

The Liquid Helium Crisis: Unsustainable Prices, Unreliable Supply, and What Congress Should Do

ACTION

Members of Congress should support the Securing Helium for Science Act and an NSF reauthorization bill that creates an extensive helium recycling program for academic researchers.

Helium is Essential to American Business, Innovation, and Health



But Price Increases and Supply Disruptions are Impacting Researchers

According to an APS survey of helium users nationwide, the average price of liquid helium has increased by nearly 25% from 2018 to 2019, with some experiencing their prices triple.



The New York Times

Nothing on Earth Can Replace Helium — and It's in Peril

by Joseph DiVerdi
APS Member and Colorado State University Professor

Maintaining Access to the Reserve Can Help

The Federal Helium Reserve, an underground storage facility established by Congress to address the strategic importance of helium, is scheduled to close in 2022. Based on current projections, the Reserve contains enough helium to meet the needs of federal users—DOD, NASA, government-sponsored researchers, etc.—for the next decade or longer.

Allowing researchers supported by federal grants to maintain access to the Federal Helium Reserve is good policy and the economical decision for the United States.

Recycling Helium Can Help

For many users, a helium re-liquefier can pay for itself in fewer than 10 years. Helium recycling systems eliminate costly annual expenses, allowing more funds for research.

Transitioning researchers to systems that recycle helium will significantly decrease the federal government's helium expenditures over time.

Proposed Legislative Solutions

Support the Securing Helium for Science Act, which will provide researchers supported by federal grants the ability to continue to purchase helium from the Federal Helium Reserve at a discounted rate for eight years after its sale. This will help provide a more affordable supply of helium for researchers supported by federal agencies—including DOE, NIH and NSF.

Support including language in an NSF reauthorization bill that would create a robust helium recycling program for academic researchers modeled on the modest and successful program currently run by the National Science Foundation's Division of Materials Research. By providing researchers with instrumentation that dramatically reduces their helium usage, a recycling program would help insulate them from future helium shortages and price spikes, while significantly decreasing helium expenditures on their federally funded grant.