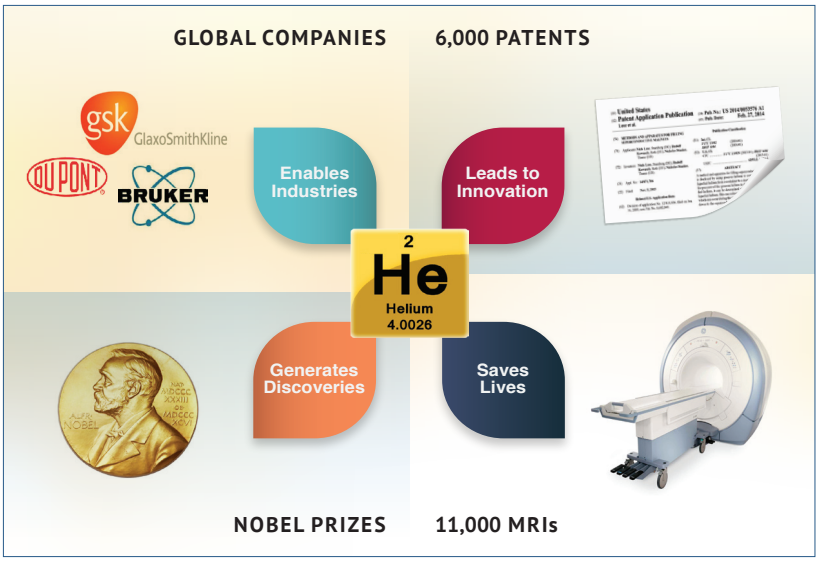
The Liquid Helium Crisis: Unsustainable Prices, Unreliable Supply, and What Congress Should Do

ACTION

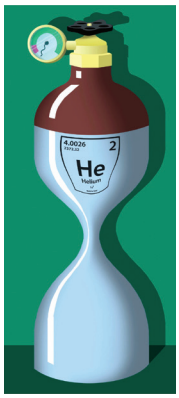
Members of Congress should introduce legislation that keeps the Federal Helium Reserve open past 2021 and creates an extensive helium recycling program for federally supported researchers.

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; some researchers' prices have doubled.



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

How Keeping the Reserve Open 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 2021. 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.

Keeping the Federal Helium Reserve open is good policy and the economical decision for the United States.

How Recycling Helium Can Help

For many users, a helium re-liquifier 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

Extend the lifetime of the Federal Helium Reserve, keeping it open past its current closure date of Fall 2021. Doing so will help provide a stable supply of helium for researchers supported by federal agencies—including DOE, NIH and NSF—and ensure helium availability for critical missions at DOD and NASA.

Establish 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.

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