

# Utility-Scale Solar Engagement Land Use FAQs

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## **How much land would TVA need for 10,000 MW of solar?**

Utility Scale Solar installations average 5-10 acres per MW installed. Currently, TVA plans to add solar power generation throughout its service area—which includes parts of seven states, not just Tennessee. However, even if all facilities contributing to the 10,000 MW aspirational goal were developed on Tennessee farmland, they would account for approximately 100,000 acres taken out of production, 1% of farmland in the state.

## **What typically makes for a successful solar property?**

Large areas of open, flat land are ideal, and a nearby connection to the electric grid is critical. As a result, agricultural land is often well-suited for large solar facilities, but they could also be built on other types of land, such as industrial areas, parking lots, and abandoned land. Many variables, such as the interconnection cost, required studies, zoning, and whether the panels are roof or ground mounted, fixed, or tracking affect the size of a facility and its economic viability.

## **Why does TVA invest so much in generation that they don't own? Why not build your own solar?**

TVA works with several well-established solar developers who have the expertise and experience siting, engineering, constructing, and maintaining solar developments. This method saves TVA, and therefore their customers, money. For these reasons, it makes sense to contract for these facilities. However, we are also considering utilizing viable TVA-owned land to build our own solar generation where that is the best decision.

## **Is TVA involved in the purchase of land for the solar installations that the developers own?**

No.

## **Once a developer secures the land, how is TVA involved in assessing impacts and providing the public opportunities to comment on the project?**

TVA will only become involved if TVA has a contract with the developer for a solar project. At that time, TVA would undertake required reviews, including environmental reviews. TVA would then consider public comments through the National Environmental Policy Act (NEPA) Environmental Impact Statement or Environmental Assessment/Review processes, which may include but are not limited to: historical, biological, and environmental impacts for a specific project. For more information please visit: Environmental Reviews ([tva.com](https://www.tva.com))

## **How well do you vet your developers?**

TVA performs due diligence with developers throughout the procurement process and prior to entering into a Power Purchase Agreement (PPA). Developers are expected to comply with all applicable federal, state, and local laws, both during construction and during operation of the project.

## **Who will keep up the land (fencing, mowing, etc.) around the development? What will it look like when it's done?**

The solar developer who owns the specific site is responsible for maintaining the site, including fencing, vegetation control or other general care. Sites should maintain an acceptable appearance and not be a nuisance to neighbors.

## **Does TVA consider brownfields, low-lands or other non-farmland for solar installations?**

As part of our solar strategy, TVA considers any land – brownfield included – for solar as long as it meets our requirements for success. Successful solar sites are close to transmission lines, relatively flat, and away from flood plains or other hazards. TVA also considers the cost of any mitigation activities and conducts a comprehensive

environmental assessment in order to protect wildlife and address environmental justice concerns, if any, among other considerations. As is the case for many brownfields, there is a cost to recover the site that may preclude them from being acceptable.

### **Why is so much solar located in the western part of the Tennessee Valley Region?**

Many of the largest tracts of land that meet the criteria for successful solar properties are located in the western part of the Tennessee Valley region.

### **Is it possible to develop utility-scale solar facilities without taking farmland out of production?**

Yes. Often referred to as agrivoltaics or dual-use solar, this approach involves grazing animals or growing crops between or under the panels and can involve raising panels higher off the ground—examples of animals and crops include sheep and shade-tolerant plants such as tomatoes or blueberries. This is sometimes done in other states; in Tennessee, there are currently at least nine agrivoltaics projects on approximately 1,900 acres of land.

### **What strategies and tools are available to communities with land-use concerns?**

Although utility-scale solar is unlikely to be the primary cause of agricultural and undeveloped land loss, existing strategies and tools are available to protect farmland and undeveloped land from development. These are not necessarily solar-specific, but all can be applied to solar development. They include putting land in trusts, zoning, and in Tennessee, the state's new Brownfield Redevelopment Area Fund.

### **If solar developers own and operate these sites, what are their plans once the sites reach their usable life?**

Large scale solar projects are expected to last over 30 years, with some estimates up to 40 years. TVA typically contracts for power delivery for 20 years, consistent with TVA's contracts with its long-term partners; however, there are opportunities for contract extension and re-use. The land-owner could choose to keep the site for future use or sell it.

### **Why don't you just encourage/incentivize people to put solar on their homes or businesses instead of focusing on utility-scale solar?**

TVA does have programs that help guide businesses and consumers through the process of installing small-scale solar on their home or business. TVA Renewables also offers programs for a variety of clean energy generation. For more information please visit: [TVA Renewables](#) or [TVA EnergyRight Solutions](#).

### **What happens if a developer goes out of business or sells the site to another party?**

TVA has contract language that protects TVA and our customers in the event of a developer going out of business or transferring the project. For the sale of a site to another party, TVA would be heavily involved in any negotiations or contracts to ensure that the new owner could meet the requirements needed for TVA.