

Dane County's first solar-powered park and campground at William G. Lunney Lake Farm County Park began producing energy in 2021. The solar system at the park has more than 460 solar panels located on four structures (two shelters and two buildings) and feeds energy to two inverters (energy converters). The system provides renewable electricity for campers, day-use visitors, and the Lussier Family Heritage Center. In total, the system provides about 90% of the electricity used across all site activities. The system is one of hundreds of solar energy systems installed across Dane County.

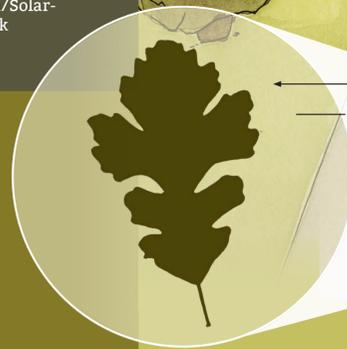


Use the camera app on your phone to scan this code and learn more about solar on our website.

<https://www.danecountyparks.com/Solar-WG-Lunney-Lake-Farm-County-Park>

PHOTOSYNTHESIS

Solar energy has been captured and utilized by many different forms of life on earth for millennia. The most common example of solar energy use is by plants during photosynthesis. During photosynthesis, light from the sun and carbon dioxide from the air are absorbed by plant leaves and converted into sugar (food/energy) and oxygen.



SOLAR SHELTER

The roof of this building is made entirely of solar panels. As the sun's rays hit the panels, photons (particles of energy) from the sun are absorbed by the photovoltaic cells in the panels and converted into DC electricity. While solar panels produce more electricity on sunny days, they also produce electricity on cloudy and even rainy days. If the sun is up, these solar panels are making electricity.

INVERTER

Solar panels generate DC (Direct Current) electricity. This electricity flows via wires to the inverter where the energy is converted into AC (Alternating Current) electricity energy, the same electricity used in homes. The inverter behind the Heritage Center disperses the AC electricity into the breaker box and then into the park buildings and campsites.

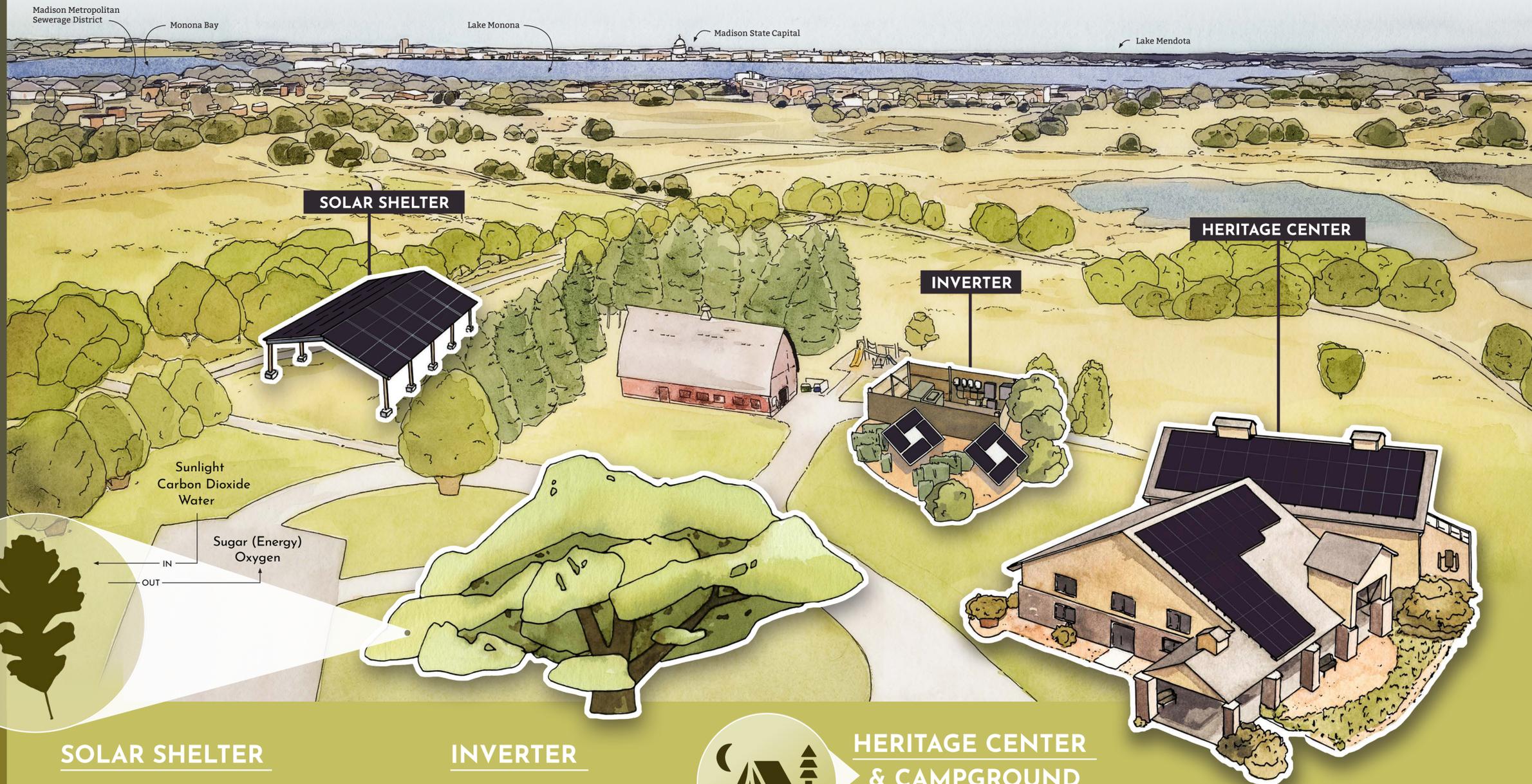


HERITAGE CENTER & CAMPGROUND

Electricity flows from the breaker box into the park buildings and campsites. Any extra, unused electricity flows through a utility meter and onto the electrical grid where it can be utilized as green energy for our community. The electrical grid, sometimes known as the power grid, is an interconnected network where electricity is moved from producers (such as solar panels or power plants) to consumers (households and businesses).

DANE COUNTY'S FIRST SOLAR-POWERED PARK

William G. Lunney Lake Farm County Park & Lussier Family Heritage Center



Design and Illustration
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