



The U.S. Department of Energy's Office of Fossil Energy (FE) supports research and development of technologies that can reduce the volume of natural gas (e.g., methane) flared or vented (released) into the atmosphere during crude oil and natural gas exploration, production, processing, transportation, and storage operations. This fact sheet was created by FE to inform stakeholders on state-level production and regulatory activity regarding natural gas flaring and venting. FE's research portfolio includes efforts to reduce methane (and other hydrocarbon) flaring through the application of improved technologies to capture and utilize small volumes of natural gas at remote locations, as well as technologies to reduce (primarily) methane release during midstream gas processing and transportation. Intermittent flaring that occurs as a result of routine well testing, production facility process shutdowns, or facility and pipeline infrastructure maintenance, are normal aspects of safe oil and natural gas production. Increases in domestic oil and natural gas production have resulted in significant infrastructure buildouts, however, natural gas pipeline capacity constraints have led to regional increases in the flaring of associated gas in some unconventional plays (e.g., Permian Basin in Texas and New Mexico and Bakken Shale in North Dakota) in order to enable oil production.

Arizona Producing Plays and Basins

While Arizona has a number of basins and geologic features, only a small portion of the Paradox Basin in the northeastern corner of the state has been oil and gas productive ([Figure 1](#)). There are about five legacy fields in that basin. In January 2017, the [Arizona Oil and Gas Conservation Commission](#) (AOGCC) reported a total of about 7,800 barrels of oil and 58 million cubic feet (MMcf) of gas was produced from 13 oil wells and 3 gas wells. The [Arizona Geological Survey](#) identified 11 potential shale oil and shale gas targets in Arizona, including the Mancos, Walcott, Aneth, and Bright Angel Shales in northern Arizona (2013). According to the U.S Energy Information Administration

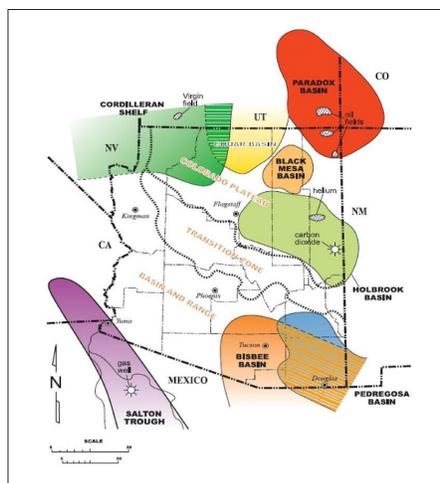


Figure 1: Arizona Producing Basins and Plays
Source: Arizona Geological Survey

(EIA), Arizona has no proved [oil reserves](#) nor [natural gas reserves](#). According to interviews with the AOGCC, all current oil and gas production originates from the Navajo Nation, in the northeastern region of the state.

Arizona Key Regulations Associated with Flaring and Venting

The U.S. Bureau of Land Management regulates Arizona's current oil and gas production, which is located on Navajo Nation territory. For any other wells, the [AOGCC](#) administers and enforces state laws related to conservation of oil and natural gas. The AOGCC has the authority to issue permits for oil and gas wells; monitor and inspect facilities

Arizona [Oil](#) and [Natural Gas](#) Statistics (EIA)

	2013	2014	2015	2016	2017	2018
Crude Oil Production (Average Barrels/Day)	164	153	101	22	36	N/A
Natural Gas Gross Withdrawals and Production (Average Mcf/Day)	197	290	260	129	153	N/A
Natural Gas Gross Withdrawals and Production (Vented and Flared) (Mcf/Day)	Arizona does not have records of any venting or flaring activity.					
Natural Gas Gross Withdrawals and Production (Oil Wells) (MMcf/Day)	0	0	0	0	0	N/A
Natural Gas and Gas Producing Oil Wells	4	6	7	3	3	N/A

MMcf - million cubic feet
Mcf - thousand cubic feet

2017 ranking among 32 U.S. oil and natural gas producing states — [Oil](#): 32 [Natural Gas](#): 33

for compliance with agency rules; issue subpoenas; maintain data related to drilling and production; publish geologic studies; and provide information related to exploration and development of resources.

The oil, gas, and geothermal resources rules explain the basic requirements for drilling, completing, and producing oil and gas wells. These rules are part of the [Arizona Administrative Code in Title 12: Chapter 7, Natural Resources](#). According to section R12-7-138, *Casinghead Gas*, operators shall meter all casinghead gas

produced and sold or transported away from a lease, except amounts of flare gas, and then report it monthly in writing to the AOGCC. Operators should burn all casinghead gas that is authorized to be vented and then report the estimated volume monthly as required by R12-7-161, *Producer's Monthly Report*. In addition, [Arizona Statute, Title 27-503](#) prohibits the waste of oil or gas. The AOGCC Commission is responsible for determining whether waste exists.

Arizona State Points of Contact

Arizona Oil and Gas Conservation Commission

Contact the AOGCC for more information about the requirements for drilling, completing, and producing oil and gas wells.

Website: <http://azOGCC.az.gov/>

Email: azOGCC@azdeq.gov

Phone: 602-771-4501

Visit energy.gov/fe/state-natural-gas-flaring-and-venting-regulations for a digital version of this fact sheet that includes hyperlinks to information sources.