

#### By Communications and Publishing

September 28, 2021

The natural gas reservoirs of the United States contain an estimated 306 billion cubic feet of recoverable helium, according to a **new report** from the U.S. Geological Survey. This is the first-ever estimate of recoverable helium resources from the USGS.

"This helium assessment is a perfect application of our long-standing research on geologic reservoirs ranging from natural gas resources to carbon dioxide storage potential," said Sarah Ryker, USGS associate director for energy and mineral resources. "This publicly available assessment will provide an unbiased estimate of the remaining volume of helium that private markets can rely on."

**Helium** is a lighter-than-air gas that is primarily used in medical imaging such as MRIs, semiconductor manufacturing, laser welding, aerospace, defense and energy programs. Almost all commercial helium supplies come from the production of natural gas. As the natural gas is pumped to the surface, it brings other gases such as helium along with it. The helium can then be captured and stored separately from the natural gas.

Helium is considered a nonrenewable resource because it is produced with other non-renewable gases and it is also light enough to escape Earth's gravity into space.

The United States is the leading supplier of helium for the world, producing 2.15 billion cubic feet of helium (61 million cubic meters) in 2020, or about 44% of the total global production. This assessment represents about 150 years of supply at 2020 U.S. production levels. However, because most production of helium is as a byproduct of natural gas production, it is unlikely that all 306 billion cubic feet of helium would be produced.



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Sunset at the BLM Helium Plant near Amarillo, TX. (Courtesy of BLM)

A significant portion of the Nation's helium production has historically come through the Federal Helium Program, managed by the Bureau of Land Management.

The USGS tracks **helium production**, both in the United States and globally, in its annual Mineral Commodity Summaries. These estimates have included both production from private wells and releases from the Federal Helium System.

This assessment of helium resources was undertaken by the USGS under the direction of the Helium Stewardship Act of 2013. It was informed by assessments of geologic carbon dioxide storage potential and **studies** of other energy-related gases.

The assessment report is entitled "National Assessment of Helium Resources Within Known Natural Gas Reservoirs" and can be accessed here. USGS commodity information on helium can be found here. To find out more about USGS energy assessments and other energy research, please visit the USGS Energy Resources Program website, sign up for our Newsletter, and follow us on Twitter. More information about USGS commodity data for helium and more than 90 other mineral commodities can be found here. All other USGS mineral resource information can be found here.

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