



## WV Solar Energy Talking Points

CO2 and other chemicals are, through the greenhouse effect, heating up the earth, causing environmental change both now and for future generations. Much of our emissions is created in the burning of fossil fuels for the generation of electricity (in addition to transportation and food production/distribution).

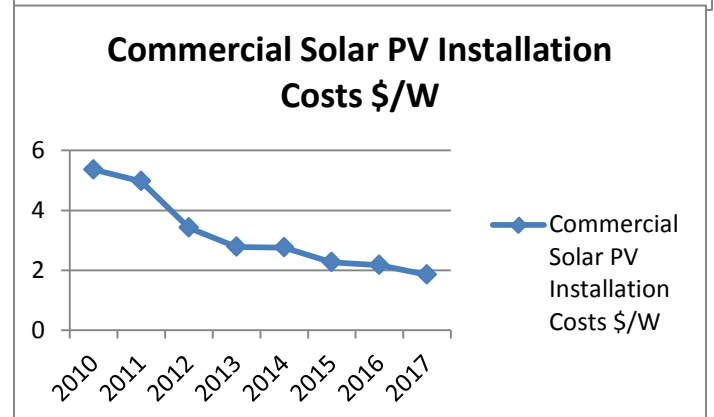
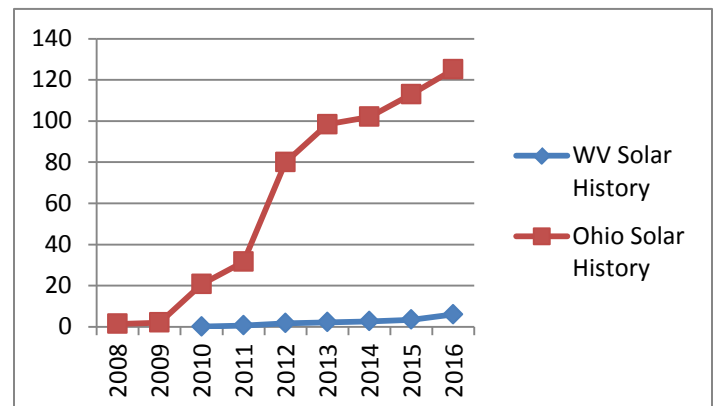
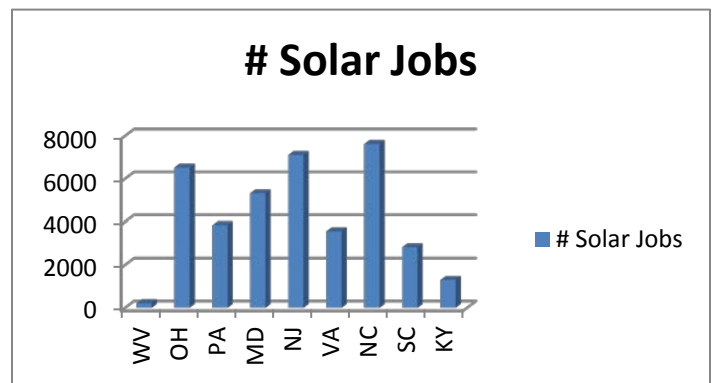
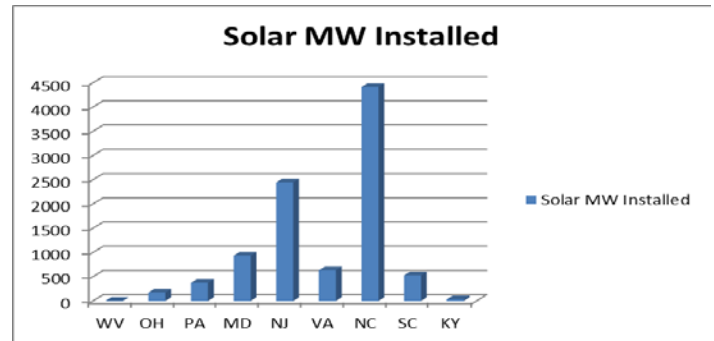
- With Solar PV energy, you put the solar panels (the generator) on the roof or on the ground. When the sun shines on the panels the energy is converted to power and put into the electrical distribution system.
- Except for the production of the panels and the recycling of the components at the end of their life, the energy produced by the solar panels does not pollute the environment.

### Economic Impacts:

- Per SEIA WV has 211 solar jobs (approximately 3% of OH)
- WV has 644 installations, average of 9 kW

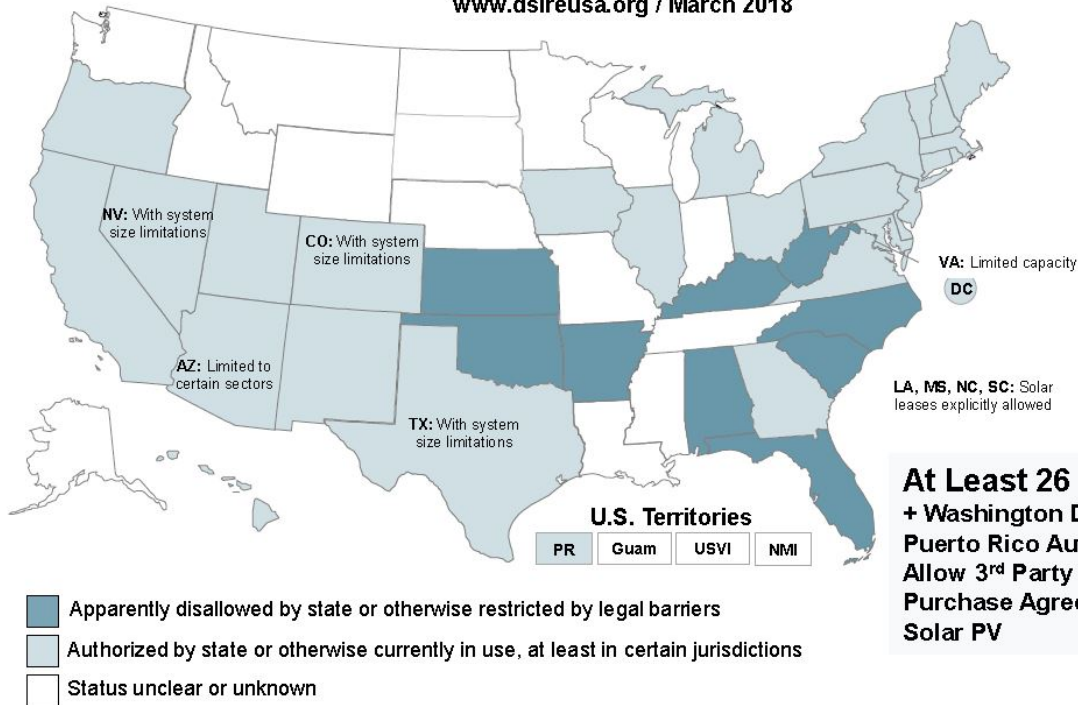
### WV is behind its surrounding solar energy because:

- Third-party Financing (Power Purchase Agreements or PPAs) are not specifically permitted.
- Renewable Portfolio Standards, carbon tax and SRECs are not recognized.
- Time-of-Use Rate Structure.
- Smart Grid and Micro-Grid Opportunities will allow research and new business opportunities as we shift from carbon-based energy to new renewable forms. This includes new metering, communication and storage options.



## 3<sup>rd</sup> Party Solar PV Power Purchase Agreement (PPA)

www.dsireusa.org / March 2018

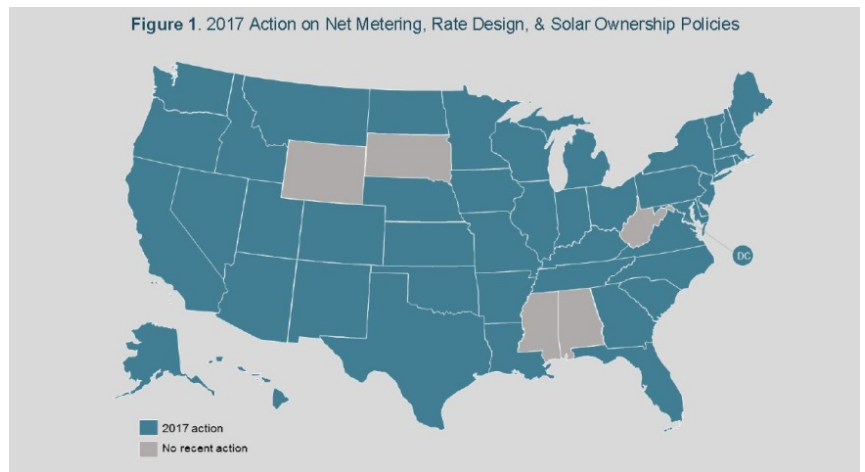


**At Least 26 States + Washington DC and Puerto Rico Authorize or Allow 3<sup>rd</sup> Party Power Purchase Agreements for Solar PV**

Policies being adapted in other areas include:

- Residential fixed charge or minimum bill changes (35 states plus DC)
- Distributed Generation compensation policies (31 states plus DC)
- Community Solar (21 states)
- Solar valuation or net metering study (21 states + DC)
- Residential demand or solar charge (10 states)
- Third-party ownership of solar (8 states)
- Utility-led rooftop PV programs (6 states)

Sources: <http://www.dsireusa.org>; [www.seia.org](http://www.seia.org)



## TOP SOLAR POLICY TRENDS OF 2017

### **Convergence Toward Net Billing as the New Net Metering**

Thus far, the majority of states issuing net metering successor tariff decisions have opted to move to a net billing policy, allowing behind-the-meter consumption but crediting all exported energy at a rate other than retail. In 2017, Jacksonville Electric Authority, Indiana, New York, and Utah approved transitions from net metering to net billing. Net billing models are under consideration in several additional states, including Arkansas, Louisiana, and Michigan.

### **Diverse Credit Rate Approaches and Methodologies**

While there is growing convergence toward the net billing framework, states are taking diverse approaches to credit rates for excess generation. The most common of these have been avoided cost and value-based crediting, although there are a wide variety of methodologies in use or under consideration for calculating avoided cost and the value of distributed generation.

### **Emphasis on Studies and Data**

A theme present throughout 2017 was state policymakers' emphasis on studies and data in decision-making. Legislatures in Michigan, Montana, and North Carolina enacted bills opening the door to net metering changes, but only after cost-benefit studies are conducted. In New Hampshire and Utah, regulators made relatively minor changes distributed generation compensation rules, while initiating new studies and data collection efforts to aid in deciding further changes.

### **Community Solar Action Climbs**

Action on state community solar policies and programs has steadily increased over the past three years, with 21 states taking a total of 30 actions during 2017. Thirteen states took 18 actions on community solar policies during 2016, while only seven states took 13 actions in 2015. Two states – North Carolina and Virginia – adopted new community solar policies in 2017.

### **Fixed Charge Increase Requests Frequently Partially Approved**

Residential fixed charge action has increased steadily over the past three years, with 61 requests to increase charges pending or decided in 2015, 71 in 2016, and 84 in 2017. A total of 44 decisions were made on these requests during 2017, with regulators approving only a portion of utilities' requested increases in 57% of these cases. Of the partial increases granted, regulators approved, on average, 26% of the utility's original request. Only six utilities were granted their full requested increases.

### **Demand Charge Proposals Down, New Approaches Up**

Only three investor-owned utilities proposed mandatory demand charges for residential distributed generation customers in 2017, down from five in 2016 and ten in 2015. However, demand charges showed up in other places during the year, including legislation. Legislation approved in multiple states specifically authorizes additional fees, including demand charges to be applied to distributed generation customers.



### Net Metering and Rate Design Changes as Part of Broader Reforms

More states are considering net metering and rate design changes as part of broader solar policy for grid modernization reforms. In New Jersey and North Carolina, net metering is being addressed as part of a broader solar policy investigation or reform. DC, Illinois, Maryland, and New York are addressing distributed solar policy as part of grid modernization proceedings.

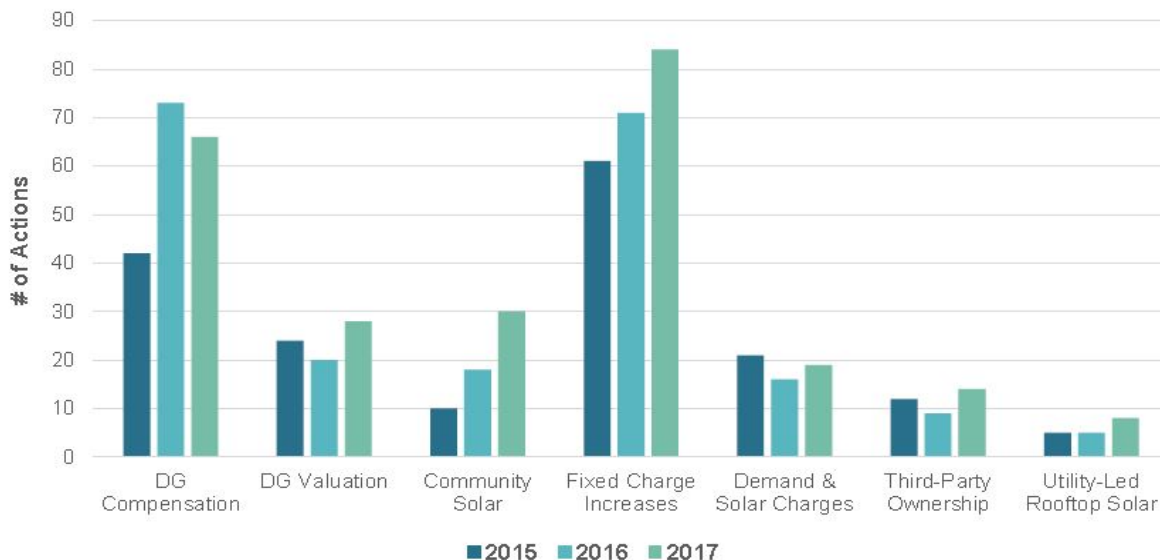
### Solar-Plus-Storage Eligibility Emerges as a Key Net Metering Consideration

Several states, including Colorado, Massachusetts, New York, and Rhode Island, continued or initiated investigations into the net metering eligibility of solar-plus-storage systems. Meanwhile, the Hawaii Public Utilities Commission approved a new compensation tariff specifically for solar plus- storage customers.

### States Consider Time-Varying Rates for Distributed Solar Customers

As states and utilities examine net metering successor tariffs and rate design changes for distributed solar customers, time-varying rates are gaining attention. In New Hampshire, regulators initiated a time-varying rates pilot program, while a pilot is also being designed in Maryland. The Vermont Public Service Department recommended exploring time-varying rates for net metering customers.

**Figure 3. Number of Solar Policy Actions 2015-2017**



Source: DSIRE: The 50 States of Solar: Q4 2017 & Annual Review Executive Summary

