

Issue: Environment



Virginia Takes Bold Steps on Environment

Ninety years ago, Thomas Edison said, “I’d put my money on the sun and solar energy. What a source of power! I hope we don’t have to wait until oil and coal run out before we tackle that.” By the time he died, he had invented a wind powered electricity plant and battery powered vehicles. “I wish I had more years,” he said.²

Virginians Want Action on Global Warming

Hurricanes, flooding and extreme heat are worrying Virginians and many are increasingly making the connection between these weather events and global warming.³ Moreover, every year, a growing majority of Virginians feel their elected officials should be doing more to respond to environmental problems, and they express strong support for renewable energy, taxing fossil fuels, regulating carbon pollution, and providing tax incentives for solar panels and energy efficient vehicles.⁴

Virginia’s Voters Create an Opportunity for Change

Despite Virginians' support for environmental action, it wasn't until 2020 when Democrats had majorities in both the House and the Senate that legislation could be passed and change could begin. Prior to 2020, when Republicans controlled the legislature, not a single piece of significant environmental legislation was enacted.⁵ Even recently, in 2020 and 2021, every Republican in the General Assembly received an F from the Sierra Club on their environmental and environmental justice voting record.⁶

Environmental Legislation

This paper describes the most significant environmental bills passed in the last two years, shown with their familiar names. Less comprehensive, yet still important bills, are also included.

The Virginia Clean Economy Act

The Virginia Clean Economy Act (2020 HB1526, SB851) is a comprehensive reset of energy policy within Virginia.⁷ The bill mandates the following:

- Utility companies are required to steadily transition 100% of the state’s electricity generation from fossil fuels to clean energy sources, primarily solar and wind, and to reach zero carbon emissions by 2045 for Dominion Energy and 2050 for Appalachian Power.⁸
- The bill offers a framework for energy efficiency programs to allow homes and businesses to reduce energy waste and lower utility bills. Traditionally underprivileged communities will receive home weatherization assistance.⁹

- Solar net-metering is expanded which will encourage more rooftop and shared solar development. Utilities must build or buy 3,100 megawatts of energy storage capacity, which makes Virginia only the seventh state to have battery storage targets.¹⁰
- Off-shore wind targets of 5,200 megawatts put Virginia third in the country for wind energy goals.¹¹ Dominion Energy Virginia must hire wind energy employees from disadvantaged communities when possible and provide job training and apprenticeships.¹²

This bill was developed with input from a broad coalition of legislators, businesses and environmental groups. Virginia's largest utilities, Dominion Energy Virginia and Appalachian Power, will be given roughly 65% of the solar, wind and storage facility construction, while 35% will be reserved for non-utility companies and newer entrants to the market.¹³

Growth from the Virginia Clean Economy Act – 29,000 Jobs and over \$4 billion to the Economy

In 2019, the latest data available, there were over 100,000 Virginians employed in clean energy and energy efficiency which is double the number of those working in real estate and greater than the number of restaurant employees.¹⁴ In 2019, there were 54,000 people employed in traditional energy jobs (construction, generation, distribution) including just over 3,000 in coal.¹⁵ Moving forward, the Virginia Clean Economy Act is expected to create more than 29,000 directly related new jobs just in solar alone and add \$4 billion to the economy with even greater indirect contributions, including state and local income taxes.¹⁶

In a June 4, 2021 Public News Service article titled “*A Year After Clean Economy Act, VA Sees Renewable Jobs Expand*,” Shawn Avery of the Hampton Roads Workforce Council spoke of the easy transferability of welding and electrician skills from coal and manufacturing jobs to offshore wind. He also said younger people hoping to make a difference wanted these jobs. Karen Jackson, interim executive director of the New College Institute, spoke to the breadth of skills—from data science, marine biology and engineering, to safety tech and accounting—that her organization is training for wind energy related jobs.¹⁷

Subsequent Developments to the Clean Economy Act

The Clean Economy Act was intended to jumpstart a clean energy transition and break open energy markets to new participants. Since enactment, concerns that the pace of progress is not sufficient to meet the bill's economic and employment goals and that existing processes do not ensure cost effectiveness have led industry and Democratic representatives to press for new accelerated interim targets and ways to streamline opening markets.^{18,19}

Currently, Terry McAuliffe's gubernatorial campaign includes a plan to move the Clean Economy Act deadline for 100% carbon free energy forward to 2035. Republican nominee Glenn Youngkin opposes developing a renewable energy economy and wants to turn away from these important bills.²⁰

Clean Energy and Community Flood Preparedness Act - Virginia Joins Regional Greenhouse Gas Initiative (RGGI)

This bill (2020 HB981, SB1027) establishes Virginia's carbon cap-and-trade program that will help enable the state to meet the carbon reduction goals set by the 2020 Clean Economy Act. Additionally, this bill directs program revenues to fund flood prevention, recovery, and coastline resiliency.²¹

The Regional Greenhouse Gas Initiative (RGGI) is the cap-and-trade program that reduces emissions in the electric power production sector in 10 New England and Mid-Atlantic states and now Virginia, the first Southern State. Under this arrangement:

- Power plants buy or trade allowances to offset their carbon dioxide emissions. This market-based model leads participants to make the most cost-effective energy efficiency changes in order to meet the declining regional annual carbon caps.
- Revenues are passed on to each respective state. Virginia anticipates bringing in over \$100 million annually for the next six years, with 45% to be spent on community flood preparedness and 50% to support energy efficiency programs, which will in turn reduce resident's utility bills.²² Prior to Virginia joining the RGGI, the participating states netted economic benefits of \$4.7 billion and have collectively reduced their emissions by 48% from the 2006-2008 base period to the 2016-2018 period with an expected additional 30% reduction by 2030.²³

While 73% of Virginians want their government to support the Virginia Clean Economy Act, the votes for this and the Clean Energy and Community Flood Preparedness Act received support almost exclusively from Democratic representatives.^{24, 25} The 2019 state budget created under Republican leadership prohibited Virginia's participation in the RGGI.²⁶ If we want continued progress in reducing pollution and creating a new clean energy economy, voters must know that Republican representatives continue to strongly oppose environmental legislation.

Republican representatives are talking about reversing both the clean economy related laws if elected. Virginia's largest utilities have already taken significant steps in planning new infrastructure to comply with these laws. These efforts would be derailed with any kind of political change.^{27,28}

Virginia Passes Clean Car Standards (2021 HB1965)

Transportation is Virginia's largest source of greenhouse gases. The Clean Car Standards bill (2021 HB1965) requires manufacturers to make and deliver more electric vehicles (EVs) to Virginia and sets low emission limits on all other vehicles sold. This bill will deliver health, environmental, and economic benefits to the state.

This bill was endorsed by the Virginia Automobile Dealer's Association and actively promoted by a number of Virginia businesses that have committed publicly to sustainability goals including electrification of their vehicle fleets.²⁹ Other large companies including Amazon, Hertz, Lyft, and Uber have aggregated their corporate influence to promote more efficient vehicles and electrification through the Corporate Electric Vehicle Alliance.³⁰

Virginia's adoption rate of buying EVs is less than 2%, but this is poised to change as one of the barriers potential EV buyers face is the lack of inventory available at car dealerships.^{31, 32} Automakers prioritize sales of EVs to states with emission standards in place so, for instance, Maryland, with already enacted clean car standards, has twice the inventory as Virginia. This legislation, which goes into effect in 2025, will solve the supply issue, but there is still a need for buyer incentives such as rebates and additional EV charging infrastructure throughout the state.³³

Over half of Virginians will consider buying electric for their next vehicle purchase with almost three-quarters supporting state-sponsored EV incentives.³⁴ Going electric will bring buyers cost savings and generate health benefits for everyone. This legislation will ensure that there will be choices for them to fulfill their goals.³⁵

Even with this corporate and citizen support, the vote for Virginia's Clean Car Standards did not get a single Republican lawmaker's vote.^{36,37}

One Objection to Progress is Cost. What is the Cost of Inaction?

Those opposed to environmental action often cite cost as the problem. Many environmentalists and ordinary citizens ask, "What is the cost of inaction?"

The University of Virginia's Weldon Cooper Center for Economic Policies developed a series of viable plans to reach decarbonization by 2050. These show that not only are goals achievable if done effectively and without delay, but the savings from health benefits and slowed warming would exceed the costs.³⁸

Optimism is in order if Virginia can build on the progress made in these past two years. Governor Northam says, "I've seen over and over how a clean environment goes hand in hand with a strong economy."³⁹

Other Environmental Bills Passed

Transportation bills passed include:

- A Rebate Program for electric vehicles of \$2,500, or \$4,500 for lower income households. The rebate begins January 2022, but funding was not provided. This vote was 100% partisan, but there was pushback on methods of funding from both parties.^{40,41} (2021 HB1979)
- An analysis of charging infrastructure for electric vehicles was added to the Virginia Energy Plan. This bill was almost completely partisan.⁴² (2021 SB1223)
- A school bus electrification program was established but not yet funded. This bill was largely partisan.⁴³ (2021 HB2118)
- A Transit Equity and Modernization Resolution approved a study on opportunities to develop more public transport, particularly in underserved communities.⁴⁴ All Democrats and about half of Republicans voted for this bill.⁴⁵ (2021 Special Session HJR542)
- A Transportation Funding bill established the Virginia Passenger Rail Authority (VPRA) which oversees the statewide buildout of public rail transport. This vote was partisan.⁴⁶ The VPRA manages Governor Northam's \$3.7B Transforming Rail in Virginia initiative, a regional commuter and intercity rail system that will carry 9 million passenger trips annually thus reducing road traffic congestion and pollution.^{47,48} (2020 HB1414)
- The State Corporate Commission must propose ways to accelerate transportation electrification such as finding how public efforts might complement private projects, and how to better accommodate charging infrastructure. This bill limits how utilities may recover costs.⁴⁹ This bill was bipartisan in the Senate, earning about half of Republican House votes.⁵⁰ (2021 HB2282)

Bills passed regarding fossil fuels will achieve the following:

- The sunset of coal tax credits, effective January 2022.⁵¹ The vote was mostly partisan. The Senate rejected Governor Northam's wish to direct funds saved towards uses in Southwest Virginia with six Democrats joining the no vote.⁵² (2021 HB1899, SB1252)

- Strengthens the scope of the Department of Environmental Quality's authorization to inspect and issue stop orders on pipeline construction. The vote was partisan in the House, bipartisan in the Senate.⁵³ (2021 SB1265)
- Requires pipeline projects to submit erosion and sediment studies prior to permitting. The vote was largely partisan.⁵⁴ (2021 SB1311)

Local Jurisdiction and Financing

- Local governments may establish a green bank to fund clean energy projects. The vote was partisan in the House, unanimous in the Senate.⁵⁵ (2021 HB1919)

Energy Efficiency Bills

- Public procurement decisions must include a preference for water and energy efficiency. The vote was partisan in the House and somewhat partisan in the Senate.⁵⁶ (2021 HB1811)
- Loans, known as C-Pace, for commercial property owners financing clean energy and stormwater projects, were expanded but also changed to exclude smaller residential projects.⁵⁷ The vote was mostly partisan.⁵⁸ (2021 HB1859)
- New state and local government buildings must develop sufficient electric vehicle chargers.⁵⁹ This vote was partisan.⁶⁰ (2021 HB2001)
- The Board of Housing and Community Development must consider amending the Uniform Statewide Building Codes to reflect changes in International Energy Conservation Code. This vote was 100% partisan.^{61,62} (2021 HB2227)

Clean Air Bills

- The Department of Environmental Quality must conduct a greenhouse gas inventory every four years. This vote was almost completely partisan.⁶³ (2021 SB1282)
- A Carbon Sequestration Task Force was established to study possible ways to increase sequestration in the natural environment. This vote was largely bipartisan with only 20 Republican house members voting against.^{64,65} (2021 SB1374)

Summary

Virginia has leapt into an environmental leadership position in the south and in the nation. It is an important first step.

To protect our forests and farmlands, our lakes, rivers and coastlines, it will take cooperation from all people, lawmakers from both parties, and every county in the state. It is in everyone's interests to push forward, but until more Virginia Republican legislators acknowledge the need to decarbonize, move to cleaner transportation, pursue energy efficiency, and protect our natural resources, it will be important to let voters know what is at stake.

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² <https://quoteinvestigator.com/2015/08/09/solar/>

³ <https://m.facebook.com/YaleProgramOnClimateChangeCommunication/> (scroll to May 17 entry)

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- ⁴ <https://climatecommunication.yale.edu/visualizations-data/ycom-us/>
- ⁵ <https://www.virginiamercury.com/2021/03/03/democrats-controlled-virginia-government-for-two-years-heres-what-they-did/>
- ⁶ https://vasierra.club/Scorecard_2021.pdf
- ⁷ <https://lis.virginia.gov/cgi-bin/legp604.exe?201+sum+hb1526&201+sum+hb1526>
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- ¹¹ Ibid
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<https://www.vpap.org/bills/68525/HB981/close-votes/>
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