

New Mexico Environment Department





State Climate Action

https://www.climateaction.nm.gov/





GHG State Emissions Targets



EXECUTIVE ORDER 2019-003

EXECUTIVE ORDER ON ADDRESSING CLIMATE CHANGE AND ENERGY WASTE PREVENTION

Background and Purpose

To further New Mexico's responsibility and opportunity to build a clean energy future for our people, limit adverse climate change impacts that harm our natural and cultural heritage, prevent the waste of New Mexico energy resources and reduce pollution that threatens human health, I hereby issue this Executive Order.

II. Climate Change

WHEREAS, climate change creates new risks and exacerbates existing vulnerabilities in communities across New Mexico and presents growing challenges for human health and safety, quality of life, and the rate of economic growth.

WHEREAS, in a special report authored by the United Nations and World Meteorological Organization Intergovernmental Panel on Climate Change ("IPCC"), it was found that the planet has as little as 12 years to take meaningful climate action in order to limit the increase in global average temperature to 1.5°C – the level necessary to forestall dramatic climatic changes that will further imperil our water supplies.

WHEREAS, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons, and sulfur hexafluoride are recognized as the six greenhouse gases contributing to climate change.

WHEREAS, in 2009, the U.S. Environmental Protection Agency ("EPA") found that these "six greenhouse gases taken in combination endanger both the public health and the public welfare of current and future generations."

WHEREAS, in May 2010, the National Research Council, the operating arm of the National Academy of Sciences, published an assessment which concluded that "climate change is occurring, is caused largely by human activities, and poses significant risks for - and in many cases is already affecting - a broad range of human and natural systems."

WHEREAS, carbon dioxide is emitted through the combustion of fossil fuels for electricity generation and for combustion-engine vehicles.

WHEREAS, the U.S. Energy Information Administration finds that the transportation sector is the largest anthropogenic source of carbon dioxide emissions in the United States.

WHEREAS, methane is a powerful greenhouse gas, 84 times more effective at trapping heat than carbon dioxide over a 20-year timeframe.

"New Mexico's objective is to achieve a statewide reduction in greenhouse gas emissions of at least 45% by 2030 as compared to 2005 levels."

Subsequently, Governor Lujan Grisham added a long-term target of reaching net zero by 2050.



GHG Inventory Reports

 Report on 2005 and 2018
 economy-wide emissions (October 2020)



Report on 2020
 oil and gas
 emissions
 (August 2022)





https://cnee.colostate.edu/wp-content/uploads/2021/01/New-Mexico-GHG-Inventory-and-Forecast-Report_2020-10-27_final.pdf





Climate Pollution Reduction Grant



Phase 1: Plan

This program is designed to provide flexible support to states, local governments, tribes, and territories regardless of where they are in their climate planning and implementation process.

- Planning grant recipients are using the funding to design climate action plans that incorporate a variety of measures to reduce GHG emissions from across their economies in six key sectors (electricity generation, industry, transportation, buildings, agriculture/natural and working lands, and waste management).
- Priority Climate Action Plan submitted March 1, 2024 (states and Metropolitan Statistical Areas (MSAs)) and submitted April 1, 2024 (Tribes, Tribal consortia, and territories)
- Comprehensive Climate Action Plan the deadline for states and MSAs is 12/1/2025. The deadline for Tribes and Territories is the end date of their grant period.



Priority Climate Action Plan

- Submitted March 1, 2024 by NMED and EMNRD
- Provided basis for Phase II applications in very competitive process
- Precursor to
 Comprehensive
 Climate Action Plan
 due in 2025

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GHG Inventory – Preliminary

Sector/Source	20056	20186	2021 (percent of total)
Electricity Generation	16.3	12.1	17.7 (20.0%)
Transportation	16.5	15. 8	15.3 (17.3%)
Residential Buildings	2.4	2.2	2.2 (2.5%)
Commercial Buildings	1.7	1.7	1.6 (1.8%)
Industry (Non-Oil and Gas)	2.8	2.1	2.1 (2.4%)
Industrial Products and Product Use (IPPU)	1.7	2.7	1.5 (1.7%)
Agriculture	7.3	7.7	10.3 (11.6%)
Coal Mining	1.6	0.9	0.9 (1.0%)
Waste and Material Management	1.6	1.8	1.1 (1.2%)
Oil and Gas Industry	37.9	33.0 ⁷	
Subtotal Emissions (Sources)	89.8	80.2	85.6 (96.6%)
Land-Use, Land-Use Change, and Forestry (LULUCF) Sector Net Total	4.8	6.1	2.9 (3.3%)
Net Emissions (Sources and Sinks)	94.6	86.2	88.6 (100%)

Source: New Mexico Priority Climate Action Plan – March 1, 2024

 $⁶⁻https://cnee.colostate.edu/wp-content/uploads/2021/01/New-Mexico-GHG-Inventory-and-Forecast-Report_2020-10-27_final.pdf$

^{7 -} https://service.web.env.nm.gov/urls/ktmiJzVo 8



GHG Inventory and Forecast Update 2024

- The update to New Mexico's greenhouse gas emissions inventory and forecast is being prepared by Energy and Environmental Economics Inc. (E3) under a contract with the Center for New Energy Economy at Colorado State University (CNEE).
- The study provides data to help New Mexico understand the scope of statewide greenhouse gas (GHG) emissions and evaluate policies to further reduce emissions.
- The study estimates GHG emissions for the 2005 baseline year and for 2021, the most recent year for which data are available for most source categories.
- The current E3 study also provides estimates for 2030 and 2050 emissions based on current state and federal policy, along with a "mitigation scenario" that illustrates the types of additional measures that may be necessary to achieve the state's 2030 GHG emissions reduction target of 45% below 2005 levels.



GHG Inventory and Forecast Update 2024



Photo: Goodwill Industries Truck Charger

NMED is updating the forecast to provide available data to estimate historical emissions and uses emissions accounting protocols consistent with the EPA national inventory, including the use of 100-year global warming potential to calculate carbon dioxide equivalent (CO2e) emissions.

Key data sources include:

- EPA's State Inventory Tool (SIT)
- EPA's National Inventory of GHG Emissions and Sinks
- Energy Information Agency's (EIA) State Energy
 Data System (SEDS)
- Eastern Research Group's (ERG) New Mexico
 Oil and Gas Greenhouse Gas Inventories and
 Forecasts.

Thank You!

Michelle Miano,

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New Mexico Environment Department

