ENVIRONMENTAL, SOCIAL AND GOVERNANCE

2021 ESG REPORT

PSE PUGET SOUND ENERGY

CONTENTS

MESSAGE FROM THE CEO

I am pleased to present Puget Sound Energy's (PSE's) second Environmental, Social and Governance (ESG) Report. Throughout our nearly 150-year history, PSE has adapted through the changing times to provide customers and communities across Washington State with safe, reliable and affordable energy. Our intent with this report is to demonstrate our commitment to do what is right by continuously improving our business in environmental, social, economic and governance matters.

As we've all experienced, the past two years have brought unprecedented challenges with the global pandemic impacting all aspects of life as we knew it. COVID-19 has forced everyone to adapt and become flexible during these uncertain times. I cannot emphasize enough how proud I am of the teamwork and discipline the PSE team demonstrates every day. Even in a changing work environment, our people have continued to proudly serve our 1.5 million customers with their everyday energy needs, while promoting improvements to our ESG performance. Our 3,150 PSE team members are our most valuable resource. Core to our business success is focusing on a workplace culture of respect and promoting our employees' personal and professional growth and well-being.

At PSE, our commitment is to each of our stakeholders, including our customers, employees, and the communities we serve. In 2020, we created a new Community Engagement team specifically focused on working with local non-profits, community-based organizations, under-served communities and communities of color. The global pandemic highlighted current social inequalities and the importance of businesses to take action. Financial hardships were exacerbated through COVID-19. We felt it was and is important to be there for our customers. The result is our COVID bill assistance program, which has provided $30 million in assistance funds for customers, in addition to our existing energy assistance programs.

PSE is deeply committed to our sustainability goals. We have demonstrated this by establishing award-winning programs in energy conservation and green power. Our programs include financial incentives and technical help for homes and businesses to conserve energy and reduce their energy use. We recognize the importance of reducing carbon emissions and promoting the growth of renewable electricity production through various customer programs, which is why we became an early leader in addressing climate change by investing billions in renewable resources and energy efficiency for homes and businesses.

PSE operates a variety of electric and natural gas conservation programs, which result in significant reductions in demand on electric and natural gas resources. These programs led to an estimated savings of over 108,500 metric tons of carbon dioxide and 6,950 metric tons of methane. In 2021, PSE proudly announced our ambitious goal and strategic plan to further reduce our carbon equivalent emissions by becoming a Beyond Net Zero Carbon energy company by 2045. To do this, PSE is planning to:

- Reduce emissions from PSE operations and electric supply to net zero by 2030. By 2045, PSE will have a 100% carbon-free electric supply.
- Aim to reach net zero carbon emissions for natural gas sales – customer use in homes and businesses – by 2045, with an interim target of a 30% emissions reduction by 2030.
- Partner with customers and industry to identify cost-effective programs and products that reduce carbon from other sources across our region and state.

PSE will be submitting a Clean Energy Implementation Plan (CEIP) later this year that will provide a four-year roadmap to guide our clean energy investments for the years 2022 through 2025.

At PSE, we are dedicated to continuously improving on our four guiding principles that drive our approach to ESG:

- Implementing innovative customer solutions
- Advancing clean energy
- Building a smarter, stronger power grid
- Strengthening employees and our communities

These principles are embedded in our day-to-day business as we drive towards our vision for the future. Developing this report provided us with the opportunity to see where we have had successes and where there are opportunities for improvement as we strive to be a leader providing clean energy across Washington State. We are proud of our long history and look forward to future successes serving our local communities with safe, affordable and reliable energy.

Sincerely,

President & CEO
October 2021

COMPANY PROFILE AND BUSINESS OPERATIONS

PSE is an investor-owned utility company headquartered in Bellevue, Washington. Its parent company, Puget Energy, is owned through a holding company structure by Puget Holdings under the ownership of a consortium of long-term infrastructure investors. We are a regulated utility under the Federal Energy Regulatory Commission (FERC), Washington Utilities and Transportation Commission (WUTC), North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC).

PSE is the oldest and largest electric and natural gas utility headquartered in Washington State with operations extending throughout the western and southern parts of the state. With a 6,000-square-mile service area stretching across 10 counties, we serve approximately 1.19 million electric customers and about 856,000 natural gas customers.

As of December 31, 2020, PSE had approximately 3,150 full-time equivalent employees with approximately 1,100 represented by the International Brotherhood of Electrical Workers Union (IBEW) or the United Association of Plumbers and Pipefitters (UA).

FIGURE 1: COMPANY OVERVIEW

RESOURCE	AMOUNT
TOTAL ELECTRIC CUSTOMERS	1,190,000
TOTAL NATURAL GAS CUSTOMERS	856,000
TOTAL ENERGY RESOURCES	4,600 MW
TOTAL ENERGY PRODUCTION	24,855,073 MWh

Source: 2020 10K Report. As of December 31, 2020, approximately 414,210 customers purchased both electricity and natural gas from PSE. Total Energy Resources and Total Energy Production include company-controlled and purchased resources.

CORE BUSINESS OPERATIONS

PSE's core business operations include electric transmission and distribution, electric generation, natural gas distribution and natural gas storage.

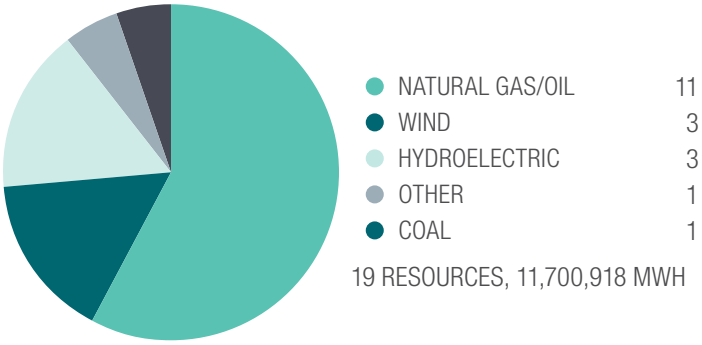
OUR DIVERSIFIED ENERGY SUPPLY MIX

The electricity we provide our customers uses several different resources. Although water supply fluctuates year to year, hydroelectric power accounts for approximately a fourth of our power portfolio. Wind power is a very important and increasingly prominent resource for PSE. Together, our three large wind farms located in central and eastern Washington produce enough electricity, on average, to power nearly 200,000 homes, making us one of the largest utility generator of wind power in the U.S.

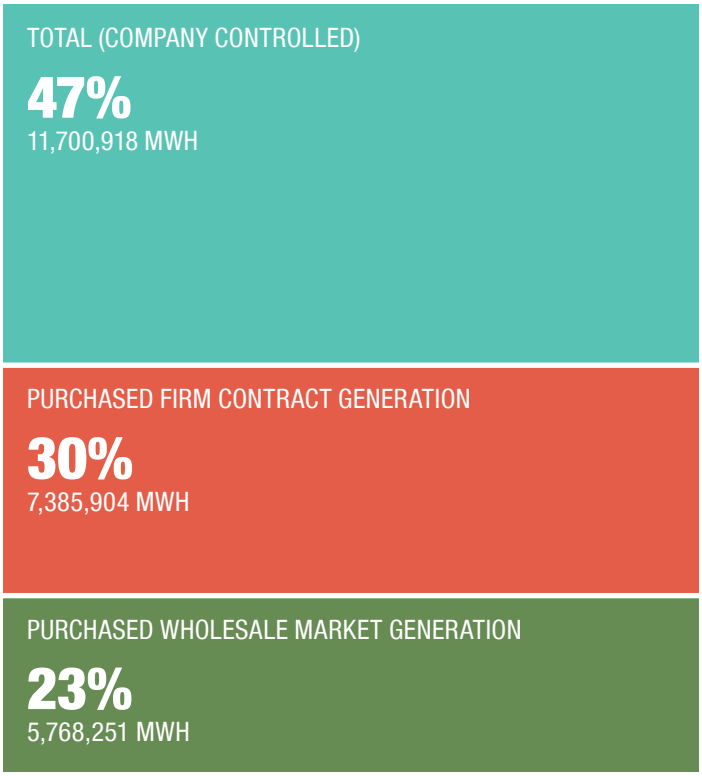
PSE owns and operates a fleet of 17 generation resources in Washington State, including hydroelectric, natural gas combustion, wind power, and battery storage. We are also a part owner of a coal plant in Colstrip, Montana along with Avista Corporation, Portland General Electric, Pacificorp, Northwestern Energy and Talen Energy (Talen Energy is also the operator) and part owner of a natural gas plant in Frederickson, Washington along with the operator Atlantic Power Corporation. As of December 31, 2020, our aggregate generating capacity was 4,600 MW from company-owned (3,326 MW) and purchased (1,274 MW) resources.

FIGURE 2: COMPANY CONTROLLED ELECTRIC RESOURCES AND PRODUCTION.

PSE CONTROLLED ELECTRIC GENERATION BY SOURCE



PSE CONTROLLED ELECTRIC RESOURCE ALLOCATION



Every year, PSE reports to the Washington State Department of Commerce the types and amount of energy that were delivered to our customers in the previous year. The estimated fuel mix assigned to PSE in 2019 is shown below.

FIGURE 3: UTILITY FUEL MIX

FUEL	PERCENT
COAL	35 %
NATURAL GAS	31 %
HYDROELECTRIC	23 %
WIND	9 %
SOLAR	1 %
NUCLEAR	<1 %
OTHER	<1 %

** Biomass, non-biogenic and petroleum. Source: Published by the Washington Department of Commerce, October 2020, with data reported by PSE in August 2020.*

Source: PSE reported data. August 2020 for 2019 data.

NATURAL GAS SUPPLY

In 1873, before Washington was even a state, PSE's earliest predecessor introduced the Washington Territory to manufactured gas lighting. Today, PSE operates the state's largest natural-gas distribution system, serving about 856,000 natural gas customers in over six counties. PSE purchases 100% of natural-gas supplies—needed for direct customer use and electric thermal generation—from Western Canada (British Columbia and Alberta) and the Rocky Mountain States. The gas we acquire is transported into our service area through large interstate pipelines owned and operated by an interstate natural gas transmission company. Once we take possession of the gas intended for direct use by customers, it is distributed through more than 25,000 miles of PSE-owned gas mains and service lines.

We manage a strategically diversified gas-supply portfolio to reduce financial risks. To obtain gas at the most favorable price, we carefully analyze gas-market trends and conditions, then procure gas under a mix of short-, medium- and long-term contracts. The combined price we pay for natural gas under these contracts is passed along to customers at cost, with no mark-up or profit for PSE.

NATURAL GAS STORAGE

While the natural gas used by PSE originates from Western Canada or the Rocky Mountain area, PSE, along with other Northwest utilities, delivers a significant share of their natural gas supply—mainly in winter (high demand periods)—from storage. By using storage, PSE and other utilities can buy and store significant amounts of natural gas during the lower-priced summer months, and then tap the reserves in winter when customers' natural gas requirements—and wholesale natural gas prices—are highest. PSE can also provide additional energy delivery capacity and system resiliency on the coldest days of the year without having to expand pipeline capacity.

We co-own (with Avista Corporation and Northwest Pipeline) and operate the Pacific Northwest's largest underground natural gas storage depot—the Jackson Prairie Underground Natural Gas Storage Facility in Lewis County—the 14th largest gas-storage reserve in the country. In operation since 1970, Jackson Prairie's natural gas reserves can meet up to 25 percent of the Pacific Northwest's peak demand on our coldest winter days. Jackson Prairie's natural gas storage capacity is over 9.2 million Dekatherms (Dth). Additionally, PSE stores up to 12.9 billion Dth of natural gas in Questar's Clay Basin underground facility in northeast Utah.

PSE also stores natural gas in the liquid form as liquefied natural gas (LNG) which reduces the storage space needed by a factor of 600. PSE operates a small LNG storage facility in Gig Harbor, Washington to help meet customer energy needs on the coldest days and has developed a larger LNG facility at the Port of Tacoma that is currently being commissioned. Similar to natural gas storage reservoirs, the Tacoma LNG facility will receive natural gas during low demand periods, liquefy it for more efficient storage, and then convert it back to a gas for use during high demand periods. The Tacoma LNG facility will also mitigate risk associated with the single interstate pipeline that serves customers from British Columbia down into Oregon.

GOVERNANCE

Our corporate governance is focused on effectively integrating our commitments throughout the organization. At the board level, we follow stated corporate governance guidelines that include an independent and local chairperson, detailed principles, and specified committee charters. We maintain a Code of Conduct for senior financial officers. Each employee receives training on ethics and corporate compliance consistent with our corporate value of doing the right thing. We implement a robust enterprise risk management framework that includes assessing risks such as enterprise, business continuity, and environmental.

LEADERSHIP

As of October 2021, 12 directors serve on Puget Energy's board of directors. These directors also constitute PSE's board, along with one additional representative. The directors are selected in accordance with the bylaws of Puget Energy and PSE. The chair of the board is an independent director who is a resident of Washington State, and not an officer or employee of PSE or our investors. In addition to this role, we have two other independent directors who are local residents, and not employed by PSE or our investors.

FIGURE 4: BOARD COMMITTEE OVERVIEW

COMMITTEE	KEY RESPONSIBILITIES
ASSET MANAGEMENT COMMITTEE	Reviews the ongoing performance relative to the budget and business plan
AUDIT COMMITTEE	Oversees compliance with financial controls and reporting and performance of the internal and independent auditors
BUSINESS PLANNING COMMITTEE	Reviews and recommends annual five -year budget and business plan
COMPENSATION AND LEADERSHIP DEVELOPMENT COMMITTEE	Oversees executive compensation and succession planning
GOVERNANCE COMMITTEE	Responsible for board governance issues
SECURITIES PRICING COMMITTEE	Approves refinancing or new debt issuances

Source: PSE Legal Dept

OUR ETHICS: DOING THE RIGHT THING

Our Code of Conduct governs the way Puget Energy and PSE conduct business. Our policies, including those regarding business ethics and compliance, are outlined in a corporate policy manual. PSE has appointed a Senior Vice President, General Counsel and Chief Ethics & Compliance Officer (CECO) who is an advisor to the board of directors and senior management. The foundation of this program is spelled out in our Compliance Management Framework, including but not limited to the following documents:

- Code of Conduct
- Corporate policy manual
- Corporate Ethics Management Committee charter
- Compliance Committee charter
- Our Duty of Employees, which is to uphold the code and related policies and laws as applicable, and the U.S. Sentencing Commission's Federal Sentencing Guidelines (FSG) Manual Chapter Eight §8B2.1

We are committed to a culture of ownership, accountability, honesty, integrity and trust. Each employee has a duty to uphold the Code, which can be summarized with this simple statement: "Do what is right."

CORPORATE ETHICS AND COMPLIANCE PROGRAMS

PSE has both Corporate Ethics and Compliance programs which infuse ethics and compliance across the organization through partnering and increasing transparency. Program components include:

- Establishing a senior-level officer and senior-level committee to govern the program
- Training to enhance company-wide awareness of the program and associated personnel responsibilities, helping employees understand the ethics and compliance risks that apply to their jobs
- Providing an anonymous reporting tool—both web intake and a toll-free help line—available 24-hours a day, seven days a week, for the public and company personnel to ask questions and report concerns
- Ensuring that the board of directors is appropriately informed about the program
- Conducting audits and reviews to assess and strengthen the Company's adherence to program standards
- Investigating and administering appropriate discipline for actions or behaviors that violate program standards, including violation of our no retaliation policy
- Assessing the program against relevant standards or benchmarks

A Compliance Council comprised of compliance program managers and key personnel throughout the company builds internal relationships and partnering benefits among compliance programs and provides recommendations with respect to overall compliant operations and continuous improvement. The Council's purpose is to:

- Partner and share information across PSE business units regarding compliance program operations and implementation planning
- Collaborate to develop clear and transparent expectations and develop processes that endeavor to build success for employees
- Maintain consistent alignment with customer service, safety, and efficiency objectives of PSE by supporting operationally effective activities that deliver compliant outcomes and reinforce a culture of compliance

ENVIRONMENTAL REGULATORY AND COMPLIANCE TRACKING

PSE manages our environmental compliance by conforming to an Environmental Management System (EMS), providing employee training, tracking regulatory compliance, regulatory reporting and conducting environmental audits. Our Environmental & Program Services (EPS) department oversees compliance and regulatory oversight, including consultation on environmental regulations. Additionally, our federal and state Government Affairs team monitors a variety of proposed and pending legislation in areas of environmental compliance and communicates information and updates to those internally affected departments for awareness, alignment and future compliance.

Incidents of environmental non-compliance and near misses are reviewed to address root causes and mitigate the likelihood of future recurrences. Company-wide tasks tied to environmental compliance are tracked through an internal system that notifies personnel with oversight of the due date to complete tasks on time, tracks progress, follow up and record completion.

RISK MANAGEMENT

Our established risk management process integrates risk management into PSE's strategy, governance, reporting procedures and culture. We use a variety of methods to identify, assess, evaluate and manage risks across the organization, including:

- Regularly conducting risk analysis to support corporate planning efforts to evaluate controls
- Assessing and communicating risk through an Enterprise Risk Management framework
- Evaluating large-scale emergency situations through Business Continuity Plans
- Identifying business risks related to environmental conformance to our EMS
- Formulating mitigation plans to lower residual risk
- Developing Business Continuity Plans to resume work following an emergency or incident that significantly impacts PSE's business operations and our customers
- Planning including evaluating key personnel, workplace and systems to prepare our employees to respond should a disruptive incident occur

These risks and associated mitigation plans are regularly reported to the board of directors.

ENVIRONMENTAL RISK MANAGEMENT

Environmental stewardship is integral to PSE and we encourage environmentally responsible and sustainable behavior. We maintain a Corporate Environmental Policy that supports PSE and its employees at each level in striving to comply with environmental laws, regulations and company environmental policies. The policy is endorsed by senior decision makers and communicated to each employee.

As part of these efforts, PSE is involved in the development of future and changing regulations and works to optimize operational needs when meeting regulatory requirements. This includes implementing an EMS that covers operational and procedural processes impacted by legal requirements and environmental regulations. Program compliance is overseen by several business units.

CYBERSECURITY

Utilities are a particular target for cybersecurity risks for data breaches, impacts to the power grid, and even crippling of critical infrastructure. PSE's goal is to apply the same level of due diligence across the enterprise to consistently identify, address and mitigate these risks for alignment with the rapidly changing cybersecurity landscape. Our awareness and training programs are based on the same national standards followed by leading companies in the energy and defense industries.

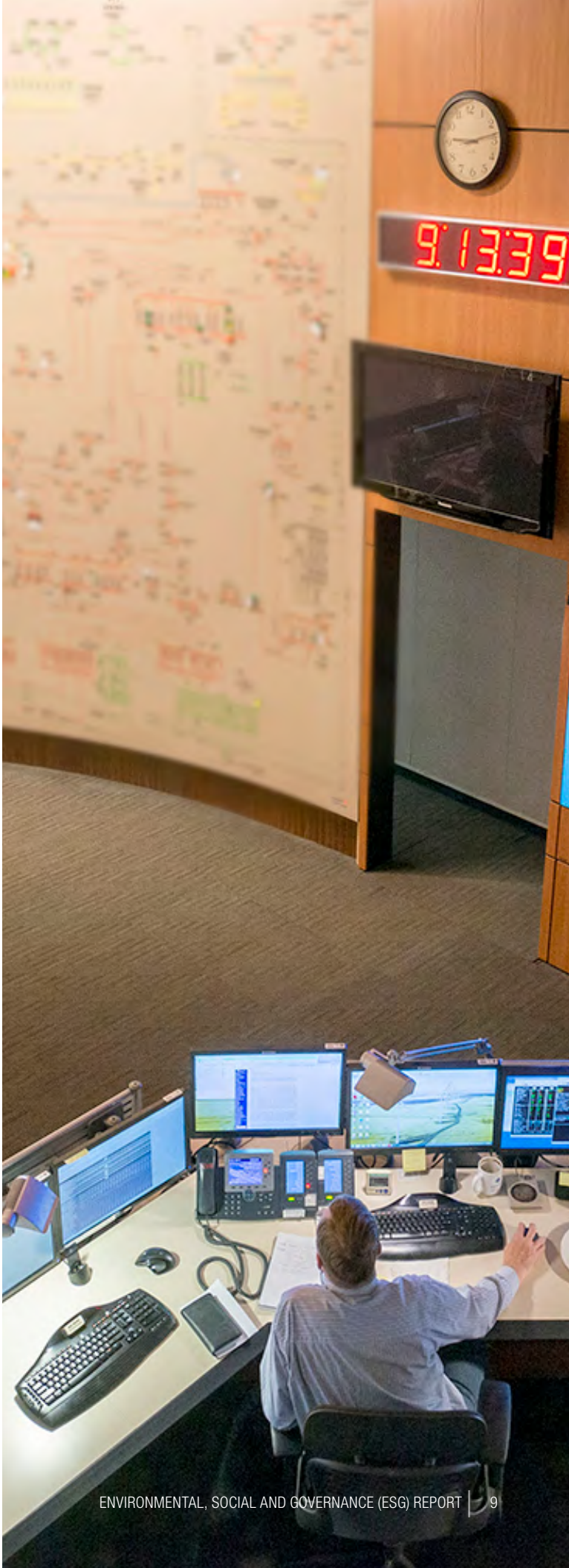
We regularly evaluate our cybersecurity posture such that additional investments are properly identified and funded. As critical infrastructure becomes more technically complex, we adapt and mature our cybersecurity practices and programs allowing PSE to take advantage of new technical opportunities while continuing to mitigate the risks.

PSE has strong cybersecurity policies and programs in place that assist in achieving our overall security goals. We require our employees and vendors to complete targeted security trainings at regular intervals throughout the year such that they are aware of the important role they play in keeping our systems and information safe. We participate in numerous state and industry-specific cyber security initiatives and coordinate across a growing list of external entities to keep pace with industry trends and standards. We perform security assessments of our vendors and technology implementations to evaluate the safety and security of our infrastructure. We regularly exercise our cybersecurity incident response plan such that anyone asked to play a role in an incident exercise has experience before a real-life situation occurs.

LOBBYING AND POLITICAL CONTRIBUTIONS

PSE engages in advocacy on behalf of our customers, the company and employees, at the federal, state and local levels of government. We strive to comply with applicable lobbying and ethics rules. Federal and state lobbyists employed by the company are required to register with Congress, the Washington State Public Disclosure Commission (PDC) or the State of Montana Commissioner of Political Practices (COPP); report political contributions on a regular basis; and file regular reports that quantify lobbying expenses incurred by the company as well as the public policy issues on which the company engaged with government officials. King County and Snohomish County require lobbyist registration and periodic reports of lobbying disclosure. PSE developed internal written policies to support compliance with these laws, to collect, organize and report on the data for each of these filings.

PSE follows strict federal, state and local political contribution laws. Compliance efforts include public disclosure and reporting of financial contributions made to political candidates and political action committees (PAC). Additionally, PSE employees can voluntarily participate in the Puget Sound Energy PAC for Good Government, which contributes to federal candidates and committees; compliance is governed by the Federal Election Commission and through the PSE PAC Articles of Association (bylaws).



ENVIRONMENT

CLIMATE MITIGATION: AN ENERGY FUTURE THAT PROTECTS THE ENVIRONMENT

We share our customers' concerns about the impacts of climate change. PSE has been an early leader in bringing our customers new sources of clean energy, particularly investing in wind energy before Washington State voters established a renewable energy portfolio standard in 2006. Over the past 15 years, we deployed over 770 MW of wind generation and other green energy projects. We are currently one of the nation's largest utility producers of wind power and the largest utility producer of renewable energy in Washington State.

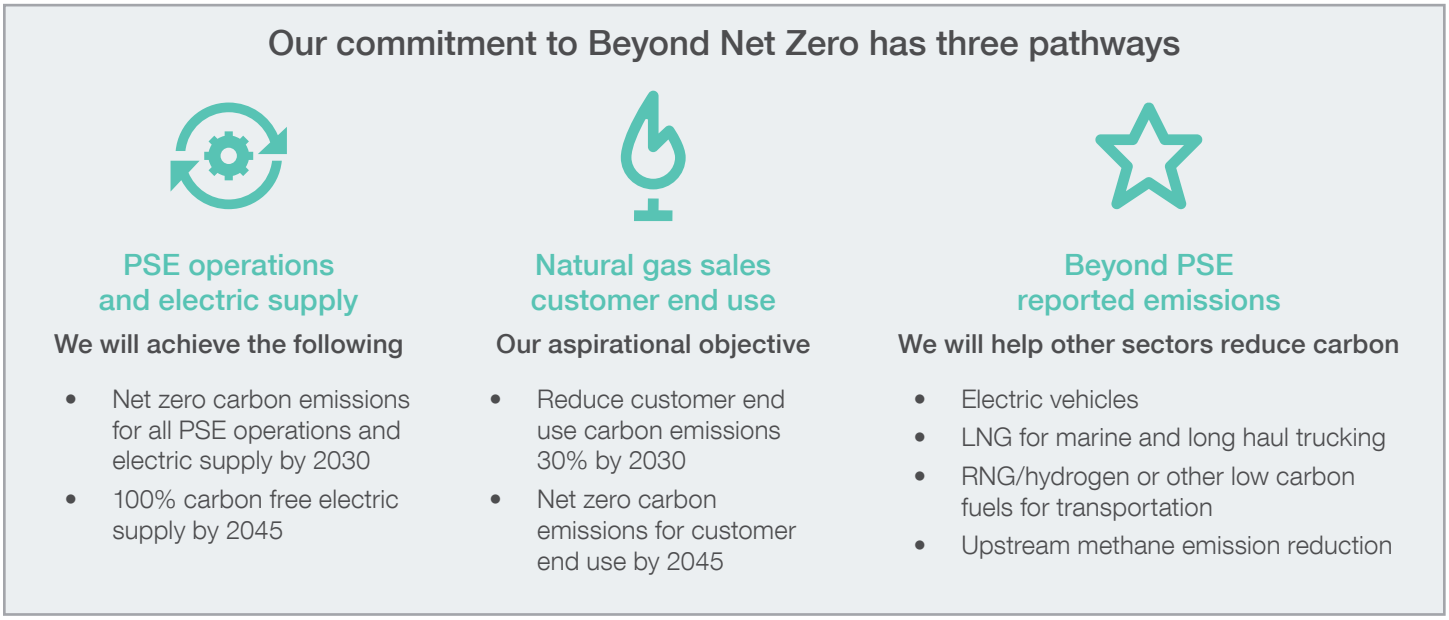
In addition to developing renewables, we have gone above and beyond in our conservation efforts, establishing award-winning programs in energy conservation and green power. PSE has one of our country's most comprehensive energy-efficiency programs for helping homes and businesses reduce their energy use. PSE offers our customers financial incentives and technical help to conserve energy. We also promote the growth of renewable electricity production in our service area through various customer programs. We are keenly aware of our customers' interest in continually reducing carbon emissions, and we share their commitment to achieving meaningful carbon reduction.

Our mission today is deep decarbonization and greenhouse gas emissions reduction, as is demonstrated by our Greenhouse Gas Policy. We were an early leader in addressing climate change, investing billions in renewable resources and energy efficiency for homes and businesses. In 2021, we announced an ambitious goal and bold plan to further reduce our carbon dioxide equivalent emissions. We don't have all of the answers today, but with the right combination of legislative, regulatory, commercial and technological enablers we think this is possible. We are on the path to meeting the current and future needs of our customers and to deliver on the objectives of Washington's Clean Energy Transformation Act (CETA) and Washington's Climate Commitment Act.

PSE CARBON REDUCTION GOAL

PSE aspires to be a Beyond Net Zero Carbon energy company by 2045 by helping lead Washington's transition from coal, providing more clean energy and advancing cleaner transportation. PSE has set a collection of commitments and aspirational goals to reach Beyond Net Zero Carbon by 2045, which includes the three pathways below.

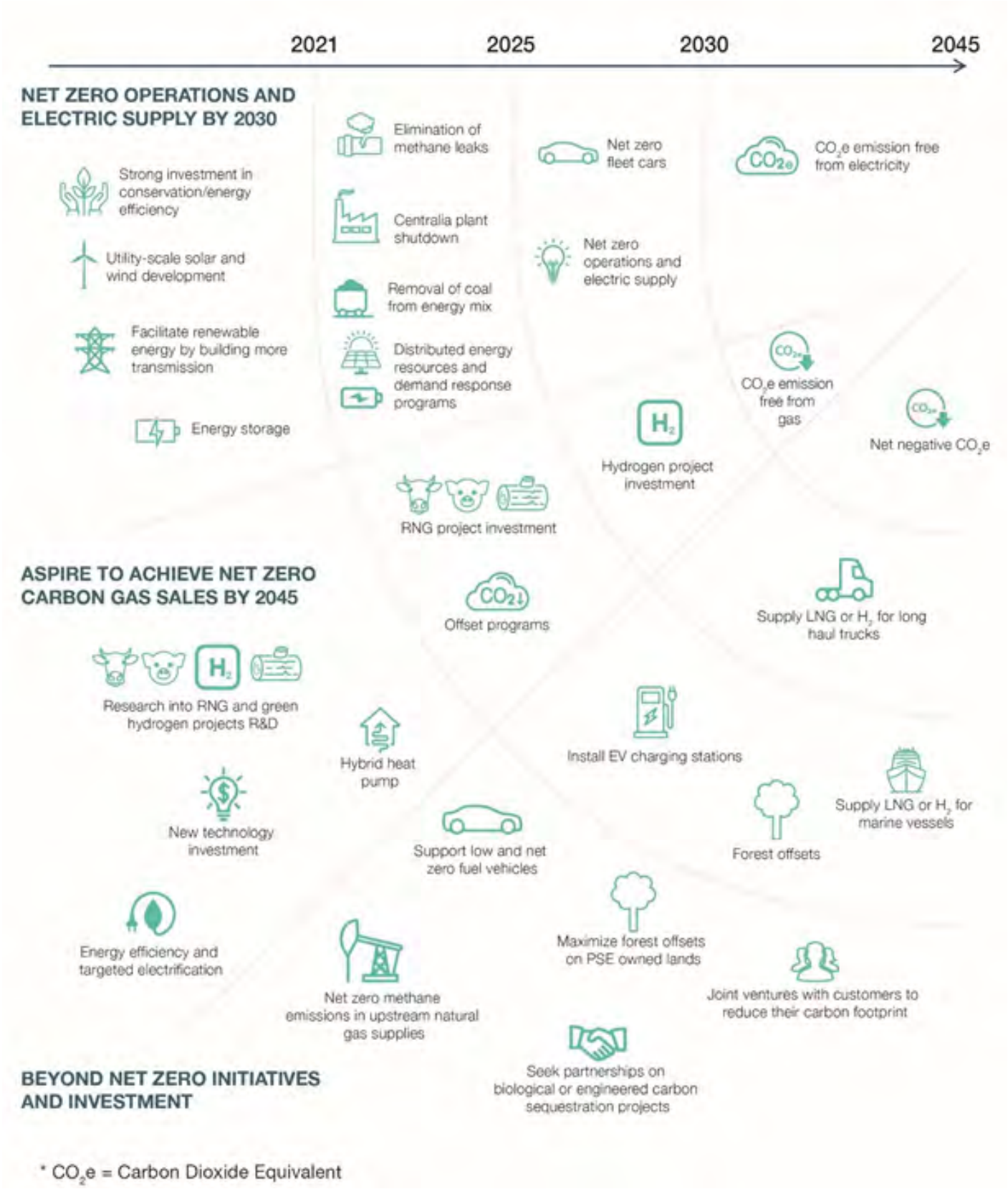
FIGURE 5: BEYOND NET ZERO CARBON GOAL



A critical component will be balancing clean energy goals with customer expectations for uncompromised reliability, safety and affordability. We believe that complementary energy systems are needed to maintain reliability and affordability for our customers. Our existing gas delivery infrastructure is a valuable system with much potential, yet we understand that natural gas is an ongoing source of carbon emissions that must be mitigated and we must consider and develop new technologies. PSE is committed to providing customers and communities access to and benefits from the transition to a clean energy future. The challenge to protect the most vulnerable and remain sustainable will necessitate healthy and complementary electric and natural gas energy systems, as well as other technologies that may not yet be commercially feasible, to maintain both affordability and reliability.

We do not yet have all the answers. Realizing our full potential will require policy changes at the state level, including alternative regulatory models, carbon policy and measures to support the adoption of electric and alternative fuel vehicles and partnerships with other utilities for cross-utility analysis to maximize clean energy benefits while minimizing costs, as well as development of new technologies not yet commercially available. PSE is actively working with customers, policy makers and other interested parties to move both short- and long-term actions forward. The roadmap below shows the focal points of our current efforts along these lines.

FIGURE 6: ROADMAP TO A BEYOND NET ZERO CARBON COMPANY BY 2045



GHG POLICY AND EMISSIONS REPORTING

As the Northwest's largest utility, PSE has been a leader in developing and promoting clean energy and advancing efficiency programs and technologies for almost 20 years. Thoughtful design of greenhouse gas policy and carbon regulation is critically important to achieving meaningful carbon reductions and avoiding unintended consequences. We take short-term measures designed to lessen the growth of greenhouse gas emissions and follow long-term strategies that will ultimately manage greenhouse gas emissions to appropriate levels in a scientifically sound and responsible fashion.

We have voluntarily reported our carbon emissions since 2002. We have also supported state-wide initiatives, laws and regulations with tools aimed at carbon reduction including an emission performance standard for thermal plants and increased energy efficiency and conservation. We served on the state Clean Energy Leadership Council and the Governor's Climate Advisory Team, a select panel that helped state lawmakers craft strategies to cut Washington's greenhouse gas emissions to half of the 1990 level by 2050.

Since 2010, PSE has striven to comply with requirements to submit an annual report of its greenhouse gas emissions to the Washington State Department of Ecology including emissions from each individual power plant emitting over 10,000 metric tons per year of greenhouse gases and from certain natural gas distribution operations.

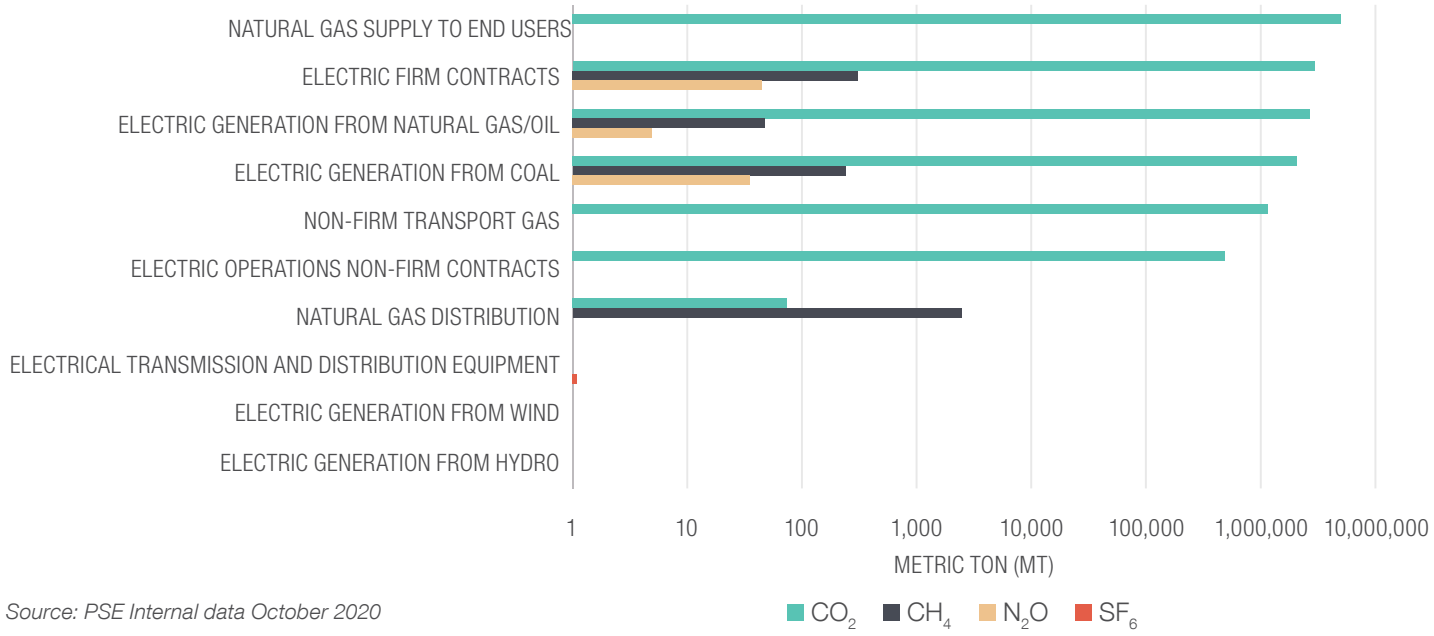
Emissions exceeding 25,000 metric tons per year of greenhouse gases from these sources must also be reported to the U.S. Environmental Protection Agency (EPA). The most recent data indicate that PSE's total greenhouse gas emissions (direct and indirect) from its electric supply portfolio in 2020 were 13.3 million metric tons of carbon dioxide equivalents (CO_2e). Approximately 16 percent of these greenhouse gas emissions (approximately 2 million metric tons CO_2e) are associated with PSE's ownership and contractual interests in coal in 2020. PSE's overall emissions strategy demonstrates a concerted effort to manage customers' needs with an appropriate balance of new renewable generation, existing generation owned and/or operated by PSE and significant energy efficiency efforts. Figures 7 and 8 show that a majority of the greenhouse gas emissions reported in the inventory are from electric generating resources, while the remaining emissions are from natural gas supply to end-users ("direct use").

FIGURE 7: 2020 GREENHOUSE GAS INVENTORY

EMISSION SOURCE	EMISSIONS			
	CO_2e (METRIC TON)	CH_4 (METRIC TON)	N_2O (METRIC TON)	SF_6 (METRIC TON)
SCOPE 1	4,775,017	2,758	40	0.68
SCOPE 3	8,493,021	306	45	-
OUTSIDE SCOPE	1,155,075	-	-	-

Source: PSE 2020 Greenhouse Inventory

FIGURE 8: 2020 GREENHOUSE GAS EMISSIONS BY SOURCE



Source: PSE Internal data October 2020

Figure 9 summarizes these total emissions reductions from conservation targets. PSE operates a variety of electric and natural gas conservation programs, which result in significant reductions in demand on electric and natural gas resources. These programs led to an estimated savings of 77,394 metric tons of CO_2, 6,950 metric tons of CH_4, and 0.15 metric tons of N_2O in 2020.

FIGURE 9: TOTAL EMISSIONS REDUCTIONS FROM CONSERVATION PROGRAMS

EMISSIONS SAVINGS	CO_2 EQUIVALENT (METRIC TON)
CO_2	77,394
CH_4	173,750
N_2O	1,490

**Source PSE Internal Data Oct 2020*

Figure 10 shows that PSE's CO_2e emissions reductions from conservation programs are equivalent to reducing or removing:

FIGURE 10: EQUIVALENT EMISSIONS REDUCTIONS FROM PSE'S CONSERVATION PROGRAMS

30,423
HOMES' ENERGY USE FOR ONE YEAR

OR

279,232,190
POUNDS OF COAL BURNED

OR

28,427,366
GALLONS OF GASOLINE CONSUMED

VOLUNTARY CARBON OFFSETS

PSE recently completed work on a Forest Management Plan to optimize the carbon content of PSE's forested properties while still meeting the original intent of the properties. This plan guides future activities to protect the long-term health of the forested lands in PSE's real estate portfolio. PSE registered this project with the American Carbon Registry and expects to receive more than 250,000 carbon offsets as a result. While the project encompasses PSE's forested lands, there are still opportunities to manage other properties to maximize carbon storage.

CLEAN ENERGY

Currently, PSE's owned electric supply resources consist of 22% of clean energy from wind, hydro and solar power and contracted clean energy power purchases pushed the total 2020 PSE portfolio to 44% clean.

CLEAN ENERGY MILESTONES

The electricity PSE supplies is generated from a mix of resources. Today, over 30% of PSE's electric energy supply comes from clean sources like wind and hydroelectric facilities that don't emit greenhouse gas emissions. Our shared goal is to reach 100% clean electricity by 2045.

2025
COAL-FREE ELECTRICITY

2030
CARBON-NEUTRAL ELECTRIC SYSTEM

2045
100% CLEAN ELECTRICITY

To help plan for the transition, PSE is including clean energy milestones in its 20+ year Integrated Resource Plan (IRP) and the 10-year Clean Energy Action Plan (CEAP). The 4-year Clean Energy Implementation Plan (CEIP) will map out timely and equitable progress toward these milestones based on community input and the needs and strategies identified in long-range planning documents.

INTEGRATED RESOURCE PLAN (IRP)

20+ YEAR RESOURCE PLAN IDENTIFYING PSE CUSTOMER FUTURE ENERGY NEEDS.

CLEAN ENERGY ACTION PLAN (CEAP)

10-YEAR STRATEGY TO MEET CUSTOMER NEEDS AND TRANSFORM ELECTRIC ENERGY SUPPLY, FILED JOINTLY WITH IRP.

CLEAN ENERGY IMPLEMENTATION PLAN (CEIP)

4-YEAR ROADMAP ON SPECIFIC TARGETS AND ACTIONS TO MEET CUSTOMER NEEDS AND TRANSFORM ELECTRIC ENERGY SUPPLY.

WIND POWER

PSE owns and operates three large wind farms in Washington State: the Wild Horse Wind and Solar Facility in Kittitas County; the Hopkins Ridge Wind Facility in Columbia County; and our third and largest, the Lower Snake River Wind Facility, in Garfield County. Our three current wind facilities produce up to 772 MW of electricity, enough to meet the power demands of nearly 200,000 homes, making us one of the largest utility owners of wind power in the U.S.

HYDROPOWER

Depending on conditions such as snowpack, low-cost hydropower accounts for roughly one-quarter of our current power portfolio. We own and operate two hydropower projects, Baker River, and Snoqualmie Falls, in Western Washington. We also buy a substantial amount of hydroelectric power from the regional power market.

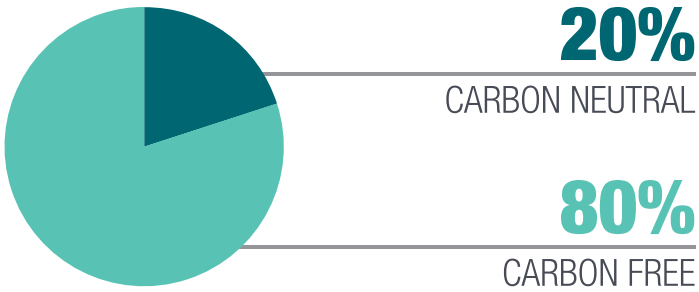
SOLAR POWER

To help demonstrate the viability of solar power in the Northwest, PSE built one of the region's largest solar arrays in 2007 at our Wild Horse Wind and Solar Facility in Kittitas County. The installation can produce up to 500 kilowatts of power. We've also helped thousands of customers, both large and small, to install solar panels and other renewable generation through our net metering program (now known as Customer Connected Solar).

FUTURE CLEAN ENERGY RESOURCES

With the Washington State Clean Energy Transformation Act (CETA) having passed in 2019, we are on a path to achieving carbon neutrality by 2030 with 80% carbon free electric supply, and 100% carbon free electric energy supply by 2045. PSE will be submitting a Clean Energy Implementation Plan later this year that will provide a four-year roadmap to guide PSE's clean energy investments for the years 2022 through 2025. These investments will include significantly more clean energy generation.

FIGURE 11: 2030 EXPECTED PSE ELECTRIC SUPPLY



CLEAN ENERGY CUSTOMER PROGRAMS

Beyond legal requirements in CETA, PSE also encourages the growth of renewable electricity production in its service area through voluntary programs. These programs allow customers to use clean power resources for their home or business by purchasing renewable energy credits, carbon offsets or installing their own small-scale renewable energy devices to reduce their carbon footprint.

In 2002, we created our Green Power program for business and residential customers to match some or all of their electricity usage with green power. Today, our Green Power program is a top-six green pricing program in terms of both participation and MWh sold. Another longstanding program is Carbon Balance, which allows PSE natural gas customers to balance greenhouse gas emissions associated with their natural gas use by purchasing carbon offsets through local projects.

PSE also offers a net metering program, called Customer Connected Solar. Net metering is designed to let customer-generators offset their electricity consumption with solar energy production on an annual basis. If you use more energy than you produce during a given bill period, then you pay PSE for your net electricity purchase, plus the basic service charge. If you produce more energy than you use within a given bill period, PSE "banks" this net metering credit for you and uses it to offset energy charges in a future bill period. Per state law, net metering credits expire on March 31 of each year.

Participants who generate a portion of their electricity through a qualifying renewable energy system (such as roof top solar) can not only avoid purchasing that amount from PSE, but they can also get a credit from PSE for any surplus renewable generation that they put into the grid.

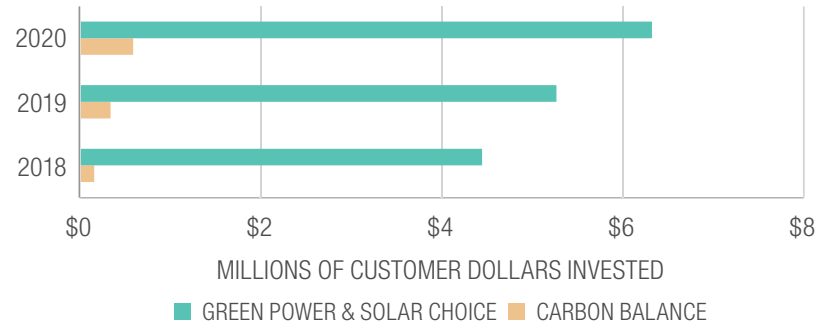
We have added two additional clean energy programs designed to help customers lower their carbon footprint and meet sustainability goals: Solar Choice and Green Direct. Solar Choice is an extension of our Green Power program that enables customers to match their usage with solar energy generated by independent power producers. It's designed for customers who want to support solar energy without having to install pricey equipment. Our Green Direct program is similar but on a much larger scale. It was created specifically for our large municipal and commercial customers who want their clean energy to come from a local resource. The first project developed for the Green Direct Program is the Skookumchuck Wind Facility, which went into operation November 2020 and can produce 137 MW of energy—equivalent to powering 30,000 homes. Site preparation and construction have begun on Lund Hill Solar, which will provide both wind and solar renewable energy for our Green Direct customers. Once Lund Hill Solar is complete, PSE will have added over 650 million KWh of renewable energy to its system, enough to power more than 54,000 homes.

Green Direct's customers range from Washington State and the Port of Seattle to T-Mobile, Target and REI, with King County being our largest customer.

FIGURE 12: CLEAN ENERGY CUSTOMER PROGRAMS AT PSE

PROGRAM	OBJECTIVE
GREEN POWER AND SOLAR CHOICE	Allows PSE electric customers to contribute to renewable energy generation and spur more renewable-power production in the Northwest by voluntarily buying renewable energy credits. PSE has partnered with public- and private-sector entities on a variety of innovative alternative-energy projects, such as the generation of power from dairy waste at farms in King, Whatcom, and Skagit counties. Solar Choice is an alternative for customers who specifically want power from solar resources. The solar power is generated at a separate location and added to the power grid on their behalf.
CARBON BALANCE	A voluntary program for PSE natural gas customers to balance the greenhouse gas emissions associated with their natural gas use by purchasing carbon offsets through local projects that work to reduce or capture greenhouse gases. Customers can purchase 'carbon offset' blocks through the Bonneville Environmental Foundation to offset CO_2 emissions. Program funds are directed to local projects that work toward reducing greenhouse gases.
COMMUNITY SOLAR	A new renewable energy program now available for PSE electric customers who want to share the benefits of local solar. Customers can subscribe to shares in a newly constructed, local solar energy site of their choice and receive bill credits for the energy that their shares generate from the power of the sun. This renewable energy replaces some or all of the customer's regular electricity use and helps drive a clean energy supply, which wouldn't be possible without support from subscribers.
GREEN DIRECT	A renewable energy program specifically designed for PSE's largest business and municipal customers seeking to reduce greenhouse gas emissions by adding renewable power to their energy portfolios. This ground-breaking initiative is an effort for PSE to provide stable, cost efficient solutions for these customers to meet their carbon reduction goals by providing them with the ability to purchase 100 percent of their energy from dedicated, local, renewable energy resources.
CUSTOMER CONNECTED SOLAR (NET METERING)	A program for PSE electric customers who generate a portion of their electricity through solar, wind, biomass from animal waste, fuel cell, or other qualifying renewable energy generating system. Customers that generate their own electricity, and are connected to the utility's distribution grid, offset electricity that would otherwise be purchased from the utility. PSE offers credits to customers who generate more electricity than their home need.

FIGURE 13: CLEAN ENERGY CUSTOMER PROGRAMS



Source: PSE Internal Data Oct 2020

ENERGY EFFICIENCY

PSE has one of the nation's largest energy efficiency programs. Since 2009, we have helped customers cut electricity consumption by more than 24 billion kW hours--that's more than enough to power every home and business we serve for a full year. And over the next two decades, we plan to help customers save an additional 440 average-MW of electricity and 70 million therms of natural gas.

Our conservation programs are separated into two categories: business energy management and residential energy management. This enables us to meet the unique needs of businesses of different types and sizes, as well as homeowners and families.

BUSINESS ENERGY MANAGEMENT PROGRAMS

PSE provides engineering consultation, custom incentives and technical assistance for energy efficiency and upgrades for commercial and industrial projects and tailored grants for retrofits and upgrades in energy intensive buildings. These programs provide businesses with a dual benefit: significant cost savings plus the opportunity to reduce their carbon footprint.

PSE's financial incentives and support programs include:

- Standard rebates and incentives for commercial HVAC systems, kitchens and hospitality equipment
- Lighting incentives and point of sale discounts for LED lighting and controls
- Customized incentives to help cover project costs
- Design assistance and incentives for new construction projects that exceed code requirements
- Incentives and support for large businesses (such as school districts, governments, hospitals and mid-size customers) under our multiple comprehensive energy management offerings.

PSE works with owners, developers and designers of new facilities, or major remodels/retrofits, to propose cost-effective energy-efficient upgrades that exceed energy codes. PSE provides funding of up to 100 percent of incremental costs for installation of cost-effective energy-efficient equipment to achieve savings beyond the applicable energy code. For small businesses, we offer a direct install rebate program to retrofit lighting and other equipment.

RESIDENTIAL ENERGY MANAGEMENT PROGRAMS

Through rebates, incentives, customer education and outreach, we help families save money and energy. We offer an extensive range of programs designed to meet multiple needs, including:

- Rebates and offers: Rebates range from appliances and heating to lighting and windows.
- Home Energy Reports: Reports to help customers achieve energy conservation by using comparisons of energy use and consumption and targeted energy efficiency advice and tips based on household energy use pattern, characteristics and demographics.
- Low-income Weatherization: Program assistance for low-income residential customers to improve the energy efficiency of single-family residences, multifamily structures and manufactured mobile homes.
- New Construction: Energy efficiency upgrades for multifamily properties such as condominiums or apartments to help lower bills and reduce overall energy usage with energy-efficient in-unit and common area equipment.

FIGURE 14: ENERGY EFFICIENCY GAS 5-YEAR INDICES

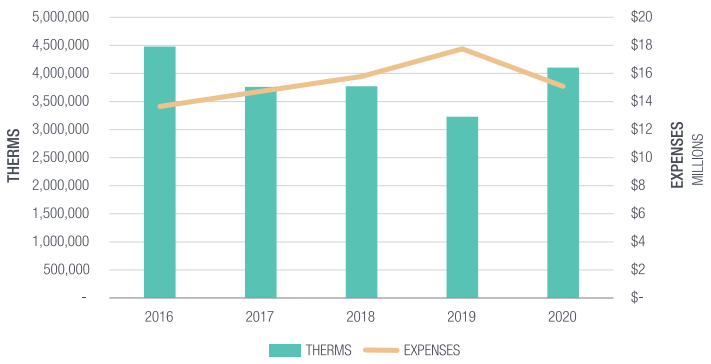
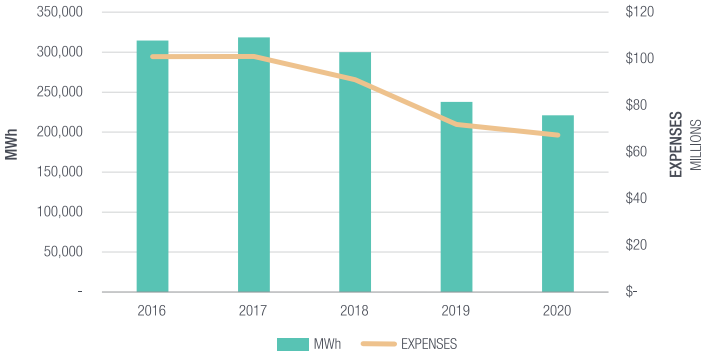


FIGURE 15: ENERGY EFFICIENCY ELECTRIC 5-YEAR INDICES

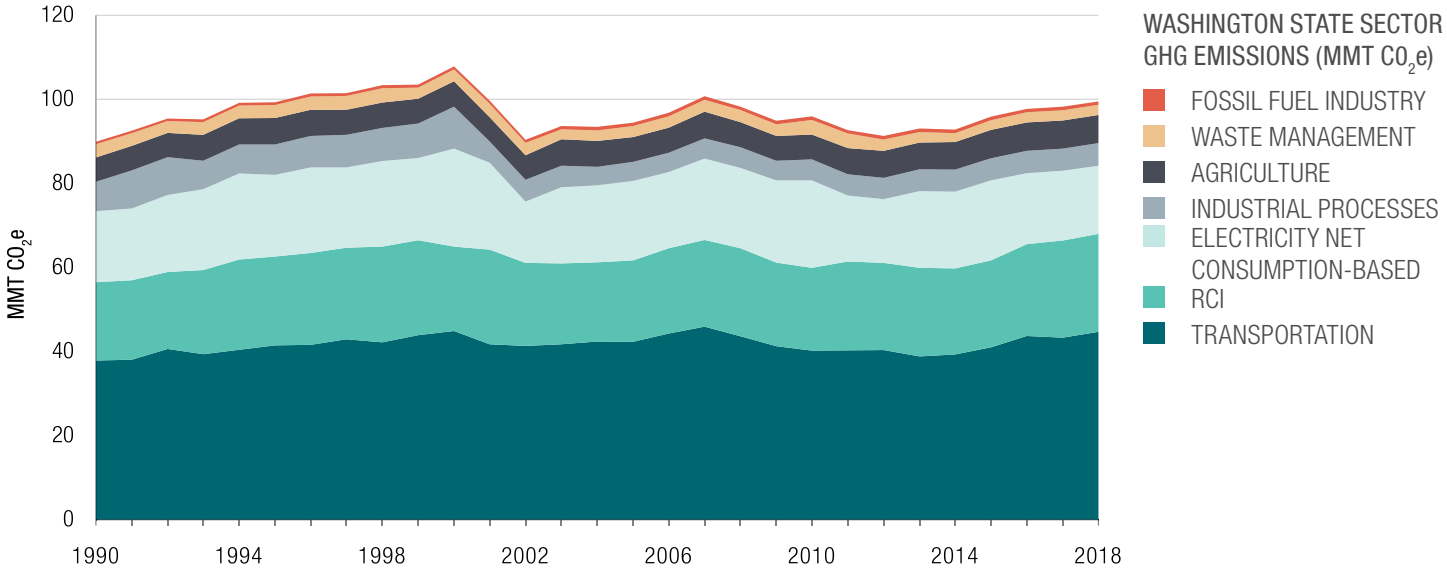


Source: PSE Internal Data Oct 2020

CLEANER TRANSPORTATION

Transportation is the largest source of GHG emissions in the U.S., accounting for 29% of the nationwide total. Since Washington's current electricity mix is cleaner than most states due to its carbon-free hydroelectricity, Washington's transportation sector represents the largest portion of GHG emissions, contributing around 45% of total emissions.

FIGURE 16: TOTAL ANNUAL GREENHOUSE GAS EMISSION (MMT CO_2E) BY SECTOR FROM 1990–2018



In addition to passenger vehicles, PSE is focused on the commercial transportation sector. There is increasing availability of lower emitting commercial vehicles that can be powered either by cleaner burning natural gas, renewable natural gas or electricity. This includes buses, delivery trucks, waste hauling vehicles and transport shuttles.

ELECTRIC VEHICLES

Each new electric vehicle (EV) that replaces an existing combustion engine eliminates an average of more than 5,400 pounds of carbon a year. PSE was a key part of the state's effort to drive adoption of 50,000 electric vehicles by 2020, a goal the state actually surpassed in 2019. As of January 2021, Washington had more than 66,500 registered light-duty vehicles on the road, making it the third largest market in the country, after California and New York. We believe that Washington can do more and we are calling for 1 million electric vehicles on the roads by 2030. Meeting this aggressive goal will require a policy and regulatory framework that enables the development of convenient, reliable and affordable charging infrastructure and incentivizes EV purchases. Currently, PSE is running a series of pilot programs with charger installations in public, workplace, multifamily and residential locations and partnering with community-based service providers for equity-focused installations, and will launch new programs with the goal of installing more than 10,000 chargers over the next few years. These pilot programs are designed to both educate customers and identify optimal mechanisms for encouraging drivers to charge when demand on the grid is smallest. PSE is also working directly with customers to educate them about electric vehicle technology and options available to them. Our free events, before the pandemic, gave customers the opportunity to learn about, and in some cases test drive, multiple styles of vehicles and talk with energy experts about charging. We've also developed online resources to help customers, including cost savings calculators, vehicle availability and information about charging at home, at work and on the road.

PSE FLEET

As part of our carbon reduction goal, we're also making improvements to our fleet. We've committed to net zero emissions from our fleet by 2030. We're investing in hybrid electric technology, most recently installing these systems on vans for our Gas First Response team. The converted vehicles will reduce our carbon footprint by about 1.3 million pounds of CO_2 annually. We've committed to net zero carbon from PSE's transportation fleet for our operations by 2030. This includes the electrification of most fleet vehicles and using lower carbon fuels for fleet vehicles that can't be electrified and offset any remaining emissions by 2030.

COMPRESSED NATURAL GAS (CNG) VEHICLES

PSE supplies compressed natural gas (CNG) to public and private fueling stations around the Puget Sound region and our own CNG truck fleet. The cost of CNG as a transportation fuel is surprisingly low and a CNG-powered vehicle gets about the same fuel economy as a conventional vehicle. Now available at roughly half the cost of petroleum-based fuel, CNG fuel prices are also more stable compared to the volatile price fluctuations in the market for petroleum.

Natural gas vehicles are designed and built to be safe in normal operations, fueling and accidents. As with vehicles that are fueled with petroleum-based gasoline, new natural gas vehicles are subject to federal motor vehicle safety standards and crash tests. Fueling stations are also built to high safety standards.

LIQUEFIED NATURAL GAS (LNG) VESSELS

Ocean-going vessels have traditionally burned the most polluting of fuels called bunker fuel. Nationally and internationally, the cleanest option for ships travelling long distances has become Liquefied Natural Gas (LNG). PSE is in the process of commissioning an LNG facility at the Port of Tacoma. It will provide a cleaner fuel alternative for maritime vessels and other transportation uses, in addition to helping meet customer demand at times of peak usage. Our first partner is TOTE Maritime. When TOTE's first ship leaves Tacoma for Alaska fueled with LNG, it will enable the greenest shipping fleet on the West Coast, helping reduce not only greenhouse gas emissions but also dangerous particulates that put Port workers at risk for major health issues. Our partnership with TOTE Maritime will make just the kind of green impact we are seeking in transportation.

ENVIRONMENTAL COMPLIANCE

We value our strong relationships with regulators and local communities as we strive for environmental performance that meets or exceeds regulatory requirements. Our management of environmental compliance risk starts with PSE's corporate environmental policy, an Environmental Management System (EMS) and an internal environmental audit program.

CORPORATE ENVIRONMENTAL POLICY

Our corporate environmental policy lays out the company's commitments to environmental compliance, pollution prevention, continual improvement, an internal awareness culture, stakeholder engagement and community outreach. The policy establishes expectations for PSE and our employees at all levels to accept accountability and responsibility for the policy to comply with environmental laws, regulations and policies at the local, state and federal levels. PSE senior decision makers endorse this policy and it is communicated to each employee.

Our EMS documentation formalizes our company-wide approach and commitment to managing our environmental responsibilities. It provides clarity of roles and responsibilities associated with implementing PSE's corporate environmental policy by providing program structure, set processes and guidance tasks for departments to support our compliance with environmental laws and regulations. It also provides a roadmap of employees and departments tasked with maintaining compliance across multiple environmental program areas throughout the company's operations. Program areas include air, cultural resources, facility siting, hazardous material, waste, natural resources, remediation, spill response and water discharge.

The EMS is reviewed regularly and continually built upon and modified. Our compliance managers monitor our progress in meeting regulatory requirements at our operations. Our goal is always to aim for zero violations of regulatory requirements.

AIR PROGRAM

PSE's air program provides reporting, management and emission reduction initiatives for various aspects of the company's air quality programs. This includes oversight and negotiations of air permits, oversight of testing and monitoring activities and regulatory interpretation and planning. PSE's Environmental & Program Services (EPS) department works closely with agencies and PSE plant and operations groups to manage compliance and develop new alternatives to reduce emissions and improve operational efficiencies.

HAZARDOUS WASTE MANAGEMENT PROGRAM

Our compliance program includes a hazardous waste management program focused on compliance with local, state and federal regulations. The program is designed to heighten awareness and improve communications and engagement with employees on waste management policies while implementing effective measures to track waste generation, cost and opportunities for waste minimization and reduction. Under guidance from our EPS department, we developed policies and procedures, employee awareness and training and compliance tracking and documentation commitments to support waste minimization and we periodically review regulatory compliance performance of PSE waste management service providers and verify that our waste is handled appropriately.

WATER

Water is an important resource in power generation. PSE's thermal electric generation facilities use water to cool high temperatures and power steam turbines. From an environmental perspective, our industrial water usage also supports our thermal facilities' control of air emissions. Each of PSE's thermal facilities operate under permitted water usage conditions or permits. We obtain the majority of our water from local municipal water supplies, and we monitor and track the amount of water used, consumed and discharged at these facilities.

Our water discharge program covers industrial wastewater and stormwater management at PSE facilities. The EPS department assists in the development, compliance, renewal and updating of wastewater and stormwater permits and best management practices for PSE facilities and operations. Most of our facilities discharge wastewater to local publicly owned treatment works and some discharge to surface waters. PSE's wastewater discharges are regulated by National Pollutant Discharge Elimination System permits.

PSE works with local jurisdictions and the Washington State Department of Ecology (WDOE) to align our best management practices with construction stormwater permitting requirements for applicable construction projects. PSE strives to minimize impacts to local waterways from potential stormwater runoff associated with construction activities.

REMEDIATION

PSE's Environmental Remediation Program manages cleanup (remediation) of legacy contamination from historic operations by PSE and our predecessors. Sites such as those listed below show PSE's commitment to properly addressing environmental impacts, and have helped PSE earn a reputation as a responsible corporate citizen.

- **Gas Works Park MGP** – Gas Works Park (Gas Works) is the site of the former Lake Station Manufactured Gas Plant, a tar refinery and other industrial activities located on the north shore of Lake Union in Seattle, Washington. From approximately 1904 to 1956, a manufactured gas plant (MGP) was operated at this location by PSE's predecessor. PSE and the City of Seattle have thoroughly investigated and remediated the upland portion of the Gas Works and continue to work with WDOE on investigating and evaluating cleanup alternatives in sediment. Construction of the sediment remedy is expected to begin in 2027.
- **South State Street MGP** – In 2008, PSE received a Notice letter from the City of Bellingham alleging that contamination they had encountered at their Boulevard Park, was related to PSE's past ownership and operation of a MGP at that location. Predecessors of PSE owned and operated a MGP at that location from 1889 till the mid-1940s when it was sold. PSE entered into an agreement with the City of Bellingham to co-investigate the site. The site has been fully investigated and the City and PSE in consultation with WDOE have selected a remedial remedy. Construction is scheduled to begin in 2023.
- **Quendall Terminals** – The EPA listed Quendall Terminals as a cleanup site on the National Priorities List (NPL) (i.e., a Superfund Site) on April 19, 2006 and has been leading an investigation/cleanup planning effort since then. On March 6, 2014, PSE received a Notice of Potential Liability and Supplemental Request for Information from the EPA indicating that they believe PSE may be a Potential Responsible Party (PRP) under CERCLA for costs associated with the cleanup of the site and requested additional information pursuant to CERCLA Section 104(e). In April of 2020, PSE as well as other PRP's negotiated and signed an administrative settlement and order on consent to investigate and develop a pre-remedial design study.
- **Bay Station (Elliott Avenue)** – PSE's predecessors owned and operated the Bay Station MGP in Seattle along the waterfront now known as Elliott Ave from approximately 1890 to the mid-1930s. In 2009, PSE was contacted by the then property owners regarding contamination in the subsurface at this location that appears to be associated with the former MGP. The results of a preliminary site investigation confirmed the presence of soil contamination consistent with MGP spills and releases. A remedial investigation as well as a focused feasibility study was developed. In September 2016, PSE received a letter alleging that contamination encountered on adjacent properties is associated with the historical operation of a manufactured gas plant on PSE's property. PSE has worked with the property owner to fully investigate the extent of the contamination present and began construction of the remedy in 2021 and expects to complete remediation of these properties by 2023.
- **Lower Duwamish Waterway** – In November of 2012, PSE received a General Notice letter from the EPA indicating that they believe PSE may be responsible under CERCLA for costs associated with the cleanup of the Lower Duwamish Waterway. In 2014, PSE received notice from a neutral allocator inviting PSE to join an alternative dispute resolution process to allocate liability for environmental remedial action at the site. Since that time, PSE has conducted research and submitted documents about historical operations to the neutral allocator, including an expert report and rebuttal expert report. In 2019, PSE and several other parties involved with the site proposed allocated shares for the various parties, including PSE. On July 27, 2021, the allocator provided a preliminary allocation of 0.195% to PSE. Final allocation is expected in January 2022.

SPILL PREVENTION AND RESPONSE

PSE has over 600,000 pieces of oil-filled electrical equipment in service throughout our territory. Damage to these devices can occur during storm events, vehicle accidents and an occasional equipment failure resulting in a spill. In order to reduce the risk of spills, PSE has over 300 facilities with spill prevention, control, and countermeasure (SPCC) plans. These plans identify, at each PSE facility, what containers or equipment contain oil in quantities of 55 gallons or more, preventative measures to reduce the risk of oil spills and what do to in the event of a spill.

PSE's spill response program is designed to alleviate the impact of spills through rigorous response procedures, mitigation and cleanup efforts including a 24-hour spill response service. Spills are reported to local agencies and spill incidents are monitored and tracked in a database.

ENVIRONMENTAL AUDIT PROGRAM

Our internal environmental audit program includes coordinating and conducting environmental reviews at PSE facilities to evaluate environmental compliance. The program is designed to review procedures and operations to identify deficiencies, potential areas of concern and areas for improvement in order to more effectively carry out commitments under PSE's corporate environmental policy. Although 2020 and 2021 were anomalous years due to COVID-related access restrictions, in normal years we conduct inspections or audits regularly at service centers and operating bases, power generation facilities, natural gas storage facilities and other PSE facilities. We also periodically review compliance performance of environmental contractors at these facilities. This program is expected to resume to its regular frequency in 2022 as COVID access restrictions allow.

BIODIVERSITY AND HABITAT PROTECTION PROGRAMS

PSE maintains programs specific to the protection of birds, fish and wildlife habitats and other natural resources. Notably this includes implementing protective measures for fish passage at hydroelectric facilities, protected bird species, wetlands and wildlife habitats.

PROTECTING FISH

Baker and Skagit Rivers

PSE's largest hydropower facility is the Baker River Hydroelectric Project, a 215 MW facility located on a tributary of the Skagit River in northwest Washington. It features the Upper Baker Dam and Lower Baker Dam, each with its own powerhouse and reservoir. The Federal Energy Regulatory Commission (FERC) issued PSE a new, 50-year operating license for the project in 2008 after eight years of collaborative consultation between PSE and 23 other parties, including government agencies, Native American tribes and environmental groups.

The Baker River is a major tributary of the Skagit River, one of Washington State's most prolific river systems for fish. PSE's power projects feature extensive salmon-enhancement systems, including a fish hatchery and innovative facilities for moving migrating fish both upstream and downstream around PSE's two dams. A second powerhouse below Lower Baker Dam allows for fish-friendly outflows that protect fish populations and riparian habitat in the Baker-Skagit Rivers.

Over the years, advances in technology, greater knowledge of fish biology, ongoing PSE investments in fisheries systems and continued collaboration with resource agencies and Northwest Native American tribes have produced significant gains in the river's fish stocks. Our two Baker River dams are too high for conventional fish ladders, so we trap returning adult fish and haul them upstream of the dams. Part of this successful equation is our floating surface collector on Baker Lake. The $50 million apparatus, completed in 2008, attracts and safely holds juvenile salmon for downstream transport by "fish taxi." In 2013, a second floating surface collector was constructed on Lake Shannon as a further boost to the basin's fish production.

The new, enhanced upstream trap-and-haul facility completed in 2010 and both floating surface collectors for downstream fish passage. These efforts are benefitting the river's once struggling salmon populations and rebounding sockeye numbers to new record levels. Furthermore, PSE constructed an advanced fish hatchery and refurbished a sockeye spawning beach. The hatchery promotes proven egg-incubation and fish culture technology while the spawning beach is an innovation in sockeye production-using a series of large, gravel-bottom pools that are spring water fed to help create a naturalistic beach and a controlled, predator-free environment for adult sockeye that greatly increases spawning success. The new hatchery and renovated spawning beach are expected to result in a fourfold increase in hatched salmon fry to the Baker reservoirs— up to 11 million initially. Future expansion could push the fry total to 15 million.

Snoqualmie Falls

PSE's Snoqualmie Falls Project, located about 30 miles east of Seattle on the western slopes of the Cascade Mountains, is one of the oldest hydropower plants in the United States. The project contains a small diversion structure just upstream from Snoqualmie Falls—which is a natural fish barrier-- and two powerhouses. Built in 1898-1899, the first powerhouse is encased in bedrock 260 feet beneath the surface and was the world's first completely underground power plant. The second powerhouse, located a quarter-mile downstream from the falls, was built in 1910 and expanded in 1957.

After operating for more than a century, the facility still produces clean, renewable electricity for our customers. The project received a new, 40-year federal operating license in 2004. The license included an adaptive management approach to operation of the project including enhancement measures for the historic infrastructure and public recreation facilities and several different areas including fish and terrestrial resources.

To further protect downstream fish on the Snoqualmie River, we installed new flow-control equipment in our Plant 2 powerhouse that will provide for consistent outflows from the plant if an emergency shutdown occurs. The new equipment is designed to prevent rapid changes in downstream river levels that could potentially strand fish in side channels.

WILDLIFE AND HABITAT PROTECTION

Through our conservation and restoration efforts, we help sustain valuable habitats that support significant wildlife populations.

Central Washington shrub-steppe

Over the past 150 years, half of this dry, native ecosystem in Central Washington has become farmland, making shrub-steppe among the most threatened ecosystems in North America. When constructing our Wild Horse Wind and Solar Facility, we voluntarily added a conservation easement to safeguard 7,000 acres of shrub-steppe habitat. By planting 6,500 sagebrush plugs, we helped restore the area to a viable ecosystem for loggerhead shrikes, ground squirrels, sage grouse and the sensitive hedgehog cactus.

In partnership with the Trust for Public Lands and the Washington Department of Fish and Wildlife, we also preserved 18,000 acres of undeveloped open-space, helping to maintain enough wild lands to support elk, mule deer, bobcats, badgers, hawks and other wildlife — all told, more than 200 bird species and 30 mammal species.

North Cascades habitat

PSE's Baker River Hydroelectric Project is situated within the heavily forested Cascade Range of northwest Washington. Under our operating license for the project, we have purchased nearly 900 acres of wildlife habitat (wetlands, elk and bird habitat). On these lands, we have developed nearly 16 acres of meadow-like elk forage areas and another 90 acres of enhanced forage areas for elk, protected 24,600 linear feet of streams and approximately 90 acres of wetlands, developed snags and logs for wildlife habitat management and decommissioned roads and installed access management features to reduce motorized vehicle impacts on the properties. We have provided funding to the USDA Forest Service for road closures to improve grizzly bear habitat, enhance habitat conditions in late seral forest areas and for mountain goat habitat enhancement.

Snoqualmie

At Snoqualmie, we have set aside about 24 acres of forest habitat and wetlands and established a popular hiking trail.

Noxious weed management

Invasive and noxious weeds can crowd out native plants, degrade habitats and increase harmful erosion. We strive to control these species through an ecologically based, integrated weed management program at our facilities. We work with local environmental organizations to help identify and manage the weeds, then reintroduce native plants to restore the habitat. Our noxious weed program has over 150 weed sites that we are treating, and we are protecting at least 10 rare plant locations

AVIAN PROTECTION

For more than 30 years, we have worked to protect birds by reducing the risk of eagles, osprey, hawks, swans and other birds interacting with our electrical system and other infrastructure. Our Avian Protection Program promotes consistent methods for addressing avian-power line issues throughout our Service Area. Although it is not possible to prevent all injurious contact between birds and electrical equipment, we make significant investments to reduce the occurrence of these incidents.

For example, while the bald eagle and trumpeter swan populations continue to increase, we have seen no significant increase in eagle fatalities, and have seen a reduction in swan fatalities, due to interaction with our electrical system. We have also reduced small bird fatalities through our efforts. These trends are a testament to the effectiveness of our program, and our efforts company-wide.

Under the Avian Protection Program we work to:

- Complete avian protection projects each year, modifying poles and wires, to respond to or proactively prevent bird injuries and fatalities on our electrical system
- Relocate problem nests from our power poles to safer locations
- Evaluate construction and vegetation management projects to avoid or minimize disturbance to nesting eagles, herons and other birds
- Exchange information and partner in the field with the U.S. Fish and Wildlife Service and the Washington State Department of Fish and Wildlife
- Provide support to our hydroelectric and wind power projects by addressing avian issues and concerns, maintaining permits under bird protection regulations and assisting with coordination with agencies and other stakeholders related to avian management
- Maintain avian-safe electric construction standards for new construction

We regularly assess our program and procedures to identify process-improvement opportunities to effectively operate our program throughout our service area. We stay up-to-date with industry best practices through our membership with the Avian Power Line Interaction Committee. Our Avian Protection Program is recognized by state and federal wildlife agencies as an industry model for reducing the impact of electrical utility infrastructure on migrating and resident bird populations.

VEGETATION MANAGEMENT

Since 2001, PSE has been recognized by the National Arbor Day Foundation as a utility that has demonstrated practices that protect and enhance America's urban forests. PSE has an obligation to provide reliable electrical service to our customers. The major cause of power outages are unhealthy trees that fall into the electrical lines, windblown branches that cross the line as they fall to the ground, and tree limbs that grow into power lines. PSE is responsible for the trimming or removal of incompatible trees near our power lines in order to comply with local, regional and state laws for the safety of the public and to increase service reliability.

When we need to remove tall-growing species under power lines or hazardous trees that could fall and damage electrical equipment, we balance it with mitigation. We partner with local, state and federal agencies to identify potential mitigation sites that are currently degraded and could benefit from additional vegetation. Our goal is to convert these critical areas into thriving ecosystems. Planting tree and shrub species native to western Washington provides shade for salmon habitats, perches for birds, woody debris for amphibians and foraging material for mammals. We're committed to providing safe and reliable service to our customers while taking a responsible approach to protecting and restoring the natural environment.

WETLAND AND WATERWAYS MITIGATION

PSE's predominant territory expands across Western Washington. This is home to a large number of wetlands and streams, many of which can be habitat for threatened and endangered salmon species. It is PSE's policy to relocate work around water bodies where possible or select a construction method that causes the least disturbance.

For projects involving in-water work or other high impact construction, we contract with specialized consultants. The consultants assist us to determine impacts, propose appropriate mitigation or use of mitigation banks or perform on-site and off-site mitigation activities to offset impacts. We reach out early (separate from the required permit noticing) to stakeholder groups, tribes and agencies on high impact projects to gather input on construction methods and mitigation details to evaluate whether we have support for the proposed action.

Once the mitigation is in place for a given project, designated PSE employees are assigned to manage and oversee the maintenance and monitoring of mitigation sites (typically a 10–year monitoring period). In addition to ongoing maintenance of multiple mitigation sites, PSE maintains a robust company standard for erosion and sediment control that continues to evolve as environmental sensitivity increases.

CULTURAL RESOURCES

PSE's Cultural Resources Program works with government agencies, tribes, other stakeholders and the public to develop and share information pertaining to cultural resources. This information acts not only as the foundation to make sound decisions regarding cultural resources managed by or potentially affected by PSE actions, but serves as outreach and education materials. We share technical reports and findings with affected parties and through consultation we develop materials suitable for the public. We also work with regulators and local tribes to verify that the necessary consultations and cultural resource surveys are conducted so that we can preserve our cultural artifacts.

SOCIAL

PSE is committed to being a valued member of the communities we serve and where our employees live. We're part of the vital infrastructure that serves homes and businesses daily and we are continually working diligently to invest in technology and infrastructure to improve and maintain our systems and provide resiliency. We work directly with customers, providing them with a range of information and resources on safety and energy efficiency and participate in local projects. We work in close partnership with local charitable, nonprofit and environmental organizations, with a majority of our emphasis placed on supporting those in need and to preserve our natural habitat environments.

PSE is embarking on an unprecedented journey—for our employees, for our customers and for the communities that we serve. Diversity, Equity and Inclusion (DEI) is an essential part of our journey. It shines on everything we do and must inform how we connect in the community, how we do business with and our expectations of third parties and suppliers, and how we serve our customers. To provide the foundation for PSE's DEI journey and to advance this business imperative, a DEI Playbook has been developed. It outlines the vision for DEI at PSE, including our roadmap, focus areas, leadership's role and the advancement of our current efforts.

HEALTH AND SAFETY

Safety is at the core of PSE's foundation. Our culture of safety incorporates each aspect of our work. We strive towards a standard that embodies "Nobody Gets Hurt Today." That extends to commit to our employees the safety of our customers and communities in our system design and maintenance as well as our outreach, education and preparedness programs. We are proud that many of these efforts have been recognized as best industry practices amongst U.S. utilities.

EMPLOYEE SAFETY PROGRAM

Our workplace safety program puts significant emphasis on eliminating hazards first and foremost, engineering hazards out of the workplace and education and training to raise awareness. PSE focuses on hazards whether that be physical hazards in the field or office and recognizing and providing resources and programs to support mental health for our employees, their families and friends. Topics cover both safety around the often-hazardous equipment and conditions employees work in and day-to-day issues such as ergonomics. This supports our efforts to comply with federal Occupational Safety and Health Administration and Washington State Division of Occupational Safety and Health rules. We also strive to go beyond to provide and remain a safe and healthy working environment for each employee.

An executive-level steering committee oversees employee safety performance and programs. Employee safety committee meetings are held monthly that involve active participation at the departmental level with employees and their leadership. Labor and management also meet regularly to discuss, support and implement safety and health measures in our daily practices. These committees and our policies and programs are outlined in a comprehensive manual, the "Yellow Book," which is maintained by PSE's Safety and Health Department.

As a way of recognizing the importance of safety, the annual employee incentive is tied to performance on goals for safety training, education and performance.

CONTRACTOR SAFETY PROGRAM

PSE maintains a supply chain contract management program that incorporates a safety policy into master service agreements with contractors. Safety is stated as a project condition in each construction contract and a written contractor project specific safety plan is reviewed, accepted and incorporated into each contract prior to start of construction. Additionally, labor standards and working conditions are governed as part of PSE's collective bargaining agreements with the International Brotherhood of Electric Workers (IBEW) Local 77 and United Association Local 23. Visitors are expected to follow the same safety requirements as employees.

Our contractors are contractually obligated to meet safety requirements. Personnel who have need to go to the field and construction sites have personal protective equipment (PPE) and are trained in the proper use of PPE. The Contractor Safety Policy is introduced throughout the supply chain to emphasize the importance of a safety culture. Contractors working on behalf of PSE must submit an incident report to PSE. Safety metrics are incorporated in each major service provider master services agreement with safety statistics reported and measured monthly. PSE tracks the safety statistics of its major construction contractors on an ongoing basis. A safety evaluation is conducted to evaluate contractors for capital bid projects and prioritizing emergency call-outs.

PUBLIC SAFETY

PSE is committed to building, operating, and maintaining its energy-delivery infrastructure in a manner that will provide a high level of public safety. This supports employees committed to following the regulatory requirements governing the design and operations of its utility infrastructure. In addition, we actively participate in public awareness safety education and commit to responding quickly and prudently to emergency situations.

Our energy delivery infrastructure is designed and operated in such a manner as to protect the integrity of the system in the event of failures, natural disasters, terrorism or other external actions. The system is also designed to meet or exceed factors of safety and redundancy called for in applicable laws, regulations and codes. Our employees are directed to report any safety issues in the energy delivery system or any issues affecting public safety related to the operation and maintenance of the energy delivery infrastructure.

PUBLIC SAFETY PROGRAMS

Our customer safety communications team informs customers how to use electricity and natural gas safely, best access PSE customer services and prevent damaging underground utilities. We also promote public awareness programs focused on helping individuals and communities prepare for a natural disaster such as a flood, earthquake or storm.

ELECTRIC SAFETY

We communicate the importance of electric safety to our customers including:

- How to steer clear of downed power lines
- How to safely use portable generators
- How to safely use electrical appliances inside homes
- How to properly shut off electricity inside the home
- How to remain clear from overhead power lines to avoid hazardous situations

NATURAL GAS SAFETY

We communicate the importance of gas safety to our customers including:

- How to detect gas leaks and what to do if a leak is suspected
- Call Before you Dig - 811
- How to properly shut off gas appliances
- How to properly maintain gas pipelines

ENERGY RESOURCE PLANNING

PSE conducts regular resource planning that incorporates energy policies, strategies and processes dedicated to maintaining reliability and affordability of our system so that we can meet our customers' growing needs for generations to come. Traditionally we evaluate multiple economic, socioeconomic and environmental factors and consider input from a wide range of community stakeholders throughout this planning process.

The Integrated Resource Plan (IRP) has been the primary planning exercise that evaluates how a range of potential future outcomes could affect PSE's ability to meet our customers' electric and natural gas supply needs for the next 20-year period. PSE's IRP is updated and released every two years to reflect new demand forecasts, changing demographics, market conditions, environmental laws and regulations and other factors. For each IRP a team of in-house economists, energy specialists, environmental advocates, demographers and other experts do the following:

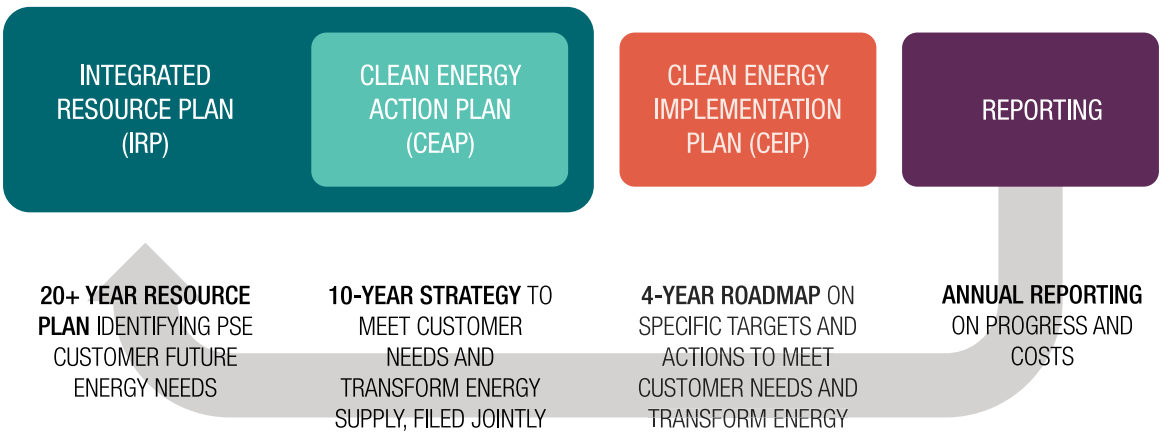
- Examine the many energy-resource options available to PSE, including the maximum amount of new energy "supply" we can acquire through energy efficiency
- Make a thorough, objective assessment of the benefits, costs and risks associated with each energy-supply option
- Analyze the region's population and economic trends, including a forecast of PSE customers' natural gas and electricity needs two decades into the future
- Evaluate political and economic policies and trends, and their potential impact on energy production, usage and availability

With the passage of CETA in 2019, our planning process was expanded to incorporate our clean energy commitments and related clean energy transformation stakeholder engagement. CETA sets out important new complementary planning standards that incorporate the social cost of carbon and require that utility resource plans provide for a transition to clean energy that benefits our customers. Now required under CETA, our bi-annual IRP must include an adjoining Clean Energy Action Plan (CEAP). The CEAP is designed to supplement the traditional IRP scope identify likely action over the next 10 years to meet the goals of CETA. The CEAP portion of the IRP includes incorporation of the social cost of greenhouse gas emissions as a cost adder to develop our 10-year conservation potential assessment, resource adequacy, demand response programs, renewable resources, distributed energy resources, delivery of electric resources, and alternative compliance options.

The IRP/CEAP together provide a long-term view of what appears to be cost effective based on the best information we have today about the future and does not dictate final resource or program implementation decisions. The electric supply part of this analysis is repeated every four years and updated every two years, so the IRP's forecasts and resource additions can be updated as technology advances, clean fuel options increase, resource costs decline, the wholesale energy market evolves and new policies are established.

Following submittal of the IRP/CEAP, CETA requires submittal of a Clean Energy Implementation Plan (CEIP). A CEIP is a four-year roadmap towards reaching clean energy goals informed by the needs and strategies identified in the IRP/CEAP. PSE will be submitting our first Clean Energy Implementation Plan in late 2021. PSE has been partnering with our customers and advisory groups to develop the CEIP roadmap. PSE is emphasizing engagement with highly impacted communities and vulnerable populations to create an equitable clean energy transition, as well as, other customers, community members and regulators to accomplish our shared clean energy goals. In developing the CEIP, PSE will consider the equitable distribution of benefits to customers for the proposed projects and programs, including the equitable distribution of non-energy impacts.

By comparison, the IRP/CEAP assesses/identifies current conditions based on economic, health, environmental, energy security and resiliency, and other metrics over 10 to 20 years, whereas the CEIP uses the criteria from this assessment to determine the programs and projects to implement over the next four years. Thus, the CEIP starts where the IRP/CEAP ends and develops specific four-year targets for solutions taking into account the equitable distribution of customer benefits and the feasibility of implementation. Actual resource decisions are based on real costs and feasibility discovered through the resource acquisition process and the CEIP.



DELIVERY INFRASTRUCTURE INVESTMENT DRIVERS: ONGOING AND NEW ENERGY DELIVERY CONSIDERATIONS

As PSE plans for growth in energy resource demand and supply we must continually assess the need for improvements to our energy delivery system. Even if customer needs for energy stop increasing or growth is offset or reduced by conservation efforts, infrastructure expenditures may stay the same or even increase. This is because load growth is only one of the drivers of infrastructure investment. For instance, aging equipment must be maintained or replaced. New or existing regulatory requirements may also require spending on system upgrades or alterations or require us to integrate new generation resources. In addition, with so much of our infrastructure located in public right-of-way, public transportation projects can necessitate public-right-of-way located energy infrastructure equipment relocation.

Below are six factors that drive infrastructure investment to better serve our customers. Some can be known in advance, others can be forecasted, and some circumstances arise from external events such as extreme weather, new codes or policies that drive behavior or actions, or new transportation projects as a result of unexpected increased funding.

1. Load growth

PSE's primary obligation is to serve the gas and electric needs of our customers. When customers turn on the switch or turn up the heat, sufficient gas and electricity needs to be available. Load drives system investment in various ways: as overall system loads, short-term peak loads, point (block) loads and system delivery considerations. Each of these efforts must be met.

LOAD GROWTH IMPACTS	EXPLANATION AND PSE ACTIONS
OVERALL BASELOAD SYSTEM DEMANDS	Demands on the overall system increase as the population grows and economic activity increases in our service area, despite the increasing role of energy demand management and conservation. PSE regularly evaluates economic and population forecasts in order to stay abreast of where and when additional infrastructure, including electric transmission lines, substations and high-pressure gas lines, may be needed to meet growing loads.
PEAK DEMAND	Peak loads occur when the weather is most extreme This can include extreme heat or cold events. To prepare for these events, PSE carefully evaluates system performance during periods of peak demand each year, updates its system models and compares these models against future load and growth forecasts. This prepares us to determine where additional infrastructure investment is required to meet peak firm loads.
POINT (BLOCK) LOADS	System investments are also sometimes required to serve specific "point loads" that may appear at a particular geographic location in our service territory. Electrical infrastructure to serve a computer server facility is one example; gas infrastructure to serve an industrial facility such as an asphalt plant is another.
SYSTEM DELIVERY CONSIDERATIONS	Electric and gas system delivery planning is based on near-term and long-term customer load growth forecast updates. PSE's Resource Planning and Analysis department prepares these forecasts. The forecasts include the impact of conservation efforts and implementation of interruptible rate schedules. Interruptible rate schedules are most commonly employed by commercial or industrial customers due to their ability to provide backup generation for critical load and willingness to tolerate a complete outage for period of time, as PSE must be able to depend on electricity or natural gas* curtailment when needed. *The gas system is designed to operate more conservatively than the electric system because during a peak event the gas system pressure declines as loads increase. As gas pressure approaches zero, customer equipment is unable to operate as intended, requiring manual intervention by PSE to restore service safely. For this reason, gas outages have much greater public and restoration impacts than electric outages and must be avoided for all but the most extreme conditions. The electric system is more flexible. For short periods of time components can often carry more current than their nameplate ratings call for with no adverse effects, and power restoration following an outage can be achieved instantly if power is rerouted through available switches.

2. Reliability and resiliency

The energy delivery system is reviewed each year to improve the reliability of service to existing customers. Past outages, equipment inspection and maintenance records, customer feedback, and PSE field input help identify areas where improvements may be made. Additional consideration is given to system enhancements that will improve resiliency (such as being able to provide a second power line from one substation to another or additional energy delivery capacity). Some of the investments to improve reliability and resiliency include replacing aging conductors, installing covered conductors (tree wire), converting certain overhead lines to underground or expanding energy delivery capacity using storage.

3. Regulatory compliance

PSE is committed to operating our system in accordance with regulatory requirements. The gas and electric delivery systems are highly regulated by several state and federal agencies including (Pipeline & Hazardous Materials Safety Administration (PHMSA), The North American Electric Reliability Corporation (NERC), Federal Energy Regulatory Commission (FERC), the Washington

Utilities and Transportation Commission (WUTC) and various worker and public safety regulations. Infrastructure investments driven by compliance requirements include electric transmission projects that are aimed at preventing cascading power outages and system collapse that could extend outside PSE's system. Gas regulations drive very specific safety focused inspection and maintenance activities and often require the replacement of assets based upon age and/or condition.

4. Public improvement projects

PSE must respond to city, county and state jurisdictions within our service area when transportation-related public improvement projects impact our facilities both within and immediately adjacent to public rights of way. PSE gas and electric facilities may require relocation or underground conversion of electrical facilities to accommodate public transportation projects. We also work closely with local jurisdictions to identify system improvement opportunities and to minimize surface restoration costs and disruptions in association with these public improvement projects.

5. Aging infrastructure

With continued maintenance, gas and electric infrastructure can provide safe, reliable service for decades. PSE has a number of programs in place that address aging infrastructure by replacing poles, pipes and other components that are nearing the end of their useful life. Our goal is to maximize the life of the system and at the same time minimize customer interruptions by replacing major infrastructure components prior to significant unplanned failure.

6. Integration/balancing needed for resource delivery

FERC and state regulations require PSE to integrate generation resources into our electric system according to processes outlined in federal and state codes. A new renewable generation plant, whether it is owned and operated by PSE or by others, can require significant electric infrastructure investment to integrate and maintain appropriate electrical power flows within our system and across the region. For the gas system, integrating gas supply resources owned or operated by PSE or others (such as underground gas storage, on-system LNG/propane and peak shaving, and the interstate gas transmission systems) can also require significant infrastructure investment to maintain appropriate system pressures and flows across the region.

Distributed generation, the smaller generation technologies such as roof-top solar panels, must also be reviewed and integrated, often requiring system protection enhancements to satisfy two-way flow requirements. For larger scale systems, these may also require system infrastructure improvements such as new distribution feeders or a substation.

After initial integration, continued monitoring of the impact and influx of these types of resources is needed in order to address any developing power quality concerns and customer demand changes. The majority of customers who pursue distributed generation today seek to do more than support their own load and desire to sell excess energy back to the utility, which requires additional consideration of infrastructure reliability. Generally, contributions from this type of generation do not occur during PSE's peak demand necessitating the need for infrastructure to supply peak load in order to deliver reliable service. Storage and control systems to help balance distributed generation limitations are maturing, and as control, communications, delivery infrastructure and energy storage systems are modernized, opportunities to integrate distributed generation more effectively to benefit PSE's operations will increase.

2021 INTEGRATED RESOURCE PLAN AND CLEAN ENERGY ACTION PLAN

CETA introduced the CEAP as a new part of the IRP process beginning with the 2021 IRP. This is the first IRP to include a CEAP, and as with any new requirement or assessment, the CEAP will evolve over time, and future IRPs will benefit from the lessons learned in this first implementation of the new planning process.

The final analysis contained in the IRP/CEAP considers policies, costs, economic conditions and the physical energy system, and proposes the starting point for making decisions about what resources may be procured in the future.

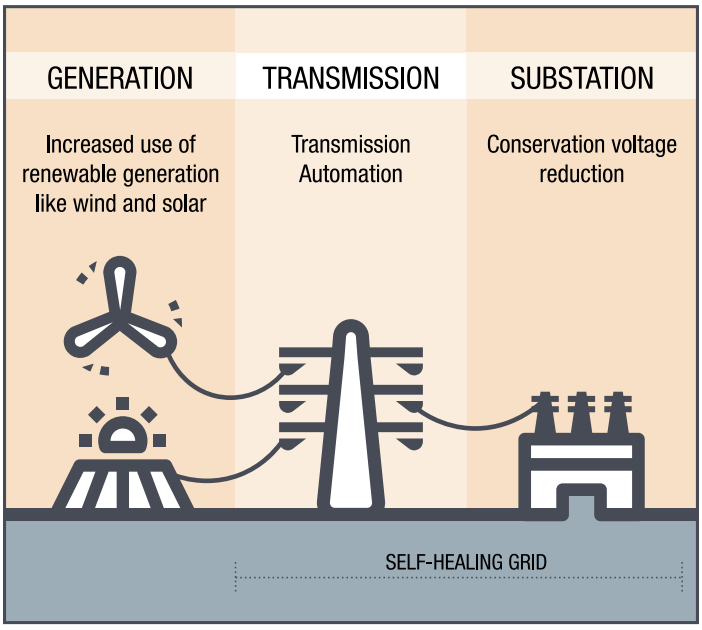
The 2021 PSE electric and natural gas IRPs have been developed during a time of extraordinary change as policy makers, the utility industry and the public confront the challenge of climate change and the necessity to transition to a clean energy future. PSE is committed to reaching the goals of the CETA and achieving carbon neutrality by 2030 and carbon free electric energy supply by 2045, and the electric resource plan presented here reflects these changes and goals. It includes:

- Significant investments in renewable resources
- Accelerated acquisition of energy conservation
- Increased use of demand response
- Integration of distributed energy resources like residential solar and battery energy storage
- Reduced reliance on short-term market purchases in response to the changing western energy market
- Inclusion of alternative fuels to operate new generating plant

The preferred portfolio reduces direct carbon emissions from PSE's electric supply by over 70 percent by 2029 and achieves carbon neutrality by 2030 through clean investments that enable a significant decrease in the generation from fossil fuel-based resources, and through alternative compliance options that may include additional renewable resources, energy efficiency, unbundled renewable energy credits or other energy transformation projects.

Legislation enacted in 2019 requires total natural gas costs to include the social cost of greenhouse gases and related upstream carbon emissions. As a result of this policy change, the natural gas resource plan focuses on significant, aggressive acquisition of conservation due to the increase in total natural gas costs. Since the natural gas IRP analysis was completed prior to the conclusion of the 2021 Washington State legislative session, it does not include new legislation that may, if enacted, substantially change the use of natural gas in certain sectors. The requirements of any new legislation will be included in the 2023 natural gas IRP.

GRID MODERNIZATION



Our current electricity grid was conceived more than 100 years ago when our energy needs were simpler. PSE is in the process of upgrading its delivery system infrastructure to modernize the grid. Grid modernization means taking a holistic approach to updating and improving PSE's infrastructure to create a grid that's reliable, resilient and flexible. Above all, it also needs to be safe and meet our customers' unique energy needs and expectations.

The process for creating a modernized grid means investing in new equipment, installing new software and communication platforms, testing and deploying new technology, and empowering customers with tools to make their own energy choices. Some of our grid modernization programs, like Distribution Automation and Demand Response, utilize smart technology, while others provide structural improvements and support the overall health of our system.

CUSTOMER AND COMMUNITY PROGRAMS

LOW-INCOME ASSISTANCE

To help customers with limited incomes increase comfort in their homes and reduce heating costs, we offer two programs administered by local agencies in partnership with PSE:

- Our Weatherization Assistance Program provides funding support for weatherization services that can reduce household energy bills by 25 percent and the need for assistance with utility bills.
- Our HELP (Home Energy Lifeline Program) provides additional bill-payment assistance beyond that offered by the federal LIHEAP (Low-Income Home Energy Assistance Program) program. Households eligible for LIHEAP are income eligible for weatherization assistance services. The program offers eligible customers up to $1,000 in credits per year in payment assistance toward their energy bill.

CUSTOMER SATISFACTION

Customers are central to what PSE does and how we do it. They're in our corporate values--"we do what's right and we seek the best outcomes for our customers and community." And customers are PSE's "north star," serving as a guide for employees in projects and efforts.

PSE uses a variety of methods to track customer satisfaction. We regularly conduct polling with our customers. PSE continues to monitor its performance on the residential J.D. Power Electric and Gas utility studies where it is benchmarked against other utilities in the Western United States. PSE's most recent reported syndicated performance from 2020 was a score of 764 on the residential electric study and 747 in the residential gas study placing it in the top half and second quartile of the Western Region. Through three quarters of the 2021 fielding PSE has scores of 755 and 766 on the residential electric and gas studies maintaining its position among its peer utilities. We also have a service quality index (SQI) with nine measures. SQIs are reported annually to the WUTC and are a quantitative factor in annual employee incentives.

TOURS AND RECREATION

PSE provides for tours and recreational access to its facilities including:

- Wild Horse Wind and Solar Facility
- Snoqualmie Falls Hydroelectric Museum and Project
- Baker River Basin
- Lower Snake River Wind Facility
- Hopkins Ridge Wind Facility

OUR EMPLOYEES

WORKPLACE POLICIES/DIVERSITY, EQUITY AND INCLUSION

PSE is committed to maintaining a work environment free of violence or harassment or discrimination of any kind, including harassment based on race, color, gender, sex, sexual orientation, age, religion, creed, national origin, marital status, veteran status or disability. Violence and threatening behavior are not tolerated by PSE and employees are expected to treat one another with mutual respect and dignity.

PSE strives to comply with federal, state and local employment laws. We prohibit unlawful discrimination in the recruiting, hiring, compensating, promoting, transferring, training, downgrading, terminating, laying off or recalling of any person based upon race, religion, creed, color, national origin, age, sex, sexual orientation, gender identity, marital status, veteran or military status, the presence of a disability or any other characteristic protected by law.

FAIR LABOR

PSE maintains policies committed to following applicable minimum wage, overtime wage, child labor, and other wage and hour laws and regulations. Our hiring policies comply with the principles of nondiscrimination, freedom of association, child labor, indigenous rights, forced and compulsory labor and other labor laws.

EMPLOYEE WELLNESS PROGRAM

PSE maintains a wellness program that offers a wide range of resources and tools at little or no cost to employees and their families, including company-sponsored wellness events and ongoing health and wellness communications. PSE focused on employee wellness throughout COVID. This includes placing an emphasis on mental health, supporting employees with flexible work schedules and working from home and quickly shifting to online training.

EMPLOYEE ENGAGEMENT AND CULTURE

PSE has been conducting the Great Place to Work survey since 2001 in an ongoing effort to create an inclusive culture that supports company values and enables PSE to do its best work on behalf of its customers and communities. We are committed to diversity, equity and inclusion and understand that our employees are the key to creating an inclusive culture.

PROFESSIONAL DEVELOPMENT AND TUITION REIMBURSEMENT

PSE has multiple training programs and modules designed to educate employees on an assortment of health and safety practices and certifications, corporate ethics and compliance, environmental awareness and regulatory compliance and emergency preparation and response. We also offer employees a tuition reimbursement program for relevant education opportunities.

MILITARY AND VETERAN SUPPORT

The PSE Patriots and Supporting Charities' (PSE2) objective is to aid in recruitment, retention and development of military veterans. We also support military veterans through communication, recognition, mentoring, community outreach, and support of families during deployment.

CORONAVIRUS RESPONSE

Starting in March of 2020, PSE worked to consistently take strong and supportive actions, as the coronavirus impacted our region. We worked to meet our customers' needs while doing our part to help mitigate this serious issue. For a limited time period we performed only essential services related to safety and reliability.

For safety, we quickly took steps at both our own facilities and in the field, due to our unique and critical role we play in the community. We made decisions to keep our employees and customers safe, while maintaining reliability of our services. These actions included:

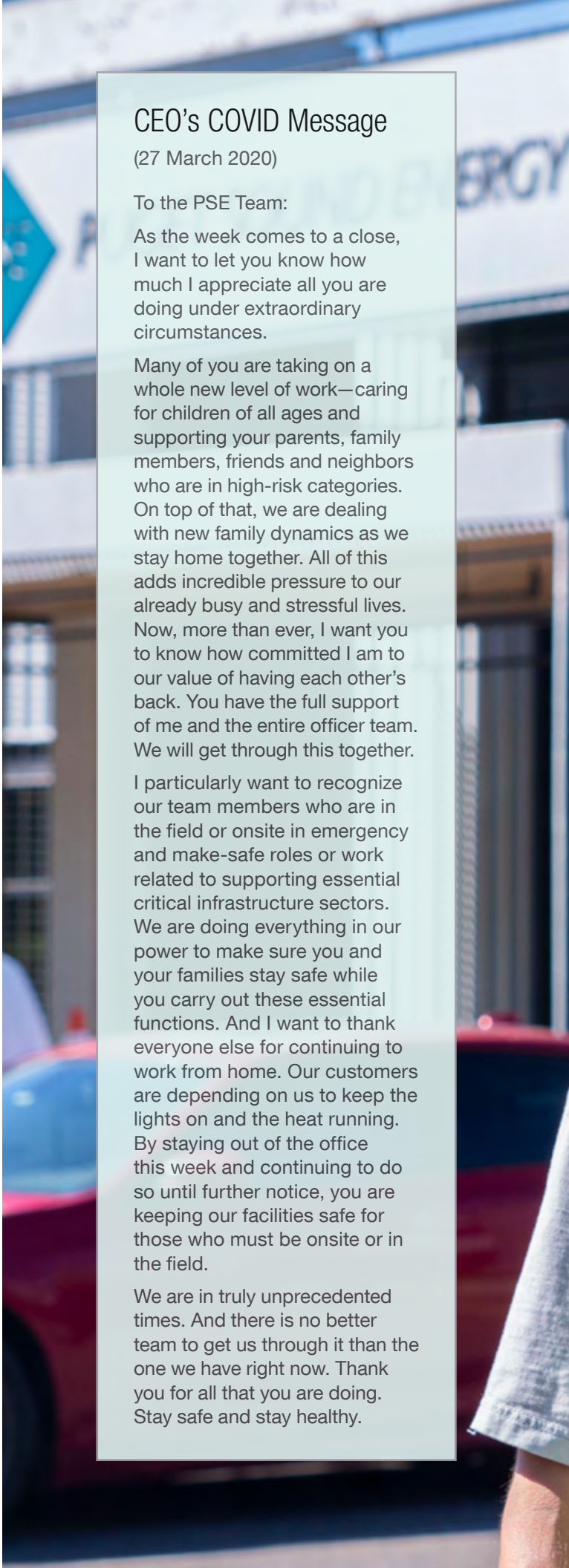
- Enhancing cleaning at PSE offices and workspaces
- Limiting building access to essential personnel and pivoting to a remote workforce
- Reimagining processes and building supporting networks to support our employees while working at home
- Initiating COVID-pay policies to support flexibility for employees managing changing home and work environments
- Implementing safety practices when visiting homes and businesses
- Initiating a Corporate Crisis Management Team to develop and disseminate information
- Creating online training programs to support our compliance and assessment programs
- Increasing mental health support programs for employees

With so much uncertainty, we knew that some customers would be worried about paying their bills. Due to the hardship local businesses and residents were and are facing, PSE alerted customers that we would not disconnect customers for non-payment. We also received approval from the Washington Utilities and Transportation Commission for a waiver that allows PSE to suspend accrual of late fees.

We encouraged anyone facing hardship to reach out to us and learn more about options such as:

- Existing energy assistance programs: Home Energy Lifeline Program (HELP) and Warm Home Fund
- COVID-Bill Assistance Programs which in 2020 and 2021 provided an additional $30.1 million in assistance funds to help customers with their past due bills
- Opportunities for payment plans, changing payment due dates and access to assistance funds through our EnergyHelp portal.
- The Puget Sound Energy Foundation efforts to work with a variety of community organizations to help support those in need, which includes donating over $250,000 to support Foundation's efforts

Puget Sound Energy has been a part of this community for nearly 150 years and know that our region is resilient. For more information on PSE COVID response, please visit our website: PSE | Help during the pandemic.



CEO's COVID Message

(27 March 2020)

To the PSE Team:

As the week comes to a close, I want to let you know how much I appreciate all you are doing under extraordinary circumstances.

Many of you are taking on a whole new level of work—caring for children of all ages and supporting your parents, family members, friends and neighbors who are in high-risk categories. On top of that, we are dealing with new family dynamics as we stay home together. All of this adds incredible pressure to our already busy and stressful lives. Now, more than ever, I want you to know how committed I am to our value of having each other's back. You have the full support of me and the entire officer team. We will get through this together.

I particularly want to recognize our team members who are in the field or onsite in emergency and make-safe roles or work related to supporting essential critical infrastructure sectors. We are doing everything in our power to make sure you and your families stay safe while you carry out these essential functions. And I want to thank everyone else for continuing to work from home. Our customers are depending on us to keep the lights on and the heat running. By staying out of the office this week and continuing to do so until further notice, you are keeping our facilities safe for those who must be onsite or in the field.

We are in truly unprecedented times. And there is no better team to get us through it than the one we have right now. Thank you for all that you are doing. Stay safe and stay healthy.

COMMUNITY

COMMUNITY ENGAGEMENT

Focusing on efforts to help build stronger communities, PSE's newly formed Community Engagement team members are geographically located throughout PSE's service area to work with local non-profit and community-based organizations as well as under-served communities and communities of color.

CUSTOMER OUTREACH

PSE's Outreach teams work to promote customer awareness of PSE's major projects and products and services through direct engagement and partnerships. Their mission is to empower customers to control their energy costs through participation in energy efficiency programs, to educate customers about PSE products and services, and to strengthen community-based programs through relationships with customers and other parties.

MAJOR PROJECTS OUTREACH

PSE engages the community, jurisdictions, tribes, and stakeholders as we develop large scale projects. Providing project specific information helps the community understand the project need, what's being proposed and what it might mean to them. Outreach tools include community meetings, customer polling, routing workshops, public open houses and online open houses, web pages, community mailers, surveys and comment cards.

Depending on the scope and complexity of the project, community advisory groups may be formed to capture the area's diverse interests. The goal is to share system needs and potential solutions, to identify and assess community values in the context of the project attributes and to develop recommendations for PSE's consideration.

An example is our Energize Eastside project. The Energize Eastside project will improve electric infrastructure that had its last major upgrade in the 1960s. Since then, the population has grown eightfold and the economy depends on reliable power in ways it did not 60 years ago. PSE conducted a multi-year outreach effort for Energize Eastside to share information and collaborate with local cities, residents and businesses. That included forming a Community Advisory Group with public meetings and project briefings with stakeholders, neighborhoods and cities about the project details as well as address public questions and concerns.

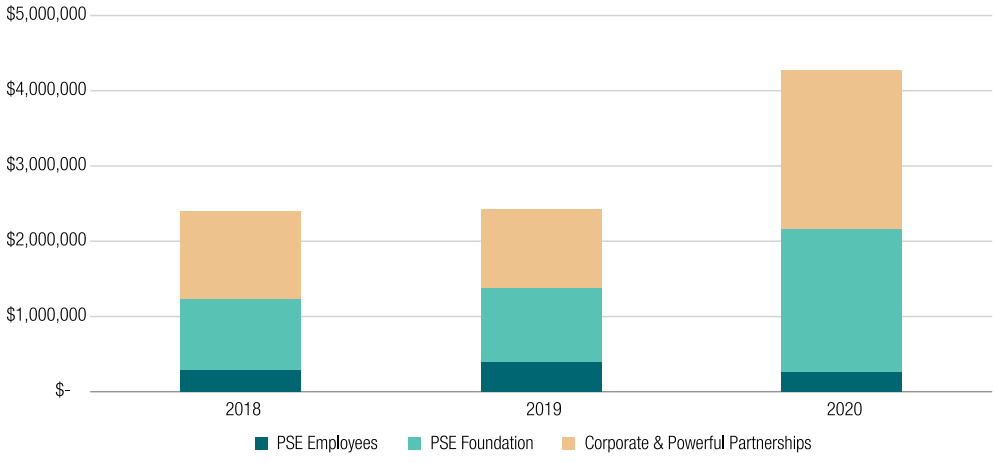
VOLUNTEERING, COMMUNITY SERVICE AND CORPORATE GIVING

Since 2016, PSE has contributed more than $13 million to the community through PSE, our separately-funded Puget Sound Energy Foundation and employee contributions and volunteer efforts. Our employees participate in the Foundations' employee contribution match program and volunteer in their communities. Organizations supported range from United Way, the American Red Cross and Food Lifeline, Mountains to Sound Greenway and many local community-based organizations.

PSE PROGRAM	SPECIFICS
TeamPSE	TeamPSE is an individual or group of PSE employees and retirees (and their families and friends) who give their time to local causes they care about, including building homes for Habitat to Humanity, trail restoration, food bank sorting and more.
Powerful Partnerships	Each year, PSE selects a group of nonprofits for a year-long collaboration. Since the program was started in 2016, PSE has partnered with 42 local organizations and invested almost $400,000 to help these organizations achieve their goals.
PSE Foundation	Puget Energy, the parent company of PSE, created the Puget Sound Energy Foundation in 2006. The foundation makes charitable contributions to qualifying 501(c)3 nonprofits to help support a broad range of community programs, with a special focus on emergency preparedness and environmental sustainability. None of Puget Sound Energy Foundation funds come from PSE customers.

Most recently, the foundation wrapped up a five-year, $1M program that launched in 2015 outfitting 18 regional nonprofit organizations that serve a critical role for their communities as emergency shelters or food distribution centers. The final generators were installed in 2020. Additionally, the PSE Foundation concluded a $1M environmental multi-year program in 2021 and we're incredibly proud to share that in 2020, of the $1.9M in charitable grants, PSE Foundation provided $1.4M to help provide immediate relief and essential needs to community members and nonprofits through our COVID-19 program focus.

FIGURE 17: PSE'S CHARITABLE GIVING BY PROGRAM



PSE EMPLOYEES
$943K
SINCE 2018

PSE FOUNDATION
$3.8M
SINCE 2018

CORPORATE INCLUDING POWERFUL PARTNERSHIPS
$4.3M

Source: PSE Internal Data Oct 2020

CONCLUSION

We do what's right and we seek the best outcomes for our customers and community.

As this report shows, we live this value through our environmental, social and governance programs. We're proud of our track record. More important, though, we're committed to continuing to be a leader and a responsible steward of resources. In this way, we can continue to serve our customers for years—and decades—to come.

PUGET SOUND ENERGY

7056 10/21