POWERING A BRIGHTER FUTURE

A Report on Solar Schools in Virginia

November 2019

Generation180

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Cover Photo: St. Anne's Belfield School in Charlottesville, Virginia. Photo by Skyclad Aerial. Courtesy of Sun Tribe Solar.

Introduction

Empowering Schools to Go Solar

Generation180 is a non-profit working to inspire and equip people to take action on clean energy. Generation180 is accelerating the arrival of a future in which our world is completely powered by clean energy. Solar schools can help lead the way to this future by modeling to their surrounding communities that generating local, clean energy is becoming the new normal for our society. Because of the potential impact that schools have both inside and outside the classrooms, we are empowering school leaders, parents, students, and community members to be catalysts for clean energy at their schools.

Inspiring a Brighter Future

Based in Charlottesville, Virginia, Generation180 has been supporting the adoption of solar at schools in our home state. Our 2017 report, *Brighter Future: A Study on Solar in U.S. Schools*, ranked Virginia as the #20 state in the country for installed solar school capacity and the #28 state for number of solar schools. We are excited to document and share the remarkable progress that has been happening across the Commonwealth in recent years. This report highlights recent growth trends, showcases the benefits of going solar, shares the stories and successes of leading solar schools, and suggests actions we can take to build on their momentum.

While there has been exponential growth in solar adoption by schools in Virginia over the past five years, only 3% of schools in the state have switched to solar. We still have a long way to go and barriers to overcome in order to reach our goal of 100% clean energy. We have a tremendous opportunity to accelerate clean energy in Virginia, and we hope this report empowers you to take action to help all of Virginia's schools access the benefits of clean energy.

Huguenot High School in Richmond, Photo Credit: Secure Futures Solar

Top Reasons Virginia Schools Are Going Solar

School districts around the Commonwealth are realizing that going solar is a win-win that cuts operating expenses and creates hands-on learning opportunities for students. These are the two primary drivers of solar adoption by Virginia's schools. Accordingly, the number of schools in the state with solar power has tripled and the amount of solar installed on schools has grown tenfold over the past two years.

Solar Generates Cost Savings

Solar energy has become a much-needed solution for Virginia's school districts to manage their tight budgets. Virginia K-12 schools with solar are saving hundreds of thousands of dollars each year in energy costs.

ARLINGTON PUBLIC SCHOOLS was a trailblazer in building and operating the first net-positive-energy school in the Mid-Atlantic, and the district has been saving $100,000 in energy costs per year just at Discovery Elementary. The county's second net-zero-energy school, Alice Fleet Elementary, opened its doors to students in Fall 2019. The new solar arrays on Alice Fleet Elementary and four more schools will save the district $4 million over the next 25 years.

In 2019, MIDDLESEX COUNTY PUBLIC SCHOOLS became the first school district in the state to have all of its schools powered with 100% solar energy. The district estimates that these solar installations will save $4.74 million in electricity costs over the next 25 years.

Discovery Elementary School in Arlington County. Photo Credit: VMDO

"Solar energy is enabling the district to save over $4 million over 25 years. We can share those budgeted funds for teaching and learning opportunities."

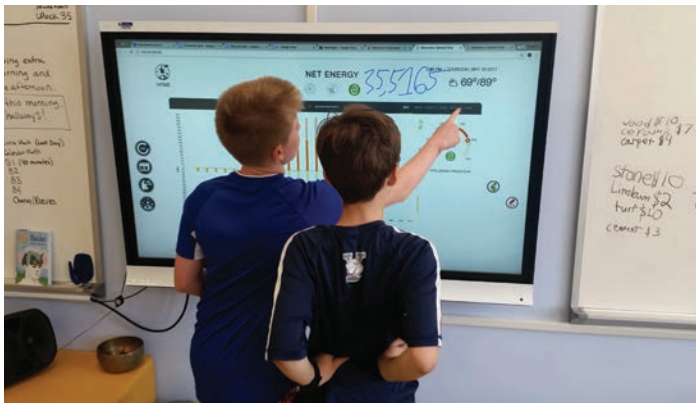
– Cathy Lin

Energy Manager and Storm-water Program Administrator, at Arlington County Public Schools

Solar Sparks Educational Opportunities

Solar schools offer opportunities to enhance STEM (science, technology, engineering, and math) learning with hands-on, real-world tools and provide access to technology that can help prepare students for a future in the solar industry, which boasts the fastest-growing occupation in the nation.[1]

When **RICHMOND PUBLIC SCHOOLS** decided to install solar panels on the roofs of 10 of its schools, it created pathways to leverage the technology to enhance student learning. All 8th grade science teachers across the district received training on solar energy lessons to use in the classroom. With a generous grant from the Community Foundation of Richmond, the district invested in technology to track building-level energy consumption and hired a sustainability coordinator to engage staff and students. Two of the schools participated in a National Solar Tour that was open to the public and engaged the school community on the benefits of solar.



Students at Discovery Elementary School in Arlington, VA use real-time solar panel production data. Photo Credit: Discovery Elementary

The process of going solar has helped students in Virginia learn about civic engagement and develop leadership and organizational skills. In **AUGUSTA COUNTY PUBLIC SCHOOLS** and **ALBEMARLE COUNTY PUBLIC SCHOOLS**, it was high school students who initiated and led the effort to go solar. Earlier this year, students, parents, and community members in Charlottesville and Albemarle County advocated for their school districts to increase adoption of clean energy and other climate protection measures. Students collected petition signatures and persuaded their school boards to pass resolutions that committed to further actions.

Parent and student advocates in Albemarle County Public Schools

> "I love environmental science, I love protecting the environment. I think it's really good we got solar panels."
>
> – Nora
>
> *4th grader in Charlottesville, Virginia*

[1] U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook*, last modified September 4, 2019, https://www.bls.gov/ooh/fastest-growing.htm.

Benefits of Solar Schools in Virginia

ENERGY SAVINGS

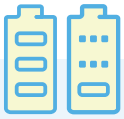
Schools can reduce and stabilize energy costs by switching to solar. Those savings can be reinvested back into student learning and enrichment opportunities. Middlesex County Public Schools expects to save $4.74 million over 25 years.

EDUCATIONAL OPPORTUNITIES

Access to solar technology provides **real-world learning opportunities in STEM areas.** Arlington County added outdoor learning labs at two schools for students to engage firsthand with solar technology. All of the 8th grade science teachers in Richmond Public Schools received training on solar energy lessons to use in the classroom.

LOCAL JOB CREATION

On-site solar installations support local employment and create vocational training opportunities. In 2018, there were 3,890 solar jobs in Virginia,[2] up 9% from the previous year and 31% higher than the number of coal jobs.[3]



COMMUNITY RESILIENCE

Particularly with rising sea levels and increasing storms in coastal Virginia, solar energy systems with on-site battery **storage can provide backup power for schools that serve as emergency shelters** after natural disasters or power outages.

HEALTHY PEOPLE AND PLANET

Switching to solar **reduces fossil fuel pollution and protects the health of people and the planet.** If all K-12 schools in the state installed an average-sized solar energy system, it would eliminate the greenhouse gas emissions of over 150,000 passenger vehicles.

ENERGY AWARENESS

Solar schools are models for staff, students, and their families to make clean energy choices at home. Solar installations **increase the likelihood of further solar adoption** in the same neighborhood.

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[2] The Solar Foundation, *Virginia Solar Jobs Census 2018*, www.thesolarfoundation.org/solar-jobs-census/factsheet-2018-va.
[3] Virginia Department of Mines, Minerals, and Energy, "Annual Production Data", www.dmme.virginia.gov/DMM/miningdata.shtml.

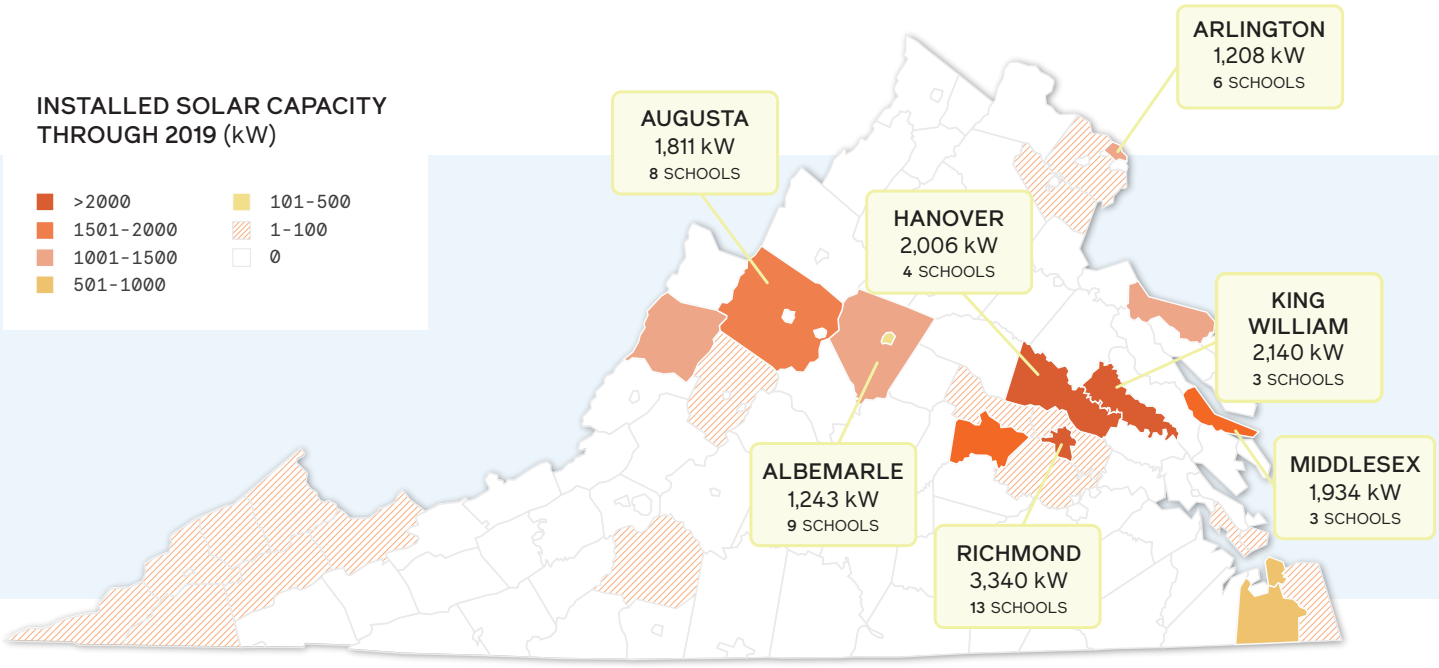
State of Solar Schools in Virginia 2019

Total Solar Capacity:
20,104 kW

Total Number of Schools with Solar:
86 SCHOOLS

3%
of Virginia K–12 Schools

Average Solar Capacity per School:
234 kW



TOP CITIES / COUNTIES *

for Solar Capacity

1. Richmond – 3,340 kW
2. King William County – 2,140 kW
3. Hanover County – 2,006 kW
4. Middlesex County – 1,934 kW
5. Augusta County – 1,811 kW
6. Powhatan County– 1,611 kW
7. Westmoreland County – 1,448 kW
8. Albemarle County – 1,243 kW
9. Arlington County – 1,208 kW
10. Bath County – 1,054 kW

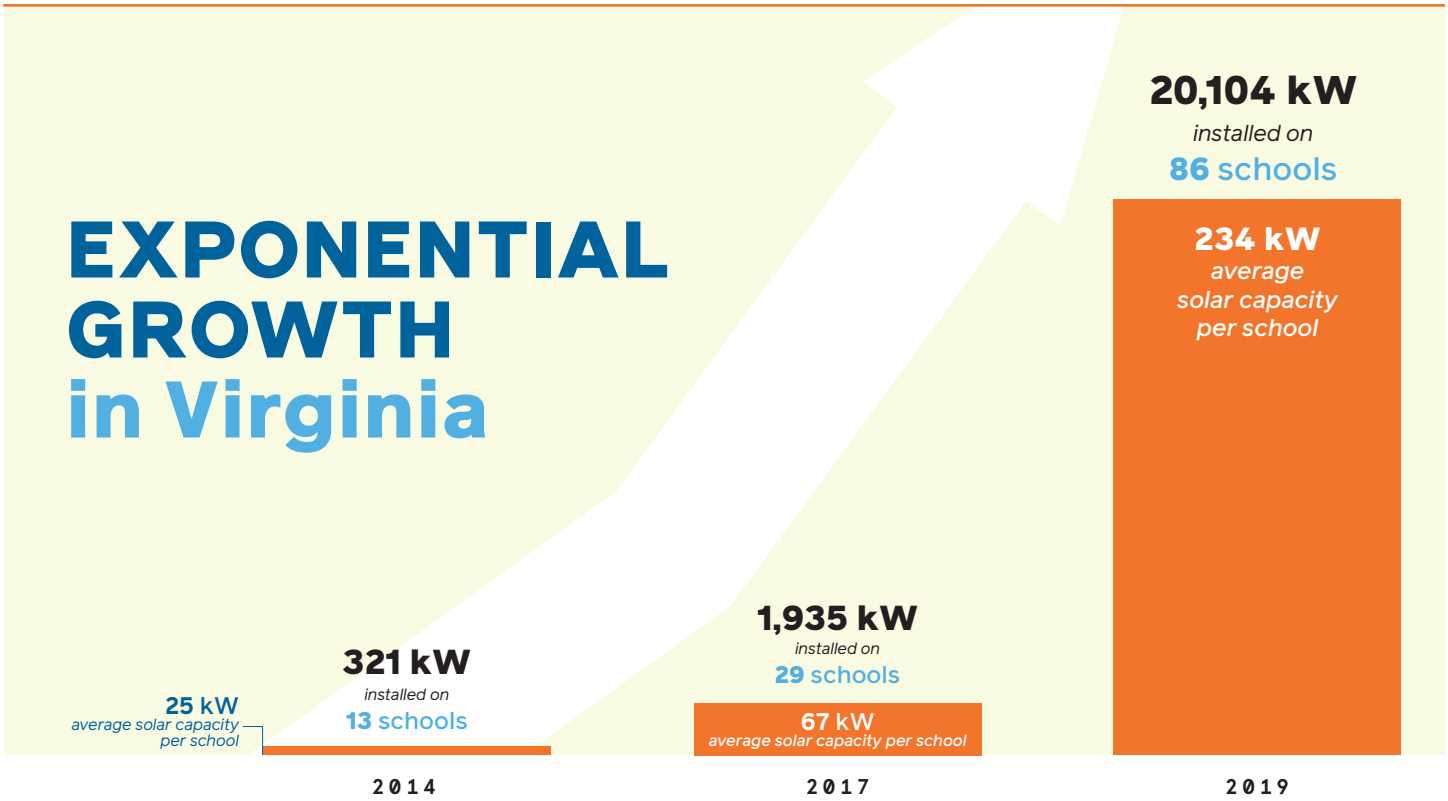
for Number of Solar Schools

1. Richmond – 13
2. Albemarle County – 9
3. Augusta County – 8
4. Arlington County – 6
5. Charlottesville – 5
6. Hanover County – 4
7. Powhatan County – 4

** Includes public and private schools*

Growth of Solar Schools in Virginia

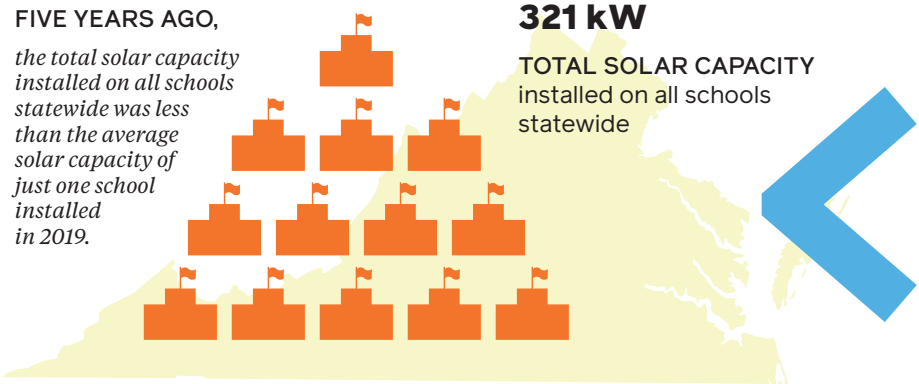
EXPONENTIAL GROWTH in Virginia



	Total Installed Solar Capacity	Total Number of Schools with Solar	Average Solar Capacity Per School
Over the past TWO YEARS	↑ 10x	↑ 3x	↑ 3.5x
Over the past FIVE YEARS	↑ 63x	↑ 7x	↑ 9.5x

FIVE YEARS AGO,

the total solar capacity installed on all schools statewide was less than the average solar capacity of just one school installed in 2019.



2014

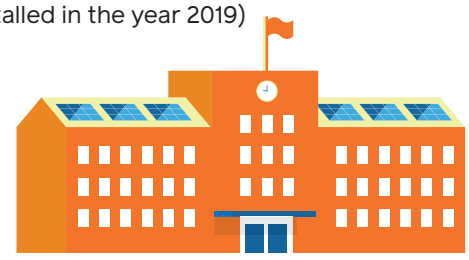
321 kW

TOTAL SOLAR CAPACITY installed on all schools statewide

2019

408 kW

AVERAGE SOLAR CAPACITY per school (for systems installed in the year 2019)



Access to Solar for All Virginia Schools

How do schools in Virginia afford to go solar?

Power purchase agreements (PPAs) are the primary method Virginia schools use to finance solar installations. Nationwide, PPAs account for nearly 90% of K-12 solar school installations since 2014.[4] Through a PPA, a third party purchases, owns, and maintains the solar panels, and the school or district agrees to buy the electricity produced by the system for the length of the agreement, often 25 or more years.

PPAs are popular with schools because they make it possible to install solar with little-to-no upfront investment or ongoing maintenance costs. In addition, the school or district typically pays a lower electricity rate than it previously paid the utility, resulting in immediate energy cost savings.

INSTALLED SOLAR CAPACITY ON VIRGINIA SCHOOLS *has grown*

10x

since 2017

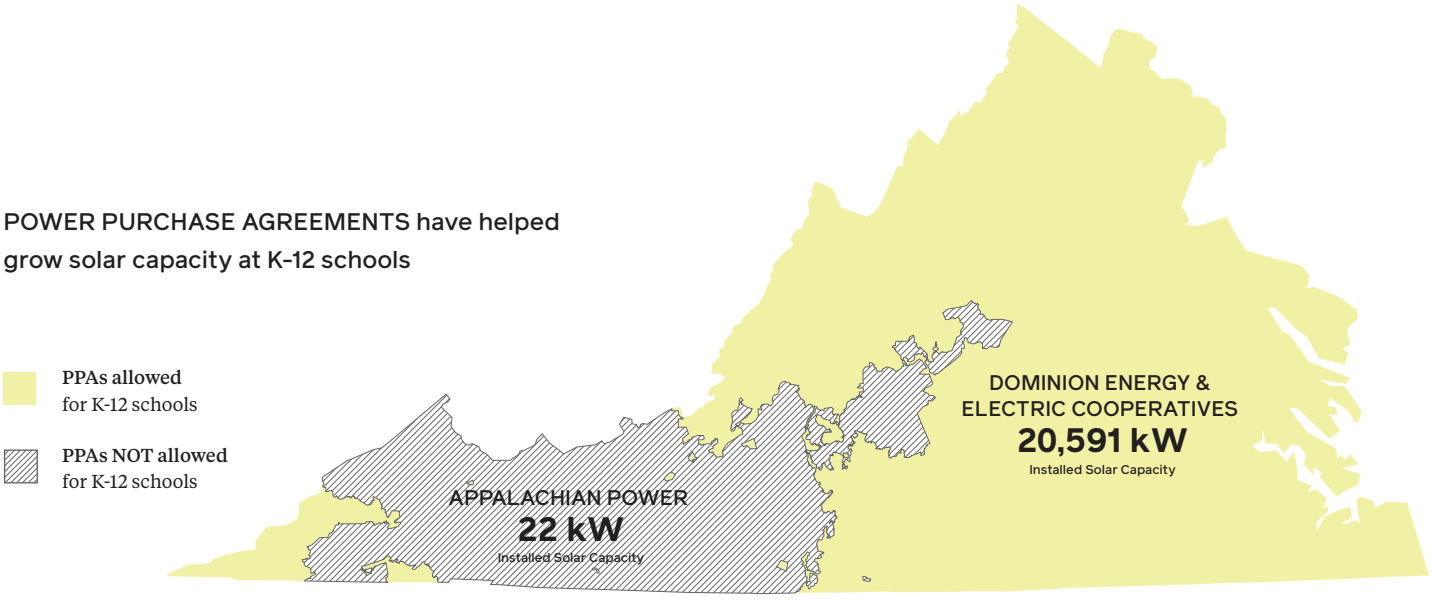
90%

of that growth was financed with POWER PURCHASE AGREEMENTS

Who has access to power purchase agreements?

In Virginia, a school's ability to participate in a PPA depends on its electric utility.

DOMINION ENERGY – The majority of solar schools in Virginia are customers of Dominion Energy. In 2013, VA Senate Bill 1023 established a pilot program with a 50 megawatt limit for renewable energy PPAs for nonresidential customers served by Dominion. As of November 2019, more than 80% of the pilot program's capacity (40.6 megawatts) had been filled and over 80% of those solar installations were for K-12 public schools. Once the limit is reached, no additional PPAs will be allowed in Dominion's service territory until the limit is raised or removed by new state legislation. The State Corporation Commission website (www.scc.virginia.gov/pur/pilot.aspx) lists the existing projects and the capacity remaining under the cap before the pilot program is fully subscribed.



[4] Generation180, Solar Energy Industries Association, and The Solar Foundation, *Brighter Future: A Study on Solar in U.S. Schools,* 2017, www.GoSolarSchools.org.

APPALACHIAN POWER – Public schools in Appalachian Power's service territory are denied the opportunity to use power purchase agreements to save on their electric bills. Because of that, only 22 kilowatts of solar capacity is installed on schools in its service area. Under House Bill 2390 of 2017, a renewable energy pilot program was established that allows only private, nonprofit higher education institutions to use PPAs in Appalachian Power's service territory. The pilot program has a cap of 7 megawatts and expires in 2022. **As of November 2019 there were no participants in the renewable energy pilot program.** The State Corporation Commission website (www.scc.virginia.gov/pur/pilot.aspx) maintains the current status of the pilot program.

ELECTRIC COOPERATIVES – Schools that get their electricity through an electric cooperative can now use PPAs. In March 2019, VA House Bill 2547 enabled PPAs for tax-exempt customers (including public and private schools) of the state's 13 electric cooperatives. While there is not a specific cap for PPAs, there are other capacity limits.

Public schools are denied the right to join Appalachian Power's Renewable Energy Pilot Program.

TAKE ACTION

to expand access to solar for all Virginia's schools

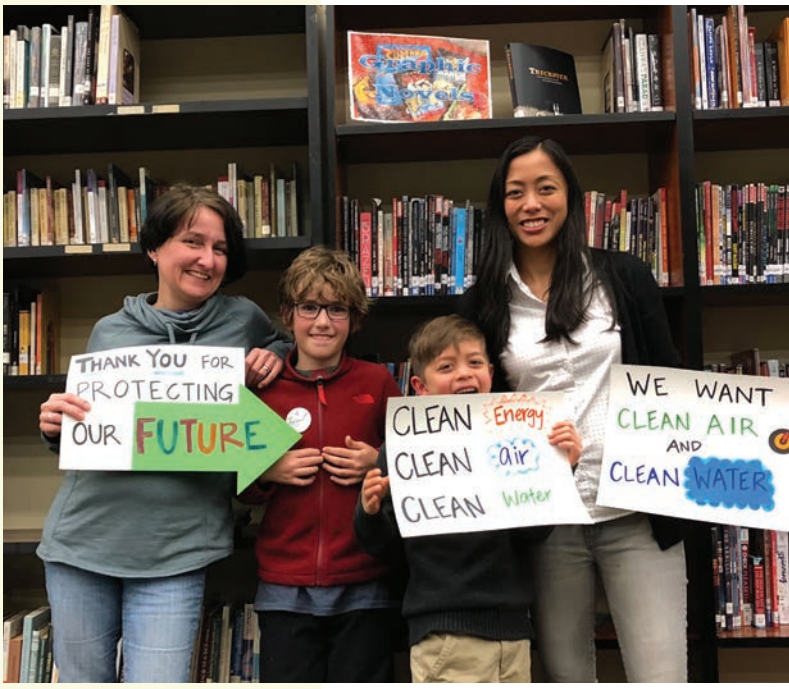
The number of schools in the Commonwealth that have gone solar tripled between 2017 and 2019. Virginia's solar schools are saving hundreds of thousands of dollars per year in electricity costs, creating real-world STEM learning experiences, and introducing students to the industry with the fastest-growing occupation in the country. Legislative changes are needed now to ensure all Virginia schools have access to these financial and educational benefits.

Parents, Students, Community members

Let your state legislators know that you don't want limits on your school's potential to use clean energy, save electricity costs, and enhance student learning opportunities. Email your state delegate and state senator about supporting solar policies that help all of Virginia's schools fairly access solar energy: visit GoSolarSchools.org.

School Districts

School districts can be powerful advocates for fair solar policies. Through the legislative agenda approved by the school board, districts can advocate for the removal of limits on cost-saving power purchase agreements and on how much of the grid capacity can be supplied by customer-generated clean energy. Customers of Appalachian Power should advocate for equal access to renewable energy PPAs that are enabling other schools in the Commonwealth to reduce their electricity bills and invest cost savings back into their students' education.



SUCCESS STORY

Middlesex County Public Schools

Photo Credit: Sun Tribe Solar

> "All of us are . . . trying to deal with budgetary challenges. This is just such a no-brainer"
>
> – Dr. Peter Gretz
>
> Superintendent, Middlesex County Public Schools, quoted in the *Washington Post* [5]

About the Solar Project

Solar Capacity: 1.93 MW

Structure:
3 ground-mounted PV arrays

Energy Offset:
First school district in Virginia to offset 100% of all schools' energy consumption

Financing:
Power purchase agreement to purchase energy from Sun Tribe Solar

Projected Savings:
$4.74 million over 25 years

Developer: Sun Tribe Solar

About Middlesex County Public Schools

Location:
Coastal region of Virginia (Middle Peninsula)

No. of Students: 1,220

No. of Schools: 3

Annual Budget (FY2018):
$16,006,935

Contact:
Greg Harrow, Director of Operations & Transportation, gharrow@mcps.k12.va.us

Solar Skeptic Turned Solar Champion

MIDDLESEX COUNTY is a conservative, rural community in coastal Virginia in which 41% of the students are economically disadvantaged. No other school district in the region had installed solar panels before Middlesex County Public Schools (MCPS) did.

Greg Harrow, Director of Operations & Transportation, has worked at MCPS for 21 years. He admits he's not big on change and is reluctant to take on projects that will create more work for his small facilities team. Prior to this project, he was skeptical of solar and thought it would be too expensive.[6] Greg was influenced by John Koontz, member of the county's Board of Supervisors and solar industry veteran, and their tour of solar installations at Albemarle County Public Schools. **He changed his mind after he realized the huge cost savings that his district would see.**

Greg recognizes that the district wouldn't have been able to go solar without a power purchase agreement (PPA), but at first his team was concerned that the arrangement sounded too good to be true. Under the PPA, the solar developer purchases, owns, and maintains the solar panels with no upfront investment from the district. The district agrees to buy the energy produced by the panels at a discounted rate for 25 years, which will result in **cumulative savings of $4.74 million.**

With 1.93 megawatts of solar photovoltaic panels installed on-site across its three schools, MCPS became the **first school district in Virginia to meet 100% of schools' electricity needs from solar energy.** Since the ground-mounted solar arrays were installed, the former solar skeptic has given dozens of tours to other school districts and brags about the energy savings and educational opportunities that the solar installation provides.

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[5] Debbie Truong, "Virginia schools have seen the light, and it's solar," *Washington Post*, March 24, 2019

[6] Southern Environmental Law Center, Broken Ground Podcast, Episode 4: Riding the Solarcoaster, brokengroundpodcast.org.

SUCCESS STORY

Richmond Public Schools

Photo Credit: Secure Futures Solar

"The big opportunity for us is that solar is a win, win, win—for our district's budget, our students' education, and our community's transition to clean energy."

- Liz Doerr

School Board Member, Richmond Public Schools

About the Solar Project

Solar Capacity: 2.91 MW
The largest school district solar installation in VA to date

Structure:
Rooftop PV arrays on 10 schools

Energy Offset:
25% of the electricity consumed at the 10 schools

Financing:
Power purchase agreement with Secure Futures Solar

Projected Savings:
$2 million over 20 years

Developer: Secure Futures Solar

Installer: Sun Tribe Solar

About Richmond Public Schools

Location: Central Virginia

No. of Students: 24,000

No. of Schools: 40

Annual Budget (FY2018):
$350 million

Contact:
Wendy Fewster,
Sustainability Coordinator,
wfewster@rvaschools.net

Solar Generates Learning Opportunities

WITH A TIGHT BUDGET AND AGING SCHOOL FACILITIES, Richmond Public Schools hadn't really considered going solar until the Community Foundation of Richmond announced its RVA Solar Fund. The fund awarded the district with a $100,000 grant and the opportunity to partner with Secure Futures Solar to install nearly 3 megawatts on 10 school buildings, which is Virginia's largest school district solar installation to date. Through a power purchase agreement (PPA), the district will save more than $2 million in energy costs over the next 20 years and will not incur any upfront capital costs or ongoing maintenance costs.

The fund created opportunities to maximize the educational impact of the solar project to students throughout the district. The grant funded the hire of a full-time sustainability coordinator to engage staff and students in using the solar technology. All 8th grade science teachers attended a professional development workshop by the National Energy Education Development Project to try out hands-on lessons about energy principles and solar power that can be used in their classes.

Real-time data generated by the solar installations enabled one high school class to participate in a collaborative research project with peers from Augusta County Public Schools, Secure Futures Solar, and the Science Museum of Virginia. The Throwing Solar Shade program has these young researchers using data from their schools' roofs to investigate the urban heat island effect and how shading from solar panels affects energy demand in their school buildings.

The solar installations are also being used to educate the surrounding community about clean energy. In October 2019, two of Richmond's new solar schools were featured in a national solar tour, allowing the school district to showcase its solar initiative to the public.

SUCCESS STORY

Norfolk Academy

Photo credit: Stephen M. Katz/Virginian-Pilot/TNS

> "I can't tell you how proud my son and I felt once we stood on the roof and saw what we had accomplished."
>
> - Ruth McElroy Amundsen
>
> NASA engineer and involved parent

Parents Lead the Charge to Donate $1 Million Solar Array

NORFOLK ACADEMY had considered going solar in the past but couldn't make the numbers work. Ruth McElroy Amundsen, a NASA engineer and involved parent, knew the campus's large, flat roofs were ripe for solar. So she got creative to help the school maximize this potential.

With other parents at Norfolk Academy, Ruth started a new company, Sun Dogs LLC, that could raise money for the solar project, offer tax benefits to investors, and eventually donate the solar panels to the school. **Sun Dogs raised $1 million to buy and install a 646 kilowatt photovoltaic system, the largest on any independent school in Virginia.** By leveraging the federal tax credit for solar and deductions for depreciation, partners in the company were able to recoup 60% of their investment in the first year and the rest within seven years. Instead of gifting money directly to the school to buy the solar panels, investing the funds through Sun Dogs enables the parents to donate solar panels to the school AND get all their money back.

Through a power purchase agreement with Sun Dogs, the school buys the energy produced by the solar installation for seven years at the same rate it had been paying the local utility. Once the investment is fully repaid, **the panels will be donated to the school so it can realize more than $80,000 annually in savings.** In addition to lower energy bills, **the school is reducing its carbon emissions by over 30% and generating enough clean energy on-site to power the James B. Massey Jr. Leadership Center.**

The project has had a positive impact on students, staff, and the community. Three kiosks on campus provide real-time data on the solar production and enable teachers to integrate the technology into their classrooms. The 6th grade class uses a few portable solar panels to measure and analyze how different weather conditions, times of day, and seasons affect productivity. Inspired by the benefits gained by the school, some of the teachers have installed solar on their homes.

To help others in her area reap the benefits of solar, Ruth founded the **Norfolk Qualified Opportunity Zone Fund** (www.NorfolkSolar.org), which enables businesses and nonprofits in economically distressed communities to benefit from free solar panels at no upfront cost.

About the Solar Project

Solar Capacity:
646 kW from 1,989 PV panels

Structure:
Rooftop PV arrays on 3 buildings

Energy Offset:
Powers the James B. Massey Jr. Leadership Center

Financing:
$1 million invested by parent-owned Sun Dogs, LLC

Projected Savings:
Over $80,000 annually after 7 years

Developer: Convert Solar

About Norfolk Academy

Location:
Southeast VA (Hampton Roads)

No. of Students: 1,200

Grades: 1-12

Contact:
Ruth McElroy Amundsen, Sun Dogs, LLC, rma@cox.net

Conclusion

Solar schools have gained incredible momentum in Virginia. Just five years ago, the total solar capacity installed on all schools statewide was less than the average capacity of just one school's solar energy system installed in 2019. We have come a long way in a short while, and now is the time for the rest of Virginia's 2,000-plus schools to make the switch to clean, local energy.

The state of Virginia is already moving toward a 100% clean energy future. Governor Northam recently announced a statewide goal of producing at least 30% of Virginia's electricity from renewable sources by 2030 and 100% of its electricity from carbon-free sources by 2050. A wave of localities is leading the way—including Albemarle County, Arlington County, Blacksburg, Charlottesville, Fairfax County and Floyd County—by setting aggressive goals toward carbon neutrality.

Virginia's schools have an important role to play in reaching both local and statewide goals. Our schools not only have the potential to make an impactful contribution to our transition to 100% clean energy, but they will also play a leadership role in inspiring and galvanizing their communities to join in.

Let's get to work on sharing the benefits of solar for all schools in the Commonwealth.

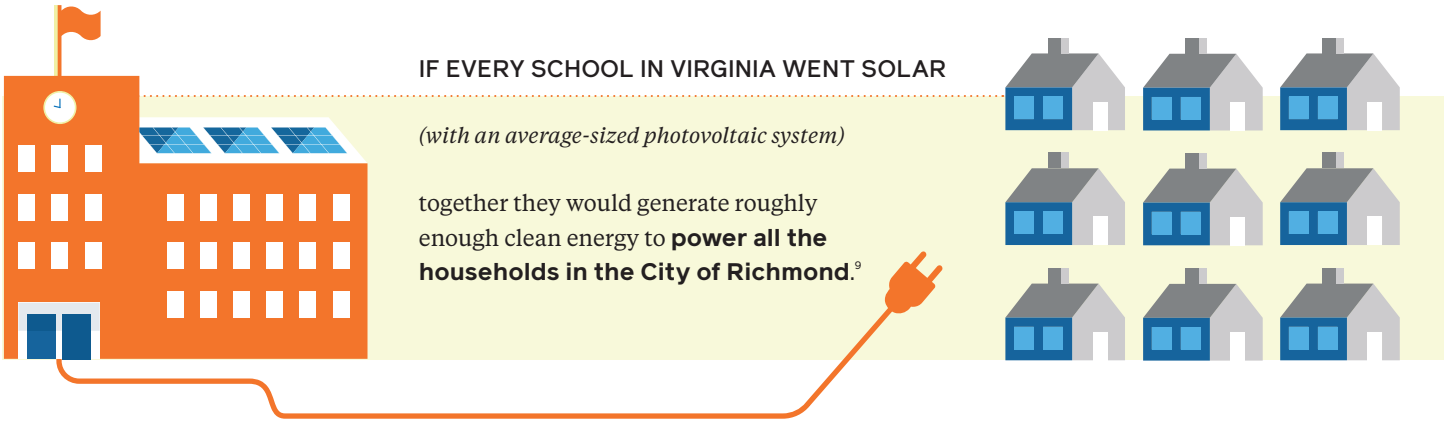
Together, we can do this.

IMAGINE IF ALL VIRGINIA SCHOOLS WERE COMPLETELY POWERED BY SOLAR ENERGY:

Our school districts could have **millions more dollars** from long-term energy savings to invest in our teachers and students.

Nearly 1.3 million students in the state[7] would have **access to authentic STEM learning** and career and technical education (CTE) opportunities.

We would all **breathe cleaner air and avoid greenhouse gas emissions** equivalent to removing more than 175,000 passenger vehicles from the roads each year.[8]



IF EVERY SCHOOL IN VIRGINIA WENT SOLAR

(with an average-sized photovoltaic system)

together they would generate roughly enough clean energy to **power all the households in the City of Richmond**.[9]

[7] Virginia Department of Education, Enrollment & Demographics, Fall Membership Reports, http://www.doe.virginia.gov/statistics_reports/enrollment/index.shtml.
[8] U.S. Energy Information Administration (EIA), "Table C10. Energy Consumption Estimates by End-Use Sector, Ranked by State, 2017," in *State Energy Data 2017: Consumption*, https://www.eia.gov/state/seds/sep_sum/html/pdf/rank_use.pdf; EIA, "Table PBA3. Sum of Major Fuel Consumption Totals and Gross Energy Intensities by Building Activity Subcategories, 2012," in *Commercial Buildings Energy Consumption Survey (CBECS)*, December 2016, https://www.eia.gov/consumption/commercial/data/2012/c&e/cfm/pba3.php; EIA, "U.S. Energy-Related Carbon Dioxide Emissions, 2018," https://www.eia.gov/environment/emissions/carbon; U.S. Environmental Protection Agency, Greenhouse Gas Equivalencies Calculator, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.
[9] U.S. Census Bureau, Quick Facts, https://www.census.gov/quickfacts; Solar Energy Industries Association, "What is in a Megawatt?," https://www.seia.org/initiatives/whats-megawatt; U.S. Department of Energy, "A Consumer's Guide: Get Your Power From the Sun," https://www.nrel.gov/docs/fy04osti/35297.pdf.

APPENDIX

Virginia Solar Schools 2019

School District	School Name	Installed Solar Capacity (kW)	Year Installed
Albemarle County Public Schools	Albemarle High School	124	2016
Albemarle County Public Schools	Baker-Butler Elementary School	224	2016
Albemarle County Public Schools	Brownsville Elementary School	183	2016
Albemarle County Public Schools	Crozet Elementary School	183	2016
Albemarle County Public Schools	Joseph T. Henley Middle School	42	2012
Albemarle County Public Schools	Mary Carr Greer Elementary School	75	2016
Albemarle County Public Schools	Monticello High School	267	2016
Albemarle County Public Schools	Mortimer Y. Sutherland Middle School	279	2016
Albemarle County Public Schools, Charlottesville City Schools	Charlottesville-Albemarle Technical Education Center	1	2017
Arlington County Public Schools	Alice West Fleet Elementary School	582	2019
Arlington County Public Schools	Discovery Elementary School	497	2015
Arlington County Public Schools	Glebe Elementary School	1	2011
Arlington County Public Schools	Kenmore Middle School	1	2017
Arlington County Public Schools	Tuckahoe Elementary School - Arlington	37	2019
Arlington County Public Schools	Wakefield High School	89	2014
Augusta County Public Schools	Cassell Elementary School	189	2018
Augusta County Public Schools	Edward G. Clymore Elementary School	460	2018
Augusta County Public Schools	Fort Defiance High School	119	2018
Augusta County Public Schools	Riverheads Elementary School	294	2019
Augusta County Public Schools	Riverheads High School	109	2019
Augusta County Public Schools	Wilson Elementary School	352	2019
Augusta County Public Schools	Wilson Middle School	288	2019
Augusta County Public Schools, Staunton City Schools, Waynesboro Public Schools	Shenandoah Valley Governor's School	1	2016
Bath County Public Schools	Bath County High School	252	2017
Bath County Public Schools	Millboro Elementary School	180	2017
Bath County Public Schools	Valley Elementary School	622	2017
Buchanan County Public Schools	Grundy High School	1	2018
Charlottesville City Schools	Charlottesville High School	100	2012
Charlottesville City Schools	Lugo-Mcginness Academy	9	2014
Chesapeake Public Schools	Western Branch High School	800	2016
Chesterfield County Public Schools	James River High School	1	2011
Colonial Heights Public Schools, Dinwiddie County Public Schools, Hopewell City Public Schools, King William County Public Schools, Petersburg City Public Schools, Prince George County Public Schools	MathScience Innovation Center	1	2017
Dickenson County Public Schools	Ridgeview High School	1	2018
Fairfax County Public Schools	Carson Middle School	3	2011
Fairfax County Public Schools	Thomas Jefferson High School	4	2009
Fauquier County Public Schools	Kettle Run High School	1	2016
Franklin County Public Schools	Gereau Center For Applied Technology & Career Exploration	16	2011
Goochland County Public Schools	Goochland High School	1	2016
Hampton City Schools	Hampton High School	1	2017
Hanover County Public Schools	Cool Spring Elementary School	288	2019
Hanover County Public Schools	Hanover High School	600	2019
Hanover County Public Schools	Laurel Meadow Elementary School	325	2019

Virginia Solar Schools 2019 [continued]

School District	School Name	Installed Solar Capacity (kW)	Year Installed
Independent School in Albemarle County	Peabody School	100	2019
Independent School in Charlottesville City	Charlottesville Day School	23	2019
Independent School in Charlottesville City	St. Anne's-Belfield School	331	2018
Independent School in Charlottesville City	Village School	2	2010
Independent School in Henrico County	Collegiate School - Mooreland Campus	30	2018
Independent School in Henrico County	Collegiate School - Robins Campus	68	2018
Independent School in Norfolk City	Norfolk Academy	660	2018
Independent School in Richmond City	St. Catherine's School	50	2013
Independent School in Richmond City	Trinity Episcopal School	379	2018
King William County Public Schools	Acquinton Elementary School	858	2019
King William County Public Schools	Cool Spring Primary School	684	2019
King William County Public Schools	Hamilton Holmes Middle School	598	2019
Lee County Public Schools	Lee County Career & Technical Center	1	2018
Lexington City Schools	Lylburn Downing Middle School	84	2017
Middlesex County Public Schools	Middlesex Elementary School	466	2018
Middlesex County Public Schools	St. Clare Walker Middle School	617	2019
Middlesex Countyy Public Schools	Middlesex High School	850	2019
Newport News City Public Schools	Deer Park Elementary School	1	2017
Norton City Public Schools	John I. Burton High School	1	2018
Powhatan County Public Schools	Flat Rock Elementary School	325	2019
Powhatan County Public Schools	Pocahontas Elementary School	375	2019
Powhatan County Public Schools	Powhatan Elementary School	424	2019
Powhatan County Public Schools	Powhatan Middle School	488	2019
Prince William County Schools	T. Clay Wood Elementary School	1	2018
Richmond Public Schools	Blackwell Elementary School	200	2019
Richmond Public Schools	Broad Rock Elementary School	194	2019
Richmond Public Schools	G.H. Reid Elementary School	187	2019
Richmond Public Schools	Huguenot High School	665	2019
Richmond Public Schools	J.B. Fisher Elementary School	131	2019
Richmond Public Schools	Linwood Holton Elementary School	166	2019
Richmond Public Schools	Lucille M. Brown Middle School	450	2019
Richmond Public Schools	Martin Luther King Jr. Middle School	585	2019
Richmond Public Schools	Mary Munford Elementary School	1	2009
Richmond Public Schools	Miles Jones Elementary School	152	2019
Richmond Public Schools	Oak Grove-Bellemeade Elementary School	180	2019
Russell County Public Schools	Honaker Elementary School	1	2018
Scott County Public Schools	Duffield-Pattonsville Primary School	9	2001
Scott County Public Schools	Twin Springs High School	1	2018
Tazewell County Public Schools	Tazewell High School	1	2018
Virginia Beach City Public Schools	Landstown High School	1	2016
Westmoreland County Public Schools	Cople Elementary School	788	2019
Westmoreland County Public Schools	Washington District Elementary School	660	2019
Wise County Public Schools	Union Primary School	1	2018