



HELIUM - Index of Articles

“Helium on the Rise: The Global Helium Shortage – Managing Tight Supply, Strong Demand and Rising Costs”, Air Products. March 2008.

Companies dependent on helium are experiencing ongoing difficulties with supply and increased prices. In this special report, Air Products discusses the reasons for the current helium supply and demand imbalance, including worldwide helium production issues, the need for new fields and capacity in helium markets, recent pricing pressures, and what the industrial helium industry is going to do to address these issues.

(0308 Helium on Rise_Air Products.pdf)

“Helium Conservation Series: Helium Conservation in the Supply Chain”, Air Liquide. December 2007.

Helium, one of the smallest molecules available, is very challenging to contain and helium leaks create opportunity for costly production losses. In this special report, Bruce Beaton, Director of Cylinder Operations for Air Liquide America, examines helium conservation methods and discusses ways to manage helium operations within reduced loss parameters.

(1207 Helium Conservation_Air Liquide.pdf)

“Helium Conservation and Recycle”, CGI Staff Report. November 2007.

In this special report, Linde, Matheson Tri-Gas, Praxair and the International Balloon Association discuss ways in which producers and end-users of helium can conserve and recycle this resource, which is currently in very tight supply worldwide.

(1107 Helium Conservation_CGI.pdf)

“The US Government's Role in Providing Helium to Worldwide Markets”, Leslie Theiss. October 2007.

The US Federal Helium Reserve was originally intended as a source of helium for US government agencies and as a backup supply to private helium refiners. The US Helium Privatization Act of 1996 altered that model and today, the US Bureau of Land Management manages this reserve to help meet the demand for helium by refiners in the private sector as well as for US government agencies. This report describes the US government's role in providing helium to worldwide markets.

(1007 US Gov Role in Helium_Theiss.pdf)

“Up, Up and Away – Where Has All the Helium Gone?”, Maura D. Garvey. October 2007.

This market update describes current conditions and trends in the worldwide helium market. Helium continues to be in tight supply worldwide; allocations and price increases in the US are a concern for many helium distributors and customers. As a by-product of natural gas processing, helium is a limited resource with its supply based on several factors unique within industrial gas markets. These factors are explained here.

(1007 Up,Up,and Away_Helium_Garvey.pdf)

“Helium — The Sun Gas”, Ebbe Almqvist. October 2006.

Ebbe Almqvist, author of *History of Industrial Gases*, provides his keen insights on the origins and uses of helium as an industrial gas. Almqvist covers the history of helium production, applications, distribution and conservation methods. He also details the introduction of liquid helium and its recent uses in high-tech research and development efforts.

(1006 Helium History_Almqvist.pdf)

“Early Helium Recovery Efforts Linked to Development of LNG Process Technology”, Air Products. October 2006.

Air Products, a major player in both the helium and liquefied natural gas (LNG) value chains, helped pioneer helium extraction technology and is the technology leader in LNG. In this special report, Air Products discusses the strategic nature of its early helium recovery efforts and how those efforts helped to motivate the company to develop a more efficient liquefied natural gas technology. The most cost effective way to recover helium is from a LNG base load facility.

(1006 Early He Recovery_AP.pdf)

“Helium from the Bureau of Land Management System Past History – Future Plans”, J. Benjamin Reinoehl & Willard D. Moyer, RMW Solutions, LLC. October 2006.

This special report reviews the history of helium supply and production from its development with the US Bureau of Land Management (BLM) to its future under the US Helium Privatization Act of 1996. The Act of 1996 directed the BLM to cease pure helium production and marketing, and for the BLM to offer for sale the approximately 29+ billion cubic feet of crude helium managed by the Federal Helium Reserve.

(1006 Helium_BLM.pdf)

“The Helium Market - Demand Floats Higher as Supplies Sink”, Maura D. Garvey. October 2006.

This market update describes current conditions and trends in the worldwide helium market. In 2006, helium supply became tighter in the worldwide market. Helium also came under scrutiny by the Federal Trade Commission and the European Commission during the evaluation of Linde's proposed buyout of BOC. The subsequent successful Linde buyout of BOC brought changes in player market shares.

1006 Helium Market_Garvey.pdf

“BOC Helium Plant Celebrates 40th Anniversary”, CGI Industry News. [December 2005.](#)

The world's first plant to produce bulk quantities of liquid helium in larger capacities than ever before came on-line in Otis, Kansas in October of 1965. This Industry News report describes the special events held by BOC to commemorate the 40th anniversary of the Otis plant, which supported a cultural and scientific revolution in helium applications.

1205 Industry News_BOC Helium Plant.pdf

“Helium Market Update: Rising Costs for Crude Driving Prices Higher”, Maura D. Garvey. [July 2005.](#)

This market update describes current conditions and trends in the worldwide helium market. In 2005, helium demand was off due to the impact of the overall economic downturn in the US economy. The demand for helium is predicted to slowly rise with a strengthening US economy and from the effect of rapidly growing sales in the Pacific Rim, Mexico and South America.

0705 Helium Update_Garvey.pdf

“Helium: Lifting World Demand”, Agnes H. Baker. [July 2004.](#)

This market update describes current conditions and trends in the worldwide helium market. Demand for helium is mixed with, slower growth in magnetic resonance imaging markets, continued stagnation in fiber optics, but faster demand growth in welding and electronics.

0704 Helium_Baker.pdf

“Helium Update: New Crude Enrichment Unit Dedicated”, CGI Staff Report. [June 2004.](#)

This special report describes the multiple arrangements that the US Bureau of Land Management has pursued with a newly organized Cliffside Refiners, LP, to cooperatively develop the infrastructure needed to efficiently and effectively preserve and produce crude from the Federal Helium Reserve over the next 15 to 20 years. These actions are taking place in accordance with the recently enacted US Helium Privatization Act of 1996, which will make crude helium from the Federal Helium Reserve more available to the private sector.

0604 Helium Update.pdf

“Balancing Liquid and Gas Sales at Helium Facilities with Liquefiers”, James Evans West. [January 2004.](#)

Liquid helium vaporizes as a result of handling in transportation, depressurization and during dewar filling. This special report explains techniques that can be used to improve helium gas sales by reducing losses that result from vaporization in ISO containers and at transfills, and by using helium liquefiers as a mechanism to leverage liquid storage.

0104 Helium Fac_West.pdf

“Qatar to Supply Helium to Air Liquide and BOC; BLM Sells 1.6 Billion scf of Crude”, CGI Industry News. [July 2003.](#)

In this Industry News section, CGI reports that Air Liquide will supply a turnkey helium extraction, purification and liquefaction plant to the new Qatar Helium Project and purchase half of the helium produced by this new plant. BOC will purchase the other 50 percent of the output from the new helium facility in Qatar. In the US, the Bureau of Land Management held its first open market sale of crude in March.

0703 Industry News_Qatar_BLM.pdf

“Helium Recovery Systems: Instrumental in Coping with Short Supply”, Dan Sheridan. [February 2003.](#)

This special report discusses helium recovery and recycle methods initiated to help high-volume helium customers reduce the cost of manufacturing, especially in fiber optics. As helium prices rise and demand outpaces supply, helium recovery and recycle systems become increasingly important and are applied in a wider variety of applications.

0203 Helium Recovery_Sheridan.pdf

“Respite in Tight Helium Supply, But Demand Expected to Pick-Up Mid '03”, CGI Staff Report. [February 2003.](#)

This market update describes current conditions and trends in the worldwide helium market. With a cyclical flattening of helium demand in the worldwide market, and with reasonable plant operating rates, the acute pinch in helium supply of 2002 has abated. As demand picks up, supply may tighten again by mid-2003.

0203 Helium Demand.pdf

“India Commissions Helium Enrichment Plant: Thermal Springs Provide Helium Source”, Vijay Prakash. [February 2003.](#)

This special report describes the opening of a new helium enrichment unit in India. After years of extensive research, India joins the elite group of countries in the world with known Grade A Helium production capabilities. Along with the US, Russia, and Poland, India successfully commissioned a helium enrichment plant in early 2002.

0203 India Helium_Prakash.pdf

“Helium Market Update: Demand Growth Outpacing Supply Growth”, Maura D. Garvey and Dan Sheridan. [February 2002.](#)

This market update describes current conditions and trends in the worldwide helium market. Due to an increase in production costs, the helium industry experienced a series of unprecedented price increases, as much as 15 and 20 percent, in 2001. Industry observers expect prices to continue their upward spiral. This report examines the factors contributing to these price increases.

0202 Helium_Garvey & Sheridan.pdf

“Sale of Federal Helium Reserves Will Impact U.S. and International Helium Markets”, CGI Staff Report. [May 1999.](#)

The special report discusses the elements in the US National Academy of Sciences Helium Reserve Committee's report to Congress on legislation that calls for the federal government to exit the helium business. The US government will be mandated to begin selling its crude helium reserves on or before January 1, 2005, with sales ending by January 1, 2015. This legislation will impact both US and international helium markets.

0599 Helium Market Update_CGI.pdf