



# Committing to Climate Action

## *Pathways for Equitably Meeting Colorado's Climate Goal*

A new report by Evolved Energy, GridLab, Natural Resources Defense Council (NRDC), and Sierra Club with support from PSE Healthy Energy, explores how to achieve a cleaner Colorado where all communities share in the environmental, economic, and public health benefits of a transition to an efficient, just, and sustainable energy system. The report was conducted in response to the passage of [House Bill 19-1261](#), or the Climate Action Plan To Reduce Pollution, into law in 2019. Under the law, the Air Quality Control Commission is tasked with implementing HB19-1261, which mandates the state reduce greenhouse gas (GHG) emissions 26 percent by 2025 and 50 percent by 2030 based on 2005 levels of emissions, with a goal of reaching 90 percent reductions by 2050.

To meet these goals, the Sierra Club and NRDC are advocating for equitable implementation of policies to

swiftly decarbonize the electric sector, electrify vehicles, buildings, and public transit, and reduce oil and gas production and emissions in the next decade. The report makes the case for community-oriented policies that recognize the disproportionate impacts of pollution on low-income families and communities of color. Policies should ensure that those who are hurt the most by our pollution can access the benefits of a healthier and cleaner Colorado.

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### Electricity Sector

**In our modeling, the most cost-effective scenario that meets Colorado's greenhouse gas reduction goals relies on almost entirely decarbonizing (98 to 99 percent) the electric sector by 2030.** Our modeling shows that lower levels of decarbonization from the electric sector by 2030 lead to higher costs; it is cheaper to get maximum GHG reductions from the electric sector.

Our modeling suggests that it is both feasible, and cost-effective, for electric utilities to decarbonize more quickly than the draft Roadmap is calling for. The draft Roadmap envisions a 80% reduction in GHG emissions by 2030 from electric utilities, but our findings indicate that deeper reductions from electric utilities would lead to a lower overall cost to meet the goals in HB19-1261.

Rapidly decarbonizing the electric sector will also make it easier to achieve emission reductions in other sectors by electrifying transportation, buildings, and oil and gas production.



Our analysis shows the overwhelming majority of fossil fuel power plants in Colorado are located in communities with higher-than-median poverty rates, higher percentage of population that are people of color, or both. In August, more than 100 elected officials, environmental justice groups, community groups, and others released an [open letter](#) highlighting that Colorado's [Climate Action Plan](#) requires the state to engage “disproportionately impacted communities” in its current policy making.



## Transportation

**By 2035 or soon thereafter, the majority of new cars and trucks of all weights should be electric.** In 2018, fewer than 2 percent of total vehicle sales in Colorado were battery electric vehicles or plug-in hybrid electric vehicles. Even after committing to adopt the Clean Car Standards, Colorado is not on a trajectory right now to decarbonize the transportation sector at the pace required to meet our climate goals. The state can meet its targets by:

- Ensuring electric vehicles make up at least 27 percent of new car sales and 8 percent of new light truck sales by 2025 and 66 percent of new car sales and 40 percent of new light truck sales by 2030.
- Ensuring zero emission vehicles make up at least 21 percent of new medium-and heavy-duty trucks by 2030 and close to 100 percent by 2040.

The analysis finds that while across the transportation sector emissions may be reducing, pollution from medium-and-heavy-duty trucks could increase, because adoption of zero-emission medium- and heavy-duty trucks will likely lag behind adoption of zero-emission light-duty vehicles. Low-income people and people of color are more likely to live in areas with more pollution from diesel trucks, and thus the State needs to ensure that these communities do not remain disproportionately burdened with air pollution during the transition to a cleaner transportation system.

## Buildings

**Emissions from the buildings sector must decrease by at least 9 to 14 percent from 2005 levels by 2030 to meet the near-term climate goals.** This level of electrification can be met by:

- Ensuring that 55 percent of new homes are all-electric by 2025, requiring all new homes to be all-electric by the early 2030s, and thereafter replacing 2 to 3 percent of non-electric space heaters and 4 to 5 percent of non-electric water heaters with electric heat pumps in existing homes each year through 2040.
- Ensuring 12 percent of new commercial space heaters, 4 percent of new commercial water heaters, and 58 percent of new commercial stoves are electric by 2025.
- Ensuring increase of residential use of up to 36 percent of space heater sales, 30 percent of water heater sales, and 91 percent of stove sales

The analysis shows that Colorado residents in rural areas spend a higher portion of their income on heating, cooling, and cooking than residents of other parts of the state, on average. This energy burden is also experienced by many low-income households in urban areas who stand to benefit from more efficient buildings.

## Oil and Gas

Methane emissions from the oil and gas sector must be reduced by at least 54 percent by 2030, relative to 2005 levels. The report recommends both reducing the methane leakage rate and reducing oil and gas production levels, rather than relying solely on a reduction in leakage rates to achieve the target methane emission reductions. Specifically, a 54 percent reduction in methane emissions can be accomplished by:

- Reducing oil and gas production 25 percent by 2030 relative to 2019 production levels; and
- Reducing methane leakage rates by 57 percent relative to 2019 production levels.

The analysis shows that industrial point sources—including oil and gas wells and other infrastructure—are more highly concentrated in locations with higher numbers of people of color. Expansion of oil and gas production will exacerbate pollution exposure for these communities.

