SOLAR FREEDOM:
A bill to remove barriers to customer solar

Virginia law contains numerous restrictions on the ability of local governments, residents and businesses to install solar facilities for their own use. These barriers are legal, not technical. Simple legislative fixes are all that is required to reduce the red tape and let the free market grow solar in our communities through private investment, while supporting well-paying, clean energy jobs right here in Virginia.

2018's SB 966, the "grid mod" bill, supported utility solar but did not address the barriers that hold back private investment in the distributed solar market. Unlike large solar farms that utilities build and control, distributed solar is mostly built by and for customers, usually with private investment dollars. Distributed solar includes rooftop solar on homes and businesses; solar serving multi-family buildings, solar canopies on parking lots; and ground-mounted solar on closed landfills, airport property, and vacant lots.

Local governments and residents are coming together around legislation in 2020 that will make these kinds of projects easier.

The "Easy 8" reforms include:

1. Raising the cap on the total amount of solar that can be net metered in a utility territory from 1% to 10%
2. Making third-party financing using power purchase agreements (PPAs) legal for all customers of IOUs
3. Allowing local government entities to install solar facilities of up to 5 MW on government-owned property and use the electricity for schools or other government-owned buildings located on nearby property, even if not contiguous
4. Allowing all customers to attribute output from a single solar array to multiple meters on the same or adjacent property of the same customer
5. Allowing the owner of a multi-family residential building to install a solar facility on the building or surrounding property and sell the electricity to tenants
6. Removing the restriction on customers installing a net-metered solar facility larger than required to meet their previous 12 months' demand
7. Raising the size cap for net metered non-residential solar facilities from 1 MW to 3 MW
8. Removing standby charges on residential facilities sized between 10-20 kW

Enacting these reforms will give local governments more opportunities to install solar on government property as well as help residents and businesses invest in solar. This can create savings for taxpayers, decrease the need for fossil fuels, help meet local sustainability goals, ensure access to solar by low-income apartment tenants, and support local jobs and economic development.

The net metering provisions of Solar Freedom do not apply to rural electric cooperatives, which operate under another section of the law.

The Solar Freedom bill also includes amendments to the Commonwealth Energy Policy to support distributed generation.

Solar Freedom's Easy 8 Provisions, Explained

1. Increase the cap on net metered solar from 1% to 10%

- This cap on the total amount of solar that can be net metered in a utility territory threatens the livelihood of rooftop solar installers, and is not needed for grid stability.
- Some smaller municipal utilities are now approaching the cap.
- Many solar projects require months of planning. The existence of the cap creates uncertainty about projects, which affects customers' ability to secure financing.

2. Confirm the legality of third-party financing through power purchase agreements (PPAs) for customer-sited solar

- Under a third-party PPA, a solar developer owns and operates a solar facility on a customer's property and sells the electrical output to the customer. This allows the customer to get solar energy at no upfront cost. The developer takes advantage of the Federal investment tax credit and depreciation rules and passes along the savings to the customer—an important feature for tax-exempt entities like local government and non-profits.
- A "pilot program" in Dominion Energy Virginia territory currently allows up to a total of 50 MW of PPAs, but only for certain customers and with restrictions. *The cap will likely be reached this year, preventing other projects from moving forward.*
- In Appalachian Power territory, the program is even more limited, as only a small number of private colleges and universities can use it—not public universities or schools, or anyone else.
- The 2018 Virginia Energy Plan recognizes the importance of this issue and specifically recommends making PPAs legal statewide.

3. Allow local governments to install solar facilities of up to 5 MW on government-owned property and use the electricity for nearby government-owned buildings

- This would allow a local government to credit the output of a solar array located on government-owned property where there is no electric load (e.g., a closed landfill or vacant lot) to load on nearby (but not necessarily *contiguous*) properties such as schools and municipal buildings. Current law limits the output of a solar facility to on-site use.
- Many local government sites could host arrays above 1 MW (the current limit for net metered projects).
- Removing this barrier would let local governments make efficient use of their property and create savings for taxpayers as well as meeting sustainability goals.
- Many local government leaders have indicated they need this legislation to pursue their solar goals.

4. Allow a customer to attribute the output of a single renewable energy facility to more than one meter on the customer's property or on adjacent property owned by the same customer

- Some farm customers are permitted to aggregate their meters under the term "agricultural net metering." There is no reason to deny this option to other customers.
- Currently customers must use the output of a solar array on the same property (or for farmers, on contiguous property). All customers should be allowed to use the output of their solar array on buildings they own that are located on the same or adjacent property.

5. Allow the owner of a multi-family residential building to install a solar facility on the building or surrounding property and sell the output to the tenants

- This would open opportunities for apartments and condominiums, including buildings that serve low and moderate-income residents. Low-income residents spend a disproportionate percentage of their incomes on utilities, making it especially important that they be able to use solar to reduce their electricity bills.

6. Remove restrictions on customers installing a net-metered solar facility larger than required to meet their previous 12 months' demand

- The limit prevents customers from sizing a solar facility to accommodate future needs such as the purchase of an electric vehicle or an addition to a home or business. Today, utilities force customers to justify the amount of solar they want to install.
- Customers who produce more electricity than they consume over a year cannot sell the excess at retail, either currently or under the proposed change, so there is no economic incentive for a customer to install "too much" solar, and no legitimate reason for the utilities to oppose a customer's preference for the size of their solar array. (For this reason, Dominion has shown support for this reform, though it did not pass in 2018.)

7. Raise the project size cap for net-metered non-residential projects from 1 MW to 3 MW

- This cap arbitrarily constrains the ability of customers to size projects to their need.

8. Remove the standby charges on residential solar facilities between 10 and 20 kW and small agricultural customers

- Larger residential systems are becoming more popular with the adoption of electric vehicles. Standby charges act like a tax on larger systems, making them economically prohibitive and effectively limiting homes to 10 kW. This harms all ratepayers by restricting the addition of privately-funded, clean peak power to the grid.
- Farms that want to use Virginia's agricultural net metering for their solar arrays also face standby charges.

In addition to these reforms, the Solar Freedom bill will amend the Commonwealth Energy Policy to declare it the policy of the Commonwealth to support distributed generation, through the addition of three goals:

- *Encourage private sector investments in distributed renewable energy;*
- *Increase the security of the electricity grid by supporting distributed renewable energy projects with the potential to supply electric energy to critical facilities during a widespread power outage; and*
- *Augment the exercise of private property rights by landowners desiring to generate their own energy from renewable energy sources on their property*.