





## COLORADO CLIMATE PLAN

**State Level Policies and Strategies to Mitigate and Adapt** 



## COLORADO CLIMATE PLAN



COLORADO CLIMATE PLAN

## **Executive Summary**



## In Colorado, climate change presents a broad range of challenges.

Colorado has warmed substantially in the last 30 years and even more over the last 50 years.<sup>1</sup> Future estimates project temperatures rising an additional 2.5°F to 5°F by 2050.<sup>2</sup> This means the warmest summers from our past may become the average summers in our future. With increasing temperatures come shifts in snowmelt runoff, water quality concerns, stressed ecosystems and transportation infrastructure, impacts to energy demands, and extreme weather events that can impact air quality and recreation. The challenges we face will affect everyone, and they require collaborative solutions. For communities with inequitable living conditions, such as low-income and communities of color living in more polluted areas, climate change is likely to exacerbate existing vulnerabilities.

The goal of this document is to set clear and specific emission reduction goals for the State of Colorado, to identify opportunities to mitigate greenhouse gas emissions, and to promote state policy recommendations and actions that increase Colorado's state agencies level of preparedness for impacts we cannot avoid. This plan is organized by key sectors, including water, energy, transportation, public health, agriculture, and tourism, among others. Each chapter lays out some of the key ways climate change will occur in the state and identifies how those shifts will likely affect that particular sector, such as how an increase in wildfires will affect tourism and public health or how warmer temperatures and earlier snowmelt will affect agriculture and water-resource planning. In addition, each chapter describes many of the measures that are already being implemented -by state agencies as well as by local entities and private actors—to address these climatic changes. Finally, each chapter identifies specific goals and policy recommendations that can help that sector best adapt to and mitigate some of the most harmful effects climate change. Because addressing climate change is best addressed collaboratively, this plan has been developed collectively by the Department of Natural Resources ("DNR"), the Colorado Department of Public Health and Environment ("CDPHE"), the Colorado Energy Office ("CEO"), the Colorado Department of Transportation ("CDOT"), the Colorado Department of Agriculture ("CDA"), the Office of Economic Development and International Trade ("OEDIT"), and the Department of Local Affairs ("DOLA"), with input from stakeholders through a public comment process.

This plan has also been developed to meet the requirements of Colorado Revised Statute § 24-20-111, which calls for the development of a state climate plan setting forth a strategy to address climate change and reduce greenhouse gas emissions while taking into account previous state actions and efforts. This plan represents advances in the discussion on how to best address climate change at the state level, however, we know that more conversations are necessary and we look forward to an ongoing dialog with climate experts and the public.

In 2014 Governor John Hickenlooper released a comprehensive Colorado Climate Plan that promoted state policy recommendations and actions to help improve Colorado's ability to adapt to future climate change impacts and increase Colorado's state agencies level of preparedness, while simultaneously identifying opportunities to mitigate greenhouse gas emissions at the agency level. A lot of progress has been made since the release of that document, but there have also been significant changes in both global and federal climate policy. Those changes resulted in a need for the State to further clarify its own Colorado specific goals and objectives with regard to greenhouse gas emissions emission reductions.

On July 11, 2017 Governor John Hickenlooper signed an executive order committing the state to additional climate action. The executive order declares it to be the goal of the State of Colorado to achieve the following:<sup>3</sup>

- Reduce statewide greenhouse gas emissions by more than 26 percent from 2005 levels by 2025;
- Reduce carbon dioxide emissions from the electricity sector by 25 percent by 2025 and 35 percent by 2030 from 2012 levels; and
- Achieve electricity savings of 2 percent of total electricity sales per year by 2020.

The executive order also commits the State to:

- Work strategically with any interested utility or electric cooperative on a voluntary basis to maximize use of renewable energy without increasing costs to taxpayers;
- Create a statewide electric vehicle plan, which can be found here: https://tinyurl.com/COElectricVehiclePlan
- Develop a greenhouse gas emissions emissions tracking rule through the Department of Public Health and Environment;
- Identify opportunities to partner with local governments on locally-led climate goals and resilience actions;
- Institutionalize the state's greening government initiative;
- Formalize and expand upon cross-agency actions to provide economic development strategies and other supportive services to communities impacted by the changing energy landscape, and submit a written annual report detailing those efforts and accomplishments.

Consequently state agencies are working closely with our partners in the private sector and in local government to execute and implement the executive order. Achieving these goals will not be easy and will require significant collaboration, but it will also help to safeguard Colorado's air, natural resources, economy, and way of life for generations to come. Because climate change is a global issue the State has also joined the United States Climate Alliance; a bipartisan coalition of states and unincorporated self-governing territories in the United States that are committed to upholding the objectives of the 2015 Paris Agreement on climate change. Additionally, the Alliance provides an opportunity to share information and best practices, which can help Colorado to further improve and refine our own Climate Plan.

The various chapters of this plan seek to identify the most significant effects of climate change and to delineate the scope of the issue for future progress. The plan also seeks to highlight the determination and innovative spirit of Colorado. This determination and spirit are demonstrated by endeavors such as our work with utilities and local communities to transition to new, clean, and safer forms of power production; our efforts to promote electric vehicles and build the infrastructure across the state to support them; our commitment to not only create Colorado's first Water Plan but also find ways to fund its implementation; our resolve to tackle water quality and air quality head on and protect the health of citizens; our push to reduce wildfires and protect ecosystems for wildlife and human benefit, and our efforts to help producers and business save money through energy efficiency. And perhaps most important of all is our collaboration with others—because together we are better.

Colorado is a state full of talented innovators who come together to tackle challenges and overcome obstacles on a daily basis. That collaboration and creative thinking is at the heart of this plan. The goals, strategies, and recommendations laid out here—and those we are still working to develop—are commitments by the state to continue moving us forward and provide Colorado specific policies and strategies to mitigate and adapt. Over the coming months state agencies will work to incorporate the goals of the executive order and the measures laid out in this plan, schedule opportunities for continued collaboration, and continue to ensure that we are taking steps to clean our air and reduce our greenhouse gas emissions in a balanced and responsible way, while also pursuing adaptive strategies that protect the core elements that make Colorado such a desirable place to live, work, and play.

<sup>&</sup>lt;sup>1</sup> Jeff Lukas et al., Climate Change in Colorado: A Synthesis to Support Water Resources Management and Adaptation (2014), 2, accessed January 15, 2018, http://wwa.colorado.edu/climate/co2014report/Climate\_Change\_CO\_Report\_2014\_FINAL.pdf.
<sup>2</sup> Ibid., 3.

<sup>&</sup>lt;sup>3</sup> Exec. Ord. D2017-015, "Supporting Colorado's Clean Energy Transition," (July 11, 2017), accessed January 15, 2018, https://www.colorado.gov/governor/sites/default/files/executive\_orders/climate\_eo.pdf.















