

# Saudi Arabia Industrial Gases Market, By Product (Oxygen, Nitrogen, Carbon Dioxide, Hydrogen, Argon, Helium), By Mode of Distribution (Tonnage/Gaseous, Bulk & Cylinder, Packaged), By Region, Competition Forecast and Opportunities, 2028

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# **Abstracts**

Saudi Arabia industrial gases market is anticipated to register a CAGR of 4.96% and reach approximately 2986.17 million USD by 2028 owing to the growing demand from oil and gas midstream sector. In 2017, Saudi Arabia accounted for 200.45 thousand million barrels of proved oil reserves and the country was the top producer of crude oil in the Middle East and Africa region. The most widely used industrial gases are oxygen, nitrogen, carbon dioxide, hydrogen, argon, neon, helium, etc. and are used for a wide range of industries, which include oil and gas, chemicals, petrochemicals, metals, fertilizers, nuclear power, electronics, and aerospace. All gases have different characteristics which make them beneficial to be used in different applications. Hence, we have segmented the product type into different applications as per their uses. Metallurgy, light engineering industry, medical are the key application sectors of oxygen whereases petrochemical, pharma & chemical industry, metallurgy, others are the key application of nitrogen gas. Carbon dioxide is widely used in welding, food & beverages, chemical & petrochemical, and healthcare industries. Same as hydrogen is used in hydrogenation of fats and oils, refinery, chemical and petrochemicals, metallurgical & metal processing, and fuel & atomic power generation.

Worldwide, Saudi Arabia is known for its vast petroleum resources and mining potential, which is the backbone for country growth. A major part of the Saudi Arabian economies is contributed by oil-based industries segment which is 46% of country's GDP. Apart from these, government has planned and made many polices to setup new plants and increase industrial activities in the country where industrial gases are needed for



production of the final product. Hence, it is expected that there will be increase in the demand for industrial gases during the forecast period. A joint venture of Air Products and ACWA Holding in Jazan city of Saudi Arabia has industrial gas production capacity of 75,000 tons per day which make it one of the major players in Saudi Arabia industrial gases market currently.

#### Growing Demand from Oil and Gas Midstream Sector is Driving Market Growth

In oil refining plant, industrial gases have an important role in all three-phases of process such as separation, conversion and treating. Midstream is a one of the three main stages of oil and gas industry operations that include the processing, storing, transporting, and marketing of oil, natural gas, and natural gas liquids. Different and adequate quality of gases is used to improve the quality refining process and safety of end-product that is refined in oil refinery. Acetylene, argon, carbon dioxide, hydrogen, nitrous, and oxygen are the major types of gases that are used by oil and gas midstream sector for different purposes such as coil tubing, EOR, oil well stimulation, purging and blanketing , leak testing, and other purposes. Furthermore, government initiatives to extract and produce natural gases from shale gas reserves are expected to increase the demand of industrial gases in Saudi Arabia.

Increasing Applications of Industrial Gas in Medical & Food Processing Industries

Food and medicine are the essential things which humans need a healthy and long life. People of Saudi Arabia spend around USD 70 billion of capital annually on their food consumption. Industrial gases are used during food production processes to improve productivity and assist to create natural, healthy, and organic food products. The Saudi Arabian government has allocated USD 2.66 billion as food security system to reduce the effects of rising global prices. As a result, significant amount inventory of wheat, barley, and other kind of foods will be purchase from local or foreign countries and stored where need of industrial gases are required. Apart from these, it is used as additives to improve the textures or taste of the foods. For example, while production of soft drinks and other carbonated drinks such as beer, coke, and other soda drinks. Gases can be used as additives, sterilization, atmospheric modifier, cryogenic conservers, and pressurizers in processing unit. Carbon dioxide, oxygen, nitrogen, hydrogen, argon, and helium are different types of gases that is used by food or medicine processing industries to keep the product away from spoilage and expand the product shelf life. Moreover, industrial gases are used in pharmaceutical sector during drug synthesis & formulation process, and for research into the practical realization of next-generation chemical plants. Hence, growing demand of medicine and food from



rapid growing population is expected to increase the demand of industrial gases from medical & food processing industries in Saudi Arabia.

Growing Demand from Energy Sector is Driving Factor the Market Growth

The energy sector is one of the flourishing markets in Saudi Arabia owing to growing demand of electricity in the region. Industrial gases are used in various processes for production of the final product in the energy sector that is applicable in conventional fossil energy sector, renewable energy sector (including fermentation and biotic resources) and solar cell/power storage sector (essential for smart grids). The Saudi Green Initiative has placed a goal to generate 50% of electricity from renewables source in the power mix in 2030. Industrial gases are used substances for extraction of useful to generate electricity, purification/recovery of useful gas components, and carbon dioxide recovery at renewable energy recycling facilities. Besides this, it is used for manufacturing and processing test for conductivity aids (nanocarbon materials), evaluation of battery characteristics, and processing test for cathode materials (organic/oxide?based materials). Hence, it is expected that market size of Saudi Arabia industrial gas market is going to rise owing to growing demand from the energy sector.

Industrial Gas Manufacturers Adopting IoT Technology

The technology has played a vital factor for the development of the many specific companies or industries. Companies are using IIoT or Industrial Internet of Things technology to tackle the growing trend and update themselves according to Industry 4.0 policy. Such development is helping gas industries to trace real time product reliability and safety. Various companies have reviewed the fault or error while production and increased their company revenue by more than 1.2%, which is very impressive. Now, they can quantify pressure in product tanks with overpressure alarm for preliminary pressure relief and discover irregular gas flow rate by using post-vaporizing temperature control. IIoT is enabling the real time link between production plant and user where they can check equipment and each process of gas production management. Praxair and Linde are the examples of such industrial companies that uses IIoT while production of industrial gases.

# **Recent Developments**

In December 2022, Saudi Arabian Oil Company (Aramco) and Total Energies have collaborated to construct a new petrochemicals complex located in Jubail, eastern region of Saudi Arabia as extension of Saudi Aramco Total Refining and



Petrochemical Co.(SATORP). The construction of new complex involved investment of USD 11 billion and is expected to complete in 2027.

In December 2021, the Saudi Aramco announcement stated that USD 12.4 billion lease and leaseback transaction has concluded in June with a conglomerate lead by EIG Global Energy Partners, which involved Aramco's stabilized crude oil pipeline network.

The official statement of Minister of Energy stated that they are going to hike the price of the industrial gases to some of exporter countries by countering that gas and liquids price are not same. Such steps are taken to increase the profitability by selling industrial gases to other countries.

#### Market Segmentation

Saudi Arabia Industrial Gases Market is segmented on the basis of product type and mode of distribution and application. Based on product type, the market is further divided into oxygen, nitrogen, carbon dioxide, hydrogen, argon, and helium. Based on the mode of distribution, the market is divided into tonnage/gaseous, bulk & cylinder, and packaged.

# **Company Profiles**

Linde-SIGAS, Air Products and Chemicals, Inc., Abdullah Hashim Industrial Gases & Equipment Co. Ltd, Gulf Cryo Saudi, Saudi Basic Industries Corporation (SABIC), Aldakheel Industrial Gases Plant (DIGAS), Jubail Gas Plant Co, Ltd., ACWA Holding, Taiyo Nippon Sanso Corporation, and Barrack Industrial Gases Factory are some of the key players in the Saudi Arabia Industrial Gases Market.

# Report Scope:

In this report, Saudi Arabia Industrial Gases market has been segmented into the following categories, in addition to the industry trends, which have also been detailed below:

Saudi Arabia Industrial Gases Market, By Product Type:

#### Oxygen

Saudi Arabia Industrial Gases Market, By Product (Oxygen, Nitrogen, Carbon Dioxide, Hydrogen, Argon, Helium),...



Nitrogen

Carbon Dioxide

Hydrogen

Argon

Helium

Saudi Arabia Industrial Gases Market, By Mode of Distribution:

Tonnage/Gaseous

Bulk & Cylinder

Packaged

Others

Saudi Arabia Industrial Gases Market, By Region:

Northern & Central

Western

Southern

Eastern

Competitive landscape

Company Profiles: Detailed analysis of the major companies in Saudi Arabia Industrial Gases market.

Available Customizations:



With the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

**Company Information** 

Detailed analysis and profiling of additional market players (up to five).



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