

Industrial Gases – An Overview

October 2017

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



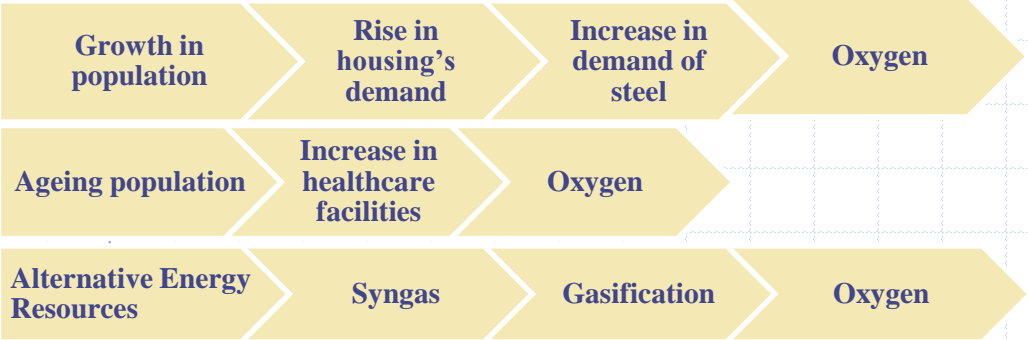
On-Site: Direct supply to customers via pipeline

- Globally, packaged segment dominates the market - ~45% of the market.
- In case of Pakistan, the market is pre-dominantly secured through packaged segment, while merchant distribution has nominal share

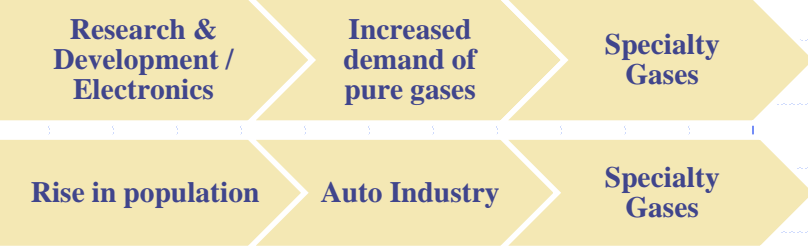


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Oxygen



Speciality Gases



Nitrogen



Global Players

- The global industrial gases market is estimated to be valued at US\$ 63bln in 2017 and this is projected to increase to US\$ 114bln by the end of 2025, witnessing a CAGR of 7.7%
- 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) 2016	Linde Group	Air Liquide	Praxair	Air Products & Chemicals
Revenue	20,250	21,667	10,534	9,524
Operating Profit/ (loss)	2,479	4,513	2,238	2,106
Gross Margin	40%	40%	44%	32%
Operating Margin	12%	23%	21%	22%
Country of Origin	German	France	US	US

Regional Players			
(US\$ mln) 2016	Taiyo Nippon Sanso	India Glycols	Yingde Gases
Revenue	5,693	559	1,074
Operating Profit/ (loss)	384	8	239
Gross Margin	35%	65%	32%
Operating Margin	7%	2%	22%
Country of Origin	Japan	India	Hong Kong



The Domestic Industry

Manufacturer	North (tpd)	South (tpd)	Total	Capacity Share	Planned (tpd)
Linde Pakistan	130	125	255	37%	
Ghani Gases	100	100	200	29%	100
Sharif Gases	60	50	110	16%	
Agha Steel	-	60	60	9%	
Fine Gases	-	50	50	7%	
Others	10	10	20	3%	
Total	300	395	695	100%	

- The southern region has a slightly larger share (57%) in the country's overall production capacity of ~700tpd.
- The industry is dominated by few large players with the largest two representing ~66% 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 of ~100tpd would enhance its share in the domestic market to an estimated 38%.
- 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.



The Domestic Industry

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

PKR (mln)	Linde Group			Ghani Gases		
	1HCY17	CY16	CY15	FY17	FY16	FY15
Revenue	2,119	3,954	3,914	1,804	1,766	1,720
Gross Profit	470	895	829	569	575	569
Gross Margin	22%	23%	21%	32%	33%	33%
Operating Profit	199	399	318	255	394	363
Operating Margin	9%	10%	8%	14%	18%	21%
Capacity Utilization	* 59%	59%	61%	73%	64%	54%

*Capacity utilization of CY16 due to non-availability of data

- The two large players cater for ~78% of the country demand with Linde in the leading position having a share of ~45%.
- Going forward, alongside overall economic buoyancy, the expected uptick in the industrial activity mainly owing to the CPEC would enhance the overall demand.

Industry Developments:

- A cardinal development with respect to industry is that Linde is planning to egress from Pakistan. A local consortium is likely to fill in the position. This will somehow affect competitive landscape of the industry.

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