

SOLAR ELECTRIC INVESTMENT ANALYSIS SERIES

Understanding Incentives

Agricultural Energy Efficiency Initiative of
Virginia Cooperative Extension / Virginia Tech
December, 2017



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Program Overview

- Introduction – Importance of Incentives
- Types of Renewable Energy Incentives
- Current Incentive Programs in Virginia
- USDA - Rural Energy for America Program
- Tools and Resources to Identify Incentives



Introduction – Importance of Incentives



Despite rapidly declining costs for PV solar, incentives are still important to the cost-effectiveness of a project.



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Introduction to Renewable Energy Incentives

- Incentives come from four primary sources
 - Federal
 - State
 - Local Government
 - Utility Companies

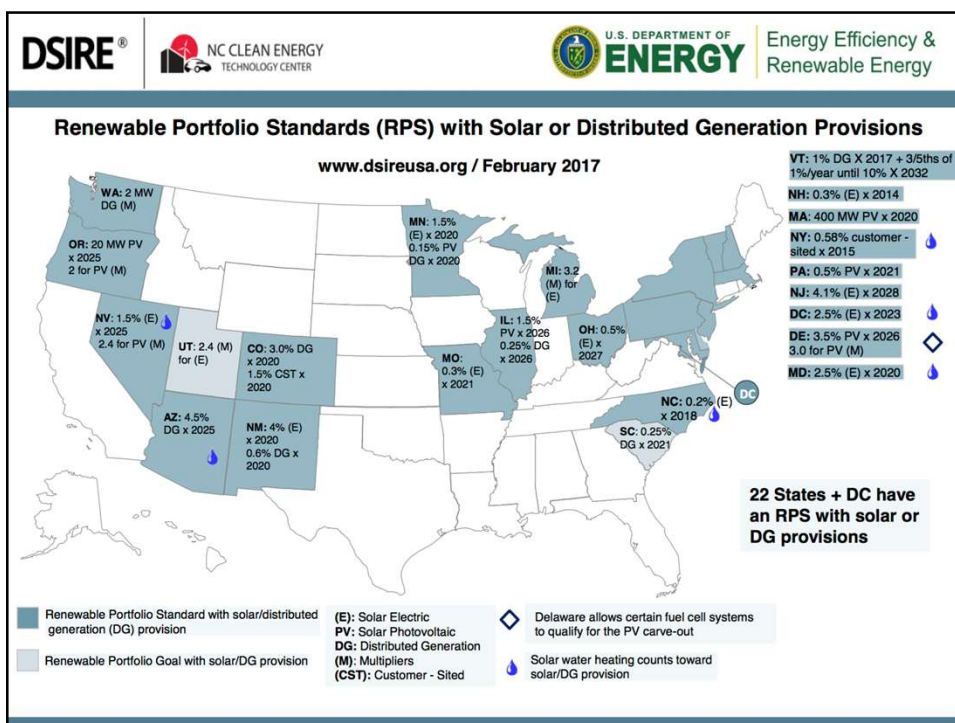
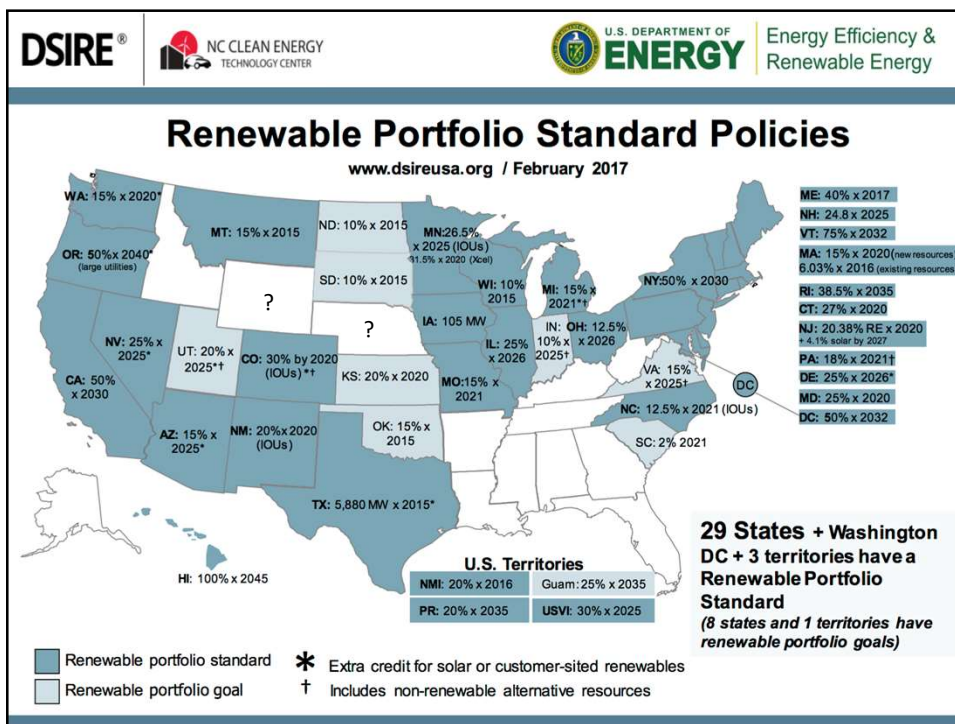


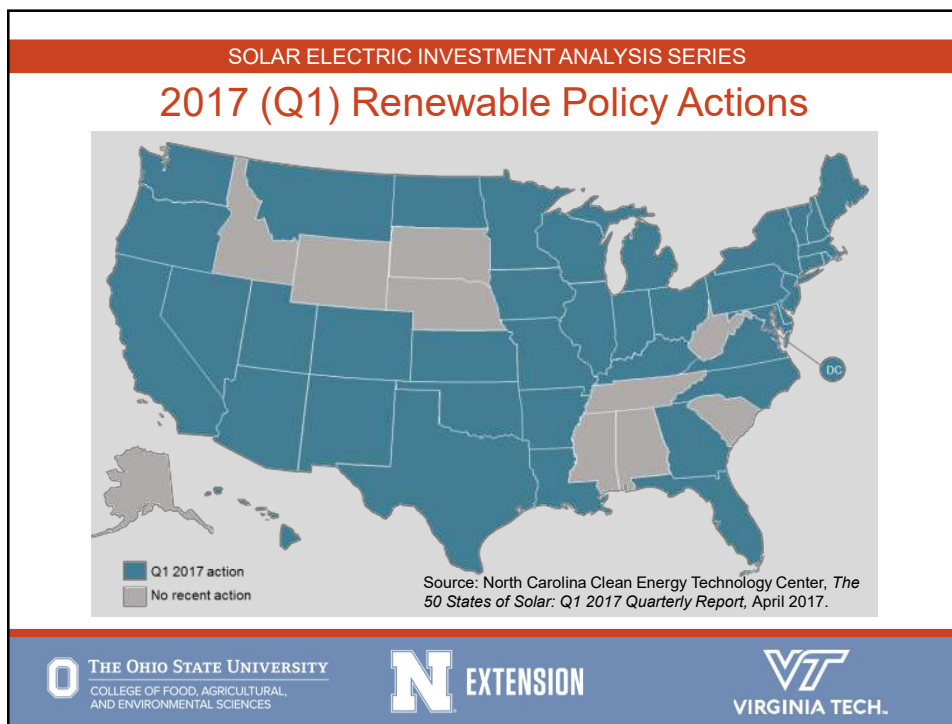
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Introduction to Renewable Energy Incentives

- Incentives typically target specific sectors, so different incentives may exist for residences, businesses, and agricultural producers.







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2017 (Q1) Renewable Policy Actions

Table 1. Q1 2017 Summary of Policy Actions

Policy Type	# of Actions	% by Type	# of States
Residential fixed charge or minimum bill increase	46	34%	23 + DC
Net metering	31	23%	21
Solar valuation or net metering study	16	11%	14 + DC
Community solar	14	10%	12
Residential demand or solar charge	13	10%	8
Third-party ownership of solar	10	7%	7
Utility-led rooftop PV programs	4	3%	4
Total	134	100%	40 States + DC

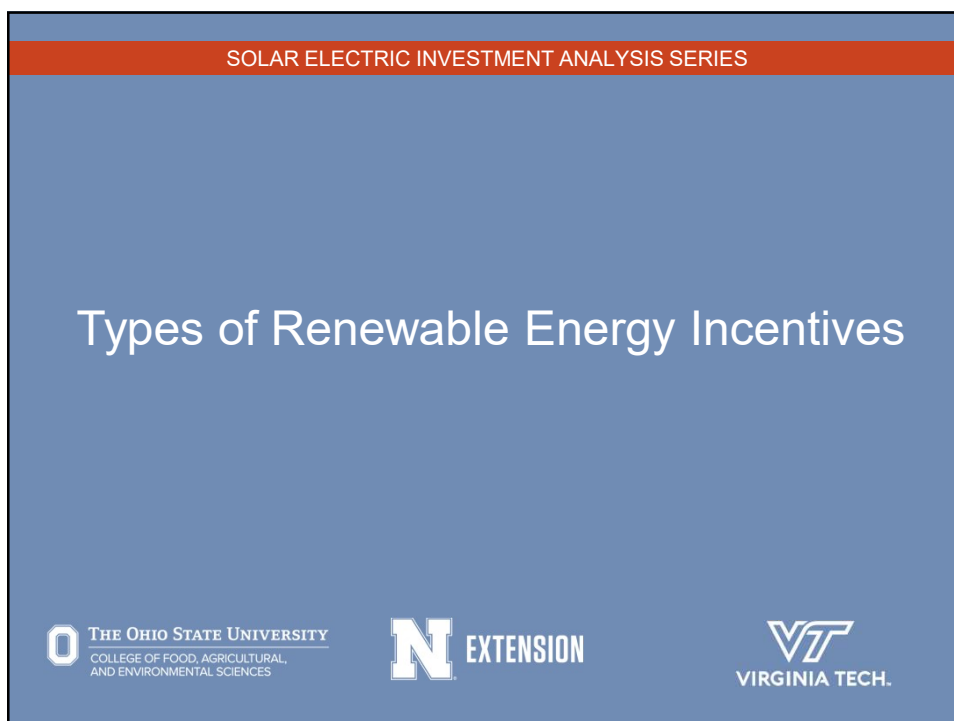
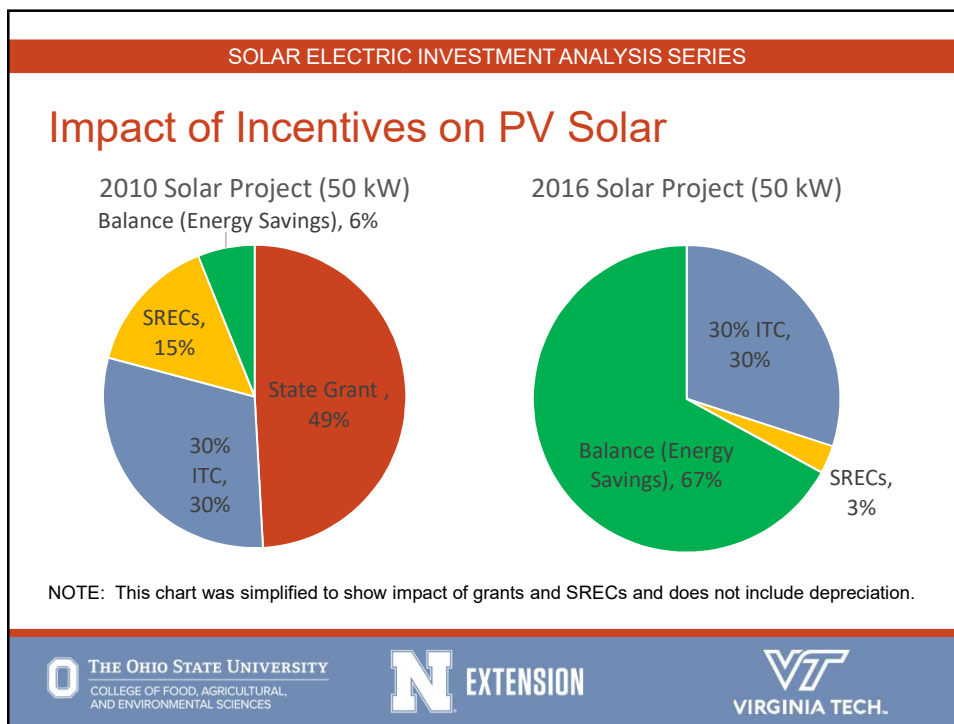
Note: The "# of States/ Districts" total is not the sum of the rows, as some states have multiple actions. Percentages are rounded and may not add up to 100%.

Source: North Carolina Clean Energy Technology Center, *The 50 States of Solar: Q1 2017 Quarterly Report*, April 2017.

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Common Types of Renewable Energy Incentives

- Tax Credits
- Depreciation
- Net Metering
- Renewable Energy Credits
- Grants
- Low Interest Loans / Loan Guarantee Programs



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Tax Credit

- A tax credit is an amount that is deducted from the project's income tax.
- **Investment Tax Credit (ITC)** – The ITC is based on the project's total installed cost and can be expressed as either a fixed amount or as a percentage. The ITC reduces the project's annual tax liability in Year 1 of the project cash flow.
- **Production tax credit (PTC)** – The PTC is a dollar amount per kilowatt-hour of annual electric output. The PTC reduces the project's annual tax liability in Year 1 of the cash flow and subsequent years based on the specified term.

Source: System Advisor Model (SAM) Help Manual



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Depreciation

- Under federal Modified Accelerated Cost-Recovery System (MACRS), businesses may recover investments in certain property through depreciation deductions.
- Most renewable energy technologies are classified as five-year property.
- Bonus depreciation - equipment placed in service:
 - before January 1, 2018 can qualify for 50% bonus depreciation.
 - during 2018 can qualify for 40% bonus depreciation.
 - during 2019 can qualify for 30% bonus depreciation.
- *****Note** that the definitions of eligible technologies included in this entry are somewhat simplified versions of those contained in tax code, you should review the relevant sections of the code in detail prior to making business decisions.

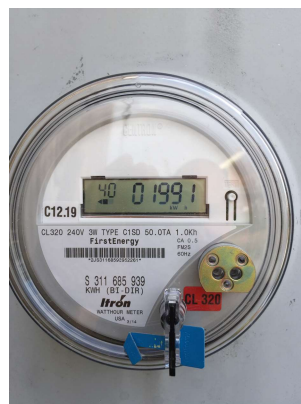
Source: U.S. Department of Energy. <https://energy.gov/savings/modified-accelerated-cost-recovery-system-macrs>



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Net Metering

- Net metering, is a metering and billing arrangement designed to compensate distributed energy generation (DG) system owners for any generation that is exported to the utility grid.
- These incentive programs allow system owners to recover some of the value of excess energy generated without purchasing batteries.
- Compensation for **net excess generation** will vary based on, location, utility provider, and rate classification.



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Renewable Energy Credits

- A renewable energy certificate (REC) is a market-based tool that represents the property rights to the environmental, social and other non-power attributes of renewable electricity generation.
- RECs are issued when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource.
- RECs play an important role in accounting, tracking, and assigning ownership to renewable electricity generation and use.
- RECs include several attributes including: certificate data, certificate type, tracking system ID, renewable fuel type, facility location, nameplate capacity, project name, commissioning date, generation, certificate ID number, utility to which project is interconnected, eligibility for certification or RPS, emissions rate of the renewable resource.

Source: EPA Green Power Partnerships: <https://www.epa.gov/greenpower/renewable-energy-certificates-recs>



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Grants, Low Interest Loans, and Loan Guarantee Programs

- Grants that provide direct cash incentives for renewable energy projects may be available from federal, state, or utility partners.
 - Grant programs are typically very competitive and often require approval before a project starts.
- Low interest loans, loan reduction programs are becoming more common. These programs provide low interest financing for the installation of renewable energy projects. Loans are not incentives or rebates, and must be paid back.
 - Some programs are designed for and those who cannot qualify for traditional financing and/or may require partnering with a participating bank.





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Summary of Current Incentive Programs in Virginia

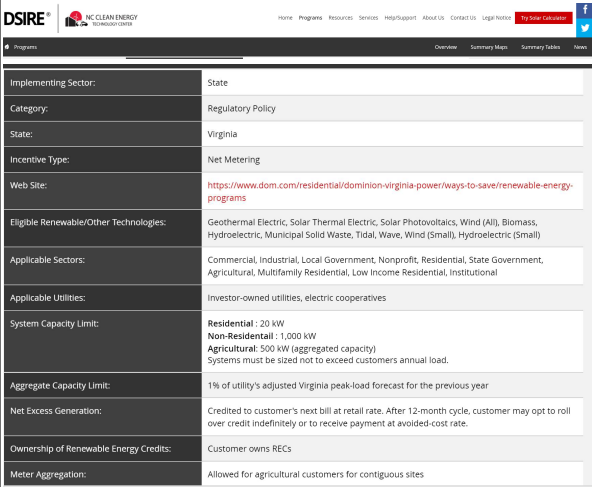


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Net Metering in Virginia: General Policy Overview




Implementing Sector:	State
Category:	Regulatory Policy
State:	Virginia
Incentive Type:	Net Metering
Web Site:	https://www.dom.com/residential/dominion-virginia-power/ways-to-save/renewable-energy-programs
Eligible Renewable/Other Technologies:	Geothermal Electric, Solar Thermal Electric, Solar Photovoltaics, Wind (All), Biomass, Hydroelectric, Municipal Solid Waste, Tidal, Wave, Wind (Small), Hydroelectric (Small)
Applicable Sectors:	Commercial, Industrial, Local Government, Nonprofit, Residential, State Government, Agricultural, Multifamily Residential, Low Income Residential, Institutional
Applicable Utilities:	Investor-owned utilities, electric cooperatives
System Capacity Limit:	Residential : 20 kW Non-Residential : 1,000 kW Agricultural: 500 kW (aggregated capacity) Systems must be sized not to exceed customers annual load.
Aggregate Capacity Limit:	1% of utility's adjusted Virginia peak-load forecast for the previous year
Net Excess Generation:	Credited to customer's next bill at retail rate. After 12-month cycle, customer may opt to roll over credit indefinitely or to receive payment at avoided-cost rate.
Ownership of Renewable Energy Credits:	Customer owns RECs
Meter Aggregation:	Allowed for agricultural customers for contiguous sites



Source: <http://programs.dsireusa.org/system/program/detail/40>

Highlights:

- System Capacity Limits:
 - Residential : 20 kW
 - Non-Residential : 1,000 kW
 - Agricultural: 500 kW (aggregated capacity)
- Systems must be sized not to exceed customers annual load
- Net excess generation (NEG) rolled over 12 months, option to payout NEG at lower rate
- Some systems > 10kW incur additional costs (standby, inspection, etc.)
- Available to customers of:
 - investor-owned utilities
 - electric cooperatives
 - not to municipal utilities
- More details at DSIRE, state code & utility webpages



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Dominion Virginia Power - Solar Purchase Program

Implementing Sector:	Utility
Category:	Financial Incentive
State:	Virginia
Incentive Type:	Performance-Based Incentive
Web Site:	https://www.dom.com/residential/dominion-virginia-power/ways-to-save/renewable-energy-programs/solar-purchase-program
Administrator:	Dominion Virginia Power
Start Date:	06/20/2013
Expiration Date:	06/20/2018
Utilities:	Virginia Electric & Power Co
Eligible Renewable/Other Technologies:	Solar Photovoltaics
Applicable Sectors:	Commercial, Local Government, Nonprofit, Residential, Schools, State Government, Federal Government, Agricultural, Institutional
Incentive Amount:	\$0.15/kWh
Terms:	5-year contract No standby charge
Eligible System Size:	Residential: 20 kW Nonresidential: 50 kW
Ownership of Renewable Energy Credits:	Transferred to Dominion

Technology:	Solar Photovoltaics
Sectors:	Commercial, Local Government, Nonprofit, Residential, Schools, State Government, Federal Government, Agricultural, Institutional
Parameters:	The incentive is 0.15 \$/kWh

Technology:	Solar Photovoltaics
Sectors:	Residential
Parameters:	The system size has a maximum of 20.00 kW

Technology:	Solar Photovoltaics
Sectors:	Commercial, Local Government, Nonprofit, Schools, State Government, Agricultural, Institutional
Parameters:	The system size has a maximum of 50.00 kW-AC

Source: <http://programs.dsireusa.org/system/program/detail/5404>

Highlights:

- Pilot Program 2013- 2018
- \$0.15/kWh (buy all, sell all)
- 5-year contract
- No standby charges
- Charge for meter
- RECs owned by Dominion
- More details at DSIRE & utility webpage

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SOLAR PURCHASE PROGRAM Non-Residential Participation

Applications are still being accepted. Join the waiting list [HERE](#).

SOLAR PURCHASE PROGRAM Residential Participation

Source: <https://www.dominionenergy.com/large-business/renewable-energy-programs/solar-purchase-program>

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Residential Property Tax Exemption for Solar General Policy Overview

Implementing Sector: State

Category: Financial Incentive

State: Virginia

Incentive Type: Property Tax Incentive

Web Site: http://www.dmm.virginia.gov/DE/Energy_Incentives.shtml

Administrator: Virginia Department of Mines, Minerals, and Energy

Eligible Renewable/Other Technologies: Solar - Passive, Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Photovoltaics

Applicable Sectors: Residential

Incentive Amount: Varies (local option)

Maximum Incentive: Varies (local option)

Eligible System Size: Not specified

Equipment Requirements: Installation needs to be inspected by the local building authorities to determine tax credit

Highlights:

- Details vary by locality
- Currently 15% (20 of 133) cities/counties in VA participate
- The State of Virginia provides the option for any county, city or town to exempt or partially exempt solar energy equipment from local property taxes.
- Commercial entities are fully exempt from state and local taxes under **Commercial Property Tax exemption for Solar**
- More details at DSIRE, state code & utility webpages

Source: <http://programs.dsireusa.org/system/program/detail/85>

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Renewable Energy Certificates

Virginia

[Home](#) > [Markets](#) > Virginia

Virginia does not currently have a viable SREC market as there is no solar carve-out. However, solar owners in Virginia may be eligible to participate in the Pennsylvania SREC market. For a period of time before January 2011, VA systems were eligible to apply to the DC SREC market.

Facility size	Management Fee	Transaction Fee	Total Fees
0-50 kW	5.0%	2.0%	7.0% ¹
50-250 kW	3.0%	1.5%	4.5% ¹
250-500 kW	1.5%	1.0%	2.5% ¹
500-1 MW	1.0%	0.5%	1.5% ¹
> 1 MW	0.5%	0.5%	1.0% ¹

Market Prices

PA OH Latest Bid Price: \$6.00

SREC FACTS

- 1 SREC = 1 Mwh of solar electricity
- A 10 kW facility generates around 12 SRECs annually
- SRECs are sold separately from the electricity
- Value is determined by market supply and demand mechanics
- Facilities must be certified by a state to sell SRECs

Source: http://www.srectrade.com/srec_markets/virginia

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Things change: DSIRE good source for most updated information

Pennsylvania - It's official. After years of advocacy from Pennsylvania SEIA and its allies, Pennsylvania has officially closed its borders to out of state solar renewable energy credits (SRECs). What does that mean?

As context, Pennsylvania was the only remaining SREC state that allowed generators from anywhere in the PJM region to sell into its market. As a result, solar projects built in PJM in utility-scale markets such as Virginia or North Carolina, or even rooftop homeowners in Ohio, could sell every 1000 kilowatt hours - which is one SREC - into the state's solar carve-out program as allowed previously by PA's Alternative Energy Portfolio Standard (AEPS). This abundance of RECs meant that complying with the state's very modest .5% by 2021 (yes, one half of one percent, as compared to the 5.3% being discussed in New Jersey) solar carve-out has been easy, and the market has been perpetually oversupplied. As of November 1, RECs in Pennsylvania were valued at \$4/SREC. Low SREC prices have led to very little in-state build; SEIA estimates that only 38.8MW of solar were installed in 2016. For comparison, SRECs in neighboring New Jersey are valued at \$196/REC, and last year, New Jersey installed nearly ten times the solar as PA at a whopping 361.4MW. New Jersey is also home to over 6,000 solar jobs, while PA employs only half that amount.

Does this mean that the solar market will rebound? Not necessarily, largely due to the already abundant oversupply combined with a modest renewables target. The legislation also grandfather's certifications (as it should to avoid lawsuits) granted by the effective date of the law, October 30th, as well as solar generators already under contract. The latter language is especially murky, and as compliance entities typically contract under a REC volume, not an individual system, which may create challenges with enforcement. As a result, the law's actual effects are to be determined, and the contracts language in particular will be subject to Public Utilities Commission interpretation.

In sum, the PA closed borders bill is a great, first step, and even more importantly, it shows that solar has bipartisan support in the PA legislature. With other states looking at 25%, 40%, or even 50% renewable energy targets, an AEPS increase in the coming years would be even better for stimulating development in PA - and seems possible after solar gained new allies with this bill.

Virginia Moves to Join RGGI Carbon-trading Market

11/15/2017 | Darrell Proctor

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Virginia regulators are ready to consider a proposal to join the Regional Greenhouse Gas Initiative (RGGI) in the Northeast, becoming the 10th state in the nation's largest carbon-trading market. The move comes as newly elected governor Ralph Northam, a Democrat, prepares to take office in a state where the Republican-led legislature has shot down previous attempts to join the RGGI.

Regulators at the state's Air Pollution Control Board will take up the proposal November 16, analysts say the draft rule, which was released just after the November 7 election, was written in a way to avoid needing approval from state lawmakers. Outgoing Gov. Terry McAuliffe, also a Democrat, in May 2017 issued an executive order for state regulators to create a market-based trading program for CO₂ emissions. Northam's Republican opponent in the recent election, Ed Gillespie, had said he would repeal the order if elected.

New Jersey also is expected to soon rejoin the RGGI. Gov.-elect Phil Murphy, a Democrat, said the state would immediately rejoin the program when he takes office. Current Republican Gov. Chris Christie pulled New Jersey out of the group in 2011.

The Virginia rule as currently written would cap emissions from utilities in the state beginning in 2020, and mandate a 30% reduction by 2030. At the time of his executive order, McAuliffe said "The threat of climate change is real, and we have a shared responsibility to confront it. As the federal government abdicates its role on this important issue, it is critical for states to fill the void."

Sources: <http://www.theenergycollective.com/sol-systems/2417287/sol-source-solar-report-november-2017>
<http://www.powermag.com/virginia-moves-to-join-rggi-carbon-trading-market/>

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Principles of Electric Utility Regulation in Virginia

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VA. CODE § 54-594 Virginia's Net Metering Program

§ 54-594. Net energy metering provisions.

A. The Commission shall establish by regulation a program that affords eligible customer-generators the opportunity to participate in net energy metering.

"Eligible customer-generator" means a customer that owns and operates, or contracts with other persons to own, operate, or both, an electrical generating facility that (i) has a capacity of not more than 20 kilowatts for residential customers and not more than one megawatt for nonresidential customers on an electrical generating facility placed in service after July 1, 2015; (ii) uses as its principal source of fuel renewable energy, as defined in § 54-576; (iii) is located on the customer's premises and is interconnected to the customer's wiring on the customer's side of an interconnection with the distributor; (iv) is interconnected and operated in parallel with an electric company's transmission and distribution facilities.

"Net energy metering" means measuring the difference, over the net metering period, between (i) electricity supplied to an eligible customer-generator or eligible agricultural customer-generator from the electric grid and (ii) the electricity generated and fed back to the electric grid by the eligible customer-generator or eligible agricultural customer-generator.

If any residential eligible customer-generator or eligible agricultural customer-generator who owns and operates, or contracts with other persons to own, operate, or both, an electrical generating facility with a capacity that exceeds 10 kilowatts shall pay to its supplier, in addition to any other charges indicated by law, a monthly standby charge.

The *Re-Regulation Act* established a net metering program for electric utility customers. That program, called *customer-generators*, may install and operate for contract with others to install and operate renewable energy facilities, such as solar panels, on their property.

Any "surplus" energy generated by a customer-generator at any point in time flows back into the electric grid.

Net metering allows customers to offset all or part of their electricity usage. Customer-generators only pay for that "net" energy usage. For example, if a customer uses 3000 kilowatt-hours ("kWh") in a month and generates 500 kWh from a rooftop solar facility, the customer only pays the utility for 2500 kWh.

Residential customer-generators may install systems that are 20 kilowatts (kW) or smaller in size, and non-residential customers may install facilities that are one megawatt (MW) or smaller. Residential customers with facilities larger than 10 kW must pay a standby charge to compensate for costs to maintain the distribution system.

Source: <https://www.greenehurlocker.com/wp-content/uploads/2017/11/Electric-Regulation-in-Va-GH-Guidebook.pdf>


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USDA - Rural Energy for America Program


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 **United States
Department of
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Rural Development



Presented by Laurette Tucker















RURAL ENERGY FOR AMERICA PROGRAM

*Rural Business and Cooperative Programs
December 13, 2017*

RENEWABLE ENERGY FOR AMERICA PROGRAM - SECTION 9007

- This program is intended to provide a way that small businesses and agricultural producers can contribute towards our National goals of energy reduction/conservation and reducing our dependency on foreign energy sources
- This can be accomplished through a renewable energy system OR an energy efficiency improvement project.

Improve Profits for Your Rural Small Business, Farm or Ranch with REAP

Eligible Technologies			
Energy Efficiency (AUDIT)		Renewable Energy	
	Lighting		Solar
	Heating		Wind
	Cooling		Small Hydroelectric
	Ventilation		Anaerobic Digesters
	Fans		Biomass
	Automated Controls		Geothermal
	Insulation		Wave/Ocean Power

- Technologies must be commercially available. R & D projects do not qualify.

Eligible Applicants

Agricultural Producer



- Individual or entity that receives 51 percent or more of their gross income from **agricultural production** – crops, livestock, aquaculture, forestry operations, nurseries, dairies

Rural Small Business





- Privately owned **for-profit small business** - as defined by the Small Business Administration (SBA)
- **Rural area or non-metro community of $\leq 50,000$**

APPLICANT ELIGIBILITY



- **Must be a citizen of the U.S.**
- **Must not have federal judgments or delinquent federal taxes**
- **Must have a DUNS number**
- **Must have a SAMs registration**
- **Applicant must own the system and control the operation and maintenance of the project**
- **Applicant must show adequate revenues for Operation & Maintenance**

Links to DUNS and SAM

 Eligible Project Costs	 Ineligible Project Costs
<ul style="list-style-type: none"> • Equipment: <ul style="list-style-type: none"> • Purchase & installation • New, refurbished, or remanufactured equipment • Post-application construction & facility improvements integral to the renewable energy or energy efficiency project • Professional service fees • Permits & license fees • Retrofitting • Working capital, land acquisition (Guarantee ONLY) 	<ul style="list-style-type: none"> • Residential energy projects • Equipment: <ul style="list-style-type: none"> • Farm tillage equipment • Used equipment • Vehicles • Pre-application construction & facility improvements; repairs or operating costs • Application preparation or grant writer fees • Line of credit • Lease payments • Payment to the applicant/business owner, beneficiary, or relative

REAP Grant Assistance

Up to 25%
of Eligible Project Costs

 Renewable Energy Systems		 Energy Efficiency Improvements	
Minimum Grant Request	\$2,500 Total eligible project costs ≥ \$10,000	Minimum Grant Request	\$1,500 Total eligible project costs ≥ \$6,000
Maximum Grant Request	\$500,000 Total eligible project costs ≥ \$2 million	Maximum Grant Request	\$250,000 Total eligible project costs ≥ \$1 million

REAP Guaranteed Loan Assistance

Up to 75%
of Eligible Project Costs

Minimum Loan Amount	\$5,000 Total eligible project costs ≥ \$6,667
Maximum Loan Amount	\$25 million Total eligible project costs ≥ \$33.4 million
Details	<ul style="list-style-type: none"> • USDA guarantees a commercial loan; applicant must have a willing lender. • Terms are negotiated between the lender and borrower. • Fees, appraisals, equity & collateral requirements apply.

How to Apply

- Contact the USDA Rural Development Energy Coordinator in your state for application materials and resources:
http://www.rurdev.usda.gov/BCP_Energy_CoordinatorList.html
- Submit applications any time of year – October 31st and March 31st
- Applications compete for funding based on project score
- Funding selections are made twice per year

Application Forms

- SF 424, SF 424-C and SF 424-D
- RD 4280-3A (\$80,000 or less project cost)
- RD 4280-3B (more than \$80,000 to \$200,000 or less)
- RD 4280-3C (more than \$200,000)
- Energy Assessment or Audit for Energy Efficiency Projects (Audit required for projects >\$80,000)

Application Forms (cont.)

- Feasibility Study by independent 3rd party for RES projects over \$200,000
- AD-3030 for all applicants except sole proprietors
- Matching Funds Documentation (not required but encouraged)
- DUNS # and Cage Code (SAM)

Scoring Criteria

Criteria 1 Sub-Criteria i - Energy Generated or Saved per REAP Grant Dollar Requested – Up to 10 Points maximum

$$\left(\frac{\text{Energy Generated/Saved in BTU'S}}{\text{REAP Grant Requested}} \right) / 50,000 \times 10$$

Scoring Criteria

Criteria 1, Sub-Criteria ii(a) – Quantity of energy replaced, saved or generated – (RES Replacement) up to 15 points maximum

- Up to 25% - 5 points
- Greater than 25% & less than or equal to 50% -10 points
- Greater than 50% & less than 150% - 15 points
- More than 150% scored as energy generation

Scoring Criteria

Criteria 1, Sub-Criteria ii(b) - For (EEI Energy Saved) – up to 15 points maximum

- 20% to 35% of current usage - 5 points
- Greater than 35% & less than or equal to 50% -10 points
- Greater than 50% - 15 points,

Scoring Criteria

Criteria 1, Sub-Criteria ii(c) - For RES Energy Generation – 10 points

Scoring Criteria

Criteria 2 - Environmental Benefits- up to 5 points

- Provides benefit to 1 of 3 impact areas – 1 points
- Provides benefit to 2 of 3 impact areas – 3 points
- Provides benefit to 3 of 3 impact areas – 5 points

Scoring Criteria

Criteria 3 - Commitment of Funds - up to 20 points

- Less than 50% - 0 points
- Greater than 50% determined by the formula: $(\% \text{ of documented match above } 50\% / 50\%) \times 20$
- 100% - 20 points

Scoring Criteria

Criteria 4 – Size of Rural Small Business or Agriculture Producer compared to SBA Size Standards – Maximum of 10 points

- 33.33% or less – 10 points
- Over 33.33% to 66.67% - 5 points
- Over 66.67% - 0 points

Scoring Criteria

Criteria 5 – Previous grantees and borrowers - up to 15 points

- Never received grant or loan – 15 points
- Not received grant or loan with the 2 previous fiscal years - 10 points
- Received grant or loan with the 2 previous fiscal years - 0 points

Scoring Criteria

Criteria 6 – Simple Payback for RES – up to 15 points

- Less than 10 years – 15 points
- 10 to less than 15 years - 10 points
- 15 to 25 years - 5 points

Scoring Criteria

Criteria 6 – Simple Payback for EEI – up to 15 points

- Less than 4 years – 15 points
- 4 to less than 8 years - 10 points
- 8 to 12 years - 5 points

Scoring Criteria

Criteria 7 – State Director and Administrator Points – up to 10 points. A State Director, for its State allocation under this subpart, or the Administrator, for awards from the National Office reserve, may award points if the application is for:

- i.) An under-represented technology,
- ii.) If selecting the application would help achieve geographic diversity,
- iii.) The applicant is a member of an unserved or under-served population,
- iv.) Selecting the application helps further a Presidential Initiative or a Secretary of Agriculture priority,
- v.) The proposed project is located in an impoverished area, has experienced long-term population decline, or loss of employment.

POST AWARD CONDITIONS

- Approved applicants must enter into a grant agreement with USDA Rural Development
- Grantees must adhere to the uses of the grant funds as contained in the application
- The system must be operational for at least 30 days before you can be reimbursed with grant funds
- Must maintain an active SAMs Registration throughout the period of the grant
- Must provide annual reports for 3 years for a renewable energy system and 2 years for an energy efficiency improvement project

Franjilou Farms



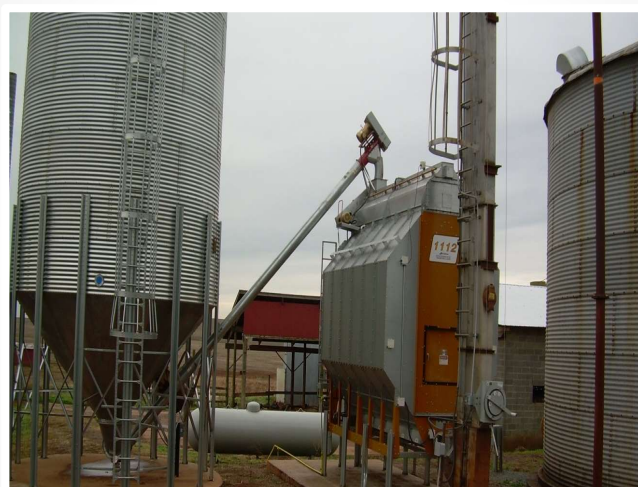
40 kW Ground-Mounted Solar
Mount Crawford, VA

Shepherds Corner Farm



**12.4 kW Roof-Mounted Solar
Purcellville, VA**

Glebe Farm



**Grain Dryer Replacement
Brandy Station, VA**

Daniel Horning



**Poultry House Replacement
Mount Solon, VA**

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Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

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(1) mail: U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410;

(2) fax: (202) 690-7442; or

(3) email: program.intake@usda.gov.
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SOLAR ELECTRIC INVESTMENT ANALYSIS SERIES

Tools and Resources to Identify Incentives

 THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

 EXTENSION

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SOLAR ELECTRIC INVESTMENT ANALYSIS SERIES

Incentive Search Tools

- **Webpage Name:** Tax Credits, Rebates & Savings
- **Host:** U.S. Department of Energy
- **Summary:** Allows the user to filter an incentives search by state, sector, and technology type.
- **Location:** <https://energy.gov/savings/search>



SOLAR ELECTRIC INVESTMENT ANALYSIS SERIES

Incentive Search Tools

- **Webpage Name:** Database of State Incentives for Renewables & Efficiency (DSIRE)
- **Host:** Operated by the N.C. Clean Energy Technology Center at N.C. State University and is funded by the U.S. Department of Energy.
- **Summary:** Allows the user to filter an incentives search by state, sector, technology type, incentive type, implementing sector, county, utility provider, zip code, and date.
- **Location:** <http://www.dsireusa.org>



SOLAR ELECTRIC INVESTMENT ANALYSIS SERIES

Incentive Search Tools

- **Webpage Name:** Energy Sage
- **Host:** Operated by Energy Sage with funding support from the U.S. Department of Energy, New York State Energy Research & Development Authority, Connecticut Green Bank, and Massachusetts Clean Energy Center.
- **Summary:** Allows the user to filter an incentives search by zip code for incentives, pre-screened installers, and provides price comparisons from nearby project installations.
- **Location:** <https://www.energysage.com>



SOLAR ELECTRIC INVESTMENT ANALYSIS SERIES

Incentive Search Tools


- **Webpage Name:** Energy Incentives
- **Host:** Virginia Department of Mines, Minerals and Energy (VA DMME)
- **Summary:** Descriptions and links for information on state, federal, and utility/private financial and tax incentives available for Virginia homeowners businesses in the commercial, industrial, and manufacturing sectors
- **Location:** https://www.dmme.virginia.gov/DE/Energy_Incentives.shtml




SOLAR ELECTRIC INVESTMENT ANALYSIS SERIES

Additional Incentive Resources


- Utility Provider ????
- State Energy Office????
- USDA Rural Development????
- Cooperative Extension????
- Others???



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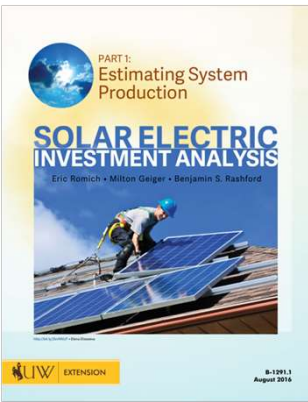
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Additional Resources






















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Thank You!

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