



Oil and Natural Gas Production

New Mexico is a leading producer of crude oil and natural gas in the United States. Major oil and gas deposits are in the Permian Basin in the southeast and in the San Juan Basin in the northwest. Fossil fuel production is critical to the survival of many New Mexico communities and contributes substantially to the state economy but also raises environmental concerns.

Oil

Since 2018, New Mexico crude oil output has ranked third in the United States because of a surge in Permian Basin production. The Permian Basin, mainly in West Texas, is one of the most productive areas in the United States and contains three of the 100 largest oil fields.

New Mexico has two oil refineries in Artesia and Gallup, which primarily process crude oil from the Permian and San Juan basins, respectively. The state also uses several petroleum product pipelines to connect the refineries to state and regional markets.

Because of high sulphur content, New Mexico “heavy” crude oil requires additional processing and attracts a lower price. Over the last three years, the price has been slightly behind the price for West Texas Intermediate, the national indicator. On average, 54 percent of oil production in New Mexico is on federal land and 35 percent on state land. Growing use of new drilling technology, such as horizontal drilling, has boosted production.

Natural Gas

As with crude oil, New Mexico natural gas production is typically in the top 10. The San Juan Basin is the largest field of a proven natural gas reserve in the United States and the leading coalbed-methane-producing region. New Mexico is responsible for around a quarter of all coalbed methane produced in the United States.

Although more than two-thirds of New Mexico households use natural gas as their primary source for home heating, less than one-tenth of New Mexico’s natural gas is used in the state. The majority of New Mexico’s supply is delivered to the West Coast and to market centers in West Texas that supply the Midwest. New Mexico’s Blanco Hub, in the San Juan Basin, is a major gathering point for Rocky Mountain natural gas supplies heading to West Coast markets. About 60 percent of natural gas production is on federal lands and about 25 percent is on state land.

The industry produces not only marketable natural gas but also other heavier hydrocarbons, known as natural gas liquids, or NGLs. Raw natural gas typically consists primarily of methane, the shortest and lightest hydrocarbon molecule. However, it also contains varying amounts of ethane, propane, and other

heavier, gaseous hydrocarbons. When processed and purified, these heavier hydrocarbons, NGLs, are marketed at a premium to petrochemical companies, refiners, and others.

Regulation

The Oil Conservation Division of the Energy, Minerals and Natural Resources Department regulates oil, gas, and geothermal activity in New Mexico, including issuing well permits, ensuring abandoned wells are plugged and the land restored, and enforcing regulations and laws.

Conflict over regulation of the oil and gas industry is often focused on the “pit rule” that regulates the handling of oil and gas facility waste water and other processes that can contaminate groundwater and the surrounding environment. The rule has undergone significant changes twice in the last decade.

Under a rule passed by the division in March 2021, oil and gas companies must capture 98 percent of the methane from oil and gas operations by 2026. Companies can use various technologies to meet those goals. As the main component of natural gas, methane is a commodity that can be captured and sold, but companies may vent or flare off methane because of safety concerns, lack of pipeline access, and other reasons. The rule provides a narrow set of criteria for venting and flaring and requires methane to be flared rather than vented except when flaring is technically infeasible or would pose a safety risk.

Environmental concerns have also been raised about horizontal drilling and hydraulic fracturing, new technologies that allow extraction where it was not possible before. “Fracking,” where a rock layer is fractured with pressurized fluid to release oil, natural gas, and other substances, has led to high-profile groundwater contamination cases in other states. New Mexico regulators have adopted rules that require drillers to disclose the chemicals in fracking fluid.

For More Information:

- National and state data on energy production can be found at the U.S. Department of Energy’s Energy Information Administration: www.eia.gov
- Information on energy regulations may be found at the U.S. Federal Regulatory Commission website (www.ferc.gov) or the Energy, Minerals and Natural Resources Department’s Oil Conservation Division website (www.emnrd.state.nm.us/ocd/).