

WOODRIDGE SOLAR: QUESTIONS AND ANSWERS

Woodridge Solar is a utility-scale solar project proposed in Albemarle County. While renewable energy is an important part of addressing climate change, it involves many complex issues that need to be considered in a thoughtful way. To help inform community discussion and understanding of this project, we put together this document with answers to some common questions we have heard.

Livable Cville is an all-volunteer group working to make the Charlottesville area a better place for everyone. If you want to get involved to support this project, email livablecville@gmail.com

Q What is the proposed Woodridge Solar project? Where and when would it be built?

A The [Woodridge Solar](#) project is a utility-scale solar development proposed by Charlottesville-based Hexagon Energy. Hexagon is seeking [special use permits](#) (SUP) from Albemarle County to build solar panels on [property](#) located between Charlottesville and Scottsville, west of Woodridge. The 138 MW solar project could generate enough energy to power more than 25,000 homes, according to Hexagon's estimates, which assume [national average](#) levels of household power usage. Hexagon also estimates that Woodridge Solar could generate between \$12.4 million and \$13.9 million in cumulative revenue for Albemarle over its 35-year lifetime. Once completed, it would be by far the largest renewable energy project in Albemarle County history.

The SUP area would cover about 1,500 acres, including close to 650 acres of solar

panels built in fenced clusters on the property. Power transmission lines that originated from a recently closed [power plant](#) in Fluvanna County already run through the property, making the logistics of connecting the panels into the power grid relatively simple.

Q Who will use the solar-generated power from this project?

A This is a utility-scale solar project, which means the energy generated by the solar array will feed directly into the power grid, where it would

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then flow to residential and commercial customers whose power lines are connected to that grid. Once completed, the project would result in a significant shift in the area's [electricity generation mix](#) away from fossil fuels and toward renewable energy sources.

Q Who will own the electricity?

A Power Purchase Agreements, or PPAs, typically provide much of the financing for utility-scale solar projects. For example, large companies or utilities may sign PPA contracts with renewable energy companies. The purchasers get a supply of energy from the solar facility or other installations, and the energy companies get revenue to support their projects and operations. A likely possibility for this project is a [Virtual PPA](#), where a buyer finances the project

in exchange for [Renewable Energy Certificates](#), but does not actually use the power produced by the project. The power instead would go into the grid for use by local electricity consumers.

Q What is on that property now? Who owns it?

A The landowner is [JD Land Holdings LC](#), which is owned by members of the local Purcell family. The property has been used for commercial timbering for about 80 years. Most of the trees on the property are loblolly pine, which the timbering operation harvests periodically and re-grows. They recently harvested the trees and used herbicide on much of the area. If the project is approved, Hexagon will lease the property from JD Land Holdings to build the solar facility.

will disturb the soil even further, potentially leading to removal of native seedbeds, though Hexagon does not plan to bring fill dirt from offsite.

To remediate the land and avoid introduction of invasive species, the vegetation management plan involves fertilizing the soil and planting native grasses, flowers and other plants that would encourage bees and other pollinators. If executed according to plan, this could result in hundreds of acres of meadows surrounded by a buffer of trees and punctuated by solar arrays (and

type of timbering done on this land involves clear cutting and use of herbicides, and may have negative impacts on [ecological resilience](#). The proposed vegetation management plan, if implemented and enforced correctly, could result in much of the property returning to native plants and the pollinators and wildlife that come along with this kind of habitat.

Q What is the stormwater management plan?

A The project will be required to follow Virginia’s stormwater management regulations as well as county-level requirements before a building permit can be issued. The clustered design of the panels differs from other solar projects where the panels occupy a continuous area. This design avoids disturbing wetlands and streams while allowing wildlife and plants to more freely occupy the project area. In addition to numerous planned runoff ponds, around 500 acres of vegetative buffers will help with stormwater management.

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Q The solar panel and enclosures will cover about 650 acres. What will happen with the remaining land?

A Hexagon worked with horticulture experts in Virginia to develop a [vegetation management plan](#) that helped the Woodridge Solar project qualify for certification under the [Virginia Pollinator Smart](#) program. Decades of monoculture pine farming have left the soil depleted and very acidic—not exactly fertile ground—which could make growing the plants contemplated by the vegetation management plan difficult. Construction and regrading

possibly grazing sheep someday). There would also be tree and shrub buffers to minimize the facility’s visibility from adjacent properties and roads. Albemarle County would be empowered to enforce adherence to the land management plans.

Q Is this solar project a better use of this land than the current timber farming?

A Both timber farms and solar installations provide resources that we all use, so either form of land use serves a need. While monoculture timber farms like this one have some environmental benefits, the

Q What are the next steps in the approval process?

A Regional transmission organization [PJM](#) fast-tracked Woodridge Solar for inter-connection with the power grid, so this project could potentially move forward relatively quickly if it receives all necessary county and state approvals.

Hexagon received a round of feedback from Albemarle

County staff this past summer, and the Woodridge Solar proposal is scheduled to go to the Planning Commission on December 13th and to the Board of Supervisors for legislative review and public hearings in early 2023. Among other things, they will have to consider how the proposal fits with the [Comprehensive Plan](#), which establishes a 20-year vision for the county.

Q If approved, what is the timeline for completion?

A Upon approval, a site design review by county staff would follow. Then the project would need to obtain zoning clearances and building permits. Hexagon would also need to get a permit by rule from Virginia to ensure compliance with state environmental regulations. Construction [could begin](#) as early as late 2023 and last 12 to 18 months. The facility would operate for about 35 years. After that, it would be removed to make way for other land uses.

Q If the project is not approved, what will happen?

A While it's uncertain exactly what would happen if this project is not approved, a few things are worth noting. First, instead of shifting the area's electric production mix to include significantly more renewable energy, we would continue to rely [primarily on natural gas](#), which is contrary to the county's climate goals. Second, it would mean Hexagon's interconnectivity

agreement with PJM for this project will no longer be valid. This would make solar development on this site any time soon very unlikely because PJM recently announced a [two-year pause](#) on reviewing and approving new power developments seeking to connect to its grid. Third, the county and local environment would not receive the potential benefits of hundreds of acres of remediated land and planting of native species. Fourth, if the project is not approved, a precedent could be set that results in solar developers avoiding projects in Albemarle County, limiting future renewable energy opportunities here.

that accounts for potential climate benefits and the health of our local ecosystem." This project appears to maintain that balance through a combination of reduction in carbon emissions, stormwater management, and an extensive vegetation management plan that qualifies for the Virginia Pollinator Smart program.

Q Why is Livable Cville supporting this project?

A We believe climate change and environmental justice must urgently be addressed at the local level. There are risks involved in building a solar facility of this size, but there are also risks to not building it.

Albemarle's Climate Action Plan set a goal of reducing the county's greenhouse gas emissions by 45% in 2030 and reaching net zero emissions by 2050.

Q How does this project relate to Albemarle County's climate goals?

A Albemarle County's [Climate Action Plan](#) (CAP) set a goal of reducing the county's greenhouse gas emissions by 45% from 2008 levels by 2030 and reaching net zero emissions by 2050. This project alone would be a significant step toward this goal. The CAP also discusses renewable energy at length. It recommends that when considering utility-scale renewable energy projects, the county should "strive to maintain a holistic perspective

Bottom line, we all use power; we all have a vested interest in replacing fossil fuel-based energy with renewable energy sources; and that renewable energy has to be produced at scale somewhere, including, potentially, near our backyards. Our research has found this project to be consistent with the county's environmental and land use goals, and we are hopeful that it will be approved and constructed.

