Regional markets

Focus on: Global update

Midway through 2014 and the global industrial gases industry is in the midst of a gradually improving business environment. Despite being offset in some areas by external variables such as energy pricing, weather systems and political landscapes, higher underlying volumes appear to be a common theme across the recent financial releases of the industry's major players.

Though The Linde Group described economic growth as 'still anything but strong' in its first quarter 2014 earnings release, Air Liquide cited a 'gradually improving global business environment' in its own first quarter results. So while the wider context may not be perfect, it is improving.

When it comes to the factors that the industry can control and capitalise on, there is cause for optimism. The energy boom at play and the headway in healthcare are two significant trends.

Products and megatrends

Underpinning the message of increased underlying volumes are seemingly strong dynamics in merchant gases.

Air Products cited higher energy pass-through and strong underlying volumes in Merchant Gases and Electronics and Performance Materials as driving a Q2 2014 sales increase of 4% over the prior year quarter; more specifically, higher Merchant Gases volumes were recorded in the US and Canada, Asia and Latin America. Air Liquide reported increased liquid volumes in its Industrial Merchant division in Europe and the Americas in Q1 2014 compared to the prior year quarter, while in its Large Industries division oxygen volumes were up in Europe and the Asia-Pacific, and hydrogen demand rose in the Americas and Asia-Pacific too.

For Linde, the fastest rate of product growth in Q1 2014 was seen in the onsite business, while a solid increase in revenue was seen in the liquefied gases product area and there was a slight rise in revenue in cylinder gases.

Praxair, Inc. saw increased onsite volumes in North America from new project start-ups for hydrogen supply to refinery customers in Q1 2014, higher volumes and pricing in South America and Europe, and volume growth in Asia and India, China and Korea in particular.

At the heart of much of the industry's growth in 2013/14 are three megatrends: energy; environment; and healthcare.

Healthcare

According to Ohio-based investment bank and M&A experts League Park, the global healthcare market will be driven by three factors: increasing population; ageing population; and increased consumption of healthcare in developing countries. League Park Director Wayne Twardokus says, "The global population is expected to increase from 6.8 billion in 2010 to 8.3 billion by 2030 (36.5% growth). The increased global population is expected to drive demand of gas consuming industries such as energy, chemicals, food, water, and construction materials."

"In addition to the increasing overall population, the globe's middle class is projected to increase from 2 billion in 2010 to 5 billion in 2030, which will meaningfully drive consumption of goods and services as billions of additional people begin to spend."

Not only is the population increasing, it is ageing too; as the 'Baby Boom' population ages, so too will the consumption of healthcare. "Currently, the growth rate of the older population (1.9%) is significantly higher than that of the total population (1.2%)," Twardokus explains. "In the near future, the difference between the two rates is expected to become even larger as the Baby Boom generation starts reaching older ages in several parts of the world. By 2025-2030, projections indicate the population over 60 will be growing 3.5 times as rapidly as the total population."

In addition to both of these demographics is an increased consumption of healthcare in developing countries. While the healthcare momentum continues in both North America and Western Europe, as evidenced by the growth in volumes and revenues for both Air Liquide and Linde of late, the potential is arguably stronger in emerging economies.

Twardokus affirms, "Looking at the US and China – as a percentage of GDP, the US spends 18% on healthcare while China only spends 5%. China's 2012 GDP was over $8 trillion, if China was to grow to just 50% of the US' healthcare spending it would equal another $500bn in healthcare expenditures, or $125m in industrial gas market growth. This analysis assumes that gas spending is 0.025% of healthcare spending."

As described above, the healthcare business is currently of increasing importance to the mature gas markets of North America and Western Europe, with this sector consuming around 10% of industrial gas and healthcare spending in the US thought to be nearing 20% of GDP. League Park suggests that companies should be watching the changing methods of care delivery, with healthcare reform and continued cost pressures set to greatly alter how care is administered.

"A key element for the industrial gas market is the method of distribution that will be required as the delivery of healthcare changes," Twardokus affirms.

Energy

The energy revolution in the US is driving natural gas fracturing ('fracking') and oil recovery, with US production of natural gas expected to expand dramatically and the country projected to become a net exporter by 2018 (for more on energy in North America, see Americas). In addition to other notable effects on the market, there is expected to be an increase in demand for liquid nitrogen and carbon dioxide (CO_2) for enhanced oil recovery (EOR) activities in new and existing oil and gas basins.

$76.5bn

gasworld valued the global gases business at $76.5bn in 2013, up from $74bn in 2012 and rising to a projected $80bn by the end of 2014.

Hydrogen energy

The field of hydrogen production and storage equipment for industry and the energy markets would certainly seem to be in growth mode, if the Q1 2014 results of France-based McPhy Energy are anything to go by.

The company recorded impressively strong growth in the quarter of 50% year-on-year, attributed to strong growth in the industry driven by new commercial momentum and an expended offering. Sales of small and medium hydrogen production units and associated services, as in 2013, accounted for the major share of consolidated revenue.

For Plug Power, who experienced wider-than-expected losses in Q1 2014, hydrogen generation and distribution are seen as critical to expanding margins and increased revenue in the future.

LNG

While Air Products reported an 11% decrease in Equipment and Energy sales in Q2 2014 over the prior year, operating income of $23m increased 11% driven largely by strong LNG project activity. Linde also 'made progress in the promising LNG business' in its reporting period (Q1).

For China's CIMC ENRIC, the company's energy equipment business – which includes LNG trailers and tanks – continued to be its dominant segment in 2013 as revenue rose by 25.8% and accounted or just under 54% of the group's total turnover. LNG equipment was the main revenue contributor.

Americas

As stated earlier, Praxair, Inc. – the largest industrial gases company in North and South America – saw increased onsite volumes in North America from new project start-ups for hydrogen supply to refinery customers in Q1 2014, as well as higher volumes and pricing in South America.

Growth in the onsite business and liquefied gases product area in North America was also noted by Linde in Q1 2014, in addition to increased revenue generation in the electronics gases market. Linde described high rates of inflation and low rates of growth in South America too.

Air Liquide, following its high-profile acquisition of Voltaix Inc. last year, shared the positivity in electronics as it recorded a revenue increase of 42.6% in Electronics, especially in the ALOHA™ and electronic specialty gases business.

Top 10 Regional Industrial Gas Markets (2012)
Source: gasworld Business Intelligence

US	$16.2bn
JAPAN	$7.0bn
CHINA	$6.9bn
GERMANY	$4.0bn
FRANCE	$2.9bn
ITALY	$2.6bn
BRAZIL	$2.4bn
CANADA	$2.2bn
UK	$2.0bn
SPAIN	$1.6bn

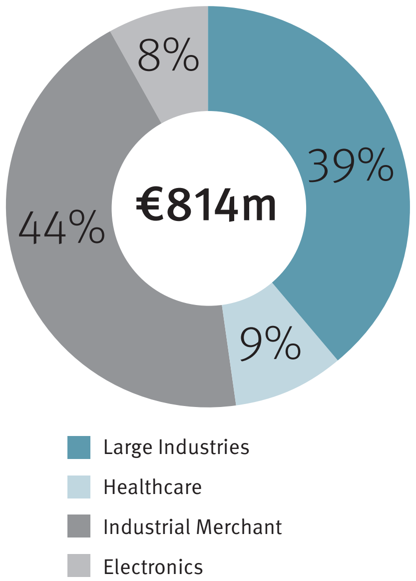
Energy is one of the biggest stories in North America, with the aforementioned expectation that US production of natural gas will expand dramatically. So what effect will the improving energy/hydrocarbon market in North America have on the gases industry?

In four words, says Twardokus, 'solid long-term demand'. He explains, "The demand will not only be driven by the large volume of industrial gas needed for the extraction and refining process, but the energy position is driving large investments in chemical and manufacturing production."

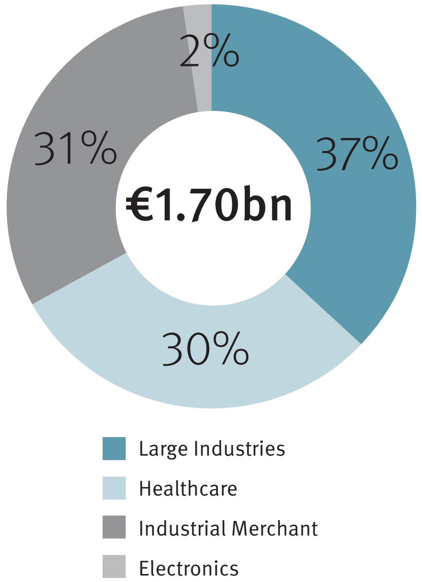
"It should be noted that much of the recently discovered shale gas is a lot 'wetter' than western formations and contains ethane, butane, and pentane. Wet gas requires more processing to strip the methane from wet gases. A representative impact for the industrial gas market is the cracking of ethane into ethylene (used to make plastics), a process that consumes hydrogen and oxygen. The US is seeing billions upon billions being spent on capacity to process the natural gas liquids."

"Further," Twardokus adds, "as North America's global energy position has improved, we are seeing the re-shoring of large volumes of chemical production. Private equity investors are clamoring to ▸

Air Liquide – Americas Gas & Services Revenue
Source: Air Liquide, 2014 1st Qtr Revenue report



Air Liquide – Europe Gas & Services Revenue
Source: Air Liquide, 2014 1st Qtr Revenue report



find energy intensive chemical companies that will benefit from a sustained period of reduced input costs."

The improving energy market in North America is also starting to see the potential for the US to be a net exporter of LNG.

Europe

According to the Messer Group, economic development in many European countries is now stagnating. Despite this, and a project-related decline in sales of around €62m, the group exceeded its financial targets for the business year of 2013 and brought on investments in new gas production facilities in France, Austria and Spain.

Air Liquide noted that revenue for Europe was almost stable in Q1, reflecting regular and solid growth in the healthcare sector and Gas and Services for industry in developing economies. In the company's Large Industries unit, oxygen volumes for the steel and hydrogen industry increased significantly throughout Europe, particularly in Western Europe. Industrial Merchant revenue was down slightly (0.8%) due to the disposal of small businesses in Western Europe, while revenue continued to grow steadily in the region's developing economies, with liquid volumes up substantially.

Italy-based SOL S.p.A experienced a rise in first quarter sales attributed not just to growing sales abroad, but also an improvement in Italy where growth was 2.4%. "In a climate of light economic recovery in some European countries, but still stagnant in Italy, in the first quarter of 2014 SOL Group achieved a growth of 4.2% in sales volume compared with Q1 2013," the company said.

Japan

Linde reported in its Q1 results that business trends in the Asia-Pacific segment were hampered mainly by unfavourable exchange rate effects. This would certainly correlate with the business climate in Japan of late, **gas**world understands.

gasworld Business Intelligence has recently published a full report on the Japanese gases business, a market it valued at $5.9bn in 2013, down from around $7bn in 2012 – a decline attributed to currency effects. "Revenue evolution in dollar terms between 2012 and 2013 suffered greatly from a more than 20% decline in the value of the Japanese Yen. To that end, if we assume a 2012 exchange rate for 2013 then average annual growth would approach 3.5% p.a. during the preceding ten-year period," says Marcus Jakt, Business Analyst at **gas**world Business Intelligence. "This means that while in Yen terms revenues were up by 2.8% year-on-year in 2013, in US dollar terms there was a 16% decline."

The Japanese gases business is of course in the headlines at the moment with news of Mitsubishi Chemical Holdings Corp.'s intention to secure a majority stake in tier one gases company Taiyo Nippon Sanso (TNSC). Japanese media reported the plans to make a $980m (¥100bn) offer to nearly double its stake in TNSC from 27% to a majority holding of 51% (*see news, page 14*).

Despite the relative maturity of both the Japanese economy and gases industry, many observers are cautiously optimistic of a renaissance in Japan's economy, while **gas**world's recent report sees some potential upsides going forward including new onsite opportunities for those able to convince the country's chemical and refining industries of moving from captive supply to onsite supply instead. The 2020 Olympics in Tokyo is also likely to boost industrial gas demand.

Emerging economies

As is often the case, it is the emerging economies that attract much of the industry's focus. With its admission that development in many European countries is stagnating, Messer has reaffirmed a desire to focus on the emerging markets that it has a presence in, while Air Liquide noted that developing economies maintained their high growth rate (+14%) in Q1. The company recorded a rise in oxygen volumes in the Asia-Pacific region in the quarter, as well as increases in electronics sales in the region.

Praxair also achieved growth in Asia in Q1 (up 7% over prior year quarter), driven by volume growth in India, China and Korea and higher pricing for helium and rare gases.

Linde described positive trends in the onsite business throughout almost all of its Europe, Middle East and Africa (EMEA)

REGIONAL MARKETS

REGIONAL MARKETS

bracket, with revenue in the liquefied gases and cylinder gas businesses in the region at the same level as in Q1 2013. The company achieved volume increases in all product areas in the Greater China region, with more modest growth in these products in South & East Asia.

League Park alludes to the huge opportunity in the emerging economies and cites application growth as key, with Twardokus underlining the sheer scale of the potential as he explains, "In terms of application growth in emerging countries, ignoring specific applications, one could infer dramatic global growth."

"...if China alone grew to 50% of the US per capita consumption of industrial gas, it would result in 10% total market growth"

"Spiritus Consulting's analysis shows that when comparing the per capital consumption of industrial gas to the US, the consumption in developing countries is a small fraction – China 20%, Mexico 12%, Brazil 10%, and India 2%. To quantify the growth potential, if China alone grew to 50% of the US per capita consumption of industrial gas, it would result in $8bn of incremental consumption or 10% total market growth."

China

China is arguably the most significant of the emerging markets. Most companies would acknowledge an economic slowdown in China in 2013/14, with Messer, Hangzhou Hangyang (Hangyang) and Hunan Kaimeite Gases (Kaimeite) among those describing this trend. Yet the opportunities are still abundant in the country.

Kaimeite, with most of its business engaged in carbon dioxide and the recovery and purification of hydrogen and fuel gases, highlighted products and services for the growing environmental industry, a pillar for the development of a green economy, as one such prospect. Another element of a green economy is of course LNG, with LNG equipment an aforementioned driver for growth in China for CIMC ENRIC.

Aside from clean fuels and green technologies, opportunities exist in the 'traditional' gases industry in China. Linde noted that the most positive trends in its Asia-Pacific segment in Q1 were seen in the Greater China region, where the rate of growth was almost into double-digits and volume increases were achieved in all product areas.

For plant manufacturer Hangyang, there are still openings in the ASU business in China; despite acknowledging an over-capacity in small and medium-size ASUs in its 2013 annual results, the construction of new coal chemistry projects in the future is expected to expedite new ASU demand.

Outlook

Looking ahead to the second-half of 2014, the consensus seems to be that growth will be modest in line with the gradual pace of global economic development. "Mediocre growth with strong optimism," Twardokus affirms.

"The US industrial and global economy continues to experience modest growth in the first half of 2014 as the pace of the recovery continues to be delayed. The delayed recovery can be seen in the soft organic growth sales results; however, the market environment continues to point towards solid growth potential. Many companies are optimistic about the second half of 2014 and 2015."

Praxair has declared that its expects base volumes for the remainder of 2014 to continue to 'reflect modest growth in line with the macro-environment' and Linde, too, expects liquefied gases and cylinder gas products to perform in line with macro-economic trends.

At this point it is perhaps pertinent to refer to the comments of Airgas President and CEO Michael L. Molinini, asserting that, "We remain focused on the things we can control…" Second-half 2014 will likely see the industry continue to pursue acquisition activity, operational efficiencies, and the realisation of project pipelines. Air Liquide cited an investment backlog of €2.5bn as an important source of growth over the medium term, with Linde also reflecting on healthy project pipelines, especially in the onsite business.

Top Three Industrial Gas Regions (2013)
Source: gasworld Business Intelligence

NORTH AMERICA	$20.2bn
WESTERN EUROPE	$18.9bn
NORTH PACIFIC RIM	$17.5bn

In terms of mergers and acquisitions (M&A), League Park sees aggressive acquisitions on the radar for the next six months. "With slow quarter-over-quarter growth, the majors will be looking to show top line and EPS growth which can be achieved through acquisitions," Twardokus says.

Another element of things that the industry can control itself is operational efficiencies; there still appears to be emphasis on targeting productivity to achieve strong operating margins/profit. With these efforts aggressively pursued throughout the industry over recent years, **gas**world asked League Park if we can expect to see companies reach a limit in terms of leveraging efficiencies.

"I don't think it will be dramatic, but there is still room for improvement," Twardokus replied. "An example of this is Airgas, which is still working through SAP, which it expects to drive another $75m of incremental operating income. Another opportunity is customer density and accretive acquisitions."

REFERENCES

Financial results used in this feature:

Airgas – Fourth quarter and full year 2013
Air Liquide – First quarter 2014
Air Products – Second quarter fiscal 2014
CIMC ENRIC – Full year 2013
Hangyang – Full year 2013
Kaimeite – Full year 2013
Linde Group – First quarter 2014
McPhy Energy – First quarter 2014
Messer Group – Full year 2013
Praxair, Inc. – First quarter 2014
SOL S.p.A – First quarter 2014