

U.S. NATURAL GAS AND OIL RESOURCES



The U.S. oil and natural gas resource base is vast and is easily sufficient for increased U.S. production for decades into the future. As technology improves, these volumes may increase. As a result, American consumers and businesses benefit from affordable and available domestic energy resources.

BACKGROUND:

The amount of resource available for future production goes well beyond proven reserves. Proved reserves are only volumes of oil and natural gas that drilling and engineering data has demonstrated to be recoverable under existing economic and operating conditions.

Total technically recoverable resource is a better estimate of the potential available oil and natural gas. However, even technically recoverable estimates can be conservative since they assume current technology. Technically available resource estimates assume current technology. As technology advances, the amount of available resource increases. EIA's estimates of the available oil and gas resource have been increasing with technological advances associated with hydraulic fracturing.

As a result, natural gas is projected to be affordable for decades to come, and U.S. leadership in energy production and in clean, abundant natural gas has meant lower prices for American manufacturers and consumers alike. According to the White House National Economic Council, "The surge in American natural gas production has lowered energy costs for manufacturers and driven job growth, with US natural gas costs one half that of Europe and one third that of Asia."

FAST FACTS:

- » A wide variety of estimates from several government, academic, and private institutions show that the U.S. has anywhere from 2.4 to 4.0 quadrillion cubic feet of natural gas resource in place. The U.S. currently produces approximately 26.5 trillion cubic feet (Tcf) of natural gas per year.¹ The estimated resource is equivalent of up to 150 years of current production.
- » Approximately 1,400 Tcf of the U.S. natural gas resource is estimated to be recoverable at \$4/MMBtu or less. More than 800 Tcf can be produced at \$3/MMBtu or less.²
- » The Energy Information Administration estimates that there is approximately 275 billion barrels of U.S. oil resource.³ In 2016, the US produced approximately 3.2 billion barrels. The current available resource is approximately 85 years of current production.
- » Since 2000, EIA's estimated amount of natural gas and oil resources in the US has increased by over 90 percent, even with subtracting the 16 years of cumulative production during that time frame.

REFERENCES:

1. ["Natural Gas Gross Withdrawals and Production,"](#) EIA.
2. IHS - "Shale Gas Reloaded: The Evolving View of North American Natural Gas Resources and Costs, concludes that in the U.S. Lower 48 and Canada
3. [Assumptions to the AEO 2017,](#) EIA.

