Climate Framework and Laws In September 2019, Governor Northam signed Executive Order 43 (EO 43), which includes the goal that by 2030, 30% of Virginia's electric system will be powered by renewable energy resources; by 2050, 100% of Virginia's electricity will be produced from carbon-free sources such as wind, solar and nuclear. In April 2019, Virginia’s Air Pollution Control Board approved a regulation to decrease and limit CO₂ emissions from power plants 30% by 2030, with an initial cap of 28 million tons of CO₂. This regulation would have allowed Virginia to link with the Regional Greenhouse Gas Initiative. The General Assembly inserted a budget item to halt work on this rule. However, the state hopes the rule will be implemented next year and is currently exploring other mechanisms to reduce carbon emissions. A 2018 executive order established the Governor’s Conservation Cabinet, which will deliver a report in 2019 detailing agency collaboration on conservation issues. In January 2019, Governor Northam issued an executive order establishing the Virginia Council on Environmental Justice, which will provide recommendations for including environmental justice considerations throughout decision-making processes.

Power Generation Virginia has seen a dramatic increase in its solar capacity, with overall generation increasing from 17 megawatts (MW) in 2014 to more than 350 MW in 2019. Much of this increase is due to the success of the Permit By Rule program run by the Department of Environmental Quality (DEQ). Since 2015, DEQ has permitted over 1,000 MW of solar with notices of intent for an additional 3,429 MW from
planned installations. Governor Northam signed the Grid Transformation and Security Act in March 2018 to overhaul Virginia’s energy regulatory landscape and set the framework for a large influx of renewable energy deployment. The legislation enables Virginia’s electric utilities to modernize the grid, emphasizing investment in clean energy technology. This will allow for more growth by increasing the amount of utility-scale solar from 500 MW to 5,000 MW over ten years, with 3,000 MW coming in the first four years. EO 43 requires Virginia to procure 30% of its own electricity from renewable resources by 2022 and to also procure at least 10 MW of distributed solar at state facilities annually. In July 2019, Governor Northam helped break ground for the Coastal Virginia Offshore Wind demonstration project, consisting of two 6 MW wind turbines located about approximately 27 miles off the coast of Virginia Beach. The first offshore wind project to be installed in federal waters, this is a first step toward the development of commercial-scale offshore wind off the coast of Virginia, including 2,000 to 2,400 MW of potential generation in a larger wind energy area adjacent to the CVOW project.

**Energy Efficiency** Virginia has a statewide goal to reduce retail electricity consumption 10% by 2022 using a 2006 baseline. The Grid Transformation and Security Act will require Virginia electric utilities to invest $1 billion in energy efficiency projects over the next decade. EO 43 requires the development of a Resource Conservation Management Plan to meet the state’s portion of the goal and requires all state agencies to use energy performance contracting to reduce energy consumption. To date, energy performance contracting efforts have reduced nearly 43 million kWh of electricity and avoided 31,219 metric tons of CO₂ emissions annually.

**Transportation** Virginia is leveraging Volkswagen Settlement funding to make catalytic investments in transportation electrification and has so far allocated nearly $48 million from this funding toward electric vehicles (EVs). In 2018, Virginia announced a $14 million contract to begin building a statewide EV charging network of high-powered direct current fast chargers. In June 2019, Governor Northam announced that more than $12 million in state funding will be allocated to deploy electric transit buses in three Virginia localities, using nearly $9 million of a $14 million allocation from the VW Settlement funding. This September, the Governor launched a $20 million clean school bus program to fund the deployment of electric school buses across the Commonwealth. Virginia allows localities in air quality non-attainment areas to use federal Congestion Mitigation and Air Quality Improvement (CMAQ) funds. Through 2020, $9 million in CMAQ funding will be made available for state and local use to cover the incremental costs of purchasing or converting a vehicle to alternative fuels. Virginia is also a member of the regional Transportation and Climate Initiative that is working to develop emission reduction strategies for the transportation sector, including through market-based mechanisms like cap-and-invest.

**Short Lived Climate Pollutants** At the direction of Governor Northam, Virginia is considering methods for limiting methane leakage from natural gas infrastructure. As of June 2019, the Virginia DEQ has held two working group meetings to develop an appropriate regulatory framework and evaluate data to inform the regulation.

**Climate Finance** The Commonwealth’s first statewide Green Community Program is funded through the reauthorization of Qualified Energy Conservation Bonds. VirginiaSAVES has provided nearly $65 million in financing support for energy efficiency projects since September 2015. The projects funded will reduce over 18 million kWh of electricity, 22 million gallons of water, and 18,675 tons of CO₂ each year.

**Resilience** In November 2018, Governor Northam issued an executive order to increase Virginia’s resilience to sea level rise and natural hazards. The EO directs the administration to designate a Chief Resilience Officer, assess vulnerability of state-owned buildings, and develop a Coastal Resilience Master Plan, among other resilience-related actions. The EO also calls for improved coordination and risk communication.

**Natural and Working Lands** Governor Northam recently revealed his core land conservation initiative, which will use data and mapping tools to identify high-value lands for conservation purposes. The initiative aims to align conservation goals with the achievement of broader targets, including climate change and resiliency. In April 2019, Virginia launched a data-driven land conservation tool called ConserveVirginia, which maps high-value lands and conservation areas to help prioritize and inform projects.