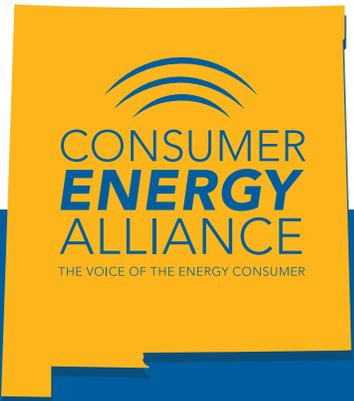


NEW MEXICO

EMISSIONS ANALYSIS



NEW MEXICO EMISSIONS ARE DECLINING, LEADING TO AN IMPROVED ENVIRONMENT

While the nation's increased energy production has received a great deal of media focus in recent years, little notice has been paid to the significant emission reductions and overall environmental improvement, both in New Mexico and across the nation.

The World Health Organization identifies outdoor air emissions as "a major cause of death and disease globally" and attributes emissions such as particulate matter (PM), ozone (formed by volatile organic compounds (VOCs), nitrogen oxides (NOx) and sulfur dioxide (SO2) to lung cancer, respiratory infection, heart disease, and stroke. The economic impacts of these air emissions include increased health care costs, decreased labor productivity and declining agricultural crop yields.

New Mexico Emission Trends 1990-2017

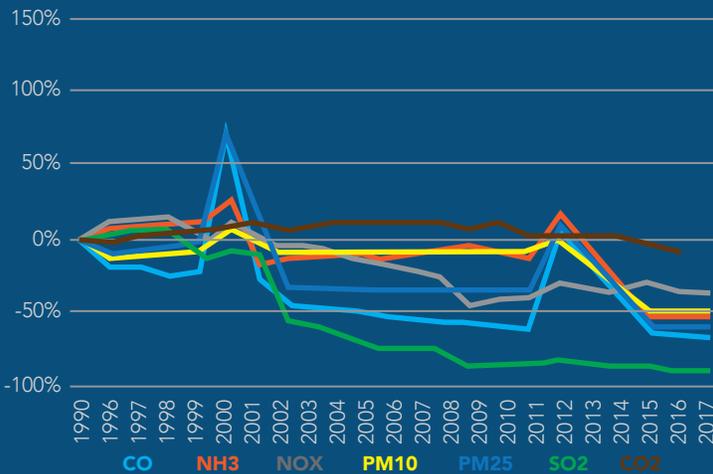


Figure 1. New Mexico Emission Trends 1990-2017 (Source: U.S. Environmental Protection Agency and U.S. Energy Information Administration) NOTE - 2014 EPA emissions data omitted due to reporting error; EIA CO2 data only available through 2016

Emissions of key air pollutants and greenhouse gases have declined significantly across the state, even though natural gas consumption has grown substantially and New Mexico remains a large energy consumer:

From 1990 to 2017, New Mexico emissions of key pollutants have decreased across the board:

- 38 percent reduction in nitrogen oxides (NOx)
- 90 percent reduction in sulfur dioxide (SO2)
- 67 percent reduction in carbon monoxide (CO)
- 61 percent reduction in fine particulate matter (PM2.5)
- 52 percent reduction in coarse particulate matter (PM10)
- 53 percent reduction in ammonia (NH3)

Additionally, from 1990 to 2017 New Mexico's carbon dioxide (CO2) emissions decreased by 9 percent, and from 2011 to 2017, the state's volatile organic compound (VOC) emissions decreased by more than 38 percent. These emissions reductions are remarkable in light of New Mexico's growth from 1990 to 2017, including:

- A 254 percent increase in the state's gross domestic product (GDP)
- A 33 percent increase in vehicle miles traveled per capita
- A 37 percent increase in population

New Mexico's cleaner air means that the state's wildlife and natural assets will be protected. This ensures that tourism, a \$6.6 billion industry for the state, will continue to thrive. Not only that, New Mexico's families and children can enjoy all their state has to offer more healthily, from the ski slopes of the Southern Rocky Mountains to Native American artifacts at the Gila Cliff Dwellings National Monument.

Additionally, improved air quality means that New Mexico's 23,800 farms across 43.9 million acres will continue to generate more than \$2.5 billion annually in specialty crops and livestock for the state's economy. This means that New Mexican cattle, pecans, onions, and chiles will continue to be distributed and enjoyed by families and businesses across the state and the nation.

NEW MEXICO ECONOMIC GROWTH

New Mexico's oil and gas industry is one of the most significant contributors to the state's GDP growth, adding more than \$2 billion annually in taxes and other revenue, often giving the state a budget surplus. Government and government enterprises also comprise a significant portion of the state's economy with New Mexico home to three air force bases and several major research facilities, including Los Alamos National Laboratory which houses the Manhattan Project, Sandia National Laboratories, and the Air Force Research Laboratory. Due to the work these facilities look after, the state receives \$6 billion in federal research funds.

NEW MEXICO ENERGY CONSUMPTION

More than 82 percent of New Mexico's energy needs are met by oil and natural gas. As one of the top ten natural gas consuming states in the nation, New Mexico's electric power sector accounts for a majority of natural gas use. Additionally, about two-thirds of New Mexicans utilize natural gas for home heating during the winter. The state's transportation sector also accounts for more than 80 percent of petroleum use.

NEW MEXICO ENERGY PRODUCTION

New Mexico is also the nation's third-largest producer of crude oil and the ninth-largest producer of natural gas. Home to the resource-rich Permian and San Juan basins, the state produces far more energy than it can consume. Most of the natural gas produced in the state is transported to Arizona or one of New Mexico's two oil refineries.

Even during this time of unprecedented growth in the Permian Basin, VOC emissions are significantly down, despite the on-going need for flaring - a process where natural gas is burned off during the extraction of oil. Usually, this gas is captured, but in times when it is not possible or there is not enough pipeline capacity, flaring occurs. Over the last year, however, the state has undertaken several regulatory and policy changes to curb flaring in oil and gas regions, including the consideration of critical construction of additional pipelines.

Still, there is much more that should be done to account for the lack of critical pipeline capacity that producers need to not only assist them in developing and transporting more of their product to market while reducing flaring, but this infrastructure would also help provide additional revenue in the state's budget.

U.S. EMISSIONS ARE DECLINING TOO

Rigorous environmental standards and energy production can and do coexist. U.S. oil and gas companies banded together to form The Environmental Partnership to improve environmental performance and further reduce emissions of methane and volatile organic compounds. These improvements are occurring at a time when our country has catapulted forward to become the world's leading producer of oil and natural gas.

Worldwide energy-related CO₂ emissions increased 1.7 percent in 2018. The U.S. stands in stark contrast to global trends, leading the world in reductions by lowering energy-related CO₂ emissions by 2.1 percent in 2019. The Energy Information Administration forecasts these emissions will decrease by 2 percent in 2020 and 1.5 percent in 2021. These reductions are due in large part to U.S. usage of natural gas.

Consumer Energy Alliance (CEA) works to support and advocate for the continued development of a balanced energy portfolio, including oil and natural gas as well as other traditional and renewable energy sources. CEA also recognizes the vital role that transportation infrastructure like pipelines and transmission lines serve, as they are critical for moving energy throughout New Mexico and the rest of the country.

With the emission reductions that have occurred recently, New Mexico's policymakers, regulators and leaders must come together in support of access to reliable energy resources and infrastructure development that will keep the state thriving, and ensure that hard-working families, seniors, households and small businesses can continue to enjoy the benefits of American energy.

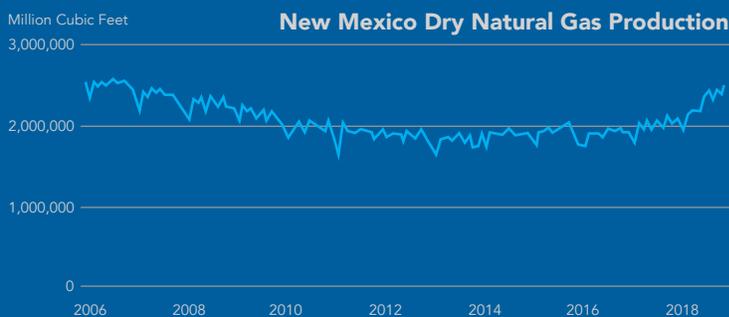


Figure 2. New Mexico Dry Natural Gas Production (Source: U.S. Energy Information Administration)

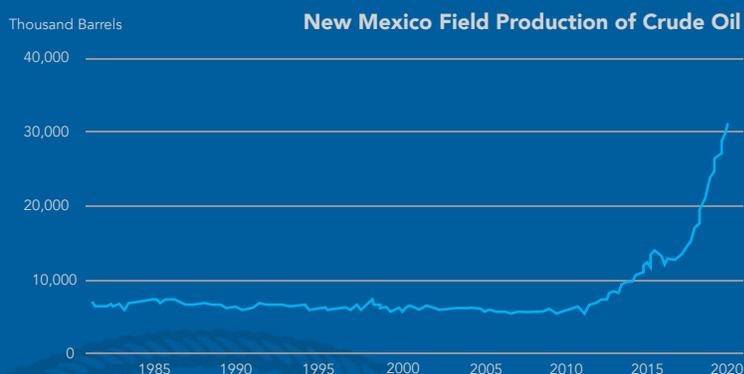


Figure 3. New Mexico Field Production of Crude Oil (Source: U.S. Energy Information Administration)

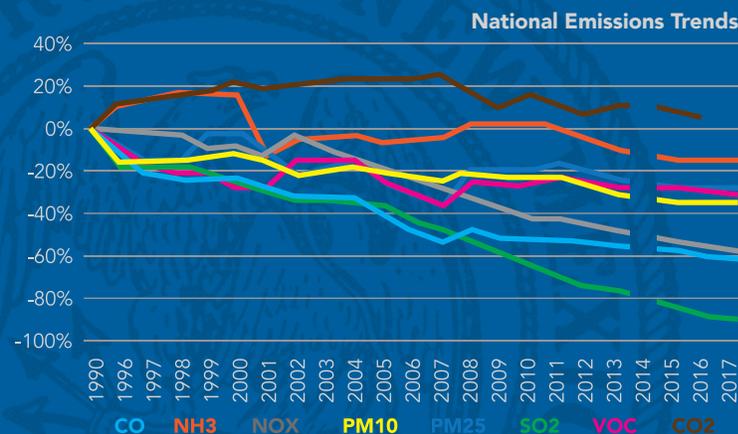


Figure 4. National Emission Trends 1990-2017. (Sources: U.S. Environmental Protection Agency and Energy Information Administration) NOTE - 2014 EPA emissions data omitted due to reporting error.

World Health Organization, <https://www.who.int/airpollution/ambient/health-impacts/en/>
 OECD, The Consequences of Outdoor Air Pollution, <https://www.oecd.org/environment/indicators-modelling-outlooks/Policy-Highlights-Economic-consequences-of-outdoor-air-pollution-web.pdf>
 EPA State Annual Emissions Trend, https://www.epa.gov/sites/production/files/2018-07/state_tier1_caps.xlsx
 EIA, State Carbon Dioxide Emissions Data, <https://www.eia.gov/environment/emissions/state/>
 EPA State Annual Emissions Trend, https://www.epa.gov/sites/production/files/2018-07/state_tier1_caps.xlsx
 Bureau of Economic Analysis, Regional Data - GDP and Personal Income, <https://apps.bea.gov/itable/itable.cfm?ReqID=70&step=1>
 U.S. VMT Per Capita by State, 1981-2017, <https://www.enotrans.org/wp-content/uploads/2019/06/VMT-per-capita-by-state-1981-2017-1.pdf>
 U.S. Census Bureau, <https://www.census.gov/>
 New Mexico Tourism Department 2018 Annual Report, https://assets.simpleviewinc.com/simpleview/image/upload/v1/clients/newmexico/2018_NMTD_Annual_Report_1e1ae54d-a8e2-4a4e-ad84-2a65488b8f7c.pdf
 New Mexico Agriculture, <https://www.farmflavor.com/new-mexico-agriculture/>
 New Mexico Economic Development, Economic Statistics, <https://gonm.biz/site-selection/economic-statistics>
 New Mexico, End-use energy consumption, 2017 estimates, <https://www.eia.gov/beta/states/states/nm/overview>
 New Mexico Energy Analysis, <https://www.eia.gov/beta/states/states/nm/analysis>
 New Mexico Energy Rankings, <https://www.eia.gov/beta/states/states/nm/rankings>
 International Energy Agency Global Energy & CO₂ Status Report 2019, <https://www.iea.org/reports/global-energy-and-co2-status-report-2019/emissions>
 EIA Short Term Energy Outlook, January 2020 <https://www.eia.gov/outlooks/steo/archives/jan20.pdf>