

A CLEANER, MORE EFFICIENT POWER SECTOR IN COLORADO

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 Colorado 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, 8.7 percent of Colorado's adult population suffers 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, 39 million metric tons of carbon pollution were emitted from power plants in Colorado — equal to the yearly pollution from over 8 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 Colorado

Colorado is part of the U.S. National Climate Assessment's Southwest 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:* Climate changes pose challenges for an already parched region that is expected to get hotter and, in its southern half, significantly drier. Increased heat and changes to rain and snowpack will send ripple effects throughout the region, affecting 56 million people – a population expected to increase to 94 million by 2050 – and its critical agriculture sector. Severe and sustained drought will stress water sources, already over-utilized in many areas, forcing increasing competition among farmers, energy producers, urban dwellers, and ecosystems for the region’s most precious resource.
- *Extreme Heat:* Projected regional temperature increases, combined with the way cities amplify heat, will pose increased threats and costs to public health in southwestern cities, which are home to more than 90% of the region’s population. Disruptions to urban electricity and water supplies will exacerbate these health problems. Exposure to excessive heat can also aggravate existing human health conditions, like for those who suffer from respiratory or heart disease. Increased temperatures can reduce air quality, because atmospheric chemical reactions proceed faster in warmer conditions. The outcome is that heat waves are often accompanied by increased ground-level ozone, which can cause respiratory distress. Increased temperatures and longer warm seasons will also lead to shifts in the distribution of disease-transmitting mosquitoes.
- *Agriculture:* Agriculture, a mainstay of the regional economy, faces uncertainty and change. The Southwest produces more than half of the nation’s high-value specialty crops, including certain vegetables, fruits, and nuts. The severity of future impacts will depend upon the complex interaction of pests, water supply, reduced chilling periods, and more rapid changes in the seasonal timing of crop development due to projected warming and extreme events.
- *Water:* Temperature-driven reductions in snowpack are compounded by dust and soot accumulation on the surface of snowpack. This layer of dust and soot, transported by winds from lowland regions, increases the amount of the sun’s energy absorbed by the snow. This leads to earlier snowmelt and evaporation – both of which have negative implications for water supply, alpine vegetation, and forests. The prospect of more lowland soil drying out from drought and human disturbances (like agriculture and development) makes regional dust a potent future risk to snow and water supplies.
- *Ecosystems:* Bark beetles have infested extensive areas of the western United States and Canada, killing stands of temperate and boreal conifer forest across areas greater than any other outbreak in the last 125 years. Climate change has been a major causal factor, with higher temperatures allowing more beetles to survive winter, complete two life cycles in a season rather than one, and to move to higher elevations and latitudes.

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

Colorado has already reduced its power sector carbon pollution by 5 percent since 2008. Mayors in seventeen cities in Colorado have joined the Mayors Climate Protection Agreement, committing to take action in their communities to reduce greenhouse gas emissions. Furthermore, Boulder and Aspen have joined the Compact of Mayors, a global cooperative of 85 cities that is committed to tracking and reducing emissions from cities. In 2014, there were approximately 11,200 people employed in the wind and solar industries in Colorado.

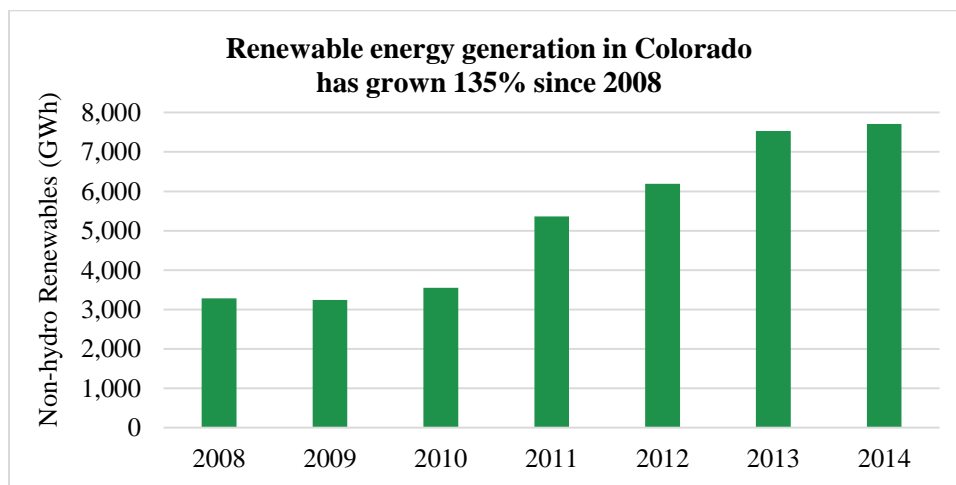
Colorado, like all states, will have flexibility to meet EPA’s goal by using the energy sources that work best for it and by cutting energy waste. To date, all 50 states have demand-side energy efficiency programs, 37 have implemented renewable portfolio standards or goals, and 10 have adopted market-based greenhouse

gas emissions programs. Colorado is no exception. The state has a goal for investor-owned utilities to generate 30 percent of their electricity from renewable energy resources by 2020, with goals of 10 to 20 percent renewables for municipal utilities and electricity cooperatives. The state also has goal to cut electricity consumption 5 percent below 2006 sales by 2018. 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 Colorado

Through the President's leadership, and the initiative of the state of Colorado, local communities, and the private sector, a number of common sense measures to combat carbon pollution in Colorado are already in place. EPA's flexible guidelines for power plants will continue driving cost-effective measures to reduce carbon pollution in Colorado, 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 Colorado, renewable energy generation from these sources has increased by 135 percent since 2008. The Administration has supported tens of thousands of renewable energy projects throughout the country, including 6,712 in Colorado, generating enough energy to power over 158,000 homes. Furthermore, the U.S. produces more natural gas than ever before -- and nearly everyone's energy bill is lower because of it.



- ***Improved 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. As part of the President's Better Buildings Challenge, Poudre School District in Colorado committed to reducing energy intensity 20 percent by 2020 in 3.8 million square feet of schools and buildings. Mesa County Valley School District made a commitment of 30 percent by 2020 for its schools totaling an area of 2.83 million square-feet. The cities

of Denver and Arvada committed to a 20 percent reduction by 2020 in 6.64 million square feet in Denver and 410,000 square feet in Arvada. The Denver Housing Authority committed to reduce energy intensity 20 percent in 10 years in 2.7 million square feet of affordable housing.