

EXELON CORPORATION
SUSTAINABILITY REPORT

2017



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# **A MESSAGE** FROM OUR CEO



The 2017 Exelon Corporation Sustainability Report shares with you our strategy, progress and approach to delivering sustainable value for our customers, communities, shareholders and employees. The story of our performance is not just about what we have planned and have accomplished, but also about how we go about our day-to-day activities in a responsible and forward-looking way. I hope you find our report on Exelon's approach to building a sustainable future informative.

Each year, Exelon's senior management team and Board of Directors review Exelon's long-term strategic plan. The essence of our strategy is to embrace the power of technology and innovation to create value for our customers and communities by providing safe, clean, reliable and affordable power and energy services. We are investing in our people, our communities and our utility infrastructure so that the benefits of the emerging smart energy system that we are helping to shape can be realized by all stakeholders. This ensures that Exelon remains a relevant and valued community and business partner as our industry evolves.

As we are investing in the future, we are also working to ensure our business models keep pace with the opportunities created by innovation and new

technologies as well as customer preferences. Our utilities continue to work closely and collaboratively with customers, state regulators, legislatures and other stakeholders to enable the integration of distributed resources and technologies into the energy system, such as energy storage, microgrids and electric vehicles. In some cases, utility participation in these efforts has been slowed by regulatory frameworks created years ago that did not anticipate the power of technology to enable the emerging smart grid. Exelon is working with stakeholders to update legislation and regulation where needed.

While we are taking steps to ensure long-term success, we remain laserfocused on our day-to-day operations and the value that our utilities and generation company can create through improvements in operational



excellence and productivity. Our utilities achieved best-on-record results in key reliability and customer service metrics in 2017. We continue to invest in utility infrastructure, with \$5.3 billion spent to improve system reliability and optimize new technologies to enhance the customer experience. The smart meter and other utility system technologies already in service continue to provide value in managing the distribution system more efficiently and accelerating recovery after storm-related interruptions. We are also leveraging smart system data and analytics to enable our customers to see and manage their energy usage, including access to personalized tips on how to use energy more efficiently.

We achieved strong operational results in generation in 2017, with the nuclear fleet capacity factor at 94.1 percent, gas and hydro plant dispatch at nearly 99 percent and wind and solar energy capture at 95.8 percent. Our asset mix, coupled with our operational excellence and efficiency, continues to provide low-carbon energy to our customers. More than 88 percent of the power produced by our generating plants came from our zero-carbon nuclear, hydro, wind and solar resources. Exelon Generation remains the largest producer of zero-carbon electricity in the United States, abating, in 2017, over 90 million metric tons of greenhouse gas (GHG) emissions that would have been emitted had all of Exelon's generation been produced at the national average emissions rate.

Exelon is continuing to build on our low-carbon profile through our new corporate GHG emission reduction goal to reduce emissions from our internal operations by 15 percent by 2022. This goal includes methane emission reductions from our natural gas distribution systems, sulfur hexafluoride (SF<sub>6</sub>) insulating gas reductions from our utility operations and other internal energy efficiency initiatives. We continue to work with our customers, cities, states and regions to advance measures to reduce GHG emissions. Our efforts include working with customers and local governments to help them achieve their GHG emission reduction plans,

as well as advocacy for regulatory reforms designed to properly value zerocarbon generation in energy markets. We believe that meeting international targets that are designed to avoid the most serious effects of climate change will require the continued operation of the nation's nuclear power plants as a foundation upon which to add new zero-carbon resources on the system.

Reduced GHG emissions are one benefit of our work to develop a culture of innovation and technology, since much of this work is aimed at achieving increasing operational efficiencies both within Exelon's operations and through our customer programs. For example, our utility energy efficiency programs saved customers over 19.2 million megawatt-hours (MWh) in 2017, avoiding almost 8.7 million metric tons of GHG emissions. We are actively collaborating with national labs, leading universities, start-ups, venture funds and corporations to develop new technologies and find solutions to the nation's energy needs. One such collaboration is Exelon's investment in Volta Energy Technologies, a group working to support commercialization of energy storage technologies, which is an important component of strategies to integrate renewable and local generation resources into the energy system. As part of our effort to drive cultural change through employee and stakeholder engagement, we held our sixth Innovation Expo in June 2017. Over 3,000 employees and guests learned about how new technologies and innovations are being developed and used across Exelon to create business and customer value, and heard from national thought leaders on the energy system of the future.

At Exelon, we understand that we cannot be successful if we are not engaged with our local communities. In 2017, Exelon and our family of companies, our employees and the Exelon Foundation set records for corporate philanthropy and volunteerism, committing over \$51 million in giving and volunteering 210,000 hours. In addition to our commitment to our own customers, our utilities also provided significant assistance with the massive restoration efforts following Hurricane Irma in September 2017.



At Exelon, sustainability is about creating value for our customers and communities, including a relentless focus on ways to ensure that clean, affordable and reliable energy and energy solutions are available for the long term. \*\*



More than 2,200 Exelon Utilities employees and contractors worked in grueling conditions to help restore power to customers in Florida and Georgia. In early 2018, additional employee volunteers were deployed to assist in Puerto Rico's recovery. Exelon employees also volunteered for disaster relief after Hurricane Harvey, and contributed \$1 million to recovery efforts in Florida, Georgia, Texas and Puerto Rico.

We continue to build and maintain the workforce of the future through training, development, educational outreach and recruiting. Our 35,000 employees are actively engaged in innovation, communication and feedback on the company's direction and initiatives. Building on our commitment to diversity and inclusion and progressive workforce policies, Exelon joined the United Nations HeForShe campaign in 2017, implemented an enhanced paid leave policy for new parents and maintained compliance with Exelon's Equal Pay Pledge, adopted in 2016. On a somber note, while our multi-year personnel safety performance improvement trend continued in 2017, we experienced the tragic loss of an employee and a contractor on the job.

Failure to achieve our most important goal has caused us to look deeply into our culture and better understand the changes we must make.

At Exelon, sustainability is about creating value for our customers and communities, including a relentless focus on ways to ensure that clean, affordable and reliable energy and energy solutions are available for the long term. Innovation, technology, evolving business models and updated regulatory frameworks are among the tools to drive progress, but our views on how to use these tools must be informed by constant engagement with our stakeholders to ensure that we pursue the right actions to meet your long-term interests. We look forward to continued dialogue with you in 2018.

Sincerely,

Christopher M. Crane, President and Chief Executive Officer



# **ABOUT EXELON**





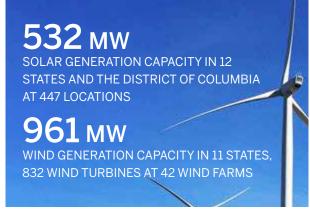
# **By the Numbers**

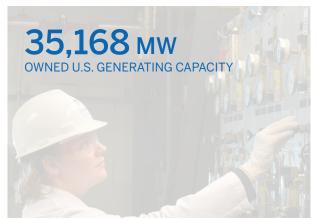
\$33.5 **BILLION IN OPERATING REVENUES** 

\$116.7 **BILLION IN ASSETS** 

\$5.3 **BILLION INVESTED IN UTILITIES IN 2017** 

**BILLION SPENT WITH DIVERSITY-CERTIFIED SUPPLIERS** 







ONLY UTILITY ON THE **FORTUNE 100 LIST** 

12 CONSECUTIVE YEARS ON **DOW JONES SUSTAINABILITY NORTH AMERICA INDEX** 



Exelon Corporation (Exelon) is a Fortune 100 company headquartered in Chicago that supplies power generation, competitive energy products and services, and electric and gas transmission and delivery. We are the nation's largest utility by customer count and the largest producer of emissions-free energy.

- Exelon is one of the largest power generators with more than 35,100 megawatts (MW) of owned capacity, comprising one of the nation's cleanest, lowest-cost power generation fleets.
- As the nation's leading energy provider in competitive energy markets, Exelon does business in 48 states, the District of Columbia and Canada. The company's competitive energy business unit, Constellation, provides energy products and services to approximately 2 million residential, public sector and business customers, including more than two-thirds of the Fortune 100.
- Our six utilities deliver electricity and/or natural gas to approximately 10 million customers in New Jersey (Atlantic City Electric, or ACE), northern Illinois (ComEd), Delaware (Delmarva Power, or DPL), southeastern Pennsylvania (PECO), Maryland (BGE, DPL and Pepco) and the District of Columbia (Pepco).

### BUSINESS COMPOSITION BY GAAP NET INCOME<sup>1</sup>

As of Dec. 31, 2017



1 The increase in GAAP earnings attributed to Generation in 2017 is primarily due to the impact of tax reform.

#### FINANCIAL PERFORMANCE

dollars in millions, except for earnings and dividends per share

	2015	2016	2017
Revenues	\$ 29,447	\$ 31,360	\$ 33,531
Operating expenses	25,056	28,200	29,720
Net income attributable to common shareholders	2,269	1,134	3,770
Total assets	95,384	114,904	116,700
Total liabilities	68,062	87,292	84,568
Total equity (includes noncontrolling interests and preference stock)	27,294	27,612	32,132
Earnings per common share (diluted) <sup>1</sup>	2.54	1.22	3.97
Dividends per common share (diluted)	1.24	1.26	1.31
Cash flow from operations	7,616	8,445	7,480
Payments to capital providers and the government	2,377	2,065	4,206
Dividends paid on common stock	1,105	1,166	1,236
Interest (net of amount capitalized)	930	1,340	2,430
Income taxes paid (net of refunds) <sup>2</sup>	342	-441	540

- 1 Earnings represented are in accordance with GAAP.
- 2 Taxes other than income is not included.

Of the \$3.8 billion in GAAP net income in 2017, approximately 62 percent was from our Generation business unit (including Constellation) and 38 percent was from our regulated utilities. Exelon is a publicly traded company listed on the New York Stock Exchange under the symbol EXC.



In 2017, Exelon made or announced a number of significant investments and changes to our generation portfolio, described in further detail in the Building the Next-Generation Energy Company section of the report. Highlights include:

• Exelon sold our 50 percent ownership share of the Sunnyside waste coal plant effective February 3, 2017, eliminating the last coal asset from our owned generation portfolio.

#### 2017 EXELON-OWNED CAPACITY AND GENERATION<sup>1</sup>

	Capacity <sup>2</sup>		Generation Output <sup>3</sup>	
	MW	%	GWh	%
Nuclear	20,310	57.8%	164,993	84.5%
Gas	8,719	24.8%	22,753	11.6%
Oil/Gas	1,778	5.1%	355	0.2%
Hydroelectric	1,642	4.7%	1,528	0.8%
Oil	1,104	3.1%	16	0.0%
Wind	961	2.7%	4,050	2.1%
Solar	532	1.5%	1,057	0.5%
Landfill Gas/Biomass	112	0.3%	534	0.3%
Other <sup>4</sup>	10	0.0%	21	0.0%
Total	35,168	100%	195,307	100%

- 1 Exelon Generation sells its electric output in competitive markets. Exelon utilities procure default electric supply through competitive processes, and some default utility supply may come from Exelon Generation and the resources listed here.
- 2 Equity share of capacity as of Dec. 31, 2017. For nuclear stations, capacity reflects the annual mean rating. Fossil stations reflect a summer rating. Wind and solar facilities reflect nameplate capacity. Source: Item 2. Properties of the 2017 Exelon 10-K, pp. 61-64.
- 3 Equity share of GWh production in 2017 for period of ownership during the year.
- 4 The capacity in the "Other" category is 10 MW of energy storage. The GWh in "Other" includes the output of Exelon's 26-MW interest in the Sunnyside waste coal plant for the period of ownership in 2017. The waste coal plant was sold on February 3, 2017; Exelon no longer owns any coal generating assets.

- On March 31, 2017, Exelon Generation assumed ownership and management of the 842-MW James A. FitzPatrick nuclear power plant in Scriba, New York.
- On March 31, 2017, a wholly owned subsidiary of Exelon Generation agreed to sell to John Hancock Life Insurance Company (U.S.A.) 49 percent of the membership interests of ExGen Renewables Partners, LLC, an owner and operator of approximately 1,296 MW of wind and solar electric generating facilities.
- In mid-2017, the Wolf Hollow II and Colorado Bend II combined cycle natural gas plants in Texas, with nearly 2,200 MW of capacity, achieved commercial operation.
- In April 2018, four of the five Exelon Generation Texas Power (EGTP) gas-fired plants — Mountain Creek, Wolf Hollow I, Colorado Bend I and LaPorte — were transferred to EGTP's lenders pursuant to a voluntary bankruptcy filing.

#### INVESTMENT GRADE RATINGS

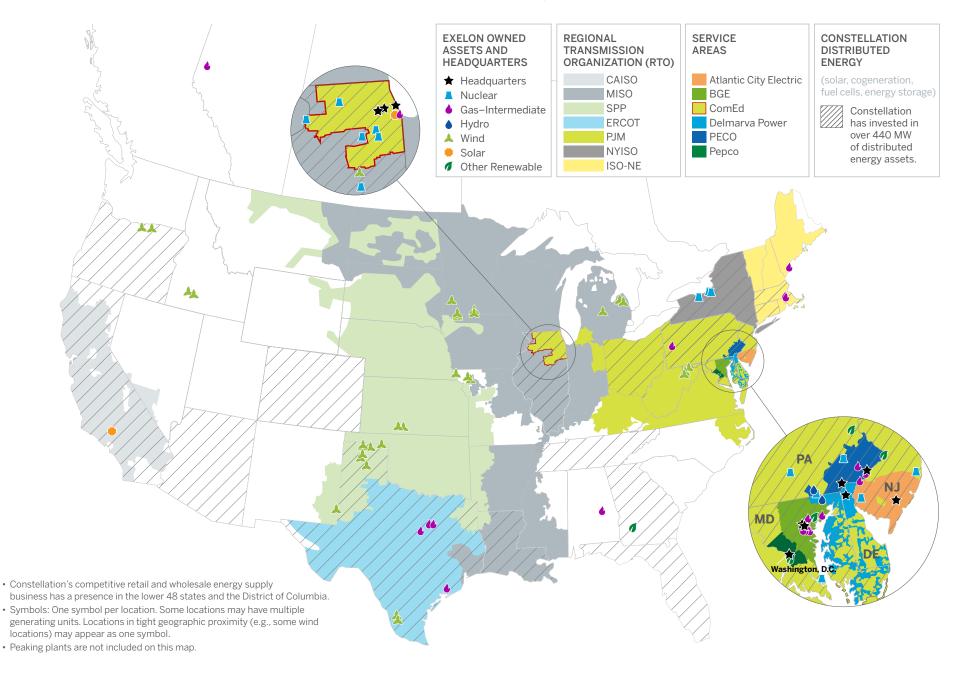
Credit Ratings<sup>1</sup>

	Moody's <sup>2</sup>	S&P	Fitch
Exelon	Baa2	BBB-	BBB
ComEd	A1	A-	Α
PECO	Aa3	A-	Α
BGE	А3	A-	A-
PHI	Baa2	BBB	BBB
ACE	А3	Α	A-
DPL	A2	Α	Α
Pepco	A2	Α	A-
Generation	Baa2	BBB	BBB

- 1 Current senior unsecured ratings for Exelon, Exelon Generation, BGE and PHI; and senior secured ratings for ComEd, PECO, ACE, DPL and Pepco as of March 8, 2018.
- 2 At Moody's, ACE has a positive outlook. All other ratings have a stable outlook.



### EXELON SERVICE AREA AND GENERATION ASSETS AS OF DECEMBER 31, 2017



Exelon Performance Data 2015-2017 <sup>1</sup>				
	2015	2016	2017	
FINANCIAL AND BUSINESS RESULTS				
Revenue (million USD)	\$29,447	\$31,360	\$33,531	
Exelon-owned capacity (MW)	32,741	32,720	35,168	
Exelon-owned generation (GWh)	179,921	186,212	195,307	
Nuclear capacity factor	93.7%	94.6%	94.1%	
Dispatch match	96.5%	98.6%	98.8%	
Wind/solar energy capture	95.5%	95.6%	95.8%	
CUSTOMERS				
Exelon utility energy efficiency (EE) program s	avings			
Customer EE savings (million MWh)	12.30	14.88	19.21	
GHG avoidance from customer EE (million metric tons CO <sub>2</sub> e)	6.97	7.63	8.66	
Customer satisfaction index				
BGE	7.75	7.78	7.94	
ComEd	7.85	7.97	8.00	
PECO	7.91	7.98	8.07	
PHI	N/A	N/A	7.59	
Reliability — SAIFI (average interruptions per o	customer)			
BGE	0.82	0.90	0.63	
ComEd	0.78	0.62	0.56	
PECO	0.70	0.77	0.72	
PHI	1.08	1.02	0.81	

	2015	2016	2017
COMMUNITIES			
Corporate and foundation giving (million USD)	\$36.7	\$46.2	\$52.1
Volunteer hours (in thousands)	129.2	171.3	210.2
Spend with minority suppliers (billion USD)	\$1.3	\$1.9	\$2.0
EMPLOYEES			
OSHA recordable rate	0.91	0.65	0.52
Number of employees	29,362	33,975	34,529
Female employees in workforce	21.7%	23.3%	23.4%
Minority employees in workforce	22.1%	24.9%	25.7%
ENVIRONMENT			
Total GHG emissions (Scope 1 and 2, location-based, with biomass, thousand metric tons CO <sub>2</sub> e)	14,950	17,130	17,409
Total water use (million gallons per year)	13,440,851	13,221,748	15,833,678
Percent of total water use that is consumptive	1.9%	1.7%	1.4%
Municipal solid waste recycling rate	73.1%	65.3%	60.5%
CO <sub>2</sub> emission intensity (lbs/MWh — owned generation)	83.0	105.8	107.6
NO <sub>x</sub> emission intensity (lbs/MWh — owned generation)	0.03	0.03	0.02
SO <sub>2</sub> emission intensity (lbs/MWh — owned generation)	0.01	0.01	0.01

 $<sup>1 \ \ \</sup>text{Additional context for the metrics in this table is available by clicking the hyperlinks in the left column.}$ 



### MANAGING SUSTAINABILITY

Exelon's commitment to sustainability is central to our mission of providing reliable, clean, affordable and innovative energy products. Our operational excellence and environmental stewardship values drive us to conduct business in a way that is sustainable for our customers, our employees and the communities in which we operate.

## **Sustainability Governance**

At Exelon, sustainability is the key to our success as a business and is supported at the highest levels of management. As a part of our journey toward being the next-generation energy company, we establish sustainability goals and measure our performance and impacts. We report these results using the Global Reporting Initiative (GRI) Standards. Led by our Chief Sustainability Officer and Senior Vice President of Corporate Strategy, Innovation and Sustainability, our sustainability team sits within our corporate strategy function, ensuring that sustainability is incorporated in decision-making at the highest levels within the company. The Exelon Corporate Governance Committee of the Board of Directors oversees specific areas of sustainability strategy and performance. A listing of Corporate Governance Committee members and the Corporate Governance Committee Charter are available on our corporate website.

Sustainability is inherently linked to our business strategy and decisionmaking. It informs our approach to investments, energy efficiency programs, climate risk mitigation and other important issues facing our business. The Board of Directors is engaged in developing our strategy and approach to sustainability. The very nature of our business requires the Board to actively participate in decision-making on our most pressing sustainability challenges. The interconnections between sustainability and our business strategy are further discussed in the Building the Next-Generation Energy Company section of the report.

### **EXELON CORPORATION PURPOSE STATEMENT**

**Our Purpose:** Powering a cleaner and brighter future for our customers and communities.

In 2017, we set out to articulate our purpose as a company — how and why we exist. Thousands of employees from across the company provided input, and the result is a bold affirmation of our reason for being. It also gives us a renewed focus on the impact we have in the communities where we work and live.

### **Key Sustainability Issues**

In 2017, we refreshed our key sustainability issues assessment to ensure that our report addresses the issues that are most important to our business and stakeholders. GRI defines these as issues that reflect the organization's significant social, economic and environmental impacts or substantively influence the assessments and decisions of stakeholders.

We reviewed the 23 issues included in our 2016 report, spanning economic, environmental, social and governance topics, and an explanation of why they are key issues for Exelon. The continued relevance of these issues was determined based upon our strategy and objectives, peer reviews, stakeholder engagement and criteria in external indices and frameworks. In particular, we reviewed:

- Customer and investor surveys and requests for sustainability information
- Edison Electric Institute (EEI) surveys of large utility investors
- Electric Power Research Institute (EPRI) Priority Sustainability Issues for the North American Electric Power Industry



- Exelon's Enterprise Risk Heatmap
- A media review of the company and our sector
- Exelon's 2017 Dow Jones Sustainability Index (DJSI) scorecard
- Our Ceres stakeholder engagement summary

All findings and results were reviewed with the executive Corporate Sustainability Report Editorial Board. In addition to updating some

descriptions of why certain issues are important and relevant to Exelon, we have added "sustainable supply chain" as a relevant issue to us, acknowledging the importance that diverse, local and sustainable suppliers have to our business and communities. Exelon's key sustainability issues and why they are important, organized alphabetically by report section, are detailed in the following table.

Key Sustainability Issues	Why It Is Important		
BUILDING THE NEXT-GENERATION	I ENERGY COMPANY		
Energy system resilience	Multiple factors affect the provision of reliable, clean and affordable energy supplies, including fuel diversity, sufficient generation with firm fuel availability, transmission and distribution systems that are adequately funded, and regulatory and market structures that evolve to maintain a resilient system.		
Generation efficiency	Converting renewable, fossil and nuclear energy as efficiently as possible into useful electric power results in lower costs per kilowatt-hour produced and maximizes the production of useful energy from natural resources.		
Investments in energy infrastructure	Continued investment in the grid ensures reliable, more resilient and more efficient transmission and distribution of electricity and gas, including the ability to integrate local energy into the nation's energy system.		
Meeting our commitments	Exelon's continued business success is dependent upon meeting our public commitments to create community and economic value for our customers.		
Value of clean energy	Customer interest in clean energy requires appropriate valuation of all forms of reliable clean energy resources in the marketplace to ensure continued net gains in low-carbon resources and continued progress toward a lower-carbon economy.		
CREATING VALUE FOR CUSTOMER	s		
Energy affordability	Reasonably priced electric and gas service, with updated regulatory frameworks to support the grid of the future, enables economic performance across all sectors of the economy and allows customers to benefit from smart grid investments.		
Innovative products and services	By delivering innovative products and services that give customers more choices and control over their energy usage, and by evolving our business to support increased electrification of the economy through measures such as electric vehicles, Exelon enhances both customer and shareholder value.		
Service to customers	Providing reliable service and achieving high customer satisfaction are key metrics for our core business, enabling customers to buy, manage and use energy efficiently and cost-effectively.		
PARTNERING WITH OUR COMMUN	ITIES		
Community and economic development	Exelon's business value is inextricably linked with the success of the communities that we serve. Exelon supports local communities through jobs, taxes paid, corporate philanthropy, community engagement and stakeholder partnerships that grow opportunities for people and city and regional economies.		
Public health and safety	With operations throughout multiple states and hundreds of communities, Exelon must protect the public health and safety of those in the regions we serve in the course of our daily operations and in the case of an emergency event.		



<b>Key Sustainability Issues</b>	Why It Is Important
A SAFE, INNOVATIVE AND REWAR	DING WORKPLACE
Diversity and inclusion	Fostering a diverse and inclusive workplace ensures that our employees and supply chain reflect and recognize the varied perspectives of our customer base and society, allowing Exelon to succeed by drawing upon a much larger pool of ideas and resources.
Employee engagement	Our employees are our greatest asset. Engaged employees help us succeed in understanding and meeting customer expectations and continuing to innovate into the next-generation energy company.
Health, safety and wellness	Keeping employees healthy and safe is our highest priority and also builds a desirable work environment, reduces health care costs and improves business performance.
Talent attraction, development and retention	Exelon must continue to seek skilled employees, particularly in the STEM areas, to enable our continued evolution into the next-generation energy company and address challenges posed by an aging workforce. Investing in our employees and potential future employees through focused training and development helps Exelon maintain the cutting-edge workforce we need to best serve our customers as the next-generation energy company.
REDUCING OUR ENVIRONMENTAL	L IMPACTS
Air quality	By focusing on low-emission generation technologies and protective air quality standards, Exelon is supporting a healthier environment for our customers.
Climate adaptation/resilience	Climate change is exacerbating many of the system challenges that Exelon has managed for decades, such as storm restoration. Continued efforts to make the system more resilient, including consideration of long-term climate change risk management opportunities, will maintain and enhance reliable electric and gas service to customers.
Greenhouse gas (GHG) emissions	GHG emissions drive climate change, which, in addition to creating adverse environmental impacts, can affect our ability to adapt to physical changes and ensure consistent prices for customers.
Habitat and biodiversity	With Exelon utility service areas encompassing 24,915 square miles and generation asset properties in 18 U.S. states and Alberta, Canada, Exelon manages unique habitats that can be enhanced to benefit biodiversity.
Nuclear fuel cycle	As the largest nuclear generator in the United States, Exelon Nuclear is focused on the effective and efficient management of spent nuclear fuel and radiological wastes to ensure employee and public safety.
Water management	The effects of climate change and increasing demand for shared water resources requires Exelon to continue to minimize consumptive water use and water quality impacts, and may offer new business opportunities related to responsible water use.
EFFECTIVE GOVERNANCE	
Corporate governance	An ethical culture with strong corporate governance and risk management processes is critical to maximizing Exelon's operational results, minimizing risks and ensuring compliance with applicable laws and regulations, with Board Governance Committee oversight of Exelon's sustainability performance.
Cybersecurity/physical security	Protection of customer information and Exelon's electronic and physical assets is of paramount importance, as our transmission, distribution and generation assets represent critical national infrastructure.
Policy engagement	Exelon's businesses are subject to a wide range of government laws and regulations. Exelon seeks to engage with policy makers to find solutions that support our business interests, provide more value to customers and create desirable outcomes for stakeholders.
Sustainable supply chain	Working with our suppliers and industry peers to build a sustainable supply chain that provides efficiencies for Exelon and supports loca and diverse businesses in the communities in which we operate.

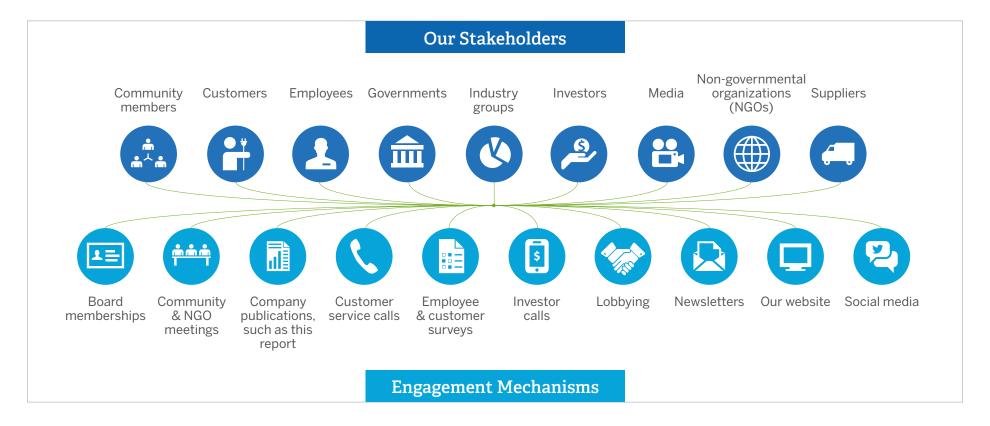


We strive to ensure that our sustainability strategy and priority areas align with global sustainability initiatives. The United Nations Sustainable Development Goals (SDGs) are an important framework for advancing sustainability globally, and we recognize the need for companies like Exelon to contribute to achieving these goals. Many of the 17 SDGs are relevant to Exelon's business and how we can contribute toward a more sustainable future for all. Please see the Appendix for a mapping of how our initiatives align with the SDGs.

### **Stakeholder Engagement**

Exelon regularly engages with stakeholders through a variety of channels. We value the interest and input of all our stakeholders. Engaging with our stakeholders helps us better understand emerging trends that impact our business and allows us to address stakeholder needs and concerns. We use stakeholder feedback to inform our sustainability strategy and business plans. The image below depicts the variety of stakeholders with whom we engage and the ways in which we engage them.

Every year, we facilitate specialized forums with individual stakeholder groups to discuss their sustainability interests and concerns to incorporate them in our business and sustainability planning. For example, we have engaged with Ceres, a nonprofit organization advocating for sustainability leadership, every year since 2008. Ceres provides an outside perspective on key issues that helps Exelon advance our sustainability performance. As part of this engagement, Ceres convened a group of external stakeholders and Exelon participants in April 2018 to engage in a structured feedback





session on the sustainability-related aspects of our corporate strategic plan, as well as our sustainability performance and reporting activities. A summary of the resulting discussion is available on our website. Additionally, we engaged with RobecoSAM on our DJSI scorecard and with CDP on our disclosure results to better understand scoring and areas for improvement. Our operating companies also participated in dozens of stakeholder engagements around specific local issues.

Shareholders are demonstrating ever greater interest in how companies manage climate and sustainability risks. To address this increasing focus, Exelon engaged with more than a dozen institutional investors and proxy advisers in 2017 on the issue of climate change and other sustainability topics. We will continue engaging with investors and communities in the coming years to ensure our climate strategies are best aligned with our business and societal needs.

### **2017 SUSTAINABILITY RECOGNITIONS**

We participate in a number of voluntary reporting initiatives including the **Dow Jones** Sustainability Indices (DJSI) and the CDP Climate Change, Water and Supply Chain surveys. Exelon has been named in the DJSI North America Index for the past 12 years, which includes the top-scoring 20 percent of the 600 largest North American companies. We also scored a B on our CDP Climate Change disclosure and an A- on our 2017 CDP Water disclosure. Visit our website to view our responses to the Climate Change survey and Water survey.

Newsweek Magazine's Green Rankings recognized our leadership in sustainability, where we ranked third among utilities, 12th in the United States 500 and 24th among the

MEMBER OF **Dow Jones** Sustainability Indices

In Collaboration with RobecoSAM (



Exelon has been named in the DJSI North America Index for the past 12 years, which includes the top-scoring 20 percent of the 600 largest North American companies.

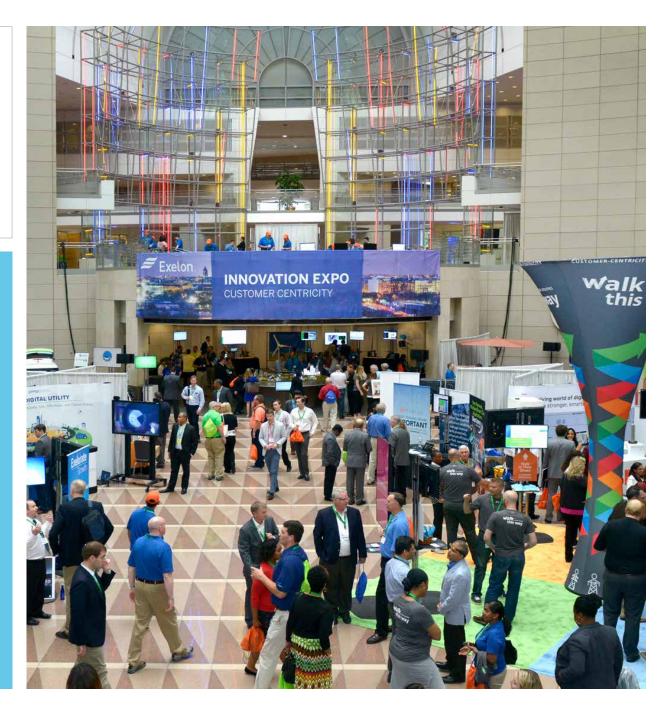






# **BUILDING THE NEXT-GENERATION ENERGY COMPANY**

- Embraced a culture of **technology** and innovation through focus on customers, employees, partnerships and investments
- Invested more than \$5.3 billion of capital across our utilities in 2017
- Achieved a **94.1%** nuclear capacity factor, 98.8% fossil and hydro dispatch match and 95.8% wind and solar energy capture rate





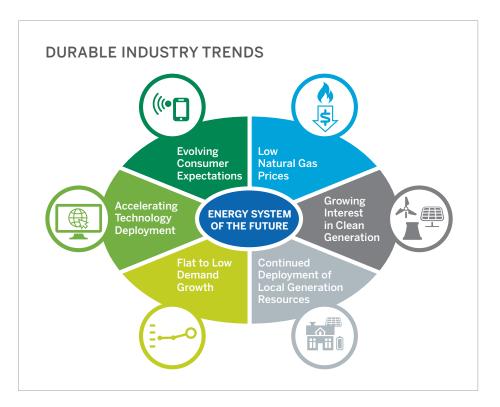
**Exelon** is powering a cleaner and brighter future for our customers and communities. We are committed to understanding and addressing our customers' needs and interests as we build the next-generation energy company. Applying innovative technology to empower customers to manage their energy use is a key area of focus, as well as meeting customer expectations for clean, reliable and affordable power. As we execute our business strategy, we must also nurture meaningful connections with our communities, pursue a leadership role in civic involvement and local partnerships, and enable growth of human potential in our communities and workforce to support a sustainable future.

### **EXELON'S BUSINESS STRATEGY**

Exelon's business strategy is informed by our views on the durable trends in our industry that are shaping the future energy landscape, described below. Durable trends are circumstances that we see as having a lasting effect on companies in the electric power industry over the mid to long term. Exelon's executive team regularly assesses key industry trends and customer expectations, and works with our Board of Directors to evolve Exelon's business strategy over time to ensure that we continue to deliver customer and community value.

# **Durable Industry Trends**

**Evolving Consumer Behavior and Expectations.** Customers increasingly seek greater personal control over their energy use and choices — from cleaner energy generation sources to customizable home and business products and services. Our customers expect their energy to be clean, as



well as affordable and reliable. In response, customers are embracing local generation, such as residential and commercial solar, desiring a more active role in implementing energy efficiency measures and using technology to track and manage home and business energy usage.

Increased Natural Gas Supply and Low Natural Gas Prices. The expansion of shale gas drilling technologies in the United States has dramatically increased the availability of domestic supply, resulting in low natural gas prices, and thus, greater use of natural gas for power generation and other end uses. Low natural gas prices have also driven down competitive power prices, negatively affecting the economics of all power generation resources, including zero-carbon resources such as nuclear power and renewable energy.



Flat to Low Demand Growth. After steady growth in load through the 20th century, power suppliers are seeing flat to very low growth in demand in recent years, due in part to deployment of energy efficiency programs. This is a fundamental shift in market dynamics as compared to prior decades when demand growth was higher.

Continued Deployment of Local Generation Resources. The amount of small-scale generating capacity such as solar, wind or fuel cells in private residential and commercial applications continues to increase. Local generation supports fuel diversification and can improve local reliability and grid resilience. Fuel diversity, increased customer demand and decreased costs are driving this trend.

Accelerating Technology Deployment. The centralized generation and transmission and distribution (T&D) system, though still fundamentally needed to supply and distribute electric power, is transforming. An intelligent electric network, enabled by two-way communication technologies and the expanding "internet of things," is emerging to create a smart power grid. Both regulated utilities and third parties are deploying new technologies that provide options to more efficiently monitor and manage energy usage, as well as to integrate local generation resources into the emerging smart grid.

**Growing Interest in Clean Generation.** We see sustained and growing public interest in reducing the impacts of energy usage on the environment. Issues of public concern include carbon dioxide (CO<sub>2</sub>) emissions associated with climate change, other air pollutant emissions such as nitrogen oxide (NO<sub>2</sub>) and sulfur dioxide (SO<sub>2</sub>) that can contribute to unhealthy air quality at regional and local levels, and water and land use impacts. Customers and other stakeholders are advocating for clean generating technologies that can avoid these impacts.



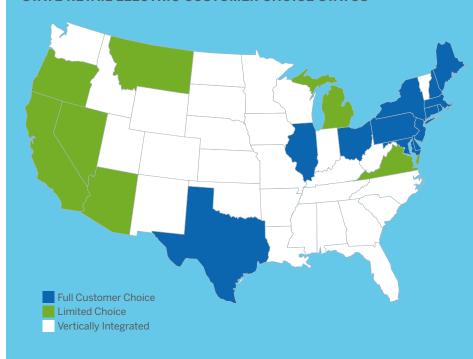
Exelon's strategy is informed by durable industry trends, including accelerating technology deployment and smart power grid investment.



### ENERGY COMPANY BUSINESS MODELS DRIVEN BY STATUS OF STATE CUSTOMER CHOICE REGULATIONS

A quarter century ago, all states had vertically integrated electric utility companies that were fully regulated by state public service commissions. At that time, all capital spending plans of utilities were approved by service commissions. Vertically integrated utilities owned both T&D systems and the power generation resources needed to meet each utility customers' energy needs.

#### STATE RETAIL ELECTRIC CUSTOMER CHOICE STATUS



Starting in the mid-1990s, many states elected to adopt customer choice laws and regulations with the primary focus on reducing electricity costs by allowing customers to switch energy suppliers. Today, 20 states and the District of Columbia, including all areas with Exelon utilities, have implemented some form of customer choice. At the time that retail competition was adopted, vertically integrated companies were required to divest or separate all power generation resources from their T&D businesses. As a result, power generation became a competitive business with generation technologies and investments determined by market economics rather than by service commission requirements.

Exelon's current business model is referred to as a "competitive-integrated" model," since Exelon Corporation owns both regulated T&D utilities (ACE, BGE, DPL, ComEd, PECO and Pepco) and competitive power generation (Exelon Generation), as well as a retail energy business (Constellation). The strength of Exelon's business model is that we can respond to durable industry trends across the energy value chain to maximize customer benefits and returns on capital investment.

Since the time that customer choice was adopted, expectations for grid management have evolved based on new technologies and customer interest. State regulators and other stakeholders are revisiting the role that utilities should play in the energy system of the future. Exelon is participating in these efforts to update policies and regulations so that utilities may perform functions and offer services that were not originally envisioned by states that adopted competition. Examples include utility participation in deployment of local generation resources, such as solar energy, fuel cells and batteries, and local resilience projects, such as microgrids that require wire integration, local generation and energy storage.



### **Exelon Strategic Plan Focus Areas**

As a result of our analysis of durable industry trends and customer expectations, Exelon has developed four strategic plan focus areas. These include:

- Creating a culture of technology and innovation
- Investing in markets at attractive returns
- Maintaining operational excellence, productivity and efficiency
- Evolving our business models and regulatory and market structures

These focus areas form the basis of our business strategy and work together to deliver value for our customers and stakeholders. The focus areas are not unrelated; they build upon each other in a cycle that creates

HOW WE'RE CREATING VALUE FOR CUSTOMERS **FOCUS AREA FOCUS AREA FOCUS AREA FOCUS AREA** Maintaining Creating a Investing in **Evolving our** culture of our markets operational business models technology at attractive excellence, and regulatory and and innovation returns productivity market structures and efficiency HOW? HOW? HOW? HOW? Partnering with stakeholders to embrace and drive new innovation embraces the power of technology

the opportunity to invest at attractive returns. As we execute our strategy in each of the four focus areas, we apply a consistent customer focus to ensure that we meet our customers' needs and remain relevant to them in a rapidly changing energy environment. This includes focusing on customer interest in affordable energy, safe and reliable electric and gas service, clean and low-carbon energy, technology and innovation, and investment in people and local communities.

# **CREATING A CULTURE OF TECHNOLOGY AND INNOVATION**

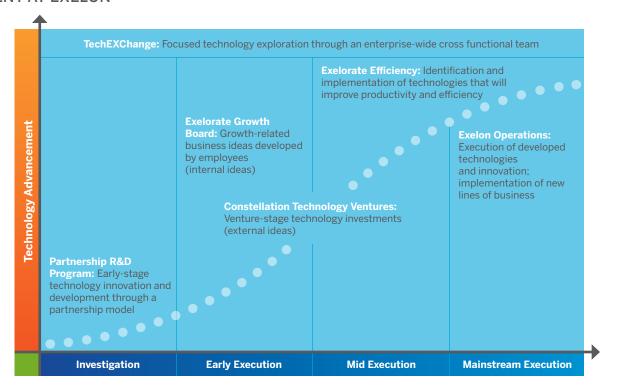


The major trends facing our industry drive us to embrace technology and innovation across all aspects of our business. We believe that the best ideas emerge when individuals from diverse backgrounds work together, sharing ideas and insights, to tackle our biggest business challenges. To this end, we have developed an ecosystem that brings together passionate employees from all parts of the company and external experts to develop innovative solutions to advance the future of energy. These teams foster a culture of innovation to drive operational excellence and accelerate the adoption of new technologies, products and services. The graphic on the next page depicts some of the key groups and efforts at Exelon that are managing technology and innovation opportunities across all maturity levels, ranging from early-investigation to full deployment in Exelon's operations.



#### EMERGING TECHNOLOGY MANAGEMENT AT EXELON

Exelon has established a series of internal groups to foster and manage the identification and evaluation of emerging technology and innovation for Exelon and our customers. Once these efforts gain maturity, they are transitioned to Exelon's operating companies for widespread deployment and/or the creation of new lines of business. These efforts are governed by Innovation Peer Groups that champion innovation and technology in the operating companies and by our Exelorate Growth Board that evaluates and manages growth-related ideas developed by employees.



The **Corporate Innovation Team** is charged with driving the culture of innovation at Exelon, and identifying new and disruptive technologies that could lead to growth opportunities and improvements in productivity and efficiencies within our existing businesses. The team applies Exelon's innovation framework to identify opportunities, pilot emerging technologies and implement them quickly.

In recent years, the Corporate Innovation Team has facilitated six Innovation Expos to bring employees together to learn about new technologies that impact our industry and to share employee ideas to leverage innovation

and technology for our customers. The 2017 Exelon Innovation Expo, held in Washington, D.C., displayed a wide range of innovations and investments. The Expo showcased our employees' dedication to customer centricity, with more than 500 employees submitting their ideas for new ways to deliver reliable, safe and clean energy to our customers. More than 3,000 people attended the 2017 Expo, including employees, customers, industry leaders and guests.

Since driving a culture of innovation throughout the company is an ongoing focus for the Corporate Innovation Team, we developed a company-wide









Exelon is exploring new technologies to identify operational benefits.

Sustaining Innovation iNdex to track employee ideas and engagement. We encourage and reward our employees for their ideas, leading to improved collaboration through our internal crowdsourcing tool. The Corporate Innovation Team works with a diverse ecosystem of startup companies, academia, research labs, government agencies and other organizations to establish the broadest understanding of emerging technologies and potential applications throughout Exelon.

Alongside the Expo and our focus on customer centricity, Exelon proactively identifies technologies to enhance our workforce and create growth opportunities. We are exploring and implementing technologies

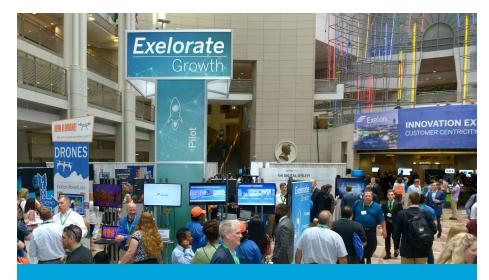
to improve productivity, safety and knowledge sharing through our Digital Worker initiative. Examples include mobile applications, augmented reality glasses, smart vests, smart helmets and digital assistants. Blockchain technology is another focus. This technology enables secure, transparent and distributed transactions of digital assets that are in near real-time across entire systems, and at a dramatically reduced cost to manage. Exelon is especially interested in Blockchain's ability to flatten traditional hierarchies, reduce time delay and minimize the cost of doing business. Blockchain opportunities exist in many areas, including decentralized recordkeeping, transaction processing and supply chain management.



Eventually, implementation could have profound impacts on many aspects of our operations, including data security, customer privacy and artificial intelligence applications.

We are expanding our understanding and use of robotics and drone technologies to more efficiently and safely perform company operations, such as aerial inspections of transmission lines and wind turbines. We are also working to explore and pilot artificial intelligence applications, including machine learning, natural language processing and computer vision, that are designed to endow computers with human-like faculties such as hearing, seeing, reasoning and learning, to enable artificial intelligence applications to interact real-time with employees in a wide variety of platforms. These applications may include asset health monitoring, damage assessment, anomaly detection and real-time information retrieval and visual display to support maintenance operations, such as presenting a technician with equipment schematics or real-time tutorials on task execution. Artificial intelligence is also helping to move Exelon employees away from paper forms, to automate repetitive clerical tasks, to answer questions based on pattern recognition of images, and even to start to understand the context of a problem.

In addition to the Corporate Innovation Team, Exelon also uses our internal **Exelorate Growth Board** to evaluate and manage growth-related business ideas developed by employees. The Exelorate Growth Board is composed of a dozen senior leaders from across Exelon's businesses. New opportunities are subjected to a five-stage process to test and pilot technologies that will provide benefits for customers. Allocation of appropriate human capital and financial resources and executive mentoring of employees are key components of the process as we seek to engage and encourage employees to embrace innovation and new technologies. During 2017, the Exelorate Growth Board focused on several opportunity areas, such as increasing the adoption of electric vehicles and helping customers reach sustainability



The Exelorate Growth Board empowers employee ideas for new technologies.

goals by easing challenges related to transactions and tracking of sustainable attributes, among others.

**TechEXChange** is charged with exploring technology that has the potential to transform the industry through teams with representation (up to 60 individuals) across the company that collaborate with government and industry associations, national labs, top universities, venture capital and private equity firms. To date, the team has identified more than 25 opportunities within its five focus areas of battery storage, fuel cells, vehicles powered by alternative fuels, water and hydrogen. These innovations have the potential to impact energy markets and create new value channels for Exelon and our customers. In 2017, the TechEXChange focused on transformative, early-stage technologies (e.g., alternative fuels like hydrogen) to ensure Exelon is positioned to capitalize on industry trends (e.g., electrification of transportation) and drive value for our consumers in the near and long term.



### **WORKING ON LOW-CARBON TRANSPORTATION SOLUTIONS FOR CUSTOMERS**

**Electrification of Transportation.** The market for electric vehicles (EVs) has grown significantly and EV adoption will impact the future energy landscape and the evolving grid. Exelon has a unique opportunity to support customer demand for transport electrification through our hybrid EV business model. Over the past year, the TechEXChange and the Exelorate Growth Board have explored ways to encourage adoption of EVs of all types across the enterprise to reduce overall carbon emissions. Potential areas of investment include enabling technology and infrastructure to support larger numbers of EVs, educating consumers and our workforce about the benefits of EV ownership and partnering with industry associations.

On the regulated utility side of the business, our utilities are enabling transportation electrification by investing in two key areas: 1) distribution system investments that support customer demand for EVs, and 2) charging infrastructure investments through utility ownership, incentives or rebates with cost recovery and return opportunities. Exelon's utilities exceeded the commitment to EEI to spend 5 percent of our annual fleet acquisition budget on electric and plug-in hybrid vehicles. A few examples of specific utility actions in 2017 include ComEd's support for the Chicago Transit Authority e-bus initiative to add approximately 20 EV buses and accompanying charging infrastructure, BGE and PHI proposals in Maryland that would make the state a leader in advancing EVs on the East Coast and PECO's support for the Clean Transportation Infrastructure Act to increase transportation electrification usage by 50 percent by 2030. To position the local grid infrastructure for EV adoption, the utilities are also working with state regulatory agencies to ensure investments can be recovered and the grid remains resilient and reliable as new load is added to the system.

On the competitive side of the business, Constellation Technology Ventures is investing in charging infrastructure through ChargePoint and in transformative vehicle technology through Proterra and XL.

In addition, the Exelorate Growth Board launched EZ-EV in 2016 to support more sustainable local communities by increasing adoption of electric vehicles. EZ-EV educates, inspires and ultimately helps consumers transition into electric vehicles. Since its inception, EZ-EV has helped hundreds of people make the switch and is offering this program as a white-labeled service to utilities across the United States.



**Hydrogen and Transportation.** The TechEXChange has also been exploring hydrogen as an alternative fuel in all segments of the transportation sector. Hydrogen continues to be actively pursued by major automakers in the United States, Germany and Japan, and has begun to see commercial traction in certain heavy-duty vehicle markets, such as forklifts, heavy trucks and commuter rail. Due to its fast refuel time and high energy density by weight compared to batteries, hydrogen may prove to be the preferred method of fueling certain modes of transportation. Exelon is partnering with national laboratories to determine the economics and feasibility of leveraging our existing nuclear assets for clean hydrogen production. While hydrogen is still seen as a longer-term fuel in the broader vehicle market and has a complex relationship with the penetration of EVs, Exelon continues to track its development to identify opportunities for infrastructure development.



The Partnership R&D Program complements the TechEXChange to position Exelon for the future. The Partnership R&D Program invests in early-stage technology innovation through the management of relationships with leading research institutions, including Argonne National Laboratory, MIT, Northwestern University, Sandia National Laboratory, Idaho National Laboratory and the University of Illinois. Exelon has dedicated human and financial capital into the Partnership R&D Program to incubate this model and reach into the country's strong research ecosystem. Exelon has screened over 60 technologies through the various partnerships and invested in 11 transformative R&D projects. These projects have the potential to support Exelon's access to new markets and products; enhance customer value; enable technical insights in key science, technology and industry trends; gain, license and use intellectual property rights on new technologies; enhance the workforce by challenging our existing patterns of thinking within the company; and support in addressing market challenges. The Partnership R&D Program represents a new strategic choice by Exelon to engage in the inception and development of new energy technology at its earliest stages, bringing industry knowledge and market motivations directly into the lab.

Cultivating Exelon's relationship with the national labs and U.S. Department of Energy (DOE) has led to a transformational innovation in the paradigm by which energy technologies are vetted and receive investment. Together with researchers from Argonne National Laboratory, Exelon took the lead in designing and founding Volta Energy Technologies (Volta), an independent investment company devoted to advancing battery technologies for all industry sectors. An evolution of the traditional venture capital model, Volta leverages a close relationship with the national lab ecosystem to bring technical expertise and diligence to bear on investment decisions made by a consortium of cross-industry strategic corporate investors. Unlike traditional venture capital, which has largely shied away from hardware and capitalintensive energy tech in recent years. Volta is able to run tests at national labs prior to committing significant capital to identify and in many cases amplify

the value of a battery technology startup. After incubating Volta for 18 months and receiving input from experts across the clean tech investment community, Exelon launched Volta in the summer of 2017 with additional backing from Albemarle Corporation, one of the world's largest lithium mining companies.

### **NUCLEAR REPURPOSING**

Exelon's generation fleet is one example of how strategic partnerships can help us address market challenges. In May 2017, Exelon kicked off a strategic R&D program to systematically and critically assess options for repurposing our existing commercial nuclear plants to produce a product or deliver a service in addition to, or as an alternative to, producing electricity for the grid. Exelon posed this challenge in an effort to consider all technical options for preserving our nation's economically challenged nuclear fleet, its local work forces and the national strategic value these assets embody. Led by Exelon Corporate Strategy and involving Exelon's top nuclear leadership and policy team, the kickoff meeting included 24 of the nuclear industry's leaders and most innovative thinkers, with representation from national labs, universities, think tanks, specialty consultants, U.S. DOE, EPRI, Nuclear Energy Institute, startups and traditional nuclear engineering vendors. Since this kickoff meeting, Corporate Strategy has been working with these internal and external partners to analyze and pursue the most promising repurposing strategies — including hydrogen production, industrial steam supply, agriculture and onsite power utilization in a phased approach that considers technical engineering constraints, regulatory hurdles, insurance limits, public acceptance, tax implications, market design factors, market acceptance and economics. After promising results from the first phase of engineering and economic analysis, the program has secured more than \$1 million from the U.S. DOE to produce a full dynamic model that considers economic and technology factors of a hybrid configuration for one of Exelon's nuclear sites. Additional workstreams are underway with university, lab and startup partners.



In 2017, as part of Exelon's Business Intelligence and Data Analytics program, our utilities launched a data analytics platform. This platform allows Exelon's data scientists and strategic analytics partners to harness the vast amount of customer and smart meter data and translate it into energy efficiency insights powered by advanced analytics. Exelon's utility customers can go on their local utility's website to view or download their energy usage data, evaluate weather impacts on energy usage and view personalized tips on how to reduce their usage. Customers may also select the communication channels of their preference to receive home energy reports and high usage alerts. In some cases, data and analysis are available through third-party partners with permission from the customer.

In addition to our internal efforts to foster a culture of technology and innovation, Exelon is investing in emerging energy technology companies through Constellation Technology Ventures (CTV). CTV invests in growth-stage companies representing technological or business model innovations that could complement or disrupt Exelon's core businesses, with the goal of providing new solutions to Exelon's operating companies and our customers. Investments made by CTV encompass a range of themes, including transportation electrification, distributed generation, energy storage, renewable generation and intelligent building controls. Following investment, portfolio companies engage with the Innovation and CTV Commercialization team, a specialized group that facilitates commercialization of CTV investments and other new concepts within Exelon's business units.

The following companies illustrate the range of technologies included in CTV's portfolio:

**PrecisionHawk** is a leading provider of drone technology. From strategic planning and program development to drone flights and custom analysis, PrecisionHawk provides end-to-end support for integrating aerial data and analytics into the enterprise. PrecisionHawk has successfully



PrecisionHawk is a leading provider of drone technology.

supported the integration of aerial intelligence for clients, which include Fortune 500 companies and market leaders in 150 countries, spanning a range of industries including agriculture, energy, insurance, government and construction. To date, PrecisionHawk has raised more than \$100 million from leading venture capital firms and strategic investments from enterprise customers and partners. The company, founded in 2010, is privately held and headquartered in Raleigh, North Carolina. More information about PrecisionHawk can be found at www.precisionhawk.com.





**Sparkfund** powers organizations by providing a new way to access energy systems — a subscription to advanced energy technology. Sparkfund partners with major utilities, energy retailers and contractors to deliver the Sparkfund Technology Subscription™. The Technology Subscription enables companies to accelerate adoption of new energy systems across their building portfolios without diverting time or money away from core business growth. A single monthly payment covers system design, installation, repairs, monitoring and servicing for equipment including lighting, HVAC, building controls, EV charging and energy storage. Since 2014, Sparkfund has completed over 200 projects across 43 states for medium-sized enterprises and Fortune 500 companies. These projects will also reduce GHG emissions by more than 10 million tons over the equipment lifetime. More information is available at www.sparkfund.com.

XL is the leader in connected fleet electrification solutions for commercial and municipal fleets. The company's XLH™ Hybrid Electric System and the XLP<sup>™</sup> Plug-In Hybrid Electric System increases commercial truck, van and shuttle fuel economy by around 25 percent and 50 percent, respectively, for Class 2 to 6 commercial fleet customers, while decreasing operating costs and CO<sub>2</sub> emissions. XL works with leading vehicle manufacturers to upfit new commercial vehicles with XL electrified technology as part of each company's new vehicle manufacturing supply chain. To date, XL has deployed more than 1,500 electrified vehicles in 45 states, which have driven more than 60 million miles, saved more than 1.1 million gallons of gasoline and reduced more than 10,000 metric tons of CO<sub>2</sub>. Each electrified vehicle deployed by XL features XL Link<sup>™</sup>, a proprietary, cloud-based vehicle connectivity platform that provides a continuous data link with fleet vehicles and analytics. Founded by MIT alumni, XL is based in Boston, Massachusetts. More information is available at www.xlfleet.com.



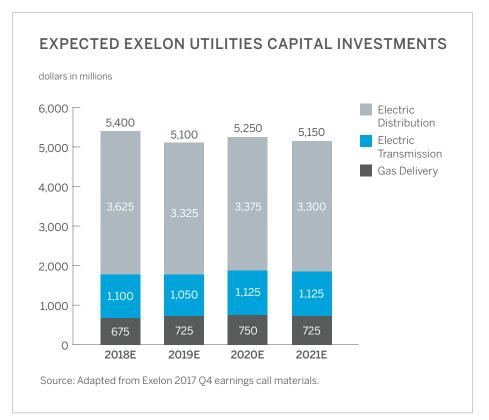
#### INVESTING IN OUR MARKETS AT ATTRACTIVE RETURNS



### **Regulated Utilities**

As part of our five-year plan to invest over \$25 billion in our regulated utilities, Exelon invested more than \$5.3 billion of capital across BGE, ComEd, PECO and the PHI utilities in 2017. As can be seen in the adjacent chart, most of Exelon's utility investments over the next four years will be in the electric distribution system, followed by the electric transmission and gas distribution systems. Of note, Exelon's utilities have completed most of their investments in smart meter technology. The details and results of past investments in some of these areas are discussed in more detail in the Creating a Smarter Power Grid section of this report. Through December 2017, we have upgraded 9.5 million smart electric and gas meters at the Exelon utilities. These advanced metering technologies enable a wide range of system and customer benefits. From an operational perspective, these new meters allow the utilities to remotely connect or disconnect service, provide enhanced information to help identify and respond to power outages and better monitor circuit voltage, saving customers money and avoiding excess GHG emissions. At the same time, these technologies give customers real-time insights into their energy usage and opportunities to save energy and money.

While Exelon's utilities have been prohibited from directly investing in and owning power generation resources since the time of industry restructuring, our utilities have worked in other ways to enable renewable energy investment and deployment in our states. For example, we are working to







### **INVESTING IN THE DISTRICT OF COLUMBIA**

In 2017, the Council of the District of Columbia approved one of Pepco's largest infrastructure projects, the District of Columbia Powerline Undergrounding initiative. The multiyear program focuses on the underground placement of vulnerable distribution power lines in the District of Columbia. This initiative involves a partnership between Pepco and the government of the District of Columbia to achieve a more resilient and reliable electric grid for residents, businesses and government. The Public Service Commission of the District of Columbia approved the first biennial plan and the financing order application in November 2017, which authorizes \$500 million for this initiative. This project will result in significant benefits to the local and regional economy through contracting and procurement opportunities and jobs. A comprehensive plan to educate customers and other stakeholders was approved by the Commission.



integrate local generation into the energy system through the deployment of new metering and other technologies and physical upgrades to distribution system networks. As described in the Clean Energy Products section of this report, Exelon's utilities have enabled almost 90,000 customers to connect 1,042 MW of local renewable generation to the emerging smart grid, and we continue to work on ways to assist customers in connecting local resources to the grid. Our utilities used almost 7.9 million renewable energy credits (RECs) to meet state renewable energy requirements last year, supporting the deployment of renewable energy resources in the regions where we operate. As described later in this section, Exelon's utilities are also evaluating potential actions to evolve their business models and state regulatory frameworks so that they can play an even more significant and central role in enabling renewable energy integration into the emerging smart grid, including potential utility investment in renewable energy resources.

Additional investments in our utilities aim to make our existing infrastructure more resilient. These efforts are described in further detail in the Customer Service and Reliability section and Natural Gas System case study later in this report.

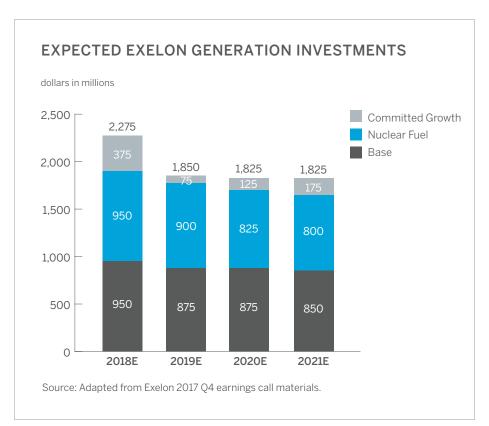
#### Investments in Generation

Exelon's capital deployment through 2021 in our Generation business is focused primarily on investments that will support and improve our existing plants' ability to generate electric power efficiently, cleanly and reliably, with a limited amount of committed investment in new generation. In mid-2017, Exelon Generation's new Wolf Hollow and Colorado Bend combined cycle gas turbine generation, totaling 2,189 MW of highly efficient capacity, achieved commercial operation. The quick ramping nature of this generation (up to 50 MW per minute) and its ability to turn down to less than 20 percent load allows it to respond rapidly to changes in demand and supply (including variable wind power production), supporting a more reliable power system and integration of renewable energy into the system.



Depending on annual dispatch, these units also have the potential to lower regional grid emissions. For the six months they operated in 2017, the plants displaced over 1 million metric tons of CO<sub>2</sub> by replacing sources that emit at the ERCOT (the local grid operator) average CO<sub>2</sub> emissions rate. In December 2017, Power Engineering named Exelon Power's Wolf Hollow Il its best gas-fired project in 2017 based on the new plant's technological innovation and local benefits.

In August 2017, Exelon Power also commenced construction on the Medway plant expansion project in Medway, Massachusetts. When completed, this project will add 200 MW of peak generation to the grid in the form of two state-of-the-art General Electric LMS100 combustion turbine-generators —





State-of-the-art peaking plant under construction at Medway.

the most efficient simple-cycle natural gas technology available. For additional information, please visit www.medwayenergy.com.

During 2017, the 28-MW biogas-fueled cogeneration plant that supplies steam and electricity for the Los Angeles Sanitation's Hyperion Water Reclamation Plant was completed and is now converting waste gas into useful electric power. Exelon Generation serves as the operator of the cogeneration facility.

On March 31, 2017, Exelon Generation finalized its acquisition of the James A. FitzPatrick Nuclear Power Plant in Scriba, New York with Entergy. Exelon's purchase of FitzPatrick was a critical component of the New York Clean Energy Standard, which saved thousands of jobs and spurred millions of dollars in economic activity in upstate New York.

Unfortunately, nuclear plants across the country continue to face significant economic challenges, and on May 30, 2017, Exelon announced that absent needed policy reforms, we will permanently cease generation operations at Three Mile Island Generating Station in Pennsylvania on or about September 30, 2019. On February 2, 2018, Exelon announced that we will



retire Oyster Creek Generating Station at the end of its current operating cycle in October 2018, about a year earlier than originally announced. In 2010, Exelon Generation signed an agreement with the State of New Jersey to close Oyster Creek by 2019. The October 2018 shutdown schedule allows the company to meet that commitment while helping employees find jobs elsewhere in the company and managing costs.

Exelon Generation remains committed to the safe, long-term operation of its nuclear plants and has obtained initial 20-year operating license renewal extensions (extending the total license term to 60 years) for all of its operating nuclear units, except for Clinton Power Station. The company intends to apply for an initial 20-year renewal for the Clinton unit sometime after the first quarter of 2021.

Exelon Generation has also maximized the output of its nuclear fleet by completing power uprates on many of its generating units. In May 2017, Exelon Generation completed a high-pressure turbine uprate on the Calvert Cliffs Unit 2 reactor that resulted in an 18-MW increase of the unit's annual net output. Nuclear capacity expansion projects were also completed in early 2018 at Calvert Cliffs Unit 1 (high pressure turbine uprate) and Peach Bottom Units 2 and 3 (measurement uncertainty recapture uprate), resulting in an estimated 59 MW of additional capacity.

# **NET POWER — DEVELOPMENT OF NEW ZERO-CARBON TECHNOLOGY SOLUTIONS**

In March 2016, NET Power, Exelon Generation, CB&I and 8 Rivers Capital broke ground on a 50-MW plant to demonstrate supercritical carbon dioxide (sCO<sub>2</sub>) cycle technology that offers higher density and competitive thermal efficiencies versus conventional steam- and turbine-driven power generation technologies without producing atmospheric emissions. Construction of the demonstration project was largely completed during 2017, with early startup expected in the third quarter of 2018. The NET Power project, located in La Porte, Texas, uses Allam Cycle technology to combust natural gas with pure oxygen and high pressure sCO<sub>2</sub> as a working fluid to drive a combustion turbine. The CO<sub>2</sub> that the NET Power plants generate from burning fuel is produced as a high-pressure, highquality byproduct, ready for pipeline transportation and storage. In many places, this CO<sub>2</sub> can be sold for use in enhanced oil recovery, permanently sequestering the CO<sub>2</sub> and providing significant added value for NET Power plant owners. This investment is an example of Exelon's continued focus on finding new technologies to provide customers with low-carbon energy solutions. More information is available at www.netpower.com.





# MAINTAINING OPERATIONAL EXCELLENCE. PRODUCTIVITY AND EFFICIENCY



Operational excellence at our regulated utilities and in our generation business is foundational for Exelon as a next-generation energy company. Our 10 million utility customers depend on us to provide affordable, reliable and clean energy safely every day of the year. To drive improvement, Exelon's operating companies engage in frequent industry benchmarking and utilize a variety of management tools to identify and share best practices across, and within, our operating companies. Given Exelon's size, scale and scope, even small opportunities for improvement can yield big results for our customers.

### **Regulated Utilities**

Exelon's utility management model focuses on continuous pursuit of operational excellence in areas such as system reliability, customer service and safety. As Exelon has incorporated new utilities into our portfolio, we have worked to identify, develop and share best practices that support continually higher levels of operational performance. As depicted in the adjacent table, Exelon's utilities consistently achieve first quartile performance, with continued efforts to raise performance in needed areas. Highlights in 2017 include BGE, ComEd and PHI achieving best-on-record Customer Average Interruption Duration Index (CAIDI) and System Average Interruption Frequency Index (SAIFI) performance, and BGE, ComEd and PECO achieving best-on-record customer satisfaction.

<b>Exelon Utilities Op</b>	erational Metrics vs.
_	IP (Results compared to 2016 benchmark)

OPERATIONS	METRIC		20	17	
OPERATIONS	WEIRIC	BGE	ComEd	PECO	PHI
	OSHA Recordable Rate				
Electric Operations	2.5 Beta SAIFI (Outage Frequency)				
	2.5 Beta CAIDI (Outage Duration)				
	Customer Satisfaction				
Customer Operations	Service Level — Percentage of calls answered in <30 seconds				
	Abandon Rate				
Gas Operations	Percentage of calls responded to in <1 hour		No gas operations		
	Performance Quartiles	Q1	Q2	Q3	Q4

In addition to performance driven by best practice sharing, performance has also been enhanced over time through the deployment of new innovations and technology on our systems, such as smart meters, as well as capital investment to modernize utility electric and natural gas T&D infrastructure.

#### **Exelon Generation**

Given the current state of low wholesale power prices and stagnant demand growth in most markets, Exelon Generation continues to focus on operating power generation assets at world-class performance levels. In support of our customers' interests in affordable, reliable and clean energy, we take pride in safely operating one of the most reliable power generation fleets in the country. Our nuclear, wind, solar, hydroelectric and landfill gas plants represent more than 23,000 MW of zero-emission electricity. Exelon Generation is the largest generator of zero-carbon power in the



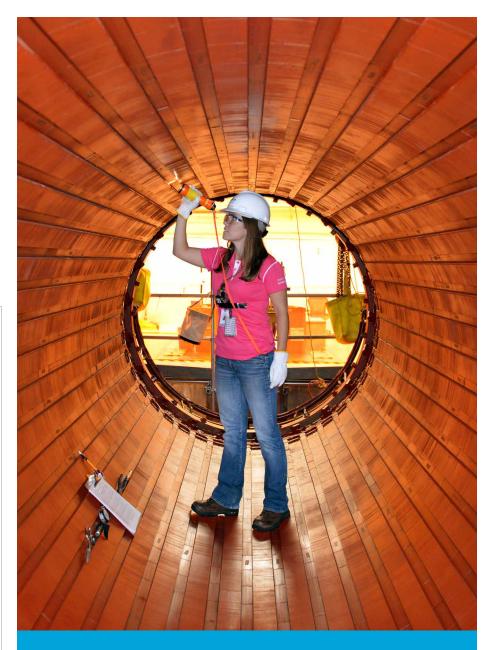
United States due to our generation technology investments and our methodical approach to operational excellence and investment in increased capacity at existing zero-carbon plants.

In 2017, for the second year in a row, the Exelon nuclear fleet achieved a capacity factor in excess of 94 percent, generating 164,993 gigawatt-hours (ownership share) and avoiding more than 86.7 million metric tons of GHG emissions if replaced by the current grid mix, less that same nuclear supply. Our dispatch match — a measure of unit revenue capture when it is called on for generation — was 98.8 percent. Our fossil equivalent forced outage rate was 3.2 percent. Our wind and solar energy capture rate was a record 95.8 percent. Our current wind fleet includes 832 utility-scale wind turbines operating at project locations across 11 states.

#### **OPTIMIZING OUR PORTFOLIO**

	2015	2016	2017
Nuclear Capacity Factor <sup>1</sup>	93.7%	94.6%	94.1%
Dispatch Match <sup>2</sup>	98.6%	97.2%	98.8%
Fossil EFORd <sup>3</sup>	4.9%	3.1%	3.2%
Wind/Solar Energy Capture <sup>4</sup>	95.5%	95.6%	95.8%

- 1 Nuclear Capacity Factor: Excludes Salem. 2017 fleet capacity factor includes Fitzpatrick from acquisition date of March 31, 2017. Capacity factors reflect Exelon's ownership share.
- 2 Dispatch Match: Expressed as a percentage, dispatch match reflects fossil and hydro units' revenue capture when they are called upon for generation. Factors that adversely impact dispatch match include forced outages, derates and failure to operate to the desired generation signal.
- 3 Fossil Equivalent Forced Outage Rate (EFORd): Measure of the portion of time a unit is in demand but is unavailable due to a forced outage.
- 4 Wind/Solar Energy Capture: The energy capture percentage is an indicator of how efficiently the installed assets capture the natural energy available from the wind and the sun. It is expressed as an energy-based fraction, the numerator of which is the energy produced by wind turbine generators or solar cells, and the denominator of which is the total wind or solar energy available at the site during that time period.



Inspecting power generation equipment at Byron Station.



# **EVOLVING OUR BUSINESS MODELS AND REGULATORY** AND MARKET STRUCTURES



#### **Exelon Utilities**

The electric power industry is experiencing historic transformation driven by technological innovations and changing customer expectations. New disruptive technologies and customer expectations are altering the way electricity is being used and managed, which presents new challenges. opportunities and expectations for electric distribution utilities. Customers expect clean energy, enhanced reliability, power systems that are secure and resilient, and the ability to actively participate in their energy use management, including access to their energy data and opportunities to pursue energy efficiency and local distributed energy resources, such as residential solar.

In response to the transformation occurring in our industry, our utilities are evolving to what we call a Customer and Energy Services (CES) business model, which will substantially enhance our utility operations by facilitating new technologies and allowing us to provide a wider array of products and services to customers. The evolution to the CES business model involves three sequential phases, starting initially with the identification and investigation of opportunities, and then subsequent phases to begin to implement the necessary changes to our businesses over time to realize the potential of new technologies to create value for our customers. The three phases we are pursuing include:

**Enhancement and Learning Phase.** In the first phase, we are pursuing emerging technology pilot programs to better understand and demonstrate the capabilities of these technologies with respect to grid evolution. In addition, we are working to shape regulatory and legislative policies as the necessary foundation to further develop the utility role as the network integrator and the provider of an expanded array of customer and energy services, with fair compensation to the utility for the role and services it provides. We also continue to invest in the system to make it more intelligent and resilient. Our efforts in these areas are focused on the recognition that the highest value utility-operated energy system — balancing economics, functionality and the environment — is anchored by a secure and resilient T&D backbone that encourages integration (rather than separation from the grid) of distributed energy resources for greatest value.

Network Service Provider and Integrator Phase. Second, and at the heart of the CES business model evolution, is the development of the distribution system operator (DSO) energy platform. The DSO platform represents a next-generation integrated grid. The DSO platform will manage and facilitate two-way power flows, enabling and coordinating new loads and distributed energy technologies reliably and fairly, providing locational price signals for these new technologies to be adopted where it is most efficient from an overall system cost perspective. The DSO platform will require substantial grid investments, including traditional technologies as well as newer data collection and analytics hardware and software, and remote monitoring and control technologies, to make the network more intelligent and resilient. It will provide greater opportunities for direct customer-facing energy products and services, while delivering greater system efficiency for all customers.

Customer and Energy Services Phase. While the establishment of the DSO platform creates a significantly more customer-focused utility, the CES business model goes further by leveraging the platform to allow the utility itself to provide value-added products and services to customers, and



pursue new growth opportunities outside of conventional energy delivery. The CES business model has been conceptualized with three key goals in mind: securing the utility as an investment vehicle; maintaining relevance in the 21st century economy; and maintaining the utility as the superior value option for customers.

Evolution to the CES business model requires not only changes in system operations and customer service, but regulatory and public policy changes as well. The regulatory compact that governs utilities must evolve so that all customers can receive the range and quality of affordable services they want, with customer rate structures reflecting the true value that customers receive from the grid, or provide to the grid, and utilities receiving fair compensation for the services they enable and provide. In addition to rethinking customer rate structures and utility compensation mechanisms, removal of unnecessary barriers to utility ownership and investment in distributed energy resources and emerging technologies must be pursued. Due to the unique constraints that exist within each utility's jurisdiction, the pace and action plan for each Exelon utility will vary as we pursue our ultimate CES business model. Evolution to the CES business model depends upon continued progress in the five focus areas depicted in the adjacent table.

TS EST
Smart lighting helps customers reduce their energy consumption.

# **Exelon Utilities Vision to Create Value for Customers Through Technology and Partnerships** Exelon's utilities will deliver a proactive, seamless and **Premier Experience** personalized customer experience, adapting to changing customer needs. Exelon's utilities will leverage new and evolving technology, **Rapid Innovator** capabilities and data to transform operations and the customer experience. Exelon's utilities will unlock the value of distributed energy **Energy Platform** resources by connecting customers, entities and the network to enable energy transactions and enhance reliability. Exelon's utilities will bring innovation and value-added products **Strategic Partner** and services to customers through strategic partnerships. Exelon's utilities will work constructively with stakeholders and regulators to pursue policies that encourage investment, **Regulatory Partner** innovation and value creation across the smart energy system,



while enhancing reliability and fair compensation mechanisms.

Exelon utilities are working to enable local generation.



#### **Grid Modernization and Innovation**

Exelon utilities seek to modernize state regulatory compacts through rate designs and updating the role that utilities play in areas of emerging customer interest, such as microgrids powered by clean energy, renewable generation (for both Renewable Portfolio Standard compliance and customer applications), energy storage and electric vehicle charging infrastructure. Currently, all jurisdictions in which Exelon utilities operate have taken steps, or are looking to take steps, to enable new customer

benefits through grid modernization. For example, during 2017, Maryland, Illinois and the District of Columbia each instituted proceedings to look at the current and desired future state of the emerging smart grid and the roles that utilities and energy suppliers should play in the future to drive additional customer benefits. Exelon's utilities and Constellation are all working constructively through these and other efforts to identify and advance opportunities to drive progress for our customers.

### MICROGRID DEVELOPMENT AND EVALUATION AT OUR UTILITIES

In 2017, Pepco filed a proposal with the Maryland Public Service Commission to build two public purpose microgrids, one in Prince George's County and one in Montgomery County. A microgrid is a localized grid that can disconnect from the traditional electric grid to operate autonomously, strengthening grid resilience and allowing for faster system response. In Prince George's County, the microgrid will be sited near the Prince George's County Regional Medical Center and will serve the hospital complex and five other facilities during emergencies. It will consist of 6.78 MW of distributed generation and 1.6 MW of storage. The Montgomery County microgrid will be sited in Rockville, Maryland, and will serve several facilities, including government facilities. It will consist of 7.46 MW of distributed generation and 0.25 MW of storage. Both proposals are supported by the counties and are currently under review by the Maryland Public Service Commission.

In early 2018, the Illinois Commerce Commission approved ComEd's proposal to construct one of the first utility-scale microgrid clusters in the nation in the Bronzeville neighborhood of Chicago. The project, which has received more than \$5 million in grant funding from the U.S. DOE, will enable the study of how microgrids support the integration of clean energy onto the grid and increase grid resilience to keep power flowing even during extreme weather or a catastrophic event. The project will serve

an area that includes 10 facilities providing critical services, including the Chicago Public Safety Headquarters and other local facilities. Phase I of the project will include 2.5 MW of load and require reconfiguration of an existing feeder, and installation of battery storage and solar photovoltaics. It will directly serve approximately 490 customers. Phase II of the project will add approximately 570 customers and an additional 4.5 MW of load and 7 MW of distributed energy resources, enough to meet the peak electricity demand of customers within the microgrid footprint. The microgrid is expected to be completed in 2019 and its performance and impact, including a cost benefit analysis, will be studied over approximately 10 years.





## **ADVANCING SMART ENERGY FOR PECO CUSTOMERS**

An example of our utilities' efforts to transform the energy experience for all customers is the work that PECO is doing with its key stakeholders in Pennsylvania to evaluate and advance smart energy legislation. Through a series of legislative bills, PECO would be authorized to implement new and innovative initiatives that respond to customer interests and needs in the areas of reliable, affordable and clean energy. The legislation would also allow for new products and services to be offered based on the emergence of the smart energy system that holds the promise of enabling greater use of technology to create value for customers.

Legislation under consideration focuses on opportunities in a number of areas, including:

- •New rate options promoting the expansion of the natural gas system, allowing more customers to take advantage of this lower-carbon fuel;
- The development of state and regional utility transportation electrification infrastructure plans;
- Creation of a legal framework to permit utility investment in emerging microgrid and energy storage technologies;
- Authorization for utilities to develop solar projects in the state for low-income customers and to meet their mandatory state requirements; and
- Authorization of new utility rate options to promote long-term grid stability, including integration of energy efficiency and renewable energy into the system in a manner that is fair and equitable to all customers.

For more information on PECO's efforts, visit

#### **Markets and Energy**

In addition to Exelon's utilities' efforts, Exelon is also working to support wholesale energy market reforms and state and federal energy policy updates that will promote affordable and clean energy for our customers, enhance reliability and resilience of the nation's power generation resources and support customer choice and efficient markets.

#### Clean Energy

As the nation's leading provider of clean energy, Exelon has a long history of supporting GHG emission reduction policies and actions at the city, state and federal levels as part of a comprehensive strategy to combat climate change. With the near-term uncertainty in environmental regulatory policy action on power plants at the federal level, Exelon is committed to continued work with states and regions to advance GHG emission reduction policies. For example, Exelon actively participated in, and supported, the recent updates to the Regional Greenhouse Gas Initiative (RGGI) program under which states agreed to further reduce CO<sub>2</sub> emission budgets over time. Our clean energy fleet helps ensure these reductions occur in a cost-effective way that promotes electric reliability.

Exelon also continued work in 2017 with stakeholders on implementation and execution of zero-emission credit (ZEC) programs in New York and Illinois. In the absence of federal action or a meaningful price on carbon, these ZEC programs help to compensate nuclear power plants for the zero-emission attributes that they currently provide. Exelon's nuclear fleet avoided about 86.7 million metric tons of CO<sub>2</sub>e emissions in 2017; for the time period 2015 to 2022, we estimate almost 650 million metric tons of CO<sub>2</sub>e emissions will be avoided, or the same emission avoidance as removing one half of all cars from U.S. roads for one year.

In the second half of 2017, Exelon, the Illinois Commerce Commission (ICC), the Illinois Power Agency (IPA) and other key stakeholders began work to implement new energy efficiency programs, launch several new renewable



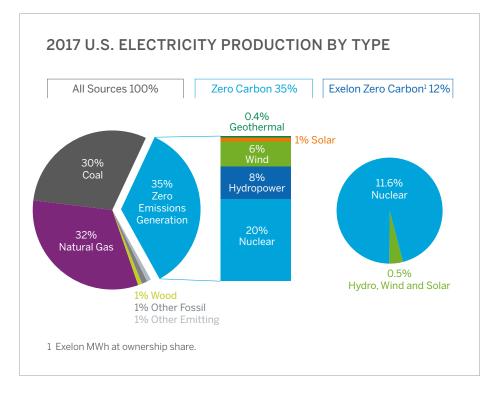
energy procurements and initiate the ZEC program as the Future Energy Jobs Act (FEJA) took effect on June 1. Implementation efforts will continue well into 2018. The ZEC implementation effort began when the ICC approved tariff filings in June 2017 from ComEd, Ameren and MidAmerican. Those filings allowed the respective utilities to collect ZEC charges from June 2017 until the procurement process concluded in early 2018. The IPA's ZEC procurement plan generally followed the statutory framework under FEJA. On January 25, 2018, the ICC issued a public notice of successful bidders and average prices in the January 2018 procurement of ZECs from facilities fueled by nuclear power. Both Quad Cities units and Clinton Power Station were winning suppliers. Exelon and ComEd also worked with other stakeholders on implementing other component parts of the FEJA, including the reformed Renewable Portfolio Standard, energy efficiency programs and the various rate caps affecting customers.

As can be seen in the adjacent image, approximately 65 percent of the nation's electric power is still produced by carbon-emitting generation, at a time when the scientific community has identified the need for a significant reduction of GHG emissions from power generation by 2050 to avoid the most damaging effects of climate change. In terms of zero-carbon resources, more than 60 percent of the nation's zero-emission generation comes from nuclear power. One out of every nine zero-carbon electrons in the United States is produced by Exelon Generation, including nuclear power and renewable energy resources.

Further, based on the June 2017 Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the United States report by Ceres, the annual zero-carbon output from Exelon's owned generation portfolio is twice as large as the zero-carbon electric output from the next largest generation company in the United States. Exelon believes that our national priority for power generation needs to focus on maintaining existing zerocarbon generation, and systematically working to reduce the amount of

emitting generation by incrementally adding new zero-carbon resources, and continuing to deploy energy efficiency measures in our economy. The size of the carbon reduction challenge is simply too large to not deploy an "all-of-the-above" zero-carbon generation strategy.

The impact of Exelon's zero-carbon generation investment can be seen in the chart on the next page that indicates that while Exelon Generation was the fourth-largest generator of power in the United States in 2015, it had by far the lowest CO<sub>2</sub> emission rate (82 pounds per MWh) of the largest generators in the United States. In fact, today, the Exelon Generation CO<sub>2</sub> emission rate is already at about the intensity level suggested by the scientific community as the level that the power generation industry must aim to achieve by 2050 to avoid the most damaging effects of climate change. This is further discussed in the climate change section of this report.





#### CO<sub>2</sub> EMISSION RATE — TOP 20 INVESTOR-OWNED POWER PRODUCERS all sources (lb/MWh) Exelon (4) 82 PSEG (18) Entergy (7) 541 NextEra Energy (2) 544 Dominion (12) Calpine (10) Duke (1) ENGIE (23) 1.017 Talen Energy (15) 1,126 Southern (3) 1.148 FirstEnergy (13) 1,305 Berkshire Hathaway Energy (9) 1,368 1.459 Ameren (20) 1.508 Xcel (14) NRG (8) 1,534 1.566 Dynegy (11) Energy Future Holdings (17) 1.641 AEP (6) DTE Energy (19) 1,673 WEC Energy Group (22) 1.810

Source: Benchmarking Air Emisisons of the 100 Largest Electric Power Producers in the United States, M.J. Bradley & Associates (June 2017). Data used in the benchmarking report was calendar year 2015. Number in parentheses is the company generation rank in 2015, i.e., Exelon was the fourth largest generator in 2015.

500

1.000

1.500

2.000

In addition to the ZEC programs, in 2017 Exelon worked with our key independent system operators — PJM, NYISO, MISO and ISO-NE — to consider the effects of current and revised market regulations on the continued operation of zero-emission generation on the system, as well as the introduction of new zero-carbon generation. As discussed in the climate change section of this report, significant reduction of GHG emissions from global industries will be required if the global commitment to limiting global temperature increase to 2°C or less by 2050 is to be met. Regarding the U.S. power generation industry, this translates to approximately a 90 percent reduction in CO<sub>2</sub> emissions from power generation, requiring "all hands on deck" policies to preserve existing zero-carbon resources. To achieve GHG reductions, public policy efforts must focus on adding renewable energy assets while utilizing the existing foundation of zero-carbon resources to support the continued phase-out of inefficient fossil-fired generation.

#### Reliability and Resilience of the Nation's Power Generation Resources

In addition to clean energy, our customers need an affordable and resilient power system that provides families and businesses with electricity under all possible weather and demand scenarios. Exelon believes that wholesale energy markets need to evolve to properly value the reliable, clean and affordable energy produced by the nation's nuclear fleet. Wholesale competitive power markets, as currently designed, do not adequately consider generating resources' ability to withstand fuel supply disruptions, such as during the January 2014 polar vortex event, or generating resources' ability to produce power without GHG emissions. As a result, the nation's nuclear fleet is facing premature retirement because markets are currently not designed to value the always-on, clean power that they provide. Between 2002 and 2016, 4,666 MW of nuclear generating capacity announced retirement, approximately 5 percent of the total. Another eight nuclear reactors with 7,167 MW of capacity have announced retirement



0

plans since 2016. The retirement of nuclear units — the most resilient and reliable generators on the system — and their replacement with resources that are neither fuel secure nor emissions-free, will have a strong negative impact on the grid's resilience, as well as city and state efforts to combat climate change.

During 2017, Exelon participated in several government and independent system operator initiatives to review opportunities to evaluate and respond to the issue of whether, and how, the reliability and resilience of the system that most Americans now take for granted is maintained. These included a U.S. DOE notice of proposed rulemaking, a Federal Energy Regulatory Commission (FERC) proceeding to examine the issue of grid reliability and efforts in PJM to evaluate opportunities to better value the output of block loaded units (generating units needed to support system demand during most hours of the year, but that cannot easily cycle their output down during low-price hours of the day, typically at night, thereby not receiving compensation to cover their cost of operation during these low-price hours).

## **GOING FORWARD**

Exelon's future business strategy will continue to be informed by our views on durable industry trends and the evolving needs and interests of our customers and communities. Technology and innovation are enabling new opportunities for Exelon to play an even more meaningful and relevant role in creating value for our stakeholders as we work to enable the energy system of the future. In addition to our focus on enabling customers through technology and innovation, Exelon remains focused on operational excellence to drive clean, affordable and reliable energy for our customers. As we execute our business strategy to power a cleaner and brighter future for our customers and communities, we remain mindful that sustainability is a shared journey, and that engagement with all of our stakeholders on new and innovative energy solutions is critically important both to the success of our business and to global sustainable development.

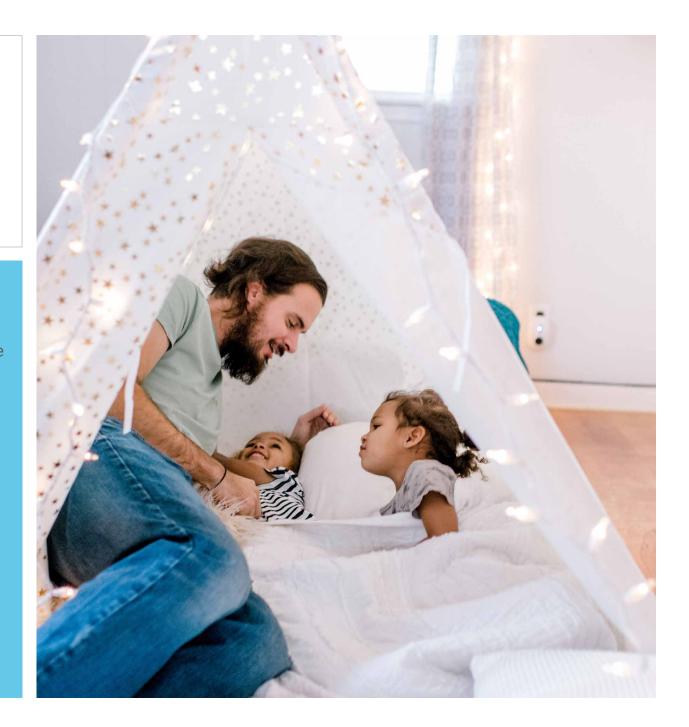


Technology and our dedicated employees are driving the energy system of the future.



# **CREATING VALUE FOR CUSTOMERS**

- Achieved **first decile** performance for outage frequency at BGE, ComEd and PECO
- Helped utility customers save 19.2 million MWh and avoid **8.7 million** metric tons of CO<sub>2</sub>e through energy efficiency programs
- Avoided nearly **660,000** service truck trips by using smart meter technology to remotely connect/ disconnect services





Our customers value clean, affordable and reliable energy and power distribution systems. Clean power comes from energy efficiency and low-carbon energy supplies. Affordable energy occurs through operational excellence to drive efficient transmission, distribution and production of energy. Reliable power occurs when utilities invest in the smart grid and innovative new technologies that better manage the integrated energy system and empower customers to become involved in the energy system of the future. At Exelon, we are relentlessly pursuing value for our customers in these areas.

# **OPERATIONAL EXCELLENCE AT OUR REGULATED UTILITIES**

Exelon's utility companies continue to invest in new technologies, information systems and infrastructure to make the physical grid more efficient and resilient. These investments support enhanced operational efficiency at our utilities and higher system reliability. They also allow customers to better participate in the energy system through access to their energy usage data and options to integrate customer generation into the emerging smart grid. Our six utilities deliver electricity and natural gas to approximately 10 million customers in Delaware, Illinois, Maryland, New Jersey, Pennsylvania and the District of Columbia.

## **Creating a Smarter Power Grid**

A smart grid is a modern electrical system that uses automated data collection, two-way communications and technology to deliver energy to customers more reliably and efficiently. It provides awareness of hourly

energy usage for customers and allows utilities to control and monitor the power system at a much more granular level compared to traditional distribution systems. Smart meters installed at customer properties support smart grid operations by enabling two-way power flows that are required to integrate distributed energy resources, such as private solar photovoltaics at homes and businesses. Smart meters also allow interested customers to see and manage their energy usage through utility and thirdparty software applications.

Smart meters transmit data directly to the local utility, helping to improve customer service and smart grid operations. These meters also help customers manage their energy use by offering access to detailed usage information, which is supplemented by programs to encourage conservation and energy savings. The new meters provide faster service to



New technology supports customer benefits, such as energy management.





Over 10 million customers benefit from Exelon utility investments.

customers by enabling utilities to remotely connect or disconnect service and eliminating the need to send a crew to customer properties for many requests. The ability to conduct work remotely also reduces the utility's own fuel consumption. lowers GHG emissions and reduces labor costs. In 2017, Exelon utilities avoided 658,000 service connect/disconnect calls through the use of smart meters. In addition, the enhanced outage information provided by the new metering technology significantly aids response and allows for quicker restoration work during storms or other power disturbances.

Advanced gas meters, like electric smart meters, have remote sensing benefits and provide usage data to support efficiency and reliability. Deployment of advanced gas meters helps improve public safety while reducing maintenance costs.

Exelon utilities invested almost \$5.3 billion in 2017 in electric transmission. electric distribution and gas distribution systems. Through December 2017, we upgraded almost 9.5 million smart electric and gas meters at the Exelon utilities. Highlights include the following:

**BGE.** BGF has an installed base of more than 1.2 million electric smart meters and over 639,000 advanced gas meters. Current efforts to install remaining meters relate to those in an "exceptions status," meaning that a specialized communication or action must take place before the meter can be installed. BGE customers reduced energy usage by nearly 137,000 MWh in 2017 through the BGE Smart Energy Manager program. This does not exclude deemed savings from other energy efficiency programs. The Smart Energy Manager program paid out \$6.9 million in bill credits in 2017, reducing peak load by 322 MW. Through continued use of smart meter disconnect switches, BGE avoided nearly 97,000 truck rolls in 2017. We are constantly evaluating enhancements to the program to benefit our customers. In 2017, improvements included the addition of several online customer insights, like bill projection (for single and dual fuel customers), bill comparison (this month to last month, and this month to the same month last year), the MyRates comparison tool (to show customers which BGE rate is best for them) and the net metering widget (that provides the customer's net energy balance).

BGE also started the deployment of the next-generation Silver Spring Networks distribution automation communication network in 2017. converting the first 170 devices in 2017. BGE also continued conservation voltage reduction (CVR) deployment, and by the end of 2017, had enabled CVR on 75 substations, representing approximately 40 percent of the



utility's primary electric distribution system, with plans for an additional 12 substations in 2018. The expansion of the CVR program is expected to extend through 2021.

ComEd. Through 2017, ComEd has installed approximately 3.8 million smart meters. ComEd's smart meter installations will be completed in 2018, three years ahead of the originally planned completion date. Deployment acceleration allows more customers to realize smart meter benefits sooner than originally expected and will provide customers with more reliable service and better control over their energy use. Peak Time Savings, an innovative demand response program made possible by smart meter technology, completed its third summer in 2017 with approximately 236,000 residential customer enrollments. In just three years, Peak Time Savings has issued more than \$2.4 million in cumulative bill credits. ComEd uses smart meter data to provide residential customers with detailed

insights into their energy usage. Customers can sign up to receive highusage alerts, notifying them when their usage is trending higher than normal for that period and weekly usage reports that summarize their past week's usage. Customers with smart meters can also view their daily and hourly usage data on ComEd.com/MyAccount and learn about ways to save after completing a short questionnaire on their home.

ComEd completed a pilot consisting of approximately 800 smart streetlights in two municipalities in June 2017 and is developing a process to deploy 140,000 smart streetlights over the next five years. Deployment began in April 2018, with approximately 2,800 smart streetlights deployed per month. Additionally, initial testing was completed to verify the feasibility of introducing smart water meters to ComEd's advanced metering network with a proof-of-concept planned to begin in 2018. This proof-of-concept will consist of approximately 400 smart water meters within three local municipalities.

#### SMART ELECTRIC AND NATURAL GAS METER DEPLOYMENT ACROSS EXELON UTILITIES AS OF DEC. 31, 2017

Electric	BGE	ComEd	PECO	PHI	Total
Total smart meters planned (in thousands)	1,276	4,131	1,731	1,993	9,131
Deployed	1,264	3,772	1,731	1,422	8,189
Remaining <sup>1</sup>	12	358	0	571	941
Avoided truck trips related to service connect/disconnect					
transactions (in thousands, for 2017 only)	96	244	97	221	658
Natural Gas					
Total gas meter upgrades planned (in thousands)	654	N/A	530	137	1,321
Deployed	639	N/A	530	134	1,303
Remaining <sup>1</sup>	15	N/A	0	3	18

<sup>1</sup> Some hard-to-access meters will require additional time to complete beyond program completion dates. Programs are complete at our utilities aside from ComEd, which is planned to be completed in December 2018. An additional 560,000 meters are planned for installation in ACE's service territory; approval to purchase and install will be pursued over the next five years.



**PECO.** PECO continues to drive innovation, advancing smart energy to provide safe, reliable, affordable and clean energy to customers. PECO has fully deployed smart meters to its electric and gas customers, with the exception of approximately 1,000 large commercial and industrial accounts where the complex meters are being transitioned to the advanced metering infrastructure. PECO's investment in smart meter technology continues to provide significant benefits to customers, including faster and more convenient service, as well as enhanced information to help customers make more informed decisions about their energy use. PECO continues to experience significant annual and recurring benefits to outage restoration, interruption frequency and interruption duration metrics resulting from smart metering. Outage benefits were achieved by using the system to avoid more than 10,000 outage response truck rolls. Smart meters continue to make significant contributions to the reduction of customer debt in 2017 via innovative data analytics solutions.

PHI. By the end of 2017, PHI had installed more than 1.4 million smart meters and avoided over 221.000 truck rolls related to service connection and disconnection. PHI customers see a host of benefits from smart meters including outage restoration time improvements, remote pinging of meters, Peak Energy Savings Credit, remote connection functionality in support of move-ins and move-outs, credit support activities and interval billing. Benefits associated with the smart meter network and the data it provides are constantly being evaluated for enhancements. For instance, the voltage data from smart meters is used in a CVR program for approximately 419,000 Pepco customers and about 50,000 DPL customers, creating energy savings for customers and supporting enhanced distribution system planning and management. Based on the latest estimates, PHI customers in Maryland have received about 87,000 MWh in energy savings across the two utilities. The overall peak system demand reductions of approximately 19.9 MW for the two utilities has led to reduced demand charges in the PJM market. PHI is on track to reach its goals in Maryland of reaching 85 percent of Pepco customers and 25 percent of DPL customers.



Exelon utilities invested \$5.3 billion in electric and gas systems in 2017.



### **Customer Service and Reliability**

Our utilities are committed to improving customer satisfaction through the delivery of reliable and cost-effective service. Each utility pursues programs for achieving a high level of reliability and maintaining exceptional customer focus.

In 2017, we continued to reduce the average number of interruptions per customer (SAIFI), with BGE, ComEd and PECO all performing in the first decile for outage frequency, while PHI attained first quartile and best-onrecord performance. ComEd's results were both best on record and best in class based on industry benchmarking. BGE's performance was also best on record. Similarly, BGE, ComEd and PHI achieved first decile performance for outage duration (CAIDI) while PECO achieved first quartile. BGE, ComEd and PHI also attained best-on-record performance in 2017 for outage duration. Improvements at our utilities are due to a number of factors including:

- Use of advanced distribution automation systems to make real-time adjustments in generation loads and distribution;
- Installation of new electronically controlled switches to reduce the number of customers affected when outages occur;
- Targeted reliability upgrades to address areas where reliability is below the system average;
- Replacement of overhead wires with modern tree-tolerant construction or underground cable;
- Continued integration of information from smart meters into the outage management process;
- Measurement and management of outage restoration processes for improved efficiency;
- Underground distribution cable replacement and remediation programs; and
- Ongoing vegetation management to keep overhead lines and other assets free from falling trees and limbs.

#### **RELIABILITY**

PHI

SAIFI <sup>1</sup>	2015	2016	2017
BGE	0.82	0.90	0.63
ComEd	0.78	0.62	0.56
PECO	0.70	0.77	0.72
PHI	1.08	1.02	0.81
CAIDI <sup>2</sup>	2015	2016	2017
BGE	91	87	82
ComEd	82	86	81
PECO	84	88	91

1 System Average Interruption Frequency Index (SAIFI) = Average number of interruptions per customer (total interruptions), excluding major events, per IEEE definition 1366, and planned interruptions.

100

101

86

2 Customer Average Interruption Duration Index (CAIDI) = Average outage duration (in minutes), excluding major events, per IEEE definition 1366, and planned interruptions.

## **IMPROVING RELIABILITY IN MARYLAND**

The Exelon utilities are constantly working to meet the growing demand for electric service and enhance the capacity and reliability of our system for our customers. Pepco is working to upgrade the electric system infrastructure in the downtown Silver Spring, Maryland area, with portions of work also occurring in nearby Prince George's County, Maryland and the District of Columbia. This project will install three new 69-kV underground lines between the Takoma and Sligo substations, increasing the capacity of the Sligo substation. Our work will replace aging infrastructure and install new equipment at each substation, further improving reliability for customers. Work on this project began in September 2017 and is expected to continue through December 2022.



Our utilities are dedicated to enhancing the customer experience through the implementation of a broad set of initiatives encompassing net metering offerings, communications and energy efficiency programs. In particular, these include:

- Providing innovative service options that enable a variety of channels (e.g., mobile apps, social media, website, text) to communicate relevant and important information to customers;
- Improving the accuracy and timeliness of information to customers during storm outages, including restoration estimates;
- Helping customers manage energy use and lower costs through implementation of a growing portfolio of energy efficiency and smart usage rewards programs;
- · Communicating proactively with government officials, agencies and media during storm events to help customers understand safety concerns, challenges faced, the extent of efforts to restore power and when they should have their power back on; and
- Supporting the local economy, community, education and nonprofit organizations through dozens of corporate citizenship activities.

Our Customer Satisfaction Index monitors our progress and captures our performance in three survey measures: overall satisfaction, meeting expectations and overall favorability. BGE, ComEd and PECO had record customer satisfaction scores and achieved top quartile or higher results in 2017. PHI utilities had positive satisfaction scores across both segments with an index score in the second quartile. Improvement in ComEd's Customer Satisfaction Index was primarily due to gains among small business customers. PECO's top score performance was attributable to exceptional reliability and customer service satisfaction among both residential and commercial segments. BGE's improvement in customer satisfaction was due to marketing campaigns that increased customer

#### **CUSTOMER SATISFACTION INDEX**

	2015	2016	2017
BGE	7.75	7.78	7.94
ComEd	7.85	7.97	8.00
PECO	7.91	7.98	8.07
$PHI^1$	N/A	N/A	7.59

<sup>1</sup> PHI began calculating its customer satisfaction index on the same basis as the other Exelon utilities starting in 2017, the first full calendar year following the PHI merger into Exelon.



Our utilities are focused on enhancing the customer experience and satisfaction.



## **2017 AWARDS**



In additional industry recognition for customer satisfaction, both ComEd and BGE were each named a "Most Trusted Brand" for 2017, and PECO for the 2017 **Utility Customer Champion, for residential** utility customers, as evaluated by Market Strategies International.



awareness of our efforts to improve electric reliability. J.D. Power ranked BGE "Highest in Customer Satisfaction with Business Electric Service in the East among Large Utilities." PHI has continued strong performance in terms of customer satisfaction with reliability, with ongoing efforts in place to enhance the customer experience across segments. The utilities continue to focus on improving the customer experience with a wide range of initiatives in progress.

Customer care center satisfaction continues to improve as well, and all utilities exceeded targets in 2017. These gains are primarily attributed to a focus on first call resolution, self-service enhancements and standardized training and process improvements.

## **Energy Efficiency**

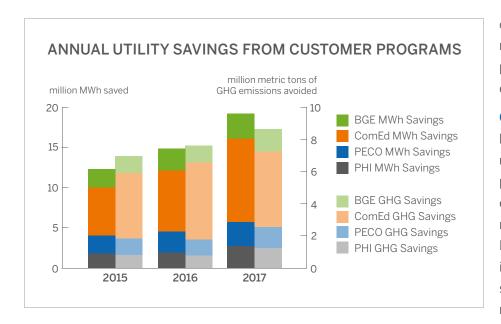
Exelon's utilities are helping customers save energy and reduce their monthly bills by providing them with the tools necessary to allow them to take control of their energy usage that will make their homes and businesses more efficient. These tools include a variety of energy efficiency, real-time pricing and smart usage rewards programs.

#### **Energy Efficiency Programs**

In 2017, through the results of a combination of new and prior-year investments, our Exelon utilities helped customers save over 19.2 million MWh of energy through the ComEd and PECO Smart Ideas® programs, BGE Smart Energy Savers Program® and PHI Home Energy Savings Program®. This equates to almost 8.7 million metric tons of CO<sub>2</sub>e emissions avoided. These programs encourage customer savings through home energy audits, lighting discounts, appliance recycling, home improvement rebates, equipment upgrade incentives and new innovative programs like smart thermostats and combined heat and power (CHP) programs. The chart on the next page shows a summary presentation of MWh saved and GHG emissions avoided as a result of these programs over the past three years.

**BGE.** BGE's residential and commercial energy efficiency programs saved 371,000 MWh in 2017 with 212,000 customers participating. These programs also had the impact of reducing gas usage by over 1 million therms. BGE customers participating in residential energy efficiency programs received nearly \$65 million in rebates and incentives and will benefit from lower bills of nearly \$600 million over the estimated useful life





of the measures installed during 2017. The residential lighting markdown program achieved over 131,000 MWh in savings, which reflects more than 127,000 participants; more than 3 million energy efficient bulbs were sold in 2017. The Quick Home Energy Checkup program achieved nearly 15,000 MWh of energy savings, achieving 115 percent of the forecast. More than 36,000 customers participated in this program with over 462,000 energy efficient measures being installed during the year. The commercial Energy Solutions for Business Program continued to be a strong contributor toward BGE's commercial and industrial portfolio, with more than 92,000 MWh, or 119 percent, of its annual energy savings forecast. Additionally, BGE had two CHP projects that went online and started generating savings in 2017. The 2-MW projects at Baltimore Washington Medical Center and the University of Maryland St. Joseph's Medical Center provided more than 25,000 MWh in savings. Program-to-date, BGE's residential and commercial energy efficiency programs have saved over 3,226,000 MWh with more than 2 million participants, and 9.7 million therms of gas were saved. BGE

customers participating in residential energy efficiency programs have received nearly \$505 million in rebates and incentives since the start of the programs and will benefit from lower bills of more than \$4 billion over the estimated useful life of the measures installed.

ComEd. The ComEd energy efficiency program provides residential and business customers easy and accessible ways to manage their energy usage, save money and help the environment. Residential programs provide lighting discounts, appliance recycling, installation of energy efficient products such as smart thermostats for single-family homes and rebates for home improvements and qualifying ENERGY STAR® appliances. Business programs give customers the opportunity to improve efficiency in existing building systems, data centers, new construction and industrial systems and provide an array of cash incentives for energy efficiency measures including lighting, smart thermostats, motors, HVAC equipment and chillers. In program year nine (June 1, 2016 to December 31, 2017), the ComEd energy efficiency program helped customers reduce their energy usage by 2.1 million MWh, providing savings of nearly \$250 million on their electric bills. Since 2008, ComEd customers have saved \$2.9 billion on their electric bills and achieved more than 26.5 million net MWh of energy savings. This level of energy savings is the equivalent of eliminating 16.7 million metric tons of CO<sub>2</sub> emissions from the atmosphere, removing 3.5 million cars off the road for one year, or the amount of carbon sequestered by 15.8 million acres of trees in one year.

**PECO.** Offering its residential and commercial customers ways to save energy and money has been the hallmark of PECO Smart Ideas® since its launch in 2009. Residential programs include in-home energy assessments, lighting discounts, appliance recycling and rebates for qualified energy efficient appliances and heating and air conditioning equipment. PECO also offers a low-income program that provides weatherization and installation of electric energy efficiency measures for qualified households.



Commercial programs include direct-install solutions to small business customers for energy-saving equipment such as lighting upgrades, LED exit signs and energy efficient HVAC and refrigeration upgrades. In addition, PECO offers financial incentives for small businesses, commercial and industrial facilities, government institutions and nonprofit organizations for retrofits, equipment and new construction that incorporate energy efficient equipment such as lighting, chillers and HVAC systems. Through this award-winning suite of energy efficiency programs, PECO customers have saved approximately \$600 million in energy consumption, incentives and rebates. This includes \$215 million in rebates, discounts and incentives, and \$385 million saved by using less energy overall. Customers have reduced electric consumption by more than 2.9 million MWh, which has the same environmental impact as removing more than 472,000 cars from roads or planting more than 57 million tree seedlings for 10 years. In 2017 alone, customers reduced consumption by an additional 364,000 MWh. Also in 2017, PECO collected nearly 725 appliances through appliance recycling events.

PHI. Customers participating in Pepco and DPL's Energy Saving Programs have realized \$2.9 billion in lifecycle benefits since the programs' inception in 2008. In addition, customers have received more than \$411 million in rebates, discounts and incentives paid since the programs began. This equates to 24.4 million gross MWh in life cycle energy reductions and 18.2 million metric tons of CO<sub>2</sub> life cycle emissions reductions, which is the equivalent of taking 3.9 million cars off the roads in the state of Maryland. More than 600,000 distinct customers have participated in the Residential Efficiency and Energy Wise Rewards Programs since 2008 and more than 37,000 customers have participated in multiple residential energy efficiency programs. The energy efficiency programs reached some major milestones in 2017, as the DPL nonresidential program reported its first completed project in the CHP program, producing more than 24,000 MWh of energy savings. ACE customers also started receiving home energy reports in late 2017 and will begin a quick home energy checkup program in 2018.

#### Hourly Pricing and Smart Usage Rewards Programs

Each of the Exelon utilities offers hourly pricing or smart usage rewards programs so that customers are able to manage their costs and reduce load during peak times.

**BGE.** BGE PeakRewards<sup>SM</sup>, BGE's residential demand response program, continued to operate smoothly with more than 312,000 air conditioning and 22,000 water heater customers receiving more than \$21 million in bill credits and creating a potential demand reduction of 357 MW at year end. During 2017, the PeakRewards program began to deploy new smart thermostats in customers' homes, with over 8,300 installed by year end. Since program inception, PeakRewards customers have received over \$227 million in bill credits and benefited from \$150 million in the value of the devices installed in their homes. BGE customers with a smart meter are eligible to participate in BGE's behavioral energy efficiency program including home energy reports, usage alerts and online tools. There are more than 920,000 eligible customers who saved more than 145,000 MWh of electricity during 2017. Since program inception, BGE customers have saved over 511,000 MWh of electricity and more than 8 million therms of natural gas. Customers participating in this program received nearly \$7 million in bill credits during 2017 and over \$46 million since program inception.

**ComEd.** In 2017, ComEd offered two residential smart usage rewards programs, which included the Central Air Conditioning Cycling Program and the Peak Time Savings Program. The AC Cycling Program at the end of 2017 included 70,442 customers using a traditional direct load control switch option and 16,633 customers using the Nest smart thermostat option for a total of 87,075 customers in the program. The Peak Time Savings Program completed its third summer season in 2017 with approximately 235,000 participants and more than \$1.2 million in summer bill credits issued. ComEd also offered a smart usage rewards program to commercial and industrial customers called the Voluntary Load Response Program



that included 2,824 customers. ComEd's Hourly Pricing Program allows customers to purchase electricity at prices that vary each hour based on the wholesale market price for electricity. At the end of 2017, the program had 23,361 active participants and savings since program inception totaled more than \$18 million, approximately a 22 percent savings versus the ComEd fixed-price rate.

PECO. In 2017, PECO offered the Smart A/C Saver program and Demand Response Aggregator program to residential, small business and large commercial customers to reduce demand during peak times. The Smart

A/C Saver program is a summer demand reduction program that cycles central air conditioners during times of peak demand for more than 62,000 control devices installed in residential and small business customer facilities. Customers receive a \$10 per month credit on their bill from June through September. Since program launch, PECO Smart A/C Saver customers have received approximately \$50 million of incentives through bill credits during the four-month summer peak electric load season. The 2017 reported verified gross demand savings was 15 MW for PECO's Smart A/C Saver program. The Demand Response Aggregator program engages large commercial customers in demand reduction activities. When PECO

# **2017 AWARDS**



**Exelon utilities were granted numerous** awards for their commitment to providing energy-saving products, programs and services to our utility customers in 2017.

BGE BGE received the ENERGY STAR® Partner of the Year — Sustained Excellence award for the seventh consecutive year, in addition to receiving the ENERGY STAR Certified Homes Market Leader Award for its successful certified homes and products programs. Additionally, BGE received the 2017 Oracle Sustainability Award for environmental impact of its behavioral programs and the EPRI Technology Transfer Award for its smart thermostats for energy efficiency and demand response program.

PECO. PECO was recognized by U.S. EPA as an ENERGY STAR® Partner of the Year -**Energy Efficiency Program Delivery. PECO also** received the 2017 ESC Partnership Award for Neighborhood Natural Gas Pilot. PECO was also recognized for its effective video communications with customers regarding its energy efficiency and conservation program as a 2017 finalist for a Chartwell People's Choice award.

ComEd. ComEd was awarded the ENERGY STAR® Partner of the Year — Sustained Excellence recognition for the fifth consecutive year. meaning this was the ninth consecutive year of recognition by the U.S. Environmental Protection Agency (EPA) for its energy efficiency programs. **ComEd received the Oracle Chief Sustainability** Officer of the Year Award as well. ComEd was also awarded the Inspiring Efficiency Leadership Award from Midwest Energy Efficiency Alliance, which also awarded ComEd with an Impact Award for its Instant Discounts program and an Innovation Award for its Energy Force program.

PHI. DPL and Pepco received the ENERGY STAR® Partner of the Year — Sustained Excellence award; this is the first year DPL has received the award and second consecutive year for Pepco. In addition, both utilities also received the ENERGY STAR Certified Homes Market Leader Award for their successful certified homes and products programs.



calls a demand response event, customers reduce their electric load by a specified amount for the duration of the event in exchange for financial incentives. For 2017, both residential and commercial reported verified gross savings was over 100 MW for PECO's demand response program.

PHI. PHI's direct load and behavioral programs continue to offer a range of smart usage reward options for its customers. The Energy Wise Rewards (EWR) program offers residential customers with central air conditioning in Delaware, the District of Columbia, Maryland and New Jersey the option of either a programmable thermostat or outdoor direct control unit (DCU) switch, which allows the utility to cycle their usage in times of summer demand. In 2017, the programs paid more than \$13 million in incentives and bonuses to nearly 359,000 participating customers. 71 percent of customers opted for the DCU control switch and 29 percent used thermostats, including over 9,800 Wi-Fi thermostats introduced in Maryland in 2016. An estimated 396 MW in demand reduction came from direct load control programs and, since inception, the EWR programs have provided nearly \$91 million in customer incentives. PHI's voluntary load reduction program, Peak Energy Savings Credit (PESC), is offered to residential customers in Maryland as well as residential and small commercial customers in Delaware. PESC rewards customers by giving credits for voluntary load reduction during events, with an average participation rate of 69 percent in 2017. Pepco's PESC programs returned over \$9 million in bill credits to customers in 2017 and is expected to provide close to 280 MW of reductions in 2018.

### **Clean Energy Products**

Our utilities use various monetary and billing mechanisms to provide benefits for customers who deploy local renewable generation. ComEd and PECO purchase excess electricity produced from residential and commercial customers' renewable energy equipment, such as solar photovoltaic units, through net metering programs. In 2017, ComEd's

total program included more than 1,147 customers providing more than 18.4 MW of renewable generation, while PECO had approximately 7,188 customers with approximately 90 MW in renewable resources. At BGE, the utility does not buy the energy produced by customers; rather, the utility's net metering tariff allows customers to offset their use with self-generation, and have the utility apply any excess balance to their use when their selfgeneration cannot cover their full need. At the end of 2017, BGE had 27,373 customers with 289 MW of installed generation capacity participating in its net metering program. Maryland introduced a community solar energy pilot in 2017, which allows customers who do not have rooftop solar to purchase solar from a community solar energy developer and have a credit applied to their monthly bill. Similar to BGE, PHI also credits its customers for their net energy use. In 2017, PHI's total program included 53,932 customers who supplied a total of 645 MW of renewable generation: 24,908 customers and 313 MW for ACE, 8,278 customers and 120 MW for DPL and 20,746 customers and 212 MW for Pepco.



All of Exelon's utilities offer energy management programs.



#### **State Renewable and Alternative Energy Requirements**

Exelon utilities use renewable and alternative energy credits to meet state legislative requirements.

**BGE.** 1.8 million renewable energy credits (RECs) are required to satisfy Maryland Renewable Portfolio Standard (RPS) requirements at BGE for 2017 for default Standard Offer Service (SOS) and large Hourly Priced Service (HPS) customers. BGE purchased RECs for HPS customers and incremental SOS load, while REC requirements for residential and small and medium commercial SOS customers were met by winning wholesale energy suppliers under full requirements contracts in PSC-approved auctions. The requirement at BGE was 15.6 percent in 2017, increasing to 25 percent in 2020.

**ComEd.** In 2017, ComEd procured approximately 1.8 million RECs from wind, solar and other renewable energy resources to meet the Illinois Renewable Energy Portfolio Standard requirement. For ComEd, this was 13 percent of supplied load. With the passage of the FEJA in Illinois in late 2016, several provisions took effect in June 2017 that impacted ComEd's RPS requirements. This included a Zero Emissions Standard, providing compensation in the form of ZECs for nuclear-powered generating facilities that meet specific eligibility criteria. Under the FEJA, ComEd's RPS requirements were expanded to include procurement of RECs for all customers by June 2019, a focus on future procurements seeking RECs from new projects, the development of an adjustable block program, the Illinois Solar for All Program to encourage expanded participation in renewable energy programs in low-income communities, and the development of a community renewable generation program allowing customers to subscribe to shares of a facility within their service territory. Remaining unchanged is the RPS renewable energy supply requirement for the 12-month period ending June 1, 2018 of 14.5 percent, with increases of 1.5 percent each year thereafter to 25 percent by June 1, 2025.

**PECO.** PECO is meeting Pennsylvania's Alternative Energy Portfolio Standards requirements that increase through 2021. Over PJM reporting year 11 (June 2016 to May 2017), PECO retired for compliance more than 1.62 million alternative energy credits to satisfy the requirement of 14.6 percent alternative energy. This requirement is set to increase on a yearly basis until it hits 18 percent in 2021.

PHI. ACE, DPL and Pepco met the RPS in all four jurisdictions in 2017. DPL purchases the RPS requirement for all of its distribution customers in Delaware. In the other jurisdictions, SOS suppliers purchase RECs to meet state RPS requirements, with the exception of hourly or market price service customers in the District of Columbia, Maryland and Delaware. In the District of Columbia, solar renewable energy credits are in short supply and many suppliers paid alternative compliance payments. In total, PHI utilities retired 2.63 million RECs to meet RPS obligations in 2017.

Constellation. In addition to Exelon's regulated utility RPS compliance, our competitive energy business unit, Constellation, promotes clean energy through the purchase, sale and retirement of renewable and clean energy attribute certificates on behalf of customers through voluntary programs. In 2017, Constellation procured 2.8 million RECs for customers, enabling them to avoid 1.2 million metric tons of GHG emissions and support the development of renewable power generation. Constellation also coordinates the sale of RECs associated with Exelon Generation's renewable generation. In addition, Constellation purchases and retires RECs on behalf of Constellation NewEnergy to meet its various state RPS obligations as a retailer in 48 states.



JURISDICTION	2017 COMPLIANCE REQUIREMENT <sup>1</sup>	COMPLIANCE STANDARD	ELIGIBLE RENEWABLES / OTHER TECHNOLOGIES
Delaware	Compliance Year 2016–2017: Eligible Renewables: 14.50% PV: 1.00% Compliance Year 2017–2018: Eligible Renewables: 16.00% PV: 1.50%	25% by compliance year 2025–2026	Geothermal Electric, Solar Thermal Electric, Solar Photovoltaics, Wind (All), Biomass, Hydroelectric, Fuel Cells using Non-Renewable Fuels, Landfill Gas, Tidal, Wave, Ocean Thermal, Wind (Small), Anaerobic Digestion, Fuel Cells using Renewable Fuels
District of Columbia	Tier I: 13.5% Tier II: 1.5% Solar: 0.98%	50% by 2032	Solar Water Heat, Solar Space Heat, Geothermal Electric, Solar Thermal Electric, Solar Thermal Process Heat, Solar Photovoltaics, Wind (All), Biomass, Hydroelectric, Landfill Gas, Tidal, Wave, Ocean Thermal, Wind (Small), Fuel Cells using Renewable Fuels
Illinois	Energy Year 2017: Overall Standard (% Retail Electric Sales to Come from Renewables): 11.5% Energy Year 2018: Overall Standard (% Retail Electric Sales to Come from Renewables): 13%	25% by compliance year 2025–2026	Solar Thermal Electric, Solar Photovoltaics, Wind (All), Biomass, Hydroelectric, Landfill Gas, Wind (Small), Anaerobic Digestion Landfill Gas, Anaerobic Digestion, Biodiesel
Maryland	Solar: 1.15% Other Tier I: 11.95% Tier II: 2.50%	25% by 2020	Solar Water Heat, Geothermal Electric, Solar Thermal Electric, Solar Photovoltaics, Wind (All), Biomass, Hydroelectric, Geothermal Heat Pumps, Municipal Solid Waste, Landfill Gas, Tidal, Wave, Ocean Thermal, Wind (Small), Geothermal Direct-Use, Anaerobic Digestion, Fuel Cells using Renewable Fuels
New Jersey	Energy Year 2017: Solar Carve-Out (A.B. 3520): 1,357 GWh Pre A.B. 3520/S.B. 1925 Solar Carve-Out: 3.00% (S.B. 1925) Class I: 10.485% Class II: 2.5% Energy Year 2018: Solar Carve-Out (A.B. 3520): 1,591 GWh Pre A.B. 3520/S.B. 1925 Solar Carve-Out: 3.20% (S.B. 1925) Class I: 12.325% Class II: 2.5%	24.48% by energy year 2027–2028 (20.38% Class I and Class II renewables by energy year 2020–2021 + 4.1% solar-electric by energy year 2027–2028)	Geothermal Electric, Solar Thermal Electric, Solar Photovoltaics, Wind (All), Biomass, Hydroelectric, Municipal Solid Waste, Landfill Gas, Tidal, Wave, Wind (Small), Anaerobic Digestion, Fuel Cells using Renewable Fuels
Pennsylvania	Compliance Year 2017: Tier I (including Solar PV): 6.0% Tier II: 8.2% Solar PV: 0.2933% Compliance Year 2018: Tier I (including Solar PV): 6.5% Tier II: 8.2% Solar PV: 0.3400%	~18% alternative energy resources by compliance year 2020–2021	Solar Water Heat, Solar Space Heat, Geothermal Electric, Solar Thermal Electric, Solar Thermal Process Heat, Solar Photovoltaics, Wind (All), Biomass, Hydroelectric, Geothermal Heat Pumps, Municipal Solid Waste, Combined Heat & Power, Fuel Cells using Non-Renewable Fuels, Landfill Gas, Wind (Small), Anaerobic Digestion, Fuel Cells using Renewable Fuels, Other Distributed Generation Technologies

<sup>1</sup> Energy year/compliance year for Illinois, New Jersey and Pennsylvania runs from June-May and is defined by the year in which the energy/compliance year ends. Source: Database of State Incentives for Renewables and Efficiency. www.dsireusa.org



#### **Low-Income Assistance**

Each of Exelon's utilities has programs in place to provide financial assistance to low-income households to make energy more affordable for the low-income population in our service areas.

**BGE.** BGE worked with state, local and nonprofit assistance partners to help more than 50,000 limited-income households receive assistance to make their utility bills more affordable from federal and state grant programs. BGE's partnership with the Fuel Fund of Maryland is an example of the programs BGE provides to assist customers throughout its service area. The Fuel Fund is an independent nonprofit organization that provides energy assistance to help pay heating and utility bills for low-income customers. In 2017, BGE's customers provided matching credits to leverage grants for almost 24,000 Maryland individuals who received help from the Fuel Fund of Maryland. A new online donation tool allowed customers to contribute nearly \$180,000 to the Fuel Fund. BGE continued a program in 2017 to help customers with serious illnesses who struggle to pay their bills, and an initiative called the Power of Home, to ensure that past-due utility bills can be retired to allow Baltimore City residents experiencing homelessness to move into housing. BGE conducted its annual outreach mailing to more than 75,000 households informing them of available energy assistance grants. BGE also worked with the State of Maryland to help design and develop a new grant program to reward households who take extra measures to improve their financial stability. For more information on BGE's assistance programs, visit the BGE website.

**ComEd.** Since 2007, ComEd's CARE programs have provided more than \$100 million in grant assistance and educational programs for residential, small business and nonprofit organizations and have assisted more than 1 million customers. As part of the Energy Infrastructure Modernization Act enacted in 2011, ComEd agreed to set aside \$10 million per year to fund customer assistance programs over a five-year period, starting in 2012.



Exelon utilities are focused on clean, reliable and affordable power.

More than 112,000 customers were enrolled in CARE programs or received energy management information between 2012 and 2016. In December 2016, FEJA was passed, which provided an additional \$50 million to extend the ComEd CARE programs, providing \$10 million a year from 2017 through 2021. ComEd CARE also supports the federally funded Low-Income Home Energy Assistance Program (LIHEAP) and state-funded Percentage of Income Payment Plan (PIPP) program. For more information on the ComEd CARE programs, visit the ComEd website.



**PECO.** PECO's Universal Services is recognized as the largest and most comprehensive low-income program portfolio in the state of Pennsylvania and one of the largest in the nation. The portfolio includes the Customer Assistance Program (CAP), which had approximately 125,000 customers enrolled in 2017. This program provides a monthly credit and forgives the total arrearage of all customers enrolled in CAP at the time of their initial enrollment. Additionally, PECO's hardship program, the Matching Energy Assistance Fund, provides grants for low-income customers whose service is terminated or in threat of termination, while the Low-Income Usage Reduction Program provides energy audits and usage reduction remediation measures for low-income, high-usage customers. PECO also has a Customer Assistance Referral and Evaluation Services program where we provide one-on-one support for low-income customers with special needs. Finally, PECO participates in the state-sponsored LIHEAP and offers



Exelon utilities work to meet the needs of low-income customers.

additional benefits to customers that receive LIHEAP crisis grants. The total value of all of PECO's Universal Services' programs is more than \$100 million annually. For more information on PECO's low-income programs, please visit PECO.com/Help.

PHI. PHI offers a variety of programs across states to assist low-income customers with paying their utility bills. In New Jersey, ACE customers may be eligible to receive assistance for heating and medically necessary cooling costs through the LIHEAP, Payment Assistance for Gas and Electric Program, and the Universal Service Fund. The New Jersey SHARES program is also available for families that are not eligible for other programs. The Lifeline Program provides assistance to seniors and the disabled who meet the pharmaceutical assistance to the aged and disabled eligibility requirements or who receive supplemental security income.

In January 2017, ACE established the Helping Hands Energy Assistance Program, which assists low-income customers who are having difficulty paying their electric bills and can be paired with other assistance programs. Low-income DPL customers in Delaware and Maryland can receive assistance with their energy bills through the federally funded LIHEAP for heating and summer cooling.

In Maryland, the Electric Universal Service Program places eligible customers on a budget billing plan in addition to paying a portion of their bill. For customers with an electric bill of over \$300, the Arrearage Retirement Assistance Program provides up to \$2,000 toward pastdue bills. The Good Neighbor Energy Fund Expansion Program provides assistance to low- and moderate-income customers who have disconnection notices or whose services have been terminated.

Customers can apply for the Residential Aid Discount Program, available to Pepco customers in the District of Columbia, which provides eligible customers with a monthly credit for their distribution charge. LIHEAP is also available for residents of the District of Columbia.



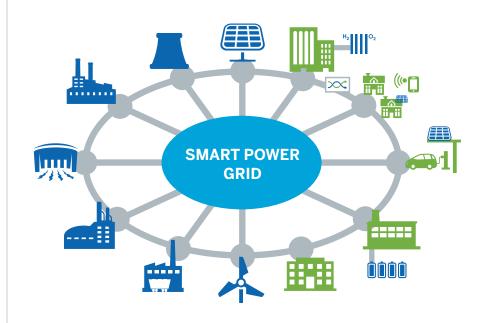
#### SUSTAINABILITY IN COMPETITIVE MARKETS

Constellation is Exelon's competitive wholesale and retail business, supplying power, natural gas and energy products and services for homes and businesses across the continental United States, as well as home services in the Mid-Atlantic region and Texas. Constellation retail serves approximately 2 million residential, public sector and business customers, including more than two-thirds of the Fortune 100. Constellation's wholesale electricity supply business provides energy to utilities, municipal utilities, co-ops and energy retailers nationwide, managing the sales, dispatch and delivery from Exelon's portfolio of owned and contracted power generation. In 2017, Constellation's power and gas business served 210 terawatt-hours of electric load and 730 billion cubic feet of gas to wholesale and retail customers.

Competitive markets drive choice, innovation, savings and environmental sustainability. Constellation's integrated energy solutions — from electricity and natural gas procurement and renewable energy supply to demandside management — are designed to empower customers in how they buy, manage and use their energy.

Constellation is committed to a clean energy future, offering customers energy options that are sustainable for the environment and the economy. The company is one of the largest owners and operators of commercial solar in the nation, based on the number of projects operating, with more than 445 commercial, industrial and governmental customer solar installations totaling more than 340 MW of capacity.

#### CONSTELLATION: INNOVATIVE. INTEGRATED SOLUTIONS FOR CUSTOMERS



**Electricity.** Offering customers budget stability and purchasing flexibility, with options for fixed, index and blended pricing solutions, as well as renewable energy supply.

Natural Gas. Creating custom natural gas strategies that meet the needs of customers' risk tolerance, budget management and overall energy goals.

**Distributed Energy.** Installation and operation of on-site solar and other energy assets help customers to more efficiently and reliably meet their energy budget and sustainability goals.

**Home Services.** Giving homeowners more choices to manage energy costs and keep their families comfortable with options for solar, heating and air conditioning systems, water heaters, plumbing systems and electrical systems, replacement windows and doors, and attic insulation.

**Energy Efficiency.** Energy management options to meet financial and environmental goals often as part of an energy performance contract or supply contracts to ease upfront capital expenses for customers.



### **Energy Efficiency**

Constellation works with customers to help them achieve their sustainability goals. Energy efficiency projects driven by Constellation enable customers to better manage their energy and operational costs through investments in infrastructure improvements that are paid for by the ensuing energy cost savings. In designing and implementing projects, Constellation utilizes tools that may include audits, engineering, design, construction management and long-term monitoring and analytics. Our focus is on asset optimization and

leveraging faster payback measures, such as lighting improvements, to help pay for slower payback investments such as chillers or distribution systems. The Efficiency Made Easy (EME) program is one example of Constellation's service offerings in this area. Under this program, customers can save money and reduce energy consumption by incorporating the cost of efficiency projects into an energy supply agreement. In 2017, Constellation EME customers saved 75,000 MWh of electricity and prevented emissions of 34,000 metric tons of CO<sub>2</sub>e.

#### **CONSTELLATION PROJECTS**

Constellation is involved in a variety of innovative, low-carbon projects for customers across the United States. Several highlights are shown here: please click the links to learn more about each project on our website.



Constellation and GRID Alternatives install 90-kW solar energy system at senior living center in Baltimore »









## **ENERGY EFFICIENCY AT LIBERTY NATIONAL GOLF CLUB**

When Liberty National Golf Club, located along the Hudson River in New Jersey, was selected for the 2017 Presidents Cup in 2014, the Club began a series of major upgrades to accommodate the large attendance, television viewership and all-around public visibility expected for the PGA TOUR event. The club commissioned a comprehensive energy audit to gauge energy use and needs. Liberty National determined that there was a need to undergo a large-scale lighting overhaul to increase energy efficiency and improve the member and visitor experience.

With a targeted completion date of early September 2017, the capitalintensive requirements of overhauling the lighting system posed a significant challenge. Liberty National engaged Constellation as its energy partner to develop a contract solution to fit the Club's unique financial and operational needs. As a sponsor of PGA of America sustainability efforts as well as an extensive track record of executing energy efficient lighting programs, Constellation was the best fit to take on Liberty National's lighting upgrade.

Through the EME program Constellation designed for the Club, the lighting upgrades provide significant benefits to the facility:

- LED lighting system reduced consumption by 50 percent
- Estimated annual energy savings of more than \$135,000
- Additional annual savings on maintenance due to new equipment that has longer life cycles and newer warranties
- Energy savings expected to reduce annual electric usage by 253.872 kWh

#### **Distributed Energy**

Constellation offers a number of distributed energy solutions including solar, cogeneration, backup generation, fuel cells and battery storage to help customers more efficiently and reliably meet their energy needs. By locating small generating units at the site where the electricity is used, distributed energy avoids transmission line losses and can help make the overall delivery system more efficient. Constellation develops and operates the on-site generation assets to ease the complexity associated with installation and management. In 2017, Constellation had more than 440 MW of distributed energy assets in operation or under development for commercial and government customers in the United States, of which 340 MW was commercial and merger-related solar operating at over 445 sites in 12 states and the District of Columbia.

#### **EMISSION-FREE ENERGY CREDITS**

In 2016, Constellation launched a pilot program offering emission-free energy credits (EFECs) to customers at no additional charge. EFECs are certificates that are created to represent the emission-free attributes of generating sources, such as nuclear, that do not directly emit GHGs from combustion. This program can be used to meet business environmental targets, personal goals or to show support for clean energy. Due to the success of the pilot program, Constellation launched the full program in 2017, selling about 10 terawatt-hours of contracts that include EFECs.





#### **MOHAVE ELECTRIC COOPERATIVE**

Constellation, along with Greenstone Renewables, worked with the Mohave Electric Cooperative a locally based, not-for-profit electric distribution cooperative in Bullhead City, Arizona — to finance and develop a 117-acre solar farm. Constellation and Mohave executed a 30-year power purchase agreement for the project. Through this agreement, Mohave paid no upfront development costs for the project, instead purchasing the clean energy from Constellation, which owns and operates the system. The solar development, constructed in two phases, generated approximately 38,000 MWh of electricity in the first year of operation, enough to power about 4,000 average homes in the United States.

# **CONSTELLATION OFFSITE RENEWABLES (CORe)**

The Constellation CORe product was launched in late 2017 and is intended to provide businesses with sustainability interests and goals with access to offsite renewable energy projects through the simplicity of a retail power contract. Businesses using CORe can simply identify their criteria for renewable energy amount, location, type, new or existing and Constellation arranges to meet the customers' requirements as part of an integrated retail power contract. Under this approach, the customer can leverage Constellation's size, scale, scope and expertise in renewable energy and markets to meet their sustainability goals, without having to develop these competencies inhouse, having to manage multiple contracts for basic energy and renewable energy, or having to site renewable generation on location. CORe allows the customer to specify the location of the renewable generation supply within acceptable distances from the customer location.



# **PARTNERING WITH OUR COMMUNITIES**

- Donated nearly **\$52.1 million** to 3,215 organizations in 42 states, benefiting nearly 3.8 million people
- Volunteered **210,196** hours on community projects through the work of **7,808** Exelon employees
- Donated **\$1 million** in employee and corporate contributions to assist those affected by the 2017 hurricanes





Being a good corporate citizen is crucial to our success as a company. In addition to providing safe, clean, reliable and affordable energy, we strive to support the communities where we operate and where our employees and customers live. Fostering economic growth, being a considerate and responsive neighbor and giving back to our communities are all important parts of our company culture.

#### LOCAL ECONOMIC BENEFITS

We are dedicated to supporting economic development in the communities where our customers and employees live, and in which we operate. Our success grows from the prosperity and vibrancy of our communities and customers. From our commitment to sourcing from local and diverse suppliers, to the high-quality jobs we create, directly and through our subcontractors, we positively impact the local and state economies in which we operate. At the end of 2017, Exelon employed 34,260 employees in electric and gas T&D operations, as well as Exelon commercial offices and power generation facilities.

We also support local growth and development through our taxes. In 2017, Exelon paid, or collected and remitted, a total of \$4.5 billion in taxes. Of this total, \$2.0 billion was paid in federal income and payroll taxes, and state income/franchise, payroll, property, sales/use and utility taxes directly related to our business operations. Exelon collected and remitted to federal and state governments an additional \$2.5 billion in taxes, such as employee payroll, sales/use and utility taxes.

### **Local Economic Development**

We are committed to facilitating economic growth in our communities. When our communities succeed, we thrive together. Each of our utilities has

#### EXELON CORPORATION AND SUBSIDIARIES — 2017 TAXES PAID1

dollars in millions	Paid by Exelon Entity	Collected and demitted by Exelon Entity on Behalf of Government Agencies	Total Taxes Paid or Collected and Remitted by Exelon Entity
Federal Income and Payroll	310	1,180	1,490
State and Local Taxes <sup>2</sup>			
Delaware	29	11	40
District of Columbia	151	26	177
Illinois	434	581	1,015
Maryland	638	269	907
New Jersey	22	131	153
New York	60	64	124
Pennsylvania	245	113	358
Texas	46	38	84
Other States	39	107	146
Total 2017 Taxes Paid	\$1,974	\$2,520	\$4,494

- 1 Numbers reported on a tax basis and rounded to the nearest million dollars.
- 2 State and local taxes include: Income/franchise; payroll; property; sales/use; and/or utility taxes as applicable in each jurisdiction.

a team dedicated specifically to fostering economic growth in its service area and attracting new business growth to its local communities. Following are examples of select 2017 activities.

ACE. Atlantic City Electric launched its new Energy Discounts for Growing Enterprises (EDGE) program to promote economic growth and job creation in southern New Jersey. This new program is designed to help retain local businesses, attract new business to the area and encourage business expansion. The EDGE program offers new and existing businesses of all sizes a 20 percent discount off the electric delivery distribution



portion of their rate, subject to certain qualifications. The discount is effective for a five-year period as long as a customer continues to meet eligibility requirements.

**BGE.** BGE's Smart Energy Economic Development (SEED) incentive program, launched in 2015, continues to support economic benefits in central Maryland and throughout the state. BGE has approved 47 SEED projects to assist with the development and expansion of businesses throughout the company's service area. The program has received promotional support from local and state economic development leaders and praise from the business community. To date, more than 6,000 full-time jobs are forecasted to be created as a result of the program's support once all projects have been completed.

**ComEd.** ComEd was recognized as a significant contributor in the Nucor Steel rolling mill expansion project, which is seen as a major economic win for the state of Illinois. The new rolling mill is expected to be operational in mid-2019. ComEd also collaborated with economic development organizational partners to develop an innovative marketing video to highlight the energy, workforce and transportation attributes that help attract business to the state of Illinois. Additionally, ComEd sponsored and led three boot camps for local elected officials and municipal staff in

Will, Lake and Grundy counties to help them become ready for business attraction. More information is available at www.ComEd.com/PowerYourBiz.

**DPL.** The DPL Region President serves on the Executive Committee of the Delaware Business Roundtable. This forum helped to form the Delaware Prosperity Partnership — a transforming achievement for Delaware in future economic development efforts through the cooperation of state government, employers and academia to expand the economy through job creation, talent acquisition and investment.

PECO. One significant infrastructure project PECO supported in 2017 was the electrification of cranes at PhilaPort's Packer Avenue Marine Terminal in Philadelphia. Pennsylvania Governor Tom Wolf's \$300 million Port Development Plan formed a public-private agreement for capital improvements at the port. This initiative will double container capacity, position the Port for future growth, create thousands of jobs, improve efficiency, increase tax revenues and contribute to electric load growth and environmental sustainability. As part of this major investment, four new electric cranes will be purchased to replace the existing diesel cranes. PECO successfully completed the electric infrastructure upgrades to accommodate the new cranes, which will be capable of unloading containers from the largest ships in the world.

# **2017 AWARDS**



Site Selection Magazine recognized both ComEd and PECO in its list of Top 10 utilities supporting economic development for business nationwide, as measured against utility peers across the country.





**Pepco.** The Pepco Region President was reappointed to the District of Columbia Sustainable Energy Utility Advisory Board. In this position, Pepco will continue to provide strategic counsel and recommendations to the Department of Energy and Environment (DOEE) and Council of the District of Columbia on the procurement and administration of the Sustainable Energy Utility (SEU). Pepco also will be responsible for reviewing and advising the DOEE on the performance of the SEU. One initiative completed in 2017 to expand sustainable energy service in the District was the Waterfront Substation coming into service in December 2017. This substation is north of the planned D.C. United soccer stadium and will address both current and future demand in the southwest quadrant of the District of Columbia. Waterfront Substation is a state-of-the-art substation currently serving 12,000 commercial and residential customers.

#### **ENGAGING WITH COMMUNITIES**

Providing reliable and affordable energy is a major public safety benefit; however, we recognize that electricity service requires care and caution as well. The safety and well-being of our customers and communities is of utmost importance at Exelon. We aim to protect the public and minimize potential adverse impacts of our operations at all times, especially during potential emergency situations. As part of this commitment, we prioritize strong communication networks with our neighbors to ensure they stay safe and healthy.

## **Disaster Preparedness and Awareness**

To ensure safety in our communities, we prepare for emergencies so we can respond to these events quickly and effectively. Each of our operating companies maintains an educational outreach and preparedness program to protect the communities surrounding our operations in the unlikely event of a disaster. Our operating companies prepare for potential emergencies using tabletop exercises, drills and real-world exercises. These activities are

### **HURRICANE RESPONSE**

Exelon and our employees sprang to action to help those affected by the powerful hurricane season in the fall of 2017. In addition to the utilities' commitment to their own customers, they also provided significant assistance with the massive restoration efforts following Hurricanes Harvey, Irma and Maria. More than 2,200 Exelon Utilities employees and contractors worked in challenging conditions to help restore power to customers in Florida and Georgia. Close to 100 employee volunteers from Exelon Business Services Company also traveled to affected areas to support the work led by the nonprofits All Hands Volunteers and Habitat for Humanity. Exelon, the Exelon Foundation and Exelon employees also donated more than \$450,000 to relief efforts in both Houston and Florida.

In early 2018, additional employee volunteers were deployed to assist in Puerto Rico's recovery. There, 284 Exelon employees joined personnel from other EEI member companies to safely restore power to the island. In total, Exelon and our employees have provided \$1 million in employee and corporate donations to assist those affected by the 2017 hurricanes.





conducted both internally with our employees and, in many cases, with local, state and federal emergency response organizations. They may also include:

- Direct mailings to residents living within each station's emergency response area containing details about emergency warning systems, evacuation routes and other safety issues;
- Community information nights to answer questions from local residents;
- Educational programs at schools to teach children about energy safety;
- Routine social media reminders on disaster preparedness and emergency response ahead of storms and seasonal changes;
- Training for contractors and excavators working in the vicinity of operations; and
- Online information on disaster preparedness.

All of our utilities provide extensive safety information on their websites. Online, customers can find tips for how to protect themselves and their families during power outages or when power lines are down, along with information on natural gas safety. We use a range of social media platforms, including Twitter, Facebook and Pinterest, to communicate directly with our customers and communities. These platforms are used to respond to customer inquiries and concerns and to provide real-time outage information. Please visit our utilities' websites at ACE Safety, BGE Safety, ComEd Safety, DPL Safety, PECO Safety and Pepco Safety for more information.

## **Nuclear Plant Safety**

Exelon operates the largest zero-carbon generation fleet in the United States, the majority of which is nuclear, followed by renewable energy resources. While nuclear power generation does not produce GHG emissions, it requires detailed attention to safety. The health and safety of our plants, our employees, our neighbors and the environment are of the highest priority.

#### **COMMUNITY ENGAGEMENT AT NUCLEAR PLANTS**

Local stakeholder engagement is very important, particularly for our nuclear operations. At each of our plants we conduct outreach through the following mechanisms:

**Tours:** We periodically provide nuclear plant tours to elected officials, community leaders, opinion leaders, key stakeholders and media. Tours offer a first-hand look at the safe operations of Exelon Generation nuclear power facilities.

Speakers' bureau: The speakers' bureau program takes our message of safe, clean and reliable operations on the road to a broad audience of school children, civic organizations and the general public. A communicator or company representative will give a speech or attend an event and deliver key themes and messages to a target audience.

**Community outreach:** We maintain ongoing, open and honest relationships with public officials, business and community leaders, opinion leaders, the public and the media through planned community events, sponsorships and other public interactions in which key themes and messages are delivered.

**Community information nights:** We hold annual open-house events at all of our nuclear sites, which give members of the public an opportunity to visit the plant, meet plant leaders, talk with employees, ask guestions and learn about nuclear energy and how their neighborhood plant operates.

**State of the plant events:** We host an annual event for local governing bodies, key county officials and community leaders in which site leaders share information about plant performance, projects, issues and involvement in the community.

The collective engagement efforts of our 14 owned nuclear sites resulted in 130 strategic tours, 106 speakers' bureaus and 154 community outreach events, reaching nearly 40,000 community members and other key stakeholders during 2017.



Exelon Generation's nuclear fleet has one of the best industrial safety records in the industry. Nuclear plants consistently have the lowest recordable injury rates of any form of electricity generation, and we employ multiple levels of oversight to ensure continued safety in this area. Exelon uses the proven, proprietary fleet-wide Exelon Nuclear Management Model for managing all aspects of nuclear plant operations. Line management is responsible for maintaining a strong safety culture at the plant level and implementing the Management Model, with executive oversight, independent Nuclear Safety Review Boards at each plant and Exelon's Generation Oversight Committee rigorously monitoring and evaluating nuclear performance. As a result, we are in full compliance for required and industry-led reporting, and actively support extensive transparency and reporting in the safe operation of nuclear facilities.

In addition to internal monitoring, plant and industry safety and reliability are also evaluated by the Institute of Nuclear Power Operations (INPO) with the objective of maximizing plant and industry performance and sharing best practices and improvement opportunities. The Nuclear Regulatory Commission (NRC) performs ongoing oversight and review of our nuclear plants in the areas of operations, maintenance, emergency planning, security, and environmental and radiological impacts. The NRC may modify, suspend or revoke operating licenses and impose civil penalties for compliance failure. As of December 31, 2017, performance indicator results from the NRC's 2017 Reactor Oversight Process indicate that 25 of the 25 nuclear generating units operated by Exelon are in the highest performance group, indicated by their green band classification. More information is available on the NRC website.

All of our nuclear facilities are highly secure, virtually impenetrable facilities that are models of security for other industries. Our defense-in-depth security systems include vehicle checkpoint stations and barriers, security towers, complex engineered barrier systems, site security fences and highly



Exelon is focused on strong physical and cyber security in our risk management operations.

trained security officers, all of which make these facilities the strongest industrial site defenses in the nation.

Our highly skilled and professional workforce receives regular and rigorous training to maintain and improve their performance and knowledge of the special and unique technology they operate. Training is conducted at each of our 14 Exelon-operated nuclear sites, three centralized training facilities in Pennsylvania, New York and Illinois, and a fire training academy located in the Midwest. Every new employee at a nuclear power plant receives orientation and initial training. Our instructional staff receives initial training from the INPO Instructor Certification Program, and is equipped with company-specific training and knowledge of requirements. Certified instructors maintain their skills and knowledge with annual continuing instructor training accredited by the National Academy for Nuclear Training. Line department employees, supervisors and work groups attend discipline-specific initial training programs that prepare them to be highly



skilled nuclear employees. The length of the initial training programs varies depending on the discipline: from nine months for skilled tradespeople to 18 months for NRC-licensed nuclear control room operators. In 2017, we completed training and licensing for 82 new control room operators.

Exelon's nuclear fleet uses distance learning technology and classrooms to conduct its maintenance and technical initial training programs. There are 28 classrooms in 12 different locations in Illinois, Pennsylvania, New York and Maryland that include the latest audio and video equipment, allowing interactive training to occur simultaneously with a multitude of students taught by a single instructor. In addition, three centralized lab locations are used for hands-on portions of maintenance program training. In 2017, continued integration of distance learning technology resulted in the graduation of 371 prospective new technicians and engineers. The Exelon

ANSI Management Certification class also used distance learning technology, which enabled 65 students from the fleet and one external student to receive their management certification. Employing new and innovative technologies affords our employees a more streamlined training schedule, more time at their home facility and less time traveling, thus improving their work-life balance.

In 2017, Exelon Nuclear enhanced leadership development for managers and directors with the implementation of a new training program. This program provides a job familiarization guide to newly promoted or hired managers and directors that includes classroom training. All leadership programs from the Supervisory Development Program through our most senior programs are designed to develop current and future senior leaders.



Classroom training at Exelon.



Employees receive regular training to meet the needs of their disciplines.



### **GIVING BACK TO COMMUNITIES**

At Exelon, we are committed to supporting community progress in the areas in which we live and work. This means engaging directly with people in our local communities to make a positive difference in the areas that matter most to the customers and communities that we serve.

We are proud to share that our 2017 philanthropic efforts benefited nearly 3.8 million people. We focus our giving in four critical areas:

Educational programs that promote science, technology, engineering and mathematics (STEM) learning or encourage students to stay in school. Our efforts in education involved more than \$10.3 million donated to educationrelated causes, which benefited 607,952 students, including helping 10,183 students graduate from high school. Our support of STEM programs, an essential part of developing a qualified workforce of the future, had 85 percent of these students participating.

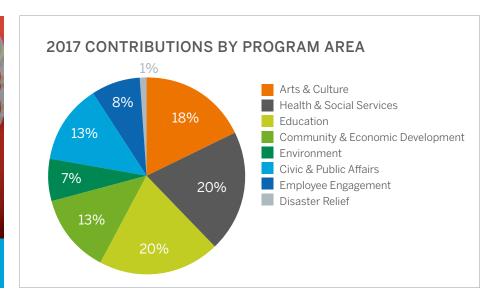
**Environmental programs** that improve the health of the environment and promote energy efficiency. Our \$3.4 million in financial support of

Exelon supports STEM education for students.

environmental projects in 2017 benefited 711,269 people and resulted in 234,677 pounds of trash collected, 1,155 acres of land preserved, 9,112 trees planted, 2.26 million square feet of land beautified and 24,275 animal habitats saved.

Community and economic development collaboration with local civic organizations that improves the quality of life in our communities. Our community and economic development contributions of nearly \$6.8 million positively impacted 1.2 million people, with more than 100 energy efficient homes built and 539 community organizations benefiting from Exelon grants.

Partnerships with arts and cultural institutions with broad public exposure supporting programs designed to make arts more accessible to a wider audience, benefiting 701,652 people. Our donations of \$9.3 million allowed 59,534 students to engage in arts and culture programs, often filling in where those programs are no longer available in schools. We provided an additional 71,645 people access to performances they would not otherwise have been able to experience.





### **Corporate Giving**

Every year, we give a portion of our revenue back to the communities to which we belong. In 2017, Exelon's corporate contributions totaled \$44.9 million. In addition to our corporate contributions, the Exelon Foundation provided an additional \$7.2 million in contributions in 2017. More than \$41 million — nearly 80 percent of our total contributions — supported organizations, programs or events that were targeted specifically to diverse populations.

3,777,273 PEOPLE BENEFITED FROM EXELON GRANTS





### SUPPORTING STEM EDUCATION

One of the key areas of our philanthropic efforts is education. Through our partnerships, we focus on strengthening STEM education and expanding opportunities to traditionally underrepresented students in communities where we operate. The Exelon Foundation, in partnership with the NEED Project and Pepco, launched the successful Energizing Student Potential (ESP) project in District of Columbia Public Schools. ESP is a STEM education initiative designed to empower teachers in the classroom, which familiarizes students in grades 5 through 8 with energyrelated STEM subjects and careers. ESP offers teachers professional development training, curriculum, interactive energy science kits, grants for a student community-based energy project, materials to host an energy fair, a school energy audit, field trips to company facilities and classroom visits from employees. The ESP program, and other STEM programs like it, exist in Illinois, Maryland and Pennsylvania, reaching over 38,000 students in the past year.



#### **WORKFORCE DEVELOPMENT INITIATIVES**

Our goal is to make our workforce a reflection of the communities we serve. By providing our community members with opportunities to develop their energy industry careers, we are investing in the economic prosperity of the communities we serve. Examples of our workforce development programs are listed below.

**BGE.** BGE works with Baltimore City Schools on various workforce development and innovation initiatives. In 2017, BGE hosted more than 150 construction, computer-aided design, engineering and automotive technology high school students for field trips to BGE facilities. The utility hosted a second BGE Innovation Day, a professional development event for more than 25 teachers from vocational and technical high schools. BGE also hired 25 high school students for summer internship positions.

**ComEd.** In 2017, ComEd created two new programs focused on a high school to college pipeline in engineering and IT, two in-demand workforce fields for ComEd. ComEd has funded a program for 30 low-income students to attend a summer camp focused on engineering and science held at University of Illinois at Chicago (UIC) called Project CHANCE. ComEd forged a new partnership between UIC/Project CHANCE and UNCF; the company's funding to UNCF is now focused on local students studying engineering and STEM fields at local colleges. ComEd also provides scholarships to 12 students at DePaul College Prep. Students completing the program successfully will receive scholarships to study IT at DePaul University. Both of these programs involve ComEd employees as mentors.

**PECO.** PECO's internship program, partnering with the Philadelphia Youth Network, introduces students to STEM work experiences built on innovation and personal development. It teaches students how they can build the energy industry of the future, while emphasizing social and environmental

responsibility. It also supports the company's diversity and inclusion efforts by facilitating internship opportunities for female and minority students. In 2017, nearly 30 students completed summer internships, where they interacted with more than 20 different departments within PECO, gaining insight about the operation of the utility's electric and natural gas systems, customer experience initiatives and business support functions.

**PHI.** In partnership with the DC Workforce Investment Council, the DC Department of Employment Services, the University of the District of Columbia and Goodwill of Greater Washington, PHI launched the DC Quick Path to Energy program. This workforce development program prepares participants to take the Construction and Skilled Trades examination, which can lead to a career at Pepco or other utility companies. Five cohorts completed the training in 2017.

**Constellation.** Constellation provides scholarships to low-income, academically talented students pursuing STEM-related disciplines at the Community College of Baltimore County (CCBC). In addition to scholarships, the program also provides mentoring workshops, study groups and other support activities to maximize student success. Scholarships are offered each semester to high-potential students enrolling at CCBC, and CCBC and Constellation will work together to establish pipelines that connect scholarship students to opportunities for internship and employment.

**Exelon Generation.** Exelon Generation has a comprehensive summer internship program that includes the hiring of approximately 350 engineering and technical interns across the company, including 120 interns in nuclear operations. Exelon Generation offers plant tours for a number of colleges and universities, including the University of Wisconsin and the University of Illinois.



#### **Volunteerism**

Exelon encourages volunteerism and supports employees in their community service work. In 2017, 7,808 Exelon employees volunteered 210,196 hours in their communities, supporting 1,550 volunteer projects. This amounts to a 63 percent increase in volunteer hours over a period of three years.

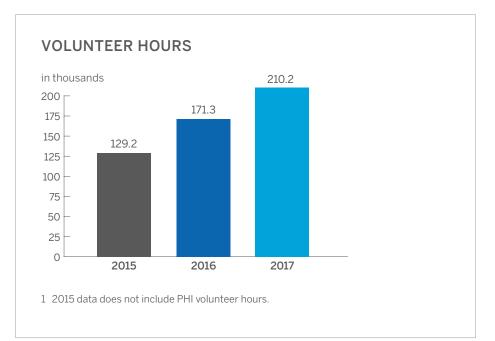
National Volunteer Week. One of our signature volunteer programs is National Volunteer Week, which was held April 23–29, 2017. Exelon employees were involved in 359 volunteer events in 14 states and 96 cities, with a total of 4,479 employees volunteering for a total of 17,273 hours.

Giving Tuesday. In honor of #Giving Tuesday, the Tuesday following Thanksgiving weekend, 1,741 Exelon employees volunteered 17,770 hours of their time at 150 service projects and 30 holiday drives around the country. More than 370 nonprofit organizations were supported by Exelon volunteers during the month of November. In addition to volunteering their time, Exelon employees made 2,150 charitable gifts of \$470,000 on Giving Tuesday.

**Employee Volunteer Awards.** To reward our employees who volunteer for more than 50 hours in a year, Exelon presents Employee Volunteer Awards, with an associated financial grant of \$5,000 to \$20,000 given to the recipient employee's nonprofit organization of choice. In 2017, 24 awards totaling \$200,000 were awarded to nonprofit partners in Baltimore, Chicago, Philadelphia and Washington, D.C.

**Dollars for Doers Program.** In 2017, 1,949 employees participated in Dollars for Doers, a program through which Exelon provides \$100, \$200 and \$400 grants to nonprofits in honor of employees' volunteer service of 10, 20 and 40 hours, respectively. In 2017, 3,928 grants totaling \$742,700 were awarded.

Board Representation. Giving back to our communities is a theme that runs through all levels of Exelon, including our corporate executive suite. Exelon was represented on more than 650 nonprofit boards in 2017.

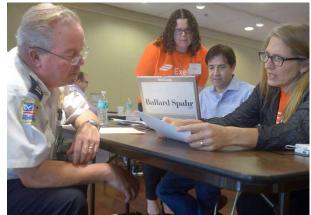














Employees supported volunteer projects in 2017.









# **2017 VOLUNTEER ACTIVITIES HIGHLIGHTS**

Throughout all of our business units, Exelon employees are dedicated to being active participants in their communities. In 2017, teams throughout the company gave back to their communities through a variety of volunteer activities in our service areas.

**BGE.** For the 2017–2018 school year, 25 BGE volunteers were matched with a group of 25 third graders from Maree G. Farring Elementary School. The students, or "Littles," and their mentors, called "Bigs," meet bi-weekly to have lunch together, complete character- and relationshipbuilding exercises as well as financial literacy courses developed by Junior Achievement. Through this program our employees develop positive relationships that have a direct and lasting effect on the lives of young people.

**ComEd.** In coordination with our employee resource group Exelon Militaries Actively Connected and Wreaths Across America, 102 volunteers assisted to place wreaths on the graves of veterans at Abraham Lincoln National Cemetery.

**PECO.** PECO supports The Big Give with Cradles to Crayons, a collection day that benefits 3,500 low-income and homeless children in Philadelphia. In 2017, 35 PECO employees volunteered to help with the collection.

**PHI.** For the past six years, on the Tuesday evening before Thanksgiving, the Pepco Edison Place Gallery is transformed into an elegant dining hall for the homeless and less fortunate. Partnering with Catholic Charities, Pepco's team of over 40 volunteers served meals to and visited with 200 guests. Pepco employee volunteers also filled and decorated shoe boxes filled with toiletries and all guests left with a shoebox and new winter coat.

**Constellation.** Constellation employees volunteered for nearly 2,000 hours through the Living Classrooms Foundation, an organization that provides hands-on education by using urban, natural and maritime resources. More than 70 employees mentor students throughout the year.

**Exelon Generation.** Volunteers from Exelon Generation's regional headquarters in Warrenville, Illinois, worked with the Western DuPage Special Recreation Association to run its annual track and field event for children and young adults with special needs. Volunteers helped organize, officiate and record the performances of each athlete and also cheered them on to victory.

# **2017 AWARDS**



In 2017, Exelon was recognized as one of the 50 most community-minded companies in the nation by the Points of Light Foundation and honored with the Civic 50 award, naming the company as the utility sector leader. The Trust for Public Land granted Exelon its Land for People award, the organization's highest honor, in recognition of Exelon's deep support for parks, conservation and science, and STEM education.





# A SAFE, INNOVATIVE AND REWARDING **WORKPLACE**

- Deployed advanced performance metrics and innovative technology to **improve safety** performance and training
- Committed to invest **\$3 million** in STEM programs for young women and girls, and to improve the company's retention of women by 2020 by joining the United Nations Women's HeForShe campaign
- Recognized as a **top employer** for military veterans and lesbian, gay, bisexual and transgender employees





At Exelon, we are invested in fostering a diverse, innovative and above all, safe workplace for our employees. Our talented, committed, diverse workforce is critical to our company's future success. Workforce safety and health is our highest priority, and we implement programs that maintain a strong safety culture. Within Exelon, we advance a culture of innovation by bringing together diverse perspectives and finding new ways to encourage, inspire and reward new ideas and entrepreneurship. To promote employee engagement and retention, we provide employees with rewarding growth opportunities, competitive compensation and benefits, and a variety of training and development programs. These efforts create a vibrant, collaborative and fulfilling workplace.

# PROMOTING A CULTURE OF SAFETY AND HEALTH

From electricity generation to repairing transmission lines after a hurricane, our employees perform many different operations, sometimes under hazardous conditions. To protect the safety and health of our employees, contractors and community members, we have implemented a number of initiatives to eliminate or reduce the risk of hazard exposure and to promote safe behaviors both on and off the job.

While performance improved in 2017 in all but one area, as compared to 2016 using our performance metrics — recordable rate, days away, restricted or transferred (DART) rate, severity rate and severe injury incidence rate — we did not achieve our most important goal of zero employee and contractor fatalities. The loss of a PECO employee and a

PHI contractor have caused us to look deeply into our culture and better understand the changes we need to make to ensure that we not only have effective programs, but that all employees and contractors understand and apply the appropriate safety measures at all times.

We continue to leverage technology and training to reduce our responsible vehicle accident rate to our best-ever performance. We must continue to be ever vigilant to prevent injuries, including keeping a strong focus on serious injuries and fatality prevention.

# **Safety Management**

We continue to pursue improvement in health and safety performance through our comprehensive safety management systems and focused initiatives on areas of high risk. Through peer-to-peer and manager safety observations, we reinforce safe work practices and identify potential risks before an incident occurs. We also offer a wide array of safety training programs through our learning information management system that assigns and tracks completion of safety training on a per-employee basis. In 2017, our employees received more than 700,000 hours of safety-related



Employees received over 700,000 hours of safety training in 2017.



training through hands-on, classroom and computer-based training. Safety training is also integrated into our leadership development programs for supervisors and managers, as well as our new employee orientation, to foster a corporate-wide culture of safety. As part of our work with the Corporate Innovation Team, the safety team seeks opportunities to use new and developing technologies as well as virtual/augmented reality systems to enhance Exelon's training offerings.

By recording safety observations and near misses and tracking incident trends, we can identify systemic issues and pinpoint improvement opportunities. Results are reviewed by the executive-level Safety Council and Safety Peer Group, which in turn may recommend specific safety initiatives. This process continues to be enhanced as we benchmark others and evaluate new technologies to integrate and trend our data.

We conduct risk assessments, track and investigate incidents and implement corrective action programs through safety management systems based on Occupational Health and Safety Assessment Series (OHSAS) and American National Standards Institute (ANSI) standards. Exelon is evaluating the International Organization for Standardization (ISO) 45001 Safety Management System Standard for potential implementation as a best practice in 2018. Exelon also continues to partner with EEI and EPRI to ensure we are an industry leader in safety.

As Exelon has grown to become the largest utility company in the United States, we also saw the need to expand our safety benchmarking to larger companies outside our industry. In October 2016, Exelon applied for and was accepted into the Campbell Institute as one of its first utility members. The Campbell Institute is a group of leading companies from the National Safety Council that are regarded as thought leaders in environmental, health and safety (EHS) issues.

Exelon is working with the Campbell Institute in five major focus areas to improve our performance as well as aid other members in improving theirs.

# **USING BRAIN THEORY TO IMPROVE TRAINING**

"Line-of-fire" (LOF) injuries in the workplace can occur when individuals place themselves directly in positions where they could be struck by an object, could be caught between objects or could be impacted by a sudden release of energy related to a work activity. After using innovative risk modeling techniques to identify specific factors that drive the risk of LOF injuries, Exelon's Safety Peer Group developed and implemented a creative intervention to reduce the risk of LOF injuries by adopting a twolevel approach. Basic training includes classroom video and interactive learning sessions for new hires. Advanced training for current employees leverages adaptation of brain theory to help employees understand and mitigate the vulnerabilities in risk identification and mitigation using an innovative video teaser, 2D and 3D animation technology, photos, video footage and interactive computer-based training sessions to convey learnings in a practical and effective manner. Our goal is to educate employees on LOF threats and the vulnerabilities of the human brain in assessing and managing risk and to arm them with insights and approaches to overcome those vulnerabilities and reduce the risk of LOF injuries.

New employee basic training has been fully deployed and integrated into the utility training curriculum. Legacy employee advanced training was completed through 27 in-person sessions. Results to-date indicate a 45 percent reduction in LOF injuries since the initiative was implemented in early 2016. This initiative is now being implemented across Exelon.

#### These areas include:

- Employee well-being/total worker health
- Leading EHS indicators and data analytics
- Serious injury and fatality prevention programs
- Environmental and sustainability integration
- Contractor and supply chain management for EHS



In 2017, we also continued encouraging our employees to practice safety at home and in the community. For example, we use safety messages that have both a workplace standard or requirement and a home application, such as the use of gloves or prevention of fires in the home.

# **Safety Technology and Engagement**

Across Exelon, our business units are often testing new and innovative methods for improving safety performance. The Safety Peer Group, consisting of each business unit's safety managers, works to identify successful pilot programs or new practices that can then be adopted by the entire corporation. For example, BGE HOME piloted the SuitX, an exoskeleton system designed to reduce musculoskeletal injuries. Use of the system may provide employees with protection from strains and sprains, even employees with previous injuries or illnesses. Exelon Nuclear continues to experiment with technology to conduct remote inspections and repairs, thereby avoiding employee exposure to radiation and heat stress. Exelon Power and Exelon Utilities continued a significant investment in the use of unmanned aircraft for inspecting transmission lines and wind turbines; this can limit the risk to employees and potentially improve the quality and speed of the inspections.

Exelon continues to engage our employee base through the Safety Achievement Awards. In 2017, we received 56 nominations for employees by their peers to receive an Exelon Safety Achievement Award. These awards are given to employees who go above and beyond to make the job safer for their peers and the community. Exelon donated a total of \$55,000 to public safety-related charities selected by the safety award winners. The three winning projects for 2017 are described below.

PHI Gas Safety Trailer. The gas demonstration trailer was designed and constructed to increase public awareness, enhance safety and reinforce responsibility around natural gas. Target audience groups include

customers, the general public, emergency response personnel, educators, students and future employees. Designed and manufactured on site by PHI employees, the demonstration trailer is a functional portable classroom that provides audiences the ability to better understand, see, touch and interact with infrastructure that is typically concealed.

ComEd Firefly Switching Tool Voltage Detector. A ComEd employee envisioned the idea of having a single tool capable of switching and detecting the presence of line voltages. ComEd worked with a vendor to create a testing and switching tool with a light so that employees would not have to switch tools to perform switching evolutions. The Firefly Voltage Detector eliminates the need for an employee to use multiple hotsticks to complete a switching evolution. The Firefly can test for voltage, operate a disconnect blade or cutout door, and features a light for night switching. This reduces restoration times when performing emergent switching and allows employees to be more efficient when performing scheduled switching. Most importantly, it provides information on whether or not line voltage is present.

**Exelon Nuclear Fukushima Seismic Evaluation.** An Exelon Nuclear employee facilitated numerous engineering meetings that supported Fukushima seismic evaluation of hazard levels beyond design basis. These meetings coordinated many stakeholders to achieve an extremely important conclusion that current design-basis systems, structures and components were adequate to successfully withstand beyond-design-basis seismic hazards. This screening process and industry engagement with the NRC resulted in eight plants avoiding a seismic analysis at about \$7 million per site, for a total \$56 million in cost savings. Exelon's leadership in this activity enhanced the company's corporate reputation and contributed to nuclear safety for the communities near nuclear power plants by completing a key part of the Fukushima improvements.



# **Safety Performance**

Exelon achieved our best-ever safety performance in 2017 using aggregate data, as seen in the table below. In total, Exelon experienced 214 Occupational Safety and Health Administration (OSHA) recordable incidents, down from 267 in 2016. Of particular note in 2017, the PHI utilities reduced employee lost time by over 450 days during their first full year in the Exelon utility family. On June 21, 2017 however, Exelon experienced an employee fatality in PECO. In addition, DPL had a contractor fatality on October 28, 2017. Both incidents involved electrical contacts, Lessons learned from both incidents were shared with all Exelon business units and key contractors, with a key focus on further enhancements to our safety culture to ensure that similar events do not occur again.

Our driver safety performance remained steady with a fleet-responsible vehicle accident rate of 2.10, essentially flat from 2.09 in 2016.

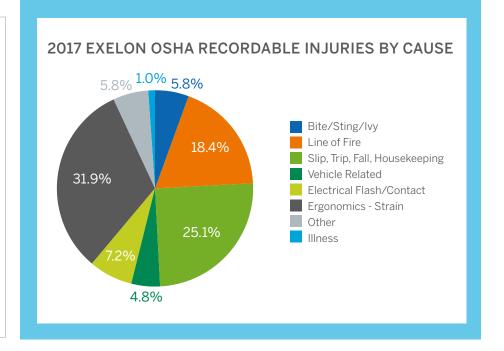
#### **EXELON EMPLOYEE SAFETY PERFORMANCE**

	2015	2016	2017
Exelon OSHA Recordable Rate <sup>1</sup>	0.91	0.65	0.52
Exelon OSHA DART Rate <sup>2</sup>	0.46	0.44	0.32
Exelon OSHA Severity Rate <sup>3</sup>	16.34	12.11	8.18
Exelon EEI Serious Injury Incident Rate <sup>4</sup>	0.16	0.10	0.07
Exelon's Contractor OSHA Recordable Rate	0.73	0.68	0.59

- 1 The number of work-related injuries or illnesses requiring more than first-aid treatment, per 100 employees.
- 2 The number of work-related injuries or illnesses that result in days away from work, restricted work or transfer, per 100 employees.
- 3 The number of days away from work per 100 employees as a result of work-related injuries or illnesses.
- 4 The EEI Serious Injury Incident Rate is a benchmarkable metric of significant and fatal injuries shared by EEI members.

# **ELIMINATING SEVERE INJURIES**

As a member of EEI, Exelon participates in the Serious Injury and Fatality Program, which collects best practices and develops tools for preventing severe injuries and fatalities. Through this program and others at EPRI and the Campbell Institute, we benchmark our processes and performance against our peers and find opportunities for learning and improvement. In 2017, we conducted a comprehensive review of cultural issues that could lead to those infrequent but significant injuries. Exelon continues to use the serious injury and fatality potential review to spotlight an injury or near miss that could have become a significant injury or fatality. When these injuries are identified, we investigate as if the injury was severe and work to learn how to prevent that potential serious injury in the future. Only by learning from mistakes and near-miss incidents can we continue to reduce our severe injuries.







Exelon achieved best-ever safety performance in 2017 across key safety metrics.

In 2017, Exelon employees drove more than 122 million miles in a combination of Exelon-owned, employee-owned and rental vehicles. We achieved strong performance despite operating in some of the country's most accident-prone cities. The majority of Exelon's motor vehicle accidents are the result of being struck by another vehicle, in many cases while our employee is stopped in traffic or at a red light or stop sign. Where Exelon is at fault, the leading cause continues to be striking stationary objects at low speeds, such as when backing up. We continue to work to prevent accidents and near misses that occur due to these types of incidents, and pilot new or improved technologies to help us be safer on the road. For 2018, Exelon has continued setting goals to meet or improve on all performance metrics.

Exelon employees work side-by-side with contractors on a daily basis. In 2017, Exelon's contractors worked more than 40 million work hours in support of our operations. We expect our contractors to meet high standards for safety. When selecting contractors, we evaluate their safety and environmental performance. We provide contractor safety training and

employ human performance error reduction tools to minimize incidents. We track and review quarterly contractor OSHA recordable rates and each year we set a safety performance goal to match or improve prior-year performance for all major contractors. We also conduct internal audits and self-assessments on a periodic basis to ensure that our contractors adhere to the safety program requirements. With Exelon's multi-billion dollar long-range investments in upgraded utility infrastructure and new power generation, ensuring that our contractors return home safely is as important as our efforts to safeguard our own employees.

In addition to requiring contractors to meet our safety standards, we track performance of major contractors to identify opportunities for improvement. In 2017, our contractor OSHA recordable rate was 0.59, nearly the same as the rate for Exelon employees and a 19 percent reduction over the past three years. For contractors with higher recordable rates, we enhance monitoring of their work and, in some cases, terminate contracts for poor safety performance.

#### **Health and Wellness**

Exelon remains committed to helping employees maintain and improve their health. Through the Exelon Power Through Health wellness program, employees are able to participate in a wide range of healthy activities, including on-site biometric screenings, walking and nutrition challenges, health coaching, fitness reimbursements, smoking cessation, heart health education and more. Exelon also continues our efforts to increase healthier food choices at select worksite locations. By participating in the wellness program, employees can save money on their medical plan premiums. Employees' spouses and domestic partners are also afforded the opportunity to complete their own biometric screening and personal health assessment. In 2017, nearly 42 percent of eligible employees completed their biometric screening and personal health assessment. Close to 40 percent of employees took part in at least one challenge.



# ATTRACTING TOP TALENT

Exelon's success is attributable to the talented, dedicated employees that work at our company. We are committed to cultivating the success of our employees by attracting highly qualified, innovative and diverse talent. With this in mind, our recruiting strategy is strongly aligned with our core competencies as an innovative, forward-thinking, peoplefocused organization.

# **Internships and University Recruitment**

In 2017, Exelon hosted more than 500 collegiate summer interns across our operating companies with the primary goals of building a diverse talent pipeline for future entry-level jobs and exposing young talent within our communities to valuable applied experience and career opportunities in the energy industry. Exelon has established strategic partnerships with key academic institutions and organizations based on academic excellence in relevant areas of study, student diversity and proximity to our major

markets of operation. Each of Exelon's operating companies has established additional academic partnerships aligned with their unique markets and needs. We continue to explore opportunities to automate and create efficiencies in our process of connecting with and recruiting students as our geographic footprint has increased.

# **Advancing our Recruiting Technologies**

Our commitment to technological innovation extends to our recruiting processes. We are using new tools to make our human resources (HR) processes more efficient and data-driven so that we can quickly hire the best talent for our company. For example, we introduced new interview tools and selection processes focused on aligning candidates with our cultural and behavioral competencies. This approach ensures that new employees are equipped for success before their first day and allows Exelon to provide unique development strategies based on personalized insights for each new employee.

# **2017 AWARDS**



Exelon was named #18 on Indeed's Best Places to Work 2017. This is **Exelon's inaugural placement on this** list and highlights our employment brand on the largest career site in the world.





# **ACCELERATING TALENT**

Talent is foundational to our organization. Beginning in 2016, Exelon redesigned key talent processes, tools and technology based on extensive external benchmarking and internal assessments. Feedback told us that employees and leaders wanted:

- More frequent interactions and richer dialogues between employees and leaders:
- A competency model that is simpler and more directly tied to our business strategy;
- Talent-related technology that is simpler and easier to use; and
- A performance management approach that drives engagement and better motivates employees.

Based on this feedback, combined with our external benchmarking, we launched a strategic transformation called Talent Accelerated. Talent Accelerated focuses on development for our employees and driving our enterprise strategy forward. This initiative is helping Exelon navigate the changing landscape, by focusing managers and employees on what matters: contributing their best and attracting, developing and rewarding talent in alignment with our strategic objectives. The adjacent strategic imperatives translate into key areas of focus for this initiative.



Talent Accelerated is focused on developing and empowering Exelon employees' success.

# **Exelon Talent Accelerated**

#### **OUR STRATEGIC IMPERATIVES**

#### WHAT WE FOCUSED ON AND WHY

Strategically optimize talent as a competitive differentiator for Exelon, by equipping leaders to be coaches and enhancing our talent review process

- Refined core and leadership competencies, to define "what good looks like" — to focus on abilities our talent needs to succeed, today and in the future
- Redesigned from performance management to **coaching conversations** — a focus on development and activities that drive higher performance, and eliminate those that don't

Help managers and employees focus on what matters, by streamlining our performance management process and refining our competency model to align with our business strategy

- Implemented a "leader as coach" model to help managers successfully facilitate growth and development of their teams, to better shape and evolve
- Elevated our business talent review process to better identify and drive focus on the future and on key talent

Providing processes and systems that are fast, smart and simple, modernizing and simplifying our tools

• Leveraged our ePeople Talent system implementation to provide managers and employees with modernized technology, advanced functionality, and easier and direct access to information they need

Leveraging advanced analytics to understand talent priorities and inform key business decisions

- Expanded talent analytics solutions to go beyond collecting data to generating insights that includes:
- Developing an enterprise analytics strategy creating a roadmap and prioritizing talent analytics efforts
- Streamlining and simplifying dashboards and reports
- Ensuring data quality, alignment and governance

Support innovation by building a diverse workforce and an inclusive culture, where all of our people feel they can contribute their best

- Expanded the Value of Mutual Respect training to a greater management audience, to engage our increasingly diverse workforce and create an inclusive environment that supports new ideas and encourages employees to bring their best contributions forward
- Offered innovation training to all employees to foster an innovative culture, and ensure all understand the impact of innovation at Exelon

Attracting and selecting talent that can help us win in the marketplace, adding new skills for new markets to our talent portfolio

• Leveraged a range of assessments to hire the best talent for the job and provide critical information to help with ongoing development



Based on external benchmarking and feedback from our employees, the following key talent processes were redesigned in 2016 and launched in 2017. With support from business leaders serving as "change champions," HR professionals from across Exelon's operating companies came together to support a robust change management and communication strategy to ensure successful program implementation as well as long-term sustainability.



# **EXELON KEY TALENT PROCESSES**

Competencies

Focus on Capabilities -The way we act and lead

- Six competencies, modern business language
- Clear link to mission. vision and values
- · Redefined role-based behavioral anchors
- · No formal assessment of each competency



Focus on Impact and Behaviors -

- Development • Three ratings with no **Performance** distribution requirements
  - Continuous and crowdsourced feedback with frequent "check ins" (no mid-year)
  - Simplified goal setting process
  - De-couple performance from compensation discussion

Coach Leader as



The way we accelerate employee development

- One formal feedback process at year-end, informal "check ins" throughout the year
- Training will focus on helping all leaders have constructive conversations and help with consistency in approach

**Business Talent Review** 

Focus on the Future -

- Talent map with development guide
- Refined and modern tools
- Enterprise-wide guidance; introduce "Success Profiles" for critical roles



# **Employee Engagement**

An important part of accelerating our employees is giving them the opportunity to provide feedback. We conduct periodic surveys to make sure we can better understand and address any issues our employees have.

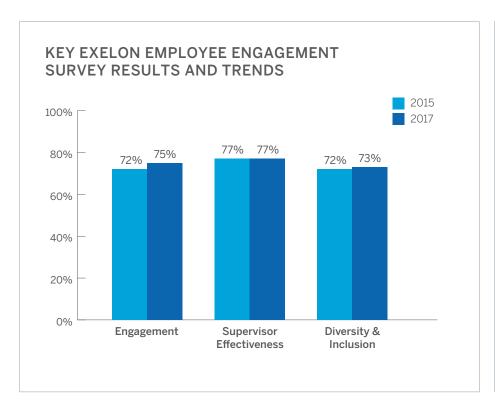
#### **Employee Engagement Survey**

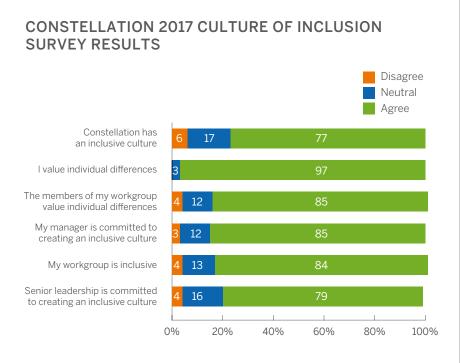
The biennial employee engagement survey was conducted in March 2017, and we achieved a record response rate of 90 percent, up from 85 percent in 2015. We also had positive ratings in our critical focus areas and increases in engagement and diversity and inclusion. The results were driven by employees feeling more appreciated, access to additional development opportunities, leaders being more engaged and providing more insight into the future direction of the company, and more open and honest communication. Exelon's

employee engagement was over 70 percent in all categories, which is well above average and is approaching best-in-class designation (77 percent or better).

#### **Culture of Inclusion Survey**

In addition to the employee engagement survey, we developed and piloted a culture of inclusion survey in 2017. The survey was piloted at Constellation and was designed to assess employee perception of the inclusiveness of the culture, drivers of inclusion and the impact inclusion has on employee and organizational outcomes. The positive findings suggest that Constellation's efforts to build an inclusive culture have had an impact. Results are being used to inform strategies and action plans to help Constellation continue to drive its culture. This survey is being rolled out in other parts of the company in 2018 and supports Exelon's participation in the global HeForShe initiative.







# **Employee Development and Training**

Exelon offers a variety of robust development programs for all levels of employees and leaders. These programs focus on developing employees' technical job-related skills, helping employees gain insight into their soft skills such as communication, and building leadership acumen and abilities.

#### **Innovation Training**

Starting in June 2016, innovation training at Exelon was developed and run in coordination with the Exelon Innovation Team. The open enrollment course, Inspiring Innovation, provides participants with a working knowledge of the Exelon innovation methodology. The course builds an understanding of different types of innovation and offers practice using an innovation framework that creates a vision of the future, dissects problems and develops innovative solutions.



Employee training and development are key focus areas at Exelon.

#### Leadership Training and Employee Development

Throughout 2017, our Talent Management Center of Excellence (COE) successfully delivered a variety of leadership courses and programs targeted at nearly every level of leader across Exelon. Since 2016, the COE has also been offering a set of enterprise-wide professional development courses to help employees build skills in key areas that align with the Exelon core competencies. These courses include topics such as change management, influencing and presentation skills, diversity, conflict management, situational leadership, strategic thinking and team building.

To support leaders with our Talent Accelerated initiative, Exelon trained over 5,000 people leaders in Leader as Coach during 2017. This full-day session was designed to provide leaders and people managers with the opportunity to strengthen their coaching capabilities to engage in dynamic, ongoing coaching across the business. The COE also offers a robust set of development programs for employees who are nominated by other leaders. These include extensive training in people leadership and coaching skills, management requirements, labor relations and other management skills, from basic to advanced, that are business-unit specific.

Along with our enterprise-wide training programs, each operating company provides leaders and employees with development opportunities. These are customized to ensure safe operations and appropriate skill development. Training opportunities range from technical courses and personal development courses delivered in both hands-on and online-based sessions. Select training highlights from our operating companies include:

**BGE.** BGE maintains a centralized technical skills training center located in White Marsh, Maryland. In addition to ongoing skills training, the training center provides classroom training and hands-on training to hundreds of BGE employees and contractor certifications to ensure compliance with state regulatory agencies.



ComEd. ComEd builds leadership and technical capability by providing development programs to crew leaders, field supervisors, professional employees and people managers through the Crew Leader Academy, the First Line Supervisor Cornerstone Program and Supervisory Development Program, Emerging Leaders, EngineeringU and expanded Leadership Development Programs. These programs offer more than 340 resources for leadership, technical and professional development, including classroom and web-based training, job aids, reference materials and videos.

**PECO.** PECO's talent and leadership development programs focus on developing our employees' technical skills and leadership capability. PECO provides a variety of opportunities that are offered both virtually and inperson. This industry-leading training includes our Gas, Aerial Line and Energy Technician Schools, in addition to Customer Operations training that is offered in a brand new training facility at PECO headquarters. PECO's leadership development programs include the Supervisor Development Program, Manager's Essentials, Power to Lead and Leaders Developing Leaders. In addition, PECO offers employees over 50 classroom-based e-learning courses that allow students to learn new skills and enable personal and professional growth.

**PHI.** PHI Training and Methods Teams provide vital services that improve human performance through a systematic approach of performance and quality control, instructional design and conducting training and testing programs. PHI has benefited from Exelon-wide leadership development programs and provided more than 360 leaders a uniquely customized development opportunity to build on previous PHI leadership development and provide the mindset and additional skills necessary to lead effectively and thrive in transition with Exelon.

Constellation. Constellation provides a number of technical and professional development opportunities for employees, including the newly launched Building Business Acumen web series and Women Empowering

Women program. Through the biennial Leadership Now conference, all 330 people managers were trained on ways to enhance employee engagement and development, create an inclusive environment through dialogue and provide more meaningful recognition.

**Exelon Generation.** Exelon Generation uses industry-leading talent management processes to identify and develop its talent. Leadership development programs target all levels of leadership and are specifically aligned with the Exelon business imperatives. Programs are based on a "leader-led" philosophy recognizing that the most effective development occurs when the business drives the learning.



Exelon companies offer a wide range of technical and leadership training.





#### Employee satisfaction is a key consideration at Exelon.

# **ADVANCING OUR PEOPLE TECHNOLOGIES**

Promoting a culture of technology and innovation is a core focus of Exelon's strategic plan. Exelon's HR team is striving to be at the forefront of this movement by advancing our HR systems. At the end of 2017, Exelon concluded the largest cloud-based HR system implementation to date, bringing the latest technology to our HR management and payroll activities. The new system is a consolidated platform for Exelon's core human capital management, recruiting and onboarding, compensation, payroll and timekeeping that stores and processes information virtually, facilitating real-time transmission of data and allowing synergies and standardization across all of Exelon's operating companies.

# **Progressive Workforce Policies**

Paid Leave. Exelon remains committed to helping our employees balance work and family responsibilities by offering industry-leading paid leave benefits for maternity, fathers and adoptive parents, and time away from work to care for a critically ill family member. In January 2017, Exelon expanded our company leave policies to offer additional paid time off following the birth or placement of a child for adoption or when a family member is critically ill. Mothers are now eligible to receive up to 16 weeks of paid leave after giving birth, and fathers and adoptive parents are eligible to receive up to eight weeks of paid leave when a child arrives. Employees are eligible to receive up to two weeks of paid leave to care for a family member with a critical illness.

**Equal Pay.** In 2016, Exelon partnered with the White House as a signatory to the Equal Pay Pledge, an initiative to encourage action and commitment to closing the national gender pay gap. As part of our commitment, we

utilized an independent third-party vendor to run regression analysis on 15,600 management positions. The analysis determined that Exelon has no systemic pay equity issues. This independent review will be conducted annually. We will also review hiring and promotion processes to neutralize any unconscious bias and embed equal pay efforts into broader enterprisewide equity initiatives. We are devoted to creating an environment that allows women to stay in the workforce, grow with us and move up in the ranks, all with parity of pay.

**Tuition Reimbursement.** Continued education leads to a more engaged, skilled and productive workforce. We support our employees in their educational endeavors in order to attract and retain people who are committed to personal and professional development. We reimburse employees who are pursuing professional credentials up to \$10,000 annually for undergraduate or certificate courses and up to \$15,000 annually for graduate courses.



# **DIVERSITY & INCLUSION**

Exelon recognizes that an inclusive culture and diverse workforce contributes to the success of our business by fostering employee and customer engagement, driving innovation and improving performance. We value diversity — in race, ethnicity, gender, age, sexual orientation, gender identity or expression, disability status, military status, religious affiliation, experience and thought — and strive to provide a workplace where every employee is valued and can contribute at his or her greatest potential.



Exelon believes that a diverse and inclusive workforce is key to our business success and meeting customer needs.

We believe that a working environment that engages all employees and enables them to do their best work is essential for our success. In 2017, we continued to focus on providing employees at all levels within the company with increased learning and development opportunities on diversity and inclusion (D&I) topics. Our commitment to diversity and inclusion spans beyond our employees to the diverse communities we serve. As part of our commitment to the economic prosperity of these communities, we focus on utilizing an array of diversity-certified suppliers.

24-hour Access to D&I Resources. All employees have one-click access to tools and information regarding D&I via a dedicated intranet site. This site provides information on Exelon D&I partner organizations, Employee Resource Groups, event calendars, toolkits, articles, webinars and e-learning modules.

**D&I Quarterly Webinars.** For the fifth consecutive year, we offered voluntary, live D&I quarterly webinars open to all employees. More than 2,000 employees participated in the webinar series, making it one of the most highly attended voluntary learning and development offerings in 2017. Participants were given the opportunity to explore such topics as building inclusion, professional relationships, racial differences and gender differences. The D&I quarterly webinar series will be expanded to include tailored webinars for leaders.

2017 Exelon Women's Leadership Summit: The Power of You. Exelon hosted its second annual Women's Leadership Summit where current and emerging female leaders across the company networked and discussed how women can be empowered to cultivate their careers in a way that makes lasting impacts on the business and themselves.

**Exelon Joins HeForShe as Thematic Champion.** Exelon committed to improve retention and cultivation of women at the company by 2020, with a goal to reach parity in voluntary turnover of men and women professionals. To continue building the pipeline of women pursuing careers in the



historically male-populated energy sector, the Exelon Foundation will invest \$3 million over the next three years to encourage and support young women's involvement in STEM. The programs will create opportunities for girls and women to learn about and pursue careers in STEM-related fields so they can become active leaders in the industry.

Value of Mutual Respect. Exelon continued to cascade the Value of Mutual Respect training to our people managers. This in-person, four-hour training program explores the practical aspects of maintaining a respectful work environment. In this course, we review and practice inclusive behaviors, articulate Exelon's workplace harassment and discrimination policies. educate ourselves on the legal implications of workplace harassment and discrimination, and understand our responsibility as leaders when we observe behaviors that go against this critical value. We hosted 13 in-person training sessions, which were completed by more than 280 employees in 2017.

# **EMPLOYEE RESOURCE GROUPS**

Exelon's nine Employee Resource Groups are a critical component of our D&I strategy. These groups serve as a forum for professional development, cultural education and community involvement:

- Asian American Resource Group (AARG)
- Developing Young Professionals (DYP)
- Exelon African-American Resource Alliance (EAARA)
- Fco-Team
- Exelon Militaries Actively Connected (EMAC)
- Exelon Network for Awareness Benefiting Leaders & Employees About Disabilities (ENABLED)
- Network of Exelon Women (NEW)
- Organization of Latinos at Exelon (OLE)
- Pride

We have a total of 48 chapters and four new satellite groups at our Kennett Square location, which reach more than 10,000 employees.





















# **2017 AWARDS**



**DiversityInc Top 50 Companies for Diversity (2017).** Exelon earned the 47th spot on the list and the sixth spot in the top 15 companies for hiring veterans, both tremendous accomplishments as more than 1,800 companies were under consideration for the Top 50 honor.

**Human Rights Campaign Best Places to** Work 2011–2017. Exelon was selected as one of the best places to work by the Human Rights Campaign, the nation's largest LGBT civil rights organization.



U.S. Veterans Magazine's Best of the Best (2013–2017). Out of the hundreds of Fortune

**G.I. Jobs Military Friendly Employer Award** Recipient (2008–2017). Exelon has been recognized as one of G.I. Jobs Military Friendly Employers for the ninth consecutive year. The ranking validates Exelon's strong military recruiting and retention efforts, high percentage of new hires with military experience and favorable policies on National Guard and Reserve service.



RecruitMilitary.com Most Valuable Employers for Military (2013–2017). Exelon was named to the RecruitMilitary.com 2017 Most Valuable Employers for Military for the fifth consecutive year. Exelon was among 81 companies recognized on the MVE list in the May 2017 issue of Military Transition News, a worldwide military base newspaper.

The Military Times Best for Vets (2013–2017). For the fifth year in a row, Exelon received recognition for our commitment to providing

opportunities to America's veterans. Military Times magazine recognizes employers based on recruiting and hiring policies, social recognition for veterans, and pay and benefits for reservists. Exelon was ranked 49 out of 82.



# **National Diversity Organization Partnerships**

We partner with a number of national diversity organizations to source highly qualified minority talent in STEM fields, including the Society of Women Engineers (SWE), the Society of Hispanic Professional Engineers (SHPE), the Black Engineer of the Year Awards (BEYA) and the Society of Asian Scientists and Engineers (SASE). Over the course of the year, in addition to sponsoring the organizations' annual conference and career fair, Exelon employees may participate on boards and panels, conduct workshops and host tours of our facilities. Our involvement with these organizations helps us connect with diverse talent regarding our career opportunities, promote Exelon as a diverse and inclusive organization within our industry and beyond, and provide professional development and recognition opportunities for our current employees.

# **Military and Veterans Initiatives**

In 2017, we continued to focus on our commitment to hiring candidates with military experience. We attended 52 military recruiting events, many of which were hosted by our partner organizations including Civilian Jobs, Hiring Our Heroes, RecruitMilitary and Veteran Recruiting Virtual Career Fair.

# **Disability Outreach**

Exelon is committed to embracing the talents and skills that individuals with disabilities bring to our workplace and to the communities that we serve. Exelon's disability outreach strategy comprises three key elements: promoting Exelon's open jobs, increasing brand recognition, and creating and supporting a disability-inclusive culture. We will continue to learn and share best practices through events like the Disability Matters Conference, the U.S. Business Leadership Network Conference, the National Organization on Disability CEO Council Forum and Americans with Disabilities Act Disability Inclusion Opportunity Summit.

#### **EMPLOYEE DIVERSITY**

Employees <sup>1</sup>	2015	2016	2017	2017%
Female	6,368	7,926	8,082	23.4%
Minority	6,475	8,460	8,891	25.7%
Aged <30	3,802	4,108	4,123	11.9%
Aged 30-50	14,450	16,834	17,526	50.8%
Aged >50	11,110	13,033	12,880	37.3%
Full-time	29,129	33,708	34,260	99.2%
Part-time	233	267	269	0.8%
Total Employees	29,362	33,975	34,529	
Turnover Rate <sup>2</sup>	7.1%	6.9%	7.6%³	

<sup>1</sup> Employee totals at December 31 of each reported year.

#### MANAGEMENT DIVERSITY

Employees in Management <sup>4</sup>	2015	2016	2017	2017%
Female	1,017	1,196	1,310	22.5%
Minority	702	1,110	1,209	20.7%
Aged <30	108	164	178	3.0%
Aged 30-50	2,320	2,939	3,098	53.2%
Aged >50	2,125	2,514	2,551	43.8%
Within 10 Years of Retirement Eligibility	3,089	3,579	3,592	61.6%
Total Employees in Management	4,553	5,617	5,827	

<sup>4</sup> Management is defined by EEOC Functions "Executive/Senior Level Officials and Managers" and "First/Mid Level Officials and Managers".

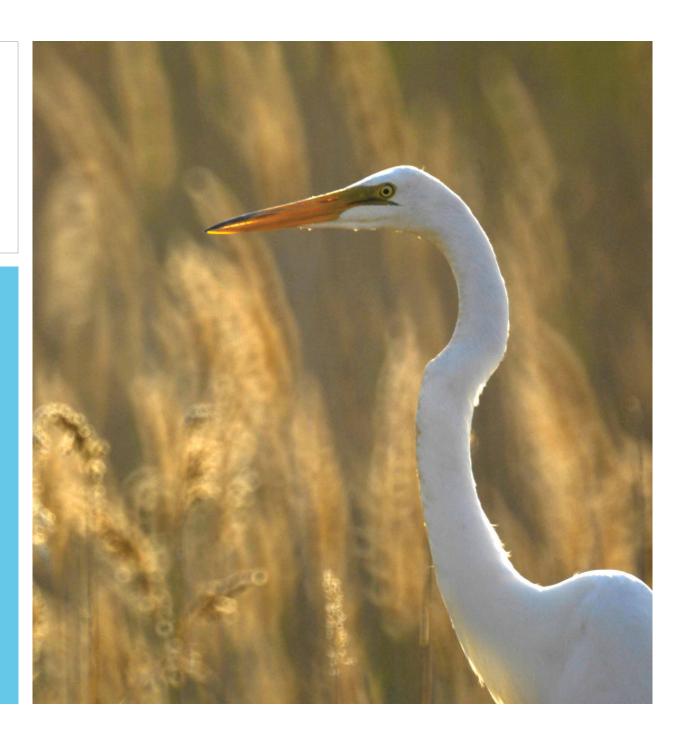


<sup>2</sup> Turnover rate calculated using December headcount.

<sup>3</sup> Increase in 2017 turnover primarily due to PHI merger commitments and subsequent staff reductions.

# **MANAGING OUR ENVIRONMENTAL IMPACTS**

- Maintained an owned-generation CO<sub>2</sub> emission rate **89 percent** below the industry average
- Established a **third** corporate GHG emissions reduction goal
- Increased Wildlife Habitat Council certifications to 37 locations for enhancing wildlife habitats and implementing environmental education programs





**Environmental sustainability has been a core value** and business driver for Exelon since our company's beginning. Successfully managing our environmental impacts strengthens our relationship with our customers and our communities. We are focused on minimizing impacts on watersheds and habitats, innovating our processes to reduce waste and emissions and being good stewards of the resources we do use. Our most substantial positive environmental impact as a company is our contribution to address climate change — as the largest producer of clean and reliable energy in the United States, our responsibility to manage our environmental impacts for our stakeholders and the planet is significant.

# **CLIMATE CHANGE ACTION AND AWARENESS**

Global climate change is a key sustainability issue for our business, our stakeholders and society at large. Given the potential impacts of climate change on the electric sector, Exelon must consider not only how to respond to the need to reduce GHG emissions, but also how our business may be affected by the physical impacts of climate change. We are working to manage the risks associated with climate change in the same way we manage all the risks associated with our business. We have organized the discussion of Exelon's climate change action plans around the core elements recommended by the Task Force on Climate-related Financial Disclosures (TCFD) — governance, strategy, risk management, and metrics and targets. This is in recognition of stakeholders' increasing interest in companies aligning their climate change disclosures with the TCFD framework.



#### Governance

As discussed in the Sustainability Governance section of this report, sustainability is the key to our success as a business and is supported at the highest levels of management through an established enterprisewide risk management model. Effective governance of our sustainability performance, including climate change, starts with the Governance Committee of the Exelon Board of Directors, whose charter includes oversight for this aspect of our business. We maintain a Climate Change Policy, which establishes our corporate position on this issue. We commit to reducing GHG emissions, innovating to increase our future competitive advantage as a low-carbon energy company and engaging with stakeholders to understand how climate change will affect the economy, communities and Exelon operations.



Our Chief Sustainability Officer is responsible for supporting the senior leadership team with setting the priorities and performance goals for addressing climate change, overseeing the implementation of our climate change efforts and reporting to the Governance Committee of our Board at least annually. The Corporate Sustainability team is integrated with the Corporate Strategy team to ensure that the business strategy reflects the most current views on relevant climate-related issues and the interests of our stakeholders. The Strategy team interfaces with senior leadership to advise them on how these potential climate change considerations may impact our business or compound the effects of other industry trends that we may already be seeing in our enterprise risk management and planning processes.

#### **Strategy**

One of the principal elements of our business strategy is that our customers will continue to expect us to deliver electricity from clean or non-emitting sources of generation. Coupled with this is the expectation that electricity service will be reliable and affordable. Each of these aspects aligns with the risks and opportunities driven by climate change. Our strategy also

considers other externalities such as public policy and technological innovation that will contribute to shaping the grid of the future. For Exelon, being a clean energy company today and in the future is business-as-usual.

As discussed in the Building the Next-Generation Energy Company section of this report, Exelon's business strategy is informed by our views of the durable trends in our industry. As a result of our sustainability governance structure, issues relating to climate change are infused in these durable trends. Five of the six durable trends encapsulate climate change risks and opportunities in one form or another, such as decreased load as a result of deployment of energy efficiency or traditional centralized generation systems being threatened by interest in local distributed generation. As a response to these durable trends, our four strategic plan focus areas have been designed to turn these potential business risks into opportunities.

Building our governance structure to address climate change risks and opportunities has contributed to the evolution of our business strategy. Our innovation around low-carbon solutions, our investments in grid

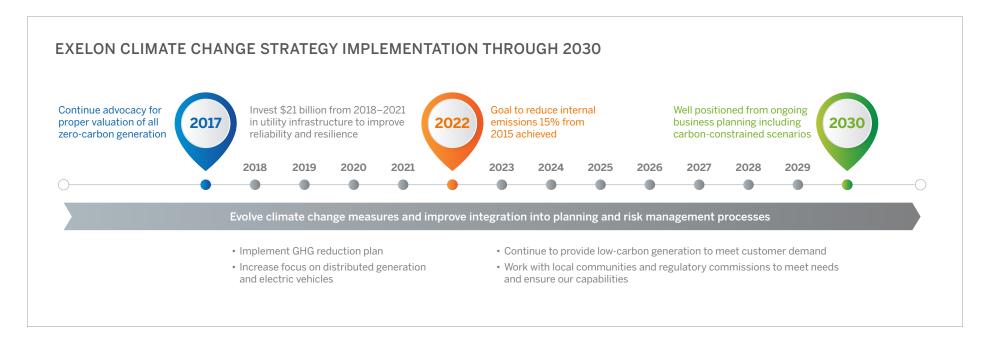




modernization that increase resilience and our advocacy to update policies and market structures to enable distributed generation and other technologies are all examples of how our governance structure has been successful in evolving the electric grid to a clean energy future. More details on these efforts are discussed in the Building the Next-Generation Energy Company section of the report.

Based on these focus areas, our strategy with respect to climate issues is focused on:

- In the short term Enabling action to reduce carbon emissions and recognize the value of clean energy. We are working to support our employees and customers in their efforts to reduce carbon emissions and use energy more effectively. We collaborate with city, state and federal governments on their climate change plans and regulatory updates to capture the full value of zero-carbon generation and to stimulate investment in zero-carbon generation.
- Over the next five years and building on past efforts Reducing emissions in our owned operations and maximizing our clean generation supply. This includes the continued operation of our zerocarbon generation at a high capacity factor (nuclear plants) to maximize available zero-carbon megawatt-hours and high availability (renewable energy plants) to provide power when wind and solar energy is available; the implementation of infrastructure modernization plans that improve efficiency of electric delivery and how it is used; and working toward our new corporate GHG emission reduction goal.
- For the long term Customer and community partnerships and innovation of the energy sector. Exelon is developing and deploying lowcarbon energy and energy solutions to our customers to help them meet their interest and need for clean energy products and services, including local renewable generation and electrification of transportation and other systems.





# **Climate-related Risk Management**

Exelon has a formal and well-established approach for Enterprise Risk Management (ERM) that uses a continuous, systematic and dynamic risk assessment process. The process we use to directly address potential climate change impacts to our business model is part of our assessment of durable industry trends that informs our corporate strategic plan, which is updated annually and reviewed with our Board of Directors. Our framework for managing strategic and emerging risks is to frame, identify, assess, manage, monitor and execute on our short-, near- and long-term response plans. The framework and associated risk management plans outline our strategies for turning challenges to our business model, and potentially disruptive technologies associated with climate change, into opportunities.

Specific assessments of longer-term physical climate change risks, including the use of regional climate change projections, are being evaluated at the site level and within our infrastructure planning processes. Our utilities are required to act in the public interest pursuant to the requirements of state public utility commissions, and the investments we are making in our T&D systems need to be supported by credible analysis to gain utility commission approval for earning a return on those investments. Exelon is continuing to explore the incorporation of alternative future climate change impact projections into our already robust planning processes.

As part of our climate risk management, Exelon joined the U.S. DOE Partnership for Electric Sector Climate Resilience as a founding member. We completed a vulnerability assessment in 2015 and developed a climate change resilience plan in 2016. Through these efforts, we determined that climate change is not just a single risk on its own, but rather a stress multiplier to existing risk and opportunity considerations that we already manage in our planning. We also recognized that climate change may affect different parts of our business in different ways. In response, we explored opportunities to increase climate change training within our organization

to further integrate climate change issue management into our business planning. In 2018, we plan to continue our training and communication efforts, increase climate change awareness in planning and improve coordination with local organizations working on climate adaption and resilience plans.

Exelon is also a founding member of the Electric Utility Sustainable Supply Chain Alliance. Through this and other supplier engagements, we have begun to assess and manage our supply chain risks associated with climate change. Through an annual supply chain survey, we are gathering information to better understand the energy and water dependencies and management strategies of our suppliers. Through the commodity standards developed by the organization, we are helping to educate and improve the environmental performance of our suppliers. We have also begun to request business continuity plans from our Tier 1 and critical suppliers to ensure they have plans in place to deal with unplanned business disruptions. Additional information can be found in the Sustainable Supply Chain section of this report.



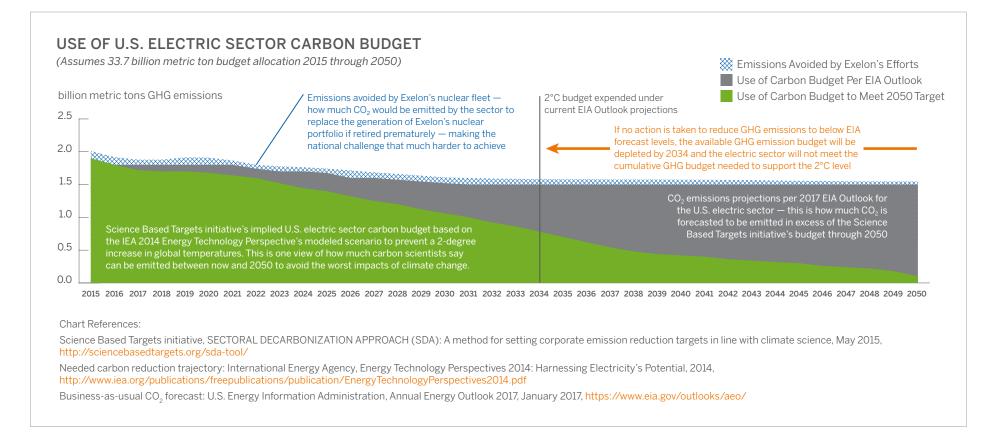
Exelon is working to better understand potential climate change risks to our supply chain.



#### Assessing Future Carbon Realities for the U.S. Electric Sector

Climate change implications for the electric sector range from changes in demand for energy and grid disruptions to supply shortages and market disturbances from new policy or legislation. The adoption of the Paris Agreement in December 2015 by the United Nations Intergovernmental Panel on Climate Change (IPCC) strengthened momentum to hold the increase in global average annual temperature to less than 2°C above pre-industrial levels by 2050. This level of temperature increase represents the maximum acceptable change in global average temperatures that can occur, based on the best available scientific estimates and allowing for reasonable adaptation by global populations to the effects of climate change.

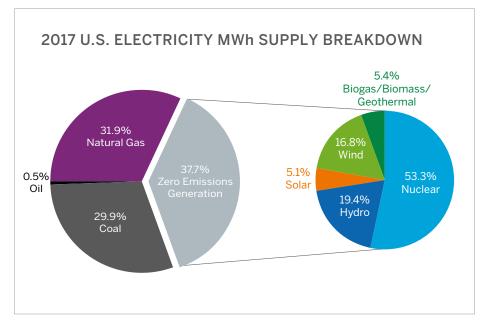
Pursuant to the Paris Agreement, and the recommendations of organizations such as the TCFD, nations and companies are evaluating potential strategies to reduce GHG emissions in support of meeting the 2°C limit. Experts have developed recommendations for specific sector contributions to this reduction, based on their current emissions trajectory and their potential for reduction. The adjacent image presents possible trajectories for carbon emissions for the U.S. electric sector between 2015 and 2050 — the business-as-usual trajectory alongside the necessary emissions reduction trajectory for domestic power generation to achieve the 2°C scenario set out by The Science Based Targets initiative (May 2015).



Opinions on the specifics of business-as-usual scenarios, the pace of change needed or the relevant solutions possible for the 2°C scenario vary. However, there are two robust conclusions that can be drawn under all reasonable cases:

- 1. By 2050, power generation in the United States must achieve near-zero annual emissions, a greater than 90 percent reduction in carbon intensity from today's collective average industry emission rate (lbs/MWh).
- 2. There is an implicit 2018–2050 cumulative carbon reduction budget for the U.S. electric sector (based on acceptable atmospheric carbon loading) that must be met during the course of the next 32 years to avoid the most serious effects of climate change. This budget could be exceeded as early as 2034 if further GHG emission reduction action. beyond the U.S. Energy Information Administration (EIA) Outlook forecast levels, is not achieved. Without the existing U.S. nuclear fleet, this time period would decrease another four years, and the carbon budget could be exceeded by 2030, resulting in society having to take even more profound action to avert or adapt to the more extreme consequences of exceeding 2°C.

As of the end of 2017, more than 62 percent of the nation's generation output was produced by fossil fuels, with coal and natural gas remaining the primary sources of power generation. Nuclear power continues to be the largest zero-carbon resource in the United States, representing over 53 percent of all zero-carbon generation in 2017. In order to meet the reductions needed by 2050, the nation needs to utilize a variety of clean generation options to replace the share of fossil-fired generation in the mix. Also paramount to meeting this goal is ensuring that new zero-carbon generation, such as wind and solar, replaces carbon-emitting generation, and does not displace existing zero-carbon generation, so that net increased emission avoidance is achieved.



While GHG emissions in our industry have declined in recent years as coal-fired generation has been replaced by lower-cost natural gas, the U.S. power generation sector is still not on a trajectory to meet the Paris Agreement emission levels. To achieve the required emission reductions, a market price on carbon is needed to reflect the economic cost of carbon emissions on the environment. Implementing a price on carbon in markets would provide an incentive for operators of carbon-intensive generation resources to switch to lower-carbon fuels or more efficient power generation technologies.

Exelon will continue to explore future climate change analysis to inform our risk management and strategic planning processes.



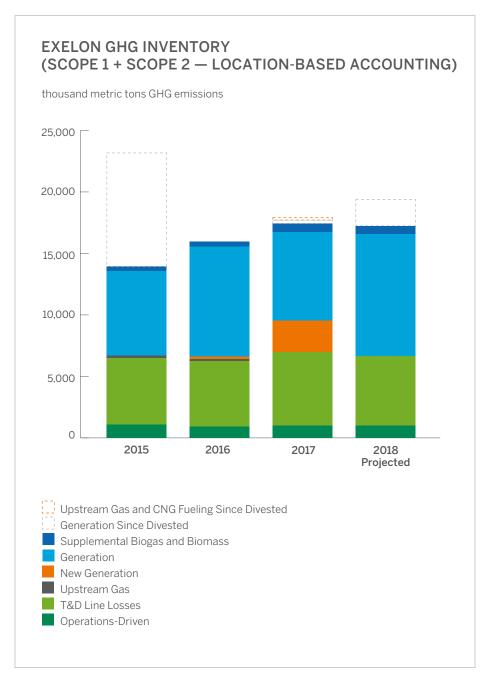
# **Metrics and Targets**

Exelon has calculated and verified our GHG emissions inventory since 2001. We have participated in public disclosure programs, such as CDP and The Climate Registry, for over 10 years. The adjacent bar chart depicts Exelon's latest corporate GHG emission inventory by major emission category, how these emissions have changed over time and what is anticipated for 2018. A detailed accounting of Scope 1, 2 and 3 emissions is presented in the Appendix. In addition, Exelon continues to publish the carbon intensity of our owned generation portfolio in the Reducing Air Emissions section of this report. In 2017, Exelon's intensity rate was 108 pounds of CO<sub>2</sub> per MWh, 89 percent lower than the national average emission rate. This level is far below the contemporaneous glidepath intensity rate suggested by the Science Based Targets initiative as necessary for industry to continue making progress toward limiting average global temperature increase to 2°C by 2050. As Exelon adjusts our portfolio in the near term to accommodate new generation, retirements and divestitures, we expect our carbon intensity rate in 2020 to increase slightly, to 117 pounds of CO<sub>2</sub> per MWh: an intensity level that will remain industryleading for a power generation company of Exelon's size for years.

#### Exelon's New Five-Year GHG Emission Reduction Goal

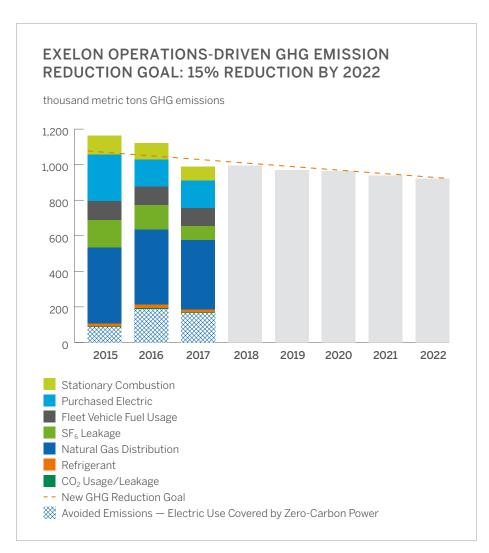
Exelon previously committed to, and fulfilled, two corporate-wide GHG emission reduction goals over the past decade. Under these programs first Climate Leaders, then Exelon 2020 — we reduced more than 9 million. metric tons of GHG emissions from 2001 to 2008, improved our building energy efficiency 25 percent by 2012 and avoided another 1.5 billion metric tons of GHG emissions through our customer energy efficiency programs and nuclear generation during that same time.

Exelon is proud to announce in 2018 that we have established a third corporate GHG emission reduction goal. This new goal is focused on reducing GHG emissions related to our internal operations by another





15 percent by 2022, compared to a 2015 baseline. Our new goal is focused on GHG emissions associated with our buildings, our fleet vehicles and our processes and equipment that emit GHGs (methane, SF<sub>6</sub>, CO<sub>2</sub> and refrigerants). The goal does not include GHG emissions driven by customer use of electricity (generation and distribution line losses), since these emissions vary with market demand.



With our new goal, we are focusing on emissions within our control, challenging ourselves to do more over the next five years to reduce these emissions through new infrastructure, new technologies, increased efficiency and use of clean power. We are committed to this goal even while projecting growth in our portfolio with three new plants coming online. Reductions will be measured from Exelon's 2015 market-based GHG emission inventory. We will report annually on progress toward our goal and the best practices that help us achieve it.

To reach our operational emission reduction goal, we are:

- Investing in natural gas pipe replacements to minimize methane leakage;
- Investing in new generation transformers to reduce SF<sub>6</sub> volumes on our systems;
- · Investing in the electrification of our own fleet; and
- Continuing to focus on energy efficiency and expanding clean energy procurement for our operations.

While our operations-driven GHG emission goal does not include customerdriven generation emissions and emissions associated with our utilities' T&D line losses, Exelon is supporting actions that minimize emissions from these sources. Through our focus on operational excellence, we maximize the performance of our low-carbon generation fleet, avoiding fossil generation dispatch on the grid to meet demand. Similarly, we are continually enhancing our customer energy efficiency programs and modernizing our infrastructure, which reduces both emissions associated with power generation and T&D line losses. We are also exploring new and emerging technologies that may drive further emissions reductions in these areas, as well as advocating for regulatory and market policies that support the clean evolution of the electric supply. Exelon will continue to report on avoided emissions from these actions as another set of metrics associated with climate change management.



Exelon is working to address 100 percent of our emissions across the three major segments of our GHG emission inventory:

- Operations-Driven Sources. These sources are those Exelon controls that may have opportunities for further emission reductions (these emissions are the focus of our new corporate GHG emission reduction goal).
- **T&D Line Losses.** Emission levels in this category are driven by the amount of energy that customers demand each year (these emissions are minimized through Exelon's utilities' customer energy efficiency programs and investments in grid infrastructure).
- Generation. Emission levels in this category are driven by overall demand for electricity and how grid operators dispatch for generating plants to fulfill that load (these emissions are minimized through Exelon's high-performing nuclear fleet and other renewable investments).

Each of the emissions categories has different reduction drivers. Not all of our emissions reduction efforts result in direct reductions in our own emissions performance: rather, some have a positive impact on the sector's overall emissions performance. Exelon is taking actions in each area to best support reduced GHG emissions at a societal level, focusing on transforming our energy systems and providing low-carbon solutions for our customers and communities.





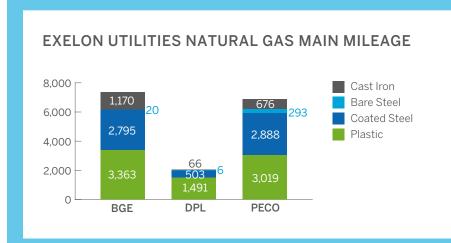
# **NATURAL GAS SYSTEM EMISSION REDUCTIONS**

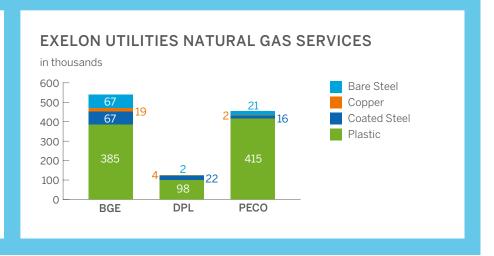
Three of Exelon's utilities — PECO, BGE and DPL — provide natural gas distribution service to customers through approximately 16,000 miles of gas mains, as well as a limited amount of gas transmission pipe (less than 200 miles). Over the course of our industry's long history, a variety of pipe main materials have been used, including cast iron, bare steel, coated steel and plastic. Service connections from the gas main in the street to the home or business have also used various materials, including copper, bare steel, coated steel and plastic, with Exelon's utilities having more than 1 million gas service connections. Main and service by company details »

Exelon's utilities have active programs in place to replace old cast iron and bare steel gas mains that may be more prone to methane leakage due to their age and physical properties. Similarly, older gas services are being upgraded as needed on a proactive basis. As can be seen in the below bar charts, DPL has already replaced most of its cast iron and unprotected steel mains. BGE and PECO both maintain long-term pipe replacement programs aimed at eliminating all cast iron and unprotected steel pipes and services by 2037. Replacement program details »

From a safety perspective, Exelon conducts periodic surveys of gas main and service assets, regardless of pipe type or age, to identify potential fugitive emission leaks, using a variety of technologies. These include optical methane detectors, remote methane leak detectors and combustible gas indicators. Identified leaks are prioritized for repair based on risk and in conformance with, or faster than, industry standards and regulatory requirements. Leak detection and repair details »

Exelon's gas utilities are members of the U.S. EPA Methane Challenge program, under which our utilities have committed to replace at least 2 percent of cast iron and unprotected steel natural gas distribution piping per year through 2021. Under Exelon's new GHG emission reduction goal to reduce operations-related GHG emissions by 15 percent by 2022, methane emission reductions are a key component of our emission reduction strategy. Our 2015 baseline year methane emissions were over 420,000 metric tons of CO<sub>2</sub>e. In terms of emission intensity, we estimate that methane emissions in our 2015 baseline year were 0.44 percent of weather-corrected total natural gas system throughput. GHG emission and intensity details »







# **IMPROVING WATERSHED MANAGEMENT**

Exelon depends heavily on access to affordable, reliable and adequate water supplies. Water is essential for Exelon's production of electricity; it drives our hydroelectric facilities and cools our thermal generation stations. At the same time, we know that water is a shared resource, critical to economic development, communities and wildlife in the areas where we operate.

Water use is a key challenge for the future, as well; with changing weather patterns and increases in competing water uses, effective water management will continue to be a priority. Water scarcity is a critical risk factor for our industry in particular, and Exelon is working to define the scope of the issue and continually refine our practical and effective management strategies.

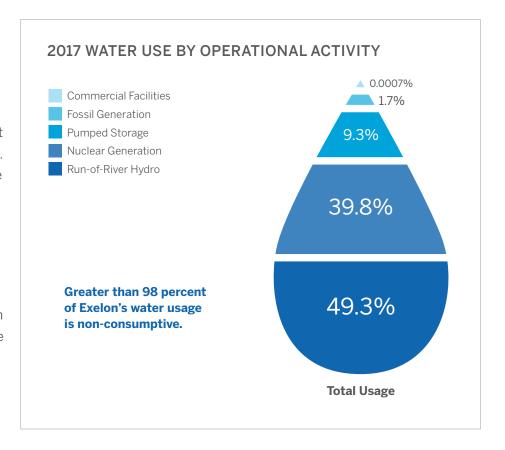
Exelon is committed to preserving the long-term viability of the water resources upon which we all rely. Guided by our Water Resource Management Policy, we are addressing site-specific water-related opportunities and risks. We recognize that working with relevant stakeholders at the local level is the most effective approach to addressing specific water challenges.

# **Water Withdrawals and Consumption**

In 2017, Exelon-operated facilities used approximately 43.4 billion gallons (or 164 million cubic meters) of water per day, greater than 98 percent of which was directly returned to its source. A significant portion of our overall water use is attributed to our fossil and nuclear thermal power plants, which require cooling water to condense steam after it has passed through turbine generators. Cooling water flows through either an open- or closed-cycle cooling system. More than 60 percent of our thermal generating capacity used closed-cycle systems that evaporate water in a recirculating tower or a pond to achieve cooling in 2017. The balance of our thermal plants used

open-cycle cooling systems, where water is drawn from a river, pond or bay for cooling and is then returned to the same water body.

Each year, we report our water use and conservation activities related to water resources via our response to the CDP water disclosure questionnaire. In 2017, we maintained a leadership category score of A-, which recognizes Exelon's use of best management practices to mitigate water risk across our business and beyond. For information on the types of cooling systems used at each of our generating stations, please see the Generation Station Appendix and our 2017 CDP Water Response.





#### **Exelon Generation 2017 Water Use by Watershed** (million gallons per year)

Watershed Zone	Consumptive Use	Non-Consumptive Use	Total Water Use
<b>Boston Harbor</b>	75	19,641	19,716
Barnegat Bay	5,064	500,813	505,877
Delaware River Basin	12,013	185,146	197,160
Chesapeake Bay	148,304	1,228,435	1,376,739
Susquehanna River	8,575	10,276,923	10,285,499
Upper Mississippi	40,525	2,760,813	2,801,338
Texas-Gulf	1,746	132,794	134,539
Lake Ontario	5,213	507,597	512,810
Total	221,516	15,612,162	15,833,678



Peach Bottom Atomic Power Station is located on the Susquehanna River in Pennsylvania.

# **Addressing Water Supply Risks**

Climate change poses a significant threat to water supplies critical to our ongoing operations, communities and wildlife. We are closely monitoring drought risk and changing precipitation patterns that have the potential to impact our production of electricity. Water-related climate change risks may affect our fleet by:

- Disrupting cooling water supplies at thermal generation stations;
- · Restricting cooling water discharges due to lower water levels and warmer water body temperatures in summer months; and
- Limiting production levels in water-scarce areas to ensure compliance with water supply and discharge permit limits.

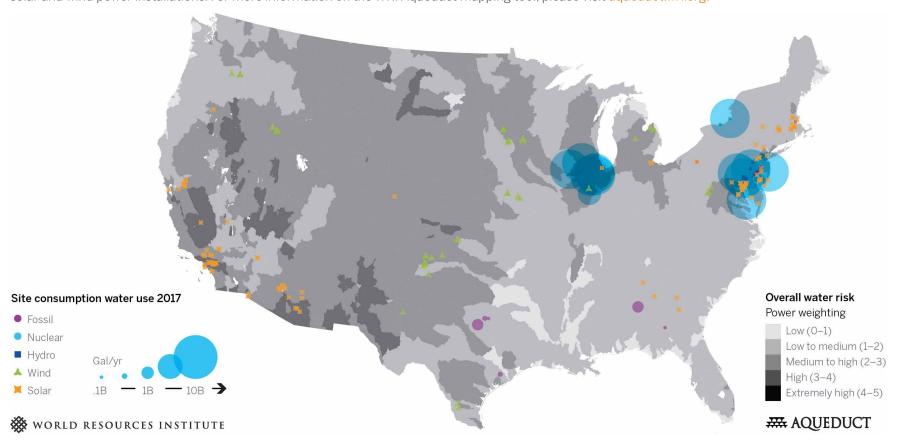
We are addressing these risks in a variety of ways. In response to more prominent heat waves — periods when electricity demand is highest we are investing in a variety of programs at our utilities to help customers manage and reduce their demand, allowing us to reduce our impacts on local water resources. We are also using and evaluating new thermal monitoring and power generation cooling technologies in consideration of higher ambient air and water temperatures in the future. We continue to engage with academic and other organizations conducting cutting-edge research to better understand potential water impacts due to climate change. In 2017, we continued work on our climate change vulnerability assessment as part of the U.S. DOE Partnership for Energy Sector Climate Resilience. This assessment reviewed climate-related risks to all of our operating companies and in all geographical areas where we operate. We have already been working to address many of these risks and to improve the resilience of our operations; in coming years, we will continue to identify and implement additional best practices within the industry. These efforts are necessary so we can minimize impacts to watersheds as well as have enough water available to provide low-carbon electricity to our customers.



#### WATER CONSUMPTION AND REGIONAL WATER RISK LEVELS AT EXELON FACILITIES

Exelon uses a variety of tools to identify water risk. One of these tools is WRI's Aqueduct global water risk mapping tool. This map presents the WRI's composite water risk assessment of the United States as an aggregated measure of 12 global water stress indicators weighted according to use factors for the power industry, including water quantity and quality, as well as regulatory and reputational risks. The risk analysis is based on historic trends over the past half-century and does not currently consider forward-looking modeling of climate change effects.

The map shows Exelon generation facilities overlaid on the WRI default map, with the size of Exelon facilities scaled based on consumptive water use. This overlay reveals that some of our facilities with the largest consumptive use are located in areas of medium risk in the Northeast and upper Midwest. The only facilities we operate in areas of the country with high water risk are those with small or negligible consumptive water use, such as solar and wind power installations. For more information on the WRI Aqueduct mapping tool, please visit aqueduct.wri.org.



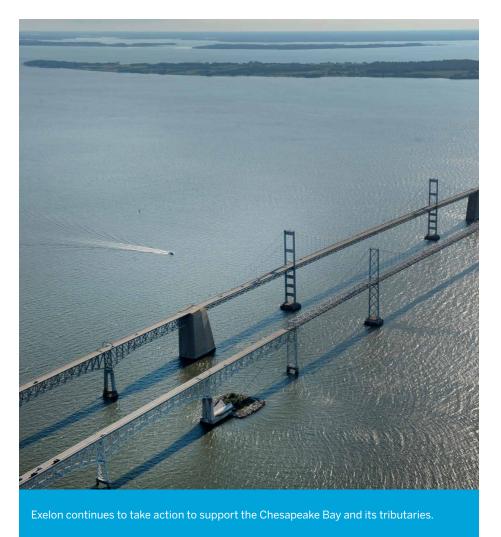


# **Commitment to Watershed Stewardship**

Through conservation stewardship and sustainable business practices, Exelon works to protect our shared water and natural resources within the watersheds where we have an operational footprint. To that end, we are implementing comprehensive environmental stewardship strategies that will provide long-term guidance for identifying and addressing priority issues relevant to our business objectives and key stakeholder interests within watersheds such as the Chesapeake Bay and others. Exelon's operational footprint in the Chesapeake Bay watershed has grown in recent years because of the 2012 and 2016 mergers with Constellation Energy and Pepco Holdings, Inc., and their operations in Delaware, Maryland, New Jersey and the District of Columbia. Developing a thorough understanding of issues, opportunities and trends within the Chesapeake Bay watershed that affect Exelon's business is essential to maintaining operations and continuing to provide clean, reliable power to our customers while also ensuring the sustainability of the water resources in the communities we serve. Environmental conservation stewardship plans also provide guidance for pursuing emerging technologies, where possible, in addressing those issues. The ecological well-being of the Chesapeake Bay watershed and others is fundamentally linked to the social fabric of watershed communities, the economic health of the regions and the quality of life of many of our customers.

Through the development and implementation of watershed strategies and conservation stewardship plans that address issues such as water quality, species of concern, vegetation management and climate change, Exelon engages in environmental restoration and enhancement projects where feasible. Examples include green stormwater applications, wetland and riparian habitat projects and other stewardship activities that support rare, threatened or endangered species through collaboration with community and environmental stakeholders. In support of our commitment to environmental stewardship within the greater Chesapeake Bay watershed,

specifically within the Anacostia River subwatershed, we have created pollinator habitats at our Benning Road facility in the District of Columbia and received a Wildlife Habitat Council certification for our environmental stewardship efforts at this facility. We are also actively involved with the implementation of trash receptors for improved water quality within the District of Columbia and the City of Baltimore.



Exelon.

# **WORKING TO PROTECT LOCAL WATERWAYS**

BGE and Exelon Nuclear are working on projects to protect local waterways and the important Chesapeake Bay.

**BGE.** The Middle Branch of the Patapsco River, which flows into the Chesapeake Bay, is listed as impaired for trash by the U.S. EPA. As a result, the Maryland Department of the Environment (MDE) has prepared and U.S. EPA has approved a total maximum daily load of trash and debris for the Middle Branch. The weak and variable currents of the Middle Branch are commonly not adequate to move floatable trash into the main branch of the Patapsco River. Instead, trash accumulates on shorelines, causing environmental damage and detracting from the aesthetics of the area. As a result, the shoreline of BGE's Spring Gardens facility is severely impacted by trash.

BGE installed a first-of-its-kind trash receptor collection system at the BGE Spring Gardens facility. The trash receptor sits within an open swale at the end of the Heath Street stormwater drain, capturing trash and debris in the stormwater runoff and preventing it from reaching the Middle Branch. This drain receives stormwater runoff from approximately 60 acres of South Baltimore between Spring Gardens and Riverside Park to the east.

The trash receptor rides an I-beam rail system that extends from within the swale to the surface, allowing the cage to be emptied into a roll-off container at the surface. The system is solar powered and equipped with a camera to ensure constant monitoring and timely removal of trash. Trash collected by the system is taken to the Wheelabrator Technologies energy-from-waste facility directly across the Patapsco River from Spring Gardens. This project was completed as a voluntary effort by BGE to improve both the local water quality as well as the aesthetics of the area.

**Exelon Nuclear.** Calvert Cliffs Nuclear Power Plant is located on the Chesapeake Bay, and has a baffle wall approximately 300 feet from the water intake structure. This wall consists of multiple baffle panels

measuring approximately 30 to 40 feet in length. The panels serve several functions, such as eliminating debris loading into the plant and providing a security barrier. The panels are removable and several are set aside for replacement each year. These panels make excellent reef structures that allow aquatic life to attach to them.

In 2017, Calvert Cliffs partnered with the Maryland Artificial Reef Initiative to install an artificial reef 11.3 miles north of the plant in an area known as Plum Point. Plum Point Reef was constructed with 18 old panels from the baffle wall and 24 concrete berms that were set for disposal to a landfill. Oysters are a critical factor in improving local water quality due to their ability to filter 55 gallons of water per day. The Reef will boost local oyster populations by providing hard surfaces for them to attach to. This is especially important in this region, as 95 percent of the naturally occurring oyster bars were flattened or buried in silt by 1984, leaving them unproductive. The Reef will provide habitat, cover and food for native species and act as a nursery for rockfish, barnacles, mussels and the eastern oyster. Improved biodiversity, fishing habitat, ecosystem restoration and recreational diving opportunities will also add recreational value for the community.





# **Mitigating our Impacts on Water Resources**

Consumptive use. Unlike water that is used and then returned to the same source, consumptive use removes water so it is not available for further use or for supporting aquatic habitats in that watershed. Closed-cycle cooling systems require adequate supplies of make-up water to replace water lost to evaporation or discharged periodically from the cooling tower reservoir ("blowdown" discharge). Evaporative losses from our cooling towers are by far the largest component of what we report as consumptive use across our operations (607 million gallons per day for Exelon-operated facilities in 2017). For all of our plants, including those with cooling towers or those with once-through cooling systems, we estimate and report the amount of water lost to evaporation through the cooling towers or in the river from the cooling water discharged from once-through cooling systems in accordance with applicable environmental regulations.

Thermal modeling and upstream water monitoring telemetry. To address changing waterbody conditions due to climate change impacts, Exelon has installed monitoring systems in river bodies with telemetry to increase data availability, trending and station response times. A daily river report based on our plant thermal modeling telemetry of upstream river stage and temperature is circulated internally. Water supply data is managed in hourly increments with thermal models that use real-time data gathered in the watershed. A key benefit of the thermal models is their ability to evaluate the impact of different weather scenarios and operational responses on water discharges. Operationally, our thermal models update 12 times per day, incorporating approximately 30,000 hourly data points.

**Entrainment and impingement of aquatic organisms.** In any large withdrawal from surface water, aquatic organisms can be drawn in with the water (entrained) or trapped on intake screens (impinged). To minimize these occurrences, power plants implement a variety of measures, including reducing the flow velocity of the cooling water withdrawal and

installing equipment to capture aquatic organisms at the intake structure and return them safely to the water body. In October 2014, the U.S. EPA's final Clean Water Act Section 316(b) rule went into effect. The purpose of the rule is to minimize the impacts of power plant cooling water intake structures on aquatic life. Exelon believes that the final rule strikes a careful balance between meaningful environmental protections and the need to maintain electric reliability and reasonably priced power by means of cost-effective regulatory requirements. Under the rule, operators select from a variety of pre-approved environmentally effective measures to minimize impacts to aquatic life. Alternatively, the operator may develop site-specific technologies or operating practices that need approval by the state permitting director. The rule also requires that a series of studies and analyses be performed to ensure selected measures are effective. There is no fixed schedule for 316(b) compliance; the timing for each facility is related to the status of its current National Pollutant Discharge Elimination System (NPDES) permit and the subsequent renewal period. In general, these measures will be completed within the next decade. Certain parties, not including Exelon, are pursuing legal challenges to the final rule in the federal court system; we do not expect this to delay our compliance.



The Limerick Generation Station, located on the Schuylkill River in Pennsylvania, uses cooling towers to reduce the volume of cooling water needed.



#### HABITAT AND BIODIVERSITY

Our operational footprint stretches over large tracts of land and is adjacent to a variety of water bodies, both of which are home to diverse flora and fauna. We take seriously our responsibility to reduce our impacts on wildlife and to enhance habitats wherever possible, guided by our corporate Biodiversity and Habitat Policy. We work to improve understanding of biodiversity through partnerships with biodiversity experts and regulatory agencies on a variety of studies and by providing educational opportunities for employees and community members through our Wildlife Habitat Council-certified sites.

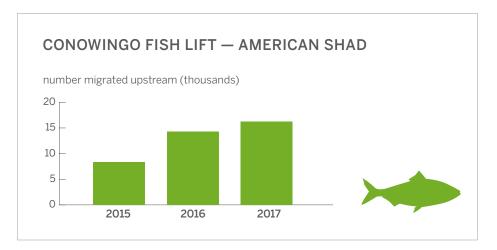
# **Protecting Aquatic Ecosystems**

Several of our generating stations require large amounts of water for continued operations and to provide reliable energy to our customers. We are committed to operating responsibly in these areas by reducing our impacts on fish, other aquatic species and their habitats.

#### Migratory Fish Passage

For our facilities with dams in active fish migration areas, we have evaluated and installed lifts or ladders to allow migrating fish to travel upstream. Across our operations, we have taken action to protect a number of species.

American Shad. American shad are a species of concern for resource agencies due to a decline in the population that has been occurring since the late 1800s. This decline has been observed in rivers both with and without dams. Since the early 1970s, Exelon and our predecessor companies operating the Conowingo Hydroelectric Project in Maryland have helped facilitate migration of American shad within the Susquehanna River Basin. During the 2017 migratory season, Conowingo passed 16,265 American shad via its east fish lift (EFL). Through 2017, this lift has passed a total of 1,233,189 American shad. The EFL also passes many other species of fish, such as alewife, blueback herring, river herring, striped bass, smalland large-mouth bass, walleye and gizzard shad. In 2017, 33 species of



fish and two hybrids passed through the EFL for a total of 844,917 fish, including the 16,265 American shad. The smaller fish lift on the western side of the dam continues to support Pennsylvania Fish and Boat Commission activities related to the study and protection of American shad. In 2017, 736 American shad were collected through the west fish lift.

**American Eel.** Exelon continued coordination of the Eel Passage Advisory Group in support of the commitments established in the Eel Management Plan of the Pennsylvania 401 Water Quality Certification (WQC) finalized in December 2014 for the Muddy Run Pumped Storage Project FERC license. As required by the Pennsylvania WQC, a permanent eel trap consisting of one collection tank, three holding tanks and one ramp was installed at Conowingo and began operation on May 1, 2017. Exelon also continued operation of a temporary eel trapping facility in the Octoraro Creek watershed. The May to September 2017 operation of the temporary facility at Octoraro Creek resulted in the collection of 11,347 juvenile eels, which were transported to holding tanks at Conowingo. The Conowingo site collected 122,300 juvenile eels; collectively from both sites, 129,902 juvenile eels were transported and released at upstream stocking sites. Exelon will continue operations of both facilities at Conowingo and Octoraro in 2018.

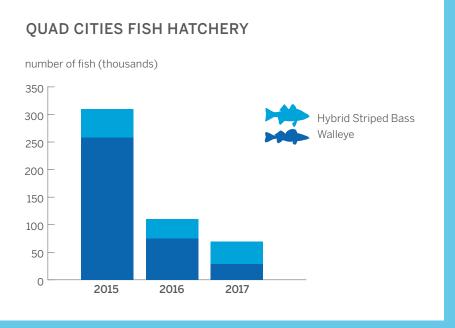


# **QUAD CITIES FISH HATCHERY**

We are proud to own and operate a major aquaculture facility at the Quad Cities Nuclear Station in Illinois, in partnership with Southern Illinois University, to enhance stocks of several aquatic species in the area. The hatchery celebrated its 34th year of operation in 2017, and produced millions of walleye fry and tens of thousands of advanced fingerling walleyes for the Mississippi River last year. Illinois and Iowa Departments of Natural Resources (DNR) both received eyed-eggs from the Quad Cities hatchery for state hatchery projects. In addition, nearly 40,000 advanced fingerling hybrid striped bass were produced for the Mississippi River, Clinton Lake and LaSalle Lake as requested by Illinois DNR. The hatchery produced 4,000 blue catfish for Clinton Lake, ranging in size from 7 to 12 inches. The site also produced over 1,000 alligator gar as part of the state alligator gar recovery program. These animals were stocked throughout the state by

Illinois DNR. The Station has been working with Illinois DNR since 2011 on this program. The hybrid striped bass and blue catfish programs are just a few of the cooperative projects with the Clinton, LaSalle and Braidwood Nuclear Stations conducted from the Quad Cities hatchery. The hatchery also partners with multiple government agencies to grow freshwater mussels on site using local mussel beds for brood stock, including the federally endangered Higgins eye mussel. This year the site produced several hundred Higgins eye, black sandshell (Illinois State threatened) and plain pocketbook (species of interest in smaller lowa streams). All of these species were grown and released into local waters. The site also recycled a retired plant operations building into a mussel hatchery building. This building should be fully operational by 2019.







### Species Management Plans in Relicensing Efforts

The Conowingo hydroelectric facility is undergoing relicensing with FERC. As part of this process, in April 2016, Exelon Generation and the U.S. Department of the Interior announced an agreement to restore American shad and river herring to the East Coast's largest river over the next 50 years. Exelon will improve fish passage facilities at Conowingo Dam as well as transport up to 100,000 American shad and 100,000 river herring annually to their spawning grounds above all four dams on the Susquehanna River. Exelon initiated design work on these upgrades, which will be implemented upon the issuance of the new license.

In May 2017, Exelon refiled an application with MDE for a WQC, under section 401 of the Clean Water Act, for Conowingo. The original application was filed in January 2014 and refiled in March 2015 as representatives from the State of Maryland indicated that MDE believed it had insufficient information to process Exelon's application. As a result, Exelon entered into an agreement with MDE to fund studies addressing the accumulation and conveyance of sediment in and through the impoundment of Conowingo Pond, providing up to \$3.5 million to various agencies including the State of Maryland, the U.S. Army Corps of Engineers, the U.S. Geological Survey, the University of Maryland Center for Environmental Science and the U.S. EPA. The sediment studies were designed to quantify the amount of suspended sediment concentration, associated nutrients, suspended sediment load and nutrient load present in the major entry points to the lower Susquehanna River reservoir system and the upper Chesapeake Bay. The sediment studies were completed in July 2017.

Exelon also agreed to withdraw and refile the WQC application on an annual basis to provide Maryland with additional time to review the WQC application. In May 2017, Exelon refiled a WQC with MDE. On April 27, 2018, MDE issued a 401 WQC for Conowingo. The WQC contained numerous conditions, including requirements for water quality, rare threatened and

endangered species and fish passage. On May 25, 2018, Exelon filed legal actions in state and federal court asserting that MDE exceeded its lawful authority in issuing the 401 WOC and that it is unconstitutional. In addition, Exelon has requested that MDE reconsider its decision by removing certain provisions of the 401 WQC, and further that MDE stay the Certification while reconsideration and judicial review are pending.

Trout Unlimited works across the country restoring degraded trout and salmon waters and making them viable and fishable once again. Exelon participated in these stream restoration efforts for the seventh consecutive year by supporting the Donegal Chapter of Trout Unlimited's improvements to Peter's Creek in Fulton County, Pennsylvania. This project supports sediment reduction in the Susquehanna River above Conowingo, which feeds into the Chesapeake Bay. Stream improvements provided by the project included the installation of mudsills, rock vanes, log vanes and cribbing to restore fish habitat to this coldwater stream.

### **Terrestrial Habitats and Wildlife**

Our generating stations and rights-of-way (ROWs) traverse thousands of acres of land, which we carefully manage to protect habitats of a wide range of plant and animal species. As we incorporate greater levels of emissionsfree solar and wind power into our generation portfolio, we must balance the



Exelon and our employees continue to work to protect and enhance wildlife habitats and biodiversity.



increasing potential for impacts to birds, bats and terrestrial habitats that arise from these technologies.

### Right-of-Way Management

Vegetation on transmission line ROWs must be managed on a regular basis to ensure safety and system reliability. Managing these areas presents an opportunity for instituting practices that benefit plants and wildlife that require open, low-growing habitats. We have undertaken a number of initiatives to promote diverse habitats in our ROWs. In ComEd's territory, most ROWs are managed as natural green space, with more than 300 acres managed as native prairie grass. PECO maintains natural conditions and native species on a significant portion of its ROWs, with a focus in recent years on planting native grass meadows and implementing Integrated Vegetation Management (IVM) on 3,600 acres of ROW. BGE has implemented or is in the process of implementing IVM at multiple high-voltage transmission ROW locations on approximately 1,250 acres of land throughout its service territory. PHI employs a selective management

strategy within its ROWs to promote natural habitat and actively manages for wildlife benefits along two ROW segments that also serve as U.S. Fish and Wildlife Service (FWS) research sites.

### Wildlife Habitat

Exelon has a longstanding partnership with the Wildlife Habitat Council (WHC) to restore and enhance wildlife habitats at our facilities and on our ROWs. Exelon has been a member of the WHC for 13 years and has accrued a total of 37 sites with WHC certifications. The WHC certification program provides us with a guidance tool and objective oversight for creating and maintaining high-quality wildlife habitats, as well as implementing environmental education programs. In addition, 37 locations or programs have National Wildlife Federation (NWF) habitat certifications. To learn more about the WHC and NWF, visit www.wildlifehc.org and www.nwf.org. As of 2017, 27 ROW segments managed with IVM hold NWF certifications as wildlife habitats and 18 IVM ROWs hold WHC certifications. Twelve ROW segments with IVM hold both NWF and WHC certifications.



ROW management at Gunpowder Falls State Park River Valley Wildland, Maryland.



PHI volunteers working at the Tri-State Bird Rescue & Research facility in Delaware.



Exelon Habitat Certifications 2017									
Company	Program Name	WHC	NWF	Acres					
	BGE-Patuxent National Research Refuge ROW Partnership	<b>✓</b>	<b>✓</b>	8,000					
	BGE ROW Environmental Stewardship Program	<b>✓</b>	<b>✓</b>	N/A					
	BGE ROW Columbia/Lake Elkhorn Vicinity		<b>✓</b>	10					
	BGE ROW Liberty Reservoir		<b>✓</b>	10					
	BGE ROW Flag Ponds		<b>✓</b>	10					
BGE	BGE ROW American Chestnut Land Trust		<b>✓</b>	10					
	BGE ROW South River Greenway Partnership		<b>✓</b>	10					
	BGE Riverside Facility		<b>✓</b>	5					
	BGE Howard Service Center		<b>✓</b>	135.4					
	BGE Notch Cliff		<b>✓</b>	20.2					
	Spring Gardens Facility	<b>✓</b>	<b>✓</b>	72					
	Buffalo Grove Prairie	<b>✓</b>	<b>✓</b>	10					
	Swift Prairie		<b>✓</b>	8					
	Romeoville Prairie		<b>✓</b>	8					
	Calumet City Prairie		<b>✓</b>	5					
	Burnham Prairie	<b>✓</b>		24					
	Cherry Valley ROW Prairie	<b>✓</b>		18					
	Greene Valley Prairie	<b>✓</b>	<b>✓</b>	16					
ComEd	Hitt's Siding Prairie	<b>✓</b>	<b>✓</b>	12					
	Kloempken Prairie	<b>✓</b>	<b>✓</b>	8					
	Lake Forest Prairie	<b>✓</b>	<b>✓</b>	10					
	Lake Renwick Prairie	<b>✓</b>		12					
	Linne Prairie	<b>✓</b>	<b>✓</b>	10					
	Pratt's Wayne Woods	<b>✓</b>	<b>✓</b>	12					
	Superior Street Prairie	<b>✓</b>	<b>✓</b>	14					
	West Chicago Prairie	<b>✓</b>		7					
Exelon Generation	Kennett Square Campus	<b>✓</b>		51.7					

Company	Program Name	WHC	NWF	Acres
	Calvert Cliffs Nuclear Power Plant	<b>✓</b>		970
	Byron Generating Station	<b>✓</b>		167
	Three Mile Island Nuclear Generating Station	<b>✓</b>		200
	Limerick Generating Station	<b>✓</b>		150
	Braidwood Generating Station	<b>✓</b>		2,640
	Clinton Power Station	<b>✓</b>		11,000
Exelon Nuclear	Oyster Creek Generating Station	<b>✓</b>		600
radical	Dresden Generating Station	<b>✓</b>		1,200
	LaSalle County Generating Station	<b>✓</b>		2,158
	Peach Bottom Atomic Power Station	<b>✓</b>		18
	Quad Cities Generation Station	<b>✓</b>		54
	Nine Mile Point	<b>✓</b>		700
	R.E. Ginna	<b>✓</b>		375
Exelon Power	Perryman Generating Station		<b>✓</b>	5
	Brandywine River Trail		<b>✓</b>	4
	Manor Road ROW	<b>✓</b>	<b>✓</b>	26
	Cherry Lane Meadow		<b>✓</b>	7
	Morton Wetland	<b>✓</b>	<b>✓</b>	1.8
	Honey Hollow Meadow		<b>✓</b>	12
DECO	Newtown Square Wetlands	<b>✓</b>	<b>✓</b>	0.4
PECO	PECO Conservation ROW	<b>✓</b>		3,600
	Pollinator Pilot Project		<b>✓</b>	2
	Ring Road Meadow		<b>✓</b>	14
	Rock Spring Natural Area		<b>✓</b>	25
	Upper Gwynedd Preserve ROW	<b>~</b>	<b>✓</b>	0.2
	West Chester University ROW		<b>✓</b>	3.4
	Benning Service Center	<b>✓</b>	<b>✓</b>	0.5
PHI	PHI Transmission ROW	<b>~</b>	<b>✓</b>	80
	WaterShed Sustainability Center	<b>✓</b>	<b>✓</b>	1

















# **Protected Species Management**

In addition to wildlife habitat certifications, we maintain special management plans to protect biodiversity on our sites and ROWs as outlined in our Biodiversity and Habitat Policy. As an example, our utilities each have a detailed Avian Protection Plan to manage interactions of birds and power lines. Where threatened or endangered species are located on or near our sites, we work with regulatory agencies and interested stakeholders to develop and implement agreed-upon management plans or special mitigations to reduce impacts on wildlife.

### American Bald Eagle

Exelon tracks the federally protected American bald eagle at a number of our facilities. We are protecting bald eagle habitats at our Muddy Run Pumped Storage Project. Several bald eagles have set up residence on BGE electric transmission towers. We have relocated one bald eagle nest to another area of a tower, protecting the eagles and nest. We continually monitor these sites and, when sites are active, prevent workers from disturbing these locations to improve the likelihood of successful breeding. At Exelon Nuclear, the Quad Cities Fish Hatchery supports the U.S. FWS in a wintertime bald eagle tracking program by allowing trapping to take place at the station and by providing bait for the program. Over the past two years, several eagles have been netted, with one eagle from the site tracked as traveling as far as within 500 miles of the Arctic Ocean during the summer.

### **Exelon Pollinator Initiative**

Exelon is engaged in a variety of pollinator habitat projects across the company at our generation and utility sites. Our habitat management supports a range of pollinators such as insects, birds and mammals. The monarch butterfly, a species of concern for many scientists and resource management groups, has become a recent priority for Exelon. Several Exelon sites lie in areas where monarch butterflies may rest and feed along their 3,000-mile journey. Our efforts support national goals for pollinator species recovery, and can position Exelon as the nation's leading utility for recovering the iconic monarch. To accomplish this, Exelon will enhance and restore habitat on company-owned properties, engage in national and regional partnerships to facilitate habitat enhancement and support public education programs to emphasize habitat conservation. We partner with a number of academic institutions, nonprofit organizations, community and youth organizations, federal and state agencies, trade associations and other Exelon business units to progress our habitat and species conservation plans.

**2017 AWARDS** 



PHI received the Energy for Wildlife **National Achievement Award from the** National Wild Turkey Federation in 2017 for its efforts to enhance wildlife habitat across its operating territories.





In 2017, Exelon Generation almost tripled the number of acres that are part of our five-year pollinator restoration initiative. There are currently 225 acres in various phases of development. Over 2,500 milkweed plugs in addition to bulk seed mixes were planted on our property to help support the restoration and creation of habitat. In addition, Exelon Generation handed out or planted more than 11,000 seed balls with regionally appropriate seed mixes. Site preparation, planting and monitoring activities in 2017 included over 100 volunteers and the participation of outside organizations such as local chapters of Pheasants Forever, FFA groups, schools and Illinois DNR. Beehives have also been installed at several sites. For more information about Exelon's pollinator programs, visit our website.

### **WASTE MANAGEMENT**

At Exelon, we seek to prevent waste before its generation. When this is unavoidable, we find ways to safely dispose of it, as in the case of nuclear waste, or find recycling and beneficial reuse options for other types of waste.

# **Managing Our Nuclear Fuel Cycle**

As the country's largest nuclear power plant operator, nuclear safety is a fundamental element of our license to operate. We diligently manage our nuclear wastes, both low-level radioactive waste and spent nuclear fuel, safely, securely and responsibly. The health and safety of the communities where we operate, our employees and the environment is the highest priority of our company.

### Low-level Nuclear Waste

Most low-level nuclear waste is dry, inert matter that has been processed into a solid state before being placed in specially designed, high-integrity containers for storage. Typical low-level waste includes materials and

equipment such as filters, tools, rags and equipment that have come into contact with varying amounts of radioactive substances. More than 90 percent of the low-level waste generated at nuclear stations is designated as Class A, which is the least radioactive. This waste is disposed of at EnergySolutions' disposal site in Clive, Utah.

Class B and C wastes have higher levels of radioactivity and include items such as core components, filters and ion exchange resins. Where we do not have adequate storage capacity on site, we ship waste off site to qualified disposal facilities. Waste from Oyster Creek Generating Station is shipped to the Barnwell disposal facility in South Carolina. Since 2015, we shipped all of the Class B and C wastes from our other facilities to the Waste Control Specialists disposal facility in Andrews, Texas, thus reducing our inventory.

### Spent Nuclear Fuel

While required to do so by the Nuclear Waste Policy Act of 1982, the federal government has yet to establish facilities for the permanent storage or disposal of spent nuclear fuel (SNF) in the United States, so Exelon Generation safely stores SNF from our nuclear generating facilities on site in storage pools and dry cask long-term storage facilities. As of the end of December 2017, Exelon Generation had approximately 84,100 SNF assemblies, or 20,600 short tons, stored on site. This includes approximately 55,800 assemblies in pools and 28,300 assemblies in 530 dry cask storage systems. Using this combination of storage methods, we project that we will have adequate storage for SNF produced through the decommissioning of our plants. The total volume of SNF produced by Exelon's entire fleet of nuclear plants since 1969 could fit in approximately three and a half Olympic-sized swimming pools. One hundred percent of this SNF is packaged, numbered, catalogued, tracked and isolated from the environment.

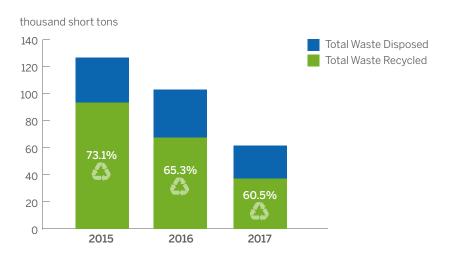


### Reducing Operational Waste

Across our businesses, we are enacting best management practices to reduce, reuse and recycle the waste we generate. From double-sided copies in the office and reusable totes in the field, to contractor take-back programs and finding outlets for refurbished meters and computer electronics, our initiatives stop the generation of waste before it begins. Likewise, our extensive recycling programs target conventional materials like paper, plastic and metals as well as non-conventional materials such as construction and demolition debris. These programs not only keep waste out of landfills, but they also save money, conserve energy and natural resources, and reduce GHG emissions.

Through the efforts of our employees and contractors, we achieved a company-wide recycling rate for municipal solid waste of approximately 61 percent during 2017. Additionally, our utilities found beneficial outlets, including new construction materials and utility excavation backfill, for more than 364,000 tons of recovered materials, leading to an overall recycling rate of nearly 90 percent for the combined municipal and industrial solid waste we generated in 2017. During 2017, we also generated approximately 941 tons of hazardous waste, recycling 24 percent of these materials before they required highly regulated disposal.

# MUNICIPAL SOLID WASTE GENERATED AND RECYCLED 2015-2017<sup>1</sup>



1 Municipal solid waste includes wastes such as durable goods, nondurable goods, containers and packaging, and other wastes (e.g., yard waste, food). This category of waste generally refers to common household waste, as well as commercial wastes, that are readily recyclable by conventional methods, but excludes industrial, hazardous and construction wastes. Industrial solid waste is not included in this chart.

# **2017 AWARDS**



ComEd was named a 2017 WasteWise regional leader (U.S. EPA Region 5) for its ongoing waste reduction achievements.





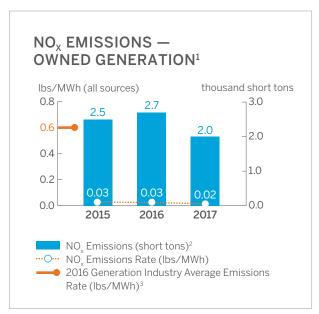
### **REDUCING AIR EMISSIONS**

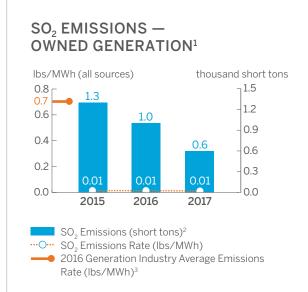
Air emissions can have significant impacts on our customers, employees and environment. As such, we are committed to continued investment in our low-emission energy portfolio to minimize Exelon's air emissions. In 2017, our generation portfolio emission rates for NO<sub>2</sub>, SO<sub>2</sub> and CO<sub>2</sub> were 0.02, 0.01 and 107.6 pounds per MWh, reflecting emission rates that are 97, 99 and 89 percent lower than the latest-available electric generation industry averages, respectively. In other words, Exelon is among the very cleanest of all electricity generators in the United States.

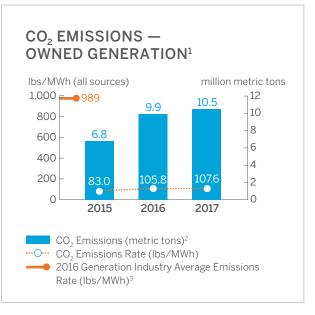
During 2017, we continued to participate in federal, state and regional regulatory efforts to improve regional air quality and reduce emissions that cause climate change. Because our power generation emission levels and emissions per megawatt-hour are already very low, Exelon is well

positioned to benefit from future emission reduction regulations, versus our competitors, since our generation fleet is already very clean.

Regarding federal regulation of GHG emissions, on October 10, 2017, the U.S. EPA proposed a rule to repeal the Clean Power Plan (CPP), which sought to reduce CO<sub>2</sub> emissions from fossil fuel-fired power plants, previously finalized in 2015. The CPP had set emission performance standards for fossil fuel-fired power plants, with requirements beginning in 2022 for existing sources (e.g., those built before 2014) and upon construction for those built in 2014 or later. On December 18, 2017, U.S. EPA released an Advance Notice of Proposed Rulemaking seeking comment on a CPP replacement. Exelon's comments recommended that U.S. EPA issue a strong rule reflective of current, substantial emission-reduction potential in the electric sector. Any new rule must ensure total emissions are







- 1 Our third-party assurance statement for Exelon Generation's No., So., and Co., emisions, net megawatt-hours and associated emission intensities for each pollutant is available on our website.
- 2 Data includes the emissions and production of acquired, retired and divested generation for the period of ownership in each year. This includes PHI assets beginning in 2016.
- 3 Source: M.J. Bradley & Associates (2018), Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the United States.



meaningfully reduced and recognize that the electric generation system is an integrated system. Further, minimum requirements must be established that are sufficiently stringent to achieve meaningful emissions reductions, while not interfering with states' rights to require reductions beyond the federal minimum.

With limited meaningful action at the federal level to reduce GHG emissions. states and regions continue to seek innovative ways to reduce GHG emissions. Exelon's support of the RGGI, discussed in the Building the Next-Generation Energy Company section of this report, is an example of our continued dedication to state and regional climate policy actions.

Exelon has also been a long-time supporter of programs to cost-effectively reduce pollutants from coal, oil and natural gas power plants that cause smog and other air quality impacts in our regions. In September 2016, the U.S. EPA released the final Cross-State Air Pollution Rule (CSAPR) Update Rule to address air pollution that flows from one state to another. The Update Rule is an important tool to support attainment of the 2008 federal ozone standard in states where Exelon has utility operations, customers and employees. The CSAPR air pollution emission reduction model uses a market-based program to cost-effectively reduce emissions. Exelon worked with U.S. EPA to develop and defend the rule and framework, including at the Supreme Court in 2014.

Coal- and oil-fired power plants also emit hazardous air pollutant (HAP) emissions, such as mercury, nickel and acid gases that are immediately harmful to people, particularly children. U.S. EPA issued the first rules limiting emissions of these toxic pollutants in 2012, requiring compliance by 2016. Exelon has supported the U.S. EPA and the standards in litigation at both the D.C. Circuit and Supreme Court. The D.C. Circuit unanimously upheld the rules with regard to substantive regulatory requirements and compliance with the rule is now virtually unanimous. However, the Supreme Court ruled in May 2015 that the U.S. EPA should have considered costs in

initially determining whether it is "appropriate and necessary" to regulate these toxic pollutants emitted by coal- and oil-fired power plants. The Court, however, did not vacate the rule and all substantive issues upheld by the D.C. Circuit were not considered by the Supreme Court. In 2016, the U.S. EPA confirmed that consideration of costs does not alter the Agency's previous determination that it is "appropriate and necessary" to regulate toxic emissions from these fossil generating units. This finding is now being litigated and Exelon continues to defend the rule as we believe these longoverdue standards are integral in protecting public health and internalizing the costs of pollution in electricity markets. Further, they are working well after three years of widespread compliance.

### MANAGING ENVIRONMENTAL RISKS

Throughout our value chain, we are constantly assessing potential impacts our operations may have on the environment. Guided by the Exelon Corporate Environment Policy, we strive for full compliance with applicable legal requirements, and we ensure our actions, and the actions of those working on our behalf, meet this commitment. We are incorporating risk management into siting of new facilities, minimizing impacts at existing facilities and working with local communities and regulators to ensure stakeholders are informed of our activities.

Our environmental management system (EMS) is an integral part of managing our environmental risk. Exelon's EMS, designed to conform to ISO 14001, lays out the necessary steps to maintain responsible operations throughout our businesses. All of Exelon's businesses have established ISO 14001-conformant EMSs and the majority have been independently certified as conforming to the standard. We also conduct regular internal and external compliance audits of our environmental programs. During 2018, we will complete phasing in the latest ISO standards, ISO 14001:2015, reinforcing our continued commitment to environmental risk reduction and



performance improvement across the company. Exelon's corporate-level EMS certification is available on our website.

# **Improving Compliance Performance**

construction site.

We monitor, measure and report our environmental performance by tracking cases where we have violated an applicable environmental regulation or permit, or had a release of a regulated substance that entered the environment. These include notices of violation (NOVs) — formal written notifications of an environmental violation from a government agency; permit non-compliance events — instances where a permit condition or administrative requirement was not satisfied; and spills of oil or chemicals that require reporting to applicable agencies, as well as non-reportable spills that involve small quantities of material that can be quickly contained and do not result in significant environmental impact.

In 2017, Exelon received 10 NOVs from regulatory agencies. These include:

Pepco Distribution Construction, Prince George's County, Maryland. Sediment and erosion plan was out of compliance for an electric distribution

Pepco Forestville Service Center, Forestville, Maryland. Pepco was cited from a September 2016 inspection for holding controlled hazardous substances beyond 90 days. This event is included in the 2016 data.

Pepco Quince Orchard Substation, Germantown, Maryland. The Montgomery County Department of Permitting Services cited Pepco for failure to comply with the sediment and erosion control plan for work at the facility.

Exelon Power Bethlehem Renewable Energy, Bethlehem, Pennsylvania.

During a full compliance evaluation, the Pennsylvania Department of Environmental Protection determined that the facility was not collecting daily landfill gas samples to determine the sulfur content as required. These samples were not being collected when the site was not staffed.

**Exelon Nuclear Peach Bottom Generating Station, Peach Bottom** Township, Pennsylvania. A vendor failed to perform a membrane integrity test as required by the drinking water permit following regular maintenance to the plant's potable water system.

Exelon Nuclear Braidwood Generating Station, Braidwood, Illinois. A temporary sump pump discharge from the circulating water blowdown house resulted in an uncontrolled release of water containing tritium to the land surface. A groundwater investigation was completed and a groundwater remediation system was installed within 10 days of the event. No additional action was required.

**Exelon Power Hillabee Energy Center, Alexander City, Alabama.** The facility failed the required semiannual toxicity testing as well as the required follow-up accelerated toxicity testing. Investigation into the reason for the failed tests revealed that the incoming water from the city water system contained elevated concentrations of a copper sulfate additive (fungicide) in the system.

PECO Berwyn Transportation Complex, Berwyn, Pennsylvania. The facility experienced an exceedance of the total zinc limit for its sanitary sewer discharge. Corrective actions were completed and subsequent sampling indicated full compliance.

Exelon Power Remediation Project, Chester, Pennsylvania. A required monthly sample from the groundwater remediation system discharge was not collected due to operational problems with the equipment.

BGE Electrical Distribution Network, Baltimore, Maryland. A 115-kV pipetype cable between the Westport and Center substations leaked mineral oil that entered the Jones Falls waterway. Upon discovery, BGE took measures to stop any additional oil intrusion into the environment and completed all corrective actions.

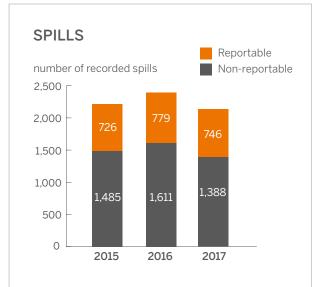


In 2017, we also reported 29 permit non-compliance events for regulated discharges to air and water, and 2,134 total spills. These are summarized in the accompanying charts.

On October 30, 2015, the U.S. FPA filed a Clean Water Act civil enforcement action against Pepco in Federal District Court for violations of the NPDES permit limits on stormwater discharges from the Benning Service Center. Pepco reached an agreement in principle with the U.S. FPA on the settlement terms as of November 4, 2016. The terms and conditions were documented in a consent decree. Key elements of the settlement include: payment of a civil penalty in the amount of \$1.6 million; continued implementation of best management practices for reducing the concentrations of metals in stormwater discharges from the site:

construction of a covered warehouse for the storage of offline transformers and other electric equipment while being staged for processing or disposal; and construction of a new facility-wide stormwater treatment system using metals filtration technology. As of December 31, 2017, Pepco had completed construction of the stormwater treatment plant, and the plant is undergoing acceptance testing. Several permit limits have not been met during this initial phase of operation, which is not uncommon for a customfitted system of this type. The facility is working to make the necessary adjustments and fine-tuning. Pepco is committed to meeting or exceeding its environmental responsibilities and the investments made at the Benning Service Center show our continued support for that obligation.







<sup>1</sup> Exelon operates in multiple local and state jurisdictions that may have different spill accounting and reporting requirements. Reportable spills presented include both spills required to be reported to the National Response Center (NRC), as well as spills that are required to be reported to local or state regulatory agencies, including voluntary reporting of spill information. NRC-reportable spills account for 5 percent, or less, of reportable spills in each of the last three years.



<sup>2</sup> PNCs are self-identified violations of local, state and/or federal permit requirements, and may include actual environmental impacts or administrative issues that do not have an environmental impact. Opacity PNCs are tracked separately and not included in this chart.

Unrelated to the Benning facility enforcement action just described, the District of Columbia Department of Energy and Environment (DOEE) and several federal agencies have been conducting a separate remediation investigation and feasibility study review. This review focused on the entire tidal reach of the Anacostia River extending from just north of the Maryland-District of Columbia boundary line to the confluence of the Anacostia and Potomac Rivers, In March 2016, DOEE released a draft of the river-wide remediation investigation report for public review and comment. DOEE asked Pepco, along with parties responsible for other sites along the river, to participate in a Consultative Working Group to provide input into the process for future remedial actions addressing the entire tidal reach of the river and to ensure proper coordination with the other river cleanup efforts currently underway, including cleanup of the river segment adjacent to the Benning Road site. Pepco agreed to participate in the Consultative Working Group indicating, however, that its participation is not an acceptance of any financial responsibility beyond the work that will be performed at the just discussed Benning Road location. A record of decision, selecting the final remedy for the project, will ultimately be issued by DOEE.

# **Eliminating Equipment with PCBs**

We are actively working to manage the risk posed by equipment containing polychlorinated biphenyls (PCBs). During replacement, repair and servicing efforts, we continue to eliminate equipment containing PCBs greater than 50 parts per million, the regulatory threshold for PCB contaminated fluid, in our power plants and on our T&D networks. Exelon Power facilities no longer have any oil-filled electrical equipment containing regulated levels of PCBs, while Exelon Nuclear plans to replace any remaining PCB transformers at its sites by the end of 2020.

Similarly, our electric utilities have been working to proactively identify equipment for replacement when it is likely to be contaminated. Among other means, we participate in EPRI's Program 51, using its industry-wide database to gather nameplate information and identify with a high success rate if a piece of equipment has PCBs or not, to maximize efficiency in removing high-risk equipment. These replacement efforts, combined with voluntary retro-fill and reclassification programs, are resulting in the continued reduction of PCB-containing equipment across the company and are therefore reducing environmental risk.

# **Managing Remediation at Historic Manufactured Gas Plants**

Our utilities continue to remediate former manufactured gas plant (MGP) sites that were used primarily by predecessor companies between 1850 and the 1950s to manufacture gas for lighting and other purposes. We participate in the Utility Solid Waste Activities Group Remediation and Response Committee, which allows us to leverage research and advocacy programs and lessons learned from other utilities around the issue. Our utilities anticipate that the majority of remediation at remaining sites will continue for several more years. ComEd closed two MGP sites in 2017, with 22 remaining in the system with remediation expected to continue through 2023. At PECO, remediation of one site commenced in 2017, with nine sites remaining being actively worked on. DPL has identified two former MGP sites and remediation of both has been completed and approved by MDE and the Delaware Department of Natural Resources and Environmental Control, respectively; a third site is currently undergoing study. BGE has two remaining MGP locations that require some level of remediation and/or ongoing monitoring. The status of the utility MGP programs and remediation reserves are discussed in more detail in Exelon's 2017 10-K Environmental Remediation Matters discussion.



## **EXELON ENVIRONMENTAL AWARDS**

Each year, Exelon conducts an Environmental Achievement Awards campaign. These awards recognize outstanding employee projects that help sustain the environment while creating value for the company and local communities. Examples include projects that reduce environmental risks, enhance environmental stewardship, increase operational efficiency, utilize innovation and enhance the company's environmental reputation. In 2017, we announced three award winners and 10 honorable mentions out of 73 total nominations. The three 2017 award winners are described below.

PECO Conservation Rights-of-Way. In 2016, PECO's Vegetation Management department placed 3,626 acres of transmission line ROW — 30 percent of PECO's total transmission ROW acreage — in certified conservation status under the WHC Conservation Certification program. WHC's certification requires that projects have a stated conservation objective and exceed regulatory requirements. The PECO conservation ROW program has leveraged existing contracting budget and vendors to implement IVM principles as its normal operating practice. IVM allows PECO to meet regulatory and reliability requirements while also promoting and improving wildlife habitat. As a result, reduced brush mowing also helps to lower the carbon footprint of PECO's daily operations.

BGE Osprey Watch. At BGE, ospreys have caused more than 100 power outages since 2006. To protect both the osprey and electric reliability, BGE created Osprey Watch in 2016, a program that allows customers to email nest locations to BGE via OspreyWatch@bge.com. BGE Communications publicized the program through media outreach, social media posts and engaging environmental organizations to have them share the launch of the program with their stakeholders. The inaugural year of Osprey Watch was extremely successful, with customers providing 24 reports of osprey nests on BGE equipment in Harford, Baltimore and Anne Arundel Counties and

the City of Baltimore. In addition to preventing outages, Osprey Watch has enhanced BGE's reputation as an environmental steward.

PHI Avian Collision Avoidance. Since 2005, PHI has implemented an Avian Protection Program (APP) to improve reliability, ensure customer satisfaction and minimize risk to birds. PHI uses the APP to respond to avian incidents and proactively minimize electrocution and collision hazards on its systems. PHI developed GIS analysis of land cover and use as well as vulture and eagle concentrations and roosts as part of a priority raptor habitat map. Further, a priority eagle risk map has been developed using GIS analysis and eagle flight data from telemetry. Through proactive mitigation techniques such as line marking, retrofitting, redesign and better planning, PHI has increased line visibility for eagles in the region. In 2016, PHI expanded avian protection efforts to its operations functions so they can more effectively maneuver in the field to better serve customers, reduce risk to birds across all territories and improve reliability.

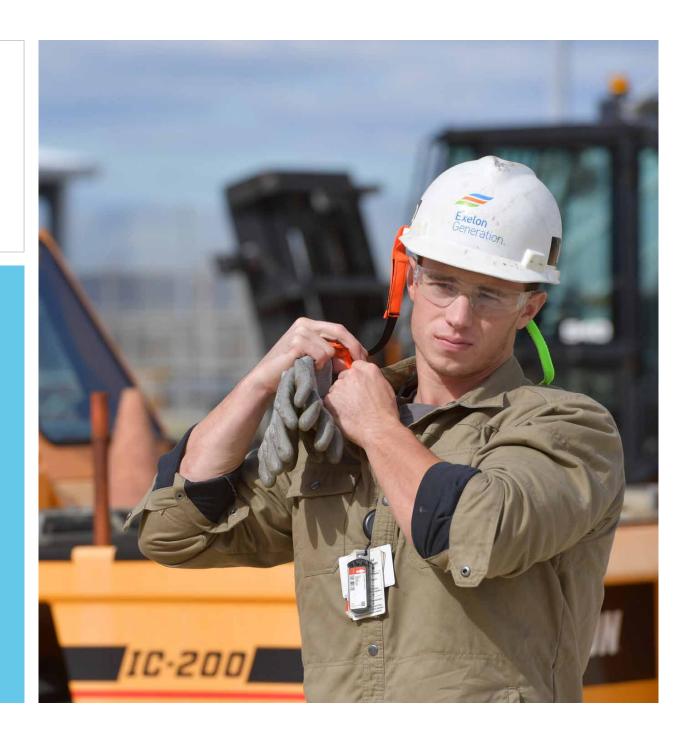


2017 Exelon Environmental and Safety Achievement Award Winners.



# **EFFECTIVE GOVERNANCE**

- Streamlined approximately **300** cyber and physical security controls by aligning with the National Institute of Standards and Technology Cyber Security Framework
- Became the first energy company and **27th member** of the Billion Dollar Roundtable, an advocacy organization that promotes corporate supplier diversity excellence
- Increased supply chain spend with diversity-certified suppliers to **\$2** billion





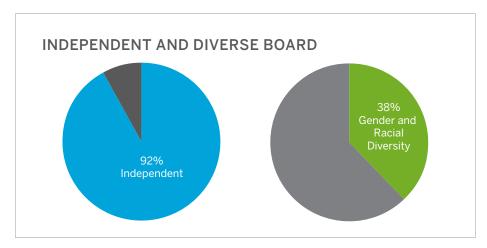
Ethics and integrity are the foundation of our business. Our commitment to good corporate governance and principled risk management is critical to our ability to provide clean, affordable, reliable energy to our customers. Our company mission and values drive our work, guided by our Code of Business Conduct.

## ETHICS AND CORPORATE GOVERNANCE

Every employee must adhere to Exelon's Code of Business Conduct, which is overseen by the Audit Committee of our Board of Directors. We develop policies and procedures and conduct training to ensure effective implementation throughout the company. We update the Code as needed to reflect new requirements based on changes in regulation and leading practices. Exelon's suppliers and third-party business partners are also required to comply with Exelon's Code of Business Conduct. We maintain a helpline and website for stakeholders to report potential ethical, compliance or legal violations. Helpline reports are actively monitored by the compliance and ethics practice area of the Legal Department. Ethics personnel oversee investigations

conducted by seasoned, trained investigators. Exelon takes appropriate action, up to and including dismissal, when any wrongdoing is substantiated.

All members of the Exelon Board of Directors, with the exception of the Chief Executive Officer, are independent according to applicable law and the New York Stock Exchange listing standards, as incorporated into Exelon's Corporate Governance Principles. The Board has six standing committees — Audit, Compensation and Leadership Development, Corporate Governance, Generation Oversight, Finance and Risk, and Investment Oversight — that oversee specific aspects of our performance and operations. As of year-end 2017, our 13-member Board includes three women and two racially diverse members, with an average director tenure of approximately seven years. The Corporate Governance Committee of the Board is responsible for Exelon's strategies and efforts to protect and improve the quality of the environment including but not limited to the company's climate change and sustainability policies and programs. For more information on Exelon's governance structure, please see the corporate governance section of our website. Exelon's sustainability governance structure is also described in the Managing Sustainability section of this report.





The Exelon Code of Business Conduct outlines expectations for directors, employees, suppliers and business partners with regard to how we conduct ourselves and our business.



### **RISK MANAGEMENT**

Exelon's Enterprise Risk Management (ERM) purpose is to power better decisions by managing the unexpected in a world of uncertainty. The ERM team provides and institutionalizes Exelon's risk management framework and products. Our foundational ERM pillars include a culture of talent development, a focus on customers and business partners, deploying and leveraging technology and a robust risk capital framework to enable opportunities and to support the disciplined execution of growth initiatives. The goal of our approach is to eliminate negative and unanticipated events — adverse events for which we were unaware of the potential, or underestimated the likelihood or impact. Exelon's market, credit, analytical and operational risk managers take an enterprise-wide approach to identifying, assessing, mitigating and reporting risk. As part of our due diligence, we ensure that our strategic plan, supporting business plans, key risk indicators and key performance indicators are aligned with our risk appetite and monitored, and that we execute the risk program consistent with industry-leading practices.

In 2017, Exelon's integrated risk management framework made significant progress on the assessment, prioritization, reporting and management of our portfolio of risks. Our risk management culture, which recognizes risks as being dynamic, fluid and highly interdependent across the enterprise, has continued to produce insightful and actionable analysis and reporting. The refinement of our risk management framework and risk appetite continues to help define strategic priorities and serve as a guide to action. Updates to Exelon's Risk Appetite Statement in 2017 focused on enhanced discipline around execution of Exelon's Risk Imperatives.

Operationally, our ERM group uses a continuous, systematic and dynamic risk assessment process that involves regular interaction with and feedback from the business. In 2017, enhancements were made in establishing a systematic review of our top risks, controls and mitigation actions, along with

### MANAGING RISK AT EXELON

Exelon regularly completes risk assessments to identify and focus on the top risks facing our company. Our assessment framework looks at strategic, financial, operational, regulatory/compliance and reputational risks and is being automated for improved intelligence and risk analytics. Additionally, Exelon employs various market, credit, liquidity and operational risk assessment tools to identify financial and business risk exposures that are evaluated by risk management committees at the corporate level and within



THE RISK WAY			
Frame	Identify	Assess and Manage	Monitor and Respond
Relevant and reliable information upon which to base decisions or actions	Systematic identification of key risk drivers	Frameworks, tools and analyses that formulate risk management strategies	Risk response plans, tracking and monitoring of residual and emerging risks
<ul><li>Strategic purpose and objective</li><li>Type of decision</li><li>Time horizon</li></ul>	<ul><li>Risks to execution of strategy</li><li>Risk driver type and causes</li></ul>	<ul><li>Risk vs. return profile</li><li>Alignment with Risk Appetite</li></ul>	<ul> <li>Control and mitigation effectiveness</li> <li>KRIs and exposure thresholds/limits</li> </ul>
	<ul> <li>Interconnected and emerging risks</li> </ul>	<ul> <li>Controls and mitigations</li> </ul>	Trigger events     and decisions



discussions of emerging issues and industry trends. One example of these advancements is the continued adoption and consistent use of the bowtie assessment methodology by risk owners. This allows for enhanced ability to review and challenge resulting risk assessments as well as action plans to reduce their likelihood of occurrence, or impact in the event the risk occurs.

We continue to enhance our risk management program at Exelon along with the changing risk landscape. Our comprehensive framework of market, credit and operational risk limits along with effective mitigation and escalation processes using the latest available tools, systems and technologies has furthered the alignment of the risk management program and business strategy. In 2017, we continued to invest in talent development and training to ensure well-qualified professionals are executing on our risk management framework and programs.



# **Cybersecurity and Business Continuity**

Our commitment to resilience and reliability means that we must address security threats that have the potential to disrupt service to our customers. Exelon's Corporate and Information Security Services (CISS) team takes a comprehensive, risk-based approach to protecting our people, processes and technology, playing a key role in effectively mitigating cyber and physical security risks. In recognition of an evolving threat landscape, CISS refreshed its security controls for the protection of personnel, facilities, cyber assets and information. By aligning with the National Institute of Standards and Technology Cybersecurity Framework, CISS streamlined approximately 300 cyber and physical security controls, engaged and trained security professionals across the company, assessed and remediated gaps, and is implementing a more robust, sustainable operating model.

Additionally, Exelon continues to grow our Cyber Mutual Assistance Program, working with industry peers, government entities and technology firms to share cyber and physical threat information with the goal of providing cooperation and support during event response and recovery efforts.

Our business continuity and crisis management processes include standardized protocols to ensure that, should a situation emerge that impacts our operations, our leaders have the tools to manage it as quickly and seamlessly as possible. Located within the CISS organization, our award-winning business continuity and crisis management (BCCM) program comprises certified business continuity professionals who offer subject matter expertise in the resumption of critical business operations and crisis management. The BCCM team is supported by embedded operating company Incident Response Teams and Emergency Response Organizations. Together these teams leverage standardized processes to prevent, detect, respond to and recover from potential disruptions to mitigate possible operational impact to the business.





PECO employees plan work day actions to support Hurricane Irma recovery.

In 2017, Exelon's successful response and recovery efforts crossed a broad spectrum of events that had the potential to result in significant operational and personnel impacts. The Exelon team effectively managed issues ranging from support for Houston-based employees and their surrounding communities during Hurricane Harvey, to domestic and international terrorism threats, facility issues and third-party cybersecurity disruptions. Each event provides an opportunity to enhance and improve our existing procedures, capturing lessons learned within more than 400 functional business continuity plans across Exelon. Through comprehensive plan development, maintenance, awareness, training and functional tabletop exercises, the BCCM team and trusted business partners validate Exelon's business critical processes, ensuring the sustainability and resilience of

# **PUBLIC POLICY**

the organization.

Exelon actively advocates for federal, regional, state and local policies based on sound science and thorough consideration of environmental, economic and community impacts to promote clean, affordable, reliable electric and

gas service to our customers and the communities we serve. We discuss our positions on specific legislation and regulation throughout this report.

Exelon also participates in various trade organizations that advocate on behalf of the industry broadly. In many cases, we are in alignment with the advocacy positions of these organizations, but not always. In cases where our views diverge, we use other means to voice our positions, most notably in support of strong policies to support and encourage clean energy. Exelon also contributes to political candidates and organizations as part of our engagement in policy dialogue. We do so in accordance with our Corporate Political Contributions Guidelines, available on our website along with the semiannual disclosures of our political and trade association contributions.

# SUSTAINABLE SUPPLY CHAIN

Exelon has approximately 8,000 suppliers that provide a wide range of materials and services to support our company operations. We actively evaluate and monitor our suppliers so that we understand our supply chain and any potential risks that need to be managed by Exelon to ensure that our supply chain remains reliable and resilient under all potential scenarios. In addition to managing our supply chain from a risk and performance perspective, we also work to ensure that our sourcing meets company objectives in key areas such as environmental responsibility, supplier diversity and sourcing from local businesses to support employment and economies in the areas served by Exelon companies.

# **Supply Chain Risk Management**

Our Supply and Enterprise Credit Risk Management team has developed a risk management process that uses a structured approach for identifying, communicating and mitigating risks. This team conducts in-depth risk reviews for our top suppliers. Evaluations address the likelihood and potential impact of disruption of products and services and assess risks to our



business continuity and compliance, including a review of supplier business continuity plans to ensure sufficient consideration of a broad range of potential business disruptions. The results of these risk reviews are regularly communicated to management. Criteria in risk assessments include:

- Severity. We quantify potential costs associated with suppliers, such as business interruption risk, service and material quality risks and volatility.
- Probability. This encompasses a qualitative and subjective assessment of the likelihood of the risk event occurring.
- Criticality. We conduct an assessment of how essential the supplier is to business functions and company objectives, such as diversity and sustainability.
- Resilience. This includes both an assessment of whether Exelon and our suppliers have redundancies and alternatives in place to manage unexpected events.

Based upon our semiannual review of all suppliers to determine criticality to our business, in 2017, Exelon identified 96 critical Tier 1 suppliers, representing 47 percent of total spend. As part of this process, five highrisk critical Tier 1 suppliers have been identified, with risk mitigation plans

implemented to manage risks and to ensure that business interruptions do not occur. As part of our real-time monitoring of our supply chain, Exelon also continues outreach to suppliers when significant events occur, such as during Hurricanes Irma and Maria in 2017, and takes proactive steps to ensure that needed supplies are not interrupted.

In addition to meeting contract terms and conditions tailored to manage each supplier's engagement, all Exelon business partners, including our suppliers are required to comply with Exelon's Code of Business Conduct, which establishes requirements for how Exelon and our business partners will conduct their business operations. Suppliers are also required to answer questions related to environmental performance.

# **Improving Sustainability with Our Suppliers**

Exelon participates in industry and government efforts to improve the environmental and social performance of supply chain operations, and we are cognizant of the influence we can have toward sustainable practices given our position as a large purchaser. We aim to minimize potential impacts of the goods and services we procure and encourage our suppliers to improve their operational performance. We advance sustainability in our supply chain through both our direct relationships with our suppliers

# **2017 AWARDS**



**Exelon received the Utility of the Year** Award from the Electric Utility Industry Sustainable Supply Chain Alliance, in recognition of Exelon's leadership within the Alliance, including our commitment to supply chain sustainability and implementation of the Alliance's standards and best practices.





and our collaboration as a founding member of the Electric Utility Industry Sustainable Supply Chain Alliance (www.euissca.org). Exelon continues to pursue progress against the Alliance's sustainability maturity model by creating more rigor around the scoring of sustainability aspects of supplier proposals in bids and by recognizing top suppliers with awards related to their environmental performance. As part of the Alliance in 2017, Exelon worked with 15 other utilities to drive sustainability through the development of voluntary standards for products, as well as the coordination of supplier sustainability performance surveys, educational materials for buyers and suppliers and speaking engagements at major supply chain events. In 2017, Exelon was represented on the Alliance's executive committee serving in the role of treasurer. In 2018, this leadership will continue with Exelon filling the Vice Chair role, automatically ascending to the role of Chair in 2019.

# **Supporting Local and Diverse Suppliers**

Exelon sources materials, goods and services from thousands of large and small businesses across the country. In 2017, Exelon spent more than \$9 billion with suppliers, excluding fossil and nuclear fuel purchases. More than 60 percent of this was spent locally in our key operating areas — Illinois, Pennsylvania, Maryland, New Jersey, Delaware, District of Columbia and Texas — where our businesses are most heavily concentrated.

In 2017, our spending with diversity-certified suppliers reached \$2 billion — an increase of more than 119 percent since 2013 — and accounted for 23 percent of our sourceable spending. As further recognition for Exelon's commitment to building a diverse supply chain, in 2017 we became the first energy company and 27th member of the prestigious Billion Dollar Roundtable, a top-level advocacy organization that promotes corporate supplier diversity excellence. The organization recognizes companies that spend at least \$1 billion annually with Tier 1 diverse suppliers. Tier 1 suppliers are those with whom Exelon spends directly.

High-margin spend with diversity-certified suppliers totaled \$99 million in 2017. The Exelon "high margin" strategy has been regarded as a utility industry best practice. This strategy focuses on fully integrating diversitycertified suppliers in underutilized professional services categories. We embarked on the high margin strategy because businesses in the professional services industries typically have higher profit margins, and therefore have an increased capacity to contribute to community economic development through job creation and community-based organization support.

The strategy highlights eight categories of spending in the professional services areas:

- · Advertising and marketing
- Banking
- · Business consulting
- Engineering and technical consulting
- Financial services
- HR services
- IT professional services
- Legal

In 2017, Exelon arranged \$128 million in credit lines with 24 community and minority-owned banks in Illinois, Maryland, New Jersey and Pennsylvania, reinforcing the company's commitment to invest in the communities we serve. These transactions help grow local businesses and the local economy, and are critical to communities that remain challenged by current economic conditions. Exelon's minority and community banking program, which began in 2003, is unique in the energy industry. Administered by JP Morgan Chase since its inception, the program now has 24 participating banks across the country, more than four times the original number.



# **2017 AWARDS**



**Exelon's Diverse Business Empowerment** program received the following corporate awards and recognitions in 2017:

The Women's Business Development Center recognized ComEd for its involvement and leadership of the Illinois **Utilities Business Diversity Council, with** involvement from the Illinois Commerce Commission.



The Capital Region Minority Supplier **Development Council Annual Corporation** of the Year award was presented to PHI for demonstrating an outstanding development and inclusion of African American, Asian, Hispanic/Latino and Native American businesses.

ACE received the 2017 Economic Impact award from the New Jersey Board of Public Utilities for the considerable increase in year-over-year spend with local suppliers from 2015 to 2016.

Exelon Corporation currently has \$2 billion in pension, employee savings plan and retiree health care assets invested with 20 diversity-certified investment firms. In addition, another 13 minority investment firms participated in or co-managed \$3.8 billion in corporate bond deals.

### **Conflict Minerals**

We adhere to all regulatory requirements related to our supply chain practices. In alignment with Section 1502 of the Dodd-Frank Act and the U.S. Securities and Exchange Commission's (SEC) conflict mineral reporting requirements, Exelon reviewed whether conflict minerals — including tin, tantalum, tungsten and gold, and other minerals determined by the U.S. government to be financing conflict in the Democratic Republic of the Congo or its neighboring countries — were necessary to the production or functionality of any product manufactured or contracted for manufacture by the company. After a review of the products we sell and services we deliver, we concluded that we do not have any reporting requirements under the rule.



# **APPENDIX**





2017 Electric Generat	2017 Electric Generation By Major Station <sup>1,2</sup>												
		N.	<b>GENERATION</b> (GWh) <sup>4</sup>			(tl	EMISSIO nousand sho			TECHNOLOGY			
FOSSIL	Location Water Body	Net Operational Capacity (MW) <sup>3</sup>	2015	2016	2017	Туре	2015	2016	2017	Current Air Pollution Control	Cooling Water <sup>6</sup>		
Colorado Bend Energy Center 6 gas 2X1 combined cycle turbines & 3 steam generators (intermediate)	Wharton, TX Colorado River	1,556	1,558	2,239	5,462	SO <sub>2</sub> NO <sub>x</sub> CO <sub>2</sub>	* 0.2 800	0.1 1,130	0.2 2,381	SCR, low-NO <sub>x</sub> burners	Closed		
Eddystone 2 oil/gas steam units (intermediate) 4 combustion turbines (peaking)	Eddystone, PA <i>Delaware River</i>	820	192	141	12	SO <sub>2</sub> NO <sub>x</sub> CO <sub>2</sub>	0.1 0.1 183	0.1 126	* * 42	Low-NO <sub>x</sub> burners with separated overfire air	Open		
Handley 3 gas steam units (2 peaking and 1 intermediate)	Fort Worth, TX Lake Arlington	1,265	371	550	355	SO <sub>2</sub> NO <sub>x</sub> CO <sub>2</sub>	* 0.1 278	* 0.1 401	* 0.1 255	SCR	Open		
Hillabee Energy Center Combined cycle: 2 gas 2X1 turbines & 1 steam generator (intermediate)	Alexander City, AL Municipal Supply	753	5,193	5,387	3,095	SO <sub>2</sub> NO <sub>x</sub> CO <sub>2</sub>	* 0.2 2,134	* 0.2 2,227	0.1 1,299	SCR	Closed		
Mountain Creek 3 gas steam units (2 peaking and 1 intermediate)	Dallas, TX Mountain Creek Cooling Pond	808	406	506	183	SO <sub>2</sub> NO <sub>x</sub> CO <sub>2</sub>	* 0.2 302	* 0.2 341	* 0.1 133	Units 6 and 7 utilize induced flue gas recirculation; Unit 8 utilizes NO <sub>x</sub> SCR	Open		
Mystic & Mystic Jet Combined cycle: 4 gas 2X1 turbines, 3 steam generators & 1 combustion turbine (intermediate)	Charlestown, MA <i>Mystic River</i>	2,001	2,945	6,940	7,158	SO <sub>2</sub> NO <sub>x</sub> CO <sub>2</sub>	0.7 0.3 1,398	0.8 0.5 3,151	0.4 0.3 3,178	SCR, low-NO <sub>x</sub> burners	Closed		
Wolf Hollow Combined cycle: 4 gas turbines & 2 steam generators (intermediate)	Granbury, TX Lake Granbury	1,769	2,941	3,030	6,137	SO <sub>2</sub> NO <sub>x</sub> CO <sub>2</sub>	* 0.3 1,345	0.3 1,390	0.3 2,620	SCR	Closed		



2017 Electric Generation By Major Station <sup>1,2</sup> (Continued)												
			GI	ENERATION (GWh) <sup>4</sup>	N	(th	EMISSIO nousand sho			TECHNOLOGY		
RENEWABLE	Location Water Body	Operational Capacity (MW) <sup>3</sup>	2015	2016	2017	Туре	2015	2016	2017	Current Air Pollution Control	Cooling Water <sup>6</sup>	
Albany Green Energy Biomass-fueled combined heat (steam) and power generation (baseload) 99%	Albany, GA Groundwater	46	-	-	282	SO <sub>2</sub> NO <sub>x</sub> CO <sub>2</sub>	-	-	0.1 376	SNCR, duct sorbent injection, activated carbon injection, baghouse, overfire air system	Closed	
<b>Conowingo<sup>7</sup></b> 11 hydro units (baseload)	Darlington, MD Susquehanna River	572	1,597	1,369	1,945						Run-of- river	
Fairless Hills <sup>8</sup> 2 landfill gas units (peaking)	Fairless Hills, PA Delaware River	60	257	242	230	SO <sub>2</sub> NO <sub>x</sub> CO <sub>2</sub>	0.1 0.1 4	0.1 0.1 11	0.1 0.1 11		Open	
Muddy Run <sup>7</sup> 8 pumped-storage units (intermediate)	Drumore, PA Susquehanna River	1,070	1,142	1,258	1,416						Pumped storage	
Exelon Wind <sup>9</sup> 832 units 51–100%		961	3,889	3,790	4,050							
<b>Solar</b> <sup>9</sup> 385 units 4.2–100%		532	922	984	1,057							



2017 Electric Generation By Major Station <sup>1,2</sup> (Continued)										
			GE	NERATION (GWh) <sup>4</sup>		TECHNOLOGY		NUCLEAR	OPERATIONS	DATA
NUCLEAR¹º	Location Water Body	Net Capacity (MW) <sup>3</sup>	2015	2016	2017	Cooling Water <sup>6</sup>	Unit	Commercial Ops. Began	Current License Expiration <sup>11</sup>	Spent Fuel Pool Capacity Reached <sup>12,13</sup>
<b>Braidwood</b> 2 PWR units (baseload)	Braidwood,IL Kankakee River	2,381	19,740	19,849	19,944	Closed (dedicated pond)	1 2	1988 1988	2046 2047	Dry cask storage in operation
<b>Byron</b> 2 PWR units (baseload)	Byron, IL Rock River	2,347	19,472	19,600	19,153	Closed	1 2	1985 1987	2044 2046	Dry cask storage in operation
Calvert Cliffs 2 PWR units (baseload) 50.01%	Lusby, MD Chesapeake Bay	888	7,322	7,382	7,555	Open	1 2	1975 1977	2034 2036	Dry cask storage in operation
<b>Clinton</b> 1 BWR unit (baseload)	Clinton,IL Clinton Lake	1,069	8,664	8,914	8,348	Closed	1	1987	2026	Dry cask storage in operation
<b>Dresden<sup>14</sup></b> 2 BWR units (baseload)	Morris, IL Kankakee River	1,845	15,188	15,444	15,445	Open	2 3	1970 1971	2029 2031	Dry cask storage in operation
Fitzpatrick <sup>15</sup> 1 BWR unit (baseload)	Scriba, NY Lake Ontario	842	-	-	5,396	Open	1	1974	2034	Dry cask storage in operation
<b>LaSalle</b> 2 BWR units (baseload)	Seneca, IL Illinois River	2,320	18,686	19,144	18,908	Closed	1 2	1984 1984	2042 2043	Dry cask storage in operation
<b>Limerick</b> 2 BWR units (baseload)	Sanatoga, PA Schuylkill River <sup>16</sup>	2,317	18,931	19,395	18,553	Closed	1 2	1986 1990	2044 2049	Dry cask storage in operation
Nine Mile Point 2 BWR units (baseload) Unit 1: 50%, Unit 2: 41%	Scriba, NY Lake Ontario	838	7,004	6,842	6,997	Open/Closed	1 2	1969 1986	2029 2046	Dry cask storage in operation
<b>Oyster Creek</b> <sup>17</sup> 1 BWR unit (baseload)	Forked River, NJ Barnegat Bay	625	5,259	4,585	5,430	Open	1	1969	2029	Dry cask storage in operation
<b>Peach Bottom<sup>18</sup></b> 2 BWR units (baseload) 50.00%	Peach Bottom Township, PA Susquehanna River	1,303	9,929	10,938	10,861	Open	2 3	1974 1974	2033 2034	Dry cask storage in operation



#### 2017 Electric Generation By Major Station<sup>1,2</sup> (Continued) **GENERATION TECHNOLOGY NUCLEAR OPERATIONS DATA** (GWh)⁴ Current **Spent Fuel** Net NUCLEAR<sup>10</sup> **Pool Capacity** Commercial License Location Capacity Cooling Unit Ops. Began Expiration<sup>11</sup> Reached<sup>12,13</sup> (continued) Water Body (MW) 2015 2016 2017 Water<sup>6</sup> **Ouad Cities** Cordova, II 1.403 11.672 11.741 11.551 Open 1973 2032 Dry cask storage 2 BWR units (baseload) 2 1973 2032 Mississippi River in operation 75.00% R.E. Ginna Ontario, NY 288 2,401 2,535 1970 2029 2,349 Open Dry cask storage 1 PWR (baseload) Lake Ontario in operation 50.01% Salem Lower Alloways 1.007 7.919 6.685 7.641 Open 1977 2036 Dry cask storage Creek Twp., NJ 2 2040 2 PWR units (baseload) 1981 in operation 42.59% Delaware Estuary Three Mile Island<sup>19</sup> Middletown, PA 837 6.598 7.083 6.861 1974 2034 Dry cask storage Closed 1 PWR unit (baseload) Susquehanna River in 2021

- 1 Owned generation as of Dec. 31, 2017, Table does not include station auxiliary equipment, plants comprised solely of peaking units or joint-owned plants where Exelon owned less than 100 MW. However, the corporate emission and intensity totals presented in the Reducing Air Emissions section of this report include emissions and generation from all equity-owned generation. Further, the emissions and intensities shown in the Reducing Air Emissions section of the report include retired and divested fossil unit emissions for the time periods in 2015–2017 during which Exelon had an ownership interest in these units. Numbers have been rounded. For more information on Exelon's generation fleet, please see Item 2: Properties, in Exelon's 2017 10-K.
- 2 Percentages listed under station name reflect Exelon's fractional ownership interest for those assets that are not 100 percent.
- 3 For nuclear stations, capacity reflects the annual mean rating. Fossil stations reflect a summer rating. Wind and solar facilities reflect nameplate capacity. Depicted capacity is operational only and does not include retired unit capacity.
- 4 Net generation.
- 5 \* Indicates emissions less than 50 short tons.
- 6 Open a system that circulates cooling water withdrawn from the environment, returning it with waste heat to its source. Closed — a system that recirculates cooling water with waste heat dissipated to the atmosphere through evaporation.
- 7 On August 29, 2012, Generation submitted hydroelectric license application to the FERC for a 46-year license for the Conowingo Hydroelectric Project. Based on the FERC procedural schedule, the FERC licensing process was not completed prior to the expiration of Conowingo's license on September 1, 2014. On September 10, 2014, FERC issued an annual license for Conowingo, effective as of the expiration of the previous license. If FERC does not issue a new license prior to the expiration of annual license, the annual license will renew automatically.
- 8 Fairless Hills CO<sub>2</sub> emissions are those related to fossil fuel combustion and exclude landfill gas CO<sub>2</sub> emissions.
- 9 Ownership may vary with each asset.
- 10 BWR boiling water reactor; PWR pressurized water reactor.
- 11 Dates in bold indicate that NRC license renewals have been received. Generation is in the process of pursuing a 20-year license extension for the Clinton plant, the only remaining nuclear unit for which an extension has not yet been granted.
- 12 Dry cask storage will be in operation at all sites prior to the closing of on-site storage pools.
- 13 Zion Station, a two-unit site in Illinois, has ceased power generation; its SNF is currently stored in dry casks on site.
- 14 Dresden Unit 1 has ceased power generation; its SNF is stored in dry casks.
- 15 On March 31, 2017, Generation acquired the single-unit James A. Fitzpatrick nuclear generating station located in Scriba, New York from Entergy Nuclear Fitzpatrick LLC.
- 16 Supplemented with water from the Wadesville Mine Pool and the Still Creek Reservoir at Tamagua via the Schuylkill River, and the Delaware River via the Bradshaw Reservoir, and Perkiomen Creek.
- 17 On February 2, 2018, Exelon announced that Generation will permanently cease generation operations at Oyster Creek at the end of its current operating cycle in October 2018. In 2010, Generation had previously agreed to permanently cease generation operations at Oyster Creek by the end of 2019.
- 18 Peach Bottom Unit 1 has ceased power generation; its SNF has been transferred to the U.S. DOE and is stored in Idaho.
- 19 On May 30, 2017, Exelon announced that Generation will permanently cease generation operations at Three Mile Island on or about September 30, 2019 and has notified the NRC.



### **ABOUT THIS REPORT**

The Exelon 2017 Sustainability Report details our company's programs and performance in the areas of economic, social, governance and environmental initiatives. Exelon is committed to reporting on our sustainability performance annually, and this report follows our 2016 Sustainability Report.

Data in this report covers 2015 through 2017, with an emphasis on activities in the reporting period of January 1, 2017 through December 31, 2017. Where it may be helpful for the reader to understand relative trends over time, we have provided charts or tables covering three years of performance. Data reflects all wholly or partially owned generating units for the time period of ownership unless otherwise noted. Contracted power (i.e., purchases for trading or resale) is outside the scope of this report.

We also seek annual assurance of our GHG emission inventory. Lloyd's Register Quality Assurance, Inc. (LRQA), an accredited GHG verifier, provided verification of our 2017 inventory to a reasonable assurance level in accordance with The Climate Registry and ISO 14064 standards. The verification statement is available on our website.

## **GRI INDEX**

The indicators below are from the GRI Standards and the Electric Utilities Sector Supplement. This report has been prepared in accordance with the GRI Standards: Core option. All disclosures in this GRI Content Index refer to GRI Standards 102 and 103 and the 200, 300 and 400 series of Standards published in 2016.

GENER	AL DISCLOSURES	REPORT SECTION					
Organiza	Organizational Profile						
102-1	Name of the organization	About Exelon					
102-2	Activities, brands, products, services	About Exelon					
102-3	Location of headquarters	About Exelon					
102-4	Location of operations	About Exelon					
102-5	Ownership and legal form	About Exelon					
102-6	Markets served	About Exelon					
102-7	Scale of the organization	About Exelon					
102-8	Information on employees and other workers	Diversity & Inclusion					
		Exelon reports the total number of employees, identifying gender, minority and age group breakdowns. As all of Exelon's employees are located in the United States and less than 1 percent of employees are part-time, we have not provided gender and regional breakdowns for these categories.					
102-9	Supply chain	Sustainable Supply Chain					
102-10	Significant changes to the organization and supply chain	About Exelon					
102-11	Precautionary principle or approach	Exelon 2017 10-K					
102-12	External initiatives	Key Sustainability Issues; Stakeholder Engagement; Climate Change Action and Awareness; Sustainable Supply Chain					
102-13	Membership of associations	Exelon website					
EU1	Installed capacity	About Exelon; 2017 Electric Generation by Major Station					
EU2	Net energy output	About Exelon; 2017 Electric Generation by Major Station					
EU3	Number of customers	About Exelon					
EU4	Length of transmission and distribution lines	About Exelon					
EU5	Allocation of CO <sub>2</sub> e emissions allowances	Exelon fossil plants in Massachusetts utilize Regional Greenhouse Gas Initiative (RGGI) CO <sub>2</sub> e allowances.					



GENER	AL DISCLOSURES (continued)	REPORT SECTION
Strategy		
102-14	Statement from senior decision-maker	A Message from Our CEO
Ethics ar	nd Integrity	
102-16	Values, principles, standards and norms of behavior	Managing Sustainability; Ethics and Corporate Governance
Governai	nce	
102-18	Governance structure	Sustainability Governance; Ethics and Corporate Governance
Stakehol	lder Engagement	
102-40	List of stakeholder groups	Stakeholder Engagement
102-41	Collective bargaining agreements	As of December 31, 2017, 11,845 employees, or 34 percent, of the Exelon workforce were covered by collective bargaining agreements.
102-42	Identifying and selecting stakeholders	Stakeholder Engagement
102-43	Approach to stakeholder engagement	Stakeholder Engagement; Disaster Preparedness and Awareness
102-44	Key topics and concerns raised	Stakeholder Engagement
Reportin	g Practice	
102-45	Entities included in the consolidated financial statements	Exelon 2017 10-K
102-46	Defining report content and topic boundaries	Key Sustainability Issues
102-47	List of material topics	Key Sustainability Issues
102-48	Restatements of information	No material restatements; footnotes on charts and tables throughout the report
		indicate any adjustments and scope of data.
102-49	Changes in reporting	No significant changes
102-50	Reporting period	About This Report
102-51	Date of most recent report	About This Report
102-52	Reporting cycle	About This Report
102-53	Contact point for questions regarding the report	Back Cover
102-54	Claims of reporting in accordance with GRI Standards	GRI Index
102-55	GRI content index	GRI Index
102-56	External assurance	About This Report
	ment Approach	
103-1	Material topics and boundaries	Key Sustainability Issues
103-3	Evaluation of management approach	Managing Sustainability; Ethics and Corporate Governance



SPECIFI	IC DISCLOSURES	REPORT SECTION
Economic	c Performance	
103-2 201-1 201-2	Management approach Direct economic value generated and distributed Climate change financial implications	About Exelon; Exelon 2017 10-K About Exelon; Local Economic Benefits; Giving Back to Communities Climate Change Action and Awareness; Exelon 2017 CDP Climate Change Response
Indirect E	Economic Impacts	
103-2 203-2	Management approach Significant indirect economic impacts	Partnering with Our Communities Local Economic Benefits
Procuren	nent Practices	
103-2 204-1	Management approach Proportion of spending on local suppliers	Sustainable Supply Chain Sustainable Supply Chain
Anti-Com	petitive Behavior	
103-2 206-1	Management approach Legal actions for anti-competitive behavior	Ethics and Corporate Governance Exelon was not involved in any regulatory enforcement actions alleging anticompetitive or anti-trust behavior in 2017.
Availabili	ty and Reliability	
103-2 EU10	Management approach Capacity and demand	Building the Next-Generation Energy Company; Operational Excellence at Our Regulated Utilities Building the Next-Generation Energy Company; Operational Excellence at Our Regulated Utilities
Demand-	Side Management	
103-2	Management approach	Energy Efficiency
Research	and Development	
103-2	Management approach	Building the Next-Generation Energy Company
Plant Dec	commissioning	
103-2	Management approach	Exelon 2017 10-K
System E	Efficiency	
103-2 EU11	Management approach Generation efficiency	Maintaining Operational Excellence, Productivity and Efficiency Maintaining Operational Excellence, Productivity and Efficiency
Energy		
103-2 302-1 302-4 302-5	Management approach Energy consumption within the organization Reduction of energy consumption Reduction in energy requirements of products and services	Exelon 2017 CDP Climate Change Response Exelon 2017 CDP Climate Change Response Exelon 2017 CDP Climate Change Response Maintaining Operational Excellence, Productivity and Efficiency; Energy Efficiency



SPECIF	IC DISCLOSURES (continued)	REPORT SECTION
Water		
103-2	Management approach	Improving Watershed Management; Exelon 2017 CDP Water Response
303-1	Water withdrawal by source	Improving Watershed Management; Exelon 2017 CDP Water Response
303-2	Water sources significantly affected	Improving Watershed Management; Exelon 2017 CDP Water Response
303-3	Water recycled and reused	Improving Watershed Management; Exelon 2017 CDP Water Response
Biodivers	sity	
103-2	Management approach	Habitat and Biodiversity
304-1	Sites near areas of high biodiversity value	Habitat and Biodiversity
304-2	Impacts on biodiversity	Habitat and Biodiversity
304-3	Habitats protected or restored	Habitat and Biodiversity
Emission	ns	
103-2	Management approach	Climate Change Action and Awareness; Full GHG Inventory and Accounting Protocol;
		Exelon 2017 CDP Climate Change Response
305-1	Direct (Scope 1) GHG emissions	Climate Change Action and Awareness; Full GHG Inventory and Accounting Protocol;
205.0	5	Exelon 2017 CDP Climate Change Response
305-2	Energy indirect (Scope 2) GHG emissions	Climate Change Action and Awareness; Full GHG Inventory and Accounting Protocol; Exelon 2017 CDP Climate Change Response
305-3	Other indirect (Scope 3) GHG emissions	Climate Change Action and Awareness; Full GHG Inventory and Accounting Protocol;
303 3	other maneet (ocope 3) and emissions	Exelon 2017 CDP Climate Change Response
305-4	GHG emissions intensity	Climate Change Action and Awareness; Full GHG Inventory and Accounting Protocol;
		Exelon 2017 CDP Climate Change Response
305-5	Reduction of GHG emissions	Climate Change Action and Awareness; Full GHG Inventory and Accounting Protocol;
		Exelon 2017 CDP Climate Change Response
305-7	$NO_x$ , $SO_x$ and other air emissions	Reducing Air Emissions
Effluents	s and Waste	
103-2	Management approach	Waste Management
306-2	Waste by type and disposal method	Waste Management
306-3	Significant spills <sup>1</sup>	Managing Environmental Risks
Environn	nental Compliance	
103-2	Management approach	Managing Environmental Risks
307-1	Non-compliance with environmental laws and regulations	Managing Environmental Risks
Employn	nent	
103-2	Management approach	Diversity & Inclusion
401-1	New employee hires and employee turnover	Diversity & Inclusion
401-3	Parental leave <sup>2</sup>	Progressive Workforce Policies



SPECIF	FIC DISCLOSURES (continued)	REPORT SECTION
Occupat	ional Health and Safety	
103-2 403-2	Management approach Injury and absenteeism rates³	Promoting a Culture of Safety and Health Safety Performance
Training	and Education	
103-2 404-2	Management approach Programs for upgrading employee skills	Accelerating Talent Accelerating Talent
Diversity	y and Equal Opportunity	
103-2 405-1	Management approach Diversity of governance bodies and employees	Diversity & Inclusion Diversity & Inclusion
Local Co	ommunities	
103-2 413-1 EU22	Management approach Local community engagement Displacement and compensation	Engaging with Communities; Giving Back to Communities Engaging with Communities; Giving Back to Communities Not applicable to Exelon.
Political	contributions	
103-2 415-1	Management approach Political contributions	Public Policy Public Policy, Exelon website
Custom	er Health and Safety	
103-2 416-1 EU25	Management approach Assessment of health and safety impacts Injuries and fatalities to the public	Disaster Preparedness and Awareness Disaster Preparedness and Awareness Confidential information; Exelon does not disclose information that may relate to potential litigation.
Access		
103-2 EU28 EU29 EU30	Management approach Power outage frequency Power outage duration Average plant availability factor	Low-Income Assistance Customer Service and Reliability Customer Service and Reliability Maintaining Operational Excellence, Productivity and Efficiency
Omissio	ns	

Omissions



<sup>1</sup> Exelon reports total reportable and non-reportable spills based upon applicable state and federal reporting requirements, which may also include voluntary reporting agreements with regulatory agencies. Due to the mix of reporting requirements across our operating states, Exelon does not publish spill volumes.

<sup>2</sup> Exelon discloses its parental leave policies, but does not disclose the number of employees that have taken parental leave.

<sup>3</sup> Exelon internally tracks rates by operating company, but presents data at the corporate level to provide an overall view of company performance.

# **SDG MAPPING**

The United Nations Sustainable Development Goals (SDGs) were released in 2015 and outline an ambitious agenda for governments, businesses and organizations to stimulate action toward sustainable development. The 17 SDGs and 169 targets aim to set the world on a sustainable path by 2030. Many of the SDGs align with Exelon's identified key sustainability issues; we have mapped these to the right.



Key Sustainability Issues	Relevant SDGs
BUILDING THE NEXT-GENERATION ENERGY COMPANY	
Energy system resilience	7, 9, 13
Generation efficiency	7, 12
Investments in energy infrastructure	7, 9, 13
Meeting our commitments	17
Value of clean energy	7, 13
CREATING VALUE FOR CUSTOMERS	
Energy affordability	7
Innovative products and services	7, 9, 13
Service to customers	7
PARTNERING WITH OUR COMMUNITIES	
Community and economic development	4, 8, 10
Public health and safety	3, 9
A SAFE, INNOVATIVE AND REWARDING WORKPLACE	
Diversity and inclusion	5, 8, 10
Employee engagement	8
Health, safety and wellness	3
Talent attraction, development and retention	4,8
REDUCING OUR ENVIRONMENTAL IMPACTS	
Air quality	3, 11
Climate adaptation/resilience	9, 11, 13
Greenhouse gas emissions	7, 9
Habitat and biodiversity	14, 15
Nuclear fuel cycle	12
Water management	6, 14
EFFECTIVE GOVERNANCE	
Corporate governance	16
Cybersecurity/physical security	9
Policy engagement	13
Sustainable supply chain	8



# FULL GHG INVENTORY AND ACCOUNTING PROTOCOL

### **Direct and Indirect Emissions**

Exelon calculates our GHG emissions inventory in conformance with The Climate Registry General Reporting Protocol, which allows for the use of U.S. EPA Mandatory GHG Reporting Program (40 CFR Part 98) requirements where applicable, and is based on the WRI GHG Protocol. The inventory is also third-party verified against these standards each year to assure its correctness; our third-party verifier in 2017 was LRQA. Emissions include stationary and mobile combustion of fossil fuels, fugitive emissions of GHGs (e.g., methane,  $SF_6$ , CO and hydrofluorocarbons) and indirect emissions associated with the purchase of electricity from external sources. Exelon uses the global warming potentials (GWPs) from the Fourth IPCC Assessment Report (AR4) to align with the November 2013 regulatory revisions to the U.S. EPA GHG regulations (40 CFR Part 98). Our primary inventory reporting uses an equity-share reporting boundary, although emissions relating to our operational reporting boundary are available through The Climate Registry.

As shown in Table 1, Exelon segregates the GHG inventory between operations-driven and customer-driven sources. This presentation of our inventory is based on the location-based Scope 2 accounting, which uses the latest regional transmission organization (RTO) average emissions rates when available, or eGRID 2012 data set issued November 2015 if an RTO emissions rate is not available. Per The Climate Registry protocol, emission rates are adjusted to account for the fossil generation Exelon has in each region, to avoid double counting of these emissions already captured in our Scope 1 accounting.

Efforts to reduce the customer-driven segment of our inventory are associated with our customer programs for energy efficiency, access to clean energy and increasing generation of low-carbon electricity. These

impacts are referred to as customer abatement, emissions displacement and avoided emissions, each of which relate to overall GHG emissions associated with grid-level electric generation and distribution. These customer programs result in real GHG benefits, apply to the broader electricity sector level and cannot always be tied directly to immediate reduction of our own GHG inventory.

# **Scope 2 Accounting**

In response to the 2015 WRI Scope 2 guidance, Exelon has incorporated market-based Scope 2 accounting into our reporting as seen in Table 2. In addition, per this guidance, we are reporting emissions per the marketbased accounting (based on how we procure our electricity) side-by-side with the emissions calculated by the location-based accounting (based on grid averages). We also report the total amount of electricity used per the WRI protocol.

Under market-based accounting, we are able to use the emission factor (lbs/MWh) associated with a specific generation technology if we have specified it for our supply through contracts or purchases. Where we are not specifying the source of the power we are purchasing, we use a residual mix emission factor (lbs/MWh), which is the emission rate of power whose emission attributes were not otherwise purchased and retired through a specific contract (tends to be higher-emitting sources and often referred to as "grid residual" or "brown power").

Under the market-based Scope 2 accounting view, Exelon is recognizing the following market-based elements: electricity we purchase specifically from Exelon-owned generation assets, Green-e® certified RECs (renewable generation emissions attributes) and PJM-issued EFECs (nuclear generation emissions attributes). All other electric use is currently assigned a residual emissions rate for the region (the emissions rate of generation after all retired attributes are removed). An independent system operator residual



# TABLE 1: EXELON CORPORATION GHG INVENTORY BREAKDOWN<sup>1</sup>

Scope 1 and 2, Equity-Share Boundary, Location-Based Accounting

<b>Customer-Driven Emissions</b>			
thousand metric tons CO <sub>2</sub> e	2015	2016	2017
Scope 1 — Direct Emissions			
Stationary Combustion	6,811	8,954	9,545
Upstream Gas (combustion & fugitive)	150	29	0
Total Customer-Driven Scope 1	6,961	8,983	9,545
Scope 2 — Indirect Emissions			
T&D Line Losses	6,397	6,554	6,016
Muddy Run Pumping Power	160	165	187
Upstream Gas (purchased electric)	48	17	0
Total Customer-Driven Scope 2	6,605	6,735	6,203
<b>Total Customer-Driven Scope 1 &amp; 2 Emissions</b> Supplemental Biomass/Biogas (Generation)	<b>13,566</b> 356	<b>15,718</b> 338	<b>15,748</b> 681

Operations-Driven Emissions			
thousand metric tons CO <sub>2</sub> e	2015	2016	2017
Scope 1 — Direct Emissions			
Stationary Combustion — Support Operations	103	88	79
Natural Gas Distribution (Fugitive Methane)	397	409	388
Electrical Equipment (Fugitive SF <sub>6</sub> )	108	132	81
Fugitive Refrigerants, Bulk CO <sub>2</sub> , Coal Pile	16	11	8
Vehicle Fleet Operations	92	100	100
Total Operations-Driven Scope 1	716	741	656
Scope 2 — Indirect Emissions			
Building Electric, District Heating and Cooling	110	139	140
Grid-Supplied Plant Electric Use	197	187	178
Total Operations-Driven Scope 2	307	326	318
Total Operations-Driven Scope 1 & 2 Emissions	1,023	1,067	974
Supplemental Biogas (Mobile)	6	7	7

Total	<b>Exelon</b>	<b>GHG</b>	<b>Emissions</b>
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	2015	2016	2017
Scope 1	7,677	9,723	10,200
Scope 2 (Location-based)	6,912	7,061	6,521
Supplemental Biomass/Biogas	361	345	688
Total	14,950	17,130	17,409



<sup>1</sup> Due to rounding, some totals may be off by 1,000 metric tons.

TABLE 2: EXELON SIDE-BY-SIDE SCOPE 2 ACCOUNTING<sup>1</sup>

	(Does not include PHI)			(Incorporates	(Incorporates PHI after time of merger)			(Inventory as owned)		
	MWh Use (in thousands)	Location- based Emissions (thousand metric tons $CO_2e$ )	Market- based Emissions (thousand metric tons CO <sub>2</sub> e)	MWh Use (in thousands)	Location- based Emissions (thousand metric tons $CO_2e$ )	Market- based Emissions (thousand metric tons CO <sub>2</sub> e)	MWh Use (in thousands)	Location- based Emissions (thousand metric tons $CO_2e$ )	Market- based Emissions (thousand metric tons $CO_2e$ )	
T&D Line Losses	12,687	6,397	4,628	14,245	6,554	5,097	13,326	6,016	4,883	
Muddy Run Pumping Power <sup>2</sup>	319	160	0	361	165	0	417	187	0	
Upstream Gas (electric compressors)	67	48	48	24	17	17	0	0	0	
Building Electric, District Heating and Cooling	237	110	52	324	139	74	311	140	85	
Grid-Supplied Plant Electric Use	440	197	125	462	187	59	443	178	70	

2015

6.912

13.751

4.853

rate is used where available, as it is considered the most current and accurate (currently only available in PJM, NEPOOL, ERCOT and CAISO). U.S. EPA e-GRID sub-regional average emissions rates are used if no ISO residual rate is available. Supplier-specific rates will be used once verified factors become available.

# **Other GHG Categories**

**Exelon Total** 

Tables 3 and 4 provide additional details on other GHG categories that Exelon is tracking as part of our program. These categories are used to gain insights into where Exelon may have additional opportunity to influence reductions in the supply chain or beyond the bounds of the Scope 1 and 2 GHG inventory.

# Scope 3

15.416

We report WRI Scope 3 supply chain categories such as business travel, long-term power purchase agreements and spot market purchases used to fulfill customer load, electricity delivered by utilities (customer use of electricity), use of natural gas delivered by utilities (customer use of natural gas) and emissions associated with heating and cooling equipment we operate for others.

14.497

2017

6.521

5.038

### Clean Attributes and Offsets

2016

7.061

5.246

Clean power attributes and CO<sub>2</sub> offsets include clean emissions attributes purchased to cover our internal electricity use (such as REC and EFECs), as well as carbon reductions we support that reduce CO<sub>2</sub> emissions outside



<sup>1</sup> Historical years have been adjusted to remove plants since divested and incorporate ISO emission rates as available. eGRID average factors were use in lieu of residual rates not available during those years.

<sup>2</sup> Muddy Run pumping power results in an emission benefit of avoiding nearly 1 million metric tons of CO<sub>2</sub>e from emissions displacement that occurs from storing power at generated at night and returning it to the grid at peak hours. This emissions displacement is not currently able to be included as part of TCR's Scope 2 accounting. Electric use is less that returned to the grid at peak hours.

TABLE 3: SUPPLY CHAIN EMISSIONS (SCOPE 3)1

thousand metric tons CO <sub>2</sub> e	2015	2016	2017
Scope 3 Emissions			
Employee Business Travel <sup>2</sup>	25	26	30
Long-term and Spot Market Power	18,131	22,486	17,693
Purchases For Resale — Fossil <sup>3</sup> Long-term Power Purchases For Resale —	678	299	1,070
Biomass Electricity Distributed by Our Utilities <sup>4</sup>	78.602	78.888	75.316
	11.430	11.248	10.759
Natural Gas Distributed by Our Utilities (as used) <sup>5</sup>	11,430	11,240	10,759
Heating and Cooling Equipment Operated for Others	585	283	356

- 1 Our third-party assurance statement for Exelon's Scope 3 emissions is available on our website.
- 2 Scope 3 business travel emissions only; owned corporate aircraft is included under Scope 1 mobile emissions. Prior years were adjusted to reflect this refinement.
- 3 Includes owned and power purchase agreement renewables for which attributes may have been sold as RECs or retired for RPS obligations.
- 4 Exelon Utilities are required to buy from the market and thus these emissions are not associated with Exelon's generation fleet.
- 5 These emissions are associated with the end use of the natural gas as delivered.

of our verified GHG inventory. RECs and EFECs as shown are now also accounted for as part of the new market-based accounting. Currently our offsets include Climate Reserve Tonnes (CRTs) retired to offset the carbon footprint associated with our business travel, and Natural Gas STAR emissions reductions associated with PECO's natural gas system operating at a lower than average operating pressure.

### **Customer Abatement**

Customer abatement refers to customer programs that result in GHG benefits. These include the BGE Smart Energy Savers programs, ComEd and PECO Smart Ideas programs and the PHI Home Energy Savings program,

all which help our customers reduce their electricity use through energy efficiency measures in conformance with state-mandated requirements. Our utilities and Constellation are procuring and retiring RECs for retail customer supply, in compliance with state-mandated renewable supply requirements.

The customer energy efficiency estimates for GHG abatement are based on the megawatt-hours reported to the Energy Smart Savers in Maryland for BGE, to the Illinois Commerce Commission by ComEd, to the Pennsylvania Public Utility Commission by PECO, and to the regulatory commissions associated with the PHI utilities. When estimating emissions avoided by these efforts, Exelon is using the PJM system mix average (lbs/MWh) for the program year being reported.

Constellation's retail energy efficiency and clean energy products sales are also accounted for as customer abatement. Estimated megawatthours reduced as a result of Constellation efforts are those associated with estimated savings in its Efficiency Made Easy contracts and actual performance as measured in its performance-based contracting. Voluntary RFC sales are based on actual annual sales volumes for national wind RFCs. We use the PJM system mix average (lbs/MWh) for the program year being reported for estimating avoided emissions from these programs.

### Avoided Emissions from Nuclear and Renewable

Exelon presents estimations for avoided emissions associated with our nuclear and renewable electric generation sources. Avoided emissions during past years are calculated based on the actual generation and a GHG emissions per MWh factor based on each plant's U.S. eGRID 2016 (issued Feb. 2018) sub-regional average adjusted to remove Exelon's nuclear generation in that region. Projected avoided emissions for current and future years are based on the EIA Outlook Report 2017, pulling emission rates from regional data that includes both generation and emissions projections. Avoided emissions are estimates designed to give a sense (order of magnitude) of the amount of additional emissions that would be



### **TABLE 4: AVOIDED EMISSIONS AND OFFSETS**

thousand metric tons CO <sub>2</sub> e	2015	2016	2017
Clean Attributes and Offsets			
RECs Purchased for Corporate Buildings	(36)	(28)	(69)
EFECs Retired	(765)	(740)	(1,900)
Verified Offsets Retired	(29)	(20)	(30)
U.S. EPA Natural Gas STAR Reduction	(14)	(9)	(9)
Customer Abatement and Avoided Emissions			
Mandated Utility Customer Programs	(6,148)	(7,629)	(8,650)
Utility Renewable Portfolio Obligations	(1,192)	(1,202)	(1,458)
Competitive Retail Customer Energy Efficiency Programs	(95)	(120)	(190)
Competitive Retail Voluntary REC Sales	(902)	(972)	(1,085)
Avoided Emissions — Competitive Retail Distributed Generation <sup>1</sup>	(149)	(188)	(176)
Avoided Emissions — Exelon-owned Utility Scale Renewable Generation <sup>2</sup>	(3,436)	(3,234)	(3,423)
Avoided Emissions — Exelon-owned Nuclear Generation <sup>3</sup>	(85,983)	(86,731)	(86,698)
Displaced Emissions from Storage Time-of-Day Shifting <sup>4</sup>	(84)	(191)	(211)
Displaced Emissions from New High-Efficiency Natural Gas Generation <sup>5</sup>	N/A	N/A	(1,023)

- 1 All years reflect emissions associated with their regional average emissions rate.
- 2 All years revised to reflect emissions based on the latest eGRID regional average emission rate.
- 3 Emission rate based on regional average less Exelon nuclear.
- 4 Calculates emissions saved from storing low-emission grid power at night for use during peak demand.
- 5 Calculates emissions displaced generation at ERCOT regional grid rates due to these new lower-emitting plants.

created if that amount of generation was no longer provided by a low- or zero-carbon source and thus replaced by the remaining grid supply. This projection is one possible outcome, as actual replacement of generation would ultimately be driven by market function, fuel prices and viable and available technologies at a given time.

# **Supplier-Specific Emissions Factors**

In order to help our customers more accurately report their GHG emissions, Constellation and our utilities have begun calculating, verifying and publishing supplier-specific emissions factors (lbs/MWh) for the electricity we sell. These emissions rates are calculated based on our owned generation coupled

with long-term power purchase agreements and other market purchases associated with how we fulfill our customer's load. Emission rates are statespecific where states have renewable or alternative energy portfolio standards that require clean energy attributes (RECs or EFECs) be retired on behalf of customers. Because we also sell RECs, we backfilled grid residual emission attributes for clean power generation for which attributes have been otherwise sold. Similarly, if clean energy attributes for Exelon's nuclear plants have not been specifically retired from the grid mix, grid residual mix attributes are used in the Constellation supplier-specific factor calculation. This is done to ensure no double counting of clean energy attributes, and further promote recognition of these attributes as part of the clean energy market.



# TABLE 5: CONSTELLATION NEWENERGY (CNE) 2017 CO, EMISSIONS FACTOR SHEET

State	Exelon Generation Wholesale Emissions Factor (lbs/MWh) Represents Exelon Generation provided to the grid before clean attribute sales/retirements	CNE Supplier-Specific Retail Emissions Factor (lbs/MWh) For market-based reporting of retail CNE customer use where additional clean power was not specified (incorporates state RPS retirements)	Residual Emissions Factor Comparable Regional Default (lbs/MWh) For market-based reporting of electric use from other retailers not publishing factors (attributes remaining after all retirements)	Grid Average Comparable Regional Average (lbs/MWh) For location-based reporting of electric use by all customers (represents all power on the grid)	Data Source
Maine		533.79			
New Hampshire		812.84			
Rhode Island	791.20	781.51	617.72	806.28	NE-ISO - CY 2016
Massachusetts		769.67			
Connecticut		742.75			
New York — Upstate		294.70	294.70	294.70	
New York City	0.00	635.80	635.80	635.80	EPA eGRID - CY2016
New York — Long Island		1,178.30	1,178.30	1,178.30	
Delaware		991.04			
Maryland		919.97			
District of Columbia	14.13	851.90			
New Jersey		881.77	991.04	992.05	PJM ISO - CY2016
Pennsylvania		1,047.95			
Ohio		979.57			
Illinois	2.25	942.48			
Michigan		1,272.00	1,272.00	1,272.00	EPA eGRID - CY2016
Texas	780.75	1,202.40	1,276.68	1,180.22	ERCOT - CY2016
California	11.46	787.63	943.58	527.90	CA ISO / eGRID - CY2016

- While a significant amount of Constellation supply flows directly from Exelon's fleet of clean generation units (with a CO<sub>2</sub> emissions intensity of 108 lbs/MWh nationally), Constellation is limited to claiming clean attributes from RECs retired for state RPS due to the deregulated market structure and limitations in preventing double-counting of nuclear supply in existing market-derived residual emission rates currently used by others. This does differ from utilities in regulated markets where owned generation flows first to its utility supply and is not being potentially reported by other entities.
- There is currently no ISO-level emissions reporting (average or residual emission rates) for NY-ISO or MI-ISO; thus the most recent eGRID 2016 data set (issued February 2018) has been used as the highest quality proxy for the system average, residual and our supplier rate per the WRI Scope 2 Standard.
- CNE currently has no RPS obligations in Delaware, thus the CNE emissions rate is equivalent to the residual rate for the region.
- Emissions rates in NEPOOL ISO has been adjusted to reflect emissions benefits as shown in eGRID 2016. This applies to anthropogenic emissions from biomass, biogas and municipal waste plants, as well as the dual power benefits of combined heat and power plants.
- Illinois, Pennsylvania and New Jersey use the reporting year time frame of June 2016 through May 2017 used for the RPS programs in these states. A comparable average emissions rate for that same time period has been listed, although as residual rates are not available for this time frame the PJM 2016 residual has been used as a proxy.
- The California residual rate is the California unspecified power rate as established by the California Air Resources Board.



### **Comments**

We welcome your comments and questions regarding this report. Please e-mail us at responsibility@exeloncorp.com or write to: Bruce Alexander, Senior Manager, Strategic Environmental Analysis, 2301 Market Street, Floor S23-3, Philadelphia, PA 19101.

### **Cautionary Statements Regarding Forward-Looking Information**

This report contains certain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to risks and uncertainties. The factors that could cause actual results to differ materially from the forward-looking statements made by Exelon Corporation, Exelon Generation Company, LLC, Commonwealth Edison Company, PECO Energy Company, Baltimore Gas and Electric Company, Pepco Holdings LLC (PHI), Potomac Electric Power Company, Delmarva Power & Light Company, and Atlantic City Electric Company (Registrants) include those factors discussed herein, as well as the items discussed in (1) Exelon's 2017 Annual Report on Form 10-K in (a) ITEM 1A. Risk Factors, (b) ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and (c) ITEM 8. Financial Statements and Supplementary Data: Note 23 Commitments and Contingencies; (2) Exelon's First Quarter 2018 Quarterly Report on Form 10-Q in (a) Part II, Other Information, ITEM 1A. Risk Factors; (b) Part 1, Financial Information, ITEM 2. Management's Discussion and Analysis of Financial Condition and Results of Operations and (c) Part I, Financial Information, ITEM 1. Financial Statements: Note 17. Commitments and Contingencies; and (3) other factors discussed in filings with the SEC by the Registrants. Readers are cautioned not to place undue reliance on these forward-looking statements, which apply only as of the date of this report. None of the Registrants undertakes any obligation to publicly release any revision to its forward-looking statements to reflect events or circumstances after the date of this report.

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