World Industrial Gases

Industry Study with Forecasts for 2014 & 2019

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The Asia/Pacific region will remain the fastest growing region based on its ever expanding manufacturing base, followed by the Africa/Mideast region based on its oil reserves and refining industry.

Global demand to rise 8% annually through 2014

World demand for industrial gases is forecast to increase 8.0 percent annually to $52.4 billion in 2014, with volume exceeding 530 billion cubic meters. Although the US is presently the largest national consumer of industrial gases, China is expected to overtake the US by 2014. The Asia/Pacific region will remain the fastest growing region thanks to its ever expanding manufacturing base. The Africa/Mideast region is the only other region expected to exceed average global growth through 2014, owing to its current small base, emerging industrial economy, immense petroleum reserves and large refining industry. The more mature economies of North America and Western Europe will lag average global growth rates.

Diverse applications help to stabilize growth

Although demand for industrial gases is subject to the cyclical nature of some of its markets, the diversity and indispensable nature of many industrial gas applications somewhat mitigates these effects. Market cyclicalism is further muted by the high degree of stability in some industrial gas markets, such as food and beverage processing, and health care. Finally, and perhaps more importantly in the long term, the steady and ongoing development of new products and new technologies will remain a major driver in establishing new industrial gas applications. The many applications of industrial gases, coupled with increases in global economic output, stimulate their consumption.

Steelmaking, health care markets to lead gains

The chemical processing and petroleum refining segment will be the largest market for industrial gases. Gains will be led by hydrogen consumption in oil refineries. The increasing production of low-sulfur, clean burning fuels requires massive amounts of hydrogen for the hydrotreating of petroleum distillates, which is driving considerable demand for merchant supplies. Metals production and fabrication is the second largest market for industrial gases. The global economic recession in recent years resulted in a severe reduction in steel output in many countries. Recovery from this low level of output will cause steelmaking to be the fastest growing market for industrial gases through 2014. Industrial gas gains in the electronics industry will increase at a healthy rate based on the rising popularity of electronic devices throughout the world and on the growing photovoltaics market. The health care market will be the second fastest growing market segment for industrial gases. Gains will be based on the expansion of health care services in developing nations and the rapidly increasing use of home health care respiratory therapies in advanced economies.
Asia/Pacific

Japan: Industrial Gas Demand

Demand for industrial gases in Japan is projected to increase 1.9 percent annually to 31.4 billion cubic meters in 2014. In value terms, consumption will advance 4.7 percent annually to $3.1 billion. Japan's industrial gas market reflects the large scale of its steel, petrochemical and semiconductor industries. In 2009, Japan was the third largest industrial gas market in the world, after the US and China. Japan's advanced economy has a high rate of industrial gas consumption per capita (third in the world), as well as a high rate of consumption per unit of GDP (fourth in the world). However, because of the high level of sophistication and maturity of the Japanese economy, and the limits imposed on it as an island nation, Japan's industrial gas demand gains will be more limited in the long run.

Demand for industrial gases in chemical processing and petroleum refining applications is forecast to increase 2.3 percent annually and reach $930 million in 2014. Gains will be limited by declining production of refined petroleum and the declining population. Although new chemical production processes will offer opportunities, overall gains will be below average because of this market's maturity. Given the maturity of the Japanese economy, high growth rates for commodity products are phenomena more of the past than of the future. Also, the nation has recently shuttered some petrochemical processing capacity.

In petroleum refining, Japan ranks second in the region, after China. Japan must import most of its petroleum needs, and so petroleum refining activities will remain significant, output of petroleum products is expected to decrease in the future. Industrial gas demand will suffer accordingly, but decreases will be offset by the continuing trend toward cleaner burning fuels, which require more nitrogen to produce. This rising use of (mostly merchant) hydrogen, driven primarily by hydrotreating processes, which grew strongly...
Kinder Morgan Energy Partners LP

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Geographic Revenues:  (2009, as percent of total) US 95%, Canada 4%, and Mexico and Other Countries 1%
Key Products:  carbon dioxide

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