

About the Project

- The proposed Bartzak Solar Project (the Project) will generate 0.5 MW of capacity. That's enough to power about 100 homes per year.
- The Project consists of 1,071+/- solar panels contained within approximately 1.3 acres.

What is Community Solar?

• The U.S. Department of Energy defines community solar as any solar project or purchasing program, within a geographic area, in which the benefits of a solar project flow to multiple customers such as individuals, businesses, nonprofits, and other groups. In most cases, customers are benefitting from energy generated by solar panels at an off-site array.

What is the SMART Program?

- The Solar Massachusetts Renewable Target Program is the Department of Energy Resources' (DOER) incentive program established to support the development of cost-effective solar in Massachusetts. In the program, the solar project provides electricity directly to the grid. Eligible projects must be interconnected to Eversource, National Grid, or Unitil.
- Bartzak will be interconnected to Eversource, serve the utility's energy demands, and ultimately help to stabilize ratepayer energy costs.

What are the panels made of?

• PV panels typically consist of glass, aluminum, copper, silver and semiconductor materials that can be successfully recycled and reused. By weight, more than 80 percent of a typical PV panel is glass and aluminum – both common and easy-to-recycle materials. Because PV panel materials are enclosed and don't mix with water or vaporize into the air, there is little, if any, risk of chemical releases to the environment during normal use. The most common type of PV panel is made of tempered glass, which is quite strong. They pass hail tests and are regularly installed in areas exposed to winter conditions.

How are the panels recycled and the site decommissioned?

• Decommissioning refers to the removal of equipment and restoration of the site. The panels have a lifespan of 25-40 years and may be refurbished or recycled. The racking systems, or mounts holding the panels, are made of steel, are easily recyclable, and typically sold as scrap. Industry framework ensures sites are decommissioned safely and sustainably. Unlike other forms of development, solar project sites can often be turned back into their original state. Furthermore, the Project seeks to maintain the natural conditions of the site to the greatest extent practicable.

What are the environmental impacts?

- Solar projects are very low impact relative to other forms of power generation.
 - Solar projects do not require transportation of physical or liquid fuels,
 - Solar projects do not require storage or disposal of physical or liquid fuels,
 - Solar projects have no on-site combustion or emissions,
 - Solar projects do not utilize water or emit point-source pollutants into waterways,
 - Solar projects do not permanently or substantially alter soils, drainage or native fauna.

The racking and solar panel structure accommodate revegetation beneath the arrays for deep-rooted plants, grasses, and flowers that can help regenerate soil conditions. In addition, these plantings can support honeybees, butterflies, humming birds, and other local pollinators.

Will this affect the wildlife?

• Environmental experts have been engaged for the Project to conduct site-specific studies to understand and mitigate any potential impacts on wildlife. The findings from the study will be submitted to and reviewed by the Town's Conservation Commission.

Are panels noisy?

No, solar panels themselves are silent. Certain pieces of equipment in a solar facility, such as invertors
and transformers, emit a small amount of sound during the day from sunrise to sunset. The impact of
this sound is negligible because the equipment is strategically placed within the solar layout and is
typically distant from property lines.

What is the risk of a fire?

The risk of fire, especially for such a small project like Bartzak, is incredibly low. To ensure proper safety and functionality, solar equipment should meet product safety standards, the National Electrical Code provisions, and inspection prior to energizing.

Do solar panels emit electromagnetic radiation?

• Electricity from solar panels produce extremely low electromagnetic fields (EMF). Exposure to low-level electromagnetic fields have been studied extensively, and there is no evidence that it can impact human health, according to the World Health Organization (WHO). This remains true for both ground-mounted and rooftop solar.

Does solar effect property values?

• Research has shown that properties near solar projects experience little to no impact on property value. In fact, studies show that in some cases solar has a positive effect on property value. According to the Solar Energies Industries Association (SEIA), proximity to solar facilities does not impact the sale of residential or agricultural properties. These studies have been conducted throughout the U.S. including New England. More information is available to read at www.seia.org/research-resources/solar-property-value.

