



Attitudes About Solar Development on Virginia Farmland

AN OVERVIEW OF FINDINGS

Solar energy is growing fast, driving landscape-scale changes in rural communities along with significant opportunities for farmers and landowners. Estimates from the Department of Energy predict that over 10 million acres of land will be needed to meet the nation’s renewable energy goals, with up to 80–90% of utility solar expected to be sited in rural communities or on agricultural land.

Tens of thousands of acres of solar are likely to be developed in Virginia over the next decade. The 2020 Virginia Clean Economy Act sets clear targets for decarbonizing the state’s grid, and at least 16,100 megawatts of solar, by the end of 2035.

The need for informed decision-making is great. Through American Farmland Trust’s Smart Solar initiative, we are working to advance three equally important goals: (1) safeguarding land well-suited for farming and ranching, (2) strengthening farm viability, and (3) accelerating solar energy development.

To that end, in 2024 we conducted a survey of Virginia farmers and landowners, with 240 responses from 78 counties representing all major production systems and scales, to understand farmer and landowner interests, priorities, and concerns related to agriculture and solar energy development. The state has already experienced a tremendous amount of solar development as well as a recent surge in solar and data center speculation. Reflective of this, survey responses ranged from receptive to hesitant views around solar. Respondents emphasized the need for greater community engagement with due consideration for size, scale, location, and way of life.

The results of AFT’s Virginia Solar Survey, outlined in the following pages, will help shape our understanding of the needs and opportunities for farmers in Virginia and the work that follows.

Virginia ranks **9th** nationally in solar energy production.

45% projected increase by 2029

5,798 megawatts installed

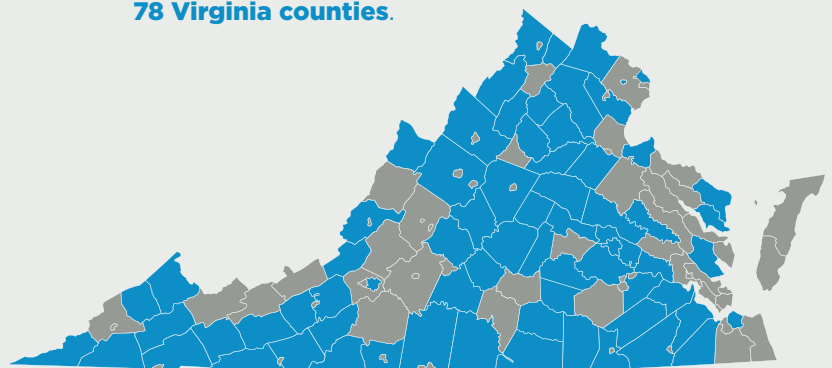
Source: Solar Energy Industries Association

DEMOGRAPHICS OF SURVEY RESPONDENTS

Most survey respondents are **owner-operators** of Virginia farmland.



Survey respondents represented **78 Virginia counties**.





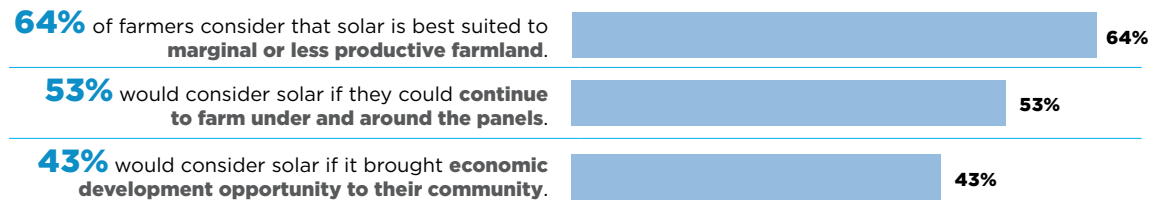
USDA

AFT's Virginia Solar Survey represents one of the first opportunities for farmers and landowners to share their thoughts about solar development in the state. The results show that Virginia farmers support solar under certain conditions but are concerned about the long-term viability of the land for agricultural purposes. Farmers are interested in learning more about the co-location of agriculture and solar energy through agrivoltaics, but

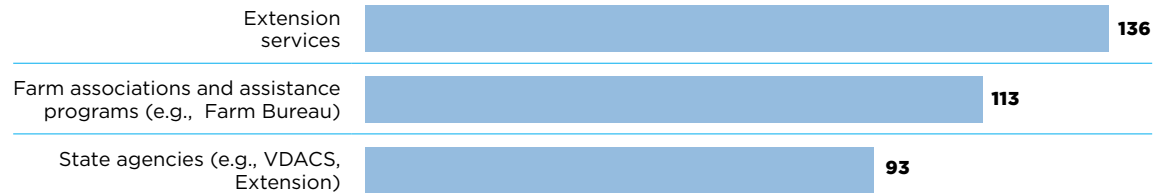
more education is needed. Community engagement is an avenue for solar developers to build trust, while farmers continue to look to traditional agricultural resources such as Virginia Cooperative Extension and state farm associations for the information they need. The survey results also reinforced the simple fact that getting solar "right" in Virginia will take collaboration and innovation across the agriculture and energy landscape.

HERE'S WHAT WE HEARD

Farmers have nuanced and varying views about solar on farmland.



Farmers view Extension and Farm Associations as trusted sources of information.



👉 *It'd be nice if there were some type of **repository for information** so that farmers could... make their own **educated decision.***

Farmers want enough land to grow food for our communities.

👉 *We need farmland. How [else] are we going to **feed ourselves** in the future?*

Farmers value soil health and the long-term viability of the land.

Farmers want to minimize habitat loss.

Farmers prefer small scale solar.

👉 *I don't like the large development. I'm more of like a small scale, very small scale or like a cooperative type of deal where it **benefits the neighbors and the local community.***



REBECCA DROBIS



GERVILLE/ISTOCKPHOTO

Farmers want more engagement with developers.

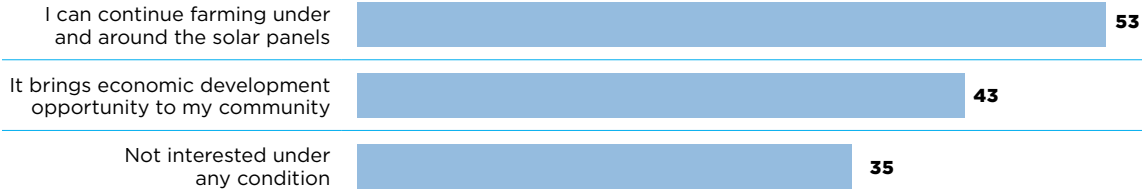
👉 *In my dreams there would be a policy where **solar developers** can't come from faraway places with no stakes in the community ...*

Farmers want more information and assurance about decommissioning.

63% of farmers agree that solar developers should be liable for **returning land back to a farmable state** after **decommissioning**.

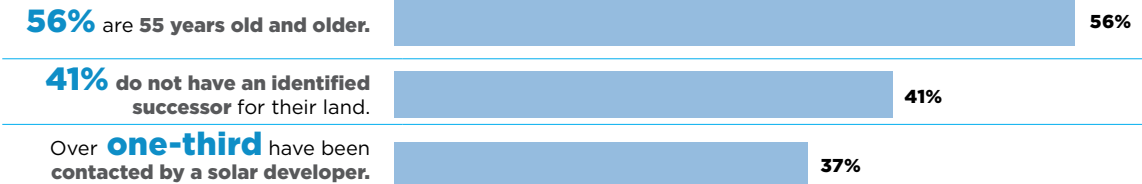
Farmers don't want solar to negatively impact tenant farmers.

Farmers would consider solar on their farm if...



USDA

Farmers are facing impactful decisions.



SUPPORTING FARMERS THROUGH AFT'S SMART SOLAR INITIATIVE

AFT is engaging in Smart Solar to help build a brighter future for farmers. To inform this work, we are listening and using the information we gather to help farmers and landowners make well-informed decisions, to assist developers in creating smarter solar projects, and policymakers to provide effective incentives and guardrails.

AFT's Smart Solar work supports Regenerate Virginia—an ambitious action plan and forward-looking vision for agriculture. Through Regenerate Virginia, AFT and our partners are working towards farming and food systems that produce abundant, healthy food, enhances soil health, supports functioning ecosystems where wildlife thrives, sustains thriving agricultural communities, addresses climate change, and creates opportunities for people of all backgrounds.

Learn more at farmland.org/projects/regenerate-virginia.

Guided by the findings from the Virginia Solar Survey, AFT will:

- Support farmers and landowners in making informed decisions about solar development on their land through educational resources, technical assistance, and other programs.
- Encourage solar developers in decision-making and best practices related to Smart Solar.
- Champion information and innovation for projects that co-locate agriculture and solar energy development
- Use the insights gathered to inform policy work around solar siting, as well as the intersection of renewable energy and agriculture at the state, regional, and federal level.



SMART SOLARSM PRINCIPLES

PRINCIPLE 1

Prioritize solar siting on buildings and land not well suited for farming.



PRINCIPLE 2

Safeguard the ability for land to be used for agriculture.



PRINCIPLE 3

Grow agrivoltaics for agricultural production and solar energy.



PRINCIPLE 4

Promote equity and farm viability.



RESOURCES

Smart SolarSM
American Farmland Trust

Check out farmland.org/solar or contact:

Eric Bronson, Mid-Atlantic Solar Specialist, farmland.org/staff/eric-bronson