# Oil and Gas Production in Ohio An LSC Infographic

## THE UTICA SHALE OIL AND GAS BOOM

The Ohio oil and gas boom began around 2012, fueled by advancements in hydraulic fracturing and horizontal drilling in the Utica Shale, a rich geological formation deep beneath the state. This boom led to a surge in drilling activity, primarily in eastern Ohio, and attracted significant investments from energy companies eager to tap into the region's natural gas, oil, and natural gas liquids. The industry has created some controversy. Some have highlighted the economic growth, job creation, and infrastructure development it has brought to Ohio. Others have raised environmental concerns regarding water usage, potential groundwater contamination, and increased seismic activity. At any rate, the boom has positioned Ohio as a notable player in the U.S. energy landscape.

In 2023, Ohio was the largest oil producer east of the Mississippi River. -U.S. Energy Information Administration

OHIO OIL PRODUCTION 2012-2023

2015 2016 2017 2018 2019 2020



#### **THE OHIO DIVISION OF OIL AND GAS**

The Division of Oil and Gas was created in 1965 within the Ohio Department of Natural Resources. The Division is responsible for regulating Ohio's oil and natural gas industry and for the protection of all Ohioans and our environment while ensuring the state's natural resources are managed properly. The Division employs inspectors, engineers, geologists, attorneys, hydrologists, surveyors, health physicists, and support personnel overseeing Ohio's oil and gas industry.

### WHAT IS FRACKING?

Hydraulic fracturing, or "fracking," is a technique used in oil and gas development to extract resources from deep underground rock formations. In this process, high-pressure fluid—typically a mixture of water, sand, and chemical additives—is injected into a well to create small fractures in the rock. These fractures allow trapped oil and natural gas to flow more freely to the wellbore for extraction. Fracking has enabled access to previously unreachable resources, particularly in shale formations, contributing to a significant increase in oil and gas production.

# **OIL & GAS PRODUCING COUNTIES**

Oil and gas production occurred in 54 counties across Ohio over the 2021-2023 period. The vast majority comes from the eastern counties that overlie the Utica Shale formation. This deep shale play, rich in both oil and natural gas, has positioned Ohio as a significant contributor to regional energy production. Most of the drilling and hydraulic fracturing operations take place in these eastern areas, where the geological makeup of the Utica Shale allows for efficient extraction.



## **TOP 5 PRODUCTION COUNTIES (2023)**

- OIL GUERNSEY CARROLL HARRISON NOBLE MONROE
- Gas Belmont Jefferson Monroe Harrison Carroll

80.0 Oil and Gas Severance Tax Revenue 2012-2023 (IN MILLIONS)

- 60.0 50.0 40.0
  - 30.0
  - 20.0 -

10.0

0

-U.S. Energy Information Administratio

2023. as compiled by Statista

2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

#### **OIL AND GAS SEVERANCE TAX**

Ohio's oil and gas severance tax is a tax on the extraction of oil and natural gas within the state. The tax rate for natural gas is \$0.025 per thousand cubic feet (MCF), while oil is taxed at \$0.10 per barrel. Ninety percent of this revenue is deposited into the state's Oil and Gas Well Fund (Fund 5180), which is used by the Ohio Department of Natural Resources (ODNR) to regulate and manage the environmental and safety aspects of oil and gas drilling activities and the oversight of well-plugging and restoration projects to mitigate environmental impacts.

The remaining 10% is allocated to the Geological Mapping Fund (Fund 5110). The Geological Mapping Fund supports the state's geological mapping and research initiatives, providing data on Ohio's geology and natural resources.



Ohio ranked 5th

gas production in

nationally for natural