

OREGON

- *WCI Partner (non-participant)*
- *RPS: 50% by 2040*
- *0.70% of US carbon emissions*
- *1.2% of US GDP*

Climate change poses one of the most significant threats to Oregon's economy, environment, and way of life. Our winters are becoming milder, our summers hotter. Snow packs are shrinking and unseasonably warm temperatures are leading to rapid spring melts depleting Oregon's supply of summer water for agriculture and stream flows for wildlife. Storms and forest fires are becoming more severe while the risk of coastal flooding is increasing. These impacts will affect all Oregonians, but will hit low-income communities, communities of color, and rural communities the hardest. Mitigating the impacts of climate change and achieving Oregon's greenhouse gas reduction goals are key priorities for Governor Kate Brown. About 80% of our greenhouse gas emissions come from the way and the type of

energy we use every day. In order to curtail climate change, we must put Oregon on the path to the clean energy resource mix of the future. Governor Brown is focused on meaningfully reducing greenhouse gas emissions to combat climate change while keeping energy reliable and costs affordable to benefit Oregonians and the state economy. Under Governor Brown's leadership, the state adopted the nation's first Coal-to-Clean law requiring disinvestment from coal and the Clean Fuels standard requiring a 10% reduction in carbon intensity of transportation fuels.

FINANCE

- *The Small-Scale Energy Loan Program (SELP)* – SELP was established to authorize the issuance of state bonds for small scale local energy projects. SELP supports Oregon clean energy policy by providing public, private, and tribal stakeholders access to capital in the form of fixed-rate long-term loans for qualified Oregon energy projects that invest in energy conservation, renewable energy, and alternative fuels. SELP loans reduce GHG emissions by facilitating projects that lower the carbon intensity of Oregon's electricity and lower the state's overall energy consumption.
- *The Renewable Energy Development (RED) Grant Program* – Red promotes development of renewable energy projects by providing a grant up to 35% of the cost of the project for businesses, organizations, public bodies, schools, nonprofits and tribes that install and operate a renewable energy system that produces electricity. This program reduces greenhouse gas emissions by replacing electricity generated from fossil fuels with electricity produced with biomass, solar, geothermal, hydroelectric, wind, landfill gas, biogas and wave, tidal or ocean thermal energy.
- *The State Home Oil Weatherization (SHOW) Program* – Show funds weatherization and energy conservation measures installed at residences primarily heated with oil, propane, kerosene, butane or wood. SHOW reduces greenhouse gas emissions by reducing the use of fossil fuels.
- *Public Purpose Charge* – A three percent public purpose charge is applied to ratepayers of the state's largest electric investor owned utilities. These funds support investments in cost-effective energy efficiency, low-income weatherization, and the above-market cost of small-scale renewable projects. Some of the funds are invested through the Energy Trust of Oregon, a third-party non-profit. From 2002 to 2016, Energy Trust has acquired 728aMW of electric savings and 52 million therms of savings. This will result in \$6.9 billion saved on energy bills. This represents energy savings equivalent to building a 700 MW power plant or enough energy to power more than 564,000 Oregon homes and heat another 100,000 homes. In addition, the three natural gas utilities in the state also direct ratepayer funds to the Energy Trust of Oregon for investment in cost-effective energy efficiency measures for their natural gas utility ratepayers.

- *Coal to Clean* – Oregon is the first state in the nation to enact a law that prohibits the state’s largest investor owned utilities from including electricity generated from coal in their rates for Oregon ratepayers by 2030. The Public Utility Commission approved new depreciation schedules related to these facilities in 2017. In addition, negotiations among state agencies and Portland General Electric resulted in an agreement to close of the utility’s coal-fired plant in 2020, two decades earlier than its assumed operating life. This is the only coal-fired power plant in Oregon. Closure of the plant at the end of 2020 is still on schedule.
- *Oregon’s Renewable Portfolio Standard (RPS)* – RPS is one of the most important drivers in reducing fossil fuel resources in Oregon’s electricity resource mix. The Oregon RPS is designed to incentivize development of new renewable energy resources, both in Oregon and throughout the region, thereby reducing the carbon intensity of Oregon’s electricity sector. The RPS requires that, by 2040, large, investor-owned utilities meet 50% of their retail sales of electricity in Oregon from qualifying, renewable resources. Small investor-owned and consumer-owned utilities are required to meet targets determined by their share of the state’s retail electric sales.
- *Utility Transportation Electrification Programs* – The state’s investor owned utilities are required to develop plans for investment in programs on transportation electrification, which are currently being reviewed by the Public Utility Commission. Some of the proposed projects include: community charging, outreach and education on electric vehicles, and electric mass transit.
- *Regulatory and Utility Business Model Investigation* – This investigation is an opportunity to better align utility incentives, regulatory frameworks, and the state’s goals for greenhouse gas emission reduction. The Oregon Public Utility Commission is studying how trends, technologies, and policy drivers in the electricity sector impact the existing regulatory system and incentives currently used in the state. Among the considerations of this study is whether the business models of utilities can be aligned to state objectives such as Oregon’s greenhouse gas reduction goals. As part of this investigation, the OPUC can consider renewable resources, distributed energy, transportation electrification, carbon emissions, specific resource ownership structures, regional transmission markets, distribution system communication and control, grid and distribution system modernization, performance based incentives, and other state policy drivers.
- *The Energy Facility Siting Council CO2 Emissions Standards* – Reduce the net CO2 emissions of energy facilities by: 1) setting net CO2 emissions rate standards for facilities in Oregon and 2) requiring facilities to acquire emission reductions by the amount that they exceed the set standards. This design not only requires applicants to reduce those CO2 emissions that exceed the set standards, it also provides an incentive for applicants to propose state-of-the-art energy facilities that emit CO2 at rates as close to the set standards as possible. Emission reductions obligations can be met in three ways, either singularly or in combination: 1) the facility implements a combined heat and power system to displace another source of CO2 emissions; 2) the applicant or a third party implements CO2 offset projects; or 3) the applicant or a third party provides funds for a qualified independent nonprofit organization to implement CO2 offset projects. This third option has provided offset funding for a diverse portfolio of projects that in 2014 achieved nearly 1.4 million metric tons CO2-equivalent emission reductions with a further 1.6 million metric tons more expected.
- *Portfolio of Options for Electric and Natural Gas Customers* – Oregon requires electric utilities to offer voluntary programs for their customers to opt to be served entirely by renewable energy sources. Natural gas utilities can voluntarily provide carbon offset programs for their customers. Oregon’s largest electric utilities operate two of the top-performing programs in the country in enrollment, customer participation, and renewable energy certificate sales. These programs contribute to lowering the carbon intensity of customers’ electric fuel mix and stimulate investments in additional renewable energy capacity to further reduce greenhouse gas emissions.

- *Oregon's Clean Fuels Program* – This Program requires a 10% reduction in the lifecycle carbon intensity of the state's transportation fuels from 2015 levels by 2025. The CFP is a market-based mechanism designed to allow companies to decide which types of fuels and business changes are most cost effective to achieve the required carbon intensity reductions and is phased in over time to allow companies time to make investments and change business practices. It includes a trading mechanism designed to lower the overall costs of the program and reward companies that over-comply with the low-carbon fuel standards. To date, regulated parties have over-complied with the standards of the program. Clean fuels reported under the program range from conventional replacements for gasoline or diesel such as ethanol, biodiesel and propane, to next generation transportation fuels such as electricity and renewable natural gas. In addition to achieving emissions cuts in the transportation sector now, the program is designed to spur the innovation and commercialization of the low-carbon fuels needed to achieve the deep decarbonization envisioned in Oregon's long-term climate change commitments.
- *Oregon's Zero Emission Vehicle (ZEV) Rule* – ZEV includes requirements for automakers to sell increasing numbers of ZEVs. Over the first six months of 2017, ZEVs registered in Oregon increased by over 70%. Oregon now has approximately 16,000 battery-electric and plug-in hybrid electric vehicles operating on our highways and the state projects that at least 8 percent of new vehicle sales will be ZEVs by 2025.
- *The Zero Emission Vehicle Rebate* – This program is designed to encourage purchases leasing of electric vehicles through rebates. Governor Brown recently signed legislation that will generate up to \$12 million each year through 2023 to provide rebates for certain zero emission vehicles. Rebates will be up to \$2,500 for electric vehicles.
- *Oregon's Charge Ahead Program* – The "Charge Ahead Program" will provide a second rebate to incentivize low- and moderate-income households buying or leasing new or used zero-emission vehicles. These rebates will be \$1,250-\$2,500 and will be offered for those low and moderate income households that voluntarily retire or scrap vehicles at least 20 years old.

- *The State Energy Efficient Design (SEED) Program* – SEED helps state buildings implement energy efficiency through institutional retrofits and best practices. State entities command significant building square footage and drive the marketplace towards adopting energy efficiency as a cost-effective strategy for reducing greenhouse gas emissions. State agencies must consider all cost-effective energy efficiency measures and build 20% above energy code for new construction or major renovations. The SEED program has saved the state more than \$7.1 million in energy costs each year. Another component of SEED is a requirement for state agencies to reduce energy consumption in existing state owned buildings. State agencies successfully completed the SEED statutory goal of 20% energy use reduction two years before the 2015 deadline. All state agencies now report building-level energy use and are striving to meet national high-efficiency targets developed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers.
- *The Energy Efficient Schools Program* – Supports K-12 public schools throughout the state to implement cost-effective energy efficiency projects. The program assesses building needs, prioritizes and plans projects, implements energy management programs, and works with school leadership to access resources. This program also includes funding to two-thirds of all K-12 public schools in the state towards energy audits and cost-effective energy projects. This has led to more than 1,200 energy audits with approximately 3,000 energy efficiency measures implemented.
- *Energy Performance Scoring* – Focuses on scoring systems and labels that are used to illustrate a building's energy efficiency and energy use. This includes rules on the requirements for residential and commercial energy performance scores that are used in the State. A stakeholder panel develops an approval process, proposes licensing and training requirements for assessors, and encourages scoring that is accurate, consistent, and relevant to consumers. The City of Portland has enacted a mandatory commercial benchmarking policy affecting approximately 1,000 buildings - and a home energy score policy, in compliance with administrative rule, that will score 14,000 homes a year. Portland's Climate Action Plan includes a key objective to reduce the total energy use of existing buildings by 25 percent. Since commercial buildings are responsible for one-quarter of Portland's carbon emissions, improving energy performance in the building sector is critical to achieving Portland's carbon emissions reduction targets. These policies also provide information about building energy performance and motivate investment in energy efficiency improvements that reduce energy use and carbon emissions.
- *Energy Efficiency Investments from Bonneville Power Administration (BPA)* – BPA works with Oregon's publicly-owned electric utilities to develop programs and incentives that encourage more efficient energy use in homes, businesses, industrial facilities, and the irrigation and agriculture industry. In addition to offering a suite of cost-effective measures to its customers, BPA develops regional programs that offer turn-key services tailored to specific market opportunities. BPA also funds the research and development of new energy efficient technologies. Through the Emerging Technologies for Energy Efficiency program, BPA works with experts across the region to research new technologies that show potential value for electric utilities. BPA conducts research and demonstration projects to understand the readiness, availability, potential savings and other criteria of these new technologies. These programs offer long-term financial commitments that guide investments and research that would otherwise be cost-prohibitive for individual utilities.

- *Ocean Acidification Policy and Management* – Oregon and other West Coast states have mobilized around increasing public awareness of the economic and environment effects from ocean acidification resulting from increasing atmospheric carbon dioxide. Current activities include the creation of the International Alliance to Combat Ocean Acidification, which has premiered at international climate and oceans convenings over the last year. In addition, the West Coast region has catalogued the acidification-relevant monitoring and research across the geography from Alaska to California, with the purpose of identifying critical needs in information being collected. Oregon created the Ocean Acidification and Hypoxia (OAH) Council to evaluate the impacts of OAH on Oregon’s resources and communities, and recommend actions to the legislature and state leadership. Starting in January 2018, the OAH Council will deliberate on the most pressing needs in the state and the region, and report to Governor Brown and the legislature in September 2018. The Council is comprised of state agencies with an oceans focus, academic, Tribal, and stakeholder interests.
- *Oregon’s Statewide Planning Goals* – Have provided a foundation for strong state and local land use planning that help protect forest and agricultural lands from urban sprawl. These natural lands play an important role in sequestering carbon. It also encourages compact and efficient urban areas that reduce more polluting forms of transportation and lower the carbon footprint of Oregon’s cities.
- *The Oregon Climate Change Research Institute (OCCRI)* – Was established by the state to facilitate research and provide climate change information to Oregon decision-makers. OCCRI fosters climate change research among faculty and universities across the state, serving as a clearinghouse for data on current and forecasted effects on Oregon from a changing climate. These data are developed to directly inform policy decisions to help the state adapt to these changes.

- *The 2017 Oregon Climate and Health Resilience Plan* – Outlines a set of strategies for Oregon’s public health system to adapt and build resilience to projected climate impacts that threaten public health. The strategies are now being implemented in collaboration with local and state partners across a variety of sectors and include the development of decision-support tools and workforce training, as well as local interventions that address specific health risks related to extreme heat, poor air quality, drought, storms and floods.
- *The Oregon Climate Change Adaptation Framework* – Identifies likely risks from the effects of climate change in Oregon, lays out short-term priorities and provides direction for Oregon to prepare for future climate change. This framework helps the state prioritize and direct resources to position Oregon to avoid some of the most costly consequences of climate change.