

This memo was delivered by AEE to both Va. Gubernatorial campaigns, Republican nominee Ed Gillespie and Democratic nominee Lt. Gov. Northam on Thursday afternoon, June 22, 2017.

Advanced Energy Roadmap for Virginia

How the Next Governor Can Make Virginia's Energy System More Secure, Clean, and Affordable—and Drive Economic Development

Our energy system is going through a transformational change. Evolving consumer preferences, dynamic new technologies, and aging infrastructure are causing the energy system as we have known it to modernize. And with this change, comes opportunity. In addition to supporting over 80,000 jobs in Virginia and 3.3 million jobs across the United States, the advanced energy industry is poised to provide the technology and know-how to bring in a new era of secure, clean, and affordable energy.

The next Governor has an opportunity to harness the economic power of the advanced energy industry to transform the Virginia economy. As a business association representing a wide variety of energy technologies as well as major corporate energy buyers, Advanced Energy Economy (AEE) has identified four key priorities as well as specific executive actions and legislative goals that will allow the next Governor to pursue an economic development agenda that takes full advantage of the potential of advanced energy.

Four Priorities to Grow Virginia's Advanced Energy Industry

ALLOWING COMPETITIVE PROCUREMENT TO ATTRACT INVESTMENT AND BENEFIT CONSUMERS

A dynamic and competitive procurement process for energy resources can attract private business investment in Virginia and can benefit consumers by bringing the most innovative, affordable, and reliable energy options to the state. Virginia energy policy should continue to allow for third-party market alternatives to receive consideration in utility resource planning, and Virginia consumers should be given more access to third-party advanced energy market options. While current Virginia law allows this in statute, more could be done to attract investment and benefit consumers. Ultimately, consumers win when third-party alternatives can compete because consumers choose the services they want and competition ultimately reduces the overall cost of the system. Virginia energy policy should continue to expand the market for third-party developers as a cost-effective option.

EXPANDING ACCESS TO ADVANCED ENERGY TO STRENGTHEN VIRGINIA'S CORPORATE PRESENCE AND SAVE TAXPAYER DOLLARS FOR LOCAL GOVERNMENTS

Providing options for companies and local governments to purchase or install renewable energy and other advanced energy options can help to maintain and grow a strong corporate presence in Virginia and produce savings for local governments. For many companies, the ability to control energy costs and choose their sources of energy is a key factor when deciding where to locate or expand their operations. In addition to seeking competitive prices, companies are increasingly looking for opportunities to purchase advanced energy—a choice often backed by an internal sustainability or

renewable energy target. For example, 71 of Fortune 100 companies and 43% of Fortune 500 firms have set renewable energy or sustainability targets. If large companies in Virginia sourced just 15% of their energy needs from renewable energy, this would drive nearly 2,000 MW of renewable energy capacity — and over \$3.6 billion in new energy investment. Local governments in Virginia are also following the trend of seeking more advanced energy. In Virginia, however, companies and local governments face regulatory hurdles that make fulfilling these commitments difficult or impossible. Policies should actively work to increase advanced energy purchasing options for Virginia companies and local governments.

MAXIMIZING ENERGY EFFICIENCY AND DEMAND RESPONSE TO CREATE JOBS AND SAVE CONSUMERS MONEY

Energy efficiency is the lowest cost and most readily available resource to meet energy demand. Both energy efficiency (savings from reducing energy waste) and demand response (payments for targeted reductions in energy use during periods of peak demand) can save money for residents and businesses, and create jobs in Virginia. However, Virginia is trailing behind other states in taking full advantage of these resources, forgoing billions of dollars in benefits and thousands of well-paying jobs. The current regulatory environment in Virginia is structured such that electric utilities lose money when customers reduce their electricity consumption, creating a disincentive for utilities to invest in energy efficiency programs and demand response. In contrast, gas utilities in Virginia and electric utilities in many other states have decoupled their sales volume from revenues, meaning that they have neither an incentive nor a disincentive to reduce customer demand. Virginia should modernize its regulatory system to encourage the adoption of energy efficiency and demand response and allow consumers and businesses to lower their electric bills. Energy efficiency and demand response also lower energy costs for non-participating customers by lowering wholesale energy prices and deferring or avoiding the need for costly infrastructure investments.

MODERNIZING THE ELECTRICITY SYSTEM TO FOCUS ON CONSUMER NEEDS

Our energy system has undergone rapid changes over the last decade. Evolving consumer preferences, dynamic new technologies, and the need to replace aging infrastructure are causing the energy system as we have known it for the past century to modernize, yet the regulatory system inadvertently stifles innovation. The Commonwealth stands to gain by upgrading our energy system by meeting consumer needs and allowing innovative technologies to thrive. To unlock consumer value, regulatory reforms are needed to allow residents and businesses a greater ability to take control of their energy future. For example, Virginia should encourage the option for individuals and businesses to install solar and storage technologies, capture the varying costs of electricity through demand response programs, and charge electric vehicles when the cost of electricity is lowest. Virginia consumers are driving the advanced energy industry in the Commonwealth, and this trend should be capitalized to modernize our energy system.

What can the next Governor of Virginia do to expand the advanced energy market?

SIX EXECUTIVE ACTIONS FOR THE NEXT GOVERNOR OF VIRGINIA

- 1) Encourage additional partnerships between advanced energy providers, utilities, and large energy users within the Commonwealth



- 2) Instruct the Department of Mines, Minerals, and Energy (DMME) to submit comments in relevant proceedings at the State Corporation Commission (SCC) that represent the Administration's policy views, specifically including a focus on advanced energy as a needed option to address Virginia's energy future.
- 3) Continue to support the efforts of the DMME to expand Virginia's energy efficiency market.
- 4) Prioritize energy efficiency and renewable energy programs in the annual budget proposal.
- 5) Work with the General Assembly to confirm commissioners at the SCC who understand the value and potential of all advanced energy technologies.
- 6) Create a Smart Grid Task Force with key stakeholders to evaluate and recommend direct actions to improve the electric grid in Virginia.

LEGISLATIVE PRIORITIES FOR THE NEXT GOVERNOR OF VIRGINIA

IMMEDIATE ACTIONS

1. **Power Purchase Agreements (PPAs):** Expand upon existing pilot programs, to make them full permanent programs, and pass an explicit legal framework for customers – including residential, commercial, and industrial – to enter into onsite and offsite PPAs.
2. **Energy Storage:** Expand the mission of the Virginia Solar Energy Development and Energy Storage Authority to focus, in addition to its existing mission, on advancing energy storage as a key energy industry in the Commonwealth.
3. **Renewable Energy Purchasing Options:** Proactively work with utilities to craft large-scale renewable energy purchasing options for companies with operations in Virginia. These solutions should work for utilities, developers, and customers alike, and should encourage renewable energy as well as maintain and attract corporations to the Commonwealth. Companies should have access to viable renewable energy options regardless of what utility territory they are located in.

MEDIUM TERM PRIORITIES

1. **Energy Efficiency and Demand Response:** Pass legislation to reduce barriers and improve incentives for utilities to invest in energy efficiency and demand response to meet Virginia's 10 percent Energy Efficiency Resource Goal by 2022.
2. **Consider Relevant Benefits, Costs, and Risks:** Pass legislation to declare advanced energy sources, including solar, wind, energy efficiency, demand response, and energy storage, in the public interest and direct the SCC to more fully weigh the long-term environmental, economic development, fuel cost risk, and portfolio diversification value of renewables, as opposed to comparing renewables against a short-term PJM price set by natural gas.
3. **Update IRP Planning:** Pass an amendment to the utility IRP process to require full consideration of advanced energy technologies.

LONG-TERM PRIORITIES

1. **Improve Utility Incentives:** Pass legislation to decouple electric utility revenues from volumetric sales, to remove the disincentive to invest in energy efficiency.
2. **Incorporate Electric Vehicles:** Make electric vehicles a cornerstone policy of the Administration's energy agenda.
3. **Investigate Performance-Based Regulation Models:** Enact legislation to authorize the SCC to open an investigatory proceeding on the potential for performance-based regulation (PBR) in the Commonwealth.

