Innovative Policy Approaches to Greenhouse Gas Reduction

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COLORADO

Department of Public Health & Environment



Major Components of Colorado's Climate Legislation

Establish greenhouse gas inventory with 2005 baseline

Reduce GHG emissions 26% by 2025, 50% by 2030, and 90% by 2050

Develop rules and policies to reduce GHG emissions

Creates regulatory path for electric utilities to meet 80% GHG reduction by 2030

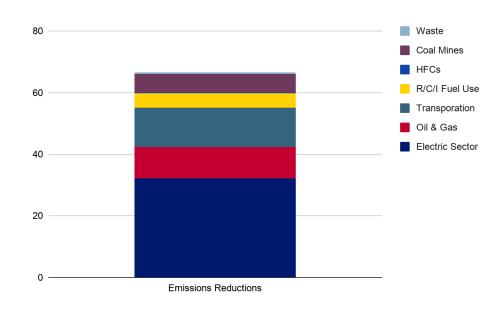
Requires annual tracking and reporting through CDPHE



Key Findings through 2030

ACHIEVING THE GOALS WILL RELY ON:

- Continuing the swift transition away from coal and towards renewables
- Achieving deep reductions in methane emissions from the oil and gas industry
- Accelerating the transition to electric cars, trucks and buses
- Changing transportation planning and infrastructure to reduce driving
- Increasing building efficiency and electrification
- Reducing methane emissions from landfills,waste water, and agriculture





Clean Energy Progress in Colorado

Black Hills Electric Holy Cross Energy **Xcel Energy** The 6 utilities that • Filing a Clean Energy Plan operate 99% of the • Filing a Clean Energy Plan • 100% carbon free electricity bv 2030 • Reduce GHG 80% by 2030 • Reduce GHG 80% by 2030 fossil power plants in • Filing a Clean Energy Plan • 70% emission reduction by • Retire Hayden 1 by 2027 Colorado have 2023 with 200 MW solar • 100 MW new wind and Hayden 2 by 2028 project. without layoffs committed to reduce • 35 MW new solar • 25 MW solar + storage emissions by <u>at least</u> • 5 MW additional hydro 80% by 2030. In PUC engagement, Tri-State G&T Platte River Power Authority **Colorado Springs Utilities** CEO views 80% • Reduce in-state GHG 90% • Filing a Clean Energy Plan • Filing a Clean Energy Plan emissions reductions by 2030. Reduce total GHG • Reduce GHG 80% by 2030 • Reduce GHG 90% by 2030 80% by 2030 in a CEP as a floor and levels • 32% renewable energy by Close Colorado plants by not a ceiling for 2030 Close Rawhide coal plant by 2030 2030 • Close all coal plants by reductions. • Preferred plan adds 900 Add 400 MW of renewables 2030 MW of wind, 900 MW of solar, 200 MW of battery

storage



Near Term Actions: Oil & Gas

Reduces pollution by ~12 million tons by 2030

- Broad O&G rulemaking on the AQCC long-term calendar for December 2021; stakeholder process has begun
- Emission limits based on reducing leak rates and other regulatory measures to achieve a 33% reduction in emissions for the sector by 2025 and over 50% (12 million tons from Proposed 2005 Baseline) by 2030
- Emissions data/metric tracking to assure the sector remains on track
- COGCC implementation of new rules that eliminate routine flaring, requiring minimizing emissions, and track pre-production and production air emissions



Near Term Actions: Transportation

Reduce pollution ~13 million tons by 2030

- Low and Zero emissions rules 6 million ton reduction
- Public investment in fleet turnover and infrastructure for zero emission vehicles
- GHG Pollution Standards for transportation plans and large employer trip reduction programs Summer 2021 AQCC rulemaking
- Incentivize land use to increase housing near jobs and reduce VMT and pollution study in 2021 to prepare for 2022 actions
- Clean trucking strategy infrastructure, fleet incentives, consider regulatory tools such as advanced clean trucks
- Participate in developing post 2025 vehicle standards
- 2022 AQCC evaluation of indirect source rules



Near Term Actions: Res, Comm, Ind Fuel Use

Reduces pollution by ~5 million tons by 2030

- Set carbon reduction targets and biogas requirements for gas utilities
- Modernize and expand gas utility energy efficiency programs
- Improve building efficiency through benchmarking, codes and standards
- Require regulated electric utilities to create programs that will support beneficial electrification.
- Expand access to financing programs for building retrofits
- AQCC action on industrial emission audits requirements and Best Available Control Technology requirements.



Near Term Actions: Natural and Working Lands

Reduce pollution ~1 million ton by 2030 *

- Develop a comprehensive emissions inventory and NWL strategic plan in concert w/ stakeholders
- Increase producer utilization of Agricultural Energy Efficiency program
- Expand Advancing Colorado's Renewable Energy and Energy Efficiency (ACRE3) program
- Improve soil function and carbon sequestration through regenerative farming practices
- Support voluntary participation in such efforts as Field to Mark, Soil Health Partnership and Precision Agriculture programs



Roadmap Implementation Legislative Priorities

- Building benchmarking and performance standards
- Utility beneficial electrification plans and incentives
- Expanded gas demand side management programs
- Biomethane standards for gas utilities
- Transportation electrification funding
- Clean energy finance



2021 study processes setting stage for later action

- Carbon Capture, Utilization and Storage (CCUS) taskforce
- EV equity study
- Medium and heavy duty vehicle ZEV technical analysis
- Hydrogen roadmap study
- Study on incentivizing smart local land use
- Multi-state study of Western electricity market participation

