



Utility-Scale Solar in VA

VACo Webinar May 21, 2020

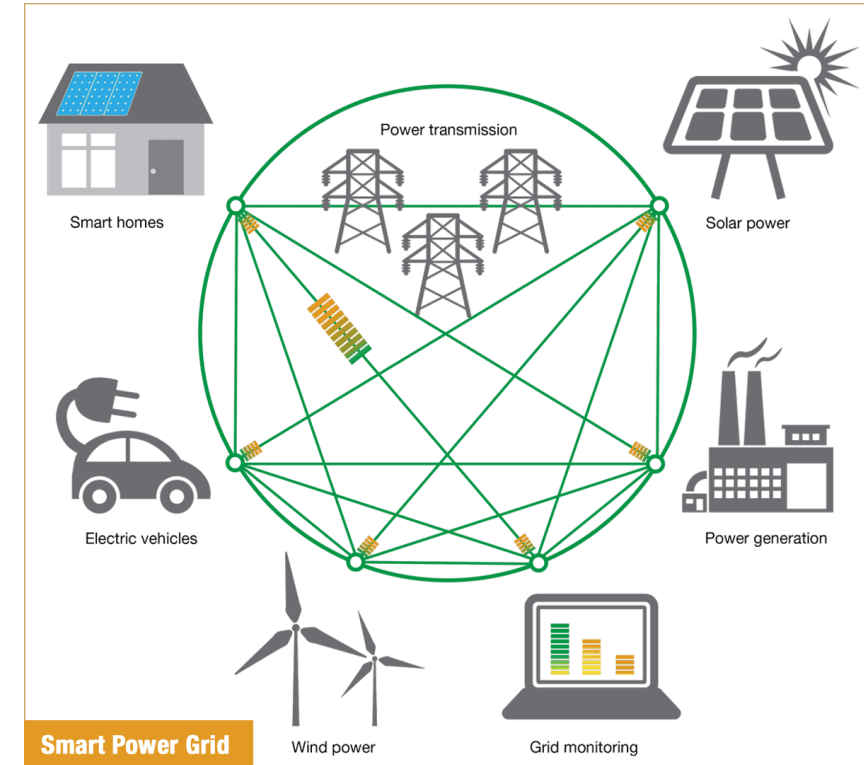
Angela Navarro, Deputy Secretary of Commerce and Trade
Office of the Governor

Carrie Hearne, Solar Program Manager
Department of Mines, Minerals and Energy

State-Level Energy Policy Goals

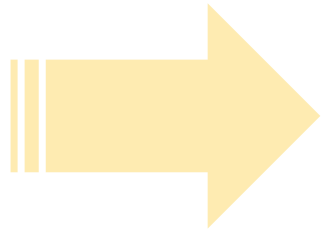
Timeline:

- **2018: Grid Transformation and Security Act**
 - Deems 5,500 megawatts (MW) of solar and wind energy projects in the public interest.
 - Provides \$1 billion in energy efficiency investments over the next 10 years.
- **2019: Executive Order 43**
 - Goal of 30% renewable energy by 2030 and 100% carbon-free electricity by 2050.
 - 5,500 MW of solar and onshore wind by 2028 and 2,500 MW of offshore wind by 2026.
- **2020: Virginia Clean Economy Act**
 - Goal of 100% carbon-free electricity by 2045.
 - Deems Deems 16,100 MW of solar and onshore wind and 5,200 MW of offshore wind in the public interest.



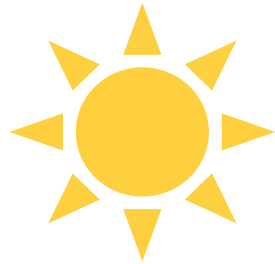


State Electricity Goals Executive Order 43



30% by 2030

Produce 30 percent of Virginia's electricity from renewable energy sources by 2030



100% by 2050

Produce 100 percent of Virginia's electricity from carbon-free sources by 2050



Energy Equity

Achieve energy goals in a just manner that advance social, energy, and environmental equity



2020 General Assembly Clean Energy Legislation

1. Virginia Clean Economy Act

- a. Renewable Portfolio Standard (30% by 2030)
- b. 100% Carbon-Free Requirement

2. Clean Energy and Community Flood Preparedness Act

- a. Enables Virginia to formally join the Regional Greenhouse Gas Initiative (RGGI)

3. Solar-specific Bills

- a. Revenue Share for Utility-Scale Solar
- b. Solar Freedom Bill

4. C-PACE



Photo Credit: Bill Dickinson Sky Noir Photography

COVID-19 Impact on Solar Industry (and beyond)

- The national trade association SEIA (Solar Energy Industry Association) estimates 80% of projects are on hold or delayed

“A large utility-scale developer told [SEIA] they have a shovel-ready \$109 million project in Texas that would employ 550 workers and pump millions of dollars into the local economy.

That project is now on hold because tax equity financing is drying up...”

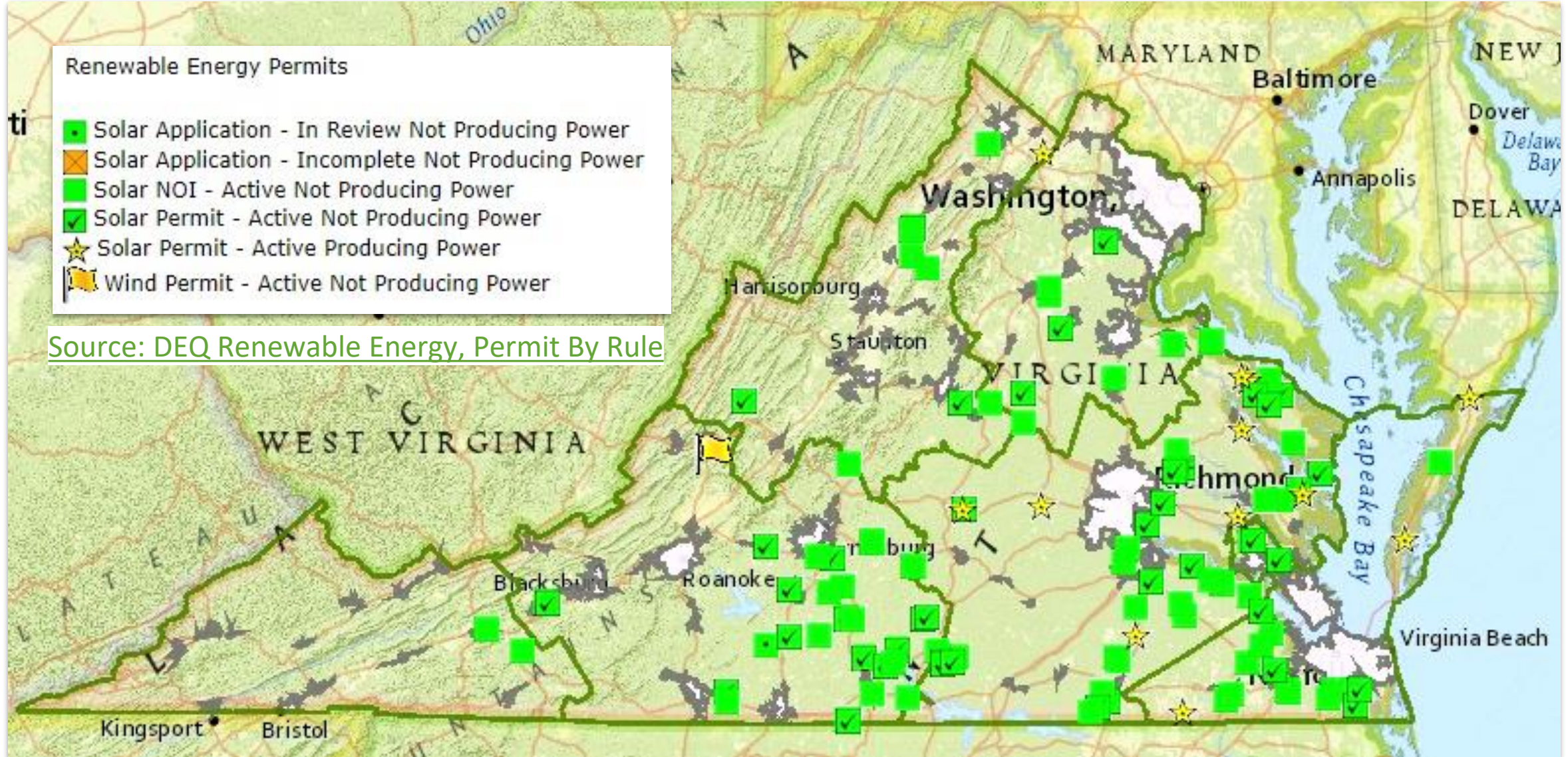


Photo credit: The Associated Press

Solar Permit by Rule (PBR) Program (DEQ)

Source: DEQ Renewable Energy, Permit By Rule

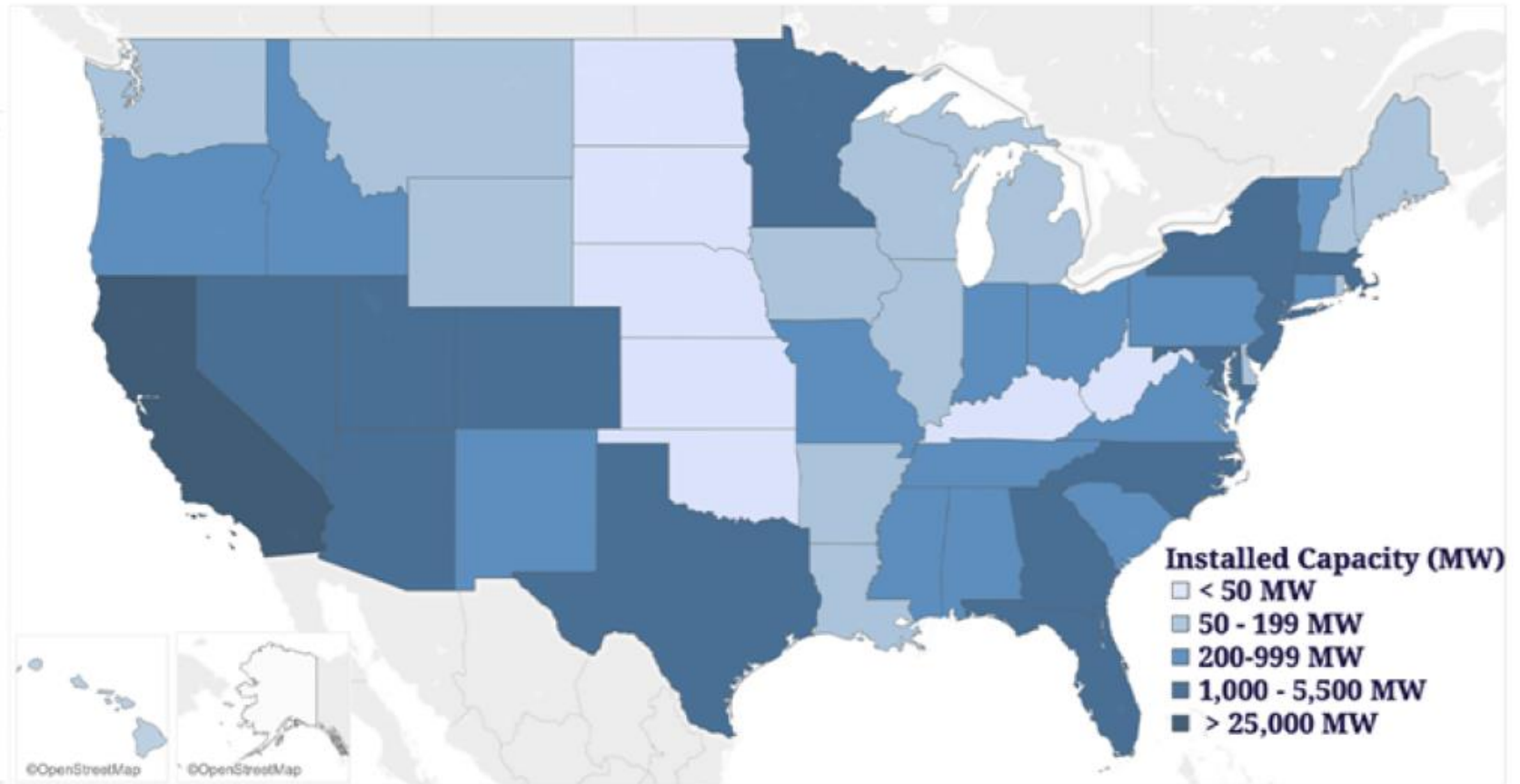
Permit by Rule & NOI Distribution



Utility Solar Capacity in US, 2019 (Source: SEIA)

Top 10 States

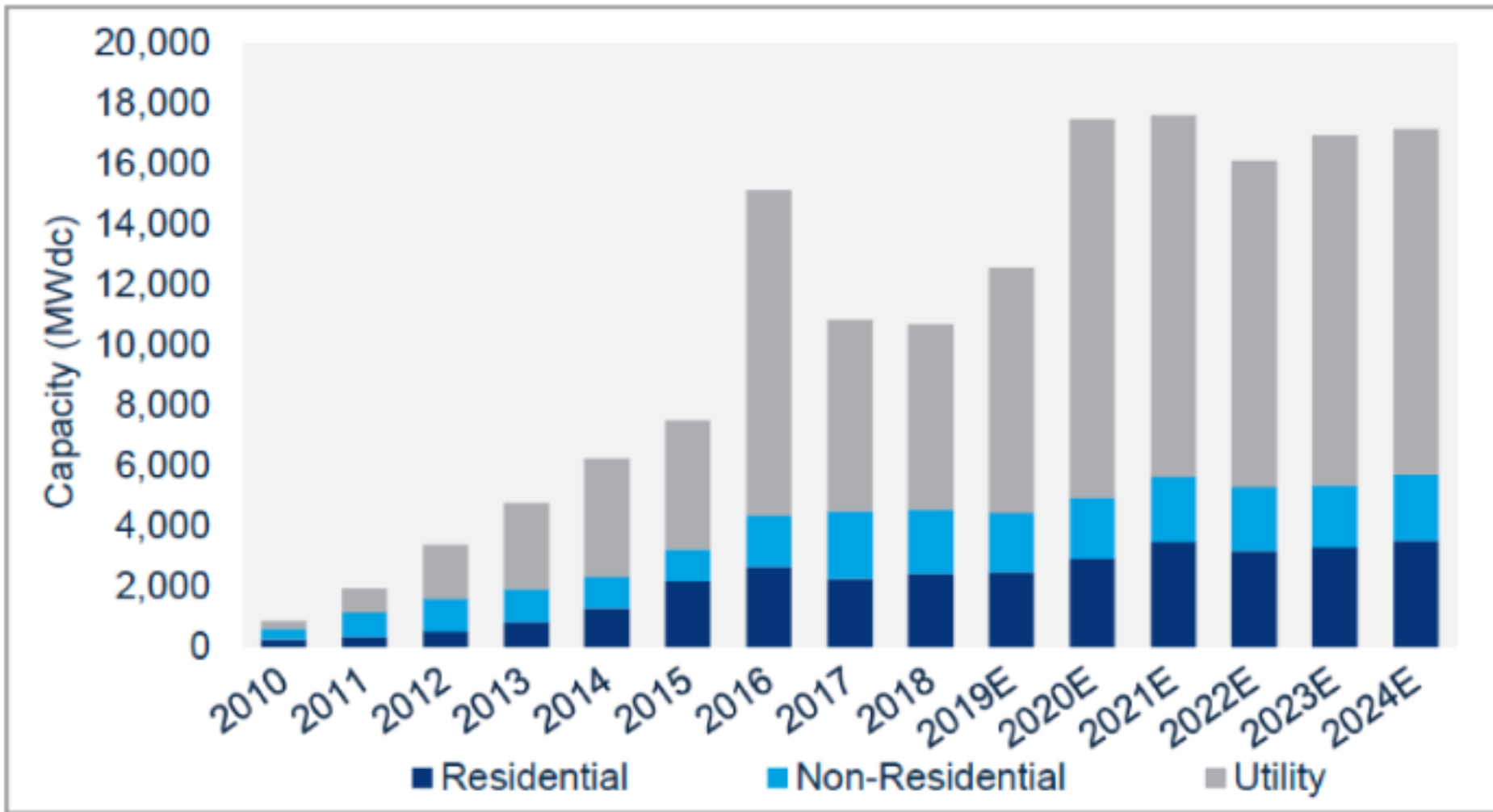
California	25,016 MW
North Carolina	5,467 MW
Arizona	3,788 MW
Nevada	3,452 MW
Florida	3,156 MW
Texas	2,957 MW
New Jersey	2,829 MW
Massachusetts	2,535 MW
New York	1,718 MW
Utah	1,661 MW
Georgia	1,572 MW





Virginia Department of Mines Minerals and Energy

U.S. PV Installation Forecast, 2010 – 2024e



Source: Wood Mackenzie Power & Renewables

Considerations for Solar Development

- Future Land Use
- Agriculture, Forestry
- Residential Use
- Industrial Zone Land
- Location to Transmission
- Visual Impacts
- Decommissioning
- Energy Storage
- Pollinators, Grazing
- Wildlife Corridors
- Stormwater, Erosion, Sediment
- Brownfields to Brightfields
- Cultural, Env. Resources
- Revenue Share, M&T Taxation
- Economic Impacts
- Employment (Short/Long-Term)

VIRGINIA

Virginia emerges as a 'hotbed' for solar as rural counties welcome projects

WRITTEN BY



Mason Adams



Governor Northam Announces Largest State Renewable Energy Contract in the Nation

New agreement to purchase 420 megawatts of solar and wind energy follows historic month for clean energy in Virginia

Despite opposition, Matoaca solar farm project moves forward

SEPTEMBER 25, 2019

BY JIM MCCONNELL SENIOR WRITER



Culpeper mulls more rules for big solar projects

By ALLISON BROPHY CHAMPION CULPEPER STAR-EXPONENT Sep 14, 2019

Coming Soon: Statewide Solar Survey



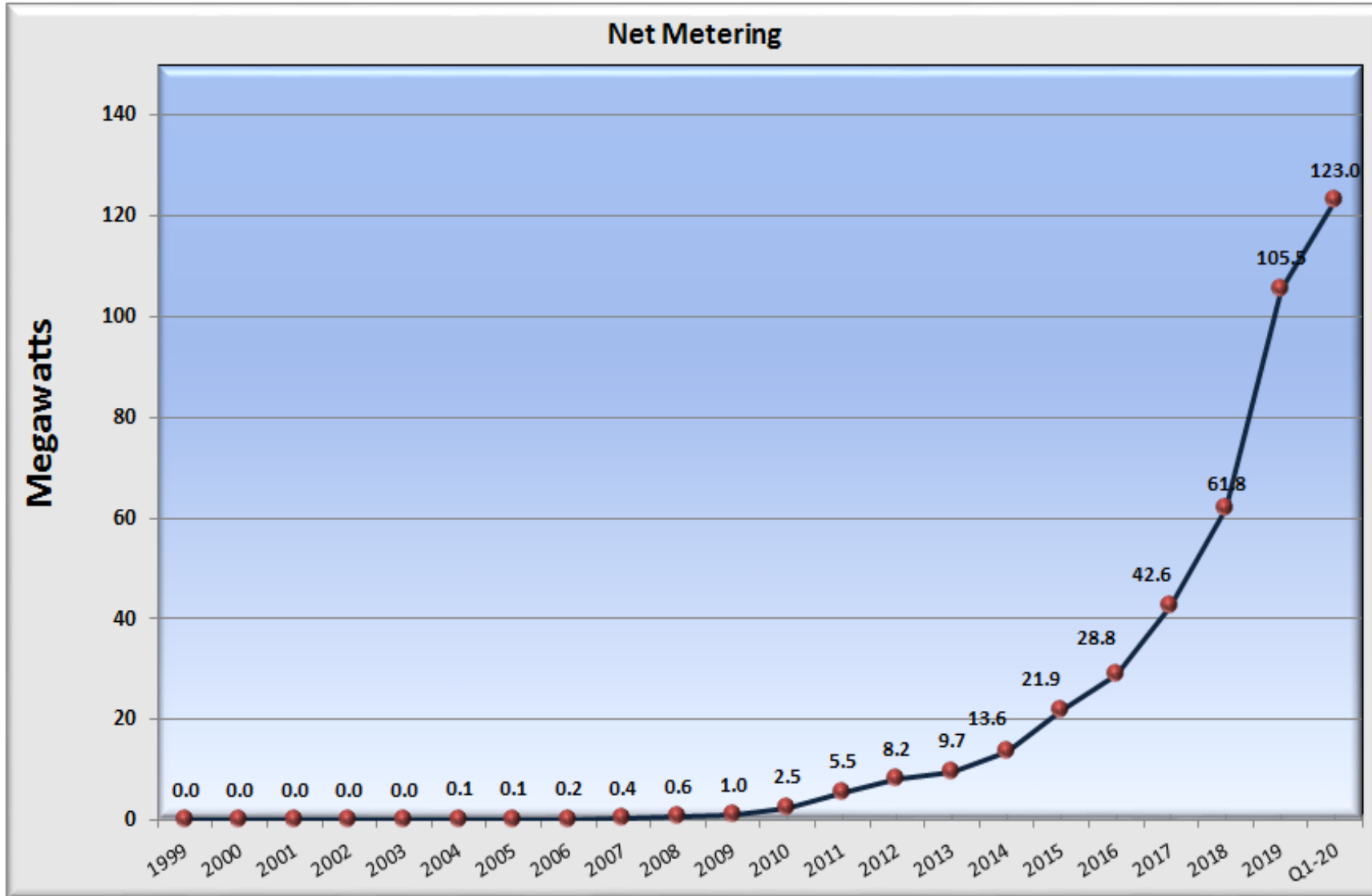
UNIVERSITY
of VIRGINIA

WELDON COOPER CENTER
for PUBLIC SERVICE

with input from the following organizations:



Customer-Owned Solar Growth Net Metering Since 1999



Now Offering SolSmart Technical Assistance

- SolSmart is a national designation program designed to recognize counties, cities and towns for encouraging solar energy growth.
- DMME & UVA now offering technical assistance to localities for SolSmart designation
- Currently recruiting in Middle Peninsula, Southside, SW 2.0



Eight Southwest Virginia communities receive SolSmart designation (2019)
Photo credit: Chelsea Barnes, Appalachian Voices



Request a Consultation from DMME/UVA Advisors

- No-cost technical assistance program for counties or cities
- Assesses comprehensive planning, zoning, ordinances, permitting, communications, and more.
- Enhances efficiencies, reduces “soft costs” to solar development, creates increased transparency, balances rooftop & large scale solar



Request A Consultation With your Virginia Advisors

Use the form below to schedule a consultation with a technical assistant to help get your designation process started.

Community Information

Municipality or Organization *

State *

Type of Community *

<https://dmme.virginia.gov/de/solsmart.shtml>

Thank You



Questions?

Contact:

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