

| CRIMINAL JUSTICE + Policing | ENERGY + Environment | GOV + Politics | EDUCATION | HEALTH | |
|--------------------------------|-------------------------|-------------------|-----------|--------|--|
|--------------------------------|-------------------------|-------------------|-----------|--------|--|

ENERGY + ENVIRONMENT

COMMENTARY

Utility-scale solar is coming to a farm near you

I support big solar, but it must be done right.



SEPTEMBER 21, 2023 12:46 AM

🎔 in f 💌 🔗 🖶



(Photo courtesy Furman University)

By Robert "Bobby" Whitescarver

We are undergoing a wonderful, historic, frustrating and devastating transition to renewable energy. Solar panels will be on buildings and parking lots, and in highway medians, landfills, and brownfields. Utility-scale solar should be installed in those places before we put it on farmland. But that's not what's happening.

Like it or not, utility-scale solar is coming. Localities – especially those with weak ordinances for utility-scale solar, defined as projects with 50 acres or more of solar voltaic panels – need to get ready for it. I support big solar, but it must be done right.

Here are ten things to demand from any utility-scale solar project in Virginia:

- Proper screening with vegetation and setbacks from property lines
- Riparian buffers

 along all hydric
 features (like springs
 and streams) within
 the project area
- Pollinator-friendly plants and/or dual purpose with agriculture under and around the panels

A bright spot at the intersection of farming, electric vehicles and solar energy



The energy transition is in full swing across the U.S. and the world, but the changes now underway are

- Enough space between the rows of panels to support plant growth and water infiltration
- Proper erosion, sediment, and stormwater runoff controls solar panels are impervious to rainfall!
- Consider proximity to transmission lines
- The requirement that the land be returned to its original use if solar panels are removed
- A decommissioning plan with a bond to back it up, including a requirement to recycle and reuse whatever is possible from the decommissioned panels
- Minimal impact on prime farmland (more on this later), forests and cultural resources
- Stellar public participation and transparency

Much guidance is available on the proper siting of utility-scale solar, including model ordinances. I have

found the most complete guidance from the Alliance for the Shenandoah Valley. The American Planning Association and the Chesapeake Bay Foundation also provide good guidance.

Farmland protection purists, hear me out, please

In this country, we lose one acre of farmland every minute to development. Leasing farmland for solar (and putting it back as it was) is a way to protect farmland.

American farmers currently grow corn on 30 million acres to produce ethanol for our gas tanks and some studies show it produces more greenhouse gasses than it prevents. A little more than a third of that land in solar panels could generate 100 percent of America's electricity demand.

The USDA's Conservation Reserve Program has retired 23 million acres of farmland from annual crop production because they are highly erodible. Solar panels on half of that could generate 100% of America's electricity demand.

Prime farmland vs. marginal farmland

Prime farmland – defined as nearly level land with deep, well-drained soil capable of producing food without irrigation – should be avoided for utility-scale solar. Prime farmland has class I and II soils in the USDA's Land Capability Classification System. Land designated for a utility-scale solar project should, generally, have less than 30% of class I and II soils, so that land may be used to grow food.

Marginal farmland has soil that is class III or higher.

These soils have "severe limitations" for growing food. These types of soil may be better used in panels with pollinator plants or forage for sheep to graze.

Solar panels may ruin your view, but that's a non-issue

Don't like the metallic look of solar panels? Get over it. It's not your land. I wish there were a cost-share program to pay me for the view our farm provides the neighbors, but there isn't. Putting solar panels on my land is a right granted because I bought and own the land. A changing view is not a legitimate reason to object to utility-scale solar.



Your electric bills are skyrocketing. Blame our failure to invest in renewable energy.

Fossil fuel prices are higher everywhere, and the effect is hitting electric bills as well as prices at the gas pump. Utilities that generate power from natural gas and coal face fuel costs two or three times as high as they were just a couple of years ago and those costs are passed on to ... Continue reading

Consider the alternative view if the farmer sells

out to development. Would you rather look at a sea of McMansions, which come with a whole host of far more downsides: suburban traffic, demands for more services, and higher taxes?

It's time to move on from our fossil fuel binge

In a time when we have atmospheric rivers, bomb

cyclones, heat domes, and record durations of extremely high temperatures, and in a time when we have smoke from wildfires thousands of miles away clouding the Statue of Liberty and the mountains in the Shenandoah Valley, and in a time when drought conditions bring death and devastation like that visited on Maui in August, we need to reduce carbon emissions, now – and in a big way. Utility-scale solar will help us get there.

Robert "Bobby" Whitescarver is a farmer in the Shenandoah Valley, a watershed restoration consultant, award-winning author, and teaches natural resources management at James Madison University. He can be reached through his website at www.gettingmoreontheground.com

SUPPORT NEWS YOU TRUST.

DONATE

REPUBLISH

Our stories may be republished online or in print under Creative Commons license CC BY-NC-ND 4.0. We ask that you edit only for style or to shorten, provide proper attribution and link to our web site. Please see our republishing guidelines for use of photos and graphics.



A NEW LOOK AT THE OLD DOMINION

2023

Democracy Toolkit // Register to vote | Find your polling place | Who represents me?



© Virginia Mercury, 2023

ABOUT US

Nonprofit. Nonpartisan. No paywalls. Fair and tough reporting on the policy and politics that affect all of us is more important than ever. The Mercury brings you coverage of the commonwealth's biggest issues from a team of veteran Virginia journalists.

View our Republishing Guidelines.

Ƴ f ¢

Commons

Our stories may be republished online or in print under Creative Commons license CC BY-NC-ND 4.0. We ask that you edit only for style or to shorten, provide proper attribution and link to our web site.

DEIJ Policy | Ethics

Policy | Privacy Policy