IMPLEMENTATION OF HB 1261

Edwin LaMair

I. INTRODUCTION

Colorado recently passed and signed into law HB 1261, the Climate Action Plan to Reduce Pollution, setting ambitious greenhouse gas emission reduction targets to combat climate change.1 HB 1261 codifies statewide emissions reduction goals of 26% by 2025, 40% by 2030, and 90% by 2050, relative to a 2005 baseline level.2 These targets are roughly consistent with the Intergovernmental Panel on Climate Change’s recent call to limit worldwide temperature rise to 1.5°C above preindustrial levels.3 With the bill, Colorado established itself as a global leader on climate policy and joined California, New Mexico, and other states in the climate federalism movement.4

HB 1261 leaves open many of the specifics for how Colorado will attain the ambitious goals, requiring the Air Quality Control Commission (Commission) to promulgate rules to achieve the targeted reductions. This Article first lays out background climate science, including the projected effects of climate change in Colorado. It then gives an overview of HB 1261 and the mandates of the bill. And lastly, it suggests methods of implementation, including important considerations for the Air Quality Control Commission during the upcoming rulemaking process. This final section places a heavy emphasis on prescriptive policy approaches including: co-pollutant reductions, community participation, vehicle emission reductions, carbon pricing, and a just transition.

II. CLIMATE CHANGE AND COLORADO5

The best available science requires that global warming is limited to 1.5°C above preindustrial levels in order to prevent the most catastrophic and irreversible consequences of climate change. Global temperatures have already warmed 1°C since the early 1900s because of human activity, primarily through the burning of fossil fuels. A certain amount of continued warming is unavoidable because of carbon already emitted, but it is unlikely that current atmospheric levels alone would cause temperatures to exceed 1.5°C.6

2 Id.
3 Id.
5 Unless otherwise noted, this section is drawn from the following three reports: INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, GLOBAL WARMING OF 1.5°C, SUMMARY FOR POLICYMAKERS (2018) (hereinafter IPCC SR15); THE NATIONAL CLIMATE ASSESSMENT, FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II: IMPACTS RISKS AND ADAPTATION IN THE UNITED STATE, EXECUTIVE SUMMARY (2018); LUKAS ET AL., CLIMATE CHANGE IN COLORADO (2014) (hereinafter Lukas).
6 Id.
To limit warming to safe levels, it is essential that global emissions not exceed the “carbon budget” allotted by scientific consensus. The total carbon budget is the amount of greenhouse gas emissions that remain before the 1.5°C threshold is inevitably exceeded. To have a 66% chance of limiting warming to 1.5°C, the remaining carbon budget was 420 GtCO₂ at the end of 2017. Current worldwide emissions are depleting the carbon budget at a rate of 42 GtCO₂ per year, and increasing by at least 3% annually. At current rates, the entire carbon budget will be depleted well before 2030. Slowing and eventually halting greenhouse gas emissions is the most important step for preventing catastrophic climate change.

How much the earth will warm by 2100 will be determined by the rate of greenhouse gas emissions between now and 2050. To attain the Paris Agreement goal of limiting warming to 2°C or less, worldwide emissions need to decline to 80% below 2005 levels by 2050, and net-zero shortly thereafter. To limit warming to 1.5°C, worldwide emissions must reach net-zero by 2050. Exceeding the carbon budget or temperature thresholds would require extremely expensive—and currently unavailable—methods of atmospheric carbon extraction to avoid catastrophic effects in the latter half of the century.

The difference in effect between 1.5°C and 2°C of warming is severe, and the best available science calls for limiting warming to, at most, 1.5°C. The Intergovernmental Panel on Climate Change predicts that at 2°C and warmer, tens of millions more people will be displaced from sea level rise, at least 99% of coral reefs will be lost, entire ecosystems will disappear, and several hundred million more people will be exposed to climate-related risks that make them susceptible to poverty. Warming greater than 2°C could trigger climate responses that would cause catastrophic changes beyond the capabilities of human adaptation.

Colorado is already experiencing the effects climate change through worsening forest fires, the pine beetle epidemic, declining and volatile snowpacks, more severe droughts, hotter and drier summers, and hundred-year

---

7 GtCO₂ is the abbreviation for gigatons of carbon dioxide. A gigaton is a thousand million tons.
8 Id.
9 This article does not extensively cover methane emission reductions. Methane, however, is an extremely potent greenhouse gas that drives shorter-term warming. Mitigating climate disruptions will require measures to address methane.
10 Signed in 2016, the Paris Agreement is a landmark international agreement primarily aimed at dealing with greenhouse-gas-emissions mitigation and climate change adaptation. Currently, there are 186 parties to the agreement, and the emissions of those parties represent nearly 90% of all current greenhouse gas emissions. U.N. Framework Convention on Climate Change, Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015, ¶ 104, U.N. Doc. FCCC/CP/2015/10 (January 29, 2016). The agreement aims to decrease global warming, in part by “[h]olding the increase in global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change.” Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104.
In 2018, Colorado experienced the warmest annual temperatures since record keeping began 124 years ago. Last year, precipitation levels statewide dropped to the second driest on record. And, since the 1960s, average annual area burned by wildfires in Colorado has increased over ten times. Another 1°C of global temperature rise is projected to cause an additional 656% increase in annual area burned in the Colorado Rockies. In 2018 alone, wildfires caused $130 million in damage across the state. The costs of 2013 floods, resulting from an extreme precipitation event, are rising toward $3 billion. And, during the 2012 drought, the state lost $409 million in agricultural revenue and an additional $317 million in secondary spending in local communities.

The localized effects of climate change threaten many of Colorado’s thriving industries. Some of the state’s highest producing sectors rely on climatic stability, and are very susceptible to rising temperatures. Over a billion dollars per year of tourism-generated tax revenue could be lost due to earlier snowmelt, rising stream temperatures, and widespread summer wildfires. The $40 billion agriculture industry will face increasing stresses and decreasing yields as water becomes scarce and arid conditions prevail.

Colorado has already warmed 1.4°C above preindustrial levels on average and is projected to warm another 1.4°C to 3°C by 2050. The warmest past years will become the new normal, with projections showing the months of August and September on the Front Range warming by an additional 2.7°C (5°F) as early as 2035. Climate change will continue affect Colorado through earlier snowmelt, warmer and hazier summers, spreading pine beetle, decreasing agricultural productivity, larger and more intense forest fires, aquifer depletion, and water

---

12 Lukas, supra note 5; COLORADO CLIMATE PLAN, STATE LEVEL POLICIES AND STRATEGIES TO MITIGATE AND ADAPT (2018) (hereinafter Colorado Climate Plan).
14 Id.
16 Wildfires and Climate Change, CENTER FOR CLIMATE AND ENERGY SOLUTIONS, https://www.c2es.org/content/wildfires-and-climate-change/ (last visited June 1, 2019).
19 Colorado Climate Plan, supra note 12, at 12.
21 Id. at 62.
22 Colorado Climate Plan, supra note 12.
23 Lukas, supra note 5, at 68.
shortages. While many of the impacts will continue inevitably for some period, long-term and catastrophic impacts are avoidable contingent on deep decarbonization.

Reducing emissions in Colorado alone is not sufficient to combat the climate disruptions that will affect our state. But, in the absence of federal action, states must lead the charge and lay the framework for climate policy until the political landscape changes at the federal level. The United States bears the greatest responsibility for causing climate change due to its current and historical emissions. Thus, it should be reducing emissions at the greatest rate and leading less developed countries in the global transition to sustainable practices and renewable energy economies.

III. HB 1261: THE CLIMATE ACTION PLAN TO REDUCE POLLUTION

The Colorado Climate Action Plan to Reduce Pollution, HB 1261, aims to combat climate change while maximizing societal benefits by amending the Air Pollution Prevention and Control Act. The bill recognizes and seeks to combat the consequences of climate change in Colorado. It also acknowledges the environmental justice implications of climate change and climate policy, and specifically seeks to address disproportionate impacts.

HB 1261 sets the goal of net-zero emissions by midcentury, consistent with the goal of limiting worldwide temperature rise to 1.5°C. It also sets contours for reaching this goal, mandating certain considerations by the Air Quality Control Commission. Notably, it requires the Commission to track progress, reduce co-pollutants, and solicit input from frontline communities. The Commission is also permitted to coordinate with other jurisdictions and adopt their strategies.

IV. STRATEGIC IMPLEMENTATION

HB 1261 sets important goals, timelines, and considerations for achieving the necessary emissions reductions in an equitable way, but it leaves broad discretion to the Commission. To achieve the legislative goals, the rulemaking process must be well-informed, participatory, and plan for long-term solutions. I offer some important normative and practical considerations for the Commission, interested parties, and the general public. Specifically, I discuss reducing co-pollutants, community participation, vehicle emission reductions, market-based systems, and economic opportunities. This article is limited in scope to what is

possible under HB 1261, and therefore other climate policy options, like carbon taxes are not considered.

HB 1261 creates potential to reduce locally harmful air pollutants alongside greenhouse gases. However, if undertaken without the specific goal of reducing co-pollutants, the implementing rules could have the unintended consequence of worsening pollution in some areas, causing “hotspots.” To prevent this, and to maximize the potential benefits of co-pollutant reductions, regulators must identify and reduce emissions in areas already burdened by air pollution and cumulative environmental stressors. These communities should be targeted for direct reductions, facility retirements, and permitting restrictions. Additionally, regulations should include measures to reduce short-lived climate pollutants, like methane, diesel particulates, and black carbon, for maximum climate and health benefits.

To effectively shape policy and ensure long-term success, community-level participation must be maximized and meaningful. Current environmental decision-making is often far removed from the most heavily impacted communities. Regulators should conduct outreach efforts, especially to frontline communities, and ensure that the rulemaking process is accessible and understandable to all. It is also important that industry not be overly influential in the process. Allowing the industry that caused the climate crisis to shape its solution is problematic, and might cause Colorado to miss its targets.


28 See Alice Kaswan, Environmental Justice and Domestic Climate Change Policy, 38 ELR 10287, 10289 (2008)(outlining co-pollutant approaches to climate policy).

29 Id.


31 Environmental Justice, U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/environmentaljustice/ (last visited June 1, 2019) (environmental justice requires the “fair treatment” and “meaningful involvement” of all groups in environmental decision-making).

32 For participation to be “meaningful” it is essential that complex air regulation jargon is simplified for the ordinary citizen, translated, and that meetings are held at times when working people can attend.

may offer valuable input about where the most cost-effective emissions reductions might come from, but industry interests cannot be prioritized over the health of Coloradans and the stability of the state’s economy.

Greater efforts to reduce vehicle emissions and abate pollution along transportation corridors are also necessary because nearby communities suffer from poor air quality and the associated health concerns.\(^{34}\) Moreover, vehicle emissions are projected to become the largest source of greenhouse gases in coming years.\(^{35}\) Regulators should adopt methods to reroute truck traffic and minimize vehicle miles travelled through vulnerable communities. Establishing accurate public health metrics is similarly necessary to ensure that policies are actually reducing pollution in nearby communities.\(^{36}\) Colorado is already taking major steps toward reducing transportation emissions, and these regulations may be expanded in coming months.\(^{37}\) Without deep decarbonization of the transportation sector, the goals of HB 1261 will not be realized.

Market-based mechanisms can usefully supplement prescriptive measures and generate additional reductions so long as they are designed thoughtfully.\(^{38}\) There are two general models for reducing emissions: cap-and-trade systems and emissions fee or tax systems. Under an emissions trading system, facilities in already-polluted areas should not be able to purchase credits that would allow emissions above their cap.\(^{39}\) In fact, to achieve the greatest overall reductions and health benefits, a trading scheme should not allow any offsetting.\(^{40}\) If offsetting is permitted, it should come from verified sequestration sources within the state that


\(^{36}\) For an example of a frontline community in Colorado and an exploration of some possible solutions see Making Noise in Globeville and Elyria-Swansea, THE COLORADO TRUST https://www.coloradotrust.org/content/story/making-noise-globeville-and-elyria-swansea. (last visited April 12, 2019).


\(^{39}\) See Richard T. Drury et al., Pollution Trading and Environmental Injustice: Los Angeles’ Failed Experiment in Air Quality Policy, 9 DUKE ENVT. L. & POL’Y F. 231, 251 (1999) (critiquing the RECLAIM trading program for failing to reduce emissions and creating hotspots in low-income Latino neighborhoods).

\(^{40}\) See Kaswan, supra note 38; Chris Busch, Comment: California’s Cap-and-Trade Program – the Crisis That Wasn’t, CARBON PULSE (Mar. 18, 2019, 8:06 AM), http://carbon-pulse.com/22969/.
produce added benefits, like job creation.41 A fee-based system is preferable to cap-and-trade because a fee-based system produces greater revenue that can be invested in deeper reductions or adaptation measures.42 A carbon fee would lead to emissions reductions at all facilities, while a trading system might allow increases in certain areas and reductions in others.43 Revenue from either system should be earmarked for sustainable investments in underserved communities.

An emissions-reduction policy creates many economic opportunities, particularly in the renewable energy sector, and these opportunities should be distributed equitably to all members of society. Without careful oversight, the same industries responsible for greenhouse gas pollution might reap the benefits of the renewables transition, perpetuating societal inequalities. Economically vulnerable communities, including those currently relying on fossil fuel revenue, must be transitioned to the new green economy.44 To do this, regulators should provide job training to underserved groups and direct new renewable projects to economically depressed areas. New facility siting and retirements of fossil fuel plants must be thoughtful and careful not to unnecessarily displace existing revenue sources.

V. CONCLUSION

The Climate Action Plan to Reduce Pollution presents Colorado with an opportunity to lead in the fight against climate change. The law leaves broad agency discretion as to the methods of implementation, but requires consideration of important factors during the rulemaking process to ensure a just transition. If undertaken with widespread participation, long-term planning for deep decarbonization, and a focus on co-benefits, the regulations will put Colorado on track for a successful and sustainable future.

43 See Alice Kaswan, Greening the Grid and Climate Justice, 39 ENVT. L. 1143, 1146 (2009).
44 See Van Jones, The Green Collar Economy 79 (2008) (detailing numerous “green collar” jobs that will become available during the clean energy transition).