



# 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

New Mexico crude oil output is typically ranked in the top 10 in the United States. 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 three oil refineries in Artesia, Bloomfield and Gallup. New Mexico also uses several petroleum product pipelines to connect the refineries to state and area markets. Giant Industries purchases almost all of the San Juan Basin's oil, refining it into gasoline and diesel at facilities in Bloomfield and Thoreau.

The high sulphur content of New Mexico "heavy" crude oil requires additional processing and New Mexico crude 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, 55 percent of oil production in New Mexico is on federal land and 37 percent on state land.

## 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 production of coalbed methane, about one-fifth of the national total, rivals production in Colorado and is responsible for around a quarter of all coalbed methane produced in the United States. While San Juan Basin coalbed methane production has declined since the late 1990s, new production is under development in the Raton Basin.

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. Due to restricted access to markets, particularly the Midwest, the price for New Mexico natural gas is usually lower than the Henry Hub, Louisiana, price used as a national indicator. Sixty-three percent of natural gas production is on federal lands and 18 percent is on state land.

The industry produces not only marketable natural gas but also other heavier hydrocarbons, known as natural gas liquids, or NGL. 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, NGL, are marketed at a premium to petrochemical companies, refiners, and others.

Production information suggests natural gas from the Permian Basin, the second most productive natural gas region in the state, is richer in NGL than that from the San Juan Basin. While 64 percent of the natural gas produced in New Mexico is from the San Juan Basin, compared with 34 percent from the Permian Basin, the basins are nearly equal in NGL production volume.

## Regulation

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.

Environmental concerns have also been raised about horizontal drilling and hydraulic fracturing, new technologies that allow extraction where it was not possible before, boosting production. "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 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.doe.gov](http://www.eia.doe.gov)
- Information on energy regulations may be found at the U.S. Federal Regulatory Commission website ([www.ferc.gov](http://www.ferc.gov)) or the N.M. Energy, Minerals and Natural Resources Department's Oil Conservation Division website ([www.emnrd.state.nm.us/ocd/](http://www.emnrd.state.nm.us/ocd/)).