

VIRGINIA FARM BUREAU

Solar Growth in the Commonwealth & Impacts on Farmland

June 2021



WHY IS THIS IMPORTANT?

The overwhelming majority of medium and utility-scale solar in the Commonwealth is being sited on farm and forest land. Over time, this development could displace agricultural production and reach a point where agricultural communities are no longer viable.

WHAT DOES SOLAR IN VIRGINIA LOOK LIKE TODAY?

As of the fourth quarter of 2020, Virginia has 2,310.5 megawatts (MW) of solar installed on over 16,043 locations, which represents 1.64% of the state's electricity production. Total cost of these projects represents \$2.2 B dollars and is credited for producing 4,489 jobs. Virginia ranked 4th in the nation for solar installation in 2020.

WHAT DOES THE FUTURE OF SOLAR INSTALLATION LOOK LIKE?

Governor Northam's Executive Order 43 (EO43) and the Virginia Clean Economy Act (VCEA) are driving solar expansion. EO43 states that 30% of Virginia's electricity must come from renewable sources by the year 2030, and 100% be carbon-free by 2050.

- The VCEA mandates a mandatory renewable portfolio standard (RPS):
 - Dominion Energy: 40% by 2030; 100% by 2045
 - Appalachian Power: 30% by 2030; 100% by 2050
- Establishes a mandatory energy efficiency resource standard (EERS):
 - Dominion Energy: 5% by 2025
 - Appalachian Power: 2% by 2025
- Deems 16,100 MW of solar and onshore wind, 5,200 MW of offshore wind, and 2,700 MW of energy storage in the public interest
- It is estimated 6,847 MW of solar will be added over the next 5 years.

HOW IS SOLAR REGULATED IN VIRGINIA?

- Generally speaking, solar energy projects less than 500 KW or with a disturbance zone less than 2 acres, and building or parking lot-mounted installations require no permits.
- Operations with capacity greater than 500 KW and less than 5 MW or a disturbance zone greater than 2 acres and less than 10 acres shall notify the Department of Environmental Quality (DEQ) and shall submit a certification that the project complies with all applicable land use ordinances.
- Operations with a capacity greater than 5 MW but less than 150 MW and land disturbance greater than 10 acres are required to go through the DEQ permit by rule process. Any project larger than 150 MW must receive approval through the State Corporation Commission (SCC) in the form of a Certificate of Public Convenience and Necessity (CPCN).

WHAT IS THE STATUS OF PERMIT BY RULE (PBR) SOLAR IN VIRGINIA? (AS OF 3/23/2021)

- There are currently 16 projects operational producing 602 MW on 32,554 permitted acres, and 9 projects under construction to produce an additional 645 MW. There are 59 pending notices of intent for a total of 2,794 MW on 31,006 acres. Total potential acreage is 63,560.

WHAT ASSISTANCE IS AVAILABLE TO LOCALITIES?

- SolSmart: free technical assistance provided by the Department of Mines, Minerals, and Energy (DMME) and the University of Virginia (UVA), however, is focused more on development of solar rather than responsible land use
- Legislation now allows localities to require a \$1,400/MW revenue share rather than the conventional machineries and tools exemption
- SolTax comparison tool to help localities estimate revenue options
- Legislation now allows localities' solar ordinances to include provisions in siting agreements to facilitate development of broadband and other infrastructure. This can be through set-aside or real property or cash payments.
- Farm Bureau has developed a punch list for localities to consider when developing solar ordinances. It is not inclusive of everything but is a good starting point for discussion.

WHAT RISKS AND OPPORTUNITIES DOES SOLAR PRESENT TO FARMERS AND RURAL COMMUNITIES?

- Solar development and expansion in Virginia is relatively new. Multiple mapping tools and sources of data on solar expansion are available, but a single source of comprehensive, unbiased, statewide data on farmland lost to solar is still unavailable. We believe more studies should be done on the impact that utility-scale solar has on agriculture before any additional projects are approved on prime agricultural lands. We do not support tax incentives, credits, subsidies, governmental grants etc. for solar development on prime agricultural land. However, we support incentives for solar and wind energy for use on landowners' agriculture enterprises and operations on prime agricultural land.
- Solar panels contain heavy metals like cadmium, arsenic, copper, selenium and others which can leach into soil when damaged or degraded. Farmers should be aware of these potential risks to soil and water quality.
- Solar development often requires removal of top soil and grading of land. Landowners should be aware of these land changes and ensure a decommissioning plan, reviewed by an attorney, is included in a solar contract. The decommissioning plan should at the very least include a bond for removal of panels and infrastructure, and reclamation of the land to its original state following the contract lifespan.
- Solar sites are often chosen based on proximity to electric transmission lines, electric substations, slope and lay of land, and road access. Be aware of your land's eligibility.
- **A farmer or landowner considering an offer for solar development should consult with an attorney to fully understand the near and long-term implications of the project and to ensure the contract is protective of their interests and personal property rights.**

- At the VFBF Annual Convention, attorneys from BotkinRose PLC presented on best practices when considering a solar proposal and provided a number of helpful resources. Please contact Governmental Relations staff for a copy of their recommendations.
- Preserving farmland is not only important to families and operations, but the clustering of farms in agricultural areas is also critical to the survival of grain elevators, processing plants, the entire agriculture industry, and both the direct and indirect jobs it produces.
- As farmers age and plan for preserving their operation and transitioning it to the next generation, they often look to ways to protect their farm and legacy. We encourage you to consider offers for solar development with the same level of scrutiny and planning you would apply to signing a long-term or perpetual conservation easement, or similar contract.

Resources:

- [Virginia Cooperative Extension presentation on solar development lessons learned](#)
- [Virginia's United Land Trust \(VaULT\) Presentation on Collaborating to Achieve Solar Energy Goals without Impacting Critical Lands](#)
- [Alliance for the Shenandoah Valley resources on utility scale solar](#)