

Technology

Q. What kind of technology do solar farms use?

A. Solar farms use conventional solar panels just like those installed on the roofs of homes and businesses. This well-established technology has been around for decades.

Q. How do solar panels make electricity?

A. When sunlight hits a solar panel, the electrons in the solar panel's semi-conducting material become energized and create an electric current.

Q. Who uses the electricity from solar farms?

A. The electricity from solar farms goes onto the high-voltage electrical grid that supplies power to everyone. This is different from rooftop solar panels, which mostly deliver power only to the building they are installed on.

Local Economy

Q. Do solar farms require any community services?

A. No. Solar farms require no water service, no sewer service, and no other taxpayer-supported services.

Q. Do solar farms pay taxes?

A. Yes. A solar farm in Ohio pays local taxes of at least \$7,000 per "megawatt" each year. So, a 75-megawatt solar farm will contribute over \$500,000 new tax dollars each year to the local community.

Q. How many jobs do solar farms create?

A. Depending on its size, a solar farm will create 100-300 jobs during construction. After construction, a solar farm creates a handful of well-paying, long-term jobs for running the facility.

Q. Are there other economic benefits?

A. Yes. Construction of solar farms increases local spending at hotels, restaurants, and gas stations. Land rent payments to participating landowners also provides them a stable long-term source of income.

Cost

Q. Isn't solar too expensive?

A. No. Innovation and competition have dramatically reduced the cost of solar in recent years. In many areas, solar now costs about the same or less than traditional sources.

Q. Will a solar farm near me increase my power prices?

A. No. Not only are solar farms cost-effective, but they supply wholesale power, which does not directly affect your retail rates.

Q. Doesn't solar receive federal subsidies?

A. All types of power generation (including coal, gas, hydro and nuclear power) receive economic benefits from certain federal policy incentives, and solar is no exception.

Pollution & Natural Resources

Q. Do solar farms produce any pollution?

A. No. Solar farms cause no air pollution, no water pollution, and generate no hazardous waste.

Q. Do solar farms require any pipelines?

A. No. The fuel for solar farms is sunlight. It is infinite, free and, over long periods of time, highly predictable.

Q. Do solar farms use water?

A. Very little. Usually rain and other precipitation is enough to clean the panels of accumulated dirt and dust, but occasionally they may be manually cleaned with water.



Risks

Q. Are there any risks or dangers living near a solar farm?

A. No. Solar panels are one of the least intrusive and cleanest forms of power generation available. Access to solar farm equipment will be restricted to maintenance personnel.

Q. What are solar panels made of?

A. Solar panels are made of glass, aluminum, silicon (refined sand), and semi-conducting material. The glass is designed to withstand hail and is tempered, like the windshields of cars, and therefore resists breakage.

Q. What about chemicals?

A. Solar panels contain very small amounts of some chemicals, but they are encased within the panel. There are no liquids in the panels. Most solar panels can be disposed of in regular landfills just like household garbage, but most will be recycled in the appropriate regional facilities.

Q. Do solar farms create electromagnetic fields or EMF?

A. All electric lines and equipment, including the lines to homes and businesses and home appliances, create EMF. Research to date has not found any link between EMF and health problems.

Land Use & Farming

Q. What impact do solar farms have on the land?

A. Very little. In flat areas, little earthmoving is needed for solar farms because the steel piles for the panels are installed directly through the topsoil.

Q. Do solar farms have foundations?

A. Almost none. The steel piles for panels generally have no foundations and most other equipment is installed on gravel pads, prefabricated concrete, or metal skids. Fence posts usually have small foundations.

Q. How much of the land in a solar farm is occupied by equipment?

A. Much less than half. Solar panels are spaced apart to prevent shading and allow room for inspections and maintenance of equipment and maintenance of the grounds.

Q. How is storm run-off controlled?

A. Solar farms are required to implement erosion and sediment controls during construction, and, prior to operation, they must obtain a stormwater management permit that implements an approved Stormwater Pollution Prevention Plan to protect the environment and neighbors.

Q. Can fields used for a solar farm be returned to farming?

A. Absolutely. A study by N.C. State University found that solar has only short-term impacts on productivity and is a “viable way to preserve land for potential future farming.”

Q. What happens to drain tile on farm fields?

A. Drain tile would be located and preserved during construction to the extent possible. When a solar farm is decommissioned, any affected drain tile systems would be restored.



Appearance

Q. What does a solar farm look like?

A. Solar farms have very low profiles, follow the natural contour of the land, and can be effectively screened with rows of trees and large shrubs, especially in flat areas.

Q. How tall are solar panels?

A. The “high ends” of solar panels usually are 8-12 feet from the ground and are surrounded by a fence at least 6 feet tall.

Q. Can trees and shrubs outside of the fence enhance the appearance?

A. Yes. In flat areas, preserving any existing vegetation and planting a row of evergreen trees and large shrubs can greatly enhance the views near neighbors’ homes and along busy roads.



Impacts to Neighbors

Q. Do solar farms make any noise?

A. Because they have very few moving parts, solar farms come close to operating silently. Some of the equipment makes small sounds but cannot be heard by neighbors.

Q. Do solar farms have any permanent lighting?

A. Virtually none. Motion-activated and downward facing lights are located only at gates and at some equipment.

Q. Do solar panels reflect sunlight?

A. Solar panels are designed to absorb, not reflect, sunlight. In fact, they reflect much less light than glass or water. All but about 2% of the sunlight is absorbed and converted to electricity.

Q. Do solar farms create any traffic?

A. Virtually none. After construction is complete, a few workers in pick-up trucks will inspect and maintain the equipment, maintain vegetation, and occasionally may clean the panels with water.

Q. Do solar farms create any odor or dust?

A. No.

Construction & Decommissioning

Q. How long does it take to build a solar farm?

A. Construction of most solar farms takes from 6 to 12 months, which is much faster than traditional power sources.

Q. What happens at the end of the useful life of the solar panels?

A. After the productive life of the panels, which is 35-40 years, the solar farm will be “decommissioned” and the land returned to its current condition.

Q. What if the owner of a solar farm goes bankrupt?

A. If an owner went bankrupt, it is very likely that a new owner would take over. Solar farms are expensive to build, but reliable and inexpensive to operate. So, there are strong incentives to continue a solar farm’s operations.

Q. What assurance is there that the owner will carry out the decommissioning?

A. A financial security, such as a bond, is required to ensure funds are always available for decommissioning and restoration of the land.

