

INDUSTRIAL GASES

VITAL SUPPLIER TO THE US ECONOMY

The American industrial gases industry uses chemistry to supply essential gases like oxygen, nitrogen and hydrogen to manufacturers, innovators and services that help drive the U.S. economy.

www.americanchemistry.com/IG

Xe

Ar

O₂

N₂

Ne



Advanced Electronics

Industrial gases are integral to the manufacturing of semiconductor chips and cell phones, computers and televisions.

He



Better Energy

Carbon dioxide and nitrogen improve oil and natural gas production, and specialty gases help produce advanced lighting, insulation and photovoltaic cells for solar energy panels.

N₂

O₂

Ne

H₂

CO₂

He

Xe

Ar

Kr

Health Care

Life-saving gases like oxygen and helium enable critical medical equipment, pharmaceuticals and procedures.

H₂

N₂

O₂



CO₂

O₂

N₂

He

Ar

Xe

N₂



Safer Food

Carbon dioxide and nitrogen chill and freeze foods to capture freshness, enhance food safety, extend shelf life, and carbonate beverages.

Ar

Xe

H₂

Ar

Xe

H₂

N₂

Cleaner Air and Water

Oxygen and carbon dioxide can improve water treatment, and specialty gases can be used to calibrate air quality monitors.

O₂



Cleaner Fuels

Hydrogen is used as a carbon free fuel for cars, buses and forklifts, and reduces the sulfur content of transportation fuels to help meet environmental regulations.

N₂

Ne

H₂

CO₂

He

CO

O₂

Xe

Ar

Kr

Ne

N₂

Ne

Ne



Manufacturing

Oxygen and other gases help reduce emissions and improve the efficiency of combustion processes used in steel, aluminum, glass, chemicals and other manufacturing.

Kr

Xe

H₂

Ar

Xe

Ne

Xe

Ar

He

CO₂



H₂



Economic Impact

The industrial gases industry produced approximately \$12.2 billion worth of products in 2014 and directly employed about 60,000 American workers. It also supplies products to industries that account for 25% of U.S. GDP. ¹

¹ Economic Contributions of Industrial Gases - ACC Economic and Statistics