



# Delivering Sustainable Value

2016–2017 Sustainability and Corporate Responsibility Report



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Serving Customers & Communities

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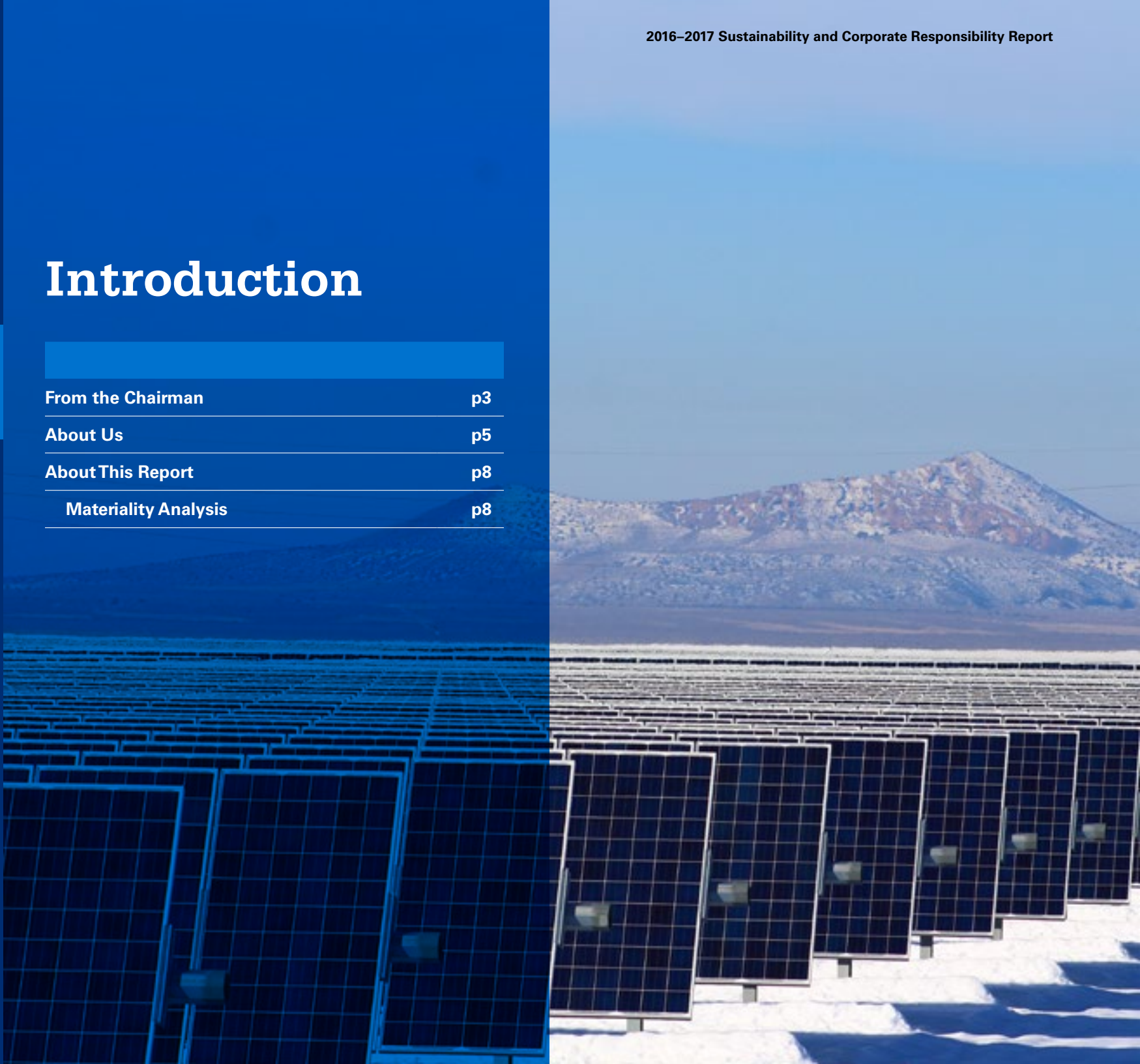


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## From the Chairman

You expect the room to light up when you flip the switch, and the warmth to embrace you on a chilly autumn evening. You probably don't think about where the energy comes from, or how it got there. You just relax as your home grows more comfortable. I do, too. But like you, I expect even more.

We all rely on energy, and we deserve to feel good about where it comes from and how it was produced. Dominion Energy hired me to give you that confidence.

I am hopeful that you experience this through our customer service, which has hit an all-time high after more than a century of experience. I am deeply proud of the 16,000 men and women across this country who make your comfort possible—and keep the American economy moving. We understand that you expect us to deliver your energy, and to do it in the right way.

This is our 10<sup>th</sup> annual report designed to show you how we conduct our business. You deserve to know that Dominion Energy operates in a way that respects people, limits our impact on the natural environment, and acknowledges the Earth's changing climate—one of the most important energy and environmental challenges of our time.

We also know your expectations are changing as well, and so are ours. We are reviewing all of our operations, continually looking for ways to improve. Some have been easy, like recycling more in our offices. Some have been harder, like disposing of

the ash that built up after years of powering millions of homes by burning coal with older technology that was once considered state-of-the-art.

This review has identified many reasons to celebrate. My favorite example is right outside my window in our company's headquarters in Virginia's capital city, Richmond. Every day at lunchtime, I see dozens and dozens of people running, swimming, fishing and rafting along the falls of the James River—or photographing the ospreys and occasional bald eagles that now live there again, after years away when the river was too dirty. This dramatic progress comes as Dominion Energy's power stations along the river are cleaner than ever and improving all the time. That's happening everywhere across the 19 states where we do business. We are in an elite group of just three companies that have reduced their carbon emissions rate by more than 40 percent since 2000. We are proud to have the most comprehensive voluntary public disclosures of any peer gas company, showing methane emissions and reductions achieved through best management



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practices. These are dramatic steps forward, and we're going to do more.

This review is identifying more ways to improve, too. We have been looking at all of our work with fresh eyes. What's working well? What needs work? How can we demonstrate our progress? We're looking at diverse and inclusive employment and hiring practices, the challenge of investing in employment and infrastructure while keeping rates low, and the rapid pace of technological advancement. We are re-tooling everything we do, in every part of the company, to operate more sustainably and to deliver energy more reliably than ever before. These are exciting days for energy companies, and Dominion Energy aims to shape the future of energy in America.

We are striving for something simple: You deserve to feel good about where your energy comes from, to know that the people who produce it are treated fairly and respectfully, and to know that you're getting a good deal for your energy dollar. We aim to continue improving the way we demonstrate this.

It's important to know that 2016 and 2017 have brought numerous steps forward:

- **Our employees set a new company record for safety.** Their commitment to teamwork and attention to detail has reduced work-related accidents by more than 30 percent over the past five years.
- **We are promoting accountability by setting targets** for issues important to our stakeholders, including a commitment to **reduce greenhouse gas emissions** and investments in gas

infrastructure improvements that will **reduce methane emissions.**

- Over the past two years, **we have grown our solar fleet** in Virginia and North Carolina from near zero to 1,333 megawatts in service, in construction, or under development. That is enough clean energy to power more than 330,000 homes during peak sunshine, and it's the beginning of a major push into renewable energy in the years ahead. During construction, Dominion Energy-developed projects have created approximately 3,500 jobs in these two states.
- We invested \$450 million in **six natural gas infrastructure projects** in South Carolina and the Appalachian Basin to transport low-carbon natural gas to those regions.
- Our employees gave **nearly 125,000 hours of personal volunteer time**, while also participating in numerous company-sponsored community engagement events across the country.
- The Women's Forum of New York recognized Dominion Energy for accelerating gender parity in the boardroom, with **women holding 25 percent of its seats on the board of directors.**
- **In 2017, the Dominion Energy Charitable Foundation donated \$20 million** to more than 2,000 organizations that are helping communities across America.

- We earned the Defense Department's prestigious "**Extraordinary Employer Support Award**" for supporting the National Guard and Reserves. That's something we take very seriously at Dominion Energy, where one in five of our new hires served in the U.S. armed forces.

We serve many stakeholders—customers, communities, shareholders, investors and many more—all of whom have high expectations of us. Those expectations are changing, and so are we.

You'll see that Dominion Energy is leading the way in the sustainable transition of our assets and many other areas, and we invite you back in 2018 to see even more.

Sincerely



**Thomas F. Farrell, II**  
CHAIRMAN, PRESIDENT AND CEO

# About Us

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Nearly 6 million customers in 19 states heat and cool their homes and power their businesses with electricity or natural gas from **Dominion Energy (NYSE: D)**. The company’s record of reliable, safe and clean energy regularly places it among America’s most-admired utilities. One of the nation’s leading operators of solar energy, Dominion Energy is one of just three companies to have reduced carbon intensity by more than 40 percent since 2000. Headquartered in Richmond, Va., Dominion Energy contributes more than \$20 million annually to the community, supports military veterans and their families, and practices responsible environmental stewardship everywhere it operates. To learn more, please visit [www.dominionenergy.com](http://www.dominionenergy.com), Facebook or Twitter.

## At a Glance\*



Richmond, Va.  
Headquarters



644.6 million  
Common shares  
outstanding



50% Carbon  
intensity  
reduction target  
(2000–2030)



6th Largest  
solar fleet in U.S.



238  
Fortune  
500 Rank



\$76.5 billion  
Assets



Nearly 125,000  
hours of  
volunteer service



2017  
Best year  
in safety



\$48.7 billion  
Market  
capitalization



\$20 million donated  
to more than  
2,000 charitable  
organizations



\$3.60  
Operating  
EPS



40% emission  
rate reduction  
since 2000



\$3.035  
Dividends  
per share



\$12.5 billion  
Operating  
Revenue



More than  
16,000  
employees



\$70.87–\$85.30  
Common stock  
price range

\*As of Dec. 31, 2017.

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## Operating Groups



### Power Generation Group

- Utility power production
- Merchant power production



### Power Delivery Group

- Electric distribution
- Electric transmission

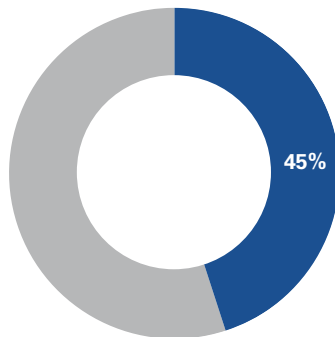


### Gas Infrastructure Group

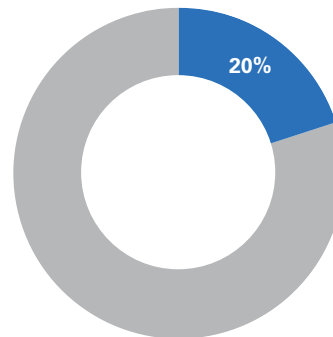
- Gas distribution
- Gas transmission & storage
- Liquefied gas services
- Retail energy marketing

## 2017 Primary Operating Segment Earnings Percentages

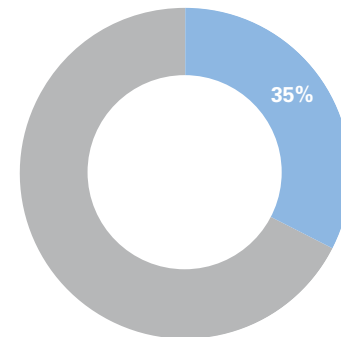
Power Generation Group



Power Delivery Group



Gas Infrastructure Group



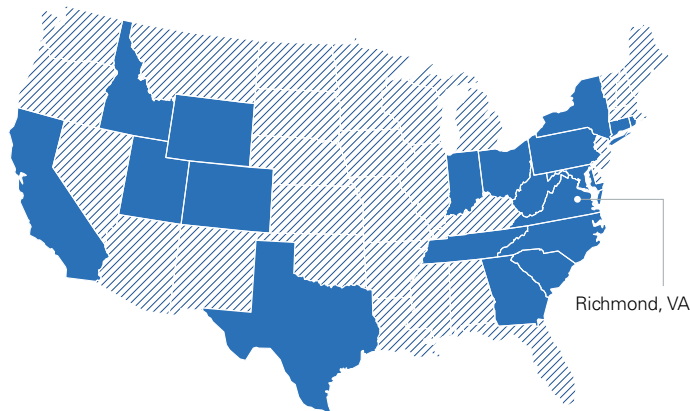
## Portfolio of Assets

Electric Generating Capacity	Approximately 26,000 Mw
Electric Transmission And Distribution Lines	64,500 Miles
Natural Gas Transmission, Gathering, Storage and Distribution Pipelines	66,600 Miles
Underground Natural Gas Storage Capacity	1,000 Bcf
Liquefied Natural Gas Import/Export & Storage	1.8 Bcf daily send-out capacity 14.6 Bcf storage capacity

As of Dec. 31, 2017.

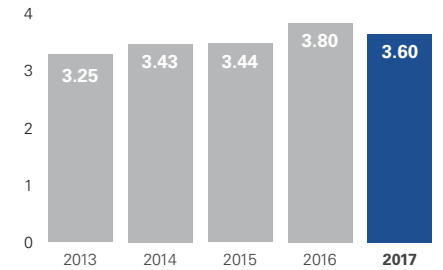
## Where We Work

More than 16,000 employees in the 19 states where Dominion Energy operates



## Operating Earnings\*

(Dollars per share)



\*Based on non-GAAP Financial Measures.



## About This Report

### Materiality Analysis

We are in a time of change in our company, both in our businesses and the expectations of our stakeholders. A materiality analysis was conducted in 2017 to help shape our sustainability strategy by understanding the issues important to our investors, employees, customers and communities. The analysis was conducted using both internal and external interviews. In addition to external interviews, external documents that provided stakeholder perspectives were reviewed. The internal interviews focused on those who directly engage with stakeholders on a regular basis. In addition, a targeted employee survey was used to hear directly from employees on issues important to them. With the help of external sustainability experts, an internal team of stakeholders considered the issues that had been identified, and then selected a list of material issues that were then vetted with internal leaders.

The list of material issues has changed significantly since the last report. The issues are focused in four main areas and drive the content and organization of this report: customers and community, environmental stewardship, our culture, and our business for the future. The list of material issues is represented below, in the form of a graph showing how they translate across our value chain.



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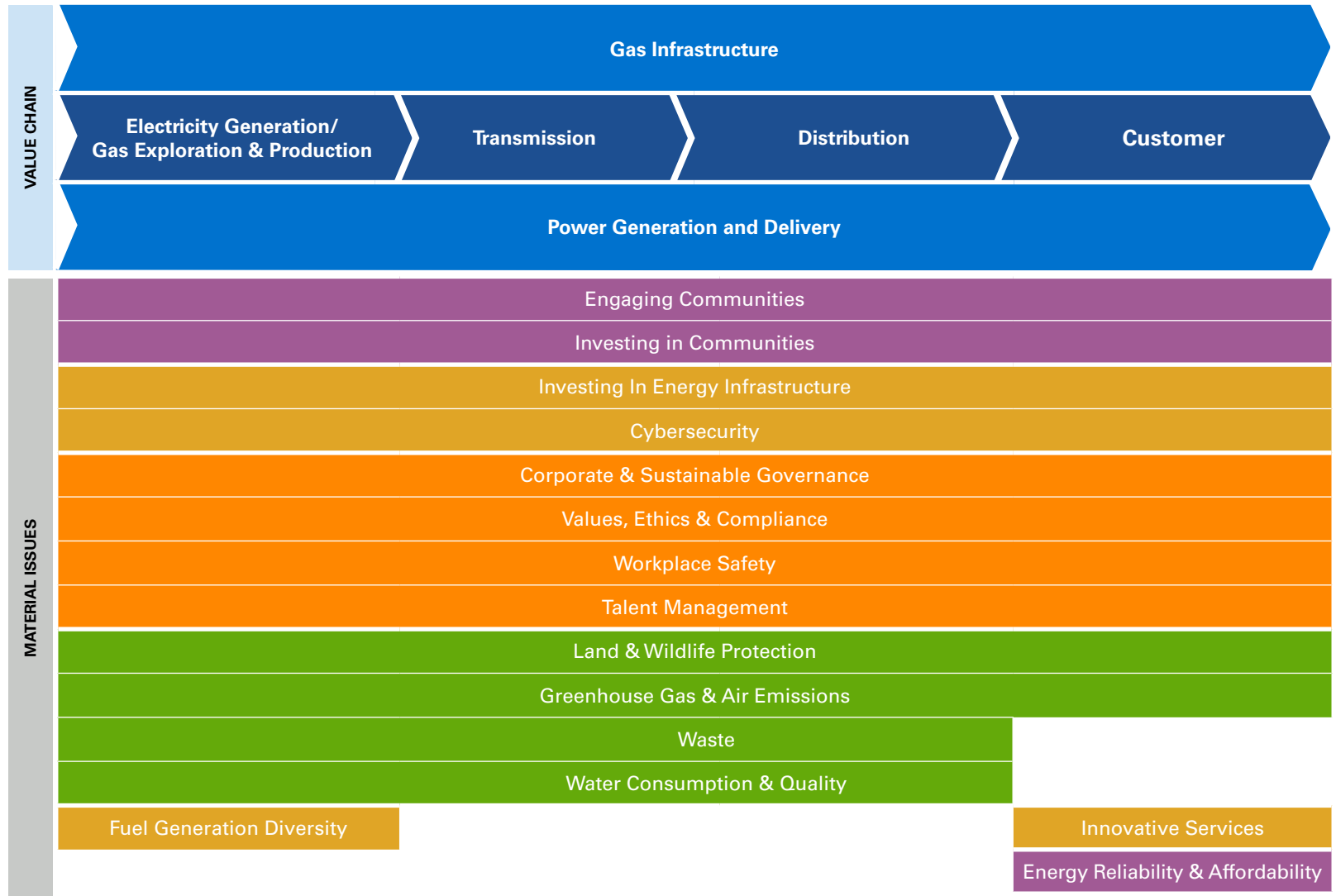
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### Material Issues



■ Customer and Community
 ■ Environmental Stewardship
 ■ Our Culture
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# Serving Customers & Communities

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# Energy Reliability & Affordability

Newer equipment and advanced technology enable us to restore your power faster and safer when it goes out, and that minimizes the inconvenience you experience. We always strive to balance the need to invest with the responsibility to keep customer rates low.

## Electricity

**Our electric reliability strategy** is to provide safe, reliable and affordable energy for our customers. We do this by deploying advanced technology to monitor and enhance grid flexibility, consistently inspecting and maintaining existing equipment, and using this approach to restore power faster and more safely when it goes out, minimizing inconvenience for customers. And when people have trouble paying for electricity, we find ways to help.

**Here's how we performed.** We invested more than \$780 million to upgrade Virginia's and North Carolina's energy grid with large, high-voltage transmission wires and equipment. We also have buried almost 1,400 overhead "tap lines"—the smaller, neighborhood-level lines that bring electricity directly to homes—using more than 450 miles of cable through 2016.

### Here's where we're going in the future.

To ensure reliability, we plan to rebuild 120 miles of electric transmission lines in 2018, and 300 miles of distribution lines will be placed underground to enhance reliability and safety. We also will annually inspect 25 percent of Dominion Energy electric equipment housed in customer-owned vaults to ensure it is working properly. If not, it could impact reliability for the customers and could result in a release of oil, so the inspection makes sure that these structures have the appropriate oil spill-prevention measures in place.

To ensure affordability, we will grow EnergyShare®, which has provided weatherization and bill-payment assistance to Virginia residents since 1982. The program helps all customers, with a special focus on older people, individuals living with disabilities, and military veterans. Our

2018 target is to invest \$4.6 million to help 16,000 families or individuals in Virginia. To reach them, Dominion Energy employees travel around the commonwealth, hosting, coordinating and attending community events to educate customers on low-cost or no-cost ways to save electricity, weatherization, and assistance options. Real change happens when customers understand what they can do to make an impact, so our 2018 target is to participate in 440 outreach events around Virginia. And we aim to weatherize 1,500 homes of electric customers who are elderly, live with a disability or who benefit from EnergyShare.

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We invested more than \$780 million in 2016 to upgrade Virginia’s and North Carolina’s energy grid with high-voltage transmission wires and equipment. This capital spending program funded more than 30 major transmission projects. Some of these focused on re-building a 96-mile section of the company’s original 500-kV line from West Virginia to Maryland that serves as the backbone of the mid-Atlantic energy grid. This upgrade increased the line’s capacity by two-thirds, which helps bolster reliability and provide additional capacity for energy flow at times of high usage. This is one of the largest electric transmission projects of its kind in our 100-year history.

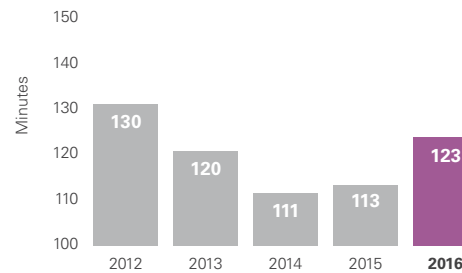
Other projects involved building new transmission infrastructure to support customer growth and upgrade system reliability and communications. We also invested in important security improvements, installing physical or electronic barriers at 17 transmission substations. We constructed a new System Operations Center—the advanced control room for delivering high-voltage electricity over long distances from power stations to

substations—which opened in the summer of 2017.

On the electric distribution side—the network that directly serves homes and businesses—in addition to our ongoing equipment inspections and preventive maintenance activities, we also completed thousands of projects to strengthen system reliability. These projects included

**Electric Service Reliability, 2012–2016**

(Customer minutes out, 3-year rolling average, excluding major events)



transformer replacements, circuit reconditioning, and the installation of new utility poles, switches, sensors and cable. This work improves service by eliminating outages or reducing the duration of outages, both important aspects of providing safe and reliable service to our customers.

Burying underground the most outage-prone overhead electric lines and equipment is another way to improve service reliability. It will take several years to do this right—and approval from state regulators.

We rely on extensive data analysis to select the lines to bury. We evaluate 10 years of outage information to

determine which overhead lines should be placed underground.

Each underground project aims to benefit customers either by reducing the frequency and duration of outages in the most affected neighborhoods or by allowing the company to shift its resources to outages that occur elsewhere on the system, speeding up service restoration for all affected customers.

By burying the most outage-prone tap lines, we expect to reduce the time it takes to restore service for all customers by as much as 50 percent after an outage caused by a major storm.

Looking ahead, we aim to:

- Maintain a superior safety record.
- Continue to invest in capital growth projects to meet the needs of our utility customers, including hardening the physical security of our substations.
- Continue our long-term plan to rebuild the system’s 500-kilovolt backbone.



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## Natural Gas

**We advance natural gas reliability** by building, operating, and upgrading pipelines that transport clean American natural gas from its natural formations to the homes, businesses and power stations that rely on it. Upgrading aging infrastructure makes service more reliable, while reducing greenhouse gases such as methane.

**Here's how we performed.** We continued upgrading our largest natural gas distribution networks serving customers in Ohio and West Virginia. We improved service-call response times to the fastest rate in five years. We have already replaced more than 1,300 miles of pipeline in Ohio—our largest gas distribution market—a \$1.2 billion investment. We implemented a similar pipeline replacement and expansion program in West Virginia in 2016, resulting in \$21 million in distribution pipeline upgrades.

**Here's where we're going in the future.**

Our western gas distribution company will invest \$95 million in 2018 to replace aging infrastructure in Utah, Wyoming and Idaho, including high-pressure mains, distribution mains and service lines.

We began initiatives in 2015 to enhance pipeline integrity, which will replace 50 miles of pipe and install 20 additional mainline valves by 2020, as well as install 250 additional remotely controlled valves by 2022.

**As a major energy supplier in uniquely beautiful, natural regions, we work to protect and enhance the economic and environmental quality of life for our customers and our employees.**

To ensure affordability, ThermWise®—our Utah program to promote the use of energy-efficient appliances and practices to reduce natural gas usage—has filed for a total 2018 budget for Energy Efficiency of \$24.5 million, forecasting that more than 81,000 customers will participate in the program in 2018. ThermWise is forecasting 1.15 million dekatherms of natural gas savings from 2018 programs, which equate to the annual usage of nearly 14,500 customers.

We are planning to invest an additional \$200 million or more annually over the next two decades to upgrade about 5,600 miles of aged bare steel, cast iron, wrought iron and copper pipe in our Ohio pipeline system—and reducing atmospheric methane emissions at the same time. Plans call for an additional \$58 million investment over the next two years. Upgrading pipelines improves reliability and significantly reduces methane emissions.

In our Western Gas Operations, we ask customers to rate our performance every month. We tally their results and report them on a quarterly basis. Their responses help us monitor how well we are meeting expectations. We continued improving customer service in 2017. We're especially proud that agents answered 99.4 percent of emergency calls within 60 seconds, and that representatives were on site within one hour for 98.3 percent of emergency calls.

*Customer service.* Our service teams respond to customers' outage-related service requests as quickly as possible. We measure our emergency response performance in 15-minute increments, from when a service call comes in to the time crews arrive at the customer's home or business. In 2016, we responded to 99.2 percent of all emergency calls in Ohio and West Virginia within 60 minutes. That's our best performance in the past five years.



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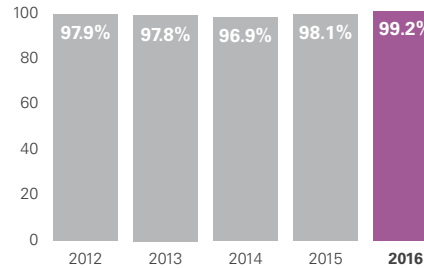
**Best Practices in Pipeline Integrity and Public Safety**

Dominion Energy’s safety procedures are among the most stringent in the industry and have been recognized as best practices by the federal agencies that oversee the natural gas industry. We also have committed to using best-in-class standards for the Atlantic Coast Pipeline, which means we will use the best technology available to go above and beyond federal and state requirements for safety.

We inspect our interstate transmission pipelines via aerial observation and by foot patrol on a regular basis. The pipelines also are inspected internally using sophisticated devices known as “smart pigs.” These devices use computerized sensors capable of detecting and reporting anomalies such as dents and corrosion, which enables us to make immediate repairs to ensure the integrity of the pipe. In the unlikely event of an emergency, Dominion Energy works closely with and supports local first responders to ensure they are fully trained and equipped to respond appropriately.

Once in service, the pipelines are closely monitored around the clock from our Gas Control Command Center. Our vigilant monitoring enables us to detect and fix any problems in our system before they become a serious risk to public safety. We continuously monitor the pressure, temperature and flow of the gas through remote sensors positioned along the entire length of the pipeline. Our sophisticated sensing equipment can detect even the slightest fluctuations in

**Natural Gas Delivery, 2012–2016  
Emergency Response Rate**  
(Receipt to Arrival Within One Hour)



these measurements and take immediate corrective action if necessary. Remote-controlled safety shutoff valves positioned along the pipeline will enable the Gas Control operator to immediately shut off the flow of gas and isolate individual sections of the pipeline if any issues are detected.

For instance, the pipeline has been designed and built with multiple, overlapping layers of protection to ensure the integrity of the pipeline and the safety of the community. That precaution includes using ½- to ¾-inch thick steel pipe and a protective layer of epoxy coating, both of which provide defense against corrosion and other external damage. Before the Atlantic Coast Pipeline enters service, we will inspect each weld with X-ray equipment and pressure test the entire line at 1.5-times maximum operating pressure to ensure the pipe and welds are secure.



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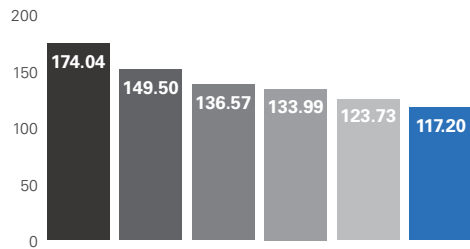
Our Business for the Future

**Energy Rates: Electricity & Natural Gas**

Rates are set to recover the cost of delivering electricity to customers and to support projects that will meet the ever-growing demand for more energy. Factors like rate class, energy use, fuel costs and the season all play a role in determining the rate customers pay.

Even while investing heavily in infrastructure upgrades, we operate efficiently to keep customer rates affordable. Typical Dominion Energy residential electric customers have seen their monthly bills go up by less than \$9 since July 2008. In fact, since Virginia’s current rate structure was enacted in February 2015, the typical Dominion Energy residential customer has actually seen a slight decrease in rates, lowering the typical monthly bill from \$115.95 to the current level of \$117.25. Dominion Energy’s typical monthly residential electric bill is 4.7 percent below the Virginia average, 14.9 percent below the

**Typical Monthly Bill for Virginia Electric Customers**  
(As of July 2017; in U.S. Dollars)



Source: Edison Electric Institute (EII)

- RGGI States Average
- East Coast Average
- D.C. Regional Average
- National Average
- Virginia Average
- Dominion Energy Average

national average, 15.1 percent below the average for all electric utilities in the Washington, D.C., metro area, and 21.8 percent below the East Coast average.

**EnergyShare & ThermWise**

For 35 years in Virginia, the company’s EnergyShare program has connected people with energy assistance through weatherization services, education and outreach. It has helped 798,000 people who need it the most—because of financial hardships or family crises—by assisting with their bill and providing energy-saving upgrades at no charge. Since 1982, EnergyShare has maintained a special focus on older Virginians, individuals living with disabilities, and military veterans.

We recently expanded the program with a five-year \$57 million commitment to incorporate weatherization assistance and educational outreach components. The expanded program helps vulnerable individuals make wise energy decisions and sustainable energy improvements in their homes. The expansion focuses on more than 2,000 individuals living with disabilities and more than 2,000 military veterans with financial challenges.

The company has provided weatherization improvements to more than 17,000 homes, and has trained more than 100 employees who serve as energy efficiency trainers. They speak at schools, professional organizations and other community venues to teach customers about the most effective methods of managing and reducing energy costs.

In Ohio, EnergyShare is a gas assistance program to help Dominion Energy customers with their heating bills once government

assistance has run out. EnergyShare partners from the Salvation Army visit homes to review requests and determine eligibility. If approved, the energy bill vendor is paid directly as part of its administrative expenses at no cost to the customer.

EnergyShare in Ohio began its 17th year in December 2017. To date, EnergyShare has raised nearly \$6.8 million and helped more than 70,000 people in the Buckeye State.

The program assisted more than 1,200 households and helped more than 3,900 people for the year ending Sept. 30, 2017. Dominion Energy Ohio made a \$230,000 contribution, and employees and customers contributed another \$152,479. Last heating season, more than \$380,000 helped eligible applicants pay their Dominion Energy gas bill, and our weatherization improvement initiative provided support to 1,471 households to increase the energy efficiency of their homes.

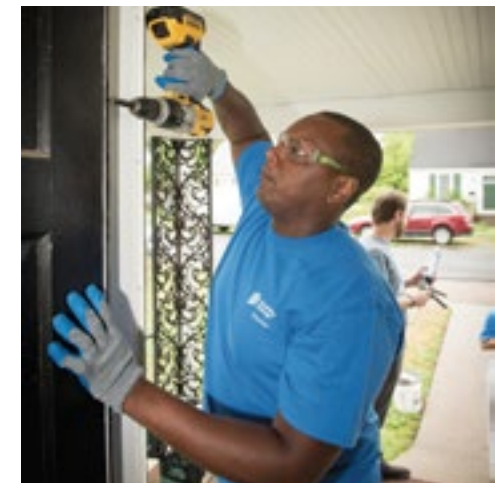




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In 2017-2018, EnergyShare will serve and provide bill assistance to about 1,640 households and 4,000 individuals in Ohio. We plan to weatherize about 1,400 homes. Through our outreach efforts, we plan to engage 1.2 million customers in the EnergyShare program and provide inserts for giving as a part of our January 2018 service bill mailing to Dominion Energy Ohio customers.

In Utah, the ThermWise energy assistance budget for 2018 is \$24.5 million, with a target of more than 81,000 customers participating. The team forecasts saving 1.15 million dekatherms of natural gas in 2018, which equates to the annual usage of nearly 14,500 customers.



**Paperless Billing**

We encourage customers to reduce paper usage by choosing to participate in our eBill paperless billing program. Nearly 42 percent of Virginia and North Carolina customers have chosen to receive their bill reminders via email and text. Customers can create on-line accounts via [dominionenergy.com](http://dominionenergy.com) to view and pay bills electronically and enroll in programs such as paperless billing, energy conservation and the Dominion Energy Green Power® Program. In 2016, customers performed about 15 million transactions through their on-line accounts.

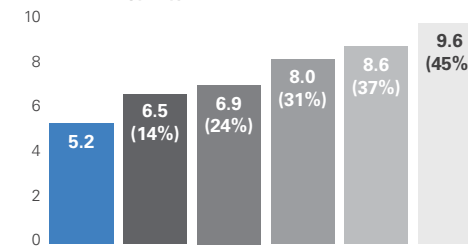
**Dominion Energy Virginia: Industrial Rates Remain Extremely Competitive**

As of April 2017, Dominion Energy’s typical industrial rate is 20 percent below the Southeast Peer Group average, 24.6 percent below the CNBC “Top States for Business: 2016” average, 35 percent below the national average, 39.5 percent below the East Coast average, and 45.8 percent below the RGGI states average.

**Industrial Rates**

(Industrial Rate Comparison, average rate per kilowatt-hour, 1,000 kW demand and 650,000 kWh usage; in ¢/kWh)

**Dominion Energy’s typical industrial electric rate is:**



- Dominion Energy Virginia\*
- National Average
- Southeast Peer Group Average†
- East Coast Average
- CNBC “Top States for Business 2016”‡
- RGGI States Average§

RGGI is a cooperative effort among Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island and Vermont to implement a regional cap-and-trade program to reduce CO<sub>2</sub> emissions.

\* DVP bill: Rates effective April 2017, annualized

† Southeast Peer Group: AL Power, Duke (NC), Duke (SC), Entergy MS, FPL, GA Power, Gulf Power, MS Power, Duke Energy Progress (NC), Duke Energy Progress (SC), Duke Energy Florida, SCE&G, Tampa Electric, Kentucky Utilities, and Louisville Gas & Electric

‡ CNBC states include: UT, TX, CO, MN, NC, WA, MI, GA, IA, FL, NE, ND, VA, WY

§ RGGI (Regional Greenhouse Gas Initiative) states include: ME, NH, VT, MA, RI, CT, NY, DE, MD

Source: Edison Electric Institute, Typical Bills and Average Rates Report: Summer 2016. Rates effective July 1, 2016. Annualized, monthly industrial bills, 1,000 kW demand & 650,000 kWh usage. Latest data available.

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## Engaging Communities

We are in the business of providing infrastructure to keep the lights on and to provide energy to communities safely. As we plan and implement those projects, we work hard to try to avoid impacts to the environment, landowners and communities. We recognize that this is an important part of our business and have begun in 2017 to look for opportunities to improve this process and will continue those efforts into 2018.



**Our strategy is to listen and engage** with community stakeholders, as we invest in energy infrastructure, from selecting routes for new infrastructure, to siting new locations and operating facilities.

**Here's how we performed.** We continued our community outreach program for the Atlantic Coast Pipeline, the largest effort in the company's history. So far, our public meetings have attracted more than 8,800 attendees, and we sent 225,000 pieces of direct mail to various stakeholders. We also kept more than 35,000 Facebook and Twitter followers and 9,000 online newsletter subscribers informed with regular project updates. Meanwhile, nearly 700 people attended 25 events concerning our electric transmission projects. In total, we sent more than 21,000 pieces of mail to help keep the public apprised of these events.

**Here's where we're going in the future.** In 2018, we will continue to work with stakeholders to identify and implement improvements to our community engagement. We also will continue to work closely with landowners to minimize impact to their property as we expand both electric and gas infrastructure. By the end of 2019, we aim to inspect 125,000 wood poles to ensure they meet Dominion Energy's safe design standards.

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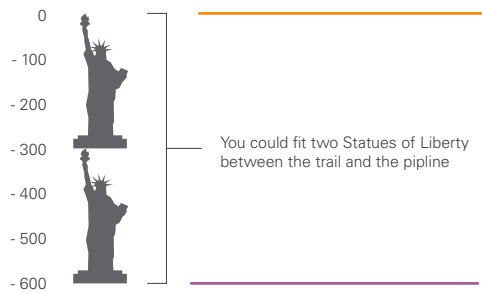
**Routing Pipelines**

We are listening and carefully studying the impact that our infrastructure projects may have on property owners and considering their input. That helps us choose a route for each project that has the least possible impact on their land. For example, we spent more than two years conducting a thorough and exhaustive review of the proposed Atlantic Coast Pipeline’s path and receiving input from landowners, local governments, and other organizations. Based on that information, we have adjusted the pipeline’s route more than 300 times to avoid environmentally sensitive areas and address individual landowner concerns.

**Atlantic Coast Pipeline**

Pipeline Depth (Feet)

The Atlantic Coast Pipeline will tunnel 600 feet below the Appalachian Trail, leaving the surface undisturbed.



- Appalachian Trail surface depth
- ACP pipeline depth

In early 2016, we adjusted the pipeline route to avoid sensitive wildlife habitats in the Monongahela and George Washington National Forests. This route adjustment

reduced our total mileage in the national forests by more than one-third at an additional cost of nearly \$300 million.

To avoid any impacts to the Appalachian Trail and the Blue Ridge Parkway, we plan to install the pipeline through a tunnel 600 feet below the surface. This technique, horizontal directional drilling, added a significant expense to the project, but it is the most protective method of crossing important scenic resources like the trail and parkway because it completely avoids any surface impacts.

These adjustments ensure that where possible, the pipeline route avoids wetlands, public drinking water sources, wildlife habitats, private wells, natural springs, and sensitive karst features like sinkholes and sinking rivers, to name only a few. For example, in March 2016, we adopted a 26-mile alternative route in Cumberland County, N.C., to avoid crossing forested wetlands and certain water bodies, reduce the number of impacted landowners, and parallel locate the route for 22 miles along an existing electric transmission line. At the request of the Augusta County Service Authority, in October 2015 we adopted a 4-mile route adjustment in Augusta County, Va., to avoid crossing the Lyndhurst well, a key public water source for Staunton and county residents.

We also make every attempt to reach mutually acceptable agreements with landowners regarding easements. These agreements allow us to build and operate the pipeline on landowners’ property, but they also ensure that the landowners are fairly compensated for the use of their land. To date, we have reached mutual easement

agreements with more than 75 percent of the landowners on the pipeline’s route, and all of those landowners have been compensated. All of those agreements were signed voluntarily by the landowners after mutual negotiation and concessions on both sides. Our goal is always to reach a mutual agreement that satisfies all parties.

When building infrastructure lines, we conduct informational meetings in which we engage with community members to learn about their concerns. We work with local government, community groups and residents to find the best solution with the least impact.

For any infrastructure project, eminent domain remains an absolute last resort. In the case of an interstate natural gas pipeline, it can be used only once a project receives federal approval and only in the relatively small number of cases where an agreement cannot be reached with the landowners. In those cases, a court determines how much the landowner should be compensated for the use of their land.



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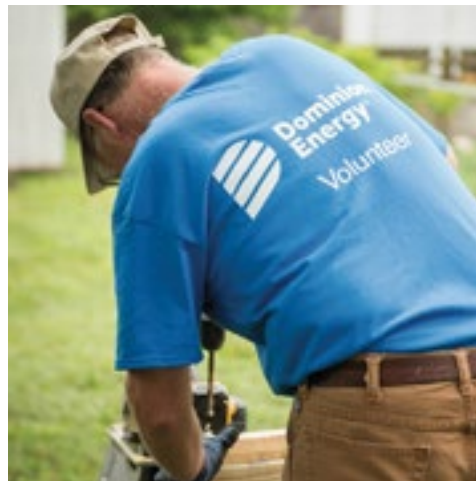
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**Focusing on community engagement**

We build a lot of infrastructure, and the planning starts with listening to people who live in communities that will be affected. Making sure that everyone’s voice is heard is important. In 2017, we began several initiatives to improve our approach to planning these projects and will be working into 2018 to implement changes to enhance our efforts going forward. Attendees to our public meetings about the Atlantic Coast Pipeline have totaled 8,800. In 2016, we also had 700 people attend 25 outreach events about the company’s electric transmission projects.

In 2016, Dominion Energy expanded the company’s existing Speakers Bureau program. More than 100 employees received training and participated in nearly 140 events across Virginia. As part of the program, employees speak to students, community groups and local businesses about energy efficiency, electrical safety, storm preparedness, careers and infrastructure projects.



**Promoting Safety**

We have a “safety village” that is used for electric safety demonstrations at schools and community events. On the electric side of the company, we also conduct diligent inspections to ensure our equipment is safe for those in the community and our line crews. By the end of 2019, our goal is to inspect 125,000 wood poles to verify they meet our stringent requirements.

Dominion Energy conducts public awareness programs to educate landowners near company facilities to help protect the safety of the community and the facility. This is especially important along 7,800 miles of pipeline that we operate, ranging in diameter from 2 inches to 36 inches, across six states—Ohio, Pennsylvania, Maryland, New York, Virginia and West Virginia. Of that total, nearly half are natural gas transmission, storage or jurisdictional gathering pipelines.

About 270 miles of the gas transmission and storage pipelines have been identified as being in high-consequence areas. Assessments occur about every seven years for gas transmission and storage pipelines and five years for liquid pipelines, but can be shorter for pipelines that indicate potential problems. These efforts help make serious incidents related to natural gas transmission and distribution extremely rare in the United States. Over the past 20 years, third-party damage has been the primary cause of incidents on natural gas pipelines, accounting for about 25 percent of all serious incidents on transmission pipelines and about 33 percent on distribution pipelines.

We support laws requiring the use of the 811 “Know what’s below; Call before you

dig” one-call system. Anyone planning to do work that disturbs the soil beneath streets, sidewalks, yards, farms or other property is required to call the single designated number. All utilities, authorities and others mark their underground facilities before work begins. Excavators can call the one-call system in their state or the national one-call number 811. It’s important to us that our customers and employees know how to take safety precautions around both electric and gas infrastructure.

Employee volunteers in Utah make roughly 100 safety presentations each year to community organizations, informing customers about earthquake preparedness, natural gas safety, the safety of high-pressure pipelines near their homes and businesses, ways to identify leaks and what to do in the event of an incident. We conduct campaigns every fall to encourage customers to have a licensed heating expert check furnaces before winter, and we partner with Utah Poison Control, Health Department and Unified Fire Department each year to educate the public about carbon monoxide. We sponsored the Utah Safety Council Safety Conference and Expo in 2017, and will do so again in 2018.



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## Investing in Community Development

The employees and retirees of Dominion Energy give our time and our money to the communities where we live and serve. Volunteering is deeply embedded in our company’s history. As far back as 1918, employees of Virginia Railway and Power Co. joined forces to package boxes of food and deliver them to families in need during the holidays.



**Our strategy is to listen to community stakeholders, and then to invest in local needs.** We demonstrate our care about the communities we serve through charitable giving, energy assistance, volunteer activities and educational programs. We actively encourage our employees to donate their time and money to address community needs.

**Here's how we performed.** Our employees gave nearly 125,000 hours of personal volunteer time while also participating in numerous company-sponsored community engagement events across the 19 states where we do business.

**Here's where we're going in the future.** In 2018, we plan to invest more than \$20 million to support community needs, in addition to encouraging and supporting employee volunteerism. Our goal is to exceed 100,000 hours of employee volunteer time. In support of our partnerships with small, local and diverse businesses, we will conduct matchmaking events, pairing local businesses with our own employees to discuss upcoming opportunities. We will continue to cultivate relationships with local businesses and advocacy organizations to encourage economic growth in our communities.

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Today’s employees continue to embody that spirit of community service that few companies can match. Dominion Energy’s formal community service program has thrived for more than three decades. Each year, the company sponsors one day of paid volunteer time for each employee and encourages participation in company-sponsored volunteer events. In 2016 and 2017, employees logged more than 200,000 hours of volunteer time and participated in more than 60 employee-led “Energizing Our Communities” projects. In one of the 2017 projects, we partnered with International Paper Co., the City of Franklin and KaBoom! to build a playground for families in a rural Virginia community.

We try to focus on the things that matter most—protecting natural resources, investing in education, supporting veterans, and revitalizing neighborhoods. The Dominion Energy Charitable Foundation and the company annually award about \$20 million to causes like these. (Shareholders fund these grants, not customers.)



**Project Plant It!**

Dominion Energy sponsors Project Plant It!, partnering with local organizations to teach students about the environmental benefits of planting trees. Children from local

schools, Girl Scout and Boy Scout troops, civic associations and more take part in our interactive lessons and leave with tree seedlings to plant at home or at school. The company distributed more than 400,000 seedlings, which is equivalent to almost 900 acres of new forest land. This is enough to offset the carbon emissions of more than 38,000 cars per year.



**Teaching About Environmental Stewardship**

The Dominion Energy Charitable Foundation supports K-12 schools that:

- Teach students and the public about environmental stewardship;
- Protect and preserve natural habitats; and
- Improve open spaces and make nature accessible.

These grants are highly competitive. In early 2017, the foundation awarded \$1.2 million to more than 100 organizations—in Connecticut, Maryland, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Virginia and West Virginia.

The program received nearly \$4 million in requests from nonprofits and schools in 10 states. Recipients in 2017 include:

- Albemarle County Public Schools, Charlottesville, Va., for its Operation Bee program;
- Alliance for the Chesapeake Bay, Annapolis, Md., for its Project Clean Stream program;
- Clemson University Foundation, Clemson, S.C., for its 4-H Junior Naturalist program;
- Jeannette’s Pier, Nags Head, N.C., for use of drone explorations in environmental science;
- Parkersburg Area Community Foundation, Parkersburg, W.Va., for Star Gazing at Calhoun County Star Park;
- Save Lucy Campaign, Mt. Solon, Va., for its Bat Friendly VA program; and
- The Nature Generation, Purcellville, Va., for an Americans with Disabilities Act-accessible community bridge.

**LED Lights for Decoration**

Dominion Energy sponsors two holiday light shows, both featuring LED lights. The Dominion Energy GardenFest of Lights at Lewis Ginter Botanical Garden is one of the Richmond area’s largest holiday light displays and works in partnership with the company to create a holiday light display that requires less energy and yields more intensity and flexibility by using more than 500,000 LED bulbs. A similar display, with more than 1 million lights, is held annually at the Norfolk Botanical Garden, and Dominion Energy, through its foundation, is the title sponsor.

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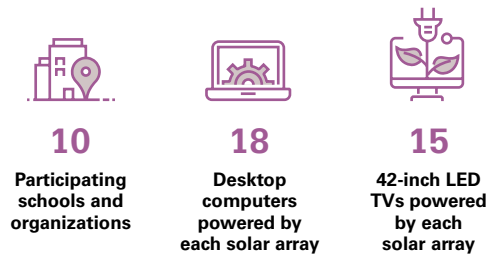


**Dominion Energy Envirothon**

This is a team-based natural resources competition for high school students throughout Virginia. Students learn stewardship and management concepts and work to solve real world environmental problems. During regional competitions, teams of high school students are tested on their knowledge of natural resources, including soils, forestry, wildlife, aquatics and a current environmental issue. Students visit five “in-the-field” test stations, where written and hands-on problem solving is required along with an oral presentation formulating a strategy to address a specific environmental issue they’ve researched. Winners of the regional competitions move to the Virginia statewide competition, and those winners attend the North American Envirothon. The company has sponsored this project, in partnership with the Virginia Association of Soil and Water Conservation Districts, since 2011.

**Solar for Students**

Dominion Energy is doubling the size of this program that gives students hands-on experience with solar power. The company has now selected 10 public schools and a children’s museum where students can observe and learn firsthand about harnessing solar energy from a solar array installed right outside the classroom. The schools receive a 1.2-kilowatt photovoltaic system that converts sunlight into electric power, along with technical support, educational materials and teacher training. The program will grow even more in the future.



**Scholarships**

**School- and Job-Readiness Programs**  
At the discretion of the Philanthropy staff and Dominion Energy’s Community Investment Boards, area grants are made to help teens prepare for jobs or bridge to post-secondary programs in engineering, math or science. Program support varies from year to year, but often includes Junior Achievement and such organizations as Jobs for Virginia Graduates and Cleveland’s Hard-Hatted Women.

- **Dominion Energy Careers in Energy at Three Rivers Community Technical College**  
Supports promising candidates for the Nuclear Engineering Technology program at Three Rivers Community College in Norwich, Conn., with up to 16 two-year scholarship awards per year, which includes tuition and fees, books, monthly stipend, and a summer internship assignment at Dominion Energy’s Millstone Power Station.
- **Dominion Energy Credit Union Scholarship Program**  
Provides educational funds for Dominion Energy Credit Union members who are graduating high school seniors enrolling as full-time students in an accredited college or university.
- **Combined College Funds**  
In the states where Dominion Energy has a broad customer base, we support a variety of combined college funds, such as the United Negro College Fund, as well as statewide and regional foundations for independent colleges and community colleges.
- **Diversity Scholars**  
We are increasing the diversity scholarships designated for highly qualified female and minority candidates—with more to come.

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**Community Revitalization**

The Dominion Energy Charitable Foundation will award up to \$1 million in grants that address critical community needs to nonprofit 501(c)(3) organizations in communities served by Dominion Energy companies. The Dominion Energy Charitable Foundation will consider grant requests up to \$50,000 that support housing and shelter, access to medicine and medical services (including mental health services), or increased food security.

**Priority will be given to efforts that:**

- Support specific programs with significant and measurable outcomes;
- Have proven records of meeting basic human needs and preventing future need; and
- Demonstrate strong partnerships and effective collaborations to meet critical community needs that advance the work beyond what one organization can do alone.

**Revitalizing Neighborhoods**

Since the fall of 2000, Dominion Energy employees have participated in more than 200 employee-nominated and -led projects to support environmental projects throughout communities served by Dominion Energy companies.

The initiative started as a one-day event to engage employees in environmental projects in their communities. Our volunteers have helped beautify parks, assisted with erosion control projects, removed invasive species, cleaned rivers, replaced osprey platforms, restored greenhouses, built urban gardens and much more.

Armed with plastic bags, rubber gloves and bug spray, 13 members of Dominion Energy’s Environmental Services team tackled the trash at Great Shiplock Park in Richmond, a historic urban park along the north bank of the James River. Volunteers

picked up cans, bottles, cardboard, old clothing and lots more trash. In all, they collected 20 bags of trash totaling more than 450 pounds.

The cleanup was part of a key program administered by Project Clean Stream, an endeavor supported by the Dominion Energy Charitable Foundation in 2017 and the largest cleanup event in the Chesapeake Bay region. Cleanups take place across the entire Chesapeake watershed, in all six Bay states and Washington, D.C.



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**Supporting Veterans**

In 2017, the Dominion Energy Charitable Foundation awarded \$550,000 in grants to provide services to veterans and military families. These include workforce programs, shelters and transitional housing, medical services (including addiction recovery), and family support. Dominion Energy employees support veterans through coordinated volunteer efforts.

As part of a Wounded Warriors project in West Virginia, employees served as fly-fishing guides with the Potomac Highlands Wounded Warrior Outreach and the Veteran of Foreign Wars organization. For three days, 11 Dominion Energy employees shared their expertise on the fine art of casting, catching and landing the elusive trout, which is then released. The veterans soon realized that despite some limitations, they can participate in activities that were once considered too difficult or even impossible.

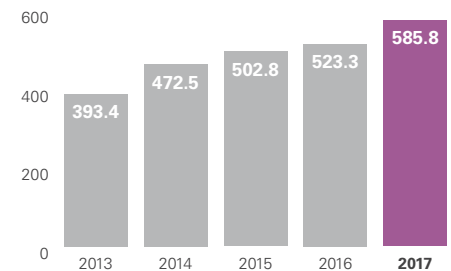
**Putting our dollars to work with local and diverse businesses**

Being a good partner with our communities also means spending dollars to support the local economy and businesses.

We partner with competitive and qualified small, local and diverse businesses to participate in the supply of materials, equipment and services we need to operate. We work with advocacy groups to identify and encourage local businesses to participate in our procurement processes. In 2017, we held matchmaking events that paired local businesses with our own employees to discuss supplier capabilities and upcoming opportunities. These partnerships translate into economic growth and increased employment opportunities in the communities we serve.

**Growth in Supplier Diversity Spending**

(millions of dollars)



# Environmental Stewardship

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## Environmental Stewardship

“Dominion Energy is fully committed to meeting its customers’ energy needs in an environmentally responsible manner. We aim to do what’s right for the communities we serve by always complying with laws and regulations, and acting consistently with our core values.” —Pam Faggert



Pamela F. Faggert, Chief Environmental Officer and Senior Vice President, Sustainability

While our environmental commitment starts with full compliance with regulations, the expectation goes further. We meet or go beyond applicable laws and regulations and pursue opportunities to create and preserve shareholder value while doing what’s right for our employees, customers and communities.

To live up to these expectations, our environmental management system has a robust set of clear expectations for every employee and for every company that helps us do business. Beginning in 2016 and continuing into 2017, we took a hard look at the systems and processes in place to improve our environmental performance.

The result is an even stronger environmental management system, led by the company’s most senior leaders, and driven by the chairman and CEO. In 2017, we established new companywide standards for environmental management, critically reviewed current practices, and established implementation plans for our business groups. In the year ahead, each of our business groups will implement these improvements to our environmental management system.

As we implement these standards, we also will focus on those environmental aspects of our operations important to our company and our stakeholders as we provide energy to our customers. We continue to strive to improve our efforts to address greenhouse gases and other air emissions from our operations, water use and water quality, responsible management of wastes, and land and wildlife protection.

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## Greenhouse Gases & Air Quality

### Leadership

**1 of 3**  
**companies**

reducing carbon emissions rate by

**more than**  
**40%**

Since 2000, our carbon intensity has decreased by 43 percent.

The company intends to further increase our reliance on cleaner generating technologies, and when combined with continued operation of our three nuclear power stations, should result in an additional reduction of our carbon intensity to 50 percent by 2030.

**Our air quality strategy** is to pursue a diverse mix of cleaner, more efficient, and lower emitting methods of generating and delivering energy—while advancing aggressive voluntary measures to continue dramatically reducing emissions.

**Here's how we performed.** Between 2000 and 2017, we reduced air emission rates by **more than 90 percent**—and *doubled* our production of electricity from renewable energy. We are burning a lot less coal, which today accounts for just 13 percent of our electric output. Since 2008, we have **reduced methane emissions by 5.4 billion cubic feet**, according to EPA estimates. This results from years of taking increasingly stringent voluntary action.

**Here's where we're going.** The company intends to further **increase our reliance on cleaner generating technologies**, and when combined with continued operation of our three nuclear power stations, should result in an **additional reduction of our carbon intensity to 50 percent by 2030.** We will continue a comprehensive methane strategy that would further **reduce methane emissions over the next five years** at an even more rapid pace.

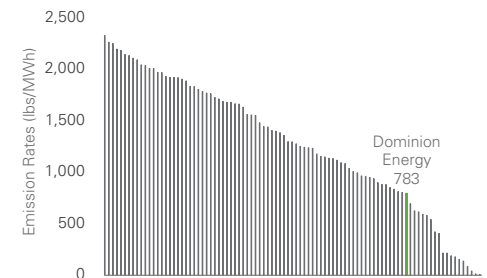
### Addressing Climate Change

Global climate change is one of the most significant energy and environmental challenges. We are committed to doing our part, along with other energy companies, to address greenhouse gas emissions from our electric generating fleet and our natural gas businesses.

### Reducing Methane Emissions

Our methane emissions reductions are the result of the cumulative effect from numerous voluntary programs. For years, our methane strategy focused on reducing our lost and unaccounted for gas rate. But we wanted further reductions. So more than five years ago, we joined the EPA's Natural Gas STAR program, which emphasized best management practices to voluntarily reduce methane emissions and report those reductions. Interested in

**Environmental Leadership**  
Carbon Performance Benchmarking—Industry CO<sub>2</sub> Intensity



Source: Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the U.S. (M.J. Bradley, July 2016).

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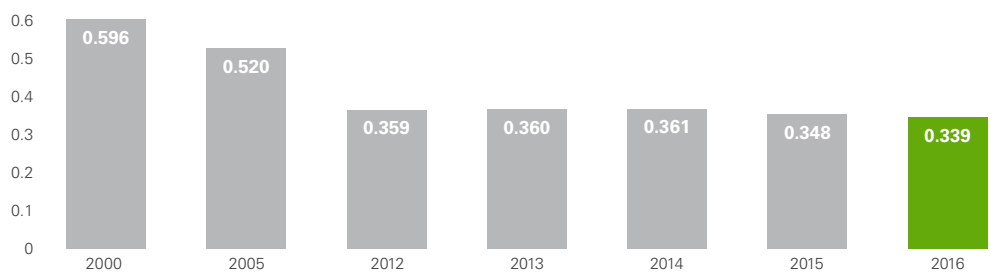
further reducing our methane emissions, we joined EPA's Methane Challenge as a founding member.

As part of the Methane Challenge, we committed to methane reduction targets through 2021, and we began disclosing results before the Challenge deadline. Experience has taught us that **one of the most effective ways to reduce methane emissions is to upgrade older pipelines.** In Ohio—our largest gas distribution market—we have been actively replacing more than 5,000 miles of bare steel mains since 2008. As part of the Methane Challenge we are planning to reduce methane emissions by investing \$200 million or more annually over the next two decades to upgrade aged bare steel, cast iron, wrought iron and copper pipe in our Ohio pipeline system—expanding on the \$1.2 billion investment we have already made to replace more than 1,300 miles of pipeline in the Buckeye State. In 2016, we began to grow a similar program we created in West Virginia in 2016, and plans call for an additional \$58 million investment there over the next two years.

On the high pressure transmission side of our business, we are reducing emissions in the Methane Challenge by relieving pressure before conducting pipeline maintenance. The Dominion Energy Transmission team will reduce methane emissions from maintenance activities by at least 50 percent by 2021. New procedures include reducing pipeline pressure before blowing down (this is the procedure where maintenance depends on first relieving pressure in the pipeline by releasing methane into the atmosphere), routing gas to a compressor or other systems for beneficial use, and using “hot taps.” (This is the ability

**Dominion Energy Carbon Intensity Reductions**

CO<sub>2</sub>e intensity rate (mt/net mWh) (by ownership)



to safely tap into a pipeline while it remains under pressure. The technology is possible only on newer pipelines.)

In Utah—our newest gas distribution market—we will reduce methane emissions under the Methane Challenge through a new program to prevent excavation damage of pipelines. Dominion Energy Wexpro will install new air compressors and air dryers to 31 devices at Canyon Creek and Church Buttes, eliminating 46,000 MCF gas lost and related emissions. We are proud that Clean Cities recognized Dominion Energy as one of the top idle-free businesses in Utah in 2017.

Recently, we challenged ourselves to find additional voluntary measures in addition to the prior voluntary programs to reduce methane emissions even further, and launched new voluntary initiatives to achieve additional reductions over the next five years.

In addition to the reduction of emissions, we are also focused on continuing to be transparent about our emissions, and in fact, we are proud to have **the most**

**comprehensive public disclosures of any peer gas company.** Dominion Energy will increase disclosures around greenhouse gases by participating in the CDP (formerly the Carbon Disclosure Project) reporting on greenhouse gases in 2018.

In 2015, we published our first methane report, building on more than a decade of voluntary reports on greenhouse gas emissions. This report was updated again in 2016. In 2012, we began reporting methane emissions from our natural gas system under the EPA mandatory greenhouse gas-reporting program. In 2008, we began developing a corporate greenhouse gas inventory for our natural gas businesses, and we have voluntarily reported our total carbon emissions on our website since 2005. Dominion Energy has been proactive about reporting methane emissions, and our program for estimating them uses approaches that the EPA recommends. We continue to incorporate and share cost-effective best practices in engineering design to reduce methane emissions from new projects.

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**Reducing carbon intensity**

Dominion Energy has a multi-pronged strategy to address carbon emissions, focusing on the ways electricity is produced, transmitted and consumed, and the company has announced plans to continue to increase our reliance on cleaner generation technologies. Our strategy also relies on maintaining a diverse fuel mix so that our customers can receive the benefits of changing market conditions for fuel prices. That’s why we are investing in clean, renewable sources of energy, natural gas, and emission-free nuclear generation. This strategy is producing demonstrable results.

**Dominion Energy’s carbon emissions rate for its electric generating fleet is in the top quartile (lowest emitters) among energy producers in the United States,**

according to an annual benchmarking report published by the M.J. Bradley group for CERES.

**Since 2000, our carbon intensity has decreased by 43 percent,** placing us in an elite group of just three companies. Dominion Energy intends to further increase our reliance on cleaner generating technologies. When combined with continued generation of our three nuclear power stations, this should result in an additional reduction of our carbon intensity to 50 percent by 2030.

In addition, between 2000 and 2016, our use of coal to generate electricity for customers in Virginia fell from 46 percent to 27 percent. In those same 16 years, our production of electricity from natural gas increased from 5 percent to 34 percent, and

our production of electricity from renewable energy doubled. Generation of the future also will be more efficient, like the new natural gas-fired power station that will open in 2018 in Greensville County, Va. It will be the largest and most efficient natural gas power station in the country—operating under the most stringent air permit in the United States in terms of carbon dioxide emissions. It will be able to power 400,000 homes. Also essential to keeping carbon emissions low, our production from carbon-free nuclear generation has remained high.

We will continue to transition to cleaner generation to prepare for a lower carbon future, not only because that’s where the world is moving, but because it’s the right thing to do.

**Lower Air Emissions**

The air in Virginia is cleaner today than in the past 20 years, the state’s Department of Environmental Quality reported in late 2017. That’s thanks, in part, to Dominion Energy’s great strides in reducing air pollutant emissions from its electric generating fleet.

Between 2000 and 2016, nitrogen oxide, sulfur dioxide and mercury emissions (measured in pounds per net MWh) from our power generation fleet have been reduced by 93 percent, 98 percent and 97 percent, respectively. Over the same period, Dominion Energy increased the amount of electricity provided by 23 percent.

**Improving Air Emissions - Dominion Energy**

Emissions Intensity Reductions (lbs./MWh) Compared to Increases in Generation (MWh).

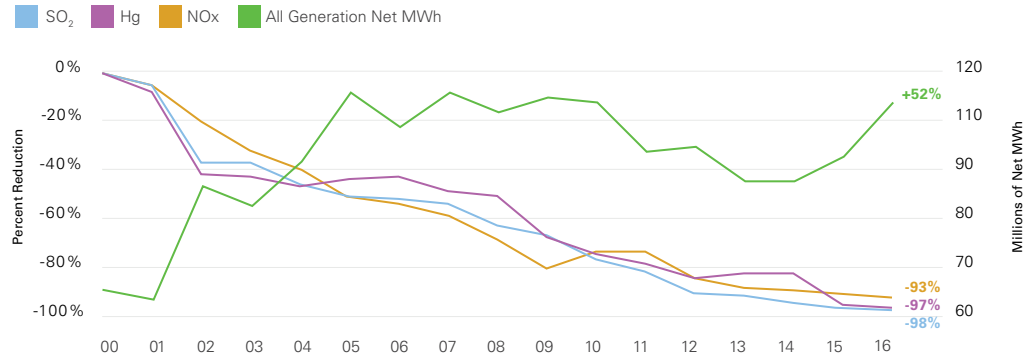


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# Dominion Energy Green Fleet

## A Greener Vehicle Fleet

Alternative vehicle technologies and fuels help lower greenhouse gas emissions, reduce worksite noise levels, and improve working conditions for our field crews. As of January 2017, more than one in three (38 percent) of the vehicles in our on-road fleet—more than 6,000 cars and trucks—are powered by alternative fuels:

- **B20 biodiesel fuel** powers more than 800 vehicles.
- **Compressed natural gas** is used in more than 250 vehicles in Ohio and Utah.
- **Hybrid car batteries and gasoline** work together to lower the fuel and operating costs of our hybrid electric vehicle fleet, providing health and environmental benefits, too.
- **Large lithium-ion battery packs** fuel our all-electric vehicles, helping reduce the company's fuel use and carbon footprint. (See the section to learn more about Dominion Energy's efforts to promote electric vehicle use among its customers.)

### Dominion Energy's Green Fleet (As of Jan. 2017)

VEHICLETYPE	NUMBER
B20 Biodiesel	837
Flex fuel*	1,236
Compressed Natural Gas	255
Hybrid Electric	52
Bi-Fuel	365
<b>Total</b>	<b>2,749</b>

\*Flex fuel vehicles operate mainly on gasoline due to the scarcity of Ethanol 85.

Revised as of April 2018

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Dominion Energy Generation (Air Emissions)	2016	2015	2014	2013	2012	2005	2000
Total CO <sub>2</sub> e emissions (millions of metric tons) (by ownership)	37.2	34.3	33.6	33.9	36.2	58.1	42.6
CO <sub>2</sub> e intensity rate (mt/net MWh) (by ownership)	0.339	0.348	0.361	0.360	0.359	0.520	0.596
Total CO <sub>2</sub> emissions (millions of metric tons) (by ownership)	36.7	33.8	33.1	33.2	36.1	57.3	42.0
CO <sub>2</sub> intensity rate (mt/net MWh) (by ownership)	0.336	0.343	0.356	0.354	0.359	0.513	0.587
Nitrogen oxide emissions (metric tons) (by ownership)	13,883	15,361	16,987	18,742	27,173	101,106	132,895
Nitrogen oxide emissions intensity (MT/Net MWh) (by ownership)	0.000128	0.000157	0.000184	0.000201	0.000271	0.000912	0.001861
Sulfur dioxide emissions (metric tons) (by ownership)	9,665	12,921	25,961	37,294	45,282	283,213	372,732
Sulfur dioxide emissions intensity (MT/Net MWh) (by ownership)	0.000089	0.000132	0.000281	0.000400	0.000452	0.002554	0.005219
Mercury emissions (kg) (by ownership)	52	54	231	235	226	931	1,071
Mercury emissions Intensity (kg/Net MWh)	4.78E-07	5.49E-07	2.50E-06	2.52E-06	2.25E-06	8.40E-06	1.50E-05

Dominion Energy Natural Gas (Air Emissions)	2016	2015	2014	2013	2012
Methane emissions (segments reported prior 2016; thousand metric tons)	35	40	46	45	49
Methane emissions—Blowdown segment reporting starting in 2016	8	(a)	(a)	(a)	(a)
Dominion Energy West Methane Emissions (thousand metric tons)	20	21	21	21	21

(a) Methane emissions from blowdowns added as reporting segment in 2016.

CO <sub>2</sub> e emissions of SF6	2016	2015	2014	2013	2012
Sulfur Hexafluoride (MT)	1.8	2.36	3.32	2.04	2.09
CO <sub>2</sub> e of sulfur hexafluoride (MT)	42,846	53,819	75,671	46,446	47,759



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## Water Quality and Use

Part of our environmental responsibility is not only to control air emissions from our operations, but also to conserve resources such as water. Producing energy requires water for cooling, fuel processing, environmental control and more. In many cases, water can be used and then returned to its original source. Since not all water can be returned, we look for opportunities to use less and to reuse water. We have further described our efforts since 2011 in the Carbon Disclosure Project’s annual “Water Disclosure,” to share our water-use and risk-management strategies with customers.



**Our strategy is to use less water** as we transform our fleet to lower carbon. We are identifying ways to use water more efficiently and to protect water quality.

**Here’s how we performed.** Water is not used to cool the new power generation facilities we opened in 2016. These include Brunswick County Power Station, which sports a modern cooling system that does not use water for cooling. Neither does the approximately 742MW of solar generation we currently are developing or have put into service since 2016 began. We continue searching for innovative ways to conserve water as we renovate office buildings. We continue to responsibly “dewater” coal ash ponds, in preparation for closing them well ahead of governmental requirements.

**Here’s where we’re going in the future.** Dominion Energy has already reduced water withdrawal by using low water-use technologies (such as dry-cooled condensers, for example) for new generation, and we will further reduce water use in the future as we continue to add to our portfolio of renewable power generation. In 2018, Dominion Energy Wexpro will install a produced water treatment system at the Canyon Creek Unit Produced Water Evaporation Facility. This system will allow an estimated 21 million gallons of produced water to be reused over the next five years at the Canyon Creek Unit Central facility and operations and operations in Wyoming.

Some of our electricity generating stations require fresh water for sanitation, air pollution control, and equipment cooling. In some cases, we have found opportunities to reuse or recycle this valuable resource. For instance, Chesterfield Power Station reuses wastewater from Proctors Creek Wastewater Treatment Plant in portions of its air emissions control equipment. And in cooler months, Millstone Power Station in Connecticut uses “variable speed drives” to regulate water and ensure the plant uses only the amount of water that is necessary to produce power.

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As we build new power stations, we have worked to eliminate the need for water to be used for cooling. The Virginia City Hybrid Energy Center, a state-of-the-art power station in Southwest Virginia, uses an air-cooled condenser to eliminate the use of water for cooling, differing from traditional coal-fired power stations that require water to cool. Similar, modern cooling systems were installed at Warren County Power Station, which became operational in late 2014, and Brunswick County Power Station, which began commercial operation in 2016. The same system will be used at the Greenville Power Station under construction. New solar construction does not require water to provide power.

**“Dewatering” coal ash ponds**

We are in the process of closing 11 ash ponds at four coal-fired power stations in

Virginia. We plan to close these ponds, which will eliminate future releases of water. One of the first steps is “dewatering” the ponds, which involves careful treatment and testing of the water before it’s released. We’re working with several top firms that specialize in on-site wastewater treatment. We will remove the water and treat and test it on-site using a multistage process to meet or go beyond stringent, government-mandated levels before release. The coal ash itself will not be released into nearby waterways, merely water that has been put through a rigorous filtration process incorporating state-of-the-art science.

When releasing the water from coal ash ponds, we are committed to protecting nearby streams and rivers. We follow the Virginia Department of Environmental Quality’s stringent standards to protect not

only water, but also fish, birds and other animals. Even after the ponds are closed, groundwater will continue to be monitored. We are committed to transparency around this process. We post water quality test results publicly on our website at [www.dominionenergy.com/coalash](http://www.dominionenergy.com/coalash).

**Water Use in Gas Operations and Infrastructure Construction**

Water is used in the initial completion of natural gas wells through a process called hydraulic fracturing, or “fracking.” While other companies produce most of the gas transferred in our pipelines, we do use this process in the extraction parts of our business.

Pipeline construction sometimes involves clearing of the land in areas that have rough terrain or wetlands or streams along the path. This type of construction can be challenging, and we work with our construction partners to minimize impacts to the environment. Pipeline construction involves careful planning to implement safely and avoid impacts to the environment. That’s why we did research to identify “best-in-class” practices to avoid soils from impacting wetlands or streams during construction. In addition, we signed on to the Interstate Natural Gas Association of America’s Best Practices for Pipeline Construction as a further commitment to minimize impacts from construction. Sometimes the plan will involve drilling beneath waterways to avoid disturbing aquatic life. This type of construction likewise requires careful planning to avoid impacts.



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**Reducing water use in facilities**

We are committed to conserving water not only in large-scale operations, but also in our office facilities. For instance, we use motion sensors in our restrooms with no-touch flush features and hand-washing fixtures to minimize water usage. New company office buildings are Leadership in Energy and Environmental Design (LEED)-certified by the U.S. Green Building Council and are constructed with low-water consumption landscaping and building fixtures. Six of our offices have been built to these standards: Cove Point liquefaction plant in Maryland; White Oaks in West Virginia; the new Systems Operations Center near Richmond; the administrative building at Brunswick Power Station; the gas transmission facility in Sabinsville, Pa.; and the Ohio Training Center in Boston Heights. Another six are currently under construction: the corporate office at 600 Canal Place and the corporate hangar in Richmond; an administrative building and warehouse in Lima, Ohio; facilities in Oakford, Pa., and Summersville,

W.Va.; and the administrative building at Greenville Power Station in Virginia.

**When something goes wrong...**

We work hard to address it so it will not happen again. This happened with an accidental fuel spill in January 2016. Dominion Energy crews responded to a failed transformer at an electric substation in a congested metro area near Washington, D.C. The failure caused mineral oil dielectric fluid to be released, and a series of unforeseen circumstances with the oil containment system caused some of the oil to make its way into a nearby waterway.

Over the next eight months, Dominion Energy worked with various federal, state and local agencies to reduce the impacts of the released oil and to repair the substation, significantly enhancing its spill containment systems.

Although this did not meet our expectations, Dominion Energy used this experience to launch an extensive review of oil spill response plans and physical

containment systems at its electrical substations. Over the next 17 months, Dominion Energy employed extensive resources to revise oil containment engineering standards, physically inspect existing containment systems, evaluate sites for oil containment upgrades and repairs, and revise the company’s Spill Prevention Control and Countermeasures Plan for these facilities. A total of 654 substations were inspected and evaluated. Repairs or enhancements were made to existing containment systems at 135 sites, and new or additional containment systems were installed at 43 sites. With the completion of this tremendous effort in July 2017, coupled with a strategy of continuing inspection and evaluation, Dominion Energy’s substation spill prevention and control systems will remain robust in the long term to ensure the protection of environmentally sensitive ecosystems within its service territory.

Dominion Energy Generation Water Use	2016	2015	2014	2013	2012
Water reused/recycled (million liters)	5,598	2,097	2,017	1,700	1,173
Water reused/recycled (million liters/Net MWh)	0.0000510	0.0000213	0.0000217	0.0000181	0.0000116

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## Reducing Waste

**Our strategy for handling waste** is to avoid creating waste whenever possible, and to look for opportunities to reuse waste material when it cannot be avoided. When waste requires disposal, we do so responsibly.

**Here's how we performed.** We recycled 718,257 tons of coal combustion byproducts, 7,473 tons of ash from the combustion of wood waste, 12,335 tons of oils and fluids, 20,553 tons of scrap metal, 495 tons of paper, cardboard, plastic and glass, and 34 tons of electronic waste. Dominion Energy Questar received a "Zero Waste Award" in recognition of its "outstanding waste reduction achievements in the state of Utah" from the Utah Recycling Alliance

for recycling efforts. In 2017, we opened a new landfill for future management of ash from Chesterfield Power Station.

**Here's where we're going in the future.**

We will continue our zero-landfill policy Information Technology equipment by responsibly recycling IT equipment that we no longer use.

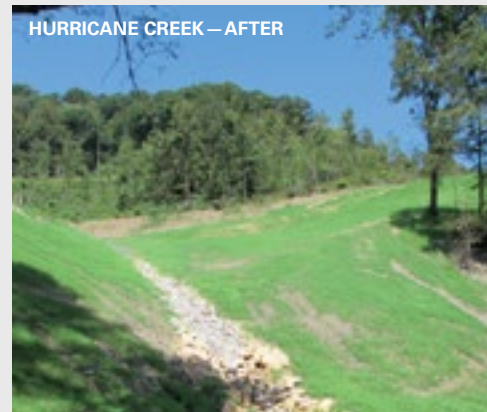
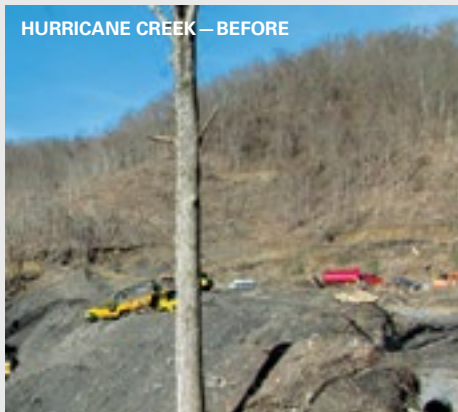
**Electronic waste**

It's important to us to reuse and recycle responsibly, so we use an IT disposal vendor that has a "no-landfill" policy and resells almost all of the company's disposed assets for continued use, while recycling all others in an environmentally responsible manner. In 2016, we recycled 34 tons of electronic waste.

**Disposal of coal ash**

As part of our transition to cleaner energy, we are shifting our focus on how we manage wastes at our facilities. The generation of new coal ash is eliminated as we retire coal units or convert them to use different fuels. For those stations that currently burn coal or have in the past, managing the ash from these sites happens in one of three ways: deposited in landfills, either on- or off-site; recycled, or stored in ash ponds.

For four stations, coal ash, a byproduct of burning coal, was stored by saturating it with water and pumping it into treatment ponds, which enabled the ash to settle in the pond and water to be released. After two incidents elsewhere in our industry



**Cleaning Up**

We are committed not only to abiding by environmental laws and regulations, but also to going above and beyond to do right by the communities we serve.

The Virginia City Hybrid Energy Center in Wise County, Va., in part uses as a fuel source the waste coal—or "gob"—left behind by local mining operations. So far, we have removed and burned a half-million tons of such coal from the Hurricane Creek gob site, a major polluter of the Clinch River in Southwest Virginia. Here's what the change looks like.

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that involved spills from ash ponds, the EPA established new rules in 2015 for managing ash. We have begun the process to close 11 ponds at these four locations. In addition, a study was completed in 2017 to ensure that stakeholders had information about various options for closure, including safety, environmental, and community impacts of various options.

At other stations that continue to burn coal, the ash is either recycled or landfilled onsite or at a commercial landfill. At Chesterfield Power Station, the ash-handling process for the station was converted to dry handling of ash, and a new state-of-the-art landfill was constructed and began operation in November 2017 for future ash generated at the station that is not recycled.

**Repurposing coal ash**

In the spirit of recycling, we continue to explore innovative ways to reuse coal combustion byproducts for the creation of drywall, roofing shingles, concrete, cement, and even bowling balls.

We recycle about 700,000 tons of coal ash material per year. In 2016, 21 percent of Dominion Energy’s coal ash was beneficially reused. Learn more at [www.dominionenergy.com/coalash](http://www.dominionenergy.com/coalash).

**Recycling**

We recycled more than 41 million pounds of scrap metals such as copper, aluminum and steel. Some of the other materials we are dedicated to recycling responsibly include hard hats, demolition material, scrap batteries, brass, porcelain, iron, crude oil and transformer oil, street lights, and

scrap transformers. In 2016, we recycled nearly 500 tons of paper, cardboard, plastic and glass.

**Efficiency in our offices**

We strive to make our company facilities sustainable by using as many recycled materials and energy efficient appliances as possible. We install LED lights where feasible and replace incandescent lighting and traditional fluorescent lights with efficient T-8 fluorescent fixtures. We keep warm with high-efficiency gas-fired unit heaters in place of steam fan coil units, and we install programmable thermostats to save energy. We also use solar film on windows to decrease heat infiltration and have heat reflective shades that can be closed electronically on hot days to help conserve energy. Our offices sport furniture systems made from recycled materials and carpet manufactured from 90 percent recycled materials, which is also fully recyclable when retired.

In our restrooms, occupancy sensor-controlled light fixtures save energy, and hands-free automated paper towel dispensers, set to distribute the smallest effective amount of paper, reduce trash. Moreover, foam soap dispensers in restrooms reduce the use of soap.

To conserve, we also use measures such as a paperless work order process to cut paper usage by more than 200,000 sheets per year. Moreover, we are using single-stream trash recycling at our offices. Practicing sustainability in our workspaces enables us to be good stewards of the environment for our customers.



**“Green” hard hats that give back**

Dominion Energy buys hard hats made from a plant-based plastic. Just as safe and protective as traditional hard hats, our “green” hard hats are made from green high-density polyethylene, derived from the abundant sugarcane plant. The material is not only 100 percent recyclable, but it also is a renewable resource because sugarcane grows faster than it is harvested. Best of all, sugarcane helps reduce greenhouse gas emissions because it captures carbon dioxide during photosynthesis.

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**Recycling demolition material**

We are practicing sustainability in the construction of a new office tower, to be called 600 Canal Place, in downtown Richmond. After the former building on-site was demolished, more than 50 percent of the demolition material was recycled, per LEED standards. (LEED, or Leadership in Energy and Environmental Design, is a “green building” certification system by which third-party experts certify that a building is environmentally sustainable.) By the end of the project, we expect that number to reach 75 percent. When it is complete, 600 Canal Place will have an LEED Gold rating.

Dominion Energy Waste	2016	2015	2014	2013	2012
Coal ash produced/reused (million tons) (by ownership)	3.2/0.5	3.3/0.6	3.6/0.5	3.7/0.6	2.7/0.5
Coal combustion byproducts produced/reused (million tons) (by ownership)	3.4/0.7	3.4/0.8	3.8/0.7	3.8/0.7	2.8/0.6
Percent of coal combustion byproducts reused/recycled (by ownership)	21	24	18	18	21
Hazardous waste produced (million lbs.) (by ownership)	3.67	2.38	2.22	2.25	2

2016 data does not include Dominion Energy West operations (formerly Questar).

Dominion Energy Material Recycled or Reused (all amounts are reported in tons)	2016	2015	2014	2013	2012
Coal combustion byproducts	718,257	776,765	724,499	726,017	583,336
Biomass combustion products <sup>1</sup>	7,473	13,896	17,287	20,652	15,030
Oils, fluids for reclamation/recovery	12,335	10,241	26,114	17,351	20,326
Scrap metals	20,553	8,145	20,712	18,567	19,802
Paper, cardboard, plastic, glass	495	721	648	1,198	1,334
E-Waste	34	14	46	142	59

The 2016 waste generation includes 0.84 million lbs. of waste generated as part of a one-time soils remediation at one Dominion Energy location.

<sup>1</sup>Includes gypsum

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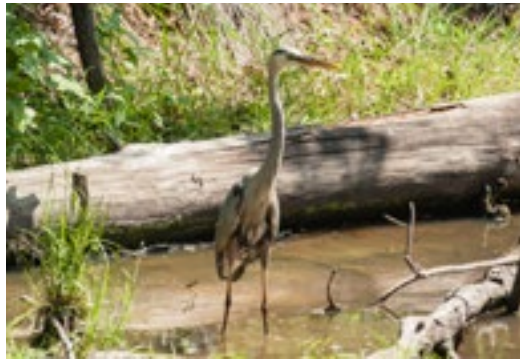
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## Habitat and Wildlife Protection



**Our strategy for protecting ecosystems and wildlife is** to look for opportunities to avoid or reduce impacts from our operations or in new projects.

**Here's how we performed.**  
In 2016, we implemented improved designs for new construction in our distribution system to provide further protection for birds in our service territory.

**Here's where we're going in the future.**  
We will continue implementing new design standards that include increased spacing on distribution lines to protect birds, animal guards on exposed equipment, and other deterrents to animals coming near equipment.

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**Protecting birds**

To build on our existing avian protection program, two years ago we began a multi-year project to protect large birds such as bald eagles, ospreys, owls and vultures. When birds with large wingspans make contact with multiple wires, they can be injured by creating a path for electricity. Most injuries and deaths occur when the birds actually land on the power poles or collide with the power lines. The program creates avian protection zones along major rivers where the birds live, such as the Potomac, James, York and Rappahannock. For all new construction or upgrades in these zones, the company increases the space between lines on power poles from 44 inches to as much as 60 inches, to give the birds more room to fly. When it's not possible to spread the wires, the company installs perch guards to discourage the birds from landing. The program protects the large birds and reduces power outages for customers. All new construction outside of the protection zone is built using a design with improved avian protections.

Dominion Energy is the first company in the country to use new aluminum alloy nesting platforms—instead of wooden ones—to lure ospreys from nesting on transmission towers. The aluminum platforms are sturdier, larger and will last a lot longer than the wooden platforms, which are prone to be destroyed by high winds and storms. In 2017, the company installed 12 new aluminum platforms alongside the Wright Memorial Bridge over Currituck Sound in North Carolina's Outer Banks. Keeping the birds off the transmission towers protects them from harm and reduces power outages for the company's customers.





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**Promoting pollinators, rare plants and birds**

We manage our electric rights-of-way to increase habitat for birds, bees, butterflies and other pollinators in Virginia and North Carolina. The company has created more than 43,000 acres of habitat by using selective herbicides that impact only trees and woody brush. By reducing the tree canopy and the shade it creates, flowers, milkweeds and other plants important to pollinators have thrived. In addition, rights-of-way in Virginia are home to rare plants that also like the open canopy. These areas are managed differently to ensure that the plants are protected. The company also has pledged to create more than 60 acres of additional pollinator habitat at its power stations. The Atlantic Coast Pipeline project also is restoring at least 50 miles of right-of-

way with pollinator habitat, native grasses and wildflowers.

In addition, this open space is attractive to birds that like this habitat, such as quail. In Virginia, we partner with the Department of Game and Inland Fisheries to help landowners manage their property in right-of ways for wildlife. As part of the Wildlife Habitat Improvement Program, the owner of property under a transmission line contacts their local Virginia Department of Game and Inland Fisheries biologist to develop a plan to improve wildlife habitat on the right-of-way. The plan may include grubbing stumps, applying herbicides, and planting game food species. Once the plan is developed and approved by the agency and by the company, a portion of the cost to the landowner is reimbursed.

**Bats, eels and more**

Employees at Warren County Power Station noticed in 2015 that bats were being drawn into the large fans that are part of the station's air-cooled condenser. To protect the bats, the company is installing netting beneath the fans where this has been an issue and has since included this in the design of similar equipment.

After it received its new license from the Federal Energy Regulatory Commission in 2005, Roanoke Rapids Power Station in North Carolina has been using eel ladders to capture and count American eels. The eels are transported above the dam so they can reoccupy historic habitat. In 2017, nearly 54,000 eels were moved upstream.

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**Making Changes to Limit Impacts on Wildlife and Habitat**

Our projects can impact wildlife and habitat. We avoid them where we can, and we try to mitigate them where we cannot. The Atlantic Coast Pipeline team has consulted with the U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration, the U.S. Forest Service, the U.S. Army Corps of Engineers, the West Virginia Division of Natural Resources, the Virginia Department of Game and Inland Fisheries, the Virginia Marine Resources Commission, the Virginia Department of

Conservation and Recreation, and the North Carolina Wildlife Commission. ACP made more than 300 changes to the pipeline routes to avoid impacts on natural resources, threatened and endangered species, and state-protected species, and to accommodate landowner requests. Where impacts were unavoidable, ACP developed mitigation plans, including species-specific mitigation. In addition, ACP is mitigating the loss of forest habitat in each of the three states by acquiring significant acres of forest lands that is then donated to states.

Specific to aquatic life, ACP has developed plans approved by state and federal agencies for the protection of aquatic life, including plans to move fish and mussels from the stream and river crossing areas during construction. Other requirements include time-of-year restrictions and, in some cases, the crossing methods were changed to provide additional protections. This effort also supports state efforts to restore quail populations and is beneficial habitat for turkey and deer.



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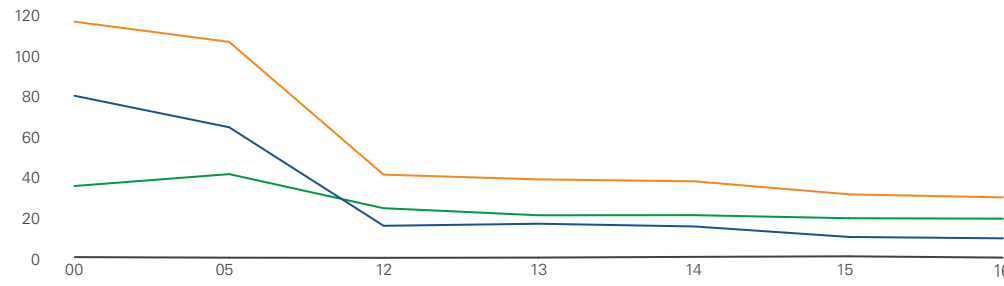
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Dominion Energy Compliance	2016	2015	2014	2013	2012
Notices of Violation (NOVs)	12	14	18	13	13
Environmental Penalties Paid	404,415	447,732	420,500	3,692,200	43,245

2016 data does not include Dominion Energy West operations (formerly Questar).

**Toxic Release Inventory**

(kg)



■ Releases to All Media 
 ■ Releases to Air 
 ■ Releases to Land 
 ■ Releases to Water

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## Values, Ethics and Compliance

Four core values guide the men and women of Dominion Energy. New employees learn them on Day One. They are continually reinforced throughout the company and throughout everyone’s career. They reflect part of who we are as a company.

### Four Core Values



#### 1. Safety

Safety is our highest priority – in the workplace and in the community. The work we do can be dangerous. So our first and fundamental goal is to send every employee home safe and sound, every day. That is the only acceptable standard of performance.



#### 2. Ethics

Integrity, individual responsibility and accountability go hand-in-hand with bottom-line results. We cannot and will not take shortcuts to achieve our goals and fulfill our obligations to stakeholders. Ethical behavior matters, and our reputation depends on it.



#### 3. Excellence

We set high performance standards and are committed to continuous improvement in all areas of our business. The odds of long-term success improve when we go beyond “good” and strive for “great.” Our aim is not to be the biggest energy company, just the best.



#### 4. One Dominion Energy

It’s about teamwork. It is a unifying outlook that transcends organizational boundaries and focuses on our shared mission and purpose. We know that strong, sustainable performance depends on how well we support each other in executing our business plan.

## Ethics & Compliance

**We recognize** that the trust of our customers, shareholders, regulators and community rests on the foundation of strong ethical conduct. Our commitment is to always comply with laws and regulations and to act consistently with our core values. Our strategy is to reinforce our culture of ethics and compliance through transparency, accountability and tone at the top.

### Here's where we're going in the future.

To continue to reinforce the importance of ethics, employees will complete annual training in ethics and compliance. In addition, employees will certify annually that any potential compliance items have been reported or are already being addressed.

### How do we foster ethical behavior?

We operate a comprehensive Ethics and Compliance Program to support our expectation that our leaders, employees and suppliers act with integrity, respect, good judgment and in compliance with the law. Our program defines responsibilities, provides resources and, when necessary, requires disciplinary action. Our Ethics and Compliance Program has the following key elements.

### Management Oversight

The board of directors oversees ethics and compliance through its Audit Committee. On a day-to-day basis, the company's chief compliance officer has established a Compliance Council, the members of which are senior officers representing our business units and key areas of responsibility. The council is responsible for an enterprisewide approach to managing critical ethics and compliance matters. Additionally, our compliance attorneys work to ensure that Dominion Energy complies with applicable laws, regulations

and company policies and maintains high ethical standards in its business activities.

### Training

All employees, officers and board members receive comprehensive annual training on the company's Code of Ethics and Business Conduct. New hires are also required to receive this training. Other types of interactive ethics and compliance training sessions are held regularly at different company locations. The code requires employees to know and comply with all regulatory requirements that apply to their business areas. Therefore, those affected by various regulatory requirements receive training on federal and state codes and standards of conduct, electric reliability standards, and other applicable regulations.

### Advice and Guidance

The Ethics and Compliance Program receives numerous questions from employees seeking advice on ethical matters. Since a variety of scenarios can implicate questions of ethical conduct, we encourage employees to ask if they are unsure about a situation, to avoid even the perception of a conflict of interest. Employees may use a dedicated e-mail account to ask questions or seek guidance about ethical concerns and compliance issues.

### Reporting and Addressing Concerns

Employees are expected to report any concerns when they suspect misconduct or illegal activities. We provide a variety of options for reporting concerns. A dedicated, confidential compliance telephone line and a website allow them to do so anonymously, if that is their desire. Employees also may report concerns by contacting the ethics

and compliance staff and other appropriate personnel. Each year, we distribute a survey to employees to help identify and address potential compliance concerns. In addition, employees must certify annually that any potential compliance items have been reported or are already being addressed. Dominion Energy shareholders may report concerns by contacting the compliance line or by communicating directly with independent members of the board of directors via the company's website or through the U.S. mail. Retaliation for good-faith reporting is strictly prohibited in all cases. We categorize reported concerns by type of allegation to facilitate investigation by appropriate company representatives and review every question and concern to determine if it is an issue covered under the Ethics and Compliance Program. A compliance attorney oversees all ethics and compliance investigations. Questions and concerns that are determined to raise ethical or compliance issues are investigated and resolved under the guidance of the program.

### Supplier Code of Ethics and Business Conduct

Dominion Energy expects all suppliers to share our commitment to ethics and compliance. Our Supplier Code of Ethics and Business Conduct outlines these minimum expectations of suppliers who work on the company's behalf. Its purpose is to promote lawful and ethical behavior in all of our business dealings. In July 2017, the company revised its Supplier Code of Ethics to clarify and reinforce its expectations of suppliers in the following areas:

- Human labor practices;
- Responsible sourcing; and
- Health and safety of suppliers' employees.

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### Political Participation

Dominion Energy operates a political action committee that is strictly voluntary and nonpartisan. Membership is open to employees and the board of directors. The PAC aims to articulate the company’s views at all levels of the political process.

Each year, we voluntarily report on [www.dominionenergy.com](http://www.dominionenergy.com) the corporate political contributions we make to tax-exempt 527 organizations, as well as the lobbying portion of trade association payments and dues. In addition, we disclose our political contributions on the website of the Federal Election Commission and the electoral board website of the states in which we contribute to state and local elections.

Dominion Energy did not make any independent political expenditures in support of or in opposition to a candidate or political party. In addition, Dominion Energy does not make payments to influence the outcome of ballot measures.

<sup>1</sup>Includes trade associations (i) to which Dominion Energy made payments greater than \$50,000 for 2016 dues and (ii) which notified Dominion Energy of the portion used by that organization for expenditures or contributions that if made directly by Dominion Energy would not be deductible under section 162(e) of the Internal Revenue Code.

<sup>2</sup>Reported amount represents the estimated portion of Dominion Energy’s dues or payment that if made directly by Dominion Energy would not be deductible under section 162(e) of the Internal Revenue Code and is based upon information requested and received by Dominion Energy. Reported amounts for which the trade association directly pays tax on the portion that is not deductible under section 162(e) of the Internal Revenue Code.

#### 2016 Corporate Political Contributions to 527 Organizations

NAME OF RECIPIENT	AMOUNT
Democratic Governors Association	\$60,000
Democratic Attorneys General Association	\$15,000
Democratic Legislative Campaign Committee	\$25,000
Republican Governors Association	\$50,000
Republican Attorneys General Association	\$15,000
Republican State Leadership Committee	\$35,000
GOPAC	\$25,000

#### Lobbying Portion of 2016 Trade Association Dues and Payments

NAME OF RECIPIENT <sup>1</sup>	LOBBYING PORTION OF DUES/PAYMENTS <sup>2</sup>
American Gas Association	\$24,476
Center for Liquefied Natural Gas	\$7,800
Edison Electric Institute	\$250,222
Greater Akron Chamber of Commerce	\$2,500
Interstate Natural Gas Association of America	\$77,450
National Association of Manufacturers	\$28,150
New England Power Generators Association	\$15,000
Nuclear Energy Institute	\$86,328
Marcellus Shale Coalition	\$15,300
U.S. Chamber of Commerce	\$75,000
Virginia Chamber of Commerce	\$8,250

## Corporate & Sustainability Governance

Successful, sustainable performance depends on good corporate governance. It helps identify Dominion Energy as a competent and trustworthy steward of the resources entrusted to our care. This accountability goes hand-in-hand with our core values of safety, excellence, ethics and teamwork, and is essential in preserving the long-term value and sustainability of Dominion Energy for our shareholders, customers, employees, the communities in which we operate, and other interested stakeholders.



The board of directors has a fiduciary duty to uphold shareholder interests and oversee the management of the company's business. Accordingly, our board of directors has oversight of the company's environmental performance and sustainability initiatives, along with our long-term growth strategy which addresses the interests of shareholders and other constituencies, including customers, employees, suppliers, our neighbors in the communities we serve and the environment.

**Here's where we're going in the future.** Beginning in 2018, the board of directors will receive an annual report on our sustainability targets, strategy and progress.

We have a well-rounded and diverse board in its broadest sense that reflects a diversity of gender, age, board tenure, experience,

skills and other attributes. In accordance with our Corporate Governance Guidelines, the Compensation, Governance and Nominating (CGN) Committee recommends director candidates that represent a mix of backgrounds and experiences that will enhance the quality of the board's deliberations and decisions.

The board operates through three committees: Audit, CGN, and Finance and Risk Oversight. All three committees are composed entirely of independent directors, and we also have an independent lead director who leads the executive session of our independent, non-management directors at each regularly scheduled board meeting. The board's structure and responsibilities are outlined in its Corporate Governance Guidelines, which also include the duties and responsibilities of our lead director and our director independence standards.

We review our governance documents and policies regularly and propose changes to those documents whenever new rules or regulations are introduced; or whenever changes are consistent with good governance practice and in the best interests of our company and our shareholders. The Corporate Governance Guidelines, each committee's charter, and other governance policies can be found on our Governance webpage at [www.dominionenergy.com/investors/governance](http://www.dominionenergy.com/investors/governance).

Stakeholders may contact our non-management directors at [www.dominionenergy.com/investors/governance/contact-the-board](http://www.dominionenergy.com/investors/governance/contact-the-board) or at:

Board of Directors  
c/o Corporate Secretary  
Dominion Energy, Inc.  
P.O. Box 26532  
Richmond, VA 23261.



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**Risk Oversight**

Dominion Energy’s board is charged with overseeing the company’s management, business, and all affairs on behalf of shareholders. The board and management recognize that the interests of Dominion Energy are advanced by responsibly addressing concerns of perceived risks raised by constituents, including employees, customers and the communities in which Dominion Energy operates.

Inherent in the board’s responsibilities is an understanding and oversight of the various risks facing the company. While the board and its committees oversee risk policies and implementation of risk-related procedures, company management is charged with managing risk. The company has robust internal processes and an effective internal control environment that facilitate the identification and management of risks and regular communication with the board.

The board and its committees receive and discuss reports regularly from members of management, including the chief risk officer, chief information officer and chief environmental officer, who are involved in our risk assessment and risk management functions on a daily basis. These reports and updates pertain to topics that are pertinent to Dominion Energy’s operations, including safety, environmental, human resources, employees, customers, and social issues, as well as financial performance, economic issues and long-term strategy.

**Dominion Energy’s Board at a Glance**

<p><b>11</b></p> <p>independent directors plus our Chairman, President and CEO</p>	<p><b>25%</b></p> <p>of Board members are women</p>
<p><b>Majority Vote</b></p> <p>is a standard for uncontested elections. All Directors are elected annually</p>	<p><b>Lead Director</b></p> <p>who is independent and elected annually by the Board</p>
<p><b>7.6</b></p> <p>Years of average tenure. Ranging from newly elected in 2017 to 19 years</p>	<p><b>62</b></p> <p>Average age</p>
<p><b>Independent Directors</b></p> <p>make the entirety of all Board Committees</p>	<p><b>Self-Assessments</b></p> <p>are conducted annually by the Board and its Committees</p>

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## Attracting, Developing & Retaining Talent

One of the company's greatest strengths is the more than 16,000 employees who provide energy to our customers and communities. To ensure that we sustain that talented work force, we continue to improve how we attract new talent, develop employees and future leaders, and ensure that the work environment is diverse and inclusive.



**Our strategy is** to continually craft a vibrant, forward-looking company that attracts millennial workers, welcomes diverse candidates, and is inclusive of everyone.

**Here's how we performed.** A formal strategy to ensure an inclusive and diverse work environment was developed and is being implemented. Training for both leaders and employees was conducted. Our biannual employee engagement survey was conducted, and several changes are being implemented in response to feedback.

**Here's where we're going in the future.** Leaders and employees will continue to complete training in diversity and inclusion. To provide a positive work environment for employees, we will strive for Leadership in Energy & Environmental Design (LEED)-design construction standards in all new office spaces. In workplace safety, we will maintain and enhance our programs designed to maintain zero work-related fatalities and to lead the industry in eliminating serious injuries. We aim to demonstrate that commitment by achieving and maintaining first-quartile performance in the Southeastern Electric Exchange peer utility benchmark.

### Attracting Talent

One of the company's greatest strengths is the more than 16,000 employees who provide energy to our customers and communities. These employees and leaders will not work forever. Nearly one-third of our workforce is above age 55—and therefore eligible to retire soon. This means that changing demographics and skilled-labor shortages could have an even greater impact on our long-term success than technology, commodity prices, or competitive pressures.

We're aggressively recruiting top talent and diverse new employees, while investing in knowledge transfer and developing current team members.

Dominion Energy has a best-in-class internship program, hiring hundreds of students each year to participate in paid

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internships. We typically hire interns majoring in business, engineering, information technology, liberal arts, math and science, and technology and trades.

Our internships are more than a few weeks on the job and a project or two. Over the course of the summer, interns gain practical experience in their chosen field, test classroom theories in real-world settings, and develop their professional skills. Interns are invited to participate in events such as the Summer Kickoff, facility tours, professional development sessions, the Executive Live Wire, volunteer events, and Leadership Roundtable discussions.

We are committed to retaining our successful students as full-time employees: More than 70 percent of our interns return for multiple summers, and 75 percent of our seniors receive offers of employment.

**Creating a Diverse and Inclusive Workplace**

It is critical that our Dominion Energy workforce reflect the communities that we serve. The United States is seeing a major shift in the generational, gender and cultural makeup of our national workforce. Today’s minority populations will become the majority around the year 2030, according to the U.S. Census Bureau. By 2043, today’s minority will become the majority of all adults, ultimately leading to a pluralistic society.

Since this change is accelerating, the demographic makeup of our workforce must change with it. This requires us to be intentional with our new hires and retention strategies. In addition, our focus must be on recruiting and retaining top diverse talent.



Increasing the diversity of our workforce is not simply a numbers game. Doing so will improve business results through overall employee engagement and increased productivity, and innovation, resulting in better problem solving and decision making. We know we must continue to grow in attracting and retaining a diverse pool of qualified candidates. Here’s what we are doing to make this happen:

- Hosting “The Business Case for Diversity and Inclusion” for all Dominion Energy leaders, starting with executives.
- Conducting on-the-spot interviews and making job offers to highly qualified female and minority intern applicants at college career fairs.

- Incorporating implicit bias training as part of our overall hiring policy training for all managers.
- Increasing the diversity scholarships designated for highly qualified female and minority candidates—with more to come. While these initiatives help provide direction, we expect to see changes that require all leaders to make a conscious choice to get involved. To that end, annual bonus plans for all leaders have been updated to include diversity awareness and training goals.

These are lofty goals that our leaders must embrace and communicate. So in 2017, all leaders had an opportunity to participate in a live, facilitated leadership training and awareness session around the business case for diversity and inclusion beginning in February with the executive team. Our 2017 annual incentive program included a diversity goal requirement that 95 percent of all of our leaders participate in an awareness session on the business case for diversity and inclusion. The session introduced our mission and vision statement as related to diversity and inclusion, delved into topics such as the dimensions of diversity and the impact of implicit bias on performance, and equipped leaders with the tools to become diversity change agents.

This year we began to implement an enhanced recruitment process targeted at attracting highly qualified female and minority employees. We used the process successfully to conduct on-the-spot interviews at the University of Puerto Rico and the BEYA (Black Engineer of the Year) Conference college recruiting fairs.

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Given our focus on workforce diversity and employee engagement initiatives, we have created Diversity Councils and Employee Resource Groups to set goals, implement programs and support our overall business mission.

**Diversity Councils**

Members of the Executive Diversity Council are appointed by the company’s chairman and CEO. Led by a senior vice president, the council develops our corporate diversity and inclusion strategy and oversees its implementation. Each business unit has a Diversity Council that includes an executive sponsor. The role of these BU Councils is to integrate our corporate-level strategies into their respective operations. They also serve as advisory bodies to our senior leadership team.

**Employee Resource Groups**

Our Employee Resource Groups offer employees the opportunity to network, share concerns, and receive support from those with similar backgrounds, experiences and interests. They also improve employee engagement, raise awareness of potential barriers to creating a diverse and inclusive workplace, assist with the company’s community outreach initiatives, and support our recruitment efforts. These include:

- African-American Resource Group;
- Dominion Energy Veterans Network;
- Dominion Energy Latino Resource Group ('Hola!');
- Dominion Energy Young Professionals;
- We3 – Women Engaging, Educating, Energizing, an employee resource group

to connect, empower and support women; and

- PRIDE, the LGBTQIA & Ally Employee Resource Group.

We are committed to recruiting outstanding students with diverse experiences and backgrounds. We strive to create and reinforce an inclusive, creative and productive work environment in which our employees can grow and succeed.

**Scholarships for Diverse Interns**

In 2016 and 2017, we benchmarked, analyzed and enhanced the intern program to ensure it remains the best-in-class. Most notably, the intern scholarship and award programs have been updated to better reflect our recruitment goals.

Through the Diversity Scholarship Program, Dominion Energy aims to hire and retain millennial talent and promote minorities and females within the utility industry by awarding \$5,000 scholarships to up to 50 diverse students. Recipients take part in additional opportunities, including innovation and leadership development events, a formal mentoring program, and Dominion Energy Scholarship Days.

As an award-winning military employer, Dominion Energy recognizes and honors active military, veterans, and retired military. We know they’ve worked hard to gain special knowledge and skills. We also know that a leap from a military career to a civilian job can be an adjustment. To support this transition, we offer the Student Veteran Service Award to our interns who are active in the military or who have honorably separated or retired from the military.

153

veterans hired in 2016



**Our Workforce Readiness Model**

- Links with our business strategies
- Defines workforce needs to support those strategies
- Identifies workforce gaps
- Devises solutions to address:
  - ✓ Sourcing and recruiting talent
  - ✓ Managing the transfer of knowledge
  - ✓ Developing and managing employees
  - ✓ Strengthening reward/retention policies and programs

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**Military and Veteran Recruiting**

We make a special effort to recruit veterans and people with military experience to Dominion Energy. Veterans possess many of the skill sets we seek in our workforce, including safety consciousness, civic mindedness, and a strong work ethic.

Several publications that serve the military, including *GI Jobs*, *Military Times* and *U.S. Veterans* magazines, repeatedly have recognized our company as one of the nation’s leading private employers in helping veterans and their families find and keep jobs in the civilian workforce.

In addition, we were recognized in 2016 by the U.S. Department of Defense’s “Employer Support of the Guard and Reserve” program and by the Virginia Department of Veterans Services’ “Virginia Values Veterans” program for our ongoing commitment to hiring veterans and our overall support of the military. We also received the “Best for Vets” award in the energy sector, from *Military Times* magazine.

Dominion Energy helped launch the Troops to Energy Jobs program ([www.troopstoenergyjobs.com](http://www.troopstoenergyjobs.com)) in 2011, to link members of the military leaving the service with jobs in the energy industry. In 2013, Chairman, President and CEO Tom Farrell helped launch this initiative nationally,

focusing on military outreach, education, recruiting and retention.

Dominion Energy hired more than 900 veterans from 2010 to 2016—about 20 percent of all new hires during that period. About 1,600 of our employees are veterans—more than 10 percent of the total workforce.



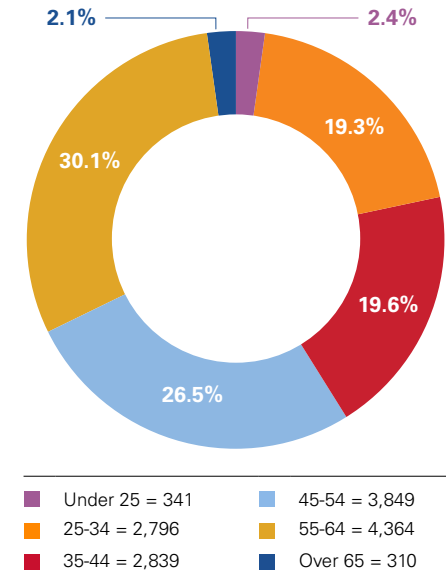
Dominion Energy is an award-winning, private-sector military employer with specialized benefits and programs for military spouses and families.

**Technical School Partnership**

More than half of the positions we need to fill do not require college degrees. So we are partnering with career and technical education high schools to create a pipeline for many of those jobs. We are engaging with students, teachers, school administrators and parents to raise awareness about these job opportunities and their requirements, and to expose them to our work environments. The main objective is to ensure that high school students understand there are alternative paths to rewarding careers in the energy industry.

**Workforce by Age—2016**

(Total Fleet, By Percent)



**Our Recruitment Tools**

- The Internet and social media
- Career fairs
- Visits to college campuses, high schools and military installations
- Career development workshops
- Corporate image advertising
- Scholarships and internships

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## Developing Talent

We want people to achieve and advance once they join Dominion Energy. They can use the tools of the Dominion Energy Career Center, which encourages employees to take an active role in planning their careers by assessing their skill sets and interests, while enhancing their awareness of positions in the company for which they are qualified. Employees have access to numerous career resources. The company also provides workshops on request covering topics such as interview preparation, resume building and personal branding.

The Career Center offers:

- Career counseling;
- Self-assessments;
- Interview coaching and mock interviews;
- Goal setting;
- Resume development and action planning;
- Performance development plans; and
- Professional development lending library.

### Incentives for Learning

Starting in 2018, the company is increasing the reimbursement amount of its Education Assistance Program—thanks to feedback from participating employees polled last year. The annual reimbursement for non-union employees will go from \$5,250 to \$7,500. The first \$5,250 in a calendar year is tax free. All regular active, full-time and part-time non-union employees who work at least 1,000 hours a year are eligible to take advantage of this benefit.



### Guiding Principles of Employee Engagement:

- **Fairness** that aligns company and employee needs and reinforces our mutual commitments and responsibilities.
- **Credibility** that emphasizes greater visibility and interaction with company leadership.
- **Development** initiatives that identify and grow leadership capacity and career path potential.
- **Recognition** programs and awards that honor and encourage outstanding job performance, innovation and community service.

### Performance Assessments

Traditionally, employee performance reviews at Dominion Energy relied heavily on documentation and numeric ratings. In 2017, we revamped this system and adopted a more forward-looking model called “Performance Connections.” The new approach focuses on quarterly discussions



### Training and Development Tools

- In-house, instructor-led training programs
- Webinars
- Virtual Learning Library
- e-Learning instruction modules
- On-the-job development experiences
- Companywide “Lunch and Learn” sessions
- Tuition reimbursement program

between employees and their supervisors about accomplishments, strengths, growth opportunities and action plans. The objective is to create a sense of shared accountability for timely feedback and progress toward established career and skill development targets and team business goals.

## Retaining Talent

### Listening to Employees

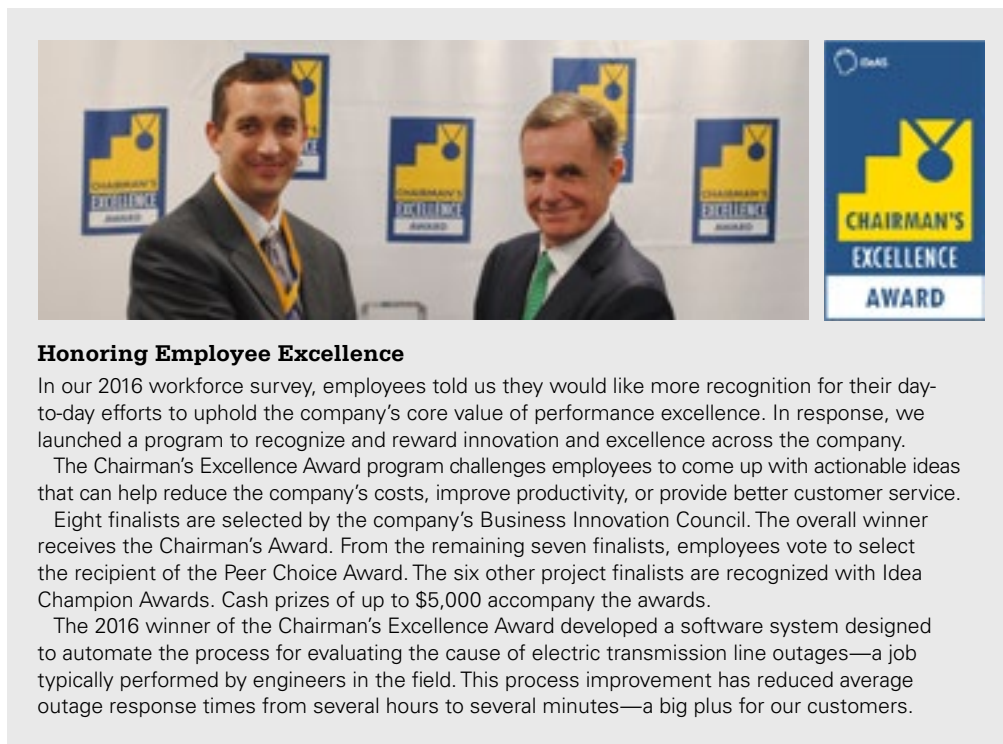
In 2016, we conducted a biannual company-wide, confidential survey of all employees—union and non-union alike—to hear what employees believe and feel about working at Dominion Energy. More than 7,000 employees participated.

Their responses revealed a strong support for the company’s core values—safety, ethics, excellence and teamwork. Employees also feel a general sense of pride in working for Dominion Energy. They also pointed out several opportunities for improvement, including:

- More recognition and appreciation of superior performance;
- Training opportunities for career development;
- Clarity and frequency of communications from senior leadership; and
- Opportunities for teambuilding and celebrating success at the departmental level.

So we’re making changes in response.

- **Employees told us they value consistency in treatment and want to see more transparency in areas such as the hiring and promotion process.** As a result, we revised our hiring policy and promotion process and enhanced training of company leaders in hiring, interviewing and diversity awareness.
- **Employees want to have a better understanding of why decisions are made, and they want to hear it directly from company leaders.** We have



### Honoring Employee Excellence

In our 2016 workforce survey, employees told us they would like more recognition for their day-to-day efforts to uphold the company’s core value of performance excellence. In response, we launched a program to recognize and reward innovation and excellence across the company.

The Chairman’s Excellence Award program challenges employees to come up with actionable ideas that can help reduce the company’s costs, improve productivity, or provide better customer service.

Eight finalists are selected by the company’s Business Innovation Council. The overall winner receives the Chairman’s Award. From the remaining seven finalists, employees vote to select the recipient of the Peer Choice Award. The six other project finalists are recognized with Idea Champion Awards. Cash prizes of up to \$5,000 accompany the awards.

The 2016 winner of the Chairman’s Excellence Award developed a software system designed to automate the process for evaluating the cause of electric transmission line outages—a job typically performed by engineers in the field. This process improvement has reduced average outage response times from several hours to several minutes—a big plus for our customers.

responded by creating “Dominion Energy Town Hall Meetings” with company executives.

- **Employees expressed an interest in expanding their opportunities for career growth.** In response, we launched a new “Performance Connections” feedback process; expanded and accelerated our leadership and employee development strategy; and raised the level of tuition reimbursement beginning in 2018.

- **Employees want to celebrate success and be recognized for top performance.** To honor this request, we have increased the range and types of venues available to employees during the “Dominion Energy Family Fun Days”; expanded our employee recognition events, especially at the local/departmental level; and provided resources for company leaders to assist them with recognizing employees.

## Improving Employee Workplaces

Another way to attract and retain talent is to modernize the workplace. The Dominion Energy Workplace Plan is a companywide plan to modernize workspaces to best meet the needs of employees, customers and communities—now and in the future.

Planning and research for this transformative effort began in 2014, setting a new standard for renovations and the development of future Dominion Energy facilities. The plan is driving much-needed updates and bringing workspaces to a modernized standard in effort to:

### 1. Engage, Retain and Attract Great Employees

We are enhancing workspaces to strengthen Dominion Energy as a great place to work, ensuring that we are a strong, viable company for many years to come.

### 2. Increase Collaboration and Teamwork

We are creating work environments that are conducive to teamwork and innovation by adding more collaborative spaces and bringing together teams that work closely with each other.

### 3. Improve Our Workplace

We are upgrading and modernizing work spaces with state-of-the-art technology, ergonomic workstations, increased parking and improved amenities that energize employees.



### 4. Reduce Our Environmental Footprint

We are seeking LEED certification for new and renovated facilities, allowing for energy-efficient, healthy, high-performing, and cost-effective buildings that directly benefit our employees, our environment and our bottom line.

### 5. Enrich Our Communities

Developing improved company facilities reinforces our commitment to the communities where we live and work, enabling us to maintain our presence as a good corporate citizen and contribute to local growth and revitalization, creating new jobs and increasing tax revenue.

New workplace standards were developed through research, testing and employee feedback. In general, new workplace designs will include:

- New, modern furniture;
- Ergonomic workstations;
- Increased access to natural light and outdoor views;
- Upgraded meeting room technology; and
- Improved amenities.

Specific features vary by location, depending on a building's operational function and whether it is new construction or a renovation.



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## Employee Health and Wellness

We strive to promote a culture of wellness and professional development, where employees have ample opportunities for career growth and support for living healthy, well-rounded lives.

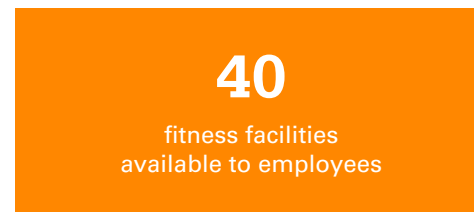


As our workforce evolves and grows more diverse, so must our wellness program evolve over time to be integrated successfully into the fabric of our company's culture. No single solution will fit every employee's needs.

Our "Well On Your Way" wellness program focuses on the areas of physical, emotional and financial health. We provide employees and their dependents a wide range of wellness offerings and health management services to encourage preventive care and to support work/life balance.

In 2016, we added some friendly competition, including a "10K A Day"

challenge, where employees were encouraged to walk at least 10,000 steps a day to promote physical activity and wellness. More than 2,700 employees and 270 spouses participated during the challenge period. In 2017, we added "Slam Dunk," linked to the NCAA March Madness basketball tournament. Employees created



teams and earned prizes for engaging in health- and wellness-related activities.

Throughout the year, we will offer onsite seminars and webinars that address behavioral and financial wellness. And in 2018, we are offering supplemental voluntary benefits, including Critical Illness and Accident Insurance, ID Theft Protection, and Home and Auto Insurance.

Dominion Energy offers employees a telemedicine service, which provides access to medical professionals on their mobile devices. Employees can chat 24/7 with board-certified physicians who are qualified to answer questions, make a diagnosis, and even prescribe basic medications (as permitted by state law). In 2017, the program was expanded to include behavioral health and support for new mothers.

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**Health & Wellness and Work/Life Initiatives**

- Health plans (medical, prescription drug, dental and vision benefits as applicable)
- Medical premium credit for eligible employees enrolled in a medical plan after completing a health screening and assessment
- Gaps in medical care outreach program
- 24/7 Nurse Line
- Employee assistance program
- Fitness centers and health club discounts
- Life insurance/accidental death and dismemberment insurance
- Long-term disability coverage
- Pre-natal risk management program
- Adoption assistance
- Tuition reimbursement
- Employee discounts
- Flexible work arrangements
- “Best Doctors” medical second opinion service
- Onsite vision screenings, flu shots and biometric screenings

**Labor Relations**

Dominion Energy respects and recognizes the right of its employees to bargain collectively through representatives of their own choosing for rates of pay, wages, hours of employment, working conditions, and other employment-related issues.



We are committed to building and maintaining constructive relationships with the local unions in eight states that represent about one in three of our employees.

We recognize the following five unions as the exclusive representatives of our employees. The company bargains collectively and in good faith with them in accordance with the National Labor Relations Act and consistent with the highest ethical standards.

- **IBEW Local 50**—Dominion Energy Virginia/Dominion Energy North Carolina
- **UWUA Local 69**—Dominion Transmission/Dominion Energy West Virginia
- **UWUA Local 310**—Manchester Street Station, Rhode Island
- **UWUA Local G555**—Dominion Energy Ohio
- **IUOE Local 420**—Kewaunee Station, Wisconsin

In 2016, we participated in union contract negotiations with two of the company’s largest unions—IBEW Local 50 and UWUA Local 69. Both negotiations resulted in successful contract ratifications.

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## Employee Safety

Safety is a core value and our top priority. It permeates everything we do. We are diligent about pre-job safety briefs to make sure everyone is aware of possible dangers and safety remains on the forefront of our minds. If someone does get injured, we examine the root cause. We do everything we can to ensure we don't repeat mistakes.



**Our strategy is** recognizing that while the numbers are important, it's ultimately about colleagues looking out for each other and the customers we serve.

**2017 was our best year in safety performance ever.** Dominion Energy employees have demonstrated their commitment to safety by steadily decreasing the company's OSHA-recordable incidence rate since 2010. Today's incidence rate is 45 percent lower than in 2010.

**Here's where we're going in the future.** Maintain and enhance programs to ensure zero work-related fatalities and lead the industry in eliminating serious injuries. Achieve and maintain first-quartile performance in the Southeastern Electric Exchange peer utility benchmark.

We know that not all injuries happen in the field. So, in the services area of the company, we start all meetings with a safety message—it could be anything from cautioning fellow employees about an unusual traffic hazard nearby, to reminding each other to hydrate on a hot day. It's ultimately about respect for one another and the desire to send each person home after a day's work in the same condition—or better—as when they arrived.

Our aggressive safety standards extend not only to employees, but also to the contractors we work with. Before hiring contractors, we carefully review their safety performance to ensure it aligns with our own.

To promote a companywide focus on safety, we host employee-led safety committees across all business units.

The committees help set safety goals, seek opportunities to improve, put on regular safety events, and share safety messages with all employees.

We set stringent standards for ourselves and strive to lower our OSHA-recordable incidence rates each year. We will not rest until we reach zero—to us, that's the only acceptable standard.

# 2017

Best Safety Year Ever

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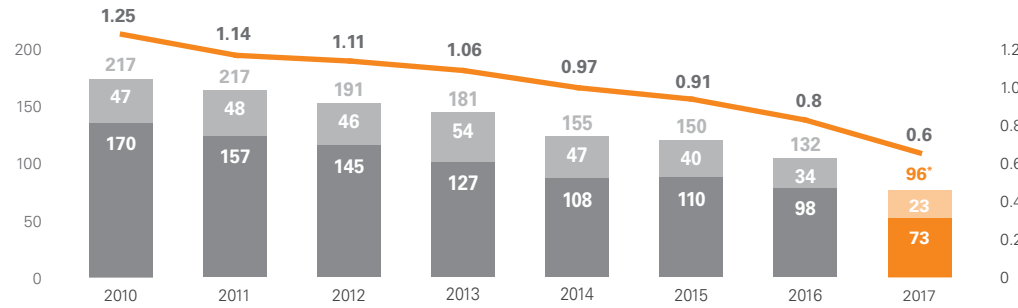
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OSHA Recordable Incidence Rate



\*Year-to-date    ■ Dominion Energy OSHA Incidents    ■ Dominion Energy Questar OSHA Incidents    — Incidence Rates

## Leadership

Dominion Energy ranks in the

# top quartile

in the  
Southeastern Electric Exchange  
peer utility benchmark



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## Energy Diversity & Security

Renewable energy—especially solar power—sits at the center of our climate change strategy. Cleaner energy sources help lower the company’s emissions and reduce our exposure to unpredictable energy price swings.



**Our clean energy strategy** is to invest more in renewable solar and wind generation, along with cleaner natural gas, to serve the needs for around-the-clock reliable generation of electricity. In fact, the electricity we produce now comes primarily from zero-carbon nuclear and clean-burning natural gas, which has about half the carbon of coal.

**Here's how we performed.** Backed by an ongoing \$1 billion investment, Dominion Energy has grown its solar fleet into the sixth largest among owners of U.S. electric utilities. As part of our ongoing commitment to bring cleaner energy to customers, Dominion Energy Virginia is moving forward on the Mid-Atlantic’s first offshore wind project. Dominion Energy also has closed or converted seven coal-fired power plants in recent years.

**Here's where we're going in the future.** The company has announced plans to continue increasing our reliance on cleaner generation technologies.

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**Renewable energy: Solar**

Backed by an ongoing \$1 billion investment, Dominion Energy has grown its solar fleet in Virginia and North Carolina over the past two years from near zero to approximately 1,350 megawatts in service, in construction or under development. That is enough clean energy to power nearly 340,000 homes during peak sunshine. Nationally, Dominion Energy has nearly 2,700 megawatts of solar generating capacity in operation or under development in nine states, including offtake agreements for the company’s utility customers. Our solar fleet is ranked the sixth largest among owners of U.S. electric utilities.

Dominion Energy’s long-term energy forecast calls for another 5,200 MW of new solar generation in the next 25 years, enough to power 1.3 million homes at peak output.

Dominion Energy is seeking regulatory approval in Virginia for a 100 percent renewable energy option for residential and small commercial and industrial customers, as well as an option for business customers to purchase renewable generation equal to a specific portion of their energy usage.



**Renewable energy: Offshore wind**

The winds of the Mid-Atlantic are blowing clean energy to Virginia. Twenty-seven miles off the coast of Virginia Beach, Dominion Energy is building the first wind turbines to directly serve its customers.

As part of our ongoing commitment to bring cleaner energy to customers, Dominion Energy Virginia is moving forward on the Mid-Atlantic’s first offshore wind project in a federal lease area. We have signed an agreement and strategic partnership with Ørsted Energy of Denmark, a global leader in offshore wind development, to build two 6-megawatt turbines off the coast of Virginia Beach.

This project—only the second of its kind in the United States and the first owned by an electric utility company—will be located about 27 miles off the coast of Virginia Beach, beyond the coastal viewshed.



**Lower carbon footprint**

Dominion Energy has closed or converted seven coal-fired power plants in recent years, switching from coal to natural gas or biomass to generate electricity. This includes the \$1.2 billion Brunswick Power Station that entered service in April 2016. This highly efficient workhorse plant is expected to provide energy savings of more than \$1 billion to our customers over its life—and help limit greenhouse gas emissions.

Because of this hard work, Dominion Energy has reduced its carbon emission rate by 43 percent over the past 15 years. Dominion Energy is among an elite group of three peer utilities that has reduced the amount of carbon emitted per energy produced by more than 40 percent since 2000.

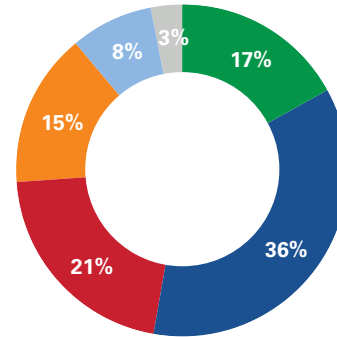
**A Changing Business**

The Power Generation Group is changing the fastest among our operating units. Evolving economics and better technology are coming together to advance renewable and low-carbon energy, as Dominion Energy reduces a legacy reliance on fossil fuels. This business unit operates a fleet of power stations that can generate 26,200 megawatts of electricity. These include regulated utility plants in Virginia, North Carolina and West Virginia, as well as “merchant” power facilities that support wholesale markets throughout the country.

Our strategy for the future depends on using a diverse and balanced mix of resources to deliver reliable and affordable energy to customers. We focus especially on balancing our portfolio to meet our customers’ future energy needs in the most reliable, affordable and environmentally sustainable manner possible.

Carbon-free nuclear and renewable energy sources provided 43 percent of the company’s total electricity output in 2016. Fossil fuel sources provided 51 percent and the remaining 6 percent came from contracted electric production or market purchases.

**2017 Generating Capacity by Fuel\***  
(Total Fleet, by Percent)



\*Includes hydroelectric capacity

- Coal
- Natural Gas
- Nuclear
- Renewables\*
- Oil
- Purchase/Other

**2017 Electric Output by Fuel\***  
(Total Fleet, by Percent)

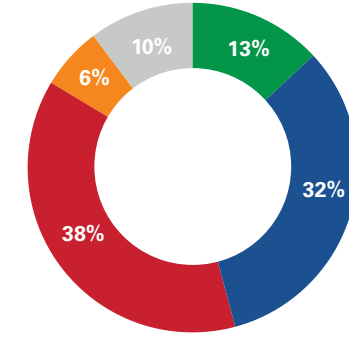




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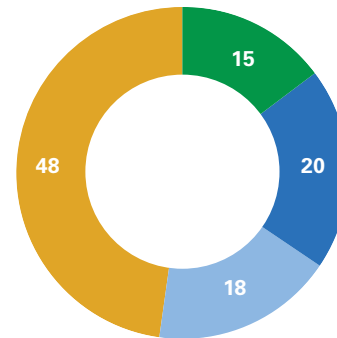
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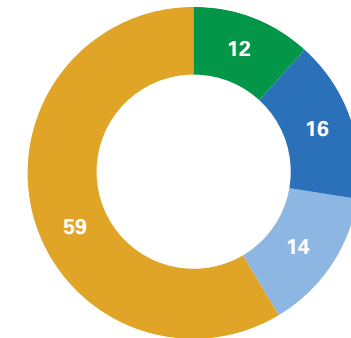
**Renewable Energy Sources**

Renewable energy—especially solar power—sits at the center of our climate change strategy. Cleaner energy sources help lower the company’s emissions and reduce our exposure to unpredictable energy price swings.

**Renewable Energy Capacity by Source\***  
(Percent)



**Renewable Energy Capacity: Operational & In Development\***  
(2015 and Beyond, Percent)



- Biomass
- Hydro
- Wind
- Solar

**Total Capacity In Service = 1,491 megawatts**

\*In service as of April 2017. May not add to 100% because of rounding. Excludes 15-MW Bridgeport fuel cell facility and potential offshore wind capacity.

**Total Renewable Capacity = 2,139 megawatts**

\*May not add to 100% because of rounding. Excludes 15-MW Bridgeport fuel cell facility and potential offshore wind capacity.

**Customers Choose Clean Energy**

We actively partner with our customers to expand the range of available clean energy options and to reduce environmental impacts as we evaluate the benefits of innovative technologies and sustainable solutions.



**2 million**  
kilowatt-hours of clean energy produced through the Solar Purchase Program, 2013–2016

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**Dominion Energy Green Power**

Through 2016, more than 24,000 electric customers were enrolled in Dominion Energy Green Power®, our voluntary green pricing program in and around Virginia. Customers have two options to choose from:

- **100 Percent Option:** For as little as 43 cents a day, customers can match 100 percent of their home electricity use with Renewable Energy Credits (RECs) by paying an additional 1.3 cents per kilowatt-hour. (A typical household using 1,000 kilowatt-hours per month will add \$13 to its monthly electric bill).
- **Block Option:** Customers can purchase RECs in any \$2 fixed increment. Each \$2 block purchased supports 154 kilowatt-hours of renewable energy.

Purchasing RECs through the Dominion Energy Green Power program allows customers to claim the specific environmental benefits associated with the renewable energy supported.

For a typical residential customer, the renewable energy generated through participation in the 100 Percent Option for one year will reduce carbon dioxide emissions by more than five metric tons—the amount of greenhouse gas reduction achieved by planting 193 trees, according to the U.S. EPA.

Our program is certified by Green-e® Energy, the nation’s leading independent consumer protection program for renewable energy sales.

For our 120,000 customers in North Carolina, we support NC GreenPower, which enables customers to add voluntary, tax-deductible contributions to their electric bills. These contributions are used to reduce carbon emissions and increase the production of renewable energy power supplies in North Carolina.

**Solar Programs**

Qualified homeowners and business customers in Virginia can participate in our five-year pilot Solar Purchase Program, which allows customers to generate and sell electricity and solar Renewable Energy Certificates directly to Dominion Energy at a premium rate of 15 cents per kilowatt-hour.

Participating customers continue to purchase all of the electricity for their home or business from Dominion Energy on their current rate schedule. The Solar Purchase Program is currently limited to 3,000 kilowatts of installed capacity and is designed to help customers cover the cost of installing solar generation, while also promoting local clean energy production.

The Dominion Energy Green Power Energy program directly supports these solar projects through the purchase and retirement of RECs produced by the Solar Purchase Program.

Since the program’s inception in 2013, about 150 solar installations have been completed. In 2016, these projects generated more than 2 million kilowatt-hours of clean energy and produced more than 2,000 RECs.

**Through the Solar Partnership Program, Dominion Energy is constructing solar energy facilities on leased rooftops or other grounds of private businesses and public properties in Virginia.**

Through the Solar Partnership Program, Dominion Energy is constructing solar energy facilities on leased rooftops or other grounds of private businesses and public properties in Virginia.

This multi-year pilot program is designed to increase our understanding of community-based solar energy by studying its impact and benefits while supporting the growth of this renewable resource in Virginia. We have 11 solar facilities either completed or under construction, with a total generating capacity of more than 7,600 kilowatts—enough to power about 1,900 typical homes at peak production.

Solar Partnership installations completed in 2016 include:

- A 2,000-kilowatt, ground-mount facility at a Philip Morris tobacco processing plant in Chester, Va., and
- An 806-kilowatt, 3,200-panel rooftop installation at the Western Branch High School in Chesapeake, Va., the largest single rooftop energy system in the state.

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**Electric Vehicles**

More than 600 Dominion Energy Virginia customers who drive electric vehicles (EVs) are taking advantage of special charging rates through a pilot program approved by state regulators. The pilot program is limited to 1,500 customers. Enrollment ended on Sept. 1, 2016, but the pilot program will continue until Nov. 30, 2018.

The pilot program provides customers with two rate options:

- **EV Only Pricing Plan:** Customers install a second, dedicated meter at their house to measure the amount of electricity used to charge an EV. Charging prices will be lower during the nighttime hours when power demand is reduced.
- **EV + Home Pricing Plan:** A “whole house” rate option, which enables customers to take advantage of lower prices for power used by all of their household appliances, including the EV charger, during off-peak hours. A special meter is installed at the customer’s home that measures power usage in 30-minute intervals. This lets participating customers receive variable prices from Dominion Energy, depending on when and how much electricity is used at the residence.



**Dominion Energy and U.S. Navy Join Forces to Develop Solar Facility**

In July 2016, the Department of the Navy and Dominion Energy Virginia announced plans to build a 21-megawatt, direct current solar energy facility at the Oceana Air Station in Virginia Beach, Va.

This marks the second solar partnership undertaken between our company and the U.S. Navy. Dominion Energy Virginia will build, own, operate and maintain the facility for 37 years. This collaboration shares common goals—investing in the growth of renewable energy and helping to make the military’s energy supply more secure.

The 179,000-panel installation, which was placed into service in November 2017, will provide the Navy with an alternative electric feed, which will increase resiliency on the base. The facility will produce enough electricity at peak production to power approximately 4,400 homes.

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## Investing in Infrastructure

Every moment of every day, we work to deliver safe, dependable, affordable and clean energy. Dominion Energy is investing \$3.7 billion to \$4.2 billion annually through the middle of the next decade to provide cleaner energy to our customers over a more robust, secure system of natural gas pipelines and electric wires. Since 2007, Dominion Energy has spent nearly \$30 billion to improve our production, storage and delivery systems, increasing the dependability of the energy flowing to our customers. This infrastructure growth program began a decade ago and has produced lasting benefits to our customers, shareholders, and the environment.



It's exemplified by projects like the 1,376-megawatt, \$1.2 billion Brunswick Power Station that entered service in 2016. It quickly became one of the workhorses of the Dominion Energy stable. It helped that fleet produce a record output of more than 80 million megawatt-hours of electricity in 2016. The plant is expected to provide energy savings of more than \$1 billion to our customers over its life—and help limit Dominion Energy's fleetwide greenhouse gas emissions.

We are also building state-of-the-art natural gas pipelines and compressor stations that help pressurize and move gas to customers with fewer emissions that contribute to climate change. Much of Dominion Energy's new and planned gas infrastructure provides our customers,

gas utilities and power producers a clean, reliable source of energy that both serves customers' needs and meets environmental goals.

**Our strategy is** to construct infrastructure to produce and deliver energy across 19 states.

**Here's how we performed.** In 2016, the 1,376-megawatt \$1.2 billion natural gas-fired Brunswick Power Station entered service. The highly efficient natural gas-fired power station is expected to provide energy savings of more than \$1 billion to our customers over its life cycle. In 2017, we opened a new Systems Operations Center to enable safe, reliable and continuous

operation of the electric transmission grid across Virginia and North Carolina. We have invested \$3.6 billion in solar generation since 2013, creating more than 10,000 construction jobs.

**Here's where we're going in the future.** We plan to begin construction of the 600-mile Atlantic Coast Pipeline, fully operationalize the Cove Point liquefaction project in Maryland, pursue re-licensing of our carbon-free nuclear fleet, and continue investing in renewable energy. We plan to rebuild 120 miles of electric transmission lines in 2018.

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### A New Source of Energy

In late 2019, the 600-mile Atlantic Coast Pipeline is expected to begin transporting natural gas to electric and gas utilities in Virginia and North Carolina. For a region facing pipeline constraints, economic challenges and the ongoing transition to cleaner energy, the project is essential to the energy security, economic vitality and environmental health of the region.

The ACP would introduce new infrastructure drawing from low-cost supply basins, including the Appalachians, thereby enhancing the reliability of electric and gas utilities service and significantly lowering costs for consumers. It also would help alleviate constraints and expand access to gas in underserved communities, and attract manufacturing and other new industries—building a foundation for long-term job creation and economic growth. In fact, the Atlantic Coast Pipeline is expected to create 17,240 jobs during construction and support thousands more with new industries.

Electric utilities in the region also are replacing older power plants with efficient, cleaner-burning units, which will enable energy consumers in Virginia and North Carolina to save an estimated \$377 million annually on their utilities. The pipeline would support this ongoing transition to cleaner energy, lowering emissions and promoting cleaner air across the region. Natural gas is an ideal partner for renewable energy, providing around-the-clock backup power.

Project partners Dominion Energy, Duke Energy and Southern Company expect construction to begin in early 2018 on this 100 percent domestic energy source supplied by Americans, for Americans.

### Safety & Environment

- Industry-leading, best-in-class program for construction, emission controls, and methane-reduction measures;
- Program to avoid landslides on steep slopes;
- 100 percent X-ray inspected pipeline welds;
- Hydrostatic pressure tests prior to operation;
- 24-7/365 monitoring from Dominion Energy’s gas control center;
- Remote-controlled shut-off valves; and
- State-of-the-art inspection program.



### Benefits

- Enhanced service reliability for utility customers;
- Increased energy security for electric and gas utilities;
- Diverse, lower-cost supply for electricity generation, home heating, and industrial customers;
- Lower emissions and cleaner air in region;
- \$377 million in annual energy cost savings for Virginia and North Carolina consumers;
- Magnet for manufacturing and other new industries, and businesses; and

- \$28 million in annual property tax revenue for localities.

### Exporting American Energy

Construction began in late 2014 to “liquefy” natural gas at Dominion Energy’s Cove Point facility on the western shore of the Chesapeake Bay in Lusby, Md. The liquefaction process involves super-cooling gas to shrink it to 1/600th of its original volume so that it can be piped to a pier a mile offshore and loaded onto a supertanker.

Cove Point’s footprint has not expanded to accommodate the project, and the project maintains a surrounding nature preserve. It also uses all pre-existing storage tanks, pipelines and the offshore pier, which was expanded in 2011.

### Overview

- About \$4 billion in investment
- Liquefaction capacity fully subscribed under 20-year contracts
- Liquefaction services completion—early 2018

### Benefits

#### Environmental

- Uses existing footprint
- Protects 800-acre nature preserve
- Zero water-discharge facility

#### Economic

- Nearly 3,000 onsite direct-hire craft and subcontractor workers—35 percent of whom are from area
- Nearly 100 permanent jobs at the site
- Expected to contribute additional \$40 million annually in revenue to Calvert County, Md.

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**International**

- Provides source of natural gas to U.S. allies
- Reduces trade deficit

**Subscribers**

**ST Cove Point, LLC**

- Joint venture between Sumitomo Corp. & Tokyo Gas Co., Ltd.
- Large Japanese gas, electric utilities

**GAIL Global (USA) LNG LLC**

- U.S. subsidiary of GAIL (India), Ltd.
- One of largest gas processing, distribution companies in India

**Energy For The East**

When the Cove Point liquefaction project enters service, American allies in Japan and India will have a new source of natural gas to supply their energy needs for the next two decades or more.

Clean natural gas, produced in the United States, can help these countries reduce their carbon footprint while improving the reliability of their gas and electric utilities. Moreover, exporting LNG to these countries improves America’s balance of trade.

And it provides local tax revenue and offers an American product abroad that employs thousands of Americans here—at Cove Point, across the pipeline system and throughout the United States’ gas production basins.

**One of the World’s Most Environmentally Friendly Power Stations**

Once finished in late 2018, the \$1.3 billion, 1,588-megawatt combined-cycle natural gas station in Greenville, Va., will operate as one of the largest and most environmentally friendly generating facilities of its kind in the



world. The station’s air permit is the most stringent in the nation in terms of carbon dioxide emissions, according to the Virginia Department of Environmental Quality.

Construction at the station will create more than 1,000 jobs and about 45 full-time positions once it is online in 2019. In its first year of operation, the station is expected to provide as much as \$8 million in property taxes for Greenville County, near the North Carolina border in Virginia’s rural Southside region. During development and construction, the project will provide direct and indirect economic benefits of about \$474 million, which supports on average 460 jobs annually.

The station will have low carbon intensity because it uses clean-burning natural gas, combined cycle technology and best available control technology to reduce emissions. It will also have lower water usage that will minimize the impact to rivers and streams.

**Nuclear re-licensing**

Dominion Energy Virginia has notified the federal Nuclear Regulatory Commission of its intent to relicense the Surry and North Anna power stations for additional 20-year terms, ensuring Virginia customers will continue to benefit from the safe, reliable, and carbon-free electricity the station produces for decades to come. We expect to file the Surry application in the spring of 2019 and the North Anna application in 2020.

Our nuclear power stations have proven to be among the most-efficient and most-reliable sources of electricity in our fleet. The operation of North Anna and Surry directly supports more than 2,000 high-paying jobs in Virginia and produces additional economic and tax benefits. Their continued operation will go a long way toward maintaining low carbon emission rates in the commonwealth.

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The company is reviewing all technical aspects associated with these renewals, and we see no significant barriers that would prevent license renewal submittals. The letter of intent is necessary so the NRC can plan its staffing needs to support the license renewal effort. The company expects to invest up to \$4 billion on upgrades to North Anna and Surry as part of the relicensing process.

Like all U.S. nuclear units, the North Anna and Surry units were originally licensed to operate for 40 years. In 2003, licenses for all four units were renewed for 20 additional years of operation, following a stringent review process required by federal law. An additional extension would extend carbon-free energy until the 2050s.

**Looking to the Future**

Historically, Dominion Energy’s infrastructure investment strategy has centered around improving reliability—ensuring that

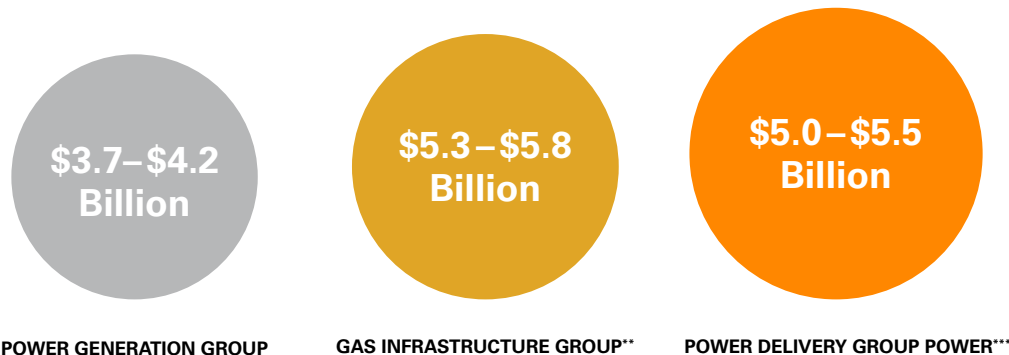
**Carbon-free nuclear and renewable energy sources provided 43 percent of the company’s total electricity output in 2016.**

customers maintain access to energy in bad weather, and that we restore it quickly after an outage, including storms. But as new threats emerge in a complex and dangerous world, we know we have to do more.

That’s why we aim to harden and modernize the energy grid much further.

**\$14-\$15.5 Billion Infrastructure Investments**

Cumulative Actual and Planned Growth Capital Expenditures 2017–2020\*



\* All planned expenditures are preliminary and may be subject to regulatory and/or Board of Directors approvals.  
 \*\* Includes Dominion Energy’s portion of the projected cost of the Atlantic Coast Pipeline project; excludes joint venture financing.  
 \*\*\* Excludes any planned capital expenditures for Power Delivery’s grid modernization program.

Like bridges and roads, the grid is a critical component of public infrastructure vital to the safety, comfort and prosperity of the public. The grid and its many components must be equipped to meet modern reliability demands, and become more resilient and adaptable to changing physical and cybersecurity challenges.

A smart energy grid uses digital technologies to be more efficient, reliable, secure, and better able to accommodate renewable energy. It means progress toward our goal of always-on power. We expect that the reliability and resiliency improvements of the smart energy grid will result in fewer power outages and faster response to those that do occur.

It also means a grid that can be even more environmentally friendly and adaptive to expanding renewable power. Our customers will have the flexibility to choose

**\$200 million**  
 Annual spending to replace aging pipelines in Ohio and West Virginia

clean, renewable energy like solar and wind, thereby exercising greater control over their own carbon footprint.

And it means an overall improvement in the customer experience. A smart energy grid will provide customers with new tools to access timely, accurate information about their energy use, and create additional pricing options and service enhancements.

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## Innovation

While Dominion Energy enjoys success today, we know that a proud history alone will not guarantee future success. Our future will be shaped not by the strength of our legacy, but by how well we embrace a commitment to innovation. We feel a sense of urgency as technology, customer expectations, and new competitors are rapidly changing our industry. As the pace of change accelerates, new technology and fresh ideas are upending industries across the globe. Dominion Energy is moving aggressively to foster innovation, creativity and development among the company’s people, processes and strategies.



**Our innovation strategy is** to aggressively seek ways to foster an even more innovative culture, while highlighting and rewarding the successes we’ve already had.

**Here’s how we performed.** In 2016, we welcomed the company’s first chief innovation officer to lead the cultural change needed to drive innovation. We launched the Chairman’s Excellence Award, which encourages employees to advance innovative ideas to be considered and evaluated by leaders and peers.

**Here’s where we’re going in the future.** We will continue to reward innovation to create a culture in which employees are encouraged to experiment. Retaining the

attributes that have made us successful, we will place even more emphasis on innovation and customer focus. We are committed to looking out for disruptions to our industry and partnering with start-ups to infuse energy into our employees and processes.

**Chief Innovation Officer**

Inside the company, we are seeking operational improvements that continue to drive safety and reliability, while reducing costs in our core businesses. Externally, we are exploring new business models to anticipate the major shifts occurring now.

Innovation requires changing our culture. The future will be marked by a greater focus on customers than ever before. We aim to empower the creativity and energy

of all employees, and to shape an agile organization that rewards prudent risk-taking. We know we must act fast.

**Dominion Energy Innovation Center**

Entrepreneurship and business incubation is often the key to the next big idea, and we are continually looking for new ways to shape the future. Dominion Energy is a founder of an advanced technology business incubator that provides start-up companies with collaborative workspaces, mentoring, guidance on business strategy, and other business support services.

The Innovation Center, located north of Richmond in Ashland, Va., offers entrepreneurs access to teams of people and resources to develop early stage concepts into financially



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viable and freestanding ventures. The Innovation Center also hosts special events and classes to foster creativity and entrepreneurship in the community.

The business incubator has fostered the launch of nearly 15 new companies. These include a developer of cutting-edge electric motors and generators; a solar energy development company; and a biotechnology start-up creating new products based on a novel recycling technology.

**IDEAS Program**



The Dominion Energy IDEAS program (short for *Innovation, Development and Solutions*) encourages our employees to channel their creativity toward the development of marketable products and services.

From concept to prototyping, market assessment, intellectual property protection and licensing, employee inventors receive step-by-step support and coaching from an IDEAS team member. Successful inventions qualify for a mix of recognition and rewards, including a share in any revenues that may result from commercialization.

**“We need to be faster, better and smarter every day as the pace of change in our industry continues to accelerate. That spirit should be driven to every corner of Dominion Energy.”**

—Chairman, President and CEO Tom Farrell

In 2016, we launched a new Dominion Energy IDEAS employee innovation competition called the Chairman’s Excellence Award. The primary purpose of this annual award is to drive higher levels of innovation at the company. (See the “Engagement & Recognition” section for additional information.)

The Chairman’s Excellence Award recognizes employee creativity in all forms. An employee-led Business Innovation Council selects eight finalists from the pool of entries. The executive team selects the grand prize winner, and employees choose a “Peer Choice Award” winner. All of the finalists are honored by the company at an annual banquet and ceremony.

**Innovation Partnerships**

Partnerships and collaborative ventures are widespread in all areas of our business, and innovation is no exception.

Dominion Energy has teamed up with two other utilities in a venture capital fund that targets innovation and late-stage start-ups in the energy sector. Participation in the fund keeps us abreast of technological advances that could benefit our customers or improve our operational efficiency. The fund has successfully supported the development and commercialization of clean energy technologies, including equipment that boosts the productivity of renewable resources, energy management systems, smart grid data analytics, and cyber/physical security.

We also participate in many industry, government, and university-sponsored innovation partnerships. For example, in conjunction with the Edison Foundation Institute for Innovation, the Electric Power Research Group, Smart Electric Power Alliance, and the Gas Technology Institute, we are evaluating emerging technologies and new business model trends that could influence the future of our company and industry. We also collaborate with the U.S. Department of Energy, NASA, and government-backed national labs to stay current with the latest research and development initiatives in the energy industry.

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**Research Partnerships**

Dominion Energy partners with about a dozen Virginia colleges and universities, providing \$1.7 million in funding for a variety of renewable energy and alternative technology research projects. The projects include high-efficiency solar cells, advanced offshore wind technologies, and the integration of battery storage with solar distributed generation, among others.

**Smart Meters**

Smart metering and other smart grid applications are opening doors to increased efficiency and energy-management tools and savings for our customers.

Smart metering technology provides a wireless, two-way communication path between Dominion and its customers. Once installed, homeowners and commercial facility managers have the ability to monitor

and more precisely control their energy use and costs. And Dominion can better detect problems on the grid and operate it more efficiently.

At the end of 2016, we had installed more than 370,000 smart meters at various customer locations in Virginia and North Carolina.



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**Micro-grid: Kitty Hawk, N.C.**

A micro-grid is a small-scale power grid that can operate independently or in conjunction with the area’s main electrical grid. Any small-scale, localized station with its own power resources, generation, electrical loads and definable boundaries qualifies as a micro-grid.

The Kitty Hawk micro-grid project includes renewable energy resources and energy storage technologies in use at Dominion Energy’s Kitty Hawk District Office in North Carolina:

- Four types of wind turbines producing up to 13-kilowatts of energy;
- A 6-kilowatt solar photovoltaic array;
- A 25-kilowatt lithium-ion battery;
- Two 1.5-kilowatt fuel cells;
- A back-up diesel generator;
- Metering and monitoring equipment for data collection; and
- An on-site kiosk supplying real-time data on the operation of the micro-grid.



**Farrell Joins Innovation Council**

Dominion Energy Chairman, President and CEO Tom Farrell joined Bill Gates and eight other prominent business leaders earlier this year on The American Energy Innovation Council. The AEIC was formed in 2010 by the Bipartisan Policy Center. Its mission is to promote strong economic growth, create jobs in new industries, and re-establish America’s energy technology leadership through robust public and private investment.

The Chairman’s Excellence Award seeks to acknowledge and recognize employee creativity in all forms across our company.

## Cybersecurity

As cyber threats expand around the world, we take very seriously our responsibility to protect the energy grid and to preserve the privacy of customer information. Our customers deserve that, and America's national security depends on it—especially in Virginia, which is home to the world's largest naval base, 29 military installations, and much of the country's critical military and industrial infrastructure.

**Our strategy is to** stretch beyond simply complying with security regulations. We have one goal: to protect the critical infrastructure that our customers rely on for their health and safety, that our country relies on for national security, and that our economy relies on to drive business operations and growth. If the energy grid goes down, people can lose their livelihood. That's why we employ more than 150 people working directly in protecting against cyber attacks. We plan to invest approximately \$50 million in the next five years to further enhance protections.

**Here's how we performed.** We implemented controls to protect the credentials of our administrators. We made changes to our email system to make it easier for employees to spot malicious emails. We implemented controls to better prevent unauthorized access to personally identifiable information. We conducted multiple penetration tests and remediated the critical findings. We implemented additional network monitoring tools to detect and block malware.

### Here's where we're going in the future.

Employees will complete annual training to educate them in their role as the first defense in cybersecurity. In addition, internal and third party-led exercises to evaluate cybersecurity defenses will be performed.

We will conduct four cyber security drills in 2018. These are conducted with both internal resources and external parties, including other utilities, regulatory agencies and law enforcement. We will conduct four Independent Vulnerability Scans in 2018. These scans are conducted by third parties to identify any public facing cyber vulnerabilities. We will conduct six Penetration Tests in 2018. These tests are targeted testing of vulnerabilities of our external and internal systems. We target enterprise and industrial control systems, with remediation of any issues found as a high priority. We will conduct NERC CIP Cyber Vulnerability Assessments at 65 locations in 2018, according to the North American Electric Reliability Critical Infrastructure Protection program.

We aim to remain in the top quartile of BitSight assessments, a third party organization that conducts external cyber assessment and scoring of major companies. We revise the cyber security strategic plan and prioritize cyber security investments based on these external assessments, threat intelligence and our assessment of risk.

Our "beyond compliance" culture starts with regular and ongoing training for all employees. It includes extensive in-depth defenses against attacks, where our security teams continuously monitor the company's computer networks and electronic devices, shutting down any device or applications that threaten to introduce security risks. We regularly practice incident response scenarios, drilling against simulated attacks on our networks and energy infrastructure.

# Our Commitments: Here's Where We're Going in the Future

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## Serving Customers & Communities

### RELIABLE ELECTRICITY

To ensure reliability, we plan to rebuild 120 miles of electric transmission lines in 2018 and 300 miles of distribution lines will be placed underground to enhance reliability and safety. We also will annually inspect 25 percent of Dominion Energy electric equipment housed in customer-owned vaults to ensure it is working properly. If not, it could impact reliability for the customers and could result in a release of oil, so the inspection makes sure that these structures have the appropriate oil spill-prevention measures in place.

### AFFORDABLE ELECTRICITY

To ensure affordability, we will grow EnergyShare, which has provided bill payment assistance to Virginia residents since 1982. The program helps all customers, with a special focus on older people, individuals living with disabilities, and military veterans. Our 2018 target is to invest \$4.6 million to help 16,000 families or individuals in Virginia. To reach them, Dominion Energy employees travel around the commonwealth, hosting, coordinating and attending community events to educate customers on low-cost or no-cost ways to save, weatherization, and assistance options. Real change happens when customers understand what they can do to make an impact, so our 2018 target is to participate in 440 outreach events around Virginia. And we aim to weatherize 1,500 homes of electric customers who are elderly, live with a disability.

### RELIABLE NATURAL GAS

Our western gas distribution company will invest \$95 million in 2018 to replace aging infrastructure in Utah, Wyoming, and Idaho, including high-pressure mains, distribution mains and service lines. We began initiatives in 2015 to enhance pipeline integrity, which will replace 50 miles of pipe and install 20 additional mainline valves by 2020, as well as install 250 additional remotely controlled valves by 2022. In West Virginia, plans call for an additional \$58 million investment over the next two years.

### AFFORDABLE NATURAL GAS

To ensure affordability, ThermWise has filed for a total 2018 budget for Energy Efficiency of \$24.5 million, forecasting that more than 81,000 customers will participate in the program in 2018. ThermWise is forecasting 1.15 million dekatherms of natural gas savings from 2018 programs, which equates to the annual usage of nearly 14,500 customers. We are planning to invest \$200 million or more annually over the next two decades to upgrade about 5,600 miles of aged bare steel, cast iron, wrought iron and copper pipe in our Ohio pipeline system—and reducing atmospheric methane emissions at the same time.

### ENGAGING COMMUNITIES

In 2018, we aim to work with stakeholders to identify and implement improvements to our community engagement. We also will continue to work closely with landowners to minimize impact to their property as we expand both electric and gas infrastructure. By the end of 2019, we aim to inspect 125,000 wood poles to ensure they meet Dominion Energy's safe design standards.

### INVESTING IN COMMUNITIES

In 2018, we plan to invest more than \$20 million to support community needs, in addition to encouraging and supporting employee volunteerism. Our goal is to exceed 100,000 hours of employee volunteer time. In support of our partnerships with small, local and diverse businesses, we will conduct matchmaking events, pairing local businesses with our own employees, to discuss upcoming opportunities. We will continue to cultivate relationships with local businesses and advocacy organizations to encourage economic growth in our communities.

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## Environmental Stewardship

### Addressing Climate Change

#### Reducing Methane Emissions

We will continue a comprehensive methane strategy that would further reduce methane emissions over the next five years at an even more rapid pace.

#### Reducing carbon intensity

The company intends to further increase our reliance on cleaner generating technologies, and when combined with continued operation of our three nuclear power stations, should result in an additional reduction of our carbon intensity to 50 percent by 2030.

#### Increasing disclosure

We are proud to have the most comprehensive public disclosures of any peer gas company. Dominion Energy will increase disclosures around greenhouse gases by participating in the CDP (formerly the Carbon Disclosure Project) reporting on greenhouse gases in 2018.

#### Reducing Water Use

Dominion Energy has already reduced water withdrawal by using low water-use technologies (such as drycooled condensers, for example) for new generation, and we will further reduce water use in the future as we continue to add to our portfolio of renewable power generation.

In 2018, Dominion Energy Wexpro will install a produced water treatment system at the Canyon Creek Unit Produced Water Evaporation Facility. This system will allow an estimated 21,000,000 gallons of produced water to be reused over the next five years at the Canyon Creek Unit Central facility and operations.

#### Reducing Waste

We will continue our zero landfill policy of Information Technology equipment by responsibly recycling IT equipment that we no longer use.

#### Protecting Habitats and Wildlife

We will continue implementing new design standards that include increased spacing on distribution lines to protect birds, animal guards on exposed equipment, and other deterrents to animals coming near equipment.

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## Our Culture

### Ethics & Compliance

To continue to reinforce the importance of ethics, employees will complete annual training in ethics and compliance. In addition, employees will certify annually that any potential compliance items have been reported or are already being addressed.

### Corporate & Sustainability Governance

Beginning in 2018, the Board of Directors will receive an annual report on our sustainability targets, strategy and progress.

### Attracting, Developing & Retaining Talent

Leaders and employees will complete training in diversity and inclusion. To provide a positive work environment for employees, Dominion Energy strives to complete all new office building construction at LEED-design construction standards.

### Employee Safety

We will maintain and enhance programs to ensure zero work-related fatalities and lead the industry in eliminating serious injuries. We will achieve and maintain first-quartile performance in the Southeastern Electric Exchange peer utility benchmark.

## Our Business for the Future

### Cleaner Generation

The company has announced plans to continue increasing our reliance on cleaner generation technologies.

### Investing in Infrastructure

We plan to begin construction of the 600-mile Atlantic Coast Pipeline, fully operationalize the Cove Point liquefaction project in Maryland, pursue re-licensing of our carbon-free nuclear fleet, and continue investing in renewable energy. We plan to rebuild 120 miles of electric transmission lines in 2018.

### Innovation

We will continue to reward innovation to create a culture in which employees are encouraged to experiment. Retaining the attributes that have made us successful, we will place even more emphasis on innovation and customer focus. We are committed to looking out for disruptions to our industry and partnering with startups to infuse energy into our employees and processes.

### Cybersecurity

Employees will complete annual training to educate them in their role as the first defense in cybersecurity. In addition, internal and third party-led exercises to evaluate cybersecurity defenses will be performed. We will conduct four cyber security drills in 2018. These are conducted with both internal resources and external parties, including other utilities, regulatory agencies and law enforcement. We will conduct four Independent Vulnerability Scans in 2018. These scans are conducted by third parties to identify any public facing cyber vulnerabilities. We will conduct six Penetration Tests in 2018. These tests are targeted testing of vulnerabilities of our external and internal systems. We target enterprise and industrial control systems, with remediation of any issues found as a high priority. We will conduct NERC CIP Cyber Vulnerability Assessments at 65 locations in 2018, according to the North American Electric Reliability Critical Infrastructure Protection program. We aim to remain in the top quartile of BitSight assessments, a third party organization that conducts external cyber assessment and scoring of major companies. We revise the cyber security strategic plan and prioritize cyber security investments based on these external assessments, threat intelligence and our assessment of risk.



**[WWW.SUSTAINABILITY.DOMINIONENERGY.COM](http://WWW.SUSTAINABILITY.DOMINIONENERGY.COM)**

To view and download our full  
2016–2017 Sustainability and  
Corporate Responsibility Report

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