

Investor Presentation

PORTLAND GENERAL ELECTRIC
MARCH 8, 2022



An Oregon kind of energy.

Cautionary statement

Information Current as of February 17, 2022

Except as expressly noted, the information in this presentation is current as of February 17, 2022 – the date on which PGE filed its Annual Report on Form 10-K for the year ended December 31, 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 the date of this report. 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," "believes," "intends," "estimates," "promises," "expects," "should," "conditioned upon," and similar expressions.

Investors are cautioned that any such forward-looking statements are subject to risks and uncertainties, including, without limitation: the outcome of various legal and regulatory actions; 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; delays in the supply chain and increased supply 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, including interest rates, 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; general economic and financial market conditions, including inflation; 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; employee workforce factors, including potential strikes, work stoppages, transitions in senior management, and the ability to recruit and retain key employees and other talent due to COVID-19 mandates and turnover due to macroeconomic trends; 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), including potential vaccination mandates, 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. These risks and uncertainties are further discussed in the reports that the Company has filed with the United States Securities and Exchange Commission (SEC). 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.

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The Company



PGE at a glance

Quick facts

- Vertically integrated electric utility encompassing generation, transmission and distribution
- Approximately 900,000 retail customers within a service area of 2 million residents
- Roughly half 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
- 28,206 circuit miles of distribution lines⁽¹⁾

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 to reduce baseline greenhouse gas emissions from power served to Oregon retail customers 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

(1) As of December 31, 2021



Financial snapshot

- 2021 revenue: \$2.4 billion
- 2021 diluted earnings per share: \$2.72
- Net utility plant assets: \$8.0 billion⁽¹⁾



Investment thesis

Investing in a reliable and clean energy future

- Adopting the 100% clean energy framework as mandated by HB 2021
- Exiting operations at existing coal plant, 2021 RFP of 375 to 500 MW of renewables and 375 MW of non-emitting 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 1.5% 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
- Modernizing our grid with a community-centered distribution system to advance environmental justice, accelerate distributed energy resources and maximize grid benefits

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 United States for over the last decade⁽²⁾
- Continued to support customers and the community during the pandemic, allocating federal, state and company funds to help customers through bill assistance.

(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



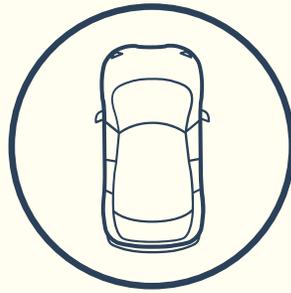
Strategy for a Clean Energy Future

Strategic Goals



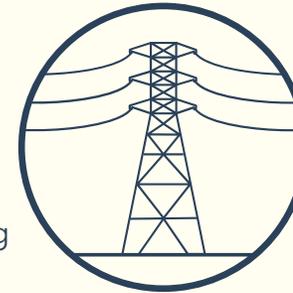
Decarbonize Power

Reduce greenhouse gas emissions from power served to Oregon retail customers 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 earnings per share growth of 4% to 6% annually from a 2019 base year

How we are achieving 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 non-emitting 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

- Leveraging technology to drive efficiency: advanced metering, outage mapping, restoration estimation
- Executing our capital plan
- Improving procurement management and increasing supplier diversity

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



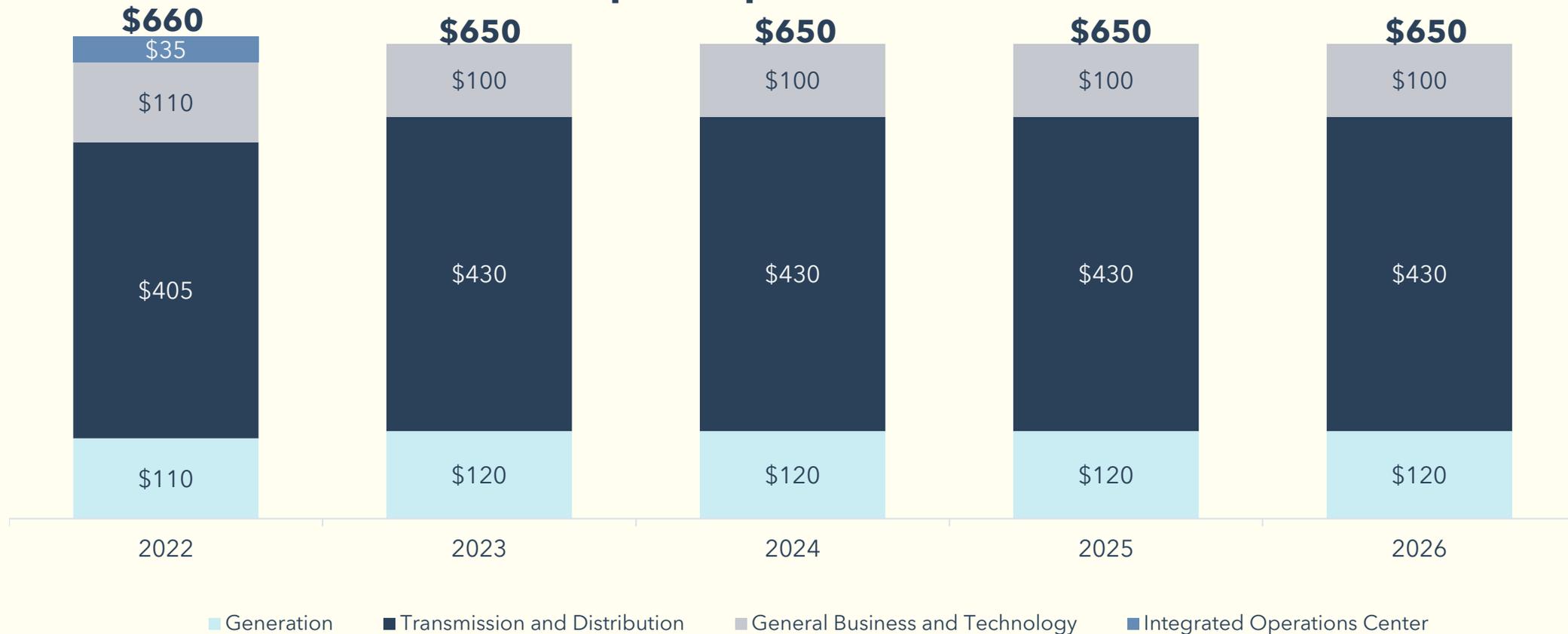
Diverse, growing service area

- 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 39% of retail deliveries in 2021, commercial 35%, industrial 26%
- Strong industrial growth in recent years, 5% CAGR from 2016-2021
- 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



Reliability and resiliency investments

Capital expenditures forecast



Note: Capital expenditures exclude allowance for funds used during construction. Dollar values in millions. These are projections based on assumptions of future investment. Actual amounts expended will depend on various factors and may differ materially from the amounts reflected in this capital expenditure forecast. All dollar values in millions



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

PGE will file its next IRP and initial Clean Energy Plan in March of 2023, aligning the IRP with HB 2021

2021 RFP

- PGE is 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** of renewables in support of the Green Future Impact program's PGE supply option
- Independent evaluator selected and scoring methodology approved
- Bids submitted in January 2022
- Acknowledgement of shortlist targeted in Q2 2022
- Final contracts executed with winning bidders targeted by the end of 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



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					
	2017	2018	2019	2020	2021
PGE Thermal Plants	88%	93%	91%	93%	89%
PGE Hydro Plants	95%	93%	93%	86%	84%
PGE Wind Farms	96%	92%	96%	94%	92%
PGE Wtd. Average	90%	93%	92%	92%	89%
Colstrip Unit 3 & 4	86%	82%	85%	74%	81%

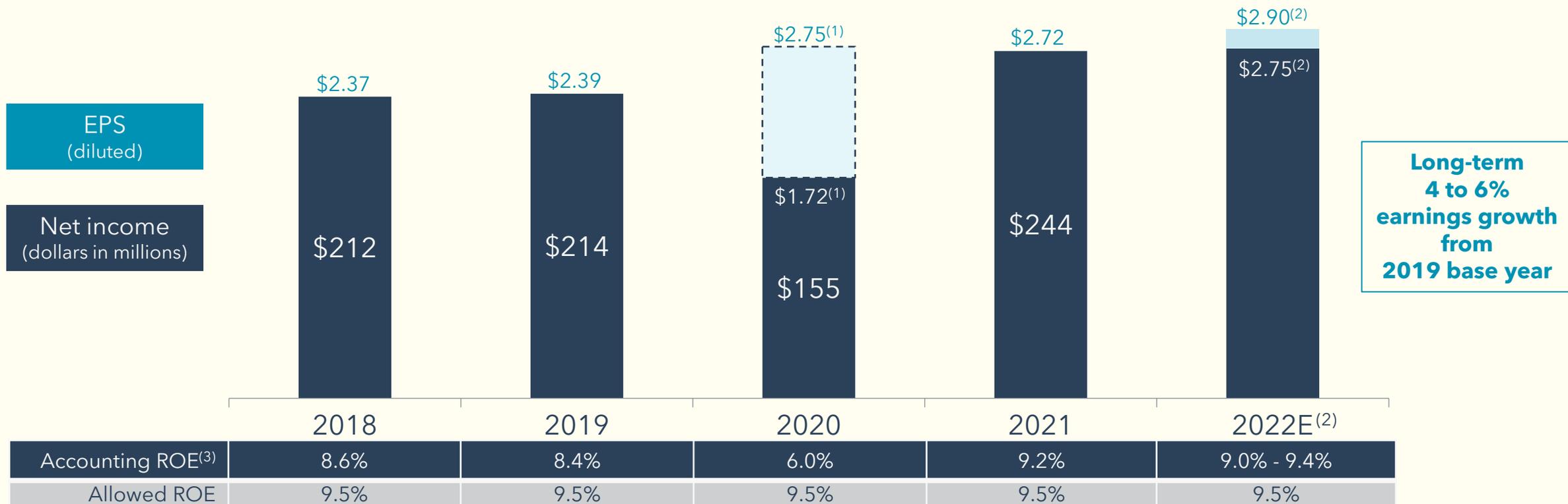
Integrated Operations Center

- 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



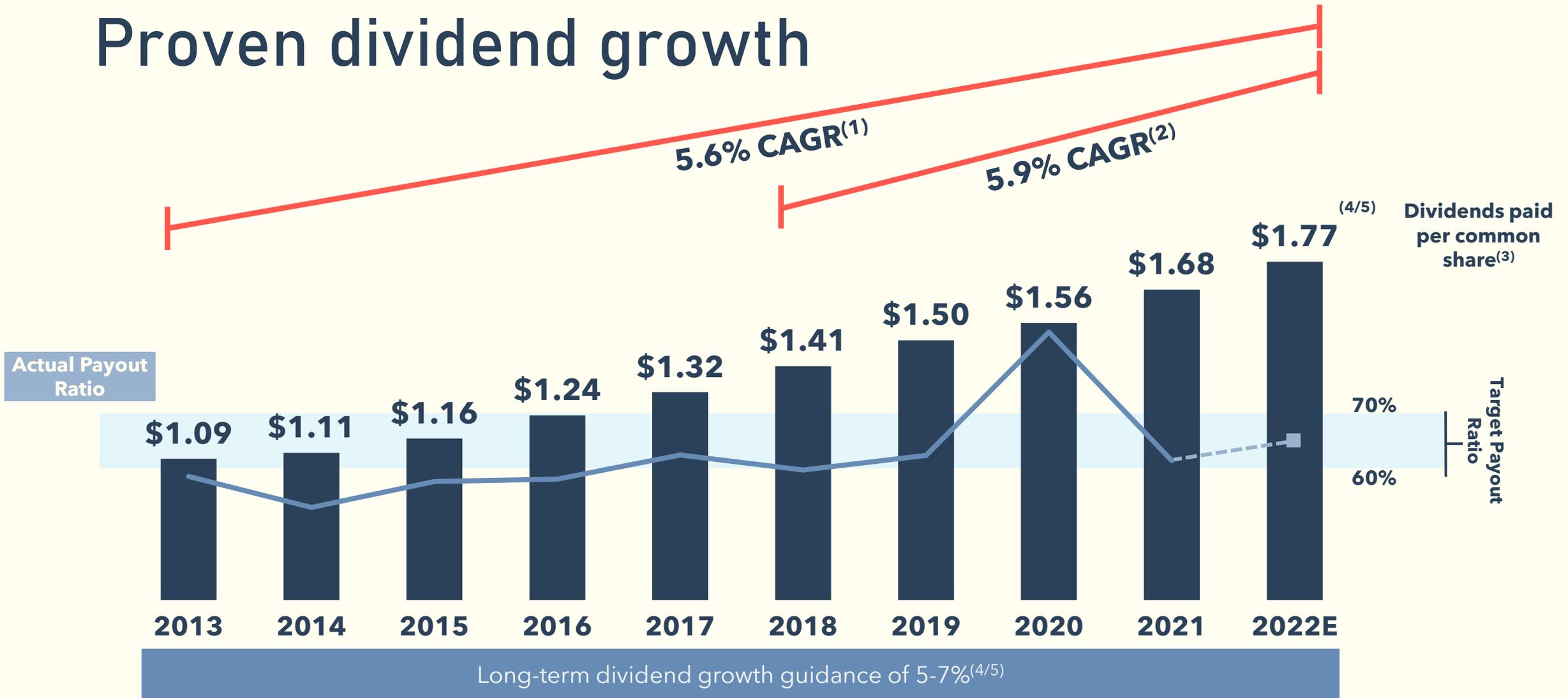
(1) In 2020 GAAP net income was \$155 million, or \$1.72 per diluted share. After adjusting for the impacts of the Energy Trading Losses, non-GAAP net income was \$247 million, or \$2.75 per diluted share. The effect of the energy trading losses was \$1.03 per diluted share

(2) Estimates and projections are based on assumptions and there can be no assurance regarding the amount of future earnings consistent with earnings guidance

(3) Return on average equity



Proven dividend growth



(1) Compound Annual Growth Rate from 2013 through 2022

(2) Compound Annual Growth Rate from 2018 through 2022

(3) Represents annual dividends paid per common share

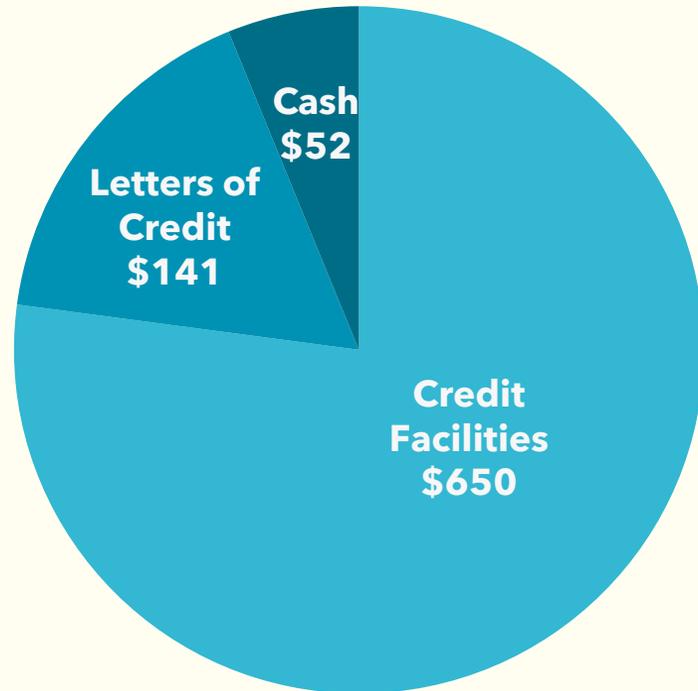
(4) Estimates and projections are based on assumptions and there can be no assurance regarding the amount of future dividends

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



Liquidity and financing

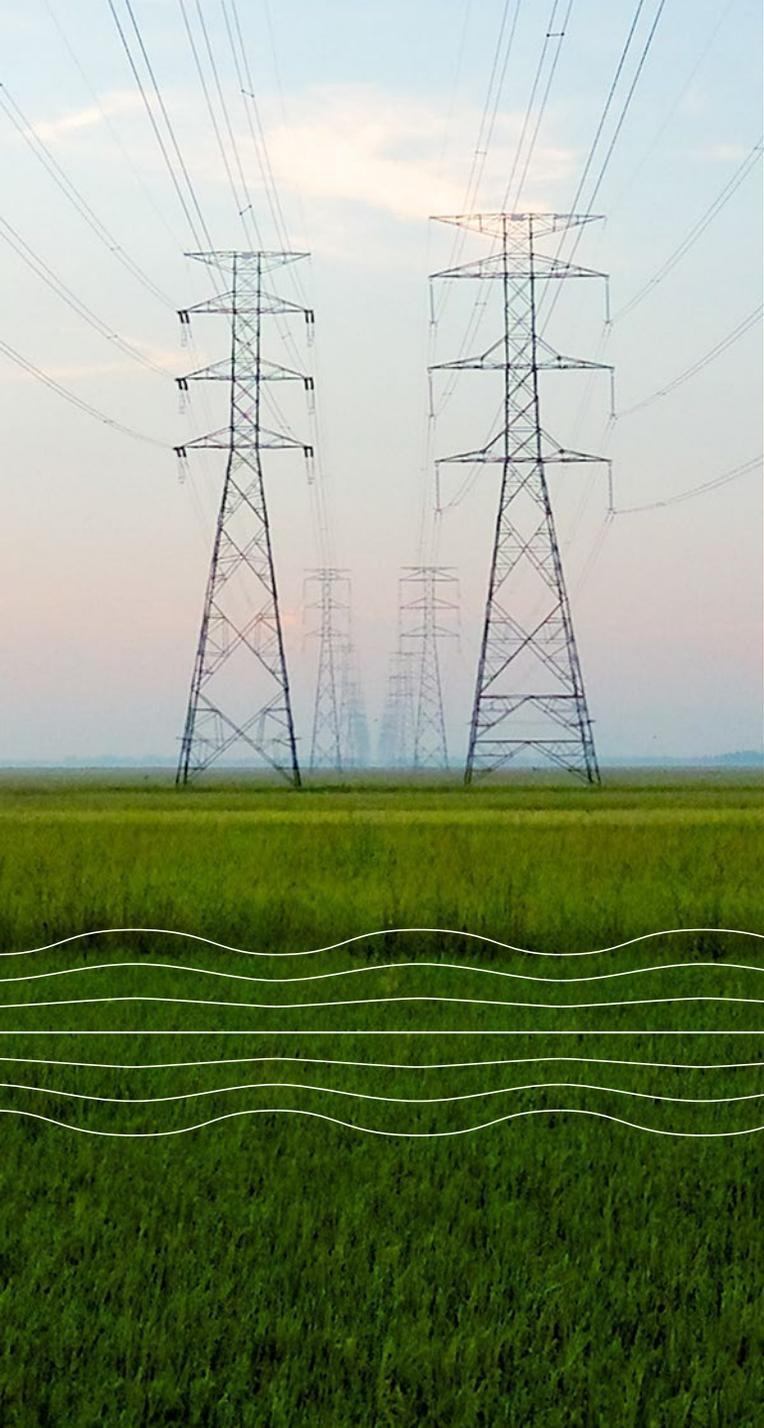
Total Liquidity: \$843 million
as of December 31, 2021 (dollars in millions)



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

Expected 2022 financings (dollars in millions)	Q1	Q2	Q3	Q4
Long-term debt	-	-	\$250	-
Short-term debt	-	-	-	-





Environmental, Social and Governance



Decarbonizing our energy supply

In addition to House Bill 2021 requirements, we plan to achieve companywide net zero greenhouse gas emissions by 2040

Reducing emissions associated with the power serving customers

- Reducing greenhouse gas emissions associated with the power supplied to Oregon retail customers by at least 80% by 2030 and 100% by 2040, compared to a baseline of the annual average of 2010, 2011 and 2012 amounts, in line with House Bill 2021
- Exiting operations at existing coal plants and adding more renewable generation through wind and solar, as well as battery storage

Reducing emissions in operations

- Reducing companywide emissions to meet our net-zero goal by 2040
- Electrifying more than 60% of PGE's fleet 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



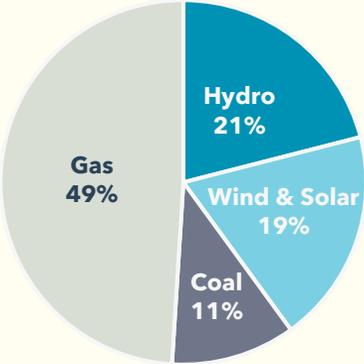
Achieving required decarbonization

Our near-term power supply emissions standard is to reduce greenhouse gas emissions associated with the power supplied to Oregon retail customers by at least 80% by 2030⁽¹⁾

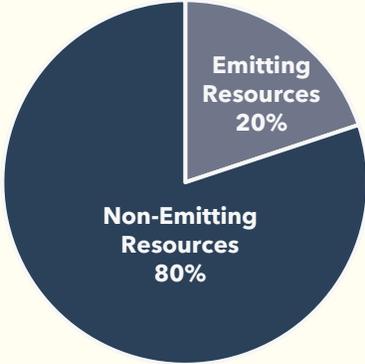
- We will need approximately 1,500 to 2,000 MW of clean resources, in addition to removing coal from our portfolio, and approximately 800 MW of non-emitting dispatchable capacity resources to meet our 2030 emissions standard
- With renewable additions and emissions reductions, new non-emitting capacity 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 Oregon retail customers

Power sources as a percentage of retail load

2022 AUT Resource Mix ⁽²⁾



2030 Estimated Resource Mix ⁽³⁾



2040 Estimated Resource Mix ⁽⁴⁾



(1) Below baseline period, defined in Oregon HB 2021 as the average annual GHG emissions for 2010, 2011 and 2012 associated with the electricity sold to retail electricity consumers as reported to the Oregon Department of Environmental Quality
 (2) Forecast for hydro, wind and solar include PGE-owned and contracted resources
 (3) 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
 (4) 100% reduction in greenhouse gas emissions as mandated by the clean energy framework in HB 2021



Achieving required decarbonization(cont'd)

Our path to an 80% reduction in 2030 is achievable through a combination of PGE, customer and community solutions

What we are already doing:

- ✓ Boardman Closure (-518 MW)
- ✓ RFP (+375-500 MW renewables)
- ✓ Green Future Impact Phases I and II (+500 MW)
- ✓ Douglas PPA (+160 MW)
- ✓ Hydro Renewals (+224 MW)
- ✓ Energy Efficiency (+220 MW)

What we are planning:



Customer-sited solar



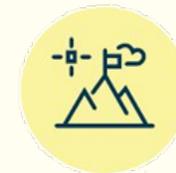
Flexible loads



Community renewables and resiliency



Energy storage



Regional partnerships



Working to exit Colstrip by the end of 2025

Moving toward a carbon neutral future

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 2025

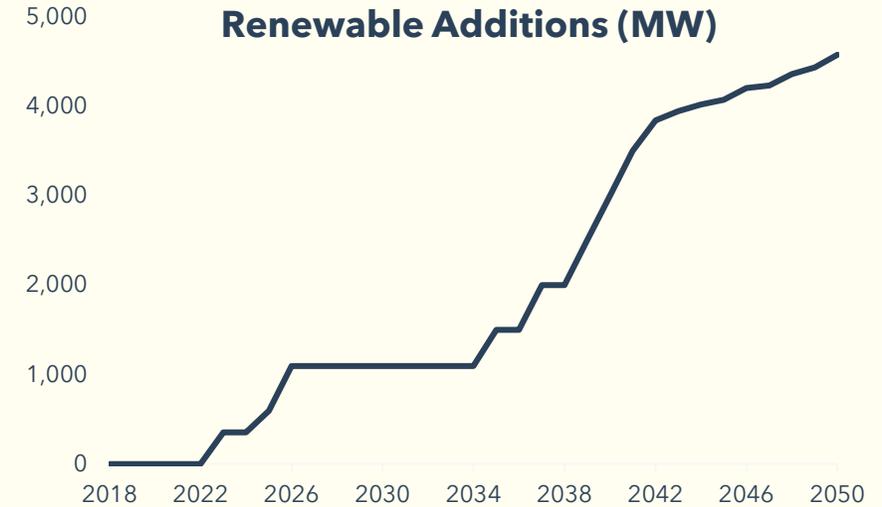
- Accelerated depreciation of our 20% ownership interest in Colstrip units 3 and 4 by 2025 (296 MW)
- Retired Boardman Coal plant in Q4 2020

Supporting other sectors of the economy to decarbonize

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

PGE customers support renewable energy

- Continuing growth in PGE’s green power program in number of participants and MWh sold annually

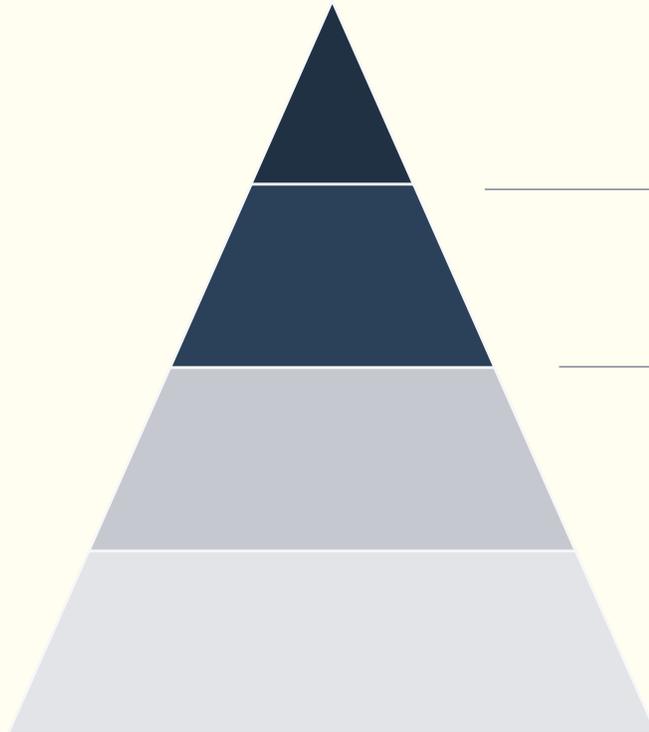


Residential and small business participants in green power program					
	2017	2018	2019	2020	2021
Residential/ small business	173,656	204,889	224,739	229,679	235,610



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. Sustainability and 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

	Name	Age	Director Since	Industry/Experience	Diversity	Committee Membership ⁽¹⁾	Other Public Boards
	Rodney Brown Independent	65	2007	Law/Environmental /Regulatory	White/Male	• Compensation • Finance	0
	Jack Davis Independent Chair	75	2012	Utilities/Regulatory	White/Male	• Governance	0
	Kirby Dyess Independent	75	2010	Finance/Technology	White/Female	• Compensation • Governance	0
	Dawn Farrell Independent	62	2022	Utilities	White/Female	• Finance • Governance	2
	Mark Ganz Independent	61	2006	Healthcare/Law	White/Male	• Audit & Risk • Compensation	0
	Marie Oh Huber Independent	60	2019	Law/Technology	Asian/Female	• Compensation • Governance	1
	Kathryn Jackson Independent	64	2014	Technology/ Environmental	White/Female	• Audit & Risk, Chair • Finance	3
	Michael Lewis Independent	59	2021	Utilities	African American/ Male	• Audit & Risk • Finance, Chair	1
	Michael Millegan Independent	63	2019	Technology	African American/ Male	• Audit & Risk • Finance	1
	Neil Nelson Independent	63	2007	Finance	White/Male	• Audit & Risk • Governance	0
	Lee Pelton Independent	71	2006	Education/Non-Profit Foundations	African American/ Male	• Audit & Risk • Governance, Chair	0
	Maria Pope President and CEO	57	2018	Utilities/Finance	White/Female		1
	Jim Torgerson Independent	69	2021	Energy/Finance	White/Male	• Compensation, Chair • Finance	1

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

Board Tenure



Board Diversity



Board Skills

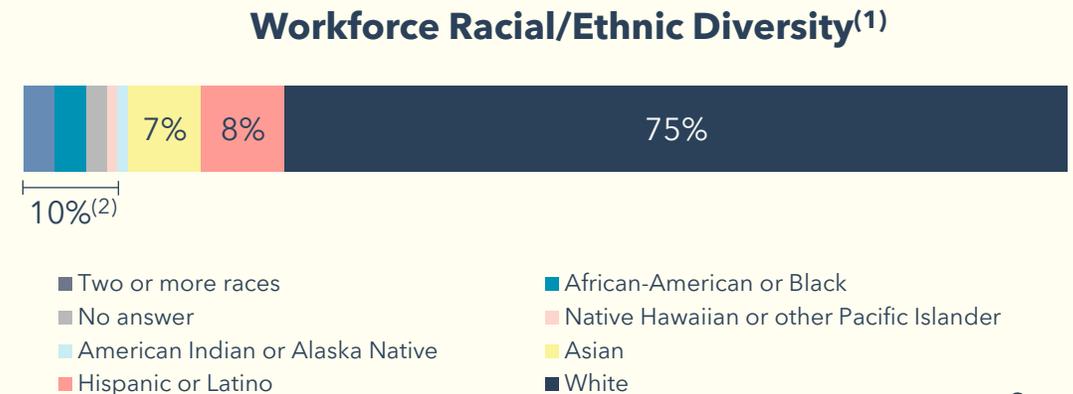
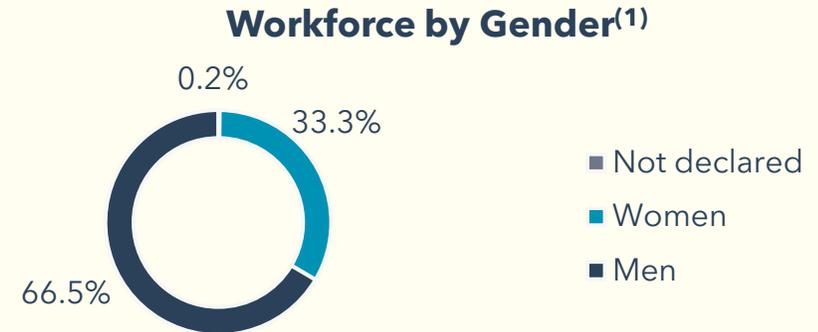


(1) Key to Committees: Compensation- Compensation and Human Resources Committee, Governance- Nominating, Governance and Sustainability Committee

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
- **Policies and purpose:** Human Rights Policy Statement established, promoting our commitment to our employees, communities, suppliers and partners



(1) As of December 31, 2021

(2) Two or more races, 3%; No answer, 2%; African-American or Black, 3%; American Indian or Alaska Native, 1%; Native Hawaiian or other Pacific Islander, 1%

Sustainability reporting

- Our [2021 ESG Report](#) 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 Key Terms - Through 4 th Settlement	
Average Rate Base	\$5.6 Billion
Average Rate Base Increase	\$814 million, 17%
ROE	9.5%
Capital Structure	50/50
Cost of Debt	4.125%
Cost of Capital	6.83% ⁽¹⁾
Revenue Requirement Increase	\$74 million, including \$64 million for power costs
Other Key Terms	<ul style="list-style-type: none"> • Elimination of decoupling mechanism • Accelerated depreciation of Colstrip to 2025 and establishment of its own, separate revenue requirement • Full recovery of Integrated Operations Center • Removal of Faraday Project from revenue requirement • Rate spread model resolution

Next Steps:

- Certain key policy items remain unsettled
- Regulatory review of the 2022 GRC will continue, with a final OPUC order expected to be issued by April 2022
- Management cannot predict the outcome of the case and all settled items are subject to OPUC approval

(1) Reflects updates for actual and forecasted debt costs



Deferral updates

COVID-19 (Docket UM 2114)

- 2022 earnings guidance reflects the ongoing impact of COVID-19
- As of December 31, 2021 PGE has deferred \$36 million, primarily related to bad debt expense. Amortization of any deferred costs will remain subject to OPUC review prior to amortization

Wildfire 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 December 31, 2021 PGE has deferred \$46 million in costs related to wildfire response

February 2021 storms (Docket UM 2156)

- As of December 31, 2021 PGE has deferred a total of \$67 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 2022

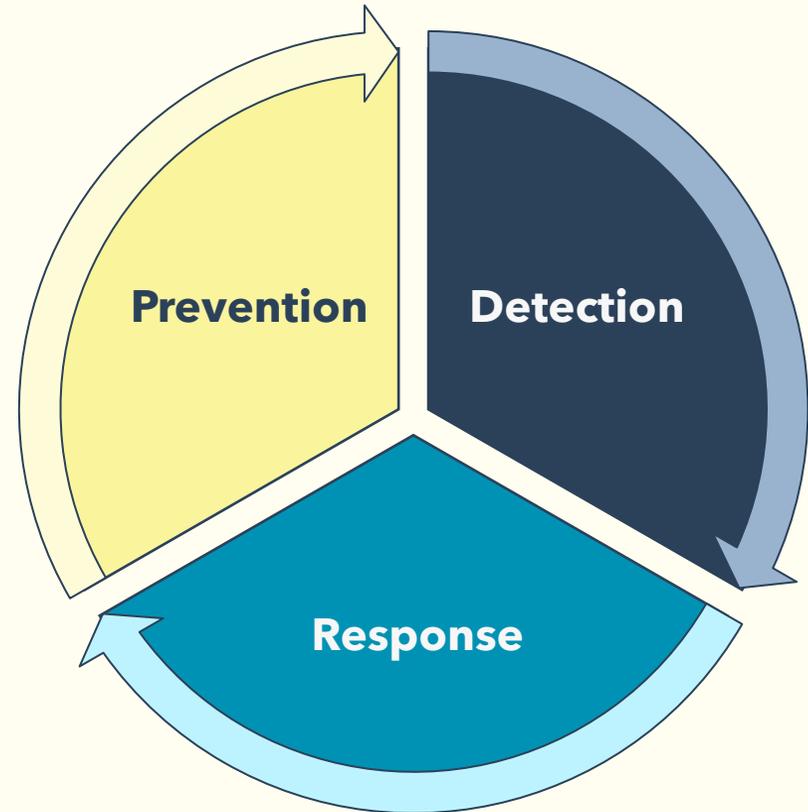
Power Cost Adjustment Mechanism

- As of December 31, 2021 PGE has deferred \$29 million which represents 90% of the excess variance expected to be collected from customers
- A final determination regarding the 2021 PCAM 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

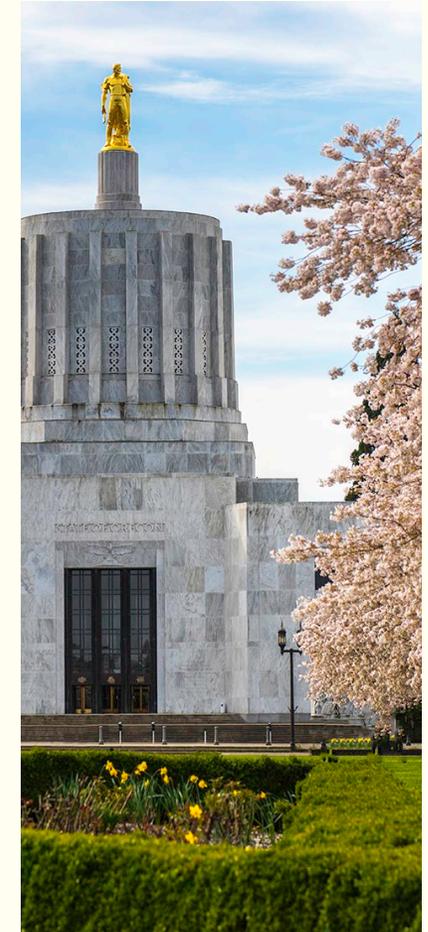
Regulatory body

- 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

Q4 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 fully implement Oregon’s new clean energy law (HB 2021) and encourage a more robust public participation process



Historical distribution system investments

PGE has invested significantly in its distribution system to maintain reliable infrastructure, minimize outages and modernize our grid

- In Q4 2021, PGE filed the inaugural Distribution System Plan with the OPUC, laying out plans to build a community-centered grid of the future with emphasis on advancing environmental justice, accelerating distributed energy resources (DER) and maximizing grid benefits
- Future investments will be driven by growth in DER, transportation and building electrification, non-wires and hybrid solutions, and distribution and substation automation
- 2021 spending was driven by industrial customer expansions and load growth in PGE's service territory

Spending Category	Yearly Distribution System Spending (million USD)				
	2017	2018	2019	2020	2021
New customer projects New connects, Minimum Load Agreements (MLAs) tied to specific customer base, and interconnections	\$52	\$60	\$86	\$175	\$106
Age-related replacements and asset renewal Like-for-like replacement due to age or reactive failure	\$84	\$86	\$87	\$86	\$156
System expansion or upgrades for reliability and power quality Proactive upgrades to improve reliability and reduce risk	\$51	\$76	\$122	\$84	\$64
System expansion or upgrades for capacity System upgrades driven by load growth per our Distribution Planning Department's load forecast	\$67	\$82	\$37	\$30	\$61
Metering Projects involving meter installs and purchases to enhance metering capabilities for PGE customers	\$7	\$7	\$12	\$9	\$8
Preventive maintenance Operation and Maintenance (O&M) spending to ensure grid components are up to standards and operating efficiently	\$4	\$8	\$5	\$2	\$2
Grid modernization projects Projects involving new technologies such as energy storage, distribution automation, communication projects	\$2	\$3	\$4	\$5	\$11
Grand Total	\$268	\$322	\$352	\$390	\$408

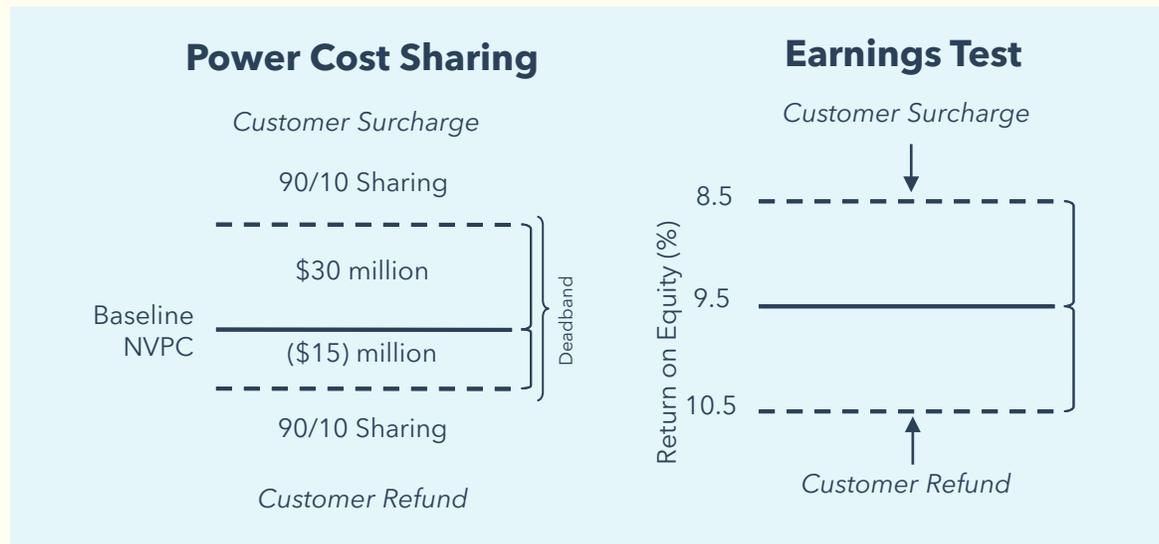


Recovery of power costs

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 prudence 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
Over / (Under)	(\$34)	(\$17)	\$11	(\$7)	(\$3)	(\$10)	\$15	(\$3)	\$5	\$ (13)	\$29 ⁽²⁾

(1) Dollar values in millions

(2) Represents 90% of the excess variance expected to be collected from customers



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 79% of 2021 customer revenues

Lost Revenue Recovery Adjustment (LRR)

for large nonresidential customers (up to 1 MWa)

- Based on the difference between actual energy-efficiency savings (as reported by the ETO) and those incorporated in the applicable load forecast
- The LRR mechanism applies to approximately 20% of 2021 customer revenues

Recent Decoupling Results

(dollars in millions)	2017	2018	2019	2020	2021
Sales Normalization Adjustment	\$11.6	\$(1.3)	\$14.4	\$(5.5)	\$(9.7)
Lost Revenue Recovery Adjustment	\$(0.4)	\$(1.1)	\$(0.1)	\$0.3	\$0.3
Total adjustment	\$11.2	\$(2.4)	\$14.3	\$(5.2)	\$(9.4)

Note: Refund = (negative) / collection = positive

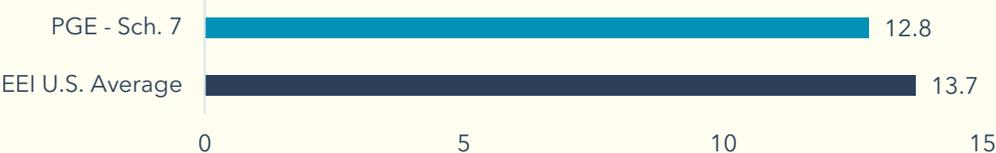
PGE's current decoupling mechanism will end with implementation of the 2022 General Rate Case in May 2022



Average retail price comparison

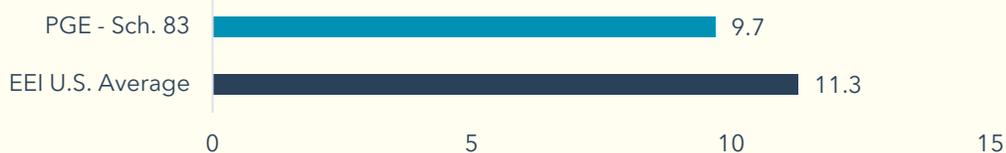
Residential Electric Service Prices:

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



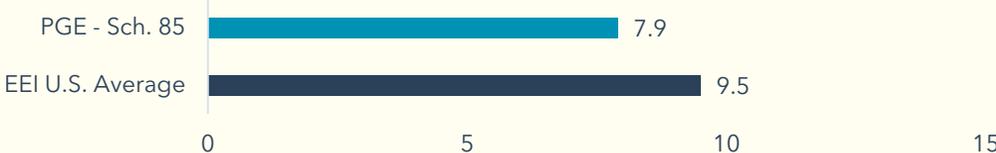
Commercial Electric Service Prices:

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



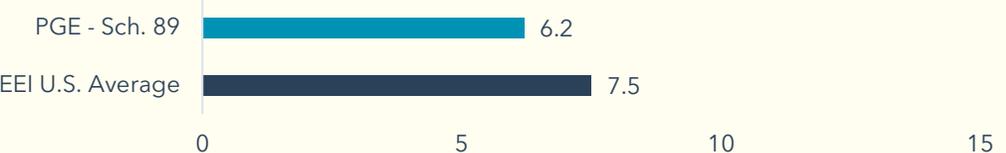
Industrial Electric Service Prices

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)



Note: EEI U.S. Average is based on Investor-owned utilities only
Source: EEI Typical Bills and Average Rates Report for Prices in effect January 1, 2021

