

## Horseshoe Solar FAQ

### **1. Why are you putting this on good farmland? Why not on rooftops or poor farmland?**

Horseshoe Solar will continue agricultural use of the land during the operation of the solar farm. Large flocks of sheep will maintain the vegetation on the site, bees will be kept on site, and other crops may be grown as well, keeping local farmers employed on the site as they are today. Putting the land into a long-term sod for the life of the solar project will prevent erosion, store carbon in the soil, and increase wildlife habitat. Most of the project site was used as pasture until the 1960's, so using it as pasture again will be in keeping with the land's history. There are not enough rooftops to supply all the power needs of the state, and rooftop solar is more expensive than ground-mounted. Lastly, there is not enough marginal farmland that is reasonably flat, near transmission lines, contiguous, and not a wetland, to supply our energy needs in NY.

### **2. What kind of taxes would this pay?**

Horseshoe Solar will enter into a PILOT (Payments In Lieu Of Taxes) agreement with the towns, counties and school districts for 20 years. It will also pay full fire district taxes in Caledonia and Rush. These additions to the tax base will hold down taxes, benefitting all taxpayers in the host towns.

### **3. Do solar panels contain toxic materials?**

Solar panels are not toxic and do not pose a risk to the environment. Panels proposed for use by Invenergy are composed of common materials such as aluminum, silicon, wiring and shatterproof glass. These materials do not present a risk to the environment or people.

### **4. Where is Invenergy based?**

While headquartered in Chicago, Invenergy has had a presence in New York for over 10 years and has an office in Ithaca. Invenergy's Sheldon wind farm located in Wyoming County has been providing low-cost, clean, reliable energy to NY energy customers since 2009. Invenergy has since built the Orangeville and Marsh Hill wind farms, and the Shoreham Solar Commons on Long Island, the largest solar array operating in NY. During construction, Horseshoe Solar is expected to support more than 300 local construction jobs in Livingston County, and once operational the project will create 3-5 local, permanent jobs.

### **5. How are deer supposed to get over a fence that is 8 or 10 feet high? What about other wildlife that uses the site?**

The fence, which is required by the National Electrical Code, will re-direct the movement of larger wildlife around the solar array, and keep the grazing sheep in and protected from predators. However, the project will be fenced in field-size blocks allowing wildlife access through and around the sides.

Invenergy has been conducting winter bird studies on the site and will work with DEC to

determine what other studies might be needed. The current annual crops grown on the fields provide relatively little habitat value for wildlife. The project will avoid wetlands.

**6. How does Invenergy deal with removal of the solar farm at the end of its useful life?  
What if Invenergy disappears?**

Invenergy will post a decommissioning bond with the towns before construction begins, that will be enough to cover the entire removal of the facility and return it to farmland. That way, no matter what happens in terms of ownership of the solar farm, the towns always have the ability to take it down at no cost to them.

**7. Are solar panels recyclable?**

Yes. Solar panels are built to last a long time – even after the 25-year warranty, the panels are expected to operate for up to 35 or more years. It's very possible the panels will be reused rather than recycled at the end of their warranty and many panel manufacturers offer a take-back program where panels are recycled. Disposal of solar panels is federally regulated by the Federal Resource Conservation and Recovery Act and is increasingly regulated at the state level. Lastly, most solar panel components (more than 80% of its weight) are glass and aluminum, which have cost-effective recycling programs in place today.

**8. Can panels withstand a natural disaster?**

Like any structure, including our houses, power lines and office buildings, solar installations are not indestructible. Invenergy selects equipment and designs the project to withstand extreme weather conditions specific to the site. For example, North Carolina has the 2nd most solar generating capacity in the US (<https://www.seia.org/research-resources/top-10-solar-states-0>), and solar installations there recently survived Hurricane Florence with little impact (<https://www.bizjournals.com/charlotte/news/2018/09/21/solar-farms-slowly-return-to-service-as-duke.html>).

**9. How much noise will construction make? What about during operations?**

Construction activity is primarily conducted by small and medium-sized equipment and is similar to other construction and farming equipment noise. During operations, work is performed during daylight hours, not at night. Solar farms are very quiet. A small motor that rotates the solar panels and other associated facilities makes small amounts of noise, however any home will be located hundreds of feet from any equipment. Solar facilities only operate during the day so there is no noise at night. A noise modeling study will be one of the studies we will do for Article 10.

**10. What about impacts to property values?**

Despite some people's concerns that property values will decline near a solar farm, research does not bear that out. Although there are only a few studies on property values and solar farms, current research shows *no* impacts to property values from solar farms, even for properties very near the energy project.