

SOLAR ENERGY: FREQUENTLY ASKED QUESTIONS

TECHNOLOGY

Q. What kind of technology do solar projects use?

A. Solar projects 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 projects?

A. The electricity from solar projects goes onto the high-voltage electrical grid that supplies power to everyone. That means power will flow to homes and businesses in the area where the project is located as well as to the larger region.

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. 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.



OPEN ROAD
RENEWABLES

CONSTRUCTION & DECOMMISSIONING

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

A. Construction of most solar projects takes roughly 12-15 months.

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 project will be "decommissioned", panels recycled or otherwise properly disposed of, and the land returned to its pre solar project condition.

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

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

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

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

LAND USE

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

A. Very little. In flat areas, little earth moving is needed for solar projects because the steel piles for the panels are installed using the existing grades. Topsoil is preserved for future agricultural use. Essentially the entire site will be planted with native grasses and maintained with minimal herbicide use.

Q. Do solar projects have foundations?

A. The steel piles for panels generally have no foundations and inverters are installed on gravel pads, prefabricated concrete, or metal skids. Fence posts usually have small foundations.

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

A. Solar panels are spaced apart to prevent shading, inspect and maintain the equipment, and maintain the vegetation under and around the panels. Only about 1/3rd of the project area is beneath solar panels.

Q. How is storm run-off controlled?

A. Solar projects are required to install controls to prevent sediment erosion during construction, and, during operation, they must comply with stormwater management permits to protect neighbors and the environment.

Q. Can fields used for a solar project 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. Prior to construction, drain tile is located and mapped, and the facility is designed to avoid as much tile as possible. Open Road commits to ensuring drain tile networks continue to function properly for neighbors.

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IMPACTS TO NEIGHBORS

Q. Do solar projects make any noise?

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

Q. Do solar projects have any permanent lighting?

A. Virtually none. Motion-activated and downward-facing lights are located only at gates and sometimes at equipment such as inverters or the project substation.

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 projects create any traffic?

A. Construction activities will create additional traffic, but once completed, the project will have minimal impact on area traffic. Open Road commits to upgrading or repairing county and township roads used during construction.