



# Industrial and Specialty Gas Industry Advisor

Spring 2012



Investment Banking Solutions for the Middle Market



# Industry Report

## Investment Banking Solutions for the Middle Market

### TABLE OF CONTENTS

I. Executive Summary .....	1
II. Industry Overview .....	4
III. Financial Analysis .....	8
IV. Valuation Metrics .....	9
V. Industrial and Specialty Gas M&A Trends .....	11
VI. 2012/2013 Expectations .....	13
League Park Overview and Representative Transactions .....	14
Sources and Disclosure .....	16

### TABLE OF FIGURES

Figure 1: Product Summary, 2011 .....	1
Figure 2: Sales by Distribution Method, 2011 .....	2
Figure 3: Sales for the U.S. Gas and Cylinder/Packaged Gas Companies, 2011 .....	3
Figure 4: Projected Global End Market Sales Growth, 2010 – 2015P .....	4
Figure 5: End Market Indicators .....	5
Figure 6: End Market Indicators (continued) .....	6
Figure 7: Population Pyramids of the United States .....	6
Figure 8: Regional Growth Summary, 2011 – 2015P .....	7
Figure 9: Quarterly Industrial and Specialty Gas Revenue, 2009 – 2011 .....	8
Figure 10: Industry Financial Analysis, 2011 .....	8
Figure 11: Relative Stock Price Performance .....	9
Figure 12: Industry Valuations .....	9
Figure 13: Strategic and Financial Valuation Drivers .....	10
Figure 14: Trends in Industry Valuations .....	10

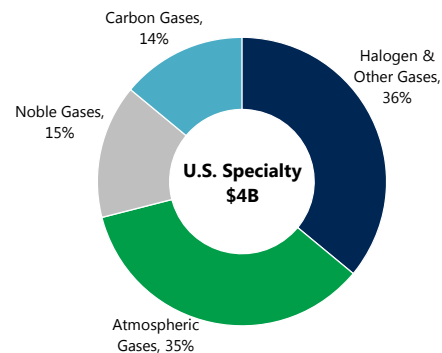
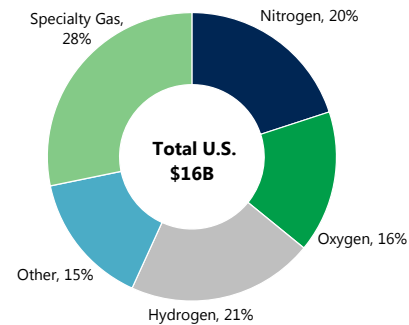
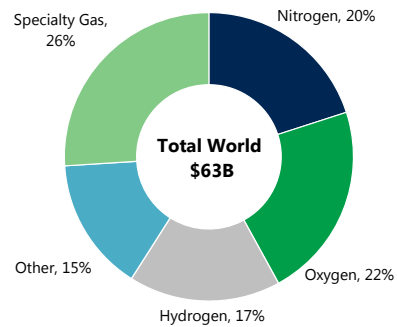
## I. Executive Summary

The global market for industrial and specialty gases represents a \$63 billion industry and encompasses a multitude of manufacturers and distributors. Over the past two years, industrial and specialty gas companies have benefited from strong macro demand drivers such as: (i) improved economic and industrial activity; (ii) increasing energy demand; (iii) increased environmental consciousness and focus on regulating and monitoring activities; (iv) emerging market growth; (v) increased use of technology and digital devices; and, (vi) an aging population with growing healthcare needs. This aforementioned growth and the robust outlook have propelled industrial and specialty gas companies' market valuations. The strong valuations, combined with the following dynamics, should increase the level of industry M&A activity:

- Increasing costs to greenfield new operations and aging Air Separation Units ("ASU") in select regions
- Operating efficiencies garnered from consolidation
- Globalization and harmonization of markets
- Vertical integration enables consolidators to get closer to the end customer and increase their share of higher margin cylinder/packaged products

As shown below, the \$63 billion global and \$16 billion U.S. market for industrial and specialty gases are highly diverse and include a plethora of products. In addition, as end-user demands have become more specific and complex, the need for mixtures, specialty gases, and high purity gases has also increased, which is driving the \$4 billion U.S. specialty gas market.

**Figure 1: Product Summary, 2011**

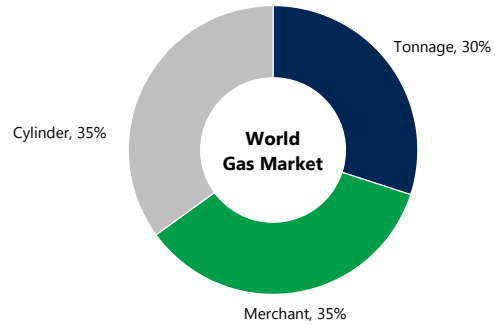


Sources: The Freedonia Group, Air Products, Susquehanna, League Park Estimates

In addition to reviewing the sales by product, the industrial and specialty gas market can also be analyzed by the method of product delivery. The three primary delivery methods include:

- Tonnage – represents large dedicated gas supply facilities that are typically set up on a customer’s site. Traditionally, these facilities have 15-plus year take-or-pay contracts whereas the customer is willing to cover at least 80% of the plant’s volume. Plants that typically use tonnage (also known as “on-site”) facilities are large consumers of oxygen, nitrogen, or hydrogen and include steel mills, chemical and petrochemical plants, or electronics plants.
- Merchant – products that are supplied to customers via large cryogenic tanker trucks. These tanker trucks are typically supplemented with vacuum insulated storage tanks at the customer’s site and are rented from the gas provider. The merchant market is characterized by three-year to five-year contracts for hospitals, metal works, glass factories, or smaller chemical plants.
- Cylinder – represents the smallest portion of supply on a volume basis; however, the meaningfully higher price (up to 100 times greater than merchant products) greatly enhances its market position. The cylinder (also known as “packaged”) market rarely has long-term contracts; however, customers do rent cylinders on a month-to-month basis, which creates meaningful revenue stability as rentals often last for months or even years at a time. The cylinder market is broadly consumed by all of the gas markets discussed in Section II.

**Figure 2: Sales by Distribution Method, 2011**

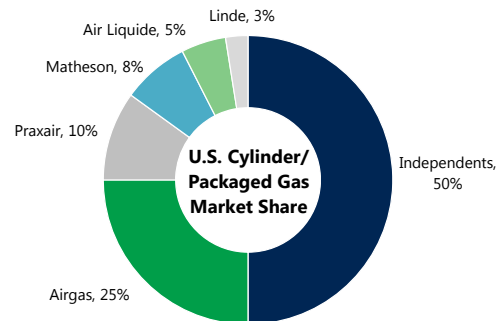
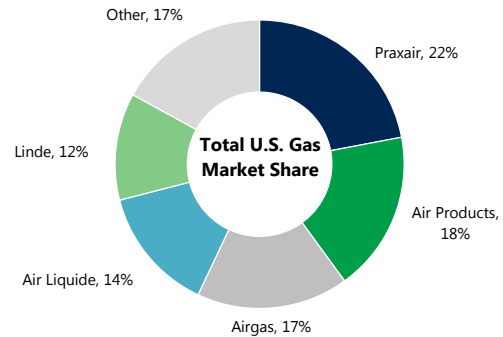


Sources: Credit Suisse, League Park Estimates

At a high level, the U.S. industrial and specialty gas market appears to be fairly concentrated, which is true for the tonnage and merchant markets. However, the cylinder/packaged gas market remains highly fragmented in nature and represents an opportunity for consolidation. For example, within the domestic \$13 billion packaged gas market, the five largest companies (the "Majors") generate \$6.5 billion in sales and control approximately 50% of the market, while the other 50% or \$6.5 billion is comprised of nearly 1,000 independent companies. We believe that regardless of end-market or general economic conditions, the fragmented nature of the cylinder/packaged industrial and specialty gas industry should drive consolidation.

In an effort to position themselves for long-term growth, industrial and specialty gas companies are anticipated to capitalize on the high degree of industry fragmentation to address the shifting end market dynamics and changing competitive environment. As a tactical measure, the majority of the consolidators' acquisitions will be focused on (i) expanding product offerings; (ii) increasing geographic coverage; (iii) enhancing their position in the supply chain; (iv) capturing share in the higher margin cylinder/packaged gas market; and, (v) driving both sales and cost synergies.

**Figure 3: Sales for the U.S. Gas and Cylinder/Packaged Gas Companies, 2011**



Sources: Airgas, Susquehanna, League Park Estimates

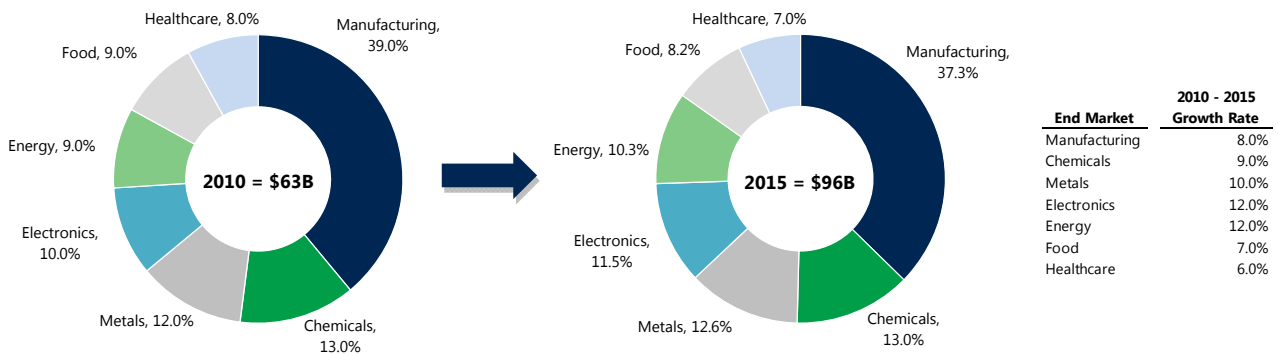
## II. Industry Overview

### End Market Overview

Approximately 39%, 13%, and 12% of industrial and specialty gases are consumed in the manufacturing, chemicals, and metals markets, respectively, while the remaining 35% is consumed in the electronics, energy, food, and healthcare markets. Given the importance of general industrial activity on industrial and specialty gas demand, League Park believes that the recent improvement in economic activity in Asia and North America should continue to drive strong volume demand as well as growth in unit pricing.

Overall, the industrial and specialty gas market is projected to grow 9% annually from 2010 through 2015; however, as shown below, a disproportionate share of the growth is anticipated to be driven by the energy, electronics, and metals sectors.

**Figure 4: Projected Global End Market Sales Growth, 2010 – 2015P**

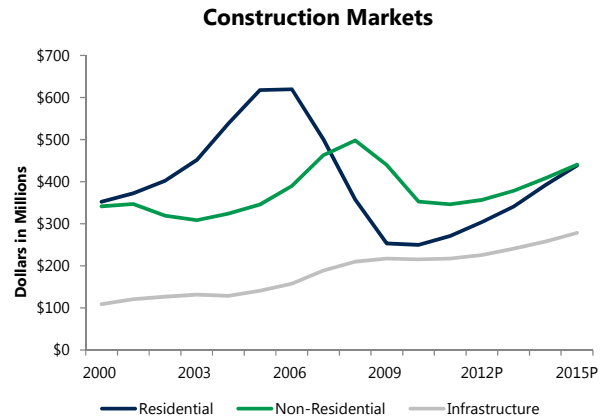


Source: Air Products, League Park Estimates

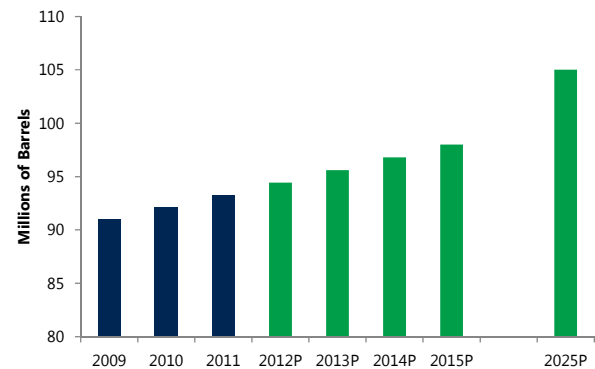
Significant underlying trends will continue to drive growth in the industrial and specialty gas industry. The aforementioned trends include:

- Rebound in global industrial production will drive continued improvements. Over the last 14 years, the industrial and specialty gas market had expanded at approximately two-times the rate of industrial production. As the U.S. and Europe rebound economically, the multiplier effect portends well for industrial and specialty gas companies.
- Anticipated improvements in the overall construction market appear to be around the corner. We believe the low levels of new home inventories, low mortgage rate environment, increasing disposable income, and projected 9.0% U.S. population growth over the next 10 years should fuel an extended sector recovery. Overall, the construction market is a large consumer of manufactured, metal, and chemical products, and will be a key driver (direct and indirect) of industrial and specialty gas consumption.
- Continued increases in global energy demand. The energy market is a significant consumer of gas in the refining and gasification production processes. In terms of the refining process, the U.S. government, among others, is requiring refiners to produce low-sulfur, cleaner burning fuels, which requires large amounts of hydrogen in the refining process. Given this, the on-site hydrogen market is projected to more than double from 2010 to 2020. In addition to the sheer volume growth of hydrogen, outsourced hydrogen plants are anticipated to grow from 20% in 2010 of volume to 30% of volume by 2015. Another notable data point is China's lack of oil resources and abundance of coal. China is increasingly using coal to produce Syngas, which is used as a fuel additive in gasoline. The Syngas production process is a large consumer of oxygen. These sustained demand drivers are expected to drive industrial and specialty gas demand.
- Heightened environmental consciousness and increased focus on regulating and monitoring activities will continue to drive industrial and specialty

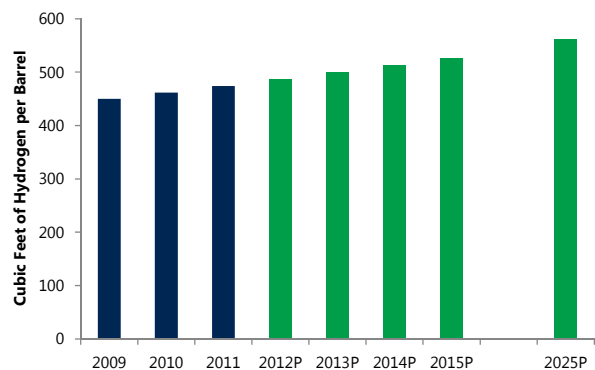
**Figure 5: End Market Indicators**



**Global Refining Capacity**



**Hydrogen in Refining Processes**

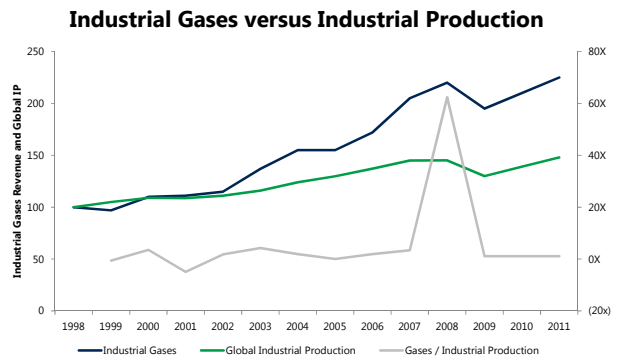
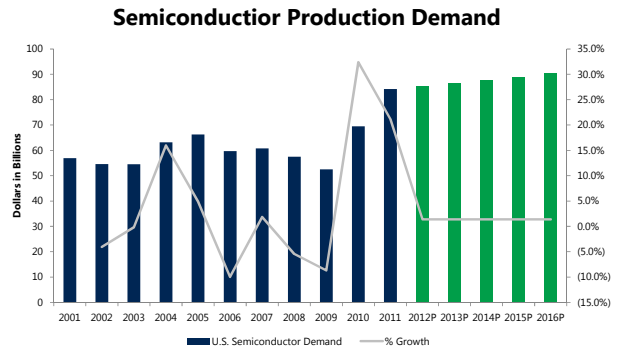


Sources: FMI Industry Report, Praxair, League Park Estimates

gas demand. The U.S. Federal government, as well as governments around the globe, continues to tighten air, water, and waste regulations. For example, the U.S. Federal government requires States to test vehicle emissions and measure the amount of regulated gases emitted to ensure that the vehicle is in compliance with EPA regulations (each vehicle test involves a machine calibration, which requires the consumption of EPA Protocol gases). If States fail to comply with the emission testing standards, the State risks losing meaningful amounts of Federal highway funding. The focus on reducing emissions will continue to drive demand.

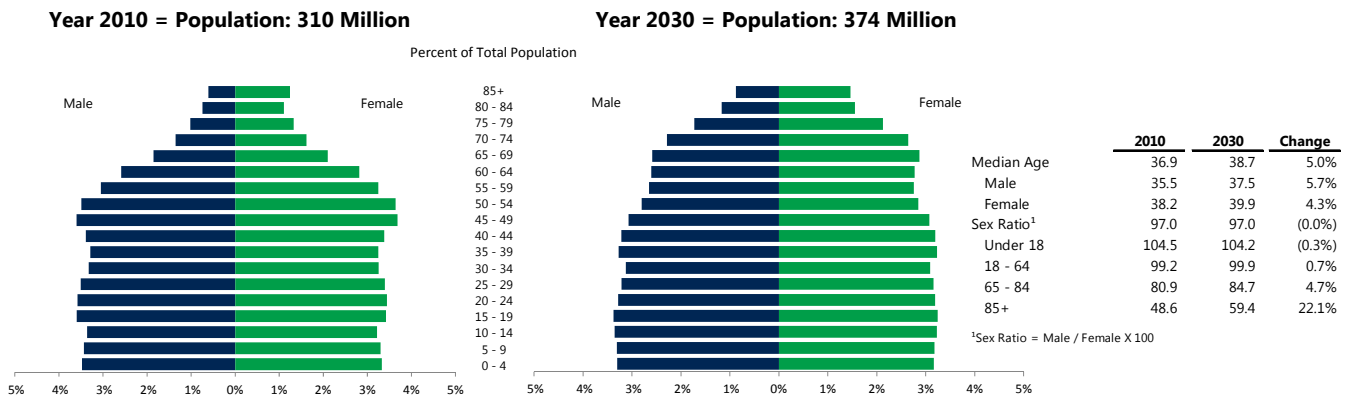
- Increased use of technology and digital devices in a broad-array of environments is driving the semiconductor and display markets. Overall, the electronics market is a large consumer of industrial and specialty gas and is projected to continue to grow, which will drive demand.
- An aging population with growing healthcare needs will continue to drive medical-grade oxygen, anesthetics, and therapeutics consumption. Additionally, the rapidly expanding homecare market represents a highly stable long-term opportunity as governments and insurers look to move patients from expensive hospitals into homecare environments. As a result, continued growth in packaged medical-grade gas products is expected.

**Figure 6: End Market Indicators (continued)**



Sources: Freedonia Group, Susquehana, League Park Estimates

**Figure 7: Population Pyramids of the United States**



Source: U.S. Census Bureau

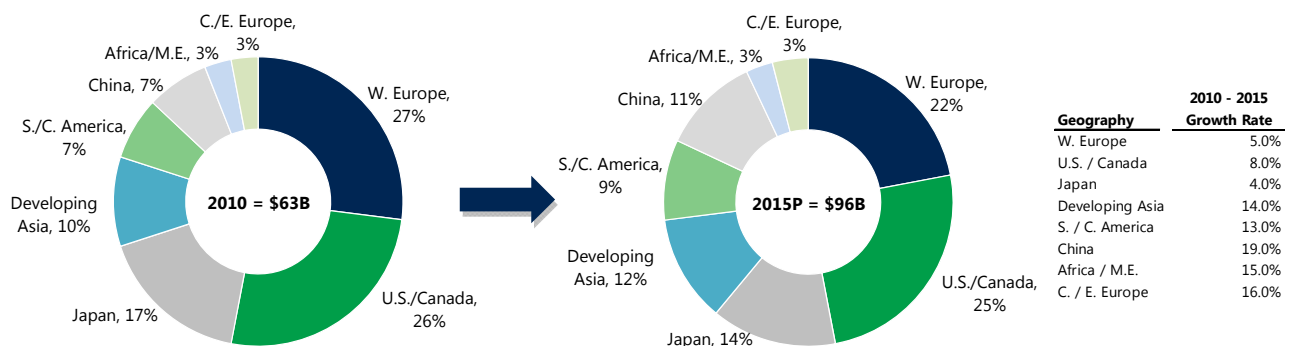


## Regional Summary

Given industrial and specialty gases' reliance on economic activity, it's not surprising that companies with a strong sales presence within Southeast Asia have generated significant historic growth. This growth is also expected to continue as the Asian markets undergo industrialization and their per capita consumption of industrial and specialty gases increases. As a percentage of per capita consumption, the Chinese market is only 13.2% the size of the U.S. and European markets, which represents meaningful growth potential. Elements driving growth in China include: (i) petroleum product shipment growth is contributing to increases in hydrogen demand; (ii) steel production is a large consumer of oxygen; and (iii) growth in electronics will drive demand in gases such as nitrogen. Going forward, China, the leading market for industrial and specialty gas, is projected to grow by 19% through 2015. Although the U.S. market is one of the more mature markets and represents 26% of the global market, it is anticipated to expand by 8% through 2015.

Although demand and production tend to be driven by regional forces, it should also be mentioned that there are some notable exceptions. For example, certain rare noble gases such as krypton and xenon are primarily manufactured in Eastern Europe at aging ASUs that are adjoined to some of the world's largest steel mills. Exceptions such as this, greatly increase the importance of distributors as the transportation and importation of these products tend to be done in smaller quantities and is highly regulated.

**Figure 8: Regional Growth Summary, 2011 – 2015P**



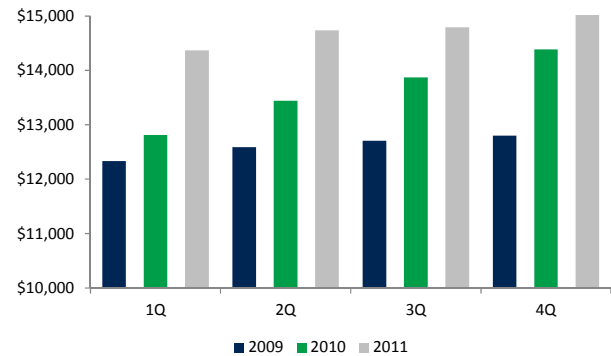
Sources: Air Products, League Park Estimates

## III. Financial Analysis

Fiscal 2011 was another record revenue year for industrial and specialty gas companies. The strong revenue growth is no surprise as the industry is directly correlated to global GDP, which has benefited from the relatively strong economy and low interest rates. In addition to positive end market dynamics, certain sectors within the industrial and specialty gas industry have also benefited from significant inflation in unit selling prices.

All of the publicly-traded industrial and specialty gas companies tracked grew their revenue base in 2011, with median growth of 8.3%. In addition to expanding revenue, the average Earnings Before Interest, Taxes, Depreciation, and Amortization ("EBITDA") margin increased 5.2%. League Park believes that profitability margins will flatten out over the coming years due to increasing commodity prices and competition. Although not intuitive, flat industry profit margins should be a driver of increased M&A activity. Companies typically pursue accretive acquisitions to improve operating efficiencies and garner market share, with the intention of enhancing pricing power.

**Figure 9: Quarterly Industrial and Specialty Gas Revenue, 2009 – 2011**



Note: Quarterly revenue figures are derived from the companies listed in Figure 10  
Source: Capital IQ

**Figure 10: Industry Financial Analysis, 2011**

As of March 31, 2012  
(\$ in 000s)

	Last Twelve Months (LTM)			LTM Margins			YoY Change			
	Revenue	EBIT	EBITDA	Gross	EBIT	EBITDA	Revenue	Gross	EBIT	EBITDA
L'Air Liquide SA	\$19,457.7	\$3,137.0	\$4,651.9	60.5%	16.1%	23.9%	4.9%	(0.8%)	5.0%	4.0%
Praxair	11,252.0	2,436.0	3,439.0	42.6%	21.6%	30.6%	11.2%	(1.2%)	12.4%	11.2%
The Linde Group	18,379.0	2,429.0	3,817.0	36.4%	13.2%	20.8%	7.1%	3.7%	15.8%	2.3%
Air Products & Chemicals	10,113.4	1,640.7	2,509.5	27.1%	16.2%	24.8%	9.4%	(3.1%)	6.8%	4.6%
Taiyo Nippon Sanso (Matheson)	5,786.3	382.4	825.4	33.3%	6.6%	14.3%	(0.1%)	0.0%	(10.0%)	(3.5%)
Airgas Inc.	4,607.8	553.8	820.2	54.2%	12.0%	17.8%	11.5%	(1.4%)	14.4%	12.3%
<b>Low</b>	<b>\$4,607.8</b>	<b>\$382.4</b>	<b>\$820.2</b>	<b>27.1%</b>	<b>6.6%</b>	<b>14.3%</b>	<b>(0.1%)</b>	<b>(3.1%)</b>	<b>(10.0%)</b>	<b>(3.5%)</b>
<b>Average</b>	<b>\$11,599.4</b>	<b>\$1,763.2</b>	<b>\$2,677.2</b>	<b>42.4%</b>	<b>14.3%</b>	<b>22.0%</b>	<b>7.4%</b>	<b>(0.5%)</b>	<b>7.4%</b>	<b>5.2%</b>
<b>Median</b>	<b>\$10,682.7</b>	<b>\$2,034.9</b>	<b>\$2,974.3</b>	<b>39.5%</b>	<b>14.7%</b>	<b>22.3%</b>	<b>8.3%</b>	<b>(1.0%)</b>	<b>9.6%</b>	<b>4.3%</b>
<b>High</b>	<b>\$19,457.7</b>	<b>\$3,137.0</b>	<b>\$4,651.9</b>	<b>60.5%</b>	<b>21.6%</b>	<b>30.6%</b>	<b>11.5%</b>	<b>3.7%</b>	<b>15.8%</b>	<b>12.3%</b>

Source: Capital IQ

## IV. Valuation Metrics

Publicly-traded industrial and specialty gas companies significantly outperformed the broader equity market (i.e., S&P 500 Index) over the last ten years, with the majority of the growth occurring since 2010. As of March 30, 2012, the median public company is trading at 98.4% of its 52-week high. League Park believes the long-term demand drivers discussed previously are key elements that are driving share price growth and consequently, company valuations.

Valuation multiples for industrial and specialty gas companies, should sustain their levels throughout 2012, exemplifying positive end market trends. The median EBITDA multiple for industrial and specialty gas companies was 10.0x as of March 31, 2012. The December 31, 2011 valuation levels were below fiscal 2010 levels, but have bounced back nicely in the first quarter of 2012. The escalation in EBITDA multiples was broad-based, as all 6 companies tracked by League Park experienced an increase in valuation. The median equity value of the public group increased 7.9% from March 31, 2011 to March 31, 2012. Figure 12 depicts League Park's valuation analysis of select companies in the industrial and specialty gas market.

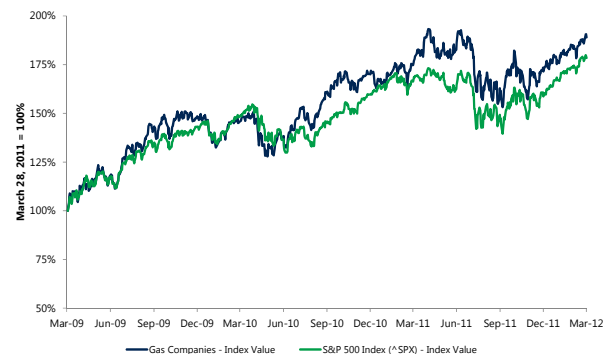
League Park believes that the positive long-term outlook for the global industrial and specialty gas market should continue to drive the share price performance of the public companies.

The relatively strong public valuations should enable strategic buyers to provide some benefits of acquisition synergies to potential sellers through a higher purchase price, yet still realize earnings accretion post-closing.

**Figure 11: Relative Stock Price Performance**

As of March 31, 2012

	Price as of 03/31/12	52 Week		% of High
		High	Low	
L'Air Liquide SA	\$133.25	\$134.64	\$107.85	99.0%
Praxair	114.18	114.89	88.64	99.4%
The Linde Group	178.92	182.21	126.64	98.2%
Air Products & Chemicals	92.00	98.01	72.26	93.9%
Taiyo Nippon Sanso (Matheson)	7.09	8.52	6.14	83.2%
Airgas Inc.	88.68	89.90	58.00	98.6%
<b>Low</b>	<b>\$7.09</b>	<b>\$8.52</b>	<b>\$6.14</b>	<b>83.2%</b>
<b>Average</b>	<b>\$102.35</b>	<b>\$104.69</b>	<b>\$76.59</b>	<b>95.4%</b>
<b>Median</b>	<b>\$103.09</b>	<b>\$106.45</b>	<b>\$80.45</b>	<b>98.4%</b>
<b>High</b>	<b>\$178.92</b>	<b>\$182.21</b>	<b>\$126.64</b>	<b>99.4%</b>



Source: Capital IQ

**Figure 12: Industry Valuations**

As of March 31, 2012  
(\$ in 000s)

	Market Cap	Enterprise Value*	Total Debt /		Enterprise Value / LTM		
			LTM EBITDA	Capital	Revenue	EBIT	EBITDA
L'Air Liquide SA	\$37,667.4	\$45,069.4	2.0x	20.1%	2.32x	14.4x	9.7x
Praxair	34,083.4	41,084.4	1.9x	16.1%	3.65x	16.9x	11.9x
The Linde Group	30,605.9	38,989.7	2.5x	23.5%	2.12x	16.1x	10.2x
Air Products & Chemicals	19,374.6	23,724.1	1.8x	19.2%	2.35x	14.5x	9.5x
Taiyo Nippon Sanso (Matheson)	2,812.7	5,523.0	3.5x	50.3%	0.95x	14.4x	6.7x
Airgas Inc.	6,772.0	8,971.3	2.7x	24.9%	1.95x	16.2x	10.9x
<b>Low</b>	<b>\$2,812.7</b>	<b>\$5,523.0</b>	<b>1.8x</b>	<b>16.1%</b>	<b>0.95x</b>	<b>14.4x</b>	<b>6.7x</b>
<b>Average</b>	<b>\$21,886.0</b>	<b>\$27,227.0</b>	<b>2.1x</b>	<b>25.7%</b>	<b>2.22x</b>	<b>15.4x</b>	<b>9.8x</b>
<b>Median</b>	<b>\$24,990.3</b>	<b>\$31,356.9</b>	<b>2.0x</b>	<b>21.8%</b>	<b>2.22x</b>	<b>15.3x</b>	<b>10.0x</b>
<b>High</b>	<b>\$37,667.4</b>	<b>\$45,069.4</b>	<b>3.5x</b>	<b>50.3%</b>	<b>3.65x</b>	<b>16.9x</b>	<b>11.9x</b>

\* - Enterprise Value includes Preferred Equity and Cash.

Source: Capital IQ

## Valuation Trends

Recent public valuation multiples for industrial and specialty gas companies have shown improvement since the last economic cycle that began in 2008. Since 2001, industrial and specialty gas companies have been focused on servicing the billowing industrial, energy, chemical, and healthcare markets. With industrial growth moderating over the medium-term, we anticipate that many industrial and specialty gas companies will be focused on minimizing their exposure to moderating commodity prices and garnering market share, including some companies that heretofore were not aggressive acquirers, but are highly interested in continuing vertical integration initiatives to consolidate the supply chain. In particular, we believe the cylinder/packaged gas companies will continue to be prime targets for the Majors as they consolidate the supply chain. Key traits that have attracted buyers to industrial and specialty gas companies are the growing energy, environmental, and technology markets, as well as the high degree of fragmentation. We believe that owners of industrial and specialty gas companies have the opportunity to realize robust valuations in the current market environment. In addition, as the public markets put pressure on companies to grow, it is anticipated that this will inherently create competition for acquisitions and the possibility for higher valuations.

**Figure 13: Strategic and Financial Valuation Drivers**

Strategic Buyer- Valuation Drivers
<ul style="list-style-type: none"> <li>• Geographic expansion</li> <li>• Product line extension</li> <li>• Downstream integration</li> <li>• Defensible market position</li> </ul>

Financial Buyer- Valuation Drivers
<ul style="list-style-type: none"> <li>• Defensible market position with barriers to entry</li> <li>• Leveragable balance sheet or cash flows</li> <li>• Limited cyclicity</li> <li>• Limited capital expenditures</li> <li>• Strong and visible exit alternatives</li> </ul>

Source: League Park Estimates

**Figure 14: Trends in Industry Valuations**

As of March 31, 2012

	3/31/2012	12/31/2011	12/31/2010	12/31/2009	12/31/2008	12/31/2007	12/31/2006	12/31/2005	12/31/2004	12/31/2003
L'Air Liquide SA	9.7x	9.6x	10.4x	9.8x	7.9x	11.0x	10.1x	9.6x	8.4x	8.2x
Praxair	11.9x	11.4x	12.5x	12.4x	8.0x	13.0x	10.4x	10.9x	10.6x	11.2x
The Linde Group	10.2x	8.4x	9.2x	8.6x	6.5x	9.4x	12.9x	6.5x	6.0x	5.4x
Air Products & Chemicals	9.5x	8.3x	9.5x	9.9x	5.8x	10.7x	9.5x	8.8x	9.3x	9.8x
Taiyo Nippon Sanso (Matheson)	6.7x	6.4x	7.7x	11.5x	6.6x	8.9x	10.5x	10.1x	8.2x	9.2x
Airgas Inc.	10.9x	10.1x	9.8x	8.0x	6.7x	10.2x	9.2x	9.5x	9.9x	9.4x
<b>Low</b>	<b>6.7x</b>	<b>6.4x</b>	<b>7.7x</b>	<b>8.0x</b>	<b>5.8x</b>	<b>8.9x</b>	<b>9.2x</b>	<b>6.5x</b>	<b>6.0x</b>	<b>5.4x</b>
<b>Average</b>	<b>9.8x</b>	<b>9.0x</b>	<b>9.9x</b>	<b>10.0x</b>	<b>6.9x</b>	<b>10.5x</b>	<b>10.4x</b>	<b>9.2x</b>	<b>8.7x</b>	<b>8.9x</b>
<b>Median</b>	<b>10.0x</b>	<b>9.0x</b>	<b>9.7x</b>	<b>9.9x</b>	<b>6.7x</b>	<b>10.5x</b>	<b>10.3x</b>	<b>9.6x</b>	<b>8.9x</b>	<b>9.3x</b>
<b>High</b>	<b>11.9x</b>	<b>11.4x</b>	<b>12.5x</b>	<b>12.4x</b>	<b>8.0x</b>	<b>13.0x</b>	<b>12.9x</b>	<b>10.9x</b>	<b>10.6x</b>	<b>11.2x</b>

Source: Capital IQ



## V. Industrial and Specialty Gas M&A Trends

### **Market Fragmentation**

The cylinder/packaged industrial and specialty gas industry is fragmented with over 1,000 total participants competing. However, due to high freight costs, location of ASUs, and unique regional product demand, we believe that the industrial and specialty gas markets need to be assessed by individual gas products and potentially on a regional basis. For example, although the industrial and specialty gas market appears to be dominated by a select group of global companies, the participants tend to compete on a regional basis with a plethora of participants. League Park believes that these dynamics will result in continued acquisition activity of companies that have a strong niche product or regional presence.

### **Down-Stream Integration**

Nearly all of the Majors have publicly stated their intent to lead down-stream integration in the industrial and specialty gas industry (the purchase of distributors). Given that the Majors have captive production units and shortages of certain products exist in the marketplace, such as helium, they have been provided significant pricing power in the short-run. League Park believes that the Majors will look to increasingly capture end-customer relationships over the long-run and control the entire supply chain. Down-stream integration should enable the Majors to provide turnkey gas solutions, capture additional value in the supply chain, and enhance cash flow and earnings stability. In addition, down-stream integration enables the Majors to increasingly capture share within the higher-margin cylinder/packaged market. Examples of down-stream integration by Majors are Praxair's acquisition of the American Gas Group, Airgas' acquisition of ABCO, and Linde's acquisition of Air Products European homecare business. League Park believes that the Majors will continue to utilize a portion of their cash hoard, which currently exceeds \$4.7 billion, to complete acquisitions of down-stream assets, and take advantage of the fragmented nature of the industrial and specialty gas industry.

### **Globalization**

Although the domestic market is projected to grow in the high single-digits (8%), many of the Majors are turning to geographic expansion as a means to generate double-digit revenue growth and appease Wall Street analysts. Historically, one approach has been to complete bolt-on acquisitions in contiguous regions, which enables the acquirer to realize significant synergetic benefits. These benefits include centralized administrative functions, efficient production and logistics planning, and pricing power. An alternative is to acquire stand-alone operations that maintain a substantial national or geographic presence. The benefits of acquiring a regionally dominant/stand-alone operation are immediate cash-flow generation and the ability for the acquirer to leverage its newfound market position and execute bolt-on acquisitions.

League Park expects that the Majors will continue to be a major driver of acquisition activity. Many of the Majors have identified geographic expansion within the U.S., South and Central America, and Asia as a primary growth strategy.

### **Implications of Eco-Friendly Production**

We believe the global adoption of sustainable energy production has positioned the industrial and specialty gas market at a unique inflection point. Example growth drivers are: (i) hydrogen and oxygen increasingly continue to be important components of the complex refining and gasification processes, which greatly reduce emissions and produce cleaner fuel; (ii) increased production of photovoltaics; (iii) increased focus on vehicle emission standards with BAR gases and EPA protocols; and (iv) purification benefits of carbon dioxide in water treatment and oxygen in wastewater treatment. The aforementioned drivers are anticipated to translate into accelerating sales and market penetration for gases with environmental applications.

Unlike other previous innovations in the industrial and specialty gas industry, the adoption of gases that have environmental applications will initially be driven by end-consumers pulling the product through the supply chain as consumers and governments continue to demand goods that are produced in environmentally sustainable processes or support reduced emissions. Given this rapidly expanding market opportunity, many companies are looking to enhance their position in products that have environmental applications.



# Industrial and Specialty Gas M&A Trends

## **Recent Activity**

The pace of M&A activity in the industrial and specialty gas industry was moderate in 2011 with relatively robust valuations. 31 transactions were reported in 2011, a 41% increase over 2010. The most active acquirers were larger, integrated global companies that are looking to: (i) strengthen a regional market; (ii) expand their geographic footprint; or (iii) expand/enter a new product line. League Park also believes activity in 2010 and 2011 was impacted by Air Products hostile takeover attempt of Airgas, which diverted Airgas' attention from acquisitions towards its hostile takeover defense.

The majority of companies acquired in 2011 had revenues in the \$5 million to \$50 million range. In conjunction with the increase in deal volume and value, there was also a noticeable trend towards the acquisition of specialty gas and international operations. The trend towards acquiring specialty gas and international operations should continue as the Majors remain on the path of consolidation.

In addition to strategic acquirers, the industrial and specialty gas industry continues to be an attractive sector for many private equity firms, primarily due to a positive long-term outlook, degree of fragmentation, and available exit opportunities. Many private equity firms have taken a keen interest in industrial and specialty gas companies due to the projected growth and earnings visibility in their respective end markets. Examples of this visibility include: (i) volume growth that is supported by emissions regulations (i.e., carbon dioxide emissions); (ii) energy security (i.e., coal to fuel); and, (iii) the expanding population that is driving healthcare and food consumption. Since the end markets have a high degree of visibility, reasonable forecasts can be developed for a three- to four-year period.

It should also be noted that the low relative cost of industrial and specialty gases in relation to the total manufacturing cost also makes the market attractive and more stable than others. For example, carbon dioxide represents a low portion of a carbonated beverage's cost, but is extremely important for its performance. In addition, in many industrial processes, gases represent a fixed volume for the process, versus a variable input that fluctuates with production volume. The fixed volume need is that many industrial and specialty gases are used as a blanketing agent to create an inert atmosphere and as long as the process is

running, the same volume of gas is required. This unique end market visibility and stability provides a private equity firm with some assurance of the financial performance of the investment during the typical three- to seven-year holding period.

The degree of fragmentation in the industrial and specialty gas industry provides many opportunities for private equity firms to acquire platform investments and then grow the business to a larger scale through add-on acquisitions, in many cases at a lower valuation than the initial platform (due to size and market position).

As a class of financial investors, private equity groups typically make an investment with varied exit alternatives, including a sale or public offering. Due to the continued industry consolidation, a financial investor in the industrial and specialty gas industry can usually rely on a sale to a strategic buyer as a likely exit scenario. We believe that the current acquisition strategies of the major industrial and specialty gas companies add more strategic parties to the M&A market and strengthen sale possibilities. In conjunction with a sound exit strategy, private equity firms also have the opportunity to create value through multiple expansion. If a private equity firm transitions its investment from a small niche company into a dominant player, it can realize more value, since larger companies are commonly worth more due to greater (i) market share and pricing power; (ii) purchasing leverage; (iii) customer, end market, and geographic diversification; and (iv) perceived management talent.

Key company specific elements that private equity investors desire in their investments include: (i) defensible market position with barriers to entry; (ii) limited cyclicality; (iii) leveragable balance sheet or cash flows; (iv) limited maintenance capital expenditure requirements; and (v) strong and visible exit alternatives. Industrial and specialty gas companies with the aforementioned traits will experience significant interest from private equity investors, which will provide their owners with a broad array of liquidity alternatives in a sale process. In addition, industrial and specialty gas companies with products that are targeted towards the energy or electronics markets, or improve sustainability and eco-friendly production will be highly attractive to private equity buyers.



### VI. 2012/2013 Expectations

Although the domestic industrial and specialty gas industry is relatively mature and tied to overall economic activity, the industry remains fragmented and possesses meaningful long-term growth fundamentals. In an effort to accelerate growth, many of the Majors will continue to consummate acquisitions. In addition to generating financial growth, League Park believes additional factors also will drive consolidation, such as the desire to (i) vertically integrate and “control” the customer; (ii) product line extensions; (iii) expansion of production or mixing/blending capabilities; and (iv) entering new geographic markets for diversification. We also believe that the Majors will be aggressively targeting independent distributors that have a strong presence in the higher-margin cylinder/package market.

Overall, League Park expects the consolidators to increase their acquisition activity in 2012 and 2013. In general, these global consolidators have strengthened their balance sheets over the last few years and have ample liquidity (\$4.7 billion of cash and \$1.1 billion of annual cash flow) to pursue acquisitions. Many of these consolidators have targeted the U.S. as part of their defined growth strategy, which should create a very favorable M&A environment. Within less capital-intensive sectors (i.e. cylinder/package) of the industrial and specialty gas industry, private equity firms have also begun to become more interested and competitive, which provides another liquidity alternative for owners of private businesses.

2012 and 2013 also may bear witness to another round of mega-transactions, similar to transactions consummated in the mid 2000's (i.e. Linde/BOC). League Park believes Air Products attempted takeover of Airgas is the forerunner to other potential global consolidations.

Due to the fairly frothy market environment, the return of healthy industry valuations, and strong M&A interest by global strategic acquirers and private equity groups, League Park believes that owners of industrial and specialty gas companies will have numerous options to consider in 2012 and beyond.



# League Park Overview

## LEAGUE PARK OVERVIEW

League Park is a boutique investment bank that professionally and ethically advises clients on strategies aimed to maximize shareholder value. We assist middle market companies with transactions that generate value through mergers and acquisitions, recapitalizations, capital raising, and outsourced corporate development.

Whatever the transaction, our clients receive specialized attention from senior bankers at every step in the deal process. Our team has decades of investment banking, corporate development, private equity, and operational experience, completing over 300 transactions across a diverse range of industries in the past 25 years.

### Advisory Capabilities:

Mergers and Acquisitions  
Recapitalizations  
Capital Raising  
Outsourced Corporate Development

### Industry Expertise:

Business Services  
Healthcare  
Technology  
Retail and Consumer Products

### Industrial

- Automotive
- Building Products and Construction
- Distribution
- **Industrial and Specialty Gas**
- Industrial Services
- Metals
- Paper, Print and Packaging
- Specialty Chemicals
- Specialty Glass

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## AMERICAN GAS GROUP



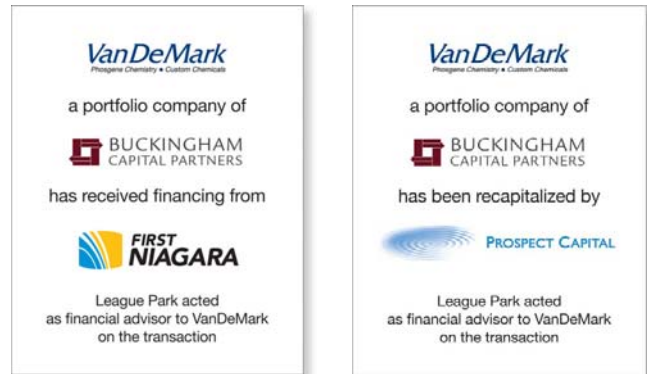
### Company Overview

American Gas Group is one of the largest independent specialty gas distributors in North America. The company specializes and packages a variety of specialty gases including EPA Protocols, hydrocarbons, VOC mixtures, reactive mixtures, high-purity chemicals, and research-grade gases in addition to industrial and medical gas products. The American Gas Group procures its products on a global basis and is a known industry leader for supply of rare gases and gas mixtures. The company's unique packaging capabilities and breadth and depth of inventory provide customers with one-stop for all their specialty gas and hard goods needs.

### Transaction Overview

Given American Gas Group's strong market position and its history of significant growth, the shareholders decided to explore their strategic options with regard to a potential sale transaction. After reviewing the competitive landscape in North America, League Park and the company prepared detailed synergy analysis for the most likely acquirer of the business, Praxair, which is the largest industrial gases company in North and South America. In late 2011, Praxair acquired the American Gas Group and is focused on continuing to drive its strong market position and its history of growth.

## VANDEMARK CHEMICAL



### Company Overview

VanDeMark Chemical ("VanDeMark"), a portfolio company of Buckingham Capital, is a leading global producer of specialty, intermediate, and catalyst chemicals utilizing phosgenation chemistry. The company serves a diverse base of loyal customers from a broad range of end markets, including pharmaceutical, agricultural, paints and coatings, plastics and polymers, and sealants and adhesives. VanDeMark maintains key customer and distribution relationships throughout North and South America, Europe, Australia, and Asia. The company's research and development department has distinguished VanDeMark within its customers' organizations as a strategic partner in their new product development and commercialization efforts.

### Transaction Overview

In an effort to reduce its cost of capital and simplify a complex ownership structure, the shareholders decided to recapitalize VanDeMark's balance sheet. The company engaged League Park to research the debt markets and provide strategic advice on its recapitalization alternatives. In early 2012, VanDeMark received \$34.1 million in financing from First Niagara Bank and Prospect Capital. The refinancing resulted in a significant reduction in VanDeMark's overall cost of capital and favorably positions the company to achieve its growth objectives.



## SOURCES AND DISCLOSURE

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