# Sustainability Report

# 2018





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# Message from the Chairman



Ralph Izzo
Chairman, President and Chief Executive
Officer. Public Service Enterprise Group

The latest report from the UN's Intergovernmental Panel on Climate Change delivered sobering news: The world's nations are not acting quickly enough to avoid the most damaging impacts of climate change. Under current policies, we will miss our global carbon-reduction targets needed to avoid such effects as rising temperatures, drought and sea-level rise.

The report's authors reiterated that the most effective path to deep decarbonization is to reduce our reliance on fossil fuels — and coal, in particular.

I believe, and I have said often, that man-made climate change and our response to it are the preeminent challenge of our time. How PSEG and others in our industry respond to this challenge will define our legacy.

Not only must the energy sector rise to meet this challenge, but I also believe that the industry can be a catalyst for change that spreads to all corners of the economy, as private industry leads America's movement toward sustainability and toward meeting our moral obligation to help reduce global carbon emissions.

I'm extremely proud to say that PSEG has taken bold steps toward a low-carbon future. We have proposed a combination of energy efficiency improvements, renewable energy development, vehicle electrification and clean power generation — a full-time effort that we are confident will help us make significant progress toward that future.

We recognize that society wants — and the threat of climate change compels us to provide — cleaner energy with lower emissions. Clearly, the development of renewables, such as solar and wind, will continue to occupy center stage in the transformation of the energy sector. At PSEG, we've been busy building grid-connected solar farms on landfills and old industrial sites to provide clean energy to all of our customers, regardless of income or geography.

New Jersey, under the leadership of Gov. Phil Murphy, is embarking upon the nation's largest effort to develop offshore wind generation – a significant step toward New Jersey's goal of 3,500 megawatts by 2030.

However, energy security requires a diversity of resources. That's why we can't afford to lose sight of the fact that existing nuclear power safely supplies nearly half of New Jersey's electricity and more than 90 percent of its carbon-free electricity. Nor should we overlook the contribution of low-cost natural gas in replacing coal as the nation's leading fuel source of electrical power.

The combination of these factors — investment in renewables, preservation of nuclear and the continued phase-out of coal — have helped U.S. power producers shrink their carbon footprint and drop below the transportation sector in overall impact on the climate.

Our utility also is taking steps to reduce emissions.

Around the country, natural gas utilities – especially those with older infrastructure, such as PSE&G and

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others in Northeastern cities — are modernizing their underground networks by replacing aging cast-iron and unprotected steel pipes with more durable materials that are less prone to leaks that are a source of methane emissions.

But at PSEG, we also are pursuing a larger picture — one that includes re-imagining our entire business model, from one that is based on selling as much gas and electricity as possible to one that is aimed, instead, at helping customers save energy.

In October, PSE&G introduced the largest energy efficiency program ever proposed in New Jersey. I am extremely proud of this initiative, which aims to reduce our state's energy consumption by as much as 2 percent and has the potential to more than double our recent carbon reduction goal of 13 million tons.

By building an energy system that is based on using less, we can help customers save energy and save money, while also limiting our collective impact on the environment.

Building a sustainable, low-carbon energy future may be the largest civic works project ever undertaken. PSEG has a clear responsibility to assume a leadership role.

To accomplish these reductions and savings, it will require thousands — maybe millions — of intermediate steps. We have 2.5 million electric and gas customers across our New Jersey service territories and we need to take advantage of each individual relationship to spread the benefits of sustainability in the same way utilities spread the availability of electricity and gas over the past century: one customer, one community at a time. Clean energy resources, such as solar and wind, will be part of that. Other innovations, such as electrifying transportation and energy storage, will be transformative.

But I believe it is energy efficiency — reshaping our business by helping customers to reduce their energy consumption — that has the power to revolutionize the energy sector and provide the sweeping reductions that are needed to meet our climate challenges.

Every little bit helps. If we do what we can for each customer, the ripple effect of energy efficiency will surpass all others in its value to environmental and climate health.

Ralph Izzo

RalphAzzo

Chairman, President and Chief Executive Officer, Public Service Enterprise Group Incorporated,
December 2018

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# Our New Focus on Citizenship



**Rick Thigpen**Senior Vice President,
Corporate Citizenship

PSEG has established a longstanding legacy of investing in the communities we serve. We sincerely believe that a successful company has a duty to not only support, but also to lift up, each of these communities.

The core values that have defined PSEG since its inception more than 115 years ago continue to guide us today. While many things have changed in that time, our commitments to our employees, shareholders, customers and communities have remained constant. Each of these commitments will ensure that we thrive during our second century of People providing Safe, reliable, Economic and Greener energy.

Our stakeholders expect us not only to be a commercial enterprise, but also to serve a social purpose. At PSEG, we consider it our responsibility to create value for our stakeholders while also contributing to societal objectives.

This year, PSEG established a new business function devoted to Corporate Citizenship — a change that recognizes the relevance of citizenship to the strategic business objectives of our company. The purpose of this new unit, which also includes our Sustainability function, is to reinforce the ideal of our founder, Thomas McCarter — "to serve the state of New Jersey and to make it a better place in which to work and live" — and, at the same time, to implement our progressive regulatory agenda, to respect and enhance the priorities of the diverse communities we serve, and to fulfill our stakeholders' expectations.

PSEG's ability to deliver on its mission also depends on the diverse talents of our employees. We have a responsibility to develop our workforce in line with our strategic goals. Our efforts to promote diversity and inclusion make us a stronger company, and our support for wellness programs helps us maintain a healthier and safer workforce of more than 13,000 employees.

PSEG's commitment to corporate citizenship and sustainability is balanced between our social and environmental responsibilities — and reflects our dedication to acting in a manner that is responsible, ethical and deliberate, balancing the needs of the business with the needs of the community.

This report reflects our commitment to transparency and disclosure, and details our balanced approach to key environmental, social and governance (ESG) issues, including the U.N. Sustainable Development Goals and our newly established human rights practice.

We are proud to present PSEG's 2018 Sustainability Report.

Rick Thigpen

Senior Vice President, Corporate Citizenship

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# About This Report



Public Service Enterprise Group Inc. (PSEG) strives to be a leader in building an economically strong, environmentally responsible energy future.

We are pleased to share with our customers, communities, shareholders and employees our 2018 Sustainability Report, which updates our progress toward this goal.

Sustainability is deeply woven into our history, but takes on new dimensions all the time. This new report — our ninth in a series — discusses the many ways that our focus on sustainability aligns with our vision for being a recognized leader for **P**eople providing **S**afe, reliable, **E**conomic and **G**reener energy.

Each section of this report offers a critical look at the issues that matter most to our company and stakeholders as we strive to enhance the benefits we bring to people and reduce our environmental impact.

In this report, the first that is completely web-based, we discuss a number of key challenges and our concerted efforts to transform these challenges into growth opportunities. We are determined to continue our leadership role by working hard every day to better serve our customers and navigate an ever-changing energy marketplace.

This report was developed primarily according to the Global Reporting Initiative (GRI) G4. A complete GRI guide is available here and includes the Electric Utility Sector Supplement for reporting on industry-specific information.

Additionally, to better serve our customers and investors, PSEG is incorporating the Edison Electric Institute's (EEI) Version 1 environmental, social, governance and sustainability-related (ESG/sustainability) reporting template into its annual reporting. This is part of an ongoing EEI-led initiative to help provide the financial community with more uniform and consistent ESG/sustainability data and information. EEI launched a pilot ESG/sustainability reporting template in December 2017. The latest version of the template is available here.

#### Feedback

We welcome your feedback on our performance and reporting. For additional information about this report, the Global Reporting Initiative information posted on our website or PSEG's sustainability initiatives, please contact Angela Ortiz at Angela.Ortiz@pseg.com or send your comments to sustainability@pseg.com.

# PSEG's Sustainability Approach



**Sustainability is an approach to living life with a long-term view.** It's how we manage the resources that sustain our lives - human, economic, environmental and the surrounding social fabric.

Energy empowers people and enables improvements in quality of life — it affects how we provide education and health care, and it drives the economic development necessary to ensure that every child grows up to have an equal opportunity to live a healthy, productive and economically viable life. We think about enabling that kind of future.

At PSEG, we innovate across our business, finding new ways to reduce energy consumption and deliver power to our customers more efficiently and sustainably. We help communities prosper. We invest in people.

It is important that we, at PSEG, put social awareness, economic growth and environmental protection — equally — at the forefront of our agenda. They are not mutually exclusive concepts. In fact, together they define sustainability.

Ultimately, our vision for PSEG is one where sustainability – for the benefit of the environment, the economy and our organization – is integrated seamlessly with our overall goal of making New Jersey a better place to work and live.

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# How We Manage Sustainability

Employees across the entire company, at all levels, are involved with managing sustainability. We pride ourselves on being a company with strong leadership, engaged employees and proven processes to manage sustainability throughout the business. We continue to emphasize the role that all of our employees have in achieving higher levels of operational excellence, which is fundamental to the future we are trying to build as a diverse, successful enterprise.

Our focus on sustainability reflects a deep recognition that our continued ability to prosper as a business depends on helping others to prosper, too. Thus, we have expanded the definition of success to include not only profitability, but also several environmental and social dimensions of performance. We strive to be both systematic and comprehensive in our approach to sustainability-related issues. Doing so helps us to remain true to our most important commitments and to further improve performance.

### Leading from the Top

Sustainability begins with our leadership. PSEG's Executive Officer Group is responsible for providing sound leadership and management that contributes to the company's long-term success and sets the right example for employees. Representing a wide range of experience, our officers take an active leadership role not only with regard to our business goals, but also with environmental issues and community and employee engagement.

PSEG established a corporate Environmental, Health and Safety (EHS) Policy in 1996. This policy, reviewed and approved by the PSEG Board of Directors, reflects the principles by which PSEG operates in eight areas: associate health and safety, nuclear safety, climate change, environmental compliance, risk reduction, pollution prevention and resource conservation, open communication and continuous improvement.

Learn more about PSEG's EH&S Policy and Environmental Management System.

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# Corporate Sustainability Goals

With all of our sustainability efforts, we set our sights on supporting PSEG's strategic business model as well as our strategic objectives. The sustainability goals we have set for ourselves reflect the alignment between our sustainability approach and the way we conduct our business.

Goal 1: To be a clear leader in reliability and safety, customer service and providing clean energy

Goal 2: To be recognized as a great place to work where engaged employees are our differentiator

Goal 3: To be a thought-leader and active implementer of energy and environmental policy goals

Goal 4: To be a strong partner of all the communities in which we operate, in keeping with our role for more than 100 years in promoting a more sustainable future

# Our Priority Issues

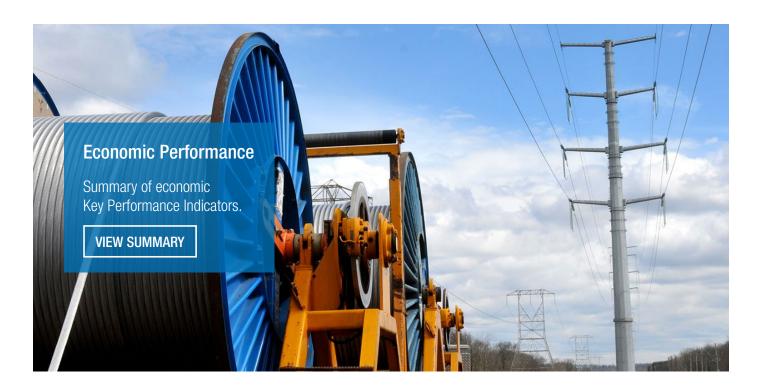
For the report, we focus our efforts on the following issues that we consider are most relevant to our business, the communities we serve and our environmental impacts and the risks and opportunities associated with them.

- Reliability and resiliency
- · Stakeholder engagement
- Employee engagement
- Strong commitment to our customers
- Financial performance
- Clean air and climate change
- Energy efficiency
- · Renewable energy
- · Talent attraction and retention
- · Diversity & inclusion

We develop goals and management processes for most of these, which are described in more detail throughout this report.

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# Governance and company profile



### **About PSEG**

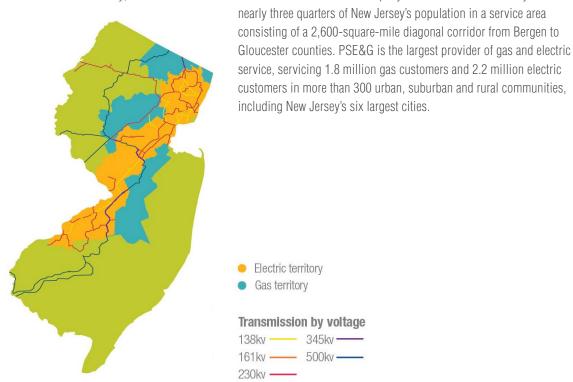
#### **Company Overview**

Public Service Enterprise Group Incorporated (PSEG) is New Jersey's largest provider of electric and gas service, serving 2.2 million electric customers and 1.8 million gas customers, approximately 70 percent of the state's population. We also own and operate an 11,500-megawatt fleet of power plants in the Northeast and Mid-Atlantic regions of the United States. We have been recognized not only for outstanding reliability, but also for our renewable solar energy and energy efficiency efforts. PSEG has been named to the Dow Jones Sustainability North America Index for 11 consecutive years. In 2016, PSEG was named to the first-ever Forbes "Just 100" list of companies celebrated as exemplary corporate citizens. PSEG is a publicly traded (NYSE: PEG) diversified energy company among the nation's leading utilities with approximately \$40 billion in assets and a member of the Standard and Poor's 500. Our headquarters are in Newark, New Jersey. PSEG's principle operating subsidiaries are Public Service Electric and Gas Company (PSE&G), PSEG Power LLC (PSEG Power) and PSEG Long Island LLC.



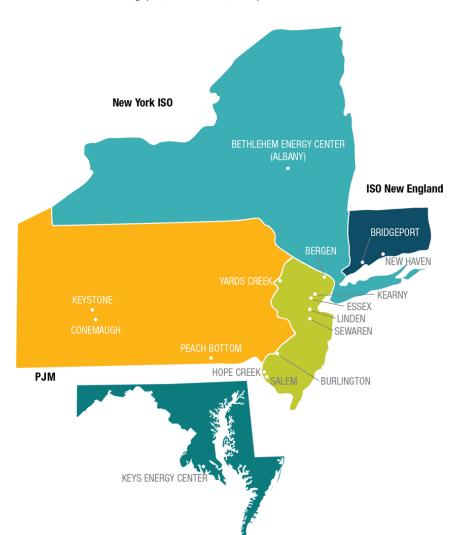
### Public Service Electric and Gas Company (PSE&G)

Public Service Electric and Gas Company is a regulated public utility company engaged in the transmission and distribution of gas and electricity. One of the largest combined electric and gas companies in the United States, PSE&G is also New Jersey's oldest and largest publicly owned utility. The Public Service Corporation was formed in 1903 by amalgamating more than 400 gas, electric and transportation companies in New Jersey; it was renamed Public Service Electric and Gas Company in 1948. PSE&G currently serves



### **PSEG Power**

A major independent power producer in the U.S., PSEG Power operates one of the most balanced portfolios in the country, both in terms of fuel mix and market segment (base load, load following and peaking), which helps us generate the power our customers need, when they need it. PSEG Power also is focused on transforming its generating fleet with reliable, efficient and cleaner energy, nearing the completion of its 1,800 MW construction program of new gas-fired combined-cycle generation at three sites. New plants in Sewaren, New Jersey, and Prince George's County, Maryland, were placed in service in 2018. The third, in Bridgeport, Connecticut, is expected to come online in 2019.



- PSEG Fossil operates the company's portfolio of natural gas, coal and oil-fired electric generating units.
- PSEG Nuclear operates
   the Salem and Hope Creek
   Nuclear Generating Stations
   in Lower Alloways Creek, New
   Jersey, and is a part-owner
   of the Peach Bottom Nuclear
   Generation Station in Delta,
   Pennsylvania.
- PSEG Energy Resources
   & Trade
- PSEG Power Ventures
- PSEG Solar Source

# PSEG Long Island

PSEG Long Island operates the electric transmission and distribution system of the Long Island Power Authority (LIPA), serving approximately 1.1 million customers in Nassau and Suffolk counties and the Rockaway peninsula of Queens, New York. PSEG Long Island began operations on January 1, 2014, under a 12-year agreement. In January 2015, PSEG Power began providing fuel procurement and power management services for LIPA under a separate agreement. PSEG Long Island has committed to improving processes and public perception with the goal of becoming a best-in-class electric utility.



# PSEG's Vision, Strategy, Commitments

This year marks PSEG's 115th year as a company, a testament to the sustainability of our business model that benefits our customers, our shareholders and the communities we serve. PSEG's vision is to be a recognized leader for safe, reliable, economic and greener energy — today and for our next 115 years — a vision that expresses he value of who we are and what we have been throughout our long history.

To achieve this vision and ensure sustainability, PSEG has long pursued a business strategy based on operational excellence, financial strength and disciplined investment. We emphasize sound fundamentals in executing our strategy, including through our efforts to:

- Improve utility operations by increasing our investments in transmission and distribution infrastructure
  projects designed to enhance system reliability and resiliency, meet our customers' expectations and
  support public policy objectives;
- Maintain and expand a reliable, efficient and environmentally responsible generation fleet with the flexibility to utilize a diverse mix of fuels, allowing us to respond to market volatility and capitalize on opportunities; and
- Sustain a solid financial profile capable of meeting our growth objectives.

#### **Reinforcing Our Core Commitments**

PSEG has a long history of ethical behavior on which we have built our business and earned the trust of those we serve. A good name is more than a source of pride; it gives us credibility in the marketplace, in the communities where we work and among current and potential employees.



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In a changing business climate, we recognize the importance of constantly reinforcing the guiding principles that we stand for and live by, in all we do as a company and in the behaviors and actions of our 13,000 employees. We recently strengthened our already robust compliance program with the addition of a new chief compliance officer. We emphasize five Core Commitments:

- Safety
- Integrity
- · Continuous Improvement
- Diversity & Inclusion
- Customer Service

#### Standards and values guide the company

Our standards go beyond integrity. Reflecting this, we adopted a new name — the PSEG Standards of Conduct — to emphasize that our standards represent how we conduct ourselves in the way we do business.

The PSEG Standards of Conduct and Core Commitments form the foundation of our ethics program.

PSEG is committed to conducting operations in accordance with the highest ethical standards and in compliance with the law. We require every employee and contractor to uphold our commitments and standards to work with PSEG.

The PSEG Standards of Conduct, reviewed and approved by the PSEG Board of Directors, describes the company's expectation of employee and contractor conduct in the workplace. Our Standards of Conduct set common expectations for interaction with investors, customers, coworkers, competitors, vendors, government officials, the media and others. Our entire staff of management, administrative, supervisory and technical associates must complete training on the Standards of Conduct and results are reported to the Audit Committee of the Board of Directors annually. We ensure accountability by defining responsibility, reporting breaches, tracking results and responding to issues.



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### Corporate Governance

Through the oversight of our Board of Directors, guided by our Corporate Governance Principles and the Standards of Conduct, we have established a leadership structure to effectively manage our business, focusing on operational excellence, financial strength and disciplined investment. Our risk management program forms an integral part of our corporate culture, along with the core values of safety, diversity and transparency.

Good governance promotes accountability and trust in our company. We have adopted what we believe are strong corporate governance standards and practices to assure effective management by our executives and oversight by our Board of Directors.

Our Corporate Governance Principles and the charters of our board committees emphasize the independence and responsibilities of our outside directors. These are outlined in detail in our proxy statement, together with the skills and qualification of each member of our board. Read more about our board's committees and charters.

### **Engaging Our Stakeholders**

Building strong relationships with our stakeholders is essential to maintain a high level of trust, understanding and service. We engage with stakeholders in various ways that accommodate their needs and

and social expectations.

find that we learn a lot in the process. Connecting with our customers,

customers













# • Educate stakeholders on our operations;

 Support and engage in local community activities, initiatives, and betterment programs;

investors, employees, communities, government officials, regulators

and suppliers helps us run a better business to meet environmental

Some of our stakeholder interests overlap and some compete, so we

have been striving to take a proactive approach that reaches out to:

- Respond openly and immediately to stakeholder concerns about construction, design, operation and environmental compliance of our operations; and
- Give stakeholders a voice in decisions that could impact them.

#### PSEG STAKEHOLDERS

PSEG's Stakeholder Engagement Council helps with the definition of the engagement scope for each stakeholder and the available communication channels.

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Our Regional Public Affairs managers are an important face of stakeholder engagement in each region of our utility service area. They are trained and experienced in addressing public concerns and facilitating public hearings for stakeholders. They manage each step of stakeholder engagement and make critical decisions to continually improve our stakeholder engagement practices.

#### **PSEG Stakeholder Engagement Council**

In 2015, PSEG established its Stakeholder Engagement Council. Governed by a charter, the council is led by an executive from our External Affairs organization and includes representatives from different parts of the company. The role of the council is to consider key issues the company is facing (short- and long-term), while also considering the interests and concerns of our key stakeholder groups and devising engagement strategies to find common denominators and design mutually beneficial strategies.

#### **Ways we Engage Specific Stakeholders**

Accountability is one of PSEG's most important core values, informing our efforts to build even stronger stakeholder relationships. We recognize that our credibility ultimately depends not on words but on deeds - on living up to our commitments and taking responsibility for our actions and results.

The importance of maintaining good, transparent lines of communications with our stakeholders cannot be overemphasized. Our experience is that different stakeholder groups prefer to communicate in different ways. We provide numerous channels tailored to the needs of each group for our stakeholders to communicate their interests and help us address issues or concerns.

# Economic Key Performance Indicators

#### **Fleet Availability**

Unit/Plant	2018 Capacity Factor (%)
Nuclear	
Salem Unit 1	97.9
Salem Unit 2	84.6
Hope Creek	88.8
Peach Bottom Unit 2	93.4
Peach Bottom Unit 3	94.2
Coal	
Keystone	83.4
Conemaugh	76.9

#### 2018 Energy Produced

Total 57,093 GWh



Gas **33%**Nuclear **55%**Coal **10%**Oil/Kalaeloa **1%** 

Pumped Storage <1%

Solar <1%

#### 2018 Fuel Diversity

Installed Capacity - Total MW 11,872



Gas **49%**Nuclear **31%**Coal **10%**Oil/Kalaeloa **5%** 

Pumped Storage 2%

Solar 3%

#### **Power Operations**

We are determined to be a leader in our industry through our commitment to operational excellence, financial strength and disciplined investment.

Reliability at PSEG is also about having power plants that are available to run as needed to help meet the energy needs of millions of people. Our generation fleet is not only one of the largest in the northeastern United States, but also one of the most diverse by fuel mix and dispatch capability. This diversity improves our ability to meet market demand around the clock from season to season.

PSEG Power faces challenges primarily due to a changing energy marketplace driven by lower prices. In response, our generation portfolio has been reconfigured to establish a more efficient, less carbon-intensive fleet. At the same time, we continue to find ways to increase the efficiency and performance of PSEG Power assets while lowering costs – without compromising safety or reliability.



# Economic Key Performance Indicators

#### **Utility Operations**

	Number of Customers December 31, 2018	Electric Sales/Gas Sold & Transported
Electric	2.3 million	41,889 GWh
Gas	1.8 million	2,630 M Therms <sup>1</sup>
	Historical Annual Load Growth	Projected Annual Load Growth
	2014-2018	<b>2018-2020</b> E <sup>2</sup>
Electric	<b>2014-2018</b> 0.3%	<b>2018-2020</b> E <sup>2</sup> 1.0%

#### **Sales Statistics**

Data as of December 31, 2018

#### 2018 Sales Mix

	Residential	Commercial	Industrial	2018 Peak Load
Electric	33%	58%	9%	~10,000MW
Gas	58%	38%	4%	-

#### **Transmission Statistics**

	Network	Base Return	2018 YE
	Circuit Miles	on Equity <sup>3</sup>	Rate Base
Electric Transmission	1,941	11.68%	\$8.7B

#### **Utility Operations**

PSE&G currently serves nearly three quarters of New Jersey's population in a service area consisting of a 2,600-squaremile diagonal corridor across the state from Bergen to Gloucester Counties. PSE&G is the largest provider of gas and electric service, servicing 1.8 million gas customers and 2.3 million electric customers in more than 300 urban, suburban and rural communities, including New Jersey's six largest cities. PSE&G invested \$3 billion in 2018 capital expenditures to upgrade, expand and enhance the reliability and resiliency of its electric and gas Transmission and Distribution system. ReliabilityOne has recognized PSE&G as the most reliable electric utility in the Mid-Atlantic region for the 17th consecutive year in 2018.

E = Estimated



<sup>&</sup>lt;sup>1</sup> Firm gas sales only.

<sup>&</sup>lt;sup>2</sup> Estimated annual growth per year, assumes normal weather.

<sup>&</sup>lt;sup>3</sup> FERC ROE is comprised of a base 11.18% plus a 0.50% adder for participation in a regional transmission organization (RTO). Certain PSE&G projects also have various ROE adders approved by the FERC to promote transmission infrastructure development.

# Economic Key Performance Indicators

# **Electric and Gas Distribution** and Solar Statistics

	Network Miles/Solar MW Installed	Base Return on Equity	2018 YE Rate Base
Electric Distribution	22,468		\$10.0B
Gas Distribution	18,000	9.6%	φ 10.0Β
Solar and EE Assets	122 MW <sub>DC</sub>		\$0.6B

#### **Renewables Program**

	2009–2018 In Service	Total MW Program Plan	Total Investment
Solar Loan I, II, III	118 MW	178 MW	\$298 Million
Solar 4 All, Extension & Ext. II	122 MW	158 MW	\$638 Million

Solar 4 All is our 158 megawatt (MW) program that utilizes rooftops, solar farms, utility poles and landfills/brownfields for large-scale, grid connected solar projects. The revenue PSE&G receives from the sale of solar energy, capacity, the sale of the solar credits (SRECs) and the federal investment tax credit (ITC) realized is returned to customers, offsetting the overall cost of the Solar 4 All Program.

The Solar Loan Program is the second piece of PSE&G's solar development strategy. PSE&G's program has made approximately \$298 million of financing available through year-end 2018 to help homeowners and businesses develop approximately 1,500 solar installations (118 MW of solar capacity). The loans generally finance up to 70% of the total cost of the solar installation and are repaid using solar renewable energy credits (SRECs), which are generated by the solar installation.



# **Economically Vibrant Energy Future**



# **Powering Progress**

The modern electric grid is one of the 20th century's great achievements. This didn't happen by chance. For more than a century, the mission and mandate of utilities were closely aligned with a major goal of society: Providing universal access to an around-the-clock supply of reliable, affordable power.

As larger community goals have changed, energy companies such as PSEG have evolved to remain aligned with them — for example, by helping to meet urgent deadlines for reducing global emissions of carbon dioxide and other greenhouse gases.

Today, the role of the utility is evolving as we adjust to meet the changing expectations of customers. At PSEG, our vision of the future is one where customers use less energy, the energy they use is cleaner, and its delivery is more reliable and more resilient than ever.

Under the banner of "Powering Progess," our company has established new business priorities to help this vision of the future become a reality — for the benefit of the environment, our customers and our shareholders. Our new priorities include:

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**Energy efficiency:** The first and most significant change will be a reordered focus of our core mission shifting from the 20th-century model in which utilities sought to sell as much electricity as possible, to a new approach in which our mandate is to help customers use less energy and, by doing so, help them to save money on their monthly bills.

We believe this transition to energy efficiency must be a top priority for utilities in the future. Energy efficiency delivers clean energy benefits similar to solar or wind, but at a fraction of the cost to consumers.

**Clean energy:** The U.S. and other nations already are beginning the conversion to renewable resources, such as solar, terrestial wind and offshore wind. PSEG is New Jersey's leading developer of solar energy resources and is a supporter of multi-state efforts to develop offshore wind facilities off the Mid-Atlantic coastline

We also must continue to work with state and federal policymakers to preserve our existing carbon-free energy sources, such as nuclear.

And because transportation represents the nation's largest source of greenhouse gases, utilities should lead the drive to electrify the sector – cars, trucks, buses and trains – by investing in a universal EV-charging infrastructure.

Connected customers: Energy companies are reimagining the electric grid as a digital network that not only delivers electricity, but also provides customers access to a universe of clean energy resources and services. In the short-term, such smart grid technology would provide real-time data on outages — and give restoration crews the information they need to respond to disruptions immediately.

Smart-grid technology also will enable customers to access a variety of data to help customize their energy use in whatever manner suits their needs.

**Infrastructure:** Energy companies evolve, we must also realize that the existing energy grid remains essential. That's why we should continue to invest in modernizing the nation's aging electric and gas infrastructure.

And finally, to achieve this vision, and ensure sustainability, PSEG has long pursued a business strategy based on operational excellence, financial strength and disciplined investment.

Energy companies are leading a new era of growth and change that will once again provide widespread benefits for the communities we serve. If utilities are able to evolve quickly, we can and will lead the energy industry toward a stronger, cleaner, more efficient future.





# Reliability is the foundation of our success

Since our company was founded in 1903, customers have relied upon PSE&G to keep the power flowing. Even as storms grow more severe, our 2.2 million electric customers and 1.8 million gas customers expect the lights to stay on and to have high quality gas service. We're proud to meet these reliability expectations, time and time again.

PSE&G designed and constructed a large portion of New Jersey's energy grid to last — and it shows. Our electric and gas infrastructure is the foundation for one of the most reliable, resilient utilities in the nation. We have been named the Mid-Atlantic region's most reliable electric utility for 17 consecutive years. Nationwide, PSE&G's reliability ranks among the top 10 percent of utilities with more than 500.000 customers.

PSE&G's average system outage duration is 45 minutes, substantially lower than the national average of 1 hour 47 minutes, and many of our customers do not experience any outages. When the power does go out — usually when a storm brings down tree limbs and power lines — PSE&G customers on average are restored within 71 minutes, one of the best response rates in the industry. PSE&G responds to gas leaks within an hour 99.9 percent of the time. Learn more about our Electric System Upgrades.

As customer needs and weather patterns change, we must continue to make the necessary investments in the infrastructure and programs that are the very foundation of our state's economy and way of life. PSE&G has a projected capital investment program of \$12 - \$16 billion over the next five years to continue our momentum to modernize and upgrade the transmission grid. That builds upon the \$13.7 billion worth of investments made in the past decade to maintain the reliability that our customers have come to expect.

Under our Energy Strong program, for example, we are elevating switching and substations to minimize the risk of losing power. We are infusing the network with advanced microprocessors and other advanced technology to more quickly identify trouble spots and expedite repairs. Today, nearly 500,000 customers who lost power under Superstorm Sandy will not lose power when the next big storm hits. Learn more about our Energy Strong Program.

With PSE&G's Gas System Modernization Program, which began in 2016, we are accelerating replacement of aging cast-iron and unprotected steel gas pipes in communities across our territory to reduce leaking methane, a potent greenhouse gas. By the end of 2018, approximately 450 miles of high-risk pipe will have been replaced, with 875 miles more to be replaced by 2023. Learn more about our Gas System Modernization Program.

Our groundbreaking Clean Energy Future proposal also would have enormous benefits for the environment, customers and the company. These three filings call for historic investments in energy efficiency, electric vehicle charging infrastructure, in utility-scale energy storage capabilities, and in technology, including smart meters, that will help PSE&G take great leaps forward in sustainability, reliability and resiliency. See the details here: https://www.psegpoweringprogress.com/

In 2018, PSE&G proposed a five-year extension of Energy Strong that calls for the continued hardening of gas metering and regulating stations against flooding, as well as to reduce potential methane releases and add redundancy to the natural gas system in the event of a major gas supply disruption.

### Working with Suppliers

We value suppliers who share our commitment to reliability, quality and integrity. We have strong relationships with our suppliers and depend on them to meet the highest standards of service.

Working with as many suppliers as we do is a complex process that requires thoughtful and meticulous management. We expect our suppliers to meet our ethical standards and have a procurement and supplier management process that conforms to the highest standards in the industry.

PSEG's management practices and ethical code, our Standards of Conduct, are woven into everything we do, including our relationships with suppliers. When considered for a new contract of any type, suppliers go through a rigorous pre-qualification review. After contract award, PSEG Procurement monitors the performance of key suppliers in concert with the Corporate Health and Safety organization. In addition, a third-party compliance auditor verifies certain health and safety information to conform with regulatory and PSEG standards. Key suppliers are graded based upon performance metrics and incentives are included in a majority of key supplier contracts. Read more about our relationship with suppliers.

#### **Supplier Diversity**

PSEG's supplier diversity process has been in place for over 30 years, utilizing a number of processes and initiatives to grow business relationships and expenditures with certified minority-women-veteran-, and service disabled veteran-owned businesses. In 2017, PSEG achieved historic results by spending more than \$532 million or 18.6 percent with MWVBE's due in part to PSEG's internal performance goals, aggressive outreach methods, business advocacy partnerships, education, mentoring and communication.

PSEG's primary outreach initiative is hosting PSEG-sponsored complementary external supplier diversity procurement fairs to connect and interview minority, women, veteran, and service disabled veteran-owned businesses for potential procurement opportunities with PSEG's Procurement organization and PSEG leadership. Each fair includes a supplier workshop on "How to do Business with PSEG with business



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success tips" and a diverse supplier presentation. PSEG helps to expand attending business suppliers' opportunities by including PSEG's top prime suppliers, New Jersey-regulated utilities and major New Jersey corporations at each of its fairs.

PSEG is an active corporate member of numerous external supplier diversity advocacy organizations that share their extensive minority, women, veteran, and service disabled veteran-owned business databases for our procurement bid and contract inclusion.

### Transforming our company with technology



For 115 years, PSEG has done business using traditional infrastructure – from pipes, poles and wires to technology. But that reliance on tradition is changing. Imagine your energy provider at the center of a two-way digital communication network, a transformation taking it from your everyday energy delivery company to a technology company that also provides energy services.

At PSEG, we are calling this transformation the Energy Cloud, a proposal that reimagines today's energy grid as a network connecting homes and businesses with a universe of clean energy sources and services, using data to help customers customize their energy use in whatever manner suits their needs.

At the core of the Energy Cloud (proposed to the BPU in September 2018) is the implementation of smart meters — safe, state-of-the-art hardware and software that provide two-way communications between the customer and PSE&G, allowing for real-time data gathering and analysis.

Smart meters benefit customers because this technology can assist in shortening power outages, provides more accurate restoration times and providing more accurate billing and usage. It also benefits the environment – reducing our carbon footprint by reducing the number of PSE&G vehicles on the road; paving the way for broader adoption of clean energy such as rooftop solar; and providing useful data to improve vegetation management.

The Energy Cloud's most transformative benefits are aimed at customers:

- Artificial intelligence will help PSE&G anticipate a customer billing question or generate offers for smart home automation, WorryFree appliance monitoring or an energy efficiency program;
- Machine learning will analyze smart meter data and detect anomalies such as an outage or an aging appliance, alert the customer and recommend a remediation plan;
- Smart home assistants, such as Google or Amazon Al assistant, will help customers manage their financial and sustainability goals with functions like setting a monthly spend or carbon footprint target

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Smart meters are central to the Energy Cloud because they provide the customer data that enables this array of new tools and services.

PSE&G also will soon be able to digitize nearly 100 percent of customer interactions, resulting in reduced costs and increased customer satisfaction.

Our technological transformation won't stop there. Generating electricity with very low levels of carbon pollution will be a vital part of New Jersey's clean energy future.

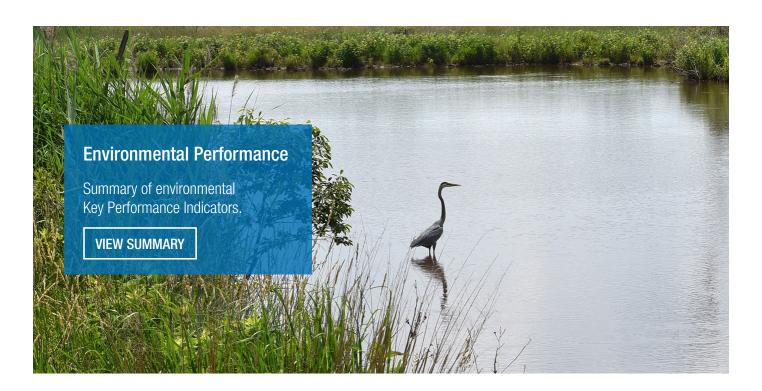
Utilizing energy storage technology, PSE&G can better integrate renewable energy onto the electric grid, providing resiliency for critical infrastructure and enabling electric lines to handle greater capacity during times of peak electric use.

Advances in technology play a key role in PSEG's power generation business, as well. Continuing PSEG PSEG Power's efforts to increase reliability and operate a cleaner, more efficient fleet, PSEG Fossil commenced commercial operation of two new combined-cycle natural gas plants in 2018, in Sewaren, New Jersey and Prince George's County, Maryland. A third is under construction in Bridgeport, Connecticut, scheduled for operation in June 2019.

These combined-cycle plants use state-of-the-art emissions control technology, resulting in cleaner generating capacity to help meet their regions' energy needs. They run primarily on clean, efficient natural gas and will support electric system reliability for the next 40 years.

Second Second

# Greening the energy future



### Responding to the challenge of climate change

PSEG has recognized for several decades that climate change is a real phenomenon that impacts our planet. Inclusion of climate change in our business plans has been a part of the PSEG culture since 1990. PSEG recognizes that there is no simple or short-term solution to address both mitigation and adaptation of global climate change. As new challenges arise, we have adapted our business plans to develop cost-effective solutions to meet these challenges.

New Jersey has been in the forefront on energy evolution. The state published its first Energy Master Plan (EMP) in 1991. The development of the EMP included input from a diverse group of stakeholders, including PSEG. The plan included policy positions and implementation strategies to meet the state's energy requirements through 2000. One of the initial state energy policy goals was "to protect our environment through wise and efficient energy use." In particular, the EMP encouraged the development of cost-effective solar energy and demand-side energy efficiency. PSEG embraced the goals of the EMP and actively sought actions to support these goals.

In parallel, the United States embraced a leadership role in developing strategies to address climate change when it signed onto the United Nations Framework Convention on Climate Change (UNFCCC)



in 1992. The objective of the UNFCCC treaty was to stabilize greenhouse gas emissions to 1990 levels by 2000. PSEG accepted the challenge and was the first electric utility in the United States to volunteer to participate in President Clinton's Climate Challenge Program in 1993. Our participation in the Climate Challenge Program was one mechanism to support New Jersey's goals under the EMP. We successfully met this goal and stabilized our carbon dioxide emissions from our New Jersey plants to 1990 levels by 2000.

PSEG sought additional opportunities to reduce our carbon footprint. PSE&G signed on to EPA's voluntary Natural Gas STAR Program in 1993. The Natural Gas STAR Program is designed to promote the implementation of cost-effective technologies and practices to reduce CH4 emissions. Also, PSEG joined EPA's WasteWise Program in 1995. Under this program, partners demonstrate how they reduce waste and incorporate sustainable materials management into their waste-handling processes. The program provides a tool to calculate GHG emission reductions associated with recycling and waste-minimization activities. PSEG's recycling rates have consistently exceeded 90 percent.

Since the UNFCCC was founded, member countries have continued to meet annually to assess progress. In December 1997, the members reached agreement on the Kyoto Protocol on Climate Change. The Clinton Administration committed to a requirement to reduce total emissions on average of 7 percent below 1990 levels; however, Congress never ratified the treaty. Nevertheless, PSEG continued to acknowledge the electric utility industry's need to play a leadership role in developing national strategies to address climate change. Building on the success of the Global Climate Challenge Program, PSEG joined EPA's Climate Leaders program in 2002 to reduce the six greenhouse gases covered under the Kyoto Protocol — carbon dioxide (CO2), methane (CH4), nitrous oxide (N20), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF6). Under this program, PSEG committed to reduce its CO2-equivalent GHG emissions on a pound-per-megawatthour basis by 18 percent from 2000 levels by Dec. 31, 2008. PSEG surpassed this goal by achieving a 31 percent reduction, due primarily to the fact that more than half our power comes from nuclear generation.

New Jersey continued to be a leader in addressing climate change. Gov. Jon Corzine issued an Executive Order which, established goals to reduce GHG emissions by 80 percent below 2006 levels by 2050. The passage of the Global Warming Response Act of 2007 supports implementation of key elements of the executive order. As a leader in the energy industry and responsible corporate citizen, PSEG established a new goal of reducing economy-wide GHG emissions by 25 percent from 2005 levels by 2025. PSEG met this goal 14 years ahead of schedule. We achieved this goal through implementation of energy efficiency programs, deployment of renewable energy, increasing nuclear output and building clean, efficient natural gas plants. This transformation of the energy business in a cost-effective manner requires heightened collaboration with the state. Energy companies can deploy capital over the long term to ensure conservation and renewable energy gains are sustained. Funding

mechanisms are necessary to ensure utilities realize a fair return on investments. During this time, PSEG implemented the following:

- Received approval from NJBPU for PSE&G's Solar Loan Program which aids businesses and homeowners in financing solar panel installations
- Investment in grid-connected solar capacity outside of PSE&G's territory
- Received approval from NJBPU for several targeted energy efficiency programs
- Hospital Efficiency Program
- Residential Whole House Efficiency Program
- Direct Install Program (PSE&G's Energy Saver Program) for Small Businesses, Government Facilities and Non-Profits
- Residential Multifamily Housing Program
- Received approval from NPBPU to replace portions of PSE&G's old cast-iron and unprotected steel gas mains (Gas System Modernization Program)
- Replacement of auto fleet with hybrids and introduced the nation's first hybrid bucket trucks
- Implemented employee workplace charging programs for PSEG employees and other employers in the PSE&G territory; and
- Lowered our carbon footprint by making several of our facilities more energy efficient through utilization of the U.S. Green Building Council's Leadership in Energy and Environmental Design rating system

In 2012, New Jersey was hit by Superstorm Sandy. The storm's ferocity revealed the vulnerability of our infrastructure to damage from severe storms. This event prompted PSEG to consider climate change adaptation into our business plans in addition to mitigation. PSE&G received approval from NJBPU to invest in resilient electricity and natural gas infrastructure in the wake of Superstorm Sandy (Energy Strong program).

In 2016, PSE&G became a founding partner of EPA's Natural Gas STAR Methane Challenge by committing to replace 1.5 percent of PSEG's cast-iron gas mains and associated service lines by 2021.

Thanks to a pioneer partnership between PSE&G, Environmental Defense Fund (EDF), Google Earth and Colorado State University, we have been able to benefit from the use of advanced methane detection technology to prioritize pipeline replacement efforts. By using that data to help plan gas line replacement

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efforts, PSE&G was able to reduce methane emissions more quickly, by replacing significantly fewer miles of gas lines than would have been necessary to achieve the same emissions savings. The effort was part of a three year, \$905 million program approved by the New Jersey Board of Public Utilities in November 2015. As we move ahead with the implementation of the Gas System Modernization Program II, PSE&G is continuing the use of this technology in support of replacement planning prioritization. To learn more about our partnership, results and the Impact of leak flow rate on gas line replacement priority, click here.

In 2017, we closed our two remaining New Jersey coal-burning power plants. Our coal-fired unit in Connecticut is schedule to retire in 2021. At the same time, we are constructing three new power plants — one each in both New Jersey and Maryland, which opened in 2018, and a third in Connecticut, expected to open in 2019 — that each will use highly efficient, natural gas-fired combined-cycle technology. As we continue this transformation of our power business, emissions levels of NOx and SO2 as well as CO2 and other pollutants will be reduced from our 2005 baseline, along with residuals from the coal-burning process and the need to employ chemicals to treat them.

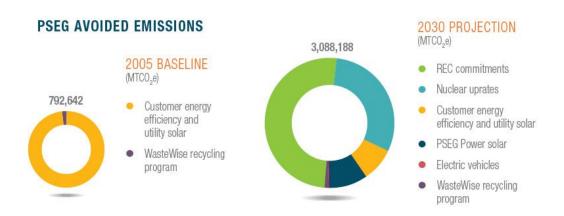
PSEG is New Jersey's leading developer of renewable energy — having spent more than \$1.7 billion to develop large-scale, grid-connected solar projects in New Jersey and around the U.S., as well as providing loans to help customers finance solar capacity on homes and businesses. We also support New Jersey Gov. Phil Murphy's efforts to develop 3,500 megawatts of offshore wind resources.

In early 2018, PSEG announced its new goal of eliminating 13 million metric tons of CO2-equivalent (MMTCO2e) by 2030 from 2005 levels. Our new goal expands upon our previous reduction goals and includes activities that avoid GHG emissions. The new goal includes the following actions:

- Accounting for avoided emissions from the post-2005 uprates at our nuclear facilities
- Retirement of our New Jersey and Connecticut coal plants
- Efficiency upgrades of our existing natural gas combined-cycle fleet
- PSE&G's Gas System Modernization Program, which will begin a five-year second phase in 2019, replacing aging cast-iron and unprotected steel natural gas infrastructure with new, more durable plastics to reduce leaks of methane
- Continued replacement of traditional fleet vehicles with hybrid vehicles and the installation of idle mitigation technology on fleet vehicles
- Solar and energy efficiency investments and programs
- Electric vehicle charging programs for our employees and our commercial/industrial customers

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- Recycling of industrial waste under EPA's Waste Wise program
- Emission reductions in fulfilling PSEG Power's REC commitments



PSEG believes that there are tremendous opportunities to further reduce GHG emissions through energy efficiency programs, but it will require a new regulatory compact. Energy utility companies are uniquely positioned to lead in the effort to deploy more energy efficiency programs. PSEG can achieve this by investing in energy-saving appliances and fixtures, all while receiving appropriate compensation for encouraging smart energy use. With the right economic incentives, energy efficiency can be a much larger contributor to our low-carbon future.

In September 2018, PSE&G filed a comprehensive Clean Energy Future proposal with the NJBPU that included the largest energy efficiency program in the history of New Jersey. As a part of this filing, PSE&G is seeking NJBPU approval of a rate design change, called the Green Enabling Mechanism (GEM). This is a proposal to decouple revenues from sales volumes and thereby encourage energy efficiency. If approved, the GEM will remove the incentive to sell more energy and will instead encourage utility investments in energy efficiency, renewables and other clean energy technologies that will ultimately benefit all customers by bringing down bills and reducing emissions.

The Clean Energy Future proposal contains four components:

• Energy efficiency: Since 2010, we have invested approximately \$400 million in energy efficiency initiatives that reduce emissions in hospitals, multifamily housing and buildings occupied by nonprofits and government agencies. This new program will allow customers at all income levels to use up-front rebates and other financial incentives to purchase more efficient appliances, smart thermostats and other

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equipment; get free and affordable energy audits, reports and system design advice; get free and low-cost energy efficiency kits, tools and installations; and seed funding for new energy-saving techniques.

- Electric vehicles: To date, we have spent in excess of \$800,000 to install more than 200 charging stations in employer locations and travel corridors. This new EV proposal jump-starts broader use of EVs by supporting nearly 40,000 EV chargers, the bulk of which are for residential use. It includes mixed-use and public DC fast-charging. CEF also supports EV innovation, including custom projects for airports, ports and other transit facilities and grants for school districts to buy and operate electric school buses.
- Energy storage: This component calls for 35 megawatts of energy storage capacity over six years through five programs: solar smoothing, distribution deferral, mobile storage for outage management, microgrids for critical facilities and peak reduction for public sector facilities. CEF will begin to put New Jersey on track to meet the Clean Energy legislation's goal of 600 megawatts of energy storage by 2021 and 2,000 megawatts by 2030.
- Energy Cloud: PSE&G's Energy Cloud program is designed to improve reliability and customer service and reduce the carbon footprint. This major undertaking includes a plan to educate customers about the many benefits of smart meters. If approved, PSE&G intends to install the smart meters by 2024.

The Clean Energy Future filings have the potential to more than double our new carbon-reduction goal upon approval by the New Jersey Board of Public Utilities.

Experience has shown us that developing and implementing integrated energy and environmental policies to achieve the necessary deep reductions in GHG emissions to properly address climate change requires leadership and a long-term commitment. As stated above, we have adapted our business plans to meet the short-term goals to implement cost-effective measures to mitigate and adapt to climate change. However, PSEG maintains that a national solution is required to achieve significant emission reductions. Through the years PSEG has supported implementation of an economy-wide price on carbon. PSEG has been and continues to be ready to partner with state, regional and federal representatives to tackle the greatest environmental challenge of our time.

Second Second





Preserving nuclear as a clean energy leader PSEG's longstanding history of generating clean energy and protecting our environment is made possible by our Salem and Hope Creek nuclear plants in Lower Alloways Creek, New Jersey, and part-ownership of the Peach Bottom nuclear plant in Delta, Pennsylvania. As the second-largest commercial nuclear generating facility in the country, the Salem and Hope Creek plants' ability to provide power 24/7 has a significant impact on New Jersey and the region. In addition to providing nearly half of New Jersey's electricity, the plants play a key role in supporting its clean energy goals. In New Jersey, more than 90 percent of the state's emissions-free power generation comes from nuclear energy. This benefits the environment, including the air we breathe, by helping to avoid harmful emissions that contribute to climate change and public health issues.

During the past year, the New Jersey Legislature and Governor Phil Murphy recognized nuclear power's vital role in the state's clean energy policy, passing Zero Emissions Certificate legislation that will help ensure that Nuclear Power remains an important component of NJ's energy supply. In 2019, the State will select the plants that would be eligible to receive this incentive.

New Jersey also benefits from nuclear power in many other ways. Salem and Hope Creek continue to set new standards for excellence by reinforcing the important role they play every day. In 2017, PSEG's nuclear fleet — Salem, Hope Creek and Peach Bottom — operated at a 93.9 percent capacity factor for the year and produced a record 31.8 terawatt-hours of electricity. This includes Hope Creek's first breaker-to-breaker run, when it ran nonstop for 517 consecutive days and set a new plant generation record of 10.6 terawatt-hours. These unprecedented achievements speak to nuclear power's position as the most reliable energy source.

Nuclear also plays a critical role in maintaining the diverse supply of fuels used to generate electricity in New Jersey and other states that belong to the PJM network. Fuel diversity contributes to the reliability, resiliency and affordability of the energy grid.

For PSEG, our nuclear plants are also about community. As the largest employer in Salem County and one of the largest employers in South Jersey, we help drive the local economy. The plants support 1,600 direct jobs plus an additional 1,000 contractors twice a year for scheduled refueling outages. Thousands of additional jobs are also supported by the \$800 million in economic activity the plants generate each year.

Most importantly, our nuclear operations are about safety. Working with our regulators and industry peers, we continue to implement best practices that enhance our ongoing commitment to safe, event-free operations. Read our Nuclear Emergency Plan.

To learn more about our nuclear operations, visit our PSEG Nuclear LLC page.

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### Stewardship of our precious water resources

PSEG's power plant operations use water in a variety of ways — in steam turbines, for cooling in boilers and to reduce air emissions. Therefore, meeting water quality standards is an issue we confront daily. We have consistently worked to reduce the use of potable water at our plants and to economize our use of other water sources.

PSEG guidelines call for all of our power plants to ensure that they maintain the quality and quantity of water in both the intake and discharge processes. Our Salem cooling water intake uses the best-available technology to safely remove and return fish to the river. We also monitor pH and temperature of water that is returned to rivers; we are in compliance with state environmental quality permits. We also treat all water used for industrial purposes on-site and both our measured and reported water data are externally verified in several ways by federal and state regulatory agencies.

The generation technologies that PSEG Power uses have been evolving in recent years. As part of this evolution, PSEG has been retiring generation units that used river or estuarine water for once through cooling and replacing them with technology that includes closed-cycle cooling. This process continues with the 2017 retirement of the Hudson and Mercer coal-powered units in New Jersey, and the announced retirement of our Bridgeport unit in Connecticut in 2021.

New generation that became operational in 2018 in Sewaren, New Jersey, and at the Keys Energy Center in Prince George's County, Maryland, employs combined-cycle combustion technology with air-cooled condensers. These units are powered primarily by natural gas, with oil as a backup fuel. Use of water will be employed only as the steam driver for the heat-recovery boilers. The new unit under construction in Bridgeport, Connecticut employs similar technology.

In addition to discharges related to power generation, PSEG manages storm water at its outdoor locations. PSEG has designed and put in place systems to treat industrial wastewater, reduce the concentration of pollutants in discharges and reduce the potential for storm water to carry pollutants from its facilities.

#### Working to reduce water use footprint

PSEG has taken the following steps recently to reduce its water use footprint:

- Several existing units in the PSEG fleet have minimized use of once through cooling water systems (which withdraw high volumes of water with relatively low water consumption rates, and also can affect local aquatic habitats) by using technologies such as closed-cycle cooling that repeatedly recycle water instead of releasing it immediately into local waterways (BEC, Bergen, Linden, Hope Creek).
- The Bergen and Linden generating stations use an alternate source of cooling water from local POTWs recycled "gray water"

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- Recently built generating stations Sewaren Unit 7, Keys Energy Center, and Bridgeport Harbor Unit 5 all utilize air cooled condenser technology instead of evaporative cooling towers for the steam turbine generators, thus eliminating the need for makeup water for the main generating cycle. The new units employ highly efficient combined cycle technology. A limited amount of city water is used for makeup to the heat recovery steam generators and small auxiliary coolers.
- In 2012, PSEG repowered water-cooled units at our Kearny plant and New Haven plant with simple cycle combustion turbine units that are air cooled and do not use cooling water.
- Recent retirement of the Hudson and Mercer coal powered units in NJ and Sewaren 1-4 gas powered units that used local surface water for cooling.
- Planned retirement of Bridgeport coal powered unit (Unit 3) in Connecticut in 2021.

#### Monitoring quality of water

- PSEG complies with all aspects of the station's NPDES Discharge to Surface Water Permits and the discharge limits within those permits.
- PSEG also implements treatment/processes to ensure the discharges remain below those regulatory limits
  and continuously works with regulatory agencies to commit to reductions in permit limits as requested by
  the agencies.
  - Examples include installing metals treatment technology at Linden Generating Station in 2016 to reduce metal concentrations in discharge and working with the state agency (NY DEC) to agree/commit to a lower limit for Total Residual Chlorine limit at Bethlehem Energy Center (BEC).
  - PSEG also has installed Manufactured Treatment Devices (MTDs), which are pre-fabricated stormwater treatment structures that utilize settling, filtration, and other technology to remove pollutants from stormwater runoff. These have been installed at Sewaren, Kearny and Bridgeport Harbor Station to assist in treating stormwater runoff from the sites and ensuring water quality best management practices are in place.

#### Options from a longer term point of view

New generation units including Sewaren 7, Keys Energy Center, and Bridgeport Harbor Unit 5 employ
combined cycle combustion technology with air cooled condensers, removing the need for use of surface
water or other sources of water for cooling. Minimal use of water is only employed as the steam driver for
the heat recovery boilers and minor auxiliary cooling. The life expectancy of these plants is approximately
30 years, so these plants will continue to provide reduced demands on local water sources and reduced
risk as it relates to water risk and drought scenarios.

Second Second



# Biodiversity

All along the southern shores of the Delaware River, colonial-era farmers built dikes to make land more suitable for agriculture. Conversion of these saltwater marshes was important to the colonial economy, but, centuries later, we also understand that the process destroyed breeding grounds for native fish, plants and wildlife.

PSEG's Estuary Enhancement Program was created in 1994 in cooperation with New Jersey's Department of Environmental Protection, and calls for PSEG to restore marshes and habitats that were altered long ago to grow salt hay and other crops.

The estuary enhancement program — which at 21,000 acres is the largest privately funded tidal marsh restoration project in U.S. history — is a prime example of PSEG's commitment to biodiversity in the communities we serve.

The estuary program includes sites along both sides of the Delaware River surrounding the Salem and Hope Creek nuclear generating stations, and farther south along Delaware Bay. As part of the program, PSEG also maintains fish migration ladders along more than a dozen Delaware River tributaries; monitors the river's fish population as far north as Trenton; and has made upgrades to fish-protection technology in the Salem plant's cooling-water intakes.

Today, the salt marshes once again are filled with grasses and algae that provide food and shelter for spawning fish, and habitats for many native birds and wildlife, including threatened and endangered species such as bald eagles, black rails and ospreys.

PSEG's commitment to natural resources extends to our impact on the land, as well.

As New Jersey's oldest and largest utility, PSE&G maintains nearly 1,000 miles of electric transmission rights-of-way, keeping trees and other vegetation well clear of lines so that power keeps flowing to the more than 2 million homes and businesses our company serves across the state.

While this work is essential, we are committed to carrying it out in the most environmentally sensitive way possible. There are more than 50 different threatened or endangered species of plants and animals known to be living along or adjacent to our transmission rights-of-way. Their presence means that we have to take great care about when and how we do this essential work so we don't conflict with the various life stages of these species.

For example, we have used specially equipped helicopters to change out aging towers in sensitive wetlands and parklands. Instead of relying on trucks, cranes and other heavy equipment, the helicopters safely transported equipment and new tower structures to the construction areas to minimize our impact on the

environment. And after our work was complete, we restored the right of way to its former state, re-grading the ground, spreading new topsoil and planting native seeds.

Similarly, we have modified our maintenance activities to protect the nesting areas of the golden-winged warbler, a small migratory bird, and the frosted elfin, a butterfly native to North America. Working with wildlife experts, we have planted nectar sources and host plants like milkweed on our rights of way. We have installed "critter crossings" so that reptiles and amphibians could safely traverse our construction areas.

Our infrastructure is also home to eagles and osprey. Environmental specialists routinely assist the NJ Department of Environmental Protection with banding young eagles that are nesting on our towers. Working with the Hackensack Riverkeeper, employees have built nesting platforms at one of PSEG's generating stations to support the increasing osprey population.

We know our customers want safe and reliable electricity, and they expect us to protect the environment in the state we call home. We are working hard to do both.

### **GHG Total Emissions**

Metric tones CO,e in millions



### Scope 3 Emissions 2018



Use of sold products 48%
Purchased goods and services 11%
Fuel and energy-related activities 22%
Capital goods 19%

### **Emissions Intensity Rate\***

Lbs/Mwh



### Climate Change

In 2018, PSEG's Scope 1 and Scope 2 emissions were approximately 14 million tons of CO<sub>2</sub>e. The small increase in our emissions from 2018 is due to the new Combined Cycle Units that started operating last year.

### **Emissions Intensity Rate**

PSEG's low intensity rate is due primarily to the fact that more than half of our power comes from nuclear generation. In addition, PSEG retired its NJ coal-fired units in 2017 and continues to invest in solar energy.



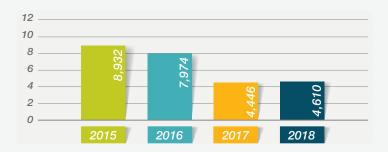
### **Methane Emissions**

Metric tones of CO<sub>2</sub>e in thousands



### **NOx Emissions**

Metric tones in thousands



#### **SOx Emissions**

Metric tones in thousands



#### Methane Emissions

In New Jersey, PSE&G owns and maintains more than 17,900 miles of gas mains that transport natural gas to our 1.87 million gas customers. PSE&G's transmission pipelines account for only about 58 miles. Cast iron was the material of choice from the late 1800s to the mid-1900s. PSE&G has been steadily and systematically replacing these mains based on condition, age and other factors. During the past 10 years, PSE&G has replaced more than 770 miles of cast iron and 340 miles of unprotected steel main. Our replacement strategy is considered an industry best practice and has been highly successful: From 2008-2017, our leaks-per-mile average is only 0.228 (approximately 8,000 leaks per year).

#### Air Emissions

PSEG is transforming its generation fleet to be cleaner and more efficient while emphasizing the continued importance of fuel diversity to ensure reliable and affordable energy. As we continue this transformation, emissions levels of NOx and SO<sub>2</sub> as well as CO<sub>2</sub> and other pollutants will be reduced from our 2005 baseline, along with residuals from the coal-burning process and the need to employ chemicals to treat them.

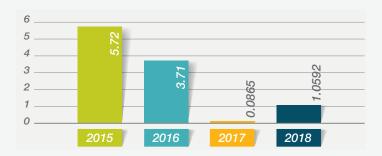


### Mercury (Hg) Emissions

Metric tones



# **SF6** *Metric tones*



### **Environmental Violations**

Significant fines (≧ USD \$10,000) related to environmental or ecological issues.

Number of Vi	olations
2015:	3
2016:	0
2017:	6
2018:	0

Amounts	
2015:	\$30,000
2016:	0
2017:	\$38,000
2018:	0



### Water Usage (Power Generation)

Cubic meters in millions



### **Sources of Fresh Water Use 2018**



### Waste

Metric Tones



#### Water

In 2018 PSEG Power used more than 80 million of cubic meters of water, but returned back to the source more than 91% of it. We have minimized the use of fresh water by using dry-cooling technologies and reclaimed water.

#### Waste

At PSEG we reduce our waste, reuse materials and find ways to safety extend the life of equipment. The amount of waste generated by our operations has been fluctuating in the last few years as we finalize our transmission upgrades and gas modernization program.



# People Strategy



## Giving back to our communities

In September 2018, dozens of ready-to-work volunteers — including more than 70 PSEG employees — arrived in Paterson, N.J. with an ambitious goal: In just a few hours, to build an entire playground on what had previously been an empty corner of Westside Park.

It's hard work. Volunteers are asked to pitch in on a variety of tasks, from assembly to construction to landscaping to clean-up.

But when the work is finished, a neighborhood's children have a brand-new space for play.

The Paterson playground is PSEG's sixth such project in cooperation with the Kaboom! organization. In addition to volunteer hours, the PSEG Foundation contributed \$97,000 to the effort.

It's also an example of PSEG's culture of volunteerism and commitment to community investment.

For PSEG, public service is synonymous with who we are — it's part of our name. We're more than just PSEG employees. We're the friends, neighbors and family members you connect with every day. We recognize the importance of being active participants in our community and giving back where it is needed most.



Each year, our employees continue to show their generosity and commitment to our communities — donating thousands of volunteer hours and tens of thousands of dollars to organizations throughout New Jersey and Long Island. PSEG supports their charitable contributions by matching employees' gifts to nonprofit community organizations and schools.

Employees can receive matching gifts to qualified 501(c)(3) organizations for charitable contributions up to \$2,500, and educational matching gifts up to \$5,000 and in 2017, PSEG matched more than \$819,000. Employees can also receive up to \$1,000 per year in volunteer grants for qualified 501(c)(3) organizations, which include youth sports groups, and veterans, fire and rescue organizations. In 2017, the company provided volunteer grants totaling more than \$84,000.

More importantly, our employees volunteer their time and talent every day to help build stronger communities. These volunteer efforts are supported by the PSEG Foundation, which provides additional assistance for hundreds of community groups and schools throughout the region. This includes programs that build and sustain neighborhoods, protect our environment, encourage Science, Technology, Engineering and Math (STEM) careers and so much more.

PSEG's diversity and inclusion efforts also include dozens of employee business resource groups (EBRGS) where employees with common interests can join together to celebrate their culture and experiences. From ethnic heritage to young professionals to military veterans, there's a group for everyone and an opportunity to work together for our business and more importantly our communities.

For more than a century, PSEG's success has been the direct result of our dedicated employees who work around the clock to keep the power flowing for New Jersey and the region. This diverse group of people is more than just an office assistant, lineman or plant operator. Each day, they represent dozens of different cultures and backgrounds that make PSEG a great place to work. This wealth of knowledge and viewpoints leads to informative discussions and ways to improve our business. All employees are encouraged to speak up and expected to challenge the status quo.

For PSEG and its employees, it's not just where we do business – it's also our home too.



# Diversity & Inclusion as a business imperative

Diversity & Inclusion makes things work for our employees, our business operations, our customers and our community. Providing energy and energy services to some of the most diverse communities in the nation is an important distinction for PSEG. As responsible corporate citizens and leaders in the energy field, we know that reflecting, valuing and leveraging diversity & inclusion means we can continue to attract different people with different minds who bring us better ideas and the best solutions.

During the past year, we have continued to solidify our commitment to live by these principles.

PSEG Chairman, President and CEO Ralph Izzo joined hundreds of leaders of the world's leading companies and business organizations in signing of the CEO Action for Diversity and InclusionTM commitment — pledging to leverage their individual and collective voices to advance diversity and inclusion in the workplace.

Within PSEG, we named a new Chief Diversity Officer who also oversees the company's community involvement as Senior Director-PSEG Corporate Citizenship and Culture.

Since then, we also have created a scorecard to more deeply understand our current state and set clear goals. The scorecard measures performance in areas such as diversity in recruitment and hiring, promotions and development program participation.

We doubled up on building our awareness and skills. We launched an online training library of topics ranging from emotional intelligence to cohesive teamwork. And we conducted in-person teaching sessions on fostering a harassment-free workplace and understanding implicit biases.

We continued to build grassroots engagement with ongoing to support of Employee Business Resource Groups centered on interests, including age and ethnicity. They provide a drumbeat of information, events and support across the company, helping to build a more welcoming workplace.

And externally, we also have continued our robust efforts in growing supplier diversity and outreach, including giving by our PSEG Foundation.

Additional efforts include:

- The PSEG Foundation invests 33 percent of its grant-making to diversity and inclusion, and invests deeply
  in urban communities, including Newark, home of PSEG headquarters for 115 years.
- PSEG earned a score of 100 on the LGBTQ-focused Human Rights Council Corporate Equality Index in 2017.

- PSEG enforces a zero-tolerance policy on harassment and fosters a culture of accountability, empathy and knowledge.
- Of the \$2.1 billion worth of business conducted with other New Jersey-based companies, \$532 million was spent with minority-, women- and veteran-owned suppliers — representing close to 19 percent of PSEG's total supplier spend, a more-than-300 percent increase over the last decade and a new all-time high.

The culmination of our 2018 efforts is a PSEG Diversity and Inclusion Summit, with PSEG's 200 top executives alongside 150 diversity & inclusion culture ambassadors across all levels of PSEG — as well as a cohort of special local guests. The event is an opportunity to hear from our leaders and prominent external stakeholders about the business imperative of diversity and inclusion, and the leadership and understanding it will take to proudly honor our dedicated, resilient — and often heroic — teams, while also courageously and openly transforming our culture.

PSEG has received various recognition for our efforts to date, including being named to Forbes' 2018 list of American's Best Employers for Diversity. And our efforts to further evolve will continue throughout next year and beyond.

### **Talent & Rewards**

PSEG is a company with strong ethical values and a deep commitment to its employees. We understand that our success ultimately depends on our ongoing ability to attract, develop and retain a highly skilled, diverse and engaged workforce. We advocate the continuous improvement of operations through a culture that recognizes the value of diversity and inclusion and where all employees are engaged and comfortable speaking up. Indeed, our people are the key to achieving operational excellence in providing safe, reliable, economic and greener energy.

Each year, we review our people strategy to ensure we have the initiatives in place to deliver on the enterprise strategic goals. PSEG promotes an environment where employees develop and utilize skills, feel comfortable sharing their ideas and concerns, and directly support the achievement of key business objectives. We continue to invest in our human capital to meet business challenges and are confident that these efforts contribute to a high-performance culture.

Employee engagement is an important part of our journey to continuously improve as a company. Our engagement initiatives focus on issues such as comfort in speaking up, building employee capabilities through our People Strong curriculum, and fostering diversity and inclusion to ensure we move forward effectively as one team. We want to build a culture where everyone not only contributes, but also feels valued and appreciated, and has a range of opportunities for growth and development.

We identify and manage numerous risks and opportunities through our people strategy. This is evidenced

in our commitment of maintaining employee and public safety, good relations with our labor unions and a highly engaged workforce.

To maintain engagement, we keep our employees informed through a variety of communication forums. The PSEG intranet (myPSEG) provides employees with a wide range of helpful information on their total rewards package including salary and benefits, retirement plans and services. We maintain an electronic catalog of policies, practices and procedures so employees know exactly how to excel. Internally, public information is communicated through myPSEG, daily Outlook Online emails and PSEG Outlook, our employee newsmagazine. In addition, our frontline supervisors and management teams routinely convey information of importance to our workforce.

People select companies that share their values. We find that job candidates are drawn to us because of our reliability, reputation and core commitments including safety, integrity, diversity and inclusion, customer focus and aspire to achieve excellence in all we do through continuous improvement initiatives; along with our clean energy initiatives, environmental stewardship and community role. PSEG has provided opportunities for our employees to grow with us for over 115 years, and we will continue to foster a workplace environment that contributes to this success.

#### **TOTAL REWARDS**

Taking great care of our customers starts with making sure we take great care of our employees. We continually strive to provide our employees with a market competitive total rewards package supporting our strategic objective to attract, retain and develop a high-performing and diverse workforce.

We conduct market research and analysis and adjust our reward programs periodically to ensure we remain competitive with the external marketplace. Our comprehensive rewards package empowers employees to be their best. Learn more about PSEG's benefits.

Lifestyle and employee wellbeing are essential to a safe and high-performance culture. PSEG recognizes the importance of offering comprehensive benefits to our employees and dependents. PSEG makes available additional services beyond traditional benefits to support and encourages employee wellbeing through physical, emotional, financial and social health. Our Be Well program focuses on employee risk factors that impact our employees' performance and drive health care costs. We offer a variety of programs to support employee wellbeing which include on-site fitness centers, health screenings, customized weight loss programs, walking challenges and incentives. A strong corporate wellness council, consisting of various union and management personnel, has played a significant role in promoting employee wellbeing and related programs. These resources are available to all full-time employees.



# Community Investment

In 2012, Superstorm Sandy cut brutally across New Jersey and New York with a surge of wind and water that devastated coastal communities. At one point, 90 percent of PSE&G's electric customers found themselves without power. Homes were moved off their foundations. Electric infrastructure was, in some places, beyond repair.

Spurred by their experience with Sandy, students at Stevens Institute of Technology – starting with only an ordinary shipping container – designed and built a prototype for a new kind of sustainable, resilient home meant to withstand the threats of rising sea levels and survive increasingly damaging storms.

The Stevens team -a mix of students with experience in engineering, energy efficiency, architecture, business, communications, management and computer science, and guided by the university's expert faculty - created the SURE House, a structure designed to be both sustainable and resilient in the face of a changing climate.

The students' efforts earned national recognition for themselves and for Stevens, winning the U.S. Energy Department's Solar Decathlon against students from the U.S. and around the world.

The SURE House is the product of a funding partnership that links PSEG with Stevens – a partnership that produces benefits far beyond our organization.

The PSEG Foundation provided \$325,000 to support development of the Stevens SURE House. The PSEG Foundation also granted \$1.5 million to Stevens in support of research focused on energy conversion and storage. These programs strengthen middle- and high school STEM education.

The foundation's financial contributions to Stevens are part of the more than \$8 million invested each year the vitality of our state and communities where PSEG does business. The PSEG Foundation provides funding for programs in three key areas: STEM and Workforce Development (37 percent), Sustainable Neighborhoods (49 percent), and Safety and Disaster Preparedness (14 percent). More than 33 percent of all PSEG Foundation grant-making supports diversity and inclusion objectives.

Key funding initiatives include:

- **STEM education:** The PSEG Foundation supports the New Jersey Institute of Technology 2018 Solar Car Team the university's first-ever, full-size, solar-powered electric vehicle to compete in the 2,000-mile "American Solar Challenge" competition to design, build, and drive solar-powered cars in a cross-country, time/distance rally event. The team has more than 60 members in 21 majors.
- **Sustainable neighborhoods:** The PSEG Institute of Sustainability Studies at Montclair State University (MSU) provides program support for sustainable communities and businesses that complement the

Sustainable Jersey program. PSEG's \$1.3 million funding is matched to provide internship opportunities to students from MSU and other New Jersey universities.

• Safety: With Sesame Workshop, the PSEG Foundation supported the creation of an emergency preparedness program, "Let's Get Ready," and an emergency response program, "Here for Each Other" (\$1.3 million). The programs provide materials in English and Spanish for families, community leaders and educators. Materials are online for easy access and include workbooks about creating an emergency plan, videos, a free app and teacher instruction.

Sesame Workshop and PSEG Foundation's new 2018-19 program, "Brave, Strong, Resilient," (\$900,000) seeks to build resiliency in children and families with curriculum to help children explore and express their feelings, practice problem-solving strategies and develop patience and confidence.

In 2018, the PSEG Foundation also is developing plans to launch a stakeholder engagement and planning process to initiate a five-year, \$5 million Signature Initiative.

A firm commitment to New Jersey for 115 years and to the communities served by PSEG is embodied in our name, Public Service. Many things have changed since our founding, but our unwavering commitment to the community – both by the company and by our employees – has remained a constant.

## The link between safety, health and wellness



Stanziale, a PSE&G Service Technician, ran from his own vehicle and called to the driver to stay inside her car. He knew that downed power lines might still be energized, and that inside the car was the safest place to be until utility crews could arrive and de-energize the lines.

The car's driver — Lauren Feldman of Livingston, N.J. — was grateful for Stanziale's quick thinking, which may have saved her life. Stanziale stayed on the scene until crews arrived to help her exit the car safely.

"I'll never forget looking out of my car window and seeing (Stanziale) and thinking, 'I am so happy he stayed," Feldman said.

Safety is PSEG's No. 1 priority – and we're proud of the safety culture we have created throughout our organization. Vaughn Stanziale's selfless response demonstrates the value of a culture that encourages safe behavior not only on the job but outside the workplace, as well.



In 2018, PSEG marked the 20th anniversary of its Health & Safety Councils, the foundation of the company's safety culture. Working together, our company's leadership and its dedicated workforce committed themselves to strengthening the safety culture of PSEG. Read our Health and Safety Commitment.

As a result, over the years our safety record has shown steady improvement, with declines both in the frequency of injuries, as well as the severity. The previous two years have been the safest in PSEG's history – establishing new record lows for OSHA-reportable incidents in 2016 and 2017.

As we continue to build on our health and safety culture, we aim to achieve our vision of Target Zero — where no one gets hurt — through a strong commitment to continuous improvement and employee involvement. We have begun to expand our efforts into areas such as driver safety and eliminating distracted driving; contractor safety and ensuring that PSEG's safety culture extends to all who share our workplaces.

We also are increasingly aware of the role that an employee's well-being plays in maintaining a safe work environment. Personal health is a driver of how an employee performs at work. Moving forward, we will aggressively continue to integrate safety and personal wellness and we will concentrate on the prevention of work-related injuries through improvement in our physical, mental, emotional, social and financial well-being.

Learn more about our Health and Safety Systems.

### Human Rights:

PSEG recently put in place a human rights practice that underscores our commitment to minimize any adverse effects our operations may have on people or communities. This new practice, along with other policies such the employee proposition, reaffirms our commitment towards ethical behavior and shows how that commitment starts from within. The practice was developed using the United Nations' Guiding Principles on Business and Human Rights as a reference and if an employee, business partner, supplier, customer or other stakeholder witnesses or learns of any incident that may involve a violation of our human rights practice, they can report it, anonymously if desired, to the company's Office of Ethics & Compliance at: ethics.compliance@pseg.com or hotline: 973-430-6405.

# Social Key Performance Indicators

### **Employee Count**

2014	2015	2016	2017	2018
12,699	13,029	13,065	12,945	13,145

### Employees as of December 31, 2018

	PSE&G	Power	PSEG LI	Service
Non-Union	2,003	1,057	899	1,041
Union	5,315	1,067	1,510	255
Total	7,318	2,124	2,409	1,296

### **Employee Turnover Rate**



#### Human Resources

As of December 31, 2018 PSEG had 13,145 employees 62% of which are covered under a collective bargain agreement.

### **Employee Engagement**

Employee Engagement is an important part of our journey to continuously improve as a company, building a culture of respect and inclusion.

PSEG and our employees work together to live our Core Commitments – Safety, Integrity, Continuous Improvement, Diversity & Inclusion and Customer Service.

### Employee Turnover Rate

PSEG ensures that there is a strong culture knowledge transfer and robust succession planning to ensure business continuity.

NOTE: Data provided reflects all our Business Units and 100% of our FTEs as of Dec. 31, 2018, unless otherwise noted.



# Social Key Performance Indicators

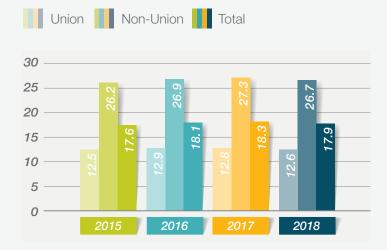
### Workforce Breakdown by Race, 2018



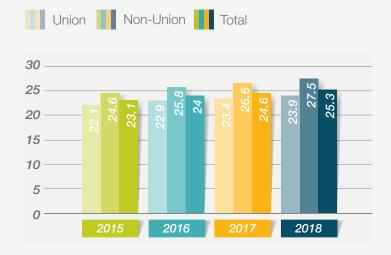
Caucasian **75%**Two or more races **1%**Black or African **11%**Hispanic Latino **8%**Asian **4%**American Indian **0.2%** 

Hawaiian or Pacific Islander 0.1%

### % Women in Workforce



### % People of Color in Workforce



### Diversity

PSEG's commitment to diversity and inclusion is embedded in our talent acquisition, talent mobility, and learning and development processes to support our efforts to attract, develop and retain a diverse workforce.

A diverse company is a strong company. We believe in a culture that values and promotes equal opportunity. Our diversity strategy focuses on our workplace, workforce and marketplace.

A workplace that respects team members is the first step in our diversity strategy.

We strive to build a culture that is inclusive through awareness, team member support and decision making, and engagement of underrepresented employees.

PSEG increased the overall percentage of women and people of color in our workforce over the past three years. This is attributed to deep focus on diversity as part of our Talent Acquisition strategy.



# Social Key Performance Indicators

### **Supplier Diversity**



### **Lost-Time Injury Frequency Rate**

	2015	2016	2017	2018
Employees	0.52	0.36	0.38	0.37
Contractors	0.45	0.43	0.47	0.41

### **Days Away, Restricted and Transfer Rate**

2015	2016	2017	2018
0.81	0.67	0.53	0.60

### **Osha Recordable Incident Rate**

2015	2016	2017	2018
1.16	0.9	0.87	0.99

### 2018 Type of Philantropic Activities



Community investment **61.52%**Commercial initiatives **30.64%**Charitable **7.84%** 

### Supplier Diversity

PSEG supplier diversity process has been in place for over 30 years utilizing a number of processes and initiatives to grow business relationships and expenditures with certified minority, women, veteran and service disabled veteran owned businesses.

In 2018 PSEG achieved historic results of over \$576 million or 20% with MWVBE's due in part to PSEG's internal performance goals, aggressive outreach methods, business advocacy partnerships, education, mentoring and communication.

### Health and Safety

In 2018, we improved on our record-setting 2016 safety performance, achieving a record-low number of reportable injuries for the third consecutive year. In 2017 there were zero employee fatalities and zero contractor fatalities.

### Community

In 2018, PSEG established a new business function devoted to Corporate Citizenship – a change that recognizes the relevance of citizenship to the strategic business objectives of our company and reinforces the core mission where we do business better places to live and work.



# Commitment to Transparency



# Supporting the U.N. Sustainable Development Goals (SDGs)

There are many challenges facing humanity. In order to secure the future for the Earth and its inhabitants, the governments of 193 United Nations member states in September 2015 signed a joint development plan, which included a program with 17 Sustainable Development Goals.

Based on our analysis, we believe our core business, initiatives, social impact agenda and philanthropic efforts contribute to — and can benefit from — many areas of focus within the 17 SDGs. The graphic below summarizes the topics most relevant to our core business and provides links to sections where we discuss our approach and contributions:

Our core business most closely aligns with:

- Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all.
- Goal 8: Decent work and economic growth
- **Goal 9:** Build resilient infrastructure, promote sustainable industrialization and foster innovation.

- **Goal 11:** Make cities inclusive, safe, resilient and sustainable.
- Goal 13: Take urgent action to combat climate change and its impacts.

INDUSTRY, INNOVATION

Our activities also support other SDGs. Find examples within this report using the table below.



Ensure inclusive and quality education for all and promote lifelong learning

- · PSEG Foundation
- STEM education investments
- · MSU Institute for Sustainability Studies
- Educational matching gift



Ensure access to affordable, reliable, sustainable and modern energy for all

- Solar Loan Program
- Solar Source Program



decent work for all

- · EE programs
- Solar 4 All



Promote inclusive and sustainable economic growth, employment and

- Target zero
- · Spending forecast infrastructure
- Job creation
- · Benefits and job security



Build resilient infrastructure, promote sustainable industrialization and foster innovation

- · Energy Strong
- Fleet optimization
- · EV programs



safe, resilient and sustainable

- PSEG Foundation
- Sustainable Jersey Sustainable neighborhoods



combat climate change and its impacts

- · New GHG goal and
- climate strategy
- · Keys energy center · Sewaren 7
- · Solar Loan
- Solar 4 All
- · SF emissions



forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

- · Ecosystem impact mitigation
- Fleet optimization
- · EV programs

# Transparency and Disclosure

PSEG's commitment to transparency includes responding annually to Carbon Disclosure Project (CDP) survey on carbon and the Version 1 of the EEI ESG template, the first and only industry-focused and investor-driven ESG reporting framework. For the full version of these documents along with our 2018 GRI template, click the links below.

- Carbon Disclosure Project (CDP)
- EEI ESG Reporting Template
- EEI ESG Sustainability Template Quantitative Information
- PSEG Global Reporting Initiative (GRI)
- 2017 PSEG Sustainability Report
- 2015 PSEG Sustainability Report
- 2014 PSEG Sustainability Report
- 2013 PSEG Sustainability



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