the City of Escanaba. The economic value of the REC is included in the participant's Billing Credit.

Who is eligible to participate?

Any City of Escanaba electric customer in good standing is eligible to take advantage of this program. This includes residential, commercial, and Large Power customers. (Note, the Land Lease Agreement allows Delta County to buy up to 500 panels)

Why participate in the Escanaba Solar Project?

It's simple. You can easily purchase solar panels for your home or business and start receiving on-bill utility credits to offset your energy consumption costs over 25 years. It's affordable. You can purchase one or more panels to fit within your budget.

It's local homegrown renewable energy.

Many people are interested in getting rooftop solar on their home or business, which is a good thing. However, not all buildings are good candidates for solar because they have poor orientation to the sun, trees will shade the roof panels, the roofs are not structurally sound enough, the buildings are rented and not owned by the occupant, or the occupant does not want to invest the upfront cost to install solar.

The Escanaba Solar Project is "get it and forget it." Participants in this program do not need to install or maintain the solar array. And the Escanaba Solar Project is located in a place that has unobstructed exposure to the sun, maximizing the amount of energy the array will produce.

Will my purchase of solar panels qualify for the federal Investment Tax Credit?

It is the sole responsibility of the customer to take any steps necessary to determine your eligibility to claim the federal Investment Tax Credit. Please consult your tax professional for more information. As of November 2018:

- In **2019**, the tax credit remains at **30%** of the cost of the system.

- In **2020**, the Investment Tax Credit declines to **26%** for Residential and Commercial customers.
- In **2021**, the Investment Tax Credit drops to **22%** for Residential and Commercial customers.
- In **2022 and beyond**,
 - The Investment Tax Credit drops to **0% for Residential** customers
 - The Investment Tax Credit drops to **10% for Commercial** customers

Costs & Requirements

How do I determine the number of panels I should lease?

Check out **the Estimated Solar Power Produced** Table below, to get started. This Table shows estimated annual solar production associated with different quantities of panels for the 1st year of operation.

The number of panels available to any one customer will be **limited by their annual average usage**.

Customers should not buy more panels than required to meet their electric needs in 2019 and into the future. For example, as increased efficiency of electric lighting, air conditioning and appliances may reduce your electric loads, or you may significantly reduce your electric load by becoming a "Snow Bird", the Solar electric energy Billing Credit will be zeroed out at the end of each fiscal year for each customer.

A customer cannot receive more Solar electric energy Billing Credit than their actual electric usage during a fiscal year.

Requested number of Panel may require a brief customer usage history review. The Escanaba Utility Office at City Hall can provide customer usage data.

How much will it cost to participate in the program?

The upfront cost for each 330-watt solar panel for 25 years is only \$407, or \$1.23 per watt. This great price is thanks to the "utility scale" Escanaba Solar Project built by the City of Escanaba.

The City of Escanaba, at its discretion, will make the final determination of the number of panels a customer may license.

Estimated Solar Power Produced			
Estimated Solar Power produced is not a guarantee.			
Actual annual generation may typically vary + or - 5% due to local weather conditions.			
The Estimate is based on the NREL PVWatts Solar Calculator using the Delta County Airport weather station historical data, and the design of the Delta County Airport site.			
Number of Solar Panels	Price, \$	Total Watts, DC	Estimated Solar Power Produced in 1st Year of Operation, kWh/Year
1	407	330	435
2	814	660	870
3	1221	990	1305
4	1628	1320	1740
5	2035	1650	2175
6	2442	1980	2610
7	2849	2310	3045
8	3256	2640	3480
9	3663	2970	3915
10	4070	3300	4350
11	4477	3630	4785
12	4884	3960	5220
13	5291	4290	5655
14	5698	4620	6090
15	6105	4950	6525
16	6512	5280	6960
17	6919	5610	7395
18	7326	5940	7830
19	7733	6270	8265
20	8140	6600	8700

What do I get in return for my purchase and license?

The amount of your utility Bill Credit will depend upon how many solar panels you purchase and how much energy they generate each month. We estimate that a 330-watt solar panel will generate a credit to your utility bill of approximately \$27 in the first year. The Bill Credit will vary each month with the actual production of Solar Energy.

Your **"payback"** is estimated to be in Year 14 out of your 25-year lease. With the 30% Investment Tax Credit, the Payback is reduced to 10 to 11 years.

Significant unanticipated future expenses (e.g., inverter failures beyond the 20 year Warranty) will be recovered by reducing the future Billing Credits for solar generation. The unanticipated future expenses will be distributed across all 3,510 panels.

You also will have the satisfaction of participating in the increase of renewable energy for the Escanaba Electric Department system in the future. Clean solar energy will reduce pollution and make our region more energy independent.

What happens if I move to a different address?

If a participant moves to another property within the City of Escanaba electric service territory, that customer can remain in the program at the new address.

People who leave the City of Escanaba electric system have several license transfer opportunities.

- If a customer owns and is selling a building, that customer could include the pro-rated value of his/her solar license in the building sale price.
- Customers could also choose to transfer the remainder of their license to another City of Escanaba electric customer, including an individual, business, church, school, or a favorite charitable organization, so long as they meet criteria set forth in the Solar Land License & Management Agreement.

If I participate, what is my legal agreement with this program?

Participants will be required to read and accept the terms and conditions of the Solar Land License & Management Agreement as part of their application package to the program.

How does the solar power get to my home or business?

Solar power generated from the community solar garden will go directly onto the City of Escanaba electric distribution system and participants will be credited against their electric consumption for the electricity production from their portion of the array.

If my solar credit exceeds my monthly energy bill, will the credit be carried over?

Yes, excess solar credits will be carried forward monthly with a 12-month settlement period based on billing cycles for bills produced from July 1 to June 30, the City's Fiscal Year. **The Solar electric energy credit carryover will be zeroed out at the end of each fiscal year for each customer.**

Can customers of utility companies other than the Escanaba Electric Department participate?

No, this program is only available to City of Escanaba electric customers (including Ford River).

If you are uncertain if you are a City of Escanaba electric customer, contact us and we can determine that for you.