



The Case for Adopting Advanced Clean Car Standards in Colorado

The U.S. Environmental Protection Agency (EPA) has announced that they may roll back current emission standards for new vehicles. By adopting Advanced Clean Car Standards in Colorado, we can protect the health of our residents and the environment. These standards, originally developed by the state of California, are aligned with standards that were enacted by the U.S. Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) in 2012 following extensive analysis. Adoption would ensure Colorado continues to benefit from cleaner cars, even if federal standards are weakened.

Other States Have Adopted Advanced Clean Car Standards

There are currently 12 states (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont and Washington), as well as Washington D.C., that have adopted the California Low-Emission Vehicle Program (LEV III) standards. Nine of those states (Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island, and Vermont) have also adopted the California Zero Emission Vehicle (ZEV) Program standards.

Much of Colorado's Poor Air Quality is Due to Vehicles

The Denver Metro/North-Front Range (DMNFR) area has not met the federal ozone standards for many years. Vehicles are one of the two largest sources of the problem:

- 31% of nitrogen oxides (NO_x) and 16% of volatile organic compounds (VOC) pollution is due to on-road vehicle pollution.¹
- Air quality modeling has shown that vehicle emissions are one of the two largest contributors to high ozone levels.

Advanced Clean Car Standards Will Help to Maintain Climate Benefits and Improve Air Quality

If Colorado adopts Advanced Clean Car standards, we can maintain the climate benefits we are striving for and improve air quality by reducing vehicle emissions of:

- Carbon dioxide (equivalent (CO₂e) of 2.4 million tons per year by 2030 and 4.3 million tons per year by 2040).²
- Ozone-forming pollutants, such as VOCs and NO_x.
- Fine particulates (PM_{2.5}) and sulfur oxides (SO_x).

Advanced Clean Car Standards Will Help to Protect Health

Improved air quality and lower greenhouse gas (GHG) emissions help to protect residents from disease and injury that have significant social and economic costs, particularly for the elderly, very young, people with low income, and communities of color. Adopting Advanced Clean Car Standards would allow us to reduce:

- Medical costs and suffering due to cardiovascular, respiratory, and allergy-related illness aggravated by poor air quality, dehydration and heat stroke.
- Climate change leading to more frequent wildfires,³ increased length and severity of allergy seasons,⁴ higher temperatures causing more high ozone, poor air quality days,⁵ and increased insect- and animal-borne and water-borne diseases.⁶
- Death, physical injury, and exposure due to increased frequency and intensity of flooding, wildfires, and droughts.⁷
- Lost work days due to illness

Adopting Advanced Clean Car Standards Will Help Save Money

Adopting Advanced Clean Car Standards will help Colorado to meet the goals of the July 2017 Executive Order to reduce GHG emissions by 26% by 2025 (as compared to 2005 levels) and, as Colorado is a supporter of the Climate Alliance, uphold the goals of the 2015 Paris Agreement. Decreased emissions from adopting California's standards would yield:

- A monetized health value of roughly \$16 to 37 million per year by 2040.⁸
- Cost savings of \$121 million/year in 2030 and \$260 million/year in 2040, in current dollars.⁹

Auto Manufacturers Are Already Meeting Advanced Clean Car Standards

Auto manufacturers are increasingly bringing more efficient and advanced vehicle models to the market that meet Advanced Clean Car emissions standards and consumer needs. With clean car standards in place, consumers could expect to save at least \$3,500 per vehicle from reduced fuel costs by 2025.¹⁰

¹ Moderate Area Ozone State Implementation Plan for the Denver Metro and North Front Range Nonattainment Area, at ES-3, https://raqc.egnyte.com/dl/q5zyuX9QC1/FinalModerateOzoneSIP_2016-11-29.pdf

² Rykowski, Richard, "The Benefits of Protective Advanced Clean Car Standards in Colorado: An Examination of Cost Savings, Greenhouse Gas Emission Reductions, and Health Outcomes," commissioned by Environmental Defense Fund, May 2018, at 29, https://www.edf.org/sites/default/files/content/The_Benefits_of_Protective_Clean_Car_Standards_CO.pdf

³ https://www3.epa.gov/airnow/wildfire_may2016.pdf

⁴ <http://www.aafa.org/media/Extreme-Allergies-Global-Warming-Report-2010.pdf>

⁵ U.S. Global Change Research Program, The Impacts of Climate Change, Chapter 3, <https://health2016.globalchange.gov/>

⁶ https://www.niehs.nih.gov/health/materials/a_human_health_perspective_on_climate_change_full_report_508.pdf

⁷ <https://nca2014.globalchange.gov/highlights/report-findings/extreme-weather/graphics/observed-us-trends-heavy-precipitation>

⁸ Rykowski at 34.

⁹ https://19january2017snapshot.epa.gov/climatechange/social-cost-carbon_.html

¹⁰ Rykowski at 4.