



Clean Energy Investments: Proven Results & Continuing Commitments

January 2018

Over the past two decades, we have made significant progress toward our environmental commitment and we are continuing that trend:

- Converting coal units to natural gas and renewable biomass
- Achieving sustained efficiency improvements at existing power stations
- Increasing priority on renewable and clean generation
- Expanding the range of renewable, energy conservation and efficiency and renewable programs for customers
- Reducing our own environmental footprint
- Developing industry-leading position in forging clean energy partnerships with large customers

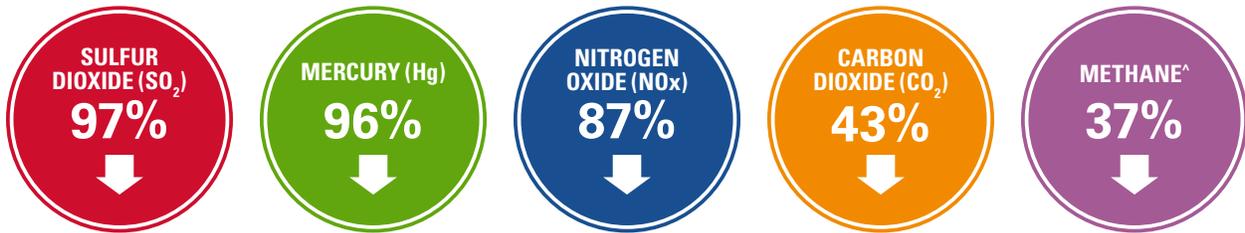


Dominion Energy is committed to continuing our no-turning-back drive to reduce air emissions.

As an industry leader we are proud of the progress we have made, including our 43% reduction in carbon emissions since 2000, as well as dramatic reductions in other air emissions. These reductions across the board have been accelerated by utilizing more natural gas, a clean partner fuel to the many renewable resources in our generation mix, and ongoing investments in our highly-efficient nuclear fleet.

We are also making substantial investments to modernize the electric grid. In addition to improving reliability and security of the grid, modernization will enhance and complement a number of our clean energy efforts by allowing for increased use of smart, clean technologies including the development of even more renewable energy, the growing use of electric vehicles and the empowerment of customers to control their own energy usage.

Emissions Rate Reductions, 2000-2016* (Electric generation, emissions per unit of output)



*Electric generation increased by 26 percent during this period, even as emissions declined.

[^]Increase in Avoided Methane Emissions 2011-2015.

Converting coal units to natural gas and renewable biomass

In the last 10 years, Dominion Energy's generation mix has transitioned from 55% coal-fired power to about 22%. This change is expected to continue as solar, natural gas and grid technologies continue to improve. Several coal units have been retired, and others have been converted to renewable biomass and natural gas. The Greensville County Power Station currently under construction in Virginia will be the largest and most efficient gas plant in the world when completed. It will use combined-cycle technology to provide round-the-clock baseload electricity, as will similar plants already in service in Warren County and Brunswick County. Dominion Energy sees natural gas as a vital and economical partner fuel to use with solar energy, other renewable resources and energy efficiency over the next 25 years.

Dominion Energy is proud to have several of its operating companies voluntarily participating in EPA's Natural Gas STAR Program and Natural Gas STAR Methane Challenge Program, which focus on reducing methane emissions through best management practices and through transparent, measurable commitments to emissions reductions.

Increasing priority on renewable and clean generation



Solar

Dominion Energy is responsible for bringing online more than 2,100 MW of solar in nine* states, enough to power 525,000 homes at peak production, and more is slated to come online by the end of 2018. We have accomplished this through a wide variety of arrangements ranging from our Solar for Students program to creative, customized partnerships for large customers. A few recent examples of these partnerships include:

- **Facebook** – The development of an innovative, renewable rate option allows Dominion Energy to construct multiple solar facilities in Virginia to meet Facebook’s energy needs for a new data center in Henrico County. This new rate option will allow Facebook, and other large companies, to fulfill their energy needs with solar energy delivered to the grid.
- **Commonwealth of VA** – As part of an agreement with Virginia, the University of Virginia and Darden School of Business will purchase the entire output of electricity produced at a new, 160-acre solar facility in King William County for the next 25 years. The facility is estimated to produce 17 MW, which is about 12% of the University’s electric demand.
- **Amazon Web Services** – Long-term power purchase agreements have led to a solar alliance with Amazon. In an expansion of the alliance, Dominion Energy is adding 180 MW of solar in five Virginia counties. This alliance will include two of the largest solar farms in the mid-Atlantic, and in total amount to 260 MW of solar.

Collaborations like these are how we are actively growing the market for clean energy in Virginia. We expect at least 5,200 MW of new solar generation will be added to our portfolio over the next 25 years, the equivalent of more than 40,000 acres of solar panels and enough to power 1.3 million homes at peak output.



What is a MW?

A megawatt is a unit for measuring power.

**1 MW =
POWER FOR ABOUT
250 HOMES**

Wind

On-shore

Dominion Energy is a joint owner of two on-shore wind facilities in West Virginia (Mount Storm) and Indiana (Fowler Ridge) which, combined, generate over 560 MW and can power roughly 156,000 homes. We are continuing to evaluate potential projects in western Virginia.

Off-shore

In July, Dominion Energy announced a partnership with Orsted Energy of Denmark to proceed with Phase I of the Coastal Virginia Offshore Wind (CVOW) project. The project will include two, 6 MW wind turbines for a total of 12 MW off the coast of Virginia that will help serve 3,000 customers. CVOW is anticipated to be operational by 2020. Dominion Energy will be the first utility to develop offshore wind in federal waters.

As a part of Phase I, CVOW is designed to provide critical experience needed for potential large scale development. Dominion Energy has leased an 112,800 acre site for large scale development, which could reach up to 2,000 MW and power 500,000 homes.



Hydro

Dominion Energy utilizes pumped storage and hydro power resources primarily during periods of high demand to supplement the power generated at other stations. Our Bath County Pumped Storage Station has been called the “world’s biggest battery” capable of generating 3,003 MW and powering 750,000 homes. We are currently considering potential options for building a second pumped storage station in southwest Virginia.



Biomass

In addition to our existing biomass facilities, Dominion Energy has converted 3 coal-fired stations – Altavista, Hopewell, and Southampton – to 100% biomass, which means the fuel for these stations is primarily derived from waste wood. These three stations produce a combined total of 153 MW of around-the-clock electricity, enough to power 38,250 homes. In addition, the 600 MW Virginia City Hybrid Energy Center is able to co-fire up to 20 percent with renewable biomass, a total of 120 MW.



Nuclear

At Dominion Energy, nuclear plays an important role in our generation portfolio complementing our solar and wind production in providing robust, zero-carbon generation. Our nuclear power plants in Virginia, North Anna and Surry, produce 3,349 MW and provide over 30% of Virginia’s electricity. Dominion Energy also operates a nuclear power plant in Connecticut, Millstone Power Station, which produces approximately half of the electricity in Connecticut and virtually all of the carbon free electricity. Each of these nuclear units is a major source of large numbers of well-paying jobs for their host communities. For example, Millstone Power Station provides 1,500 high paying direct jobs in southeast Connecticut.

Because nuclear plays such an important role in our clean energy portfolio, Dominion Energy plans to file with the Nuclear Regulatory Commission (NRC) for a Subsequent License Renewal (SLR) which will extend the operating life of a nuclear unit from 60 years to 80 years.

*Virginia, North Carolina, California, Connecticut, Georgia, Indiana, South Carolina, Tennessee and Utah

Pictures starting from top left: Louisa County Solar Farm; Wind Turbine - Orsted Energy of Denmark; Bath County Pumped Storage Station; Virginia Hybrid Energy Center; Surry County Power Station

Expanding the range of energy conservation, efficiency and renewable programs for customers



Renewable Energy Programs

Dominion Energy is committed to providing our customers with program options to support customer interest and needs. Our programs are designed to help gauge customer interest in renewable energy, allowing them to directly influence future program offerings while also providing us with a platform to study and assess the impact of renewable energy. These programs include:

- **Dominion Energy Green Power Program;** customers choose to pay an extra amount each month to support the generation and distribution of renewable energy and for Renewable Energy Certificates
- **Net Metering;** a two-way flow of electricity allows customers to connect their renewable energy systems to the power grid, and only pay for the “net” power they consume from us
- **Agricultural Net Metering;** a subset of traditional net metering that allows agriculture customers to aggregate their usage at multiple meter locations
- **Solar Purchase Program;** customers generate and sell their solar power back to Dominion Energy
- **New offerings to include a 100% renewable option** for customers of all sizes and a community solar program, pending regulatory review



Energy Conservation Programs

Dominion Energy offers various energy efficiency and conservation programs designed to meet the needs and reduce the carbon footprint of our customers, including:

- **Smart Cooling Rewards for homeowners** that cycle their AC on high-use days
- **Energy audits and improvements** for income and age qualifying customers
- **Appliance recycling**
- **Rebates for the installation of energy efficient lighting and controls,** HVAC equipment and solar reduction window film
- **Energy assessments and recommendations** for small business customers with monthly demand less than 100 kilowatt hours
- **Distributed Generation,** which incentivizes curtailing load by using customer-owned, backup generation when called upon to do so



Reducing our own environmental footprint

Dominion Energy is also focused on reducing our own environmental footprint. At various office locations, we utilize:

- **Energy Management Systems** to control lighting and HVAC systems
- **Solar window film and reflective roofs**
- **Light sensor-activated switches and timers** in selected rooms and public spaces
- **High-efficiency LED** light bulbs
- **Single-stream recycling and green vendors** to recycle technology
- **Dominion Energy Green Fleet**, 38% of our vehicle fleet is powered by alternative fuels

Dominion Energy is also proud to have several LEED-certified “green” buildings in our footprint. Our newest LEED building was certified in West Virginia as Gold Status, the first privately owned building in the state to achieve such status. We are also currently constructing a new, high-rise office building in Richmond, VA that has been designed to meet the criteria for LEED-Gold Status certification upon completion.



Pollinator Garden: Science Museum of Virginia



Environmental Stewardship in our Communities

Environmental stewardship is also an important component of Dominion Energy. One of our long-standing programs is Project Plant It!, an environmental education program that has distributed over 400,000 tree seedlings across our footprint and is equivalent to almost 900 acres of new forest land.

Dominion Energy has long been committed to strengthening the communities in which we do business. For the past 35 years, through the EnergyShare program, Dominion Energy has provided bill payment assistance to low income customers. The program was recently expanded to include providing free weatherization and energy efficiency upgrades to those same customers to help them achieve permanent energy savings. In total, nearly 800,000 families have been assisted by this best in the industry program combining the one-time benefits of energy assistance with the ongoing benefits of weatherization.

The Dominion Energy Charitable Foundation, the philanthropic arm of Dominion Energy has been active for more than 70 years. It annually awards over \$15 million to non-profit organizations supporting access to education, environmental causes, and other critical community needs.



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Buckingham Solar Farm, Virginia