



# Transformation at scale BUILDING A CONNECTED WEST



## Delivering on our promise

Our 2023 Integrated Resource Plan is a roadmap for transforming the western grid at scale. It builds toward a truly connected West, where the transition to a net-zero energy system delivers safe, reliable, affordable power now and for years to come.

This is more than a vision for the future; it is our promise to the communities we serve — one we're already delivering on, with steady progress toward ambitious targets for reducing greenhouse gas emissions and transitioning to cleaner energy sources.

As our 2023 IRP demonstrates, we've made significant headway in recent years by investing in transmission, renewable resources and market strategies — and by driving forward innovative technologies, such as batteries and advanced nuclear resources, to keep energy supplies reliable and affordable for customers across the region.

Now we're accelerating our efforts and investments. This IRP provides an update on our progress toward decarbonization and lays out our roadmap for the work still ahead of us.

## OUR COMMITMENTS

### **PRIORITIZING SAVINGS AND VALUE FOR OUR CUSTOMERS**

We've captured over \$620 million in savings for our customers by leading the way in establishing more innovative markets, enabling us to deliver reliable service at rates 27% below the national average. Soon, we'll evolve how we buy and sell electricity even further to secure greater economic and reliability benefits for customers.

### **EXPANDING CLEAN POWER**

Through smart investments that keep costs low, we're on track to deliver over 20,000 megawatts of wind and solar energy by 2032.

### **BUILDING STORAGE CAPACITY**

We're working toward an energy storage capacity of nearly 7,400 megawatts by 2029.

### **INVESTING IN TRANSMISSION**

We're making progress on our ambitious Energy Gateway plan to add 2,500 miles of new transmission lines, substantially expanding the connectivity between the Pacific Northwest and the Rocky Mountains to meet rising customer demand, while connecting clean energy across our system for a more resilient grid.

# Responsible progress: The promise of a connected West

We're advancing a once-in-a-century investment in our critical infrastructure to meet the challenges of a rapidly changing economy, while laying the groundwork for long-term affordability and reliability and helping build a more resilient grid.

The 2023 IRP outlines PacifiCorp's bold vision for the West between now and 2042 and sets us on the path to:

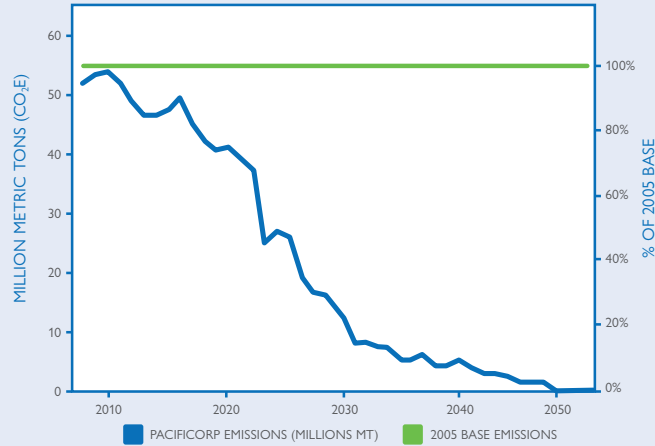
- Continue our growth toward a grid powered by clean energy:
  - 9,111 megawatts of new wind resources.
  - 8,095 megawatts of storage resources, including batteries co-located with solar generation, standalone batteries and pumped hydro storage resources.
  - 7,855 megawatts of new solar resources (most paired with battery storage).
  - 4,953 megawatts of capacity saved through energy efficiency programs.
  - 929 megawatts of capacity saved through direct load control programs.
  - 500 megawatts of advanced nuclear generation (Natrium™ reactor demonstration project) in 2030, with an additional 1,000 megawatts of advanced nuclear resources over the long term.
  - 1,240 megawatts of non-emitting peaking resources that meet high-demand energy needs.
- Connect and optimize these diverse, clean resources across the West with a strengthened and modernized transmission network that provides resilient service, reduces costs and creates greater opportunities for our communities to thrive:
  - 416 miles of new transmission from the new Aeolus substation near Medicine Bow, Wyoming, to the Clover substation near Mona, Utah (Energy Gateway South).
  - 290 miles of new transmission from the Longhorn substation in north central Oregon to the Hemingway substation in south central Idaho (Energy Gateway Segment H).
  - 200 miles of new transmission from the new Anticline substation near Point of Rocks, Wyoming, to the existing Populus substation near Downey, Idaho (Energy Gateway West Sub-Segment D3).
  - 150 miles of new transmission from the Anticline substation near Point of Rocks, Wyoming, to Shirley Basin substation in southeastern Wyoming (Energy Gateway West Sub-Segment D2.2).
  - 59 miles of new transmission from the Shirley Basin substation in southeastern Wyoming to the Windstar substation near Glenrock, Wyoming (Energy Gateway West Sub-Segment D1).
  - Additional local transmission upgrades to enable renewable resource requests to connect to the transmission system in southeast Idaho, central Utah, central Oregon, the Willamette Valley in Oregon, and in Yakima and Walla Walla, Washington.



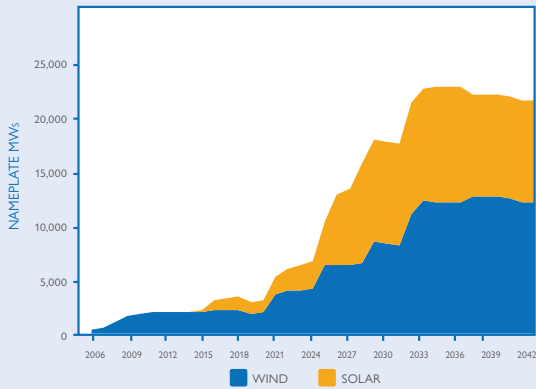
# TRACKING OUR PROGRESS

PacifiCorp's 2023 IRP rapidly expands our portfolio of solar, wind and storage resources to lower costs. Participation in innovative new energy markets will leverage our six-state footprint and help further drive affordability.

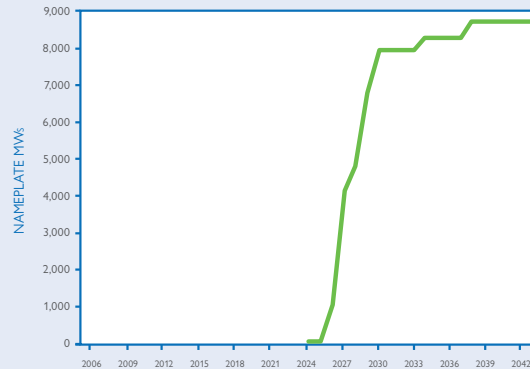
EMISSIONS\*



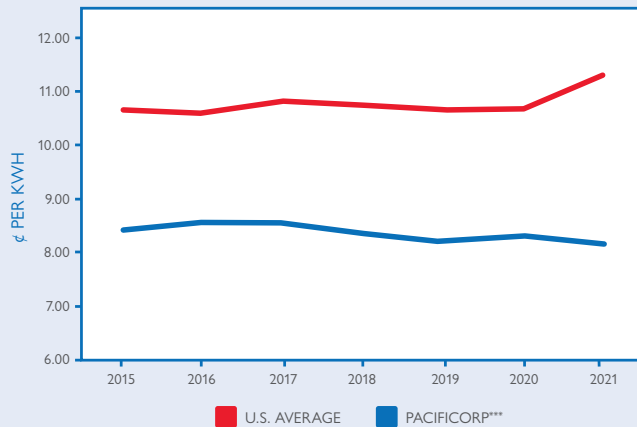
WIND AND SOLAR CAPACITY\*\*



NEW STORAGE CAPACITY



AVERAGE HISTORICAL ELECTRICITY RATES



Source: Sales and revenue for the 12 months ending December 2021, as reported by the Edison Electric Institute.

\*California, Oregon and Washington are on an accelerated greenhouse gas emissions reduction trajectory as compared to the systemwide emissions reduction trajectory.  
 \*\*Resources acquired through customer partnerships, used for renewable portfolio standard compliance or used for third-party sales of renewable attributes are included in the total capacity figures quoted.  
 \*\*\*Weighted average of rates for Utah, Oregon, Wyoming, Washington, Idaho and California.





## Evolving our portfolio

Working in close partnership with our communities, we are making significant progress in our evolution toward an increasingly clean and cost-effective portfolio.

Our resource strategy in the 2023 IRP continues that progress, and in the coming years we will:

- Continue the process of coal-to-gas conversion of Jim Bridger Units 1 and 2 in Rock Springs, Wyoming, by 2024.
- Begin the process of coal-to-gas conversion of Naughton Units 1 and 2 in Kemmerer, Wyoming, for completion by 2026.
- Retire Dave Johnston Units 1, 2 and 3 in Glenrock, Wyoming, in 2027 and 2028.
- Begin the process of coal-to-gas conversion of Jim Bridger Units 3 and 4 by 2030.
- Exit the Colstrip project in Montana by January 1, 2030.
- Retire Hunter Units 1, 2 and 3 in 2031 and 2032.
- Retire Huntington Units 1 and 2 in 2032.

Throughout this process, we are collaborating closely with affected communities and with state leadership to support a successful transition for our employees and their communities.



# Building partnerships for a thriving future

## Making electric vehicle ownership more accessible for customers and communities

PacifiCorp is committed to boosting vehicle electrification as part of our pursuit of a net-zero emissions future. From electrifying advanced logistics and freight operations to powering electric tractors and school buses, to supporting car sharing programs for low-income communities, PacifiCorp's innovative customer grants, rebates and partnerships are helping electrify the transportation sector in the West.

## Co-creating energy solutions for the grid of the future

PacifiCorp's award-winning Wattsmart® battery program relies on a growing fleet of residential and commercial batteries to enable greater use of renewable power and improve overall grid resilience. Together, customers' 2,400 batteries help PacifiCorp dispatch renewable energy from batteries to maintain grid stability and reduce peaks in demand. Program participants can access backup power for emergencies and earn monthly credits on their energy bills.

The company is also helping interconnect 64 megawatts of solar resources through the Oregon Community Solar Program. These projects provide an easy way for all customers to share in the benefits of local solar energy production.

## Planning for innovative storage resources

PacifiCorp launched feasibility studies of 11 pumped hydroelectric storage projects located in Utah, Wyoming, Oregon, Idaho and Washington. Pumped hydroelectric storage has distinct advantages, including longer plant lives and significantly greater energy delivery capabilities when compared to other resource solutions. The company is pursuing permit applications with federal regulators to advance these projects.

## Partnering in advanced nuclear

We're working with TerraPower, as part of a public-private partnership with the U.S. Department of Energy, to support the development of advanced nuclear reactors with integrated salt storage projects near retiring coal plants, laying the foundation for a future of noncarbon energy while supporting skilled jobs. In the 2023 IRP, the Natrium™ demonstration project is envisioned for placement at the Naughton facility in Kemmerer, Wyoming. With recent federal legislation and studies on the opportunities of a coal-to-nuclear energy transition, TerraPower and PacifiCorp remain committed to bringing the Natrium technology to market for the benefit of grid reliability and stability for energy-producing communities in Wyoming and Utah.





# Building a connected, resilient grid

## Expanding transmission to connect clean energy and communities across the West

For the region and nation, this is a historic time that calls for prudent investments at a transformative scale. We are rising to meet this moment by expanding and modernizing the West's energy infrastructure — expeditiously, safely and in the most cost-effective way possible.

We're interconnecting the West by adding 2,500 miles of new transmission lines through the Energy Gateway transmission expansion plan. This initiative provides greater access to the West's abundant and diverse energy resources and is the foundation for our plan to meet our customers' expectations for an affordable and reliable net-zero energy future.

## Regional leadership delivers opportunities

These are big-picture investments that only PacifiCorp can make, while keeping costs as low as possible and ensuring reliability. We are unique due to our scale, partnerships and integration throughout the West.

We own and operate one of the largest privately-held transmission systems in the nation, spanning 17,100 line miles of high-voltage transmission across 10 states with diverse resource capabilities. This makes us uniquely able to serve our customers with a broad portfolio of energy resources — at lower prices, with less risk of energy interruptions and with more resilience in the face of extreme weather.

The investments we're making now are essential in this moment, and they will help lower costs in the long term.

### Energy Gateway



This map is for general reference only and reflects current plans. It may not reflect the final routes, construction sequence or exact line configuration.



# Capturing savings and delivering value

## Pioneering advanced energy markets for reduced emissions, improved reliability and lower costs

We are moving the West forward by helping develop advanced energy markets that reduce emissions, improve reliability and keep costs low, through the power of diverse resources and collaboration with partners.

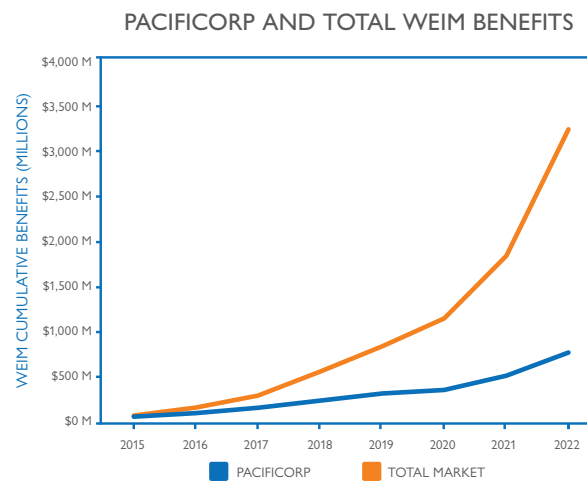
### WESTERN ENERGY IMBALANCE MARKET

One of these advanced markets is already producing significant benefits for customers and the environment — the Western Energy Imbalance Market. This is a real-time, wholesale energy market that brings together 20 utilities across the region to automatically dispatch the lowest-cost energy to meet the short-term needs of customers in 10 Western states and one Canadian province. The WEIM has saved PacifiCorp customers more than \$620 million to date, while helping improve reliability and reduce emissions.

### EXTENDED DAY-AHEAD MARKET

We've recently taken another big step forward by helping lead the creation of the Extended Day-Ahead Market. The EDAM will do even more to enhance reliability, increase customer savings and reduce emissions throughout our region.

The EDAM will allow PacifiCorp to buy or sell wholesale electricity the day before it's needed — at a time when key fuel supply and operational commitments are made. Region-wide, EDAM member utilities will be able to work together across state lines and service areas to acquire clean, reliable power at the lowest cost. This will help reduce emissions and maintain a reliable, resilient power supply year-round, including during extreme weather events.



## Expanded conservation measures

Energy efficiency and demand-response programs are important tools for meeting customers' future energy needs. Our innovative approach moves beyond management based on peak loads and focuses on turning demand-response resources into dynamic operating reserves. That's why we're expanding existing demand-response programs and introducing new solutions for customers, particularly as more interconnected technologies enter the market. These programs will reduce our need to buy reserve power on the market and create greater customer benefits.

In the coming years, our ongoing conservation and cost-effective demand-response initiatives will seek to deliver:

- 799 megawatts of energy efficiency between 2023 and 2026.
- 372 megawatts of demand response between 2023 and 2026.



## Building a connected future for all of our communities

Our 2023 IRP is a story of progress toward ambitious goals, one that offers clarity about the scope and scale of the work that lies ahead.

By continuing to work closely with the communities we serve, and by making prudent investments in innovation to accelerate necessary transformation, we will continue our progress toward a future of net-zero energy that delivers reliable, clean, safe, affordable power for generations to come.