

Industrial Gases – An Overview

September 2016

An
Introduction

Demand
Centers

Global
Industry

Domestic
Industry

An Introduction | Distribution Channels

- ◆ Industrial gases encompass a large number of products that are gaseous at room temperature and pressure, and while they may actually be stored as a liquid or solid, they are commonly used in gaseous form.
- ◆ The most common industrial gases are oxygen, hydrogen, nitrogen, carbon dioxide, and noble gases such as argon, neon, xenon, and krypton.

Distribution Channels

Packaged: Compressed in metal cylinders for customers

Merchant: Supply of gases in cryogenic tankers

On-Site: Direct supply to customers via pipeline

- Packaged segment dominates the market and account for ~45% of the market share

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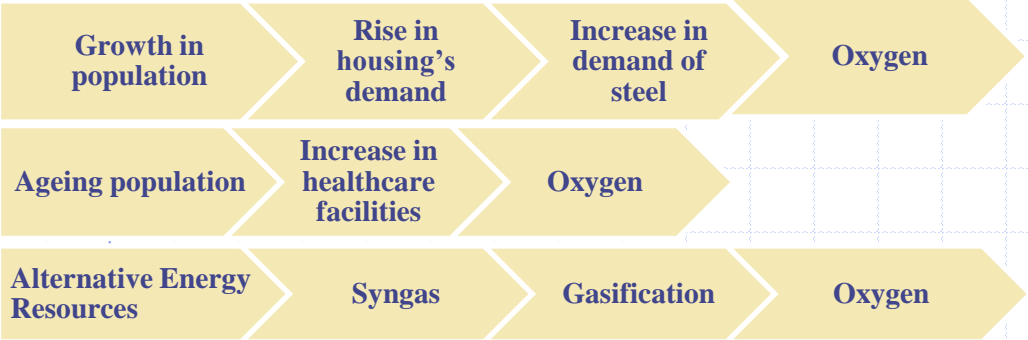
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Global Industry

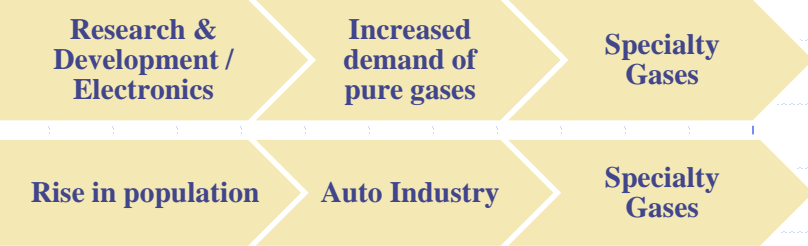
Domestic Industry

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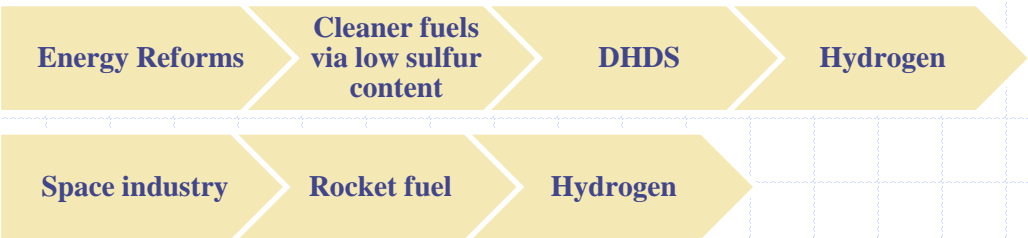
Oxygen



Speciality Gases



Hydrogen



Nitrogen



- Petroleum refining segment has the largest share in the global industrial gases market followed by chemical manufacturing, food processing, pharmaceuticals, and metal processing.



Global Players

- The Global industrial gases market is estimated at ~ US\$ 50bln.
- The industry is expected to grow at a CAGR of ~6% with the major growth factors of rapid industrialization and increasing population.
- Asia Pacific held the largest share of ~ 39% with the greater contribution from China and India.
- Going forward, Asia Pacific would continue to remain the demand centre with increasing industrial activity and economic growth
- The global market is dominated by few large players that hold more than 60% share
- Most of the large players in the industry have high margins

International Players

(US\$ mln)	Linde Group	Air Liquide	Praxair	Air Products & Chemicals
Revenue	19,604	16,572	10,776	9,895
Operating Profit/ (loss)	2,232	4,513	2,321	1,702
Gross Margin	40%	40%	40%	20%
Operating Margin	10%	23%	20%	17%
Country of Origin	German	France	US	US

Regional Players

(US\$ mln)	Taiyo Nippon Sanso	India Glycols	Yingde Gases
Revenue	4,642	1,899	1,220
Operating Profit/ (loss)	293	(9)	289
Gross Margin	30%	30%	30%
Operating Margin	10%		20%
Country of Origin	Japan	India	Hong Kong

An Introduction

Demand Centers

Global Industry

Domestic Industry

The Domestic Industry

Manufacturer	North (tpd)	South (tpd)	West / Dedicated	Planned (tpd)	Capacity Share
Linde Pakistan	130	125			32%
Ghani Gases	100	100		100 (southern Region)	25%
Sharif Gases	60	-	50		14%
Agha Steel	-	60			8%
Fine Gases	100	50			19%
Others	10	10			3%
Total	400	345	50		

- The northern region has a slightly larger share (55%) in the country's overall production capacity of ~800tpd.
- The industry is dominated by few large players with the largest two representing ~58% of the total production capacity.
- The major consumption centres in the country are ship breaking industry, oil and exploration and hospitals.
- With the announcement of a third gases plant by Ghani Gases in the southern region of ~100tpd would enhance its share in the domestic market to an estimated 33%.

An Introduction

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Global Industry

Domestic Industry

The Domestic Industry

Players	Market share
Linde Pakistan	45%
Ghani Gases	33%
Sharif Gases	14%
Fine Gases	3%
Others	5%

	Linde Group		Ghani Gases	
PKR (mln)	2015	2014	2015	2014
Revenue	3,914	3,925	1,720	1,347
Operating Profit/ (loss)	318	295	363	155
Gross Margin	21%	18%	33%	24%
Operating Margin	8%	7%	21%	11%
Capacity Utilisation	61%	64%	64%	63%

- The country's overall production capacity is in surplus to the domestic demand.
- The two large players cater for ~78% of the country demand with Linde in the leading position having a share of ~45%.
- The non-operational status of one of the large player in the northern market (Fine Gas – 100tpd) enabled the industry leaders to enhance their share in the overall pie.
- Going forward, the expected uptick in the industrial activity in the southern region mainly owing to the CPEC would enhance the overall demand.



Thank You

Profile

Ownership

Governance

Management
Quality

System &
Controls

Business
Risk

Financial
Risk