

Oklahoma: An Energy and Economic Analysis

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Would you like to live in a state with low unemployment and low energy prices? If so, Oklahoma may be the state for you. Oklahoma's unemployment rate is less than 5 percent, while the nation's is at 8.2 percent. Oklahoma's average gasoline price is [the 12th lowest](#) in the United States, 4 percent less than the nation's average gasoline price, and its electricity prices are the [10th lowest](#), 22 percent lower than the average electricity price in the nation.

Oklahoma Energy and Economic Facts

Unemployment Rate	4.80%	5th lowest
Gasoline Price, per Gallon	\$3.26	12th lowest
Electricity Price, per Kwh	7.83 cents	10th lowest



Sources: Bureau of Economic Analysis, <http://www.bea.gov/iTable/iTable.cfm?ReqID=70&step=1&isuri=1&acrdn=1>
 Bureau of Labor Statistics, <http://www.bls.gov/web/liaus/laumstrk.htm/>, AAA Fuel Gauge Report, <http://fuelgauge.report.aaa.com/?redirect=Http://fuelgauge.report.opisnet.com/index.asp> (July 9, 2012),
 Energy Information Administration, Electric Power Monthly, February 2012, http://www.eia.gov/electricity/monthly/current_year/february2012.pdf

Oil and Natural Gas

Oklahoma is rich in oil and natural gas resources. Many of the largest oil and gas fields in the country are found in the geologic basins within the state. The state's economy is heavily dependent on the oil and natural gas industry. Oklahoma is the [5th largest oil producing state](#), producing more than 3 percent of U.S. crude oil production. Oklahoma has [more than 125,000 producing oil and natural gas wells](#), producing more than [74 million barrels of oil](#) the United States would otherwise have to import each year. Crude oil wells and gathering pipeline systems are concentrated in central Oklahoma, although drilling activity also takes place in the panhandle. Two of the 100 largest oil fields in the United States are found in Oklahoma.

The city of Cushing, in central Oklahoma, is a major crude oil trading hub connecting Gulf Coast producers to Midwest refining markets. In addition to crude oil produced in Oklahoma, the Cushing hub receives oil supplies from several major pipelines in Texas. Traditionally, the Cushing Hub has supplied crude oil from the Gulf Coast and Mid-Continent areas to Midwest refining markets. However, because production from those regions had been in decline, the crude oil pipeline system was reversed to deliver crude oil produced in Alberta, Canada, to Cushing, from which it can access Gulf Coast refining markets. More recently, due to the boom in shale oil production, the pipeline is again being reversed to deal with the oil glut that has built up around Cushing. Cushing is also the designated delivery point for NYMEX crude oil futures contracts.

Crude oil supplies from Cushing are also delivered to Oklahoma's five refineries, which have a combined distillation capacity of over 500 thousand barrels per day, about [3 percent](#) of the total U.S.

refining capacity. Several petroleum product pipelines (e.g. the Explorer pipeline) connect those refineries to consumption markets in Oklahoma and nearby States.

Beginning in the mid-1980s, Oklahoma oil and gas production had begun a steady decline, but it still remained a considerable source of employment and revenue. In 1992, the Oklahoma State Legislature created the [Commission on Marginally Producing Oil and Gas Wells](#) to keep the decline in production to a minimum. The Commission was organized to help oil and gas operators to sustain production from marginally producing wells. In recent years, they have accounted for over three-fourths of Oklahoma oil production and about one-tenth of the State's natural gas production.

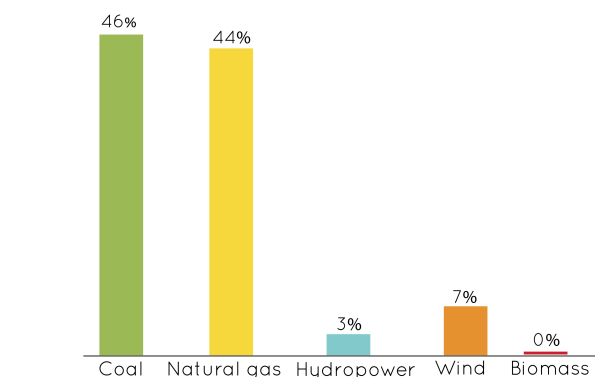
Oklahoma is the [fourth largest state natural gas producer](#) in the United States with production accounting for 8 percent of the natural gas produced in the United States. More than a dozen of the 100 largest natural gas fields in the country are found in Oklahoma. Oklahoma also has large reserves of coal bed methane, natural gas located in coal bed seams, which are found in the eastern part of the State.

Oklahoma consumes about one-third of its natural gas production for electricity generation, industrial production, and home heating. About 60 percent of Oklahoma households use natural gas to heat their homes. The other two-thirds of Oklahoma's natural gas production are moved via pipeline to neighboring States, particularly to Kansas.

Coal, Electricity, and Renewable Energy

Oklahoma ranks 22nd in coal production with small coal deposits located in Eastern Oklahoma. But, most of its coal comes from Wyoming via rail. Coal- and natural gas-fired power plants dominate electric power production in Oklahoma, producing almost equal amounts of electricity. Oklahoma also has hydroelectric potential in several river basins, as well as wind and solar potential, primarily in the western portion of the State. Oklahoma produces almost 10 percent of its electricity from renewable sources, mostly wind and hydropower with some minor production from biomass. About one-fourth of Oklahoma households use electricity as their primary energy source for home heating.

Oklahoma Electricity Generation Shares, 2011



Jobs and Tax Revenues

One in six jobs in Oklahoma is directly or indirectly supported by the oil and natural gas industry, which totals **344,503 workers**. Since 2009, the Oklahoma oil and natural gas industry added nearly 12,000 jobs with the average oil and natural gas worker making more than \$113,000 a year.

Oklahoma's oil and natural gas industry generates **\$52 billion** in goods and services annually, or one out of every \$3 in gross state product. The state's oil and natural gas producers paid nearly **\$1 billion** in gross production taxes in 2011. Those funds are spent by the state on education, roads, bridges, wildlife conservation and other programs.

Many of the state's oil and natural gas producers and royalty owners have voluntarily contributed more than **\$70 million** to restore **12,000 abandoned well sites** across Oklahoma. Oklahoma's oil and natural gas industry has contributed **\$1.6 million** toward weatherizing homes for low-income Oklahoma families, saving them up to 30 percent on their utility bills. Oklahoma's oil and natural gas producers have given more than **\$1.75 million** in Petroleum Scholarships, supporting hundreds of Oklahoma college students majoring in petroleum-related fields.

Regulatory Environment

Affordable energy is a vital component of a productive economy. Because regulations tend to increase the cost of energy making it less affordable, Oklahoma has chosen to limit regulations within the state, abiding by those set by the federal government, but not implementing many of the regulations and mandates that other states have imposed. For instance, [30 states have a renewable portfolio standard](#) (RPS) that mandates that a specified share of electricity be produced by renewable fuels in the future. Oklahoma [does not have an RPS](#). But states that do tend to have higher electricity prices because renewable sources of energy are [more expensive](#) than their fossil fuel counterparts.

Oklahoma does have a net metering policy, which has been in effect [since 1988](#), to allow the connection of small renewable energy generation. Net metering allows consumers who own renewable energy facilities to receive retail credit for electricity that is in excess of their own use and that is provided for sale to the electricity grid.

Oklahoma also does not provide a cap on greenhouse gas emissions as do several states that are members of a regional agreement to limit greenhouse gas emissions. Because there is no commercially available technology to control the release of carbon dioxide emissions, the most prevalent greenhouse gas emission, the cost of containment is particularly high resulting from either limiting the use of fossil fuels or increasing their prices. Carbon dioxide is a natural byproduct of the combustion of carbon-containing fuels, such as coal, natural gas, petroleum, wood, and other organic materials.

Because of its favorable regulatory environment, Oklahoma has the 10th lowest electricity prices in the country, more than 20 percent below the national average.

Conclusion

Oklahoma has provided favorable policies and few regulations, making energy affordable for its residents. The state ranks in the top five for the production of oil and natural gas, from which it obtains revenues through production taxes and royalties for state projects, and provides high-paying jobs, keeping the state's unemployment rate below 5 percent.