



## **Frequently Asked Questions Solar Energy Farms**

### **Why Solar Energy?**

*Q: Why Solar Energy?*

*A: Solar Energy technology is the most benign form of power generation. It uses no fuel to produce electric power, so there is no air pollution, no waste material, no carbon, and no cost escalation due to fuel price increase. It is powered by the sun with an infinite renewable supply. For these reasons, many governments around the world are encouraging solar energy development.*

*Q: What is Solar Photovoltaic (PV)?*

*A: The word photovoltaic means literally electricity from light. Solar panels absorb sunlight and convert it into electricity, which is then transmitted like any other electrical power. The panels make no noise and are easy to construct and maintain. They are ground mounted, fastened in rows to frames that stand about 6 feet off the ground. Solar farms also include inverters that convert DC to AC current, normal transmission equipment and may include motors to adjust the panel to the angle of the sun.*

*Q: Is Solar PV a proven and safe technology?*

*A: Very much so. This is well established equipment used around the world. Solar PV facilities comply with all UL and other equipment safety and compatibility standards. We do secure the sites and guests are only allowed by special permission.*

*Q: How long will it take to build a solar farm?*

*A: The project will only take a few months to build. It does not require big construction equipment or major road building. We will not be moving large amounts of earth. The actual area covered with solar panels will be a bit less than one half the site. Depending on the project and the technology used, the rows are typically spaced approximately 20 feet apart, leaving ample room for grass to grow.*

*Q: How are the panels installed?*

*A: It depends on the system design and soil type. It is similar to building a pole barn. Posts are installed and secured, the frames are attached to the posts, and the solar panel attached to the frame.*

*Q: How much power will a project produce?*

*A: Each project is a little different, but in general, a 50 acre site will hold about 10 Megawatts of solar cells. That is enough to supply the equivalent of 1700 to 2000 homes with their total electric power use for a year.*

### **Why here?**

*Q: Why here?*

*A: Because the Mid-Atlantic has a good solar resource, somewhat better than Germany, which is one of the world leaders in solar energy. But especially because there is high energy demand, excellent transmission, and strong public policy in support of solar in this area.*

*Q: Are utilities required to buy solar energy?*



A: Currently there are 29 states that require utilities to supply energy from renewable sources. Renewable portfolio standards require that utilities buy a portion of their power from renewable energy sources, with a specific set aside requirement for solar energy in some of those states.

### **Who is Community Energy?**

Q: Who is Community Energy?

A: We are a 10 year old company with headquarters outside Philadelphia, Pennsylvania. We are one of the leading renewable energy companies in the East. We manage the renewable energy product lines for some 20 utilities; and have built many of the first wind farms in states including Pennsylvania, New Jersey, New Hampshire, and Illinois. We are now building solar energy farms. We are an experienced builder of renewable energy projects.

Q: Will Community Energy own the solar farm?

A: Yes, unlike some, we plan to build, own, operate and maintain the projects.

### **How does the community benefit?**

Q: Will the community benefit?

A: Yes, in several ways. It will complement the agricultural character of the area and allow the land to stay in the farm family. It will contribute taxes to the community without the burden of more schools or more services. We will source as much work locally as possible and the power produced may reduce the need for new transmission lines and relieve power congestion in the area. Many communities are proud to be on the forefront of new, clean energy generation.

Q: Just how is it compatible with our agrarian nature?

A: The most obvious way is to keep the land in the family that leases land to us. We have long term leases at very attractive rates. At the end of the lease, the family can ask us to remove the equipment and return the land to the state it was in. We escrow funds for equipment removal and assure that the land can return to agriculture at that point.

Q: Does Community Energy pay taxes?

A: Yes, we pay local taxes to the community. We pay corporate income taxes to the federal and state governments. In general, our local taxes help a community because our projects do not require much in the way of additional costs for such community services as schools, roads, or police and fire.

### **Does it help or harm our environment?**

Q: How will this project help the environment?

A: After energy conservation and efficiency, solar energy is the most environmentally benign form of energy generation. There is no air pollution, no waste material, no carbon, no water consumption and it is gentle on the land. Solar PV systems create electricity during peak hour demands (day time). The energy produced goes directly into the regional grid and offsets the need for more power produced by conventional means, which have a higher cost to the environment.

Q: Will there be glare?

A: Solar panels are designed to absorb sunlight, not reflect it. To this point, solar installations can be found at the Denver Airport and at US Air Force bases.

Q: Will the panels cause runoff?



*A: We carefully manage rainfall with the approval of Soil Conservation District so that the project is well controlled and in compliance with all regulations.*