

# Helium Discovered in Tanzania

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## Source & Date

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By [Staff Reporter](#)

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## Article

Scientists make 'game-changing' Helium discovery in Tanzania

Helium has for the first time been found intentionally after reserves of the non-renewable gas had reached extremely low levels globally.



Researchers found that the intense volcanic heat in Tanzania's East African Rift Valley has released helium from ancient rocks and trapped it in shallow gas fields.

Helium may be considered an insignificant element largely used to inflate party balloons or blimps. But the world is so heavily dependent on the gas that its reserves had reached dangerously low levels.

Up until now.

# Helium Discovered in Tanzania

Scientists have made a 'game-changing' discovery of helium in Tanzania, with a field in the East African country capable of supplying 54 billion cubic feet of the gas to the world.

The global consumption of the helium is 8 billion cubic feet per year with the rare, non-renewable gas being used in medical scanners, spacecraft, nuclear energy, major research facilities and also in manufacturing.

"We sampled helium gas, and nitrogen, just bubbling out of the ground," said Chris Ballentine, a professor at the University of Oxford who was involved in testing the gasses, adding the find was "enough to fill over 1.2 million medical MRI scanners".

"This is a game changer for the future security of society's helium needs and similar finds in the future may not be far away," Ballentine said.

It is thought that volcanic activity in Tanzania's section of the Rift Valley created the high temperatures necessary to release the gas from ancient rocks allowing it to rise up and become trapped closer to the surface making it ripe for exploitation.

Norwegian mining company Helium One, which worked with the scientists on a new exploration technique credited with the find and has three prospecting licenses in Tanzania, claimed to have discovered, "a globally significant helium-bearing province."

Helium's utility in scientific research stems from its nature as a stable, inert gas that becomes liquid at minus 269 degrees Centigrade (452 degrees Fahrenheit), the lowest temperature of all the elements. It is usually only discovered in small quantities as a by-product of gas and oil drilling.

## **Why is Helium important?**

- The gas is used as a cooling medium in the Large Hadron Collider, MRI scanners, NMR spectrometers, satellite instruments and space vehicles
- It is used in the manufacturing of semiconductors, fibre optics and also to detect leaks
- Helium is used in car airbags
- It is used as an artificial atmosphere by deep-sea divers and others working in high pressurized conditions
- Helium is used in microscopes and barcode scanners in supermarkets

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## Source Article Link

- Ref: <https://www.trtworld.com/article/13083971>