



Oil Profits and Production Grow at the Expense of Jobs, Consumers, and the Environment

The American Petroleum Institute's (API) latest 2022 report claims that 11.3 million jobs are supported by the oil and gas industry (5.6 percent of all U.S. jobs). This is based on a report that the API commissioned in 2021 relying on 2019 data.¹ In reality, there were only 695,000 oil and gas jobs nationally in 2019, which fell to 541,000 in 2020. By 2021, while oil and gas production recovered to 98 percent of 2019 levels, national employment fell further to 504,000 (0.35 percent of all U.S. jobs).² For context, nationally, employers added an average of 457,000 jobs each month in the first half of 2022, and national job openings totaled nearly 11 million in June 2022.³

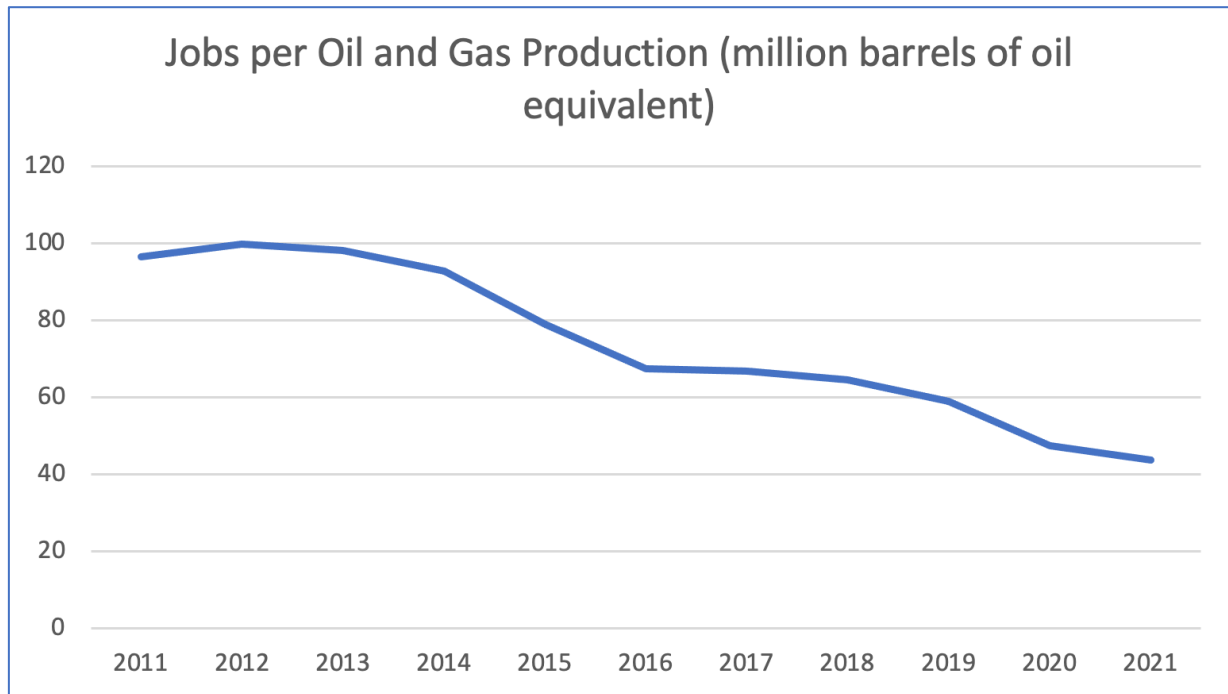
Oil and gas industry proponents claim that increased production is necessary to create and sustain jobs and combat rising gas prices at the pump.⁴ The truth is that oil and gas are cyclical industries that are prone to boom-and-bust cycles — bringing influxes of activity but leaving behind a poisonous environment and a toxic legacy when the money leaves.⁵ While the oil and gas industry uses promises of employment to gain political leverage, increased production does not actually guarantee more jobs. The 2020 crash shows that workers and communities bear the brunt of these busts, and 2021 shows that even when production returns, jobs continue to be cut.

Oil and Gas Jobs Decline While Production and Profits Grow

While oil and gas production recovered in 2021, U.S. oil and gas employment fell 7 percent from 2020's decade-low, to 504,000, down 37 percent from the 2014 peak.⁶ Yet over the same period, oil and gas production rose 33 percent.⁷ Oil and gas production in 2021 was associated with only 47 percent as many jobs as it was in 2014. For example, in 2021, each job in the oil and gas industry was associated with the equivalent of 22,894 barrels of oil, gas, and natural gas liquids production, compared to 10,777 barrels per job in 2014.⁸

The jobs that remain in the oil and gas industry are increasingly hard to access, dangerous, and insufficiently compensated. The on-site jobs of the past are being replaced by technology, relying on drones and remote steering from central control facilities, often miles away from the drill site.⁹ These new jobs often require additional qualifications and technical experience.¹⁰ Oil and gas corporations frequently complain that workers are not skilled enough.¹¹ By early 2022, oil and gas

workers, fed up with dangerous or unpleasant working conditions and wages below pre-pandemic levels, quit at rates not seen since before the pandemic.¹²



Major oil corporations registered record profits in 2022.¹³ According to a survey conducted by the Dallas Federal Reserve in early 2022, oil producers on average required prices between \$23 and \$38 per barrel to cover the costs of existing wells, and between \$48 and \$69 per barrel to profitably drill new wells.¹⁴ Compared to an average oil benchmark price of \$68 per barrel in 2021, oil investments produced a significant upside for corporations.¹⁵ Chevron and ExxonMobil made a combined \$38.6 billion in 2021.¹⁶ In the last quarter of 2021, ExxonMobil recorded the company's highest profits in seven years.¹⁷

Increased production is not a geopolitical panacea or a solution to high energy prices

Rising U.S. oil and gas production has done little to blunt the geopolitical importance of countries such as Russia and Saudi Arabia. A graph in the API's 2022 *State of American Energy* report shows that U.S. oil and gas production has skyrocketed since 2011, but production in both Russia and Saudi Arabia remains virtually unchanged.¹⁸ This is a predictable result for those familiar with energy economics: New fuel supplies add to the existing stockpiles but do not displace current reserves that will remain profitable even at dramatically lower prices.¹⁹

Nor has rising U.S. oil and gas production protected Americans from rising prices at the pump or meter. While oil and gas production in 2021 was 1.7 times higher than in 2011,²⁰ by June 2022,

average gasoline prices reached \$5 per gallon for the first time in history.²¹ In early 2022, electricity bills began surging, as much as doubling for some households, driven by high natural gas prices and by the gas-addicted electrical grid.²²

How the Fossil Fuel Industry Inflates Jobs Estimates

Fossil fuel corporations and their supporters have overhyped the employment benefits of fracking (hydraulic fracturing, the practice of using high pressure injection of water and chemicals to access new supplies of oil and gas).²³ Frackers have a long history of citing misleading jobs data.²⁴ The public and policymakers are being misled by deceptive models and inflated numbers that do not add up. Food & Water Watch has extensively documented the flaws with the oil industry's jobs studies, including what appear to be basic arithmetic errors such as double counting and the inclusion of entirely unrelated jobs in their estimates.²⁵ Outlandish jobs claims have one goal: to hype the scope and impact of the oil and gas industry.

One of the most misleading aspects of industry jobs analysis is the conflation of direct jobs with indirect and induced jobs. Direct jobs are positions held directly within a given industry. Indirect jobs are those held within the supply chain that supports that industry, while induced jobs are positions supported by wages from both direct and indirect jobs.²⁶ Indirect and induced jobs account for nearly 75 percent of the top-line numbers that some oil and gas companies are referencing. Misattributing these jobs to the oil and gas industry itself distorts the size and scope of the industry's payroll.²⁷

In other words, the jobs that these companies identify as being endangered would only be "lost" if the alternative to investment in oil and gas had nothing to do with capital and did not involve using power or energy. This is a false choice. In reality, the alternative to fracking (and other oil and gas investment) would have been, and could still be, large-scale investment in clean, job-creating renewable electricity technologies.²⁸ Fracking jobs can instead be green energy jobs.

Pennsylvania sees jobs decline despite production growth

In July 2021, the API claimed that its new analysis showed that the oil and gas industry is important to Pennsylvania's post-pandemic recovery, but the data that the API cited were from 2019, before the pandemic.²⁹ Additionally, the API falsely claims that a fracking ban would cost Pennsylvania a staggering 551,000 jobs.³⁰

Even without a fracking ban, oil and gas jobs fell 20.5 percent in 2020 from 2019 levels, employing only 24,635 of the state's more than 5 million workers.³¹ These job losses occurred while Pennsylvania produced record amounts of natural gas in 2020.³² Despite a 7.6 percent

increase in gas production in the following year, oil and gas jobs fell further, with employment of only 24,088 in 2021 — 2 percent less than in 2020.³³

New Mexico's oil and gas employment continues to fall

The New Mexico Oil and Gas Association slams any proposal to slow fossil fuel production on federal lands, claiming that it would cost the state 60,000 jobs.³⁴ That is more than triple the number of actual workers in the entire industry in the state. Even with production continuing on federal lands, oil and gas jobs declined by 25.8 percent in 2020 over 2019 levels, to 20,000 (2.6 percent of New Mexico's workforce).

This is not the first bust for the land of enchantment — in 2016, the oil and gas industry shed nearly a quarter of its jobs.³⁵ In 2021, experts predicted that the jobs are not coming back, and a University of New Mexico projection that same year estimated that oil and gas jobs will only recover to 74 percent of pre-pandemic levels.³⁶ Not only have jobs failed to return to New Mexico, in 2021, oil and gas jobs fell to 18,331, a 9 percent decline from 2020 lows and 67 percent of the pre-pandemic peak.³⁷ That occurred despite a 22 percent increase in oil production and a 19 percent increase in gas production in the state.³⁸

Despite oil and gas curbs in California, employment declines are lower than in states with more new drilling

When Gov. Gavin Newsom announced modest plans to phase out permitting for new oil production in California, industry advocates freaked out. The Western States Petroleum Association claimed that the oil industry supports close to 368,000 jobs in the state.³⁹ That is surprising since, according to the Bureau of Labor Statistics, only 22,000 Californians were involved in oil production in 2020, down 40 percent from the industry's peak in 2012.

In the Golden State, oil and gas production accounts for barely one-tenth of 1 percent of all employment.⁴⁰ While California's oil production fell 5 percent and gas production fell 17.5 percent from 2020 to 2021, oil and gas employment in the state fell only 4 percent, less than in many states where oil and gas production grew substantially.⁴¹

North Dakota's bust is a lesson for other oil and gas states

Oil and gas employment in North Dakota has declined by more than half since 2014 — from 32,400 jobs to 14,800 in 2021. Even though jobs never recovered to 2014 levels, oil production peaked in 2019 with 31 percent more oil production (and 26 percent fewer jobs). Even though oil production and employment have declined substantially since 2019, in 2021, oil production was still 2.7 percent higher than in 2014.⁴²

Conclusion

The oil and gas industry and its proponents are misleading the public and policymakers about the economic benefits produced by this destructive industry. Their false claims do not add up and cannot be allowed to stall a rapid transition to 100 percent clean, renewable energy. We need a New Deal-scale green public works investment to create real green jobs and stave off the worsening effects of climate catastrophe.

Endnotes

- 1 American Petroleum Institute (API). "State of American Energy: Progress Is Made in America." January 7, 2022 at 3 and 9; PricewaterhouseCoopers (PwC). Prepared for API. "Impacts of the Oil and Natural Gas Industry on the US Economy in 2019." July 2021 at E-1.
- 2 Food & Water Watch (FWW) analysis of Bureau of Labor Statistics (BLS). Quarterly Census of Employment & Wages. Annual Employment by North American Industry Classification System (NAICS) Sector. Accessed July 2022. FWW created a model using a definition that encompasses only jobs directly involved with domestic oil and gas production, specifically: oil and gas extraction; support activities for oil and gas operations; drilling oil and gas wells; oil and gas pipeline construction; and pipeline transportation. Employment changes in these sectors track much more closely to the advent of fracking than broader models used in industry estimates. For example, gas station jobs (including those with convenience stores) accounted for about half of the direct jobs in industry studies, but employment in this sector predictably has almost no relationship to domestic oil production. See: FWW. "Phantom Jobs: Fracking Job Creation Numbers Don't Add Up." March 20, 2020; FWW analysis of U.S. Energy Information Administration (EIA). August 2022 Monthly Energy Review. On file with FWW and available at <https://www.eia.gov/electricity/monthly>. Accessed August 2022.
- 3 Wiseman, Paul. "U.S. job openings slid to 10.7 million in June." *Associated Press*. August 2, 2022.
- 4 U.S. Chamber of Commerce. "What if... Hydraulic Fracturing Was Banned? The Economic Benefits of the Shale Revolution and the Consequences of Ending It." December 2019 at 1 and 29.
- 5 Yergin, Daniel. (1991). *The Prize: The Epic Quest for Oil, Money, and Power*. New York: Simon & Schuster at 29 to 34; Mayfield, Erin N. et al. "Cumulative environmental and employment impacts of the shale gas boom." *Nature Sustainability*. Vol. 2. December 2019 at 1122; Alter, Theodore R. et al. Penn State. Center for Economic and Community Development. "Pennsylvania: Bust to Boom? Great Recession to Recovery & Beyond." June 2019 at 3.
- 6 FWW analysis of BLS (2022).
- 7 FWW analysis of U.S. EIA. August 2022 Monthly Energy Review. On file with FWW and available at <https://www.eia.gov/electricity/monthly>. Accessed August 2022.
- 8 *Ibid.*
- 9 Lee, Mike. "'Not the same oil industry.' Record profits don't create jobs." *E&E News*. July 7, 2022.
- 10 *Ibid.*
- 11 Hampton, Liz, Stephanie Kelly, and Nia Williams. "North American oil companies scramble to find workers despite boom." *Reuters*. April 29, 2022.
- 12 *Ibid.*
- 13 Lee (2022).
- 14 Dallas Federal Reserve. "Oil and Gas Expansion Accelerates as Outlooks Improve Significantly." March 23, 2022.

- 15 FWW analysis of U.S. EIA. Crude Oil Spot Prices. Accessed August 2022.
- 16 Jacobs, Justin. "Big Oil groups regain swagger with largest profits in years." *Financial Times*. February 2, 2022.
- 17 Valle, Sabrina. "Exxon posts biggest profit in seven years on high oil prices." *Reuters*. February 1, 2022.
- 18 API (2022) at 11.
- 19 Hill, Jason et al. "Climate consequences of low-carbon fuels: The United States Renewable Fuel Standard." *Energy Policy*. Vol. 97. August 2016 at 351 and 352; Heal, Geoffrey and Wolfram Schlenker. "Coase, Hotelling and Pigou: The Incidence of a Carbon Tax and CO2 Emissions." NBER Working Paper 26086. July 2019 at 1 to 4.
- 20 FWW analysis of U.S. EIA August 2022 Monthly Energy Review. On file with FWW and available at <https://www.eia.gov/electricity/monthly>. Accessed August 2022.
- 21 Isidore, Chris. "Average US gas price hits \$5 for first time." *CNN*. June 13, 2022.
- 22 Wade, Will and Francesca Maglione. "Electric bills double for U.S. families with fuel costs surging." *Bloomberg*. March 7, 2022.
- 23 Wood MacKenzie Energy Consulting, API. "U.S. Supply Forecast and Potential Jobs and Economic Impacts (2012-2030)." September 7, 2011; Public Policy Institute of New York State. "Drilling for Jobs: What the Marcellus Shale Could Mean for New York." July 2011; America's Natural Gas Alliance. "Why Natural Gas?" Available at <http://www.anga.us/why-natural-gas>. Accessed August 21, 2013.
- 24 FWW. [Report]. "Exposing the Oil and Gas Industry's False Jobs Promise for Shale Gas Development. How Methodological Flaws Grossly Exaggerate Jobs Projections." November 2011.
- 25 FWW (2020).
- 26 PwC. Prepared for API. "Impacts of the Natural Gas, Oil and Petrochemical Industry on the US Economy in 2017." December 2019 at 1.
- 27 *Ibid.* at E-1.
- 28 Shearer, Christine et al. "The effect of natural gas supply on US renewable energy and CO2 emissions." *Environmental Research Letters*. Vol. 9. September 2014 at 1 and 2; Bistline, John E. "Electric sector capacity planning under uncertainty: Climate policy and natural gas in the US." *Energy Economics*. Vol. 51. July 2015 at 236, 241 and 244.
- 29 API. [Press release]. "New Analysis: Pennsylvania-Made Natural Gas and Oil Drives U.S. Economic Recovery, Strengthens All Industries." July 22, 2021.
- 30 API (2020) at 5.
- 31 FWW analysis of BLS (2022).
- 32 Pennsylvania Department of Environmental Protection. "2020 Oil and Gas Annual Report." July 2021 at 18.
- 33 FWW analysis of BLS (2022).
- 34 Hedden, Adrian. "New Mexico oil and gas leaders slam Biden's federal leasing halt as 'devastating' economy." *Carlsbad Current-Argus*. January 25, 2021.
- 35 FWW analysis of BLS (2022).
- 36 Redfern, Jerry. "New Mexico oil and gas jobs not projected to rebound." *Capital & Main*. July 6, 2021.
- 37 FWW analysis of BLS (2022).
- 38 FWW analysis of U.S. EIA. Natural Gas Gross Withdrawals and Production. New Mexico Field Production of Crude Oil. Accessed August 2022.
- 39 Willon, Phil and Taryn Luna. "Newsom bans new California fracking permits starting in 2024." *Los Angeles Times*. April 23, 2021.
- 40 FWW analysis of BLS (2021).
- 41 FWW analysis of BLS (2022); FWW analysis of U.S. EIA. Natural Gas Gross Withdrawals and Production. California Field Production of Crude Oil. Accessed August 2022.
- 42 FWW analysis of BLS (2022); FWW analysis of U.S. EIA. North Dakota Field Production of Crude Oil. Accessed August 2022.