

Solar Photovoltaic

How does a solar photovoltaic (PV) system work?

Solar panels absorb the sun's energy and convert it into DC electricity. The DC electricity is converted to AC electricity through inverters, which is then delivered to the local utility's infrastructure.

How much energy will the solar array generate?

Bristol Solar One will generate **5,942 MWh/year**. This is enough renewable energy to power **733 homes** for an entire year and offset **4,202 tons of carbon dioxide**.

Local Benefits

What are the local benefits of having solar generation?

In general, energy production takes place at power plants, which can be located a significant distance from where the electricity is used. Local energy production such as Bristol Solar One will help strengthen the electricity grid in Bristol through more reliable, advanced infrastructure. Additionally, solar generation is a renewable energy, which delivers locally produced power with zero emissions.

What are the municipal benefits?

Once operational, the City of Bristol will receive annual tax revenues from Verogy for an estimated 20 years. Additionally, there will be no burdens placed on municipal infrastructure or demands on City of Bristol services.

Construction & Operation

How long will construction take?

Following all state and local approvals, construction will take approximately six months.

How will the solar array be maintained?

Maintenance visits by Verogy staff will take place onsite every one to two months. Once the solar array is operational, Verogy will monitor energy production remotely.

What is the lifespan of this solar array?

Bristol Solar One has an overall lifespan of 35 years.

What will happen to the array at the end of its lifespan?

At the end of its lifespan, Bristol Solar One will be decommissioned and removed from the property. Once cleared, the land will be restored to its original condition.

Location & Site Selection

Why was this location chosen?

The site was selected due to its minimal impact to both neighboring property owners and the environmental conditions of the area. The project is located on land that is pre-cleared and not located on core forest, helping to minimize tree clearing. The array itself will not impact any wetland habitats and appropriate setbacks from neighboring properties have been incorporated into the project's site design. Additionally, the site is in close proximity to the electrical infrastructure necessary to interconnect this project to the Eversource distribution network.

How much of the current property will be used for the project?

The total area of the property where Bristol Solar One is proposed is approximately 28 acres. When completed, the project will use an estimated 16.5 acres, leaving 40% of the parcel undeveloped and available for other uses, including agriculture and open space.

Are there any dangers living near a solar array?

There are no known dangers or adverse effects of living near a solar array.

Will the project create glare or other visual impacts?

Solar panels are designed to absorb light in order to maximize their efficiency and generally reflect about 2% of sunlight. The panels that will be used at Bristol Solar One are about 10 feet tall; due to the existing vegetation and topography of the site, there will be limited views of the project. Additionally, Verogy will identify areas in the neighborhood that may experience visual impacts and use vegetative screening and other techniques to limit these impacts.

Bristol Solar One and the Environment

What will happen to the existing land, forest, and trees on the property currently?

This project was designed with the least possible impact on the existing environment of the property with limited tree trimming taking place during construction. When completed, the project will use an estimated 16.5 acres out of a total 28 acres, leaving 40% of the parcel undeveloped and available for other uses, including agriculture and open space.

What measures will be taken to protect wildlife that visit or live on the property?

A full survey of the land will be conducted as part of the Siting Council approval process. Verogy will be working with environmental professionals to conduct numerous studies on the property, including:

- **Natural Diversity Database:** Identify the endangered, threatened and special concern species and significant natural communities on or nearby the property
- **USFWS:** Consultation in regard to Section 7 and 10 of the Endangered Species Act
- **Soil:** Identify the types of soil and their uses
- **Wetlands:** Identify any existing wetland areas in order to avoid impact

Verogy takes its commitment to sustainability and the environment very seriously. We will continue to work with our environmental engineers and other stakeholders to ensure that Bristol Solar One's impacts are as limited as possible.

Approval Process

What is the approval process for Bristol Solar One?

Verogy requires approval from the Connecticut State Siting Council, which has jurisdiction over projects like Bristol Solar One. We will also be working closely with municipal departments in Bristol throughout the development of the project.

Residents with questions about the approval process can contact Verogy's Director of Development, Bryan Fitzgerald at development@verogy.com or (203) 257-3375.

Contact Us

Verogy is committed to keeping members of the Bristol community informed about our projects. Please feel free to contact us with questions or concerns.

Project Contact:
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About Verogy

Verogy is a Hartford-based solar developer focused on commercial, industrial and small utility scale projects. Built on 50+ years of combined industry experience, the professionals at Verogy have developed, financed and constructed hundreds of solar projects across the United States.

For more information, visit www.verogy.com/bristol-solar-one/