
Whipple Farm Solar Power Plan

Hannah Crayton

Sustainability Coordinator

February 21, 2023



Agenda



<https://www.vecteezy.com/free-vector/solar-energy>

01 Explanation

02 Future Plans

03 How Does Solar Power Work?

04 Benefits

Explanation

- In October 2022 ReVision Energy conducted a solar feasibility study for the Whipple Farm neighborhood and identified **38** homes that are suitable for solar panels.
- ReVision Energy takes shade variation, roof pitch and orientation, and sun exposure into consideration when studying solar feasibility.



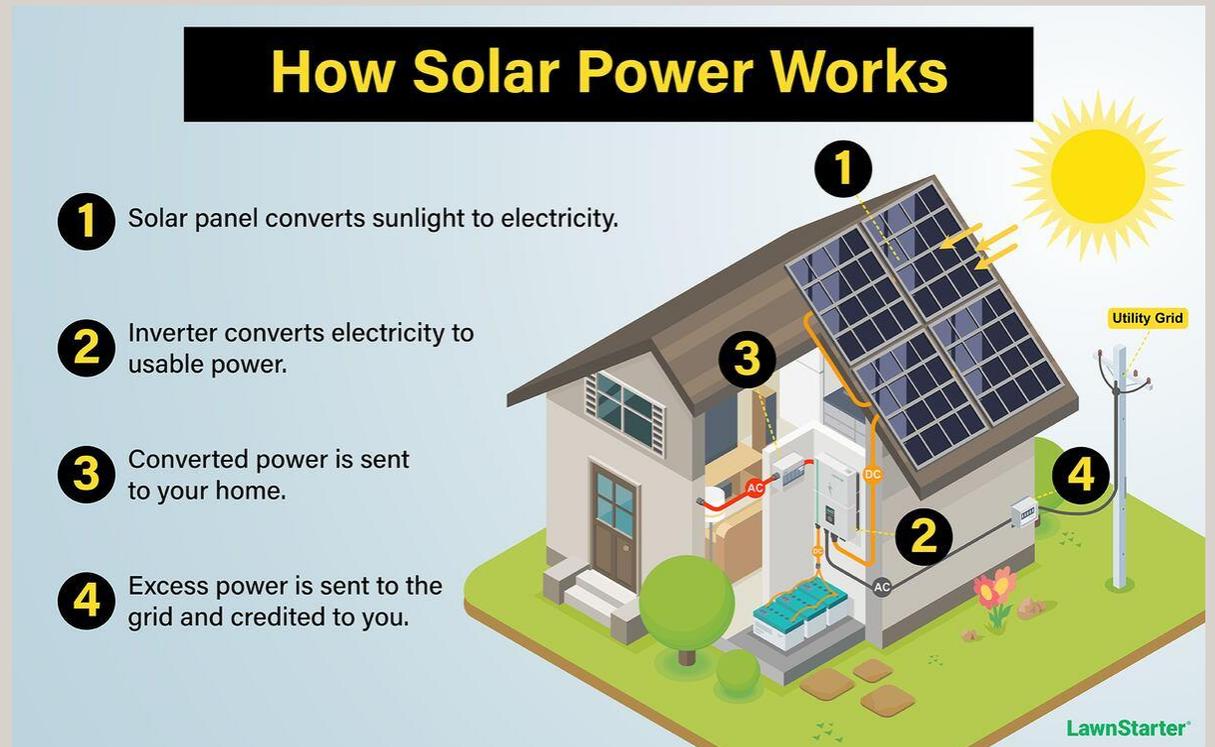
<https://solarindustrymag.com/revision-energy-maine-city-install-4-7-mw-solar-array-to-support-municipal-needs>

Future Plans

- Solar panel installations are set to begin in **Spring 2023** and should take approximately one month to complete all rooftop installations.
- **818** solar panels are expected to be installed in total for this project.
- OceanView will be taking over the CMP meters for the homes receiving solar panels and the electricity produced will be used to power the OV community areas.
- Community Areas include: **Pool and Locker rooms, Fitness Pavilion, Whipple Farm House, Common areas in all large buildings, hallways, stairwells, dining room,etc.**
- **Street lights Whipple Farm Lane, Blueberry Ln. SHC lights alone use 1900KW per month**
- **Sewer pump stations**
- **Maintenance Building**
- **Storage areas**

Solar Savings OverView

- While every location on Earth receives some sunlight over a year, the amount of solar radiation that reaches any one spot on the Earth's surface varies. Solar technologies capture this radiation and turn it into useful forms of energy.
- When the sun shines onto a solar panel, energy from the sunlight is absorbed by the PV cells in the panel. This energy creates electrical charges that move in response to an internal electrical field in the cell, causing electricity to flow.
- Take the direct-current (DC) electricity produced by modules and convert it to the alternating-current (AC) electricity used to power all the appliances in your home.



<https://www.lawnstarter.com/blog/roofing/how-do-solar-panels-work/>

Benefits

- **Expected Environmental Benefits of this Project:**

- Annual CO2e offset (lbs) : **336,213**

This is equivalent to...

- **17,160** gallons of gasoline not burned
- **33** passenger cars removed from the road
- **168,030** pounds of coal not burned
- **52** tons of waste recycled

- This project is estimated to produce **343,074 KWh** of electricity annually.
- Therefore, the electricity from these solar panels will be a community benefit in addition to an environmental benefit as we strive to become **net zero!**