Investor Presentation

Portland General Electric
October 29, 2021





Cautionary statement

Information Current as of October 29, 2021

Except as expressly noted, the information in this presentation is current as of October 29, 2021 – the date on which PGE filed its Quarterly Report on Form 10-Q for the quarter ended September 30, 2021 – and should not be relied upon as being current as of any subsequent date. PGE undertakes no duty to update this presentation, except as may be required by law.

Forward-Looking Statements

Statements in this presentation that relate to future plans, objectives, expectations, performance, events and the like may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements represent our estimates and assumptions as of October 29, 2021. The Company assumes no obligation to update or revise any forward-looking statement as a result of new information, future events or other factors.

Forward-looking statements include statements regarding the Company's full-year earnings guidance (including expectations regarding annual retail deliveries, average hydro conditions, wind generation, normal thermal plant operations, operating and maintenance expense and depreciation and amortization expense) as well as other statements containing words such as "anticipates," "assumes," "believes," "conditioned upon," "estimates," "expects," "intends," "plans," "projected," "promises," "seeks," "should," and similar expressions. Investors are cautioned that any such forward-looking statements are subject to risks and uncertainties, including, without limitation: demand for electricity; the sale of excess energy during periods of low demand or low wholesale market prices; operational risks relating to the Company's generation and battery storage facilities, including hydro conditions, wind conditions, disruption of transmission and distribution, disruption of fuel supply, and unscheduled plant outages, which may result in unanticipated operating, maintenance and repair costs, as well as replacement power costs; failure to complete capital projects on schedule or within budget, or the abandonment of capital projects, which could result in the Company's inability to recover project costs; the costs of compliance with environmental laws and regulations, including those that govern emissions from thermal power plants; changes in weather, hydroelectric and energy market conditions, which could affect the availability and cost of purchased power and fuel; the development of alternative technologies; changes in capital and credit market conditions, which could affect the access to and availability of cost of capital and result in delay or cancellation of capital projects or execution of the Company's strategic plan as currently envisioned; the outcome of various legal and regulatory actions; general economic and financial market conditions; severe weather conditions, wildfires, and other natural phenomena and natural disasters that could result in operational disruptions, unanticipated restoration costs, or third party liability; cyber security breaches of the Company's customer information system or operating systems, data security breaches, or acts of terrorism, which could disrupt operations, require significant expenditures, or result in claims against the Company; PGE business activities are concentrated in one region and future performance may be affected by events and factors unique to Oregon; and widespread health emergencies or outbreaks of infectious diseases such as the novel coronavirus disease (COVID-19), which may affect our financial position, results of operations and cash flows. As a result, actual results may differ materially from those projected in the forward-looking statements. Prospective investors should also review the risks and uncertainties listed in the Company's most recent annual report on Form 10-K and the Company's reports on Forms 8-K and 10-Q filed with the United States Securities and Exchange Commission (SEC), including management's discussion and analysis of financial condition and results of operations and the risks described therein from time to time. These reports are available through the EDGAR system free-of-charge on the SEC's website, www.sec.gov and on the Company's website, investors.portlandgeneral.com. Investors should not rely unduly on any forward-looking statements.

Investor Relations Contacts

Jardon Jaramillo

Senior Director Investor Relations, Treasury and Risk Management (503) 464-7051 Jardon.Jaramillo@pgn.com

Peter Davis

Senior Analyst Investor Relations (503) 464-8586 Peter.Davis@pgn.com

Portland General Electric

investors.portlandgeneral.com 121 SW Salmon Street Suite 1WTC0506 Portland, OR 97204





The Company



PGE at a glance

Quick facts

- Vertically integrated electric utility encompassing generation, transmission and distribution
- 900,000 retail customers within a service area of 2 million residents
- 46 percent of Oregon's population lives within PGE service area, encompassing 51 incorporated cities entirely within the State of Oregon
- 75 percent of Oregon's commercial and industrial activity occurs in PGE service area

Leading the way to a clean energy future for Oregon

- Our goals align with the 100% clean energy by 2040 framework as mandated by HB 2021⁽¹⁾. The reduction targets are:
 - 80% reduction in greenhouse gas emissions by 2030
 - 90% reduction in greenhouse gas emissions by 2035
 - 100% reduction in greenhouse gas emissions by 2040 and every year thereafter

3,300+ MWs of Generation





⁽¹⁾ House Bill 2021 ("HB 2021") is a bill passed by the Oregon State Legislature that sets a timetable for Oregon's electricity providers to eliminate emissions associated with power used to serve retail customers in Oregon by 100% by 2040

⁽²⁾ PGE has a 20% ownership interest in Colstrip Units 3 & 4, representing 296 MW of net capacity

Investment Thesis

Investing in a reliable and clean energy future

- Planning to achieve the 100% clean energy framework as mandated by HB 2021
- 2021 RFP of 375 to 500 MW of renewables and 375 MW of nonemitting capacity, 100 MW Green Future Impact

High-growth service area

- Desirable core urban service territory with strong growth in residential and high-tech industrial segments
- Strong in-migration, growing number of customer connects and 1% long term load growth

Building a smarter more resilient grid

- Investing in our system to maintain and increase resiliency to protect against extreme weather and wildfires
- Decarbonizing our grid through integrating new and existing renewable resources and energy storage

Constructive regulatory environment

- Regulatory mechanisms to recover costs and add renewables, including a Renewable Adjustment Clause, and forward test year
- Vertically integrated, regulated utility

Focusing on operational effectiveness and efficiency

- 4% to 6% long term EPS growth, off 2019 base year, and 5% to 7% long term dividend growth guidance⁽¹⁾
- Continuing to implement efficiencies and manage costs through technology

Delivering exceptional customer experiences

- No. 1 ranked renewable power program in the Unites States for over the last decade⁽²⁾
- No. 2 ranked utility in the United States for customer experience⁽³⁾



⁽¹⁾ The amount and timing of dividends payable and the dividend policy are at the sole discretion of the Portland General Electric Board of Directors and, if declared and paid, dividends may be in amounts that are materially less than projected.

⁽²⁾ National Renewables Energy Laboratory

³⁾ Forrester, The US Customer Experience Index, 2021

Strategy for a Clean Energy Future

Strategic Goals



Decarbonize Power

Reduce greenhouse gas emissions by at least 80% by 2030 and 100% by 2040



Electrify the Economy

Increase beneficial electricity use to capture the benefits of new technology while building an increasingly clean, flexible and reliable grid



Advance our Performance

Deliver long-term earnings per share growth of 4% to 6% annually from a 2019 base year

How we will achieve our goals

Accelerating the clean energy transformation

- Investing in a smarter, more reliable and resilient grid: Integrated Operations Center, smart grid test beds
- Wheatridge Renewable Energy Facility
- 2021 RFP of 375 to 500 MW of renewables and 375 MW of nonemitting capacity

Delivering cleaner, integrated customer solutions

- Improving our customer experience through new digital payment platforms and a new website
- Expanding EV infrastructure through make ready investments
- EV Transit Partnerships

Increasing operational efficiency

- Leadership diversity representation
- Supplier diversity
- Executing our capital plan
- Leveraging technology to drive efficiency



We are taking a holistic approach to decarbonizing the power supply while continuing to provide reliable, affordable energy to everyone we serve

Diverse, growing service area

- Desirable core urban service area with strong population growth supporting services (government, education, restaurants, healthcare, and other services)
- I-5 corridor and port access provide opportunity for transportation and warehousing and market access for traditional manufacturing (wood products, food, metals)
- 'Silicon Forest' high tech cluster includes R&D and component manufacturing. Hillsboro fiber infrastructure provides unique opportunity for continued data center development
- Residential customers accounted for 40% of retail deliveries in 2020, commercial 35%, industrial 25%
- Strong industrial growth in recent years, 4% CAGR from 2015-2020⁽¹⁾
- Forecast long term annual energy deliveries growth of 1% driven by growth in industrial and stability in residential and commercial, as increases in customer count are offset by more efficient usage



Core metro service area

☐ I-5 corridor

☐ 'Silicon Forest' high tech cluster



(1) Excludes one large paper customer

2022 General Rate Case

Enabling customers through a resilient and integrated grid

A capital driven rate case requesting an increase in rate base of \$993 million, including:

- Extensive investments in PGE's T&D system to serve new and growing customer loads, address reliability and resiliency, replace aging infrastructure, and upgrade cyber and physical security
- Total rate base proposed: \$5.7 billion

Primary O&M cost drivers include:

• Increased vegetation management, wildfire mitigation, outage accrual expense, insurance expense, transportation electrification

Other proposals include:

 Accelerated depreciation and separate revenue requirement for Colstrip, improve storm outage mechanism, remove 2% cap on decoupling, expand distributed energy and DSG programs

2022 All-in Proposed Price Change



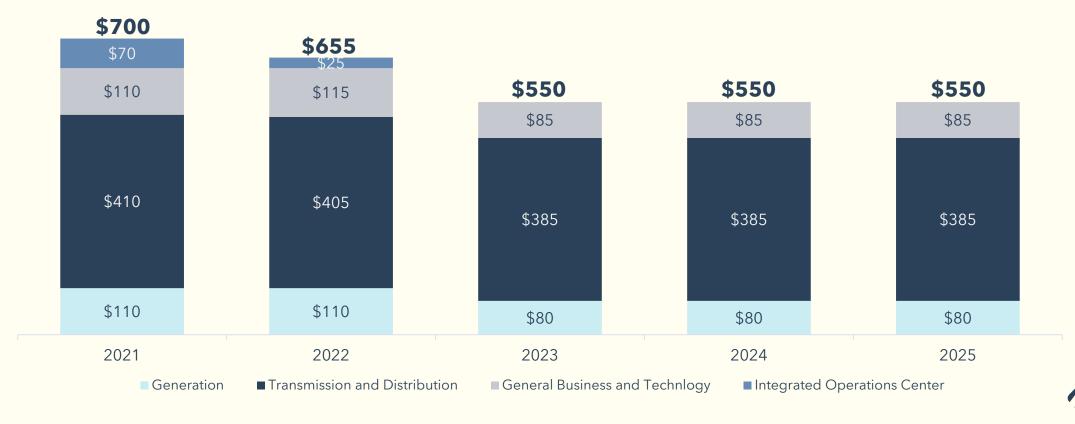
Settled Items						
ROE	9.5%					
Capital Structure	50/50					
Cost of Capital	6.83% ⁽¹⁾					



(1) Reflects updates for actual and forecasted debt costs

Reliability and resiliency investments

Capital expenditures forecast



Resource planning and procurement

2019 IRP ACTION PLAN

Customer Resource Actions

 Increased energy efficiency, demand response, storage and dispatchable standby generation

Renewable Resource Actions

 A renewable RFP, resources targeted online by the end of 2024

Capacity Resource Actions

- A multi-stage procurement process to meet capacity needs
- Pursue cost-competitive agreements for existing capacity in the region
- Conduct an RFP for remaining capacity needs after renewable addition and existing capacity

2021 RFP

- PGE will be seeking up to approximately 1,000 MW of renewable and non-emitting resources by initiating this RFP, consisting of:
 - 375 to 500 MW of renewables
 - 375 MW of non-emitting capacity
 - **100 MW** for Green Tariff Phase 2, plus the Customer Supply Option
- Independent evaluator selected and scoring methodology approved
- Planning to issue in Q4 2021
- Acknowledgement of shortlist in 2022





Key strengths



Focus on customers



Top quartile system reliability

Edison Electric Institute #1

No.1 renewable energy program in the nation for over the last decade

National Renewables Energy Laboratory



Most Trusted Utility Brand

Utility Trusted Brand & Customer Engagement™ Residential Study Escalent **#2**

No. 2
ranked utility in
the United
States for
customer
experience

Forrester The US Customer Experience Index, 2021



High-quality utility operations

Improving security, resiliency, and reliability for our customers

- Integrated into the Western Energy Imbalance Market (EIM) to enhance reliability and optimize resources
- Smart grid opportunities to incorporate more renewables, decarbonize, power the transportation network and integrate demand side resources

Plant Availability								
	2016	2017	2018	2019	2020			
PGE Thermal Plants	92%	88%	93%	91%	93%			
PGE Hydro Plants	99%	95%	93%	93%	86%			
PGE Wind Farms	95%	96%	92%	96%	94%			
PGE Wtd. Average	93%	90%	93%	92%	92%			
Colstrip Unit 3 & 4	85%	86%	82%	85%	74%			

Integrated Operations Center

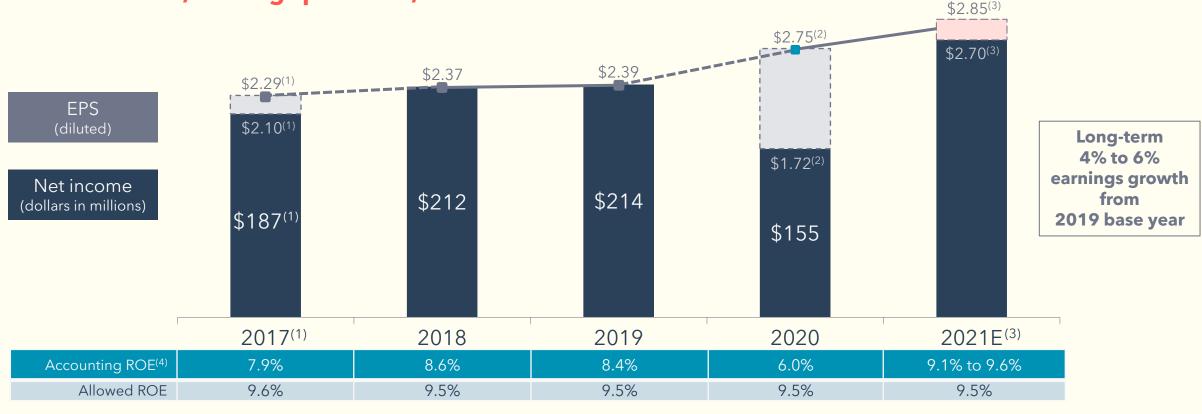
- A new, \$200 million, 24/7 center for key operations
- Significantly improves seismic resilience, cyber and physical security
- Improves monitoring, control and optimization of distributed assets and our distribution system





Long-term financial performance

Net income, earnings per share, and ROE



⁽¹⁾ In 2017 net income based on generally accepted accounting principles (GAAP) was \$187 million, or \$2.10 per diluted share. After adjusting for the impacts of the Tax Cuts and Jobs Act (TCJA), non-GAAP net income was \$204 million, or \$2.29 per diluted share. Management believes that excluding the effects of the TCJA (\$0.19) provides a more meaningful representation of the Company's comparative earnings. The Company has adjusted this amount to maintain comparability between periods

⁽²⁾ PGE's 2020 GAAP net income and diluted EPS was \$155 million and \$1.72, respectively. After adjusting for the impacts of the energy trading losses of \$127 million on net income, or \$1.42 per diluted share, offset by resulting tax effects of \$35 million on net income, or \$0.39 per diluted share (as calculated using the Company's full-year blended federal and state statutory tax rate), PGE's adjusted, non-GAAP net income was \$247 million, or \$2.75 per diluted share



⁴⁾ Return on average equity



Proven dividend growth



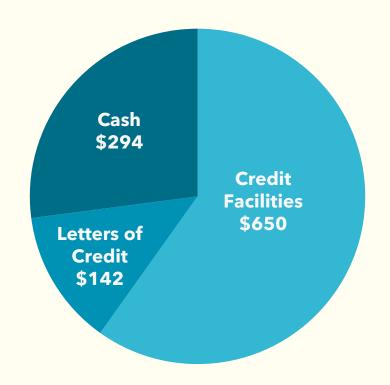
- (1) Compound Annual Growth Rate from 2012 through 2021
- (2) Compound Annual Growth Rate from 2017 through 2021
- 3) Dividend payout ratio is 91% based on GAAP earnings per diluted share of \$1.72, which has not been adjusted for the impacts of the energy trading losses. The effect of the energy trading losses was \$1.03 per diluted share
- (4) Estimates and projections are based on assumptions and there can be no assurance regarding the amount of future dividends. 2021 estimated payout ratio is 61% based on the midpoint of earnings guidance of \$2.70 \$2.85 per diluted share. The amount and timing of dividends payable and the dividend policy are at the sole discretion of the Portland General Electric Board of Directors and, if declared and paid, dividends may be in amounts that are materially less than projected



Liquidity and financing

Total Liquidity: \$1,086 million

as of September 30, 2021 (dollars in millions)



Ratings	S&P	Moody's
Senior Secured	А	A1
Senior Unsecured	BBB+	A3
Commercial Paper	A-2	P-2
Outlook	Stable	Stable

Actual and Expected 2021 Financings (dollars in millions)	Q1	Q2	Q3	Q 4
Long-term debt	-	-	\$400	-
Short-term debt	\$200	-	-	-





Environmental, Social, and Governance



Ambitious decarbonization goals

We plan to achieve companywide net zero greenhouse gas emissions by 2040

Our goals are aligned with HB 2021, which mandates a 100% clean energy framework by 2040

Reducing emissions associated with the power serving customers

- Reducing greenhouse gas emissions associated with the power supplied to customers by at least 80% by 2030 (from 2010 levels)
- Exiting operations at existing coal plants and adding more renewable generation through wind and solar, as well as battery storage
- Planning for zero greenhouse gas emissions associated with the electricity we serve customers by 2040

Reducing emissions in operations

• <u>Electrifying more than 60% of PGE's fleet</u> by 2030, including 100% of Class 1 vehicles like sedans, SUVs, and small pickups, as well as forklifts, by 2025

Reducing emissions through evolving customers' energy choices

• Creating new, innovative programs, like our Green Future products that offer a variety of choices to customers looking for clean, green energy options to power their homes and businesses

Management incentives aligned with achieving our decarbonization goals

• Since 2019, our CEO and other executives' incentive awards have been tied to the achievement of ESG-related goals such as decarbonization, environmental leadership and integrated grid initiatives

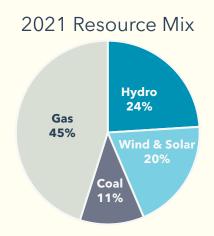


Achieving our decarbonization goals

Our near-term power supply emissions goal is to reduce greenhouse gas emissions associated with the power supplied to customers by at least 80% by 2030 (from 2010 levels)⁽¹⁾

- We will need approximately 1,500 to 2,000 MW of clean resources, in addition to removing coal from our portfolio, and approximately 800 MW of non-emitting dispatchable capacity resources to meet our 2030 emissions goals
- With renewable additions and emissions reductions, new non-emitting capacity will be required in the near-term and new technologies will be required in the longer-term as we look to our 2040 requirement of zero GHG emissions associated with the electricity we serve customers

Power sources as a percentage of retail load











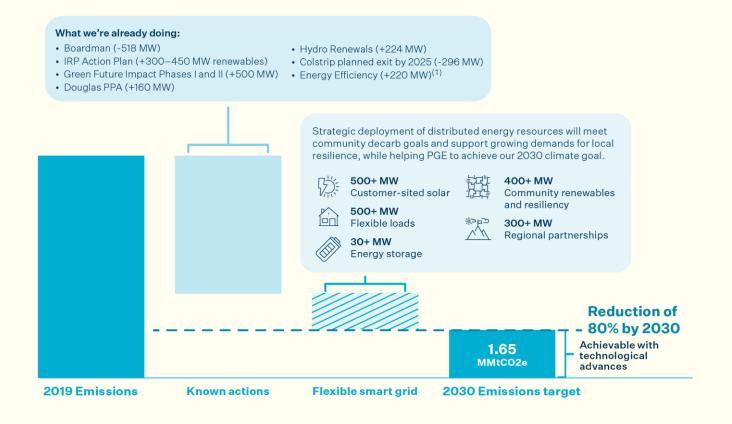
⁽¹⁾ We forecasted in the Reference Case of the Preferred Portfolio in the 2019 IRP Update to emit 4.32 MMtCO2 in 2030. We must emit at most 1.65 MMtCO2e in 2030, requiring a reduction of at least 2.67 MMtCO2 from this forecast to meet our emission reductions goals and targets established in HB 2021

^{(2) 2030} load from reference case forecast in the 2019 IRP, net of energy efficiency and demand response. Emissions rates are an average of PGE's combined cycle plants based on 2020 emissions

^{(3) 100%} reduction in greenhouse gas emissions as manded by the clean energy framework in HB 2021

Achieving our decarbonization goals (cont'd)

Our clean energy future is achievable through a combination of PGE, customer and community solutions





Achieving our decarbonization goals (cont'd)

Increasing renewables in our portfolio

- Layered approach balances near-term and long-term risks and benefits for customers
- Incremental renewable actions reduce near-term carbon emissions and puts PGE on track to meet Oregon's carbon reduction goal

Removing coal from our portfolio by 2030

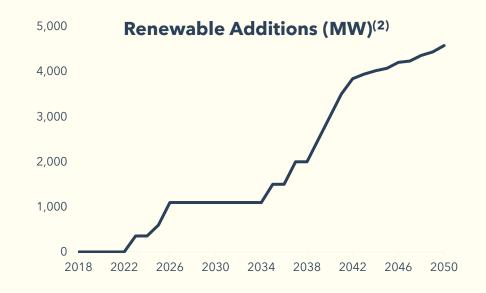
- Proposing to accelerate depreciation of our 20% ownership interest in Colstrip units 3 and 4 by 2027⁽¹⁾ (296 MW)
- Retired Boardman coal plant in Q4 2020

Supporting decarbonization in other sectors of the economy

 Promoting economy-wide emission reductions through energy efficiency, electrification and smart energy use

Supporting our customers' call for clean energy

• Expecting to procure a resource or resources for PGE's Green Future Impact (GFI) program through the 2021 All-Source RFP⁽³⁾





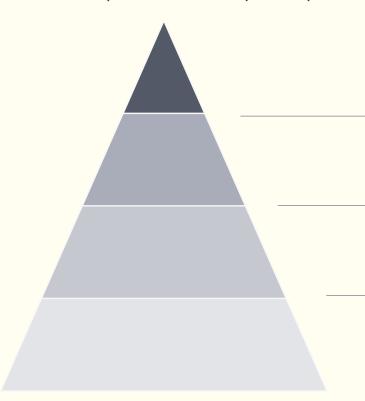
^{(1) 2022} General Rate Case, UE 394

⁽²⁾ Source: 2019 IRP. Represents additional renewable additions past Wheatridge. This chart was developed prior to the passage of HB 2021 and the associated clean energy framework. Chart will be refreshed following the release of the 2022 IRP

⁽³⁾ Under the GFI Program, PGE can procure up to 100 MW of a new wind, solar, or hybrid renewable and battery storage resource to meet subscriber demand under the PGE supply option

Sustainability and ESG Governance Framework

Responsibility for environmental, social and governance (ESG) performance is integrated with the policies and principles that govern our company



Board oversight

The Board area of strategic responsibility includes oversight over actions to address risks and opportunities related to climate change and PGE's decarbonization strategy

Nominating, Governance & Sustainability Committee

This committee provides overall governance and oversight of programs and performance related to sustainability and ESG matters affecting PGE, including review of decarbonization goals

Executive oversight and management

Standing committees are important delegates, monitoring specific areas of Sustainability and ESG matters and their metrics, processes and controls.

ESG Steering Committee established to oversee execution of Sustainability and ESG planning and goals

Business area management

Each business area is responsible for certain aspects of sustainability, and uses effective performance management techniques to align employees around successful execution of our efforts to achieve our goals



Diverse and Experienced Board



Jack Davis, Chair Former CEO, Arizona Public Service Co Joined in 2012 Board Chair since 2013



Maria Pope President & CEO Portland General Electric Joined in 2018



Rodney Brown Founding Partner, Cascadia Law Group PLLC Joined in 2007



Kirby Dyess Principal, Austin Capital Management LLC Joined in 2009





Mark Ganz Retired President & CEO. Cambia Health Solutions. Joined in 2006



eBay Inc. Joined in 2019

Marie Oh Huber SVP, General Counsel and Secretary,







Kathryn Jackson Director of Energy and Technology Consulting at KeySource, Inc. Joined in 2014



Michael Lewis Former Interim President. Pacific Gas and







Michael Millegan Founder and CEO, Millegan Advisory Group 3 LLC Joined in 2019





Neil Nelson Retired President, Siltronic Corp. Joined in 2006

Electric Company

Joined in 2021







Lee Pelton President and CEO. The Boston Foundation Joined in 2006

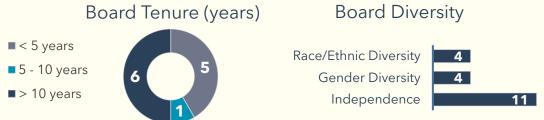


Jim Torgerson Retired CEO. AVANGRID, Inc. Joined in 2021



Track record of thoughtful refreshment enables us to have a Board with the experience and diverse perspectives needed to oversee our business

Diverse and Independent Leadership



Average tenure of directors is 8 years

Board Skills











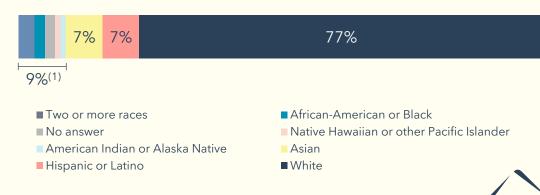
Diversity, Equity and Inclusion

Committed to DEI across our business

- Partners and suppliers: Increasing our supplier diversity to 15% of total supplier spending by 2022
- Awareness, education, and training: Racial equity education for our board, leadership and employees
- Recruitment and development: Development opportunities for underrepresented, high-potential employees interested in leadership
- Awards and recognition: Perfect score on the Human Rights Corporate Equality Index and Gender-Equality Index, with active participation in the CEO Action for Diversity & Inclusion
- Competitive pay and benefits: Diversity metrics included in incentive programs. PGE employees in the same role, with comparable work experience, at the same location earn a near-perfect dollar-for-dollar pay

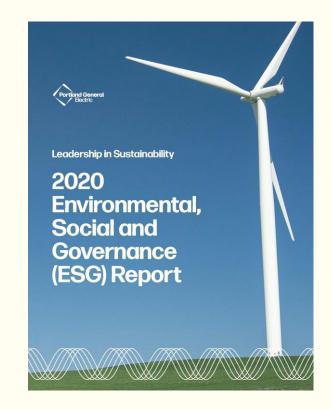


Workforce Racial/Ethnic Diversity



Sustainability reporting

- Our <u>2020 ESG Report</u> shares information about PGE's commitment to sustainability along with information about strategic projects that illustrate our commitment to advancing a sustainable future and caring for our community.
- Sustainability principles are woven into the fabric of who we are and how we operate. We are:
 - Taking a holistic approach to decarbonizing the power supply while continuing to provide reliable, affordable energy to everyone we serve
 - Accelerating electrification, allowing us to power more things with clean, carbon-free energy
 - Being good stewards of Oregon's land, water and wildlife
 - Supporting our customers, our communities and our employees
 - Leading with integrity by setting the bar high at the top level of our organization
 - Maintaining a robust board refreshment process to oversee our creation of long-term value and support our clean energy development and environmental, social and governance goals







Portland General Electric

APPENDICES



2022 General Rate Case updates

Rate Case Filing Details ⁽¹⁾							
Proposed Rate Base	\$5.7 Billion						
Primary O&M Cost drivers	Increased vegetation management						
Other proposals	 Accelerated depreciation of Colstrip to 2025 and establish its own, separate revenue requirement Improve storm outage mechanism to establish a balancing account with sharing percentages and increase the annual accrual amount from \$3.7 million to \$10.4 million Retain the 2% cap on decoupling but allow for balancing any amounts over 2% to carryover into subsequent years for recovery Expand distributed energy and DSG programs 						

Settled Items							
	2021 Authorized	2022 Test Year Settled					
ROE	9.5%	9.5%					
Capital Structure	50/50	50/50					
Cost of Debt	5.100%	4.125%					
Cost of Capital	7.30%	6.83%(2)					



⁽¹⁾ The 2022 General Rate Case is filed under docket no. UE 394 and is subject to OPUC approval

⁽²⁾ Reflects updates for actual and forecasted debt costs

Deferral updates

COVID-19 (Docket UM 2114)

- 2021 earnings guidance reflects the ongoing impact of COVID-19
- As of September 30, 2021 PGE has deferred \$27 million, primarily related to bad debt expense. Amortization of any deferred costs will remain subject to OPUC review prior to amortization

Wildfires restoration (Docket UM 2115)

- In October 2020, the OPUC approved the Company's application to defer costs associated with damage restoration related to the 2020 wildfires for a 12-month period beginning September 10, 2020 (Order 20-389)
- As of September 30, 2021 PGE has deferred \$36 million in costs related to wildfire response

February 2021 storms (Docket UM 2156)

- As of September 30, 2021 PGE has deferred a total of \$58 million, including interest, related to incremental operating
 expenses due to the storms
- PGE does not expect an OPUC decision on the February storm deferral until later in 2021 or 2022

Power Cost Adjustment Mechanism

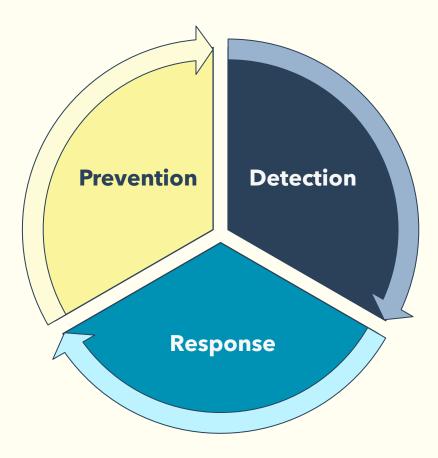
- As of September 30, 2021 PGE has deferred \$27 million which represents 90% of the excess variance expected to be collected from customers
- A final determination regarding the 2021 CPAM results will be made by the OPUC through a public filing and review in 2022



Wildfire mitigation and risk management

Number one priority is protecting the lives and property of customers, coworkers and the communities we serve.

- Robust tree trimming and vegetation management program
- Ongoing focus on system hardening:
 - Fire resistant, ductile iron transmission and distribution poles in priority wildfire areas
 - Clearance of critical transmission lines
 - Underground cables
- Advanced technologies for monitoring and early alerts







Constructive regulatory environment

Regulatory construct

- Forward test year
- Integrated Resource Planning (IRP)
- Renewable Portfolio Standard (RPS)
- Proven track record of achieving reasonable Commission-approved settlements
- Forward test year

Regulatory body

- Public Utility Commission of Oregon
- Governor-appointed three-member commission serving four-year terms

Name	Term End	Party
Megan Decker (Chair)	Mar. 2025	Democrat
Mark Thompson	Nov. 2023	Republican
Letha Tawney	May 2024	Democrat

Q3 2021 Regulatory Updates

- Initiated the regulatory process of the renewables RFP to procure more renewable and non-emitting resources
- Filed the Distribution System Plan, which lays out the partnership needed with customers to build the equitable grid of the future and the amount of distributed energy resources anticipated by 2030–and beyond
- Filed an extension waiver for the next Integrated Resource Plan (IRP), in order to more fully bring to life the vision of Oregon's new clean energy law (HB 2021) and encourage a more robust public participation process



Historical distribution system investments

PGE has invested significantly into its distribution system to maintain reliable infrastructure and keep outages low

- 2020 spending was driven by industrial customer expansions and load growth in PGE's service territory
- The distribution system is facing tremendous change as a result of customer demands and advancing distributed energy resource (DER) technologies
- Future investments will be driven primarily by forecasted growth in DERs, and load growth from transportation and building electrification

	Yearly Dis	stribution S	ystem Spe	nding (milli	on USD)
Spending Category	2016	2017	2018	2019	2020
New customer projects New connects, Minimum Load Agreements (MLAs) tied to specific customer base, and interconnections	\$50	\$52	\$60	\$86	\$175
Age-related replacements and asset renewal Like-for-like replacement due to age or reactive failure	\$49	\$84	\$86	\$87	\$86
System expansion or upgrades for reliability and power quality Proactive upgrades to improve reliability and reduce risk	\$39	\$51	\$76	\$122	\$84
System expansion or upgrades for capacity System upgrades driven by load growth per our Distribution Planning Department's load forecast	\$32	\$67	\$82	\$37	\$30
Metering Projects involving meter installs and purchases to enhance metering capabilities for PGE customers	\$9	\$7	\$7	\$12	\$9
Preventive maintenance Operation and Maintenance (O&M) spending to ensure grid components are up to standards and operating efficiently	\$0	\$4	\$8	\$5	\$2
Grid modernization projects Projects involving new technologies such as energy storage, distribution automation, communication projects	\$0	\$2	\$3	\$4	\$5
Grand Total	\$180	\$268	\$322	\$352	\$390

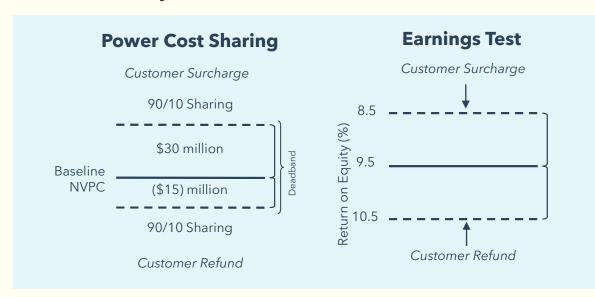


Recovery of power costs

Annual power cost update tariff

- Annual reset of prices based on forecast of net variable power costs (NVPC) for the coming year
- Subject to OPUC prudency review and approval, new prices go into effect on or around January 1 of the following year

Power Cost Adjustment Mechanism (PCAM)



- PGE absorbs 100% of the costs/benefits within the deadband, and amounts outside the deadband are shared 90% with customers and 10% with PGE
- An annual earnings test is applied using the regulated ROE as a threshold
- Customer surcharge occurs if PGE's actual regulated ROE is below 8.5%; ROE will not exceed 8.5% with surcharge
- Customer refund occurs if PGE's actual regulated return is above 10.5%; regulated return will not decrease below 10.5% with refund

	Detriment / (Benefit) PCAM Baseline at Year End ⁽¹⁾ :										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 YTD
Over / (Under)	(\$34)	(\$17)	\$11	(\$7)	(\$3)	(\$10)	\$15	(\$3)	\$5	\$ (13)	\$60 ⁽²⁾



⁽¹⁾ Dollar values in millions

²⁾ As of September 30, 2021 \$27 million has been deferred, which represents 90% of the excess variance expected to be collected from customers

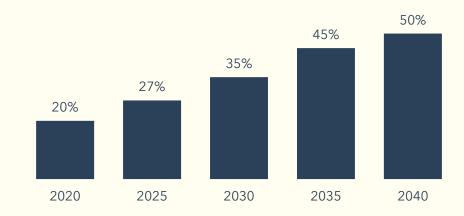
Renewable portfolio standard

Additional renewable resources

• As of 2020, PGE had the following qualifying renewable resources $^{(1)}$:

Type of Resource	% of Retail Load
Wind	12.3%
Qualifying facilities	5.4%
Low-impact hydro	2.5%
Solar & other	<1%

Renewable Portfolio Standard



 Renewable Portfolio Standard qualifying resources and Renewable Energy Certificates (RECs) supplied approximately 10% of PGE's retail load in 2012, 2013, and 2014, approximately 15% of retail load in 2015, 2016, 2017, 2018, 2019, and approximately 20% of retail load in 2020

Renewable Adjustment Clause

• Renewable resource can be tracked into prices, through an automatic adjustment clause, without a general rate case. Using Schedule 122, prices go into effect on the resource's in-service date and are updated annually. Upon Commission approval of the subsequent general rate case the renewable resource is included in base prices and Schedule 122 goes back to zero

Decoupling mechanism

The decoupling mechanism is intended to allow recovery of margin lost due to a reduction in sales of electricity resulting from customers' energy efficiency and conservation efforts

Collections under the decoupling mechanism are subject to an annual limitation of 2% of the applicable tariff schedule

Sales Normalization Adjustment (SNA)

for residential and nonresidential customers (≤ 200 kW)

- Based on the difference between actual usage per customer and that projected in PGE's 2019 general rate case
- The SNA mechanism applies to approximately 76% of 2020 customer revenues

Lost Revenue Recovery Adjustment (LRRA)

for large nonresidential customers (up to 1 MWa).

- Based on the difference between actual energyefficiency savings (as reported by the ETO) and those incorporated in the applicable load forecast
- The LRRA mechanism applies to approximately 16% of 2020 customer revenues

Recent Decoupling Results

	2016	2017	2018	2019	2020
Sales Normalization Adjustment	\$1.9	\$11.6	\$(1.3)	\$14.4	\$(5.5)
Lost Revenue Recovery Adjustment	\$(0.8)	\$(0.4)	\$(1.1)	\$(0.1)	\$0.3
Total adjustment	\$1.1	\$11.2	\$(2.4)	\$14.3	\$(5.2)

Note: Refund = (negative) / collection = positive

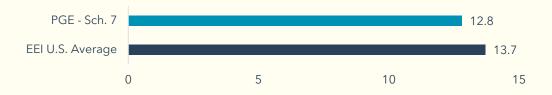


Average retail price comparison

15

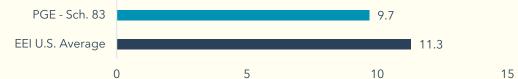
Residential Electric Service Prices:

1,000 kWh monthly consumption (Prices in cents per kWh)



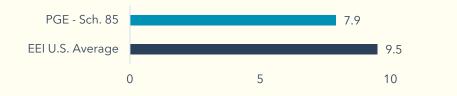
Commercial Electric Service Prices:

40 kW demand and 14,000 kWh monthly consumption (Prices in cents per kWh)



Industrial Electric Service Prices

1,000 kW peak demand and 400,000 kWh monthly consumption (Prices in cents per kWh)



Large Industrial Electric Service Prices

50,000 kW peak demand and 32,500,000 kWh monthly consumption (Prices in cents per kWh)

