

A CLEANER, MORE EFFICIENT POWER SECTOR IN OREGON

We have a moral obligation to leave our children a planet that's not polluted or damaged. By taking action now to combat climate change, including developing homegrown clean energy and cutting energy waste, we can help protect our kids' health, cut carbon pollution, and begin to slow the effects of climate change so we leave a cleaner, safer environment for future generations.

We are already feeling the dangerous and costly effects of a changing climate across the nation. In the past three decades, the percentage of Americans with asthma has more than doubled, and climate change is putting those Americans at greater risk of landing in the hospital. And extreme weather events – from more severe droughts and wildfires in the west to more powerful hurricanes and record heat waves – are affecting communities across the country. Now is the time to act. We have already made progress by moving to cleaner sources of energy and improving the energy efficiency of our cars, trucks, and buildings.

The Clean Power Plan, a key part of the President's Climate Action Plan, cuts harmful carbon pollution from the power sector that's fueling climate change. By setting the first-ever national standards to limit carbon pollution from power plants, the largest single source of U.S. carbon pollution, it will improve the health of Americans across the country, create clean energy jobs, and help households and businesses save on their energy bills. The final plan takes into account the more than 4 million comments received from states and stakeholders across the country, creating strong but achievable standards for power plants that provide flexibility and choices for states and utilities on how to achieve their clean energy future.

The Clean Power Plan Will Improve the Health of Oregon Residents

We know climate change will put vulnerable populations at greater risk – including the elderly, our kids, and people already suffering from burdensome allergies, asthma, and other illnesses. According to the Centers for Disease Control and Prevention, 11.4 percent of Oregon's adult population and 8.4 percent of children in the state suffer from asthma. The sooner we act, by taking responsible steps to cut carbon pollution from existing power plants, the more we can do to prevent impacts that affect all Americans – especially the most vulnerable.

In 2013, 9.5 million metric tons of carbon pollution were emitted from power plants in Oregon — equal to the yearly pollution from almost 2 million cars. In addition to reducing a portion of this carbon pollution, EPA's guidelines will also cut other forms of air pollution like soot and smog. Overall, these reductions will provide significant health benefits.

Since the Clean Air Act was implemented more than 40 years ago, the EPA has continued to protect the health of communities, in particular those vulnerable to the impacts of harmful pollution, while growing the economy. In fact, since 1970, air pollution has decreased by nearly 70 percent while the economy has tripled in size. The Clean Power Plan builds on this progress, while providing states the flexibility to have clean, reliable, and affordable electricity.

Reducing Carbon Pollution Lowers Risks and Costs for Oregon

Oregon part of the U.S. National Climate Assessment's Northwest Region. The findings in the National Climate Assessment underscore the need for urgent action to combat the threats from climate change, protect American citizens and communities today, and build a sustainable future for our kids and grandkids. According to the third U.S. National Climate Assessment Highlights report, regional and state-specific impacts include:

- *Climate:* Temperatures increased across the region from 1895 to 2011, with a regionally averaged warming of about 1.3°F.
- *Fisheries and freshwater species:* Region-wide summer temperature increases and, in certain basins, increased river flooding and winter flows and decreased summer flows, will threaten many freshwater species, particularly salmon, steelhead, and trout. Rising temperatures will increase disease and/or mortality in several iconic salmon species, especially for spring/summer Chinook and sockeye in the interior Columbia and Snake River basins.
- *Water:* Changes in the timing of streamflow related to changing snowmelt are already observed and will continue, reducing the supply of water for many competing demands and causing far-reaching ecological and socioeconomic consequences. The largest responses are expected to occur in basins with significant snow accumulation, where warming increases winter flows and advances the timing of spring melt. By 2050, snowmelt is projected to shift three to four weeks earlier than the 20th century average, and summer flows are projected to be substantially lower, even for an emissions scenario that assumes substantial emissions reductions.
- *Coastal:* In Washington and Oregon, more than 140,000 acres of coastal lands lie within 3.3 feet in elevation of high tide. As sea levels continue to rise, these areas will be inundated more frequently. Ocean acidification threatens culturally and commercially significant marine species directly affected by changes in ocean chemistry (such as oysters) and those affected by changes in the marine food web (such as Pacific salmon). Increasing coastal water temperatures and changing ecological conditions may alter the ranges, types, and abundances of marine species. Many human uses of the coast – for living, working, and recreating – will also be negatively affected by the physical and ecological consequences of climate change.
- *Forests:* Climate change will alter Northwest forests by increasing wildfire risk and insect and tree disease outbreaks, and by forcing longer-term shifts in forest types and species. Many impacts will be driven by water deficits, which increase tree stress and mortality, tree vulnerability to insects, and fuel flammability. The cumulative effects of disturbance – and possibly interactions between insects and fires – will cause the greatest changes in Northwest forests.
- *Agriculture:* Projected warming will reduce the availability of irrigation water in snowmelt-fed basins and increase the probability of heat stress to field crops and tree fruit.
- *Tribes:* Observed and future impacts from climate change threaten Native Peoples' access to traditional foods such as fish, game, and wild and cultivated crops, which have provided sustenance as well as cultural, economic, medicinal, and community health for generations.

Oregon is Already Reducing Carbon Pollution and has Many Tools to Meet its Clean Power Plan Goals

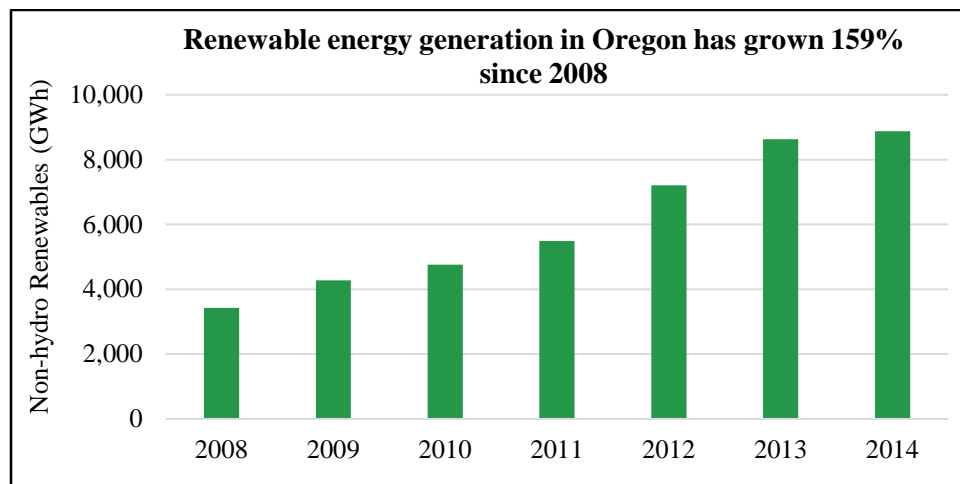
Since 2008, Oregon has reduced its power sector carbon pollution 12 percent. Mayors in 16 cities in Oregon have joined the Mayors Climate Protection Agreement, committing to take action in their communities to reduce greenhouse gas emissions. In 2014, there were approximately 4,100 people employed in the wind and solar industries in Oregon.

Oregon, like all states, will have flexibility to meet EPA’s goal by using the energy sources that work best for it and by cutting energy waste. To date, all 50 states have demand-side energy efficiency programs, 37 have implemented renewable portfolio standards or goals, and 10 have adopted market-based greenhouse gas emissions programs. Oregon is no exception. The state has a goal for large utilities to generate 25 percent of their electricity using renewable energy resources by 2025 and a goal to cut energy waste by an average of 1.3 percent per year from 2015 to 2019. EPA’s rule builds on progress already underway in each state and provides guidelines for states to develop plans to meet their carbon pollution reduction goals. It lets states work alone to develop plans or work together with neighboring states to develop multi-state plans, creating thousands of good jobs for Americans who are making our electricity system cleaner and our homes and businesses more energy efficient.

Cutting Carbon Pollution and Saving on Energy Bills in Oregon

Through the President’s leadership, and the initiative of the state of Oregon, local communities, and the private sector, a number of common sense measures to combat carbon pollution in Oregon are already in place. EPA’s flexible guidelines for power plants will continue driving cost-effective measures to reduce carbon pollution in Oregon, building off of recent progress:

- **Increasing the Deployment of Clean Energy:** Since President Obama took office, the United States has more than doubled its use of renewable energy from wind, solar, and geothermal sources, including tripling wind energy generation and increasing solar generation by more than twenty times. In Oregon, renewable energy generation from these sources has increased by 159 percent since 2008. The Administration has supported tens of thousands of renewable energy projects throughout the country, including 1,885 in Oregon, generating enough energy to power nearly 430,000 homes. Furthermore, the U.S. produces more natural gas than ever before – and nearly everyone’s energy bill is lower because of it.



- **Improving Energy Efficiency:** Using less energy to power our homes and businesses is critical to building a clean and secure energy future. President Obama has made essential investments in research and development to advance energy efficiency, and set new standards to make the things we use every day more efficient. Since October 2009, the Department of Energy and the Department of Housing and Urban Development have jointly completed energy upgrades for more than 1.5 million homes across the country, saving many families more than \$400 on their heating and cooling bills in the first year alone. Already, local communities are taking initiative Through the President’s Better Buildings Challenge, the cities of Beaverton and Hillsboro committed to reducing energy intensity 20 percent by

2020 in a combined 2.1 million square feet of local buildings. To date, Hillsboro and Beaverton have achieved improved energy performance of 9 percent and 15 percent respectively. Portland Public School District committed to the same reduction for its 8 million square feet of school buildings and has already achieved a 10 percent improvement in energy performance.