Linde AG
Germany, Specialty Chemicals

A+ STABLE

Corporate profile

Linde is an integrated industrial gases and engineering company founded by the inventor Carl von Linde in 1879. The conglomerate formerly consisted of gases, material handling and refrigeration divisions, until the latter two were divested in 2006 and 2004, respectively. After acquiring two industrial gases companies, Sweden's AGA in 1999 and UK's BOC in 2006, Linde is now one of the four leading suppliers of industrial gases worldwide. It is active in about 100 countries and led the market in 2015 in healthcare, bulk and cylinders. Its engineering division focuses, among other activities, on air separation and hydrogen/syngas plants built on the customer's site to supply major customers locally; gases produced at these sites are also supplied to other gases activities. The gases division generated about 85% of group revenues and 95% of EBITDA in 2016.

Ratings

Corporate rating	A+
Outlook	Stable
Short-term rating	S-1+

Rating rationale

Scope Ratings affirms its A+ issuer rating for Germany-based Linde AG (Linde). The short-term rating is S-1+. The rating Outlook is Stable.

The ratings reflect Scope Ratings' view of the group's highly credit-supportive business risk profile, owing to the industrial gases industry's limited cyclicality and high degree of protection, as well as Linde's strong market position as one of the four leading global suppliers of gases. The ratings are also supported by our assessment of the group management's extremely conservative financial policy and strong commitment to the ratings assigned.

A key ratings factor is the very stable and resilient industrial gases industry, evidenced by its limited historical cyclicality. In 2009, the global gases industry declined by only a single-digit rate, significantly less than more cyclical sectors such as automotive. In our view, this is because industrial gases are firmly embedded inputs in many industrial production processes and involve long-term contracts with take-or-pay conditions, which is a stabilising element in recessions. Customers generally tend to be loyal with a considerable interest in ensuring that a working supplier relationship is not interrupted so as to maintain service at all times. Competitors offering marginally lower prices are usually unable to entice customers away. In addition, we believe there are significant entry barriers to potential newcomers in the form of know-how, capital resources and established regional positions. It thus makes little sense for a potential new entrant to build a new plant next to a competitor's existing facility.

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Related Research // Methodology

Corporate Ratings Methodology, January 2017

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We believe that Linde’s competitive position supports the ratings even more strongly than the benefits gained from the industry in which it operates. This is explained by Linde’s leading market positions in many countries and regions as well as across product groups. Linde is one of the four global ‘gas majors’, with solid market presences not only in Europe but also ‘away from home’, thereby differentiating it in particular from its two global US-based peers. The last two points bear a direct link to our diversification-related rating driver, which we assess as very strong in the context of Linde’s ratings. Furthermore, Scope believes the company’s competitive position also benefits from stable and comparatively high EBITDA margins between 25% and 30% in the gases division, enabling consistent and strong free cash flow. Given the above factors we believe Linde’s business risk profile to be extremely defensive and supportive for the ratings.

Linde’s financial risk profile reflects our perception of the management’s very conservative financial and liquidity policies. In addition, key credit metrics have been improving since 2012 – the year of the Lincare acquisition – and we expect further upside in the next two years based on the group’s capacity to generate stable and sizeable annual free cash flows of about EUR 300m after dividends and interest. This enables further deleveraging, which should not be endangered even in times of relatively low revenue growth as in 2016. Group sales increased by 0.2% in 2016, (the gases division’s revenues rose by 1.4%, on a comparable basis, respectively), while group EBITDA after non-recurring items was stable at just below EUR 4bn.

As the possible merger with Praxair Inc. still needs to be cleared by both regulators and Praxair shareholders – as well as Linde shareholder’s sufficient participation in the exchange offer - over a lengthy timeline potentially stretching into the second half of 2018 (it was approved by the Linde supervisory board in early June 2017) we are not in a position to reflect the transaction in the rating yet. In addition, while existing ratings relate to Linde AG, the new Ireland-based holding company’s management will need to decide on that entity’s choice of rating agencies.

Outlook

The Stable Outlook reflects Scope’s expectation that Linde’s financial risk profile will continue to improve as it did in 2016. Specifically, Scope views credit metrics aligning with a low A category to be in line with the corporate ratings, as indicated by an FFO-to-Scope-adjusted-debt ratio of about 40% and a Scope-adjusted-debt-to-EBITDAR ratio of about 2x. In general, we believe potential future rating changes could be triggered by Linde’s financial risk profile, as its business risk profile is rated relatively higher and is deemed very stable.

A higher rating could be triggered by a sustainable improvement in the credit metrics detailed above. A negative rating action could result from a more aggressive financial policy or a sustained negative deviation from ratios commensurate with the present ratings.

Rating drivers

Positive	Negative
Credit-supportive industry risk for industrial gases, given its limited cyclicality – even in times of extreme crisis – and high barriers to entry, coupled with a low substitution risk	Comparatively lower growth realisation compared to some peers
Very strong competitive position, reflecting Linde's high and stable operating margins, very high degree of diversification and global position as one of only four industrial gases producers with a strong international market position High recurring profits enable consistent and high free cash generation	Engineering division suffering from low business volumes in the petrochemicals industry due to the low oil price
Conservative financial policy	
Extremely conservative liquidity policy	

Rating-change drivers

Positive	Negative
Significant improvement in credit metrics	Sustained drainage of free cash flow as a consequence of lower margins, leading to significantly lower credit metrics
	Change to a more aggressive financial policy

Financial overview

			Scope estimates	
Scope credit ratios	**2015**	**2016**	**2017F**	**2018F**
EBITDAR/ interest cover (x)	10.2x	11.8x	12.9x	16.4x
SaD/ EBITDAR	2.0 x	2.0x	1.9x	1.6x
Scope-adjusted FFO/ SaD	39%	40%	41%	49%

			Scope estimates	
P&L (EUR m)	**2015**	**2016**	**2017F**	**2018F**
Sales	17,944	16,948	17.0-17.5 bn	18.0-18.5 bn
EBITDA (reported, after non-recurring items)	3,955	3,972	3.8-4.0 bn	4.3-4.5 bn
Margin	22.0%	23.4%	22.6%	24.1%

			Scope estimates	
Cash flows (EUR m)	**2015**	**2016**	**2017F**	**2018F**
Funds from operations (FFO)	3,202	3,310	3.1-3.3 bn	3.5-3.7 bn
Free cash flow after dividends	734	740	0.3-0.4 bn	0.5-0.7 bn
Capital expenditure (gross)	1,894	1,794	1.9-2.0 bn	1.9-2.0 bn

			Scope estimates	
Balance sheet (EUR m)	**2015**	**2016**	**2017F**	**2018F**
Gross financial debt	9,561	8,602	8.0-8.2 bn	7.6-7.8 bn
Cash & cash equivalents (available)	1,638	1,394	1.3-1.5 bn	1.2-1.4 bn
Scope-adjusted debt (SaD)	8,296	8,263	7.8-8.0 bn	7.3-7.5 bn

Business risk profile

Industry risk

Defensive characteristics

Scope's ratings reflect our positive perception of the defensive characteristics inherent in Linde's business risk profile. They are also supported by our evaluation of the company's underlying industry and market position, our view of the generally long-term contracts with minimum-volume offtake clauses which Linde has with many onsite customers, as well as the less-pronounced price-elastic demand in the industrial gases industry compared to other sectors.

Low-risk industry

We view the industrial gases industry as relatively stable and protected by high entry barriers. While industrial production appears a valid proxy for gases demand indicating a high cyclical exposure, severe macroeconomic downturns are usually mitigated for industrial gases suppliers by multi-year contracts and customer focus on uninterrupted production. Thus, even the severe downturn in 2009 only led to a single-digit decline in this industry's revenues, compared to more than 30% for cyclical sectors such as automotive. We also view entry barriers as high due to the relatively high capital requirements for the construction of networks and plant infrastructure, as well as the industry's consolidated structure.

According to our Corporate Ratings Methodology, the combination of the three industry risk drivers results in an industry risk for Linde of A+.

Competitive position

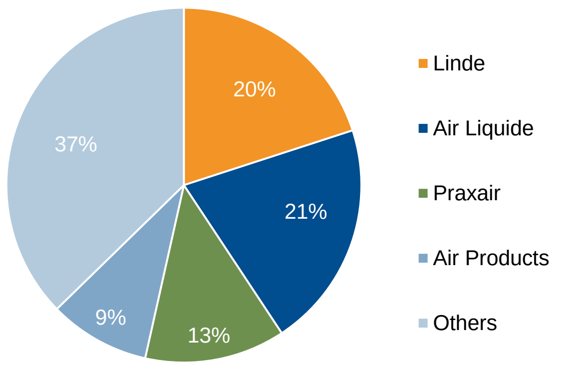
Superior competitive position

In Scope's opinion, Linde has an excellent competitive position in a credit-supportive underlying industry. This is based on our assessment of the three drivers as per Scope's evaluation of competitive position: market share, diversification and operating margins.

Linde among top four global suppliers

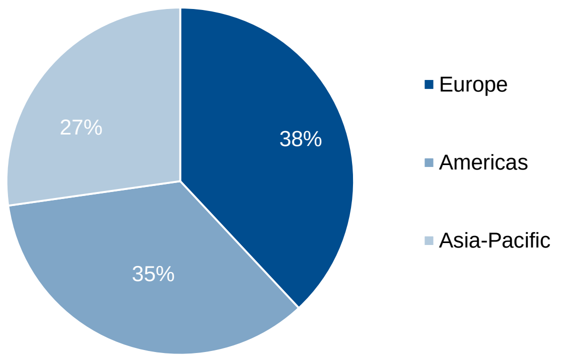
Together with Air Liquide, Praxair and Air Products, Linde is one of the four truly global suppliers of industrial gases. Linde and Air Liquide are both significantly larger on an absolute scale than the two US-based players, also with regard to 'away from home' positions. The consolidated nature of the global industry is demonstrated by the four largest companies' accumulation of a total market share of more than 60%. This degree of concentration has actually risen from 2016 onwards, following Air Liquide's acquisition of US-based Airgas (USD 5.5bn of revenues in 2015, equivalent to a roughly 7% global market share).

Figure 1: Industrial gases – global market shares in 2016



Source: Scope Ratings

Figure 2: Linde industrial gases division's geographic revenue breakdown 2016



Source: Linde

Best-in-class diversification

Linde's diversification is very strong, in our opinion. This is based on its geographical exposure, with the three largest continents almost evenly represented (see Figure 2 for 2016 figures), as well as our positive view of its products (bulk, onsite, cylinders and healthcare) and exposure to a broad circle of customer industries. In 2016, Linde led the market in cylinders, bulk and healthcare (after acquiring Lincare in 2012), while Air Liquide appears to lead in the large industries/onsite area.

Strong and sustainable operating margins

Scope regards Linde's operating margins as comfortable and typical for the industry. While its 25-30% EBITDA margins in the gases division are not best-in-class (Praxair makes 32%), they nevertheless enable Linde to generate very comfortable and sustainable free cash flow. EBITDA margins have tended to fall within a very narrow range of 25% and 28% since 2007, due to a resilient and protected business risk profile, as well as, in particular, the mitigating effects of long-term contracts and loyal customers in times of recession. In 2016, the EBITDA margin in the gases division increased by almost one percentage point to 28.3%, in a year-on-year comparison, which is a good achievement in our view given the low-growth environment, especially in Europe.

Industry growth rates of limited comparability

The world's key industrial gas suppliers were able to generate positive growth rates in the first quarter of 2017. On a comparable basis (excluding currency movements and M&A transactions), Linde, Air Liquide and Air Products all recorded like-for-like growth rates of between 2% and 3% in this period (without adjusting for positive energy prices). However, due to the differing product and geographical exposure of the individual companies, the comparability of growth rates remains limited.

Business risk profile rated AA-

Scope assesses Linde's business risk profile as AA-. This includes the A+ industry risk and our competitive positioning analysis (AA). The latter reflects Linde's solid market position and excellent diversification, somewhat moderated by slightly below-par operating margins.

Financial risk profile

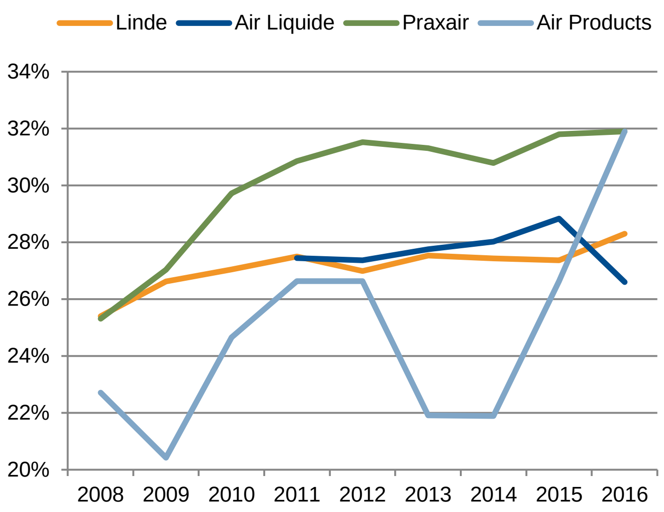
Credit metrics

Linde's key credit metrics have been improving since 2012, the year of the Lincare takeover. The transaction led to gross financial debt increasing by about EUR 2.4bn in 2012, aided by a EUR 1.4bn capital increase. Linde's consistent application of free cash has led to deleveraging since then (except for 2014, when it was held back by lower profits and a EUR 300m pension contribution).

Despite more stagnant revenue and EBITDA trends for Linde in 2016, the group again managed to achieve significant deleveraging. Gross financial debt was reduced by almost EUR 1bn compared to 2015 due to the robust free cash generation of EUR 740m after dividends in 2016, also supported by slightly lower capex (net of divestitures) and a significant positive contribution from working capital management.

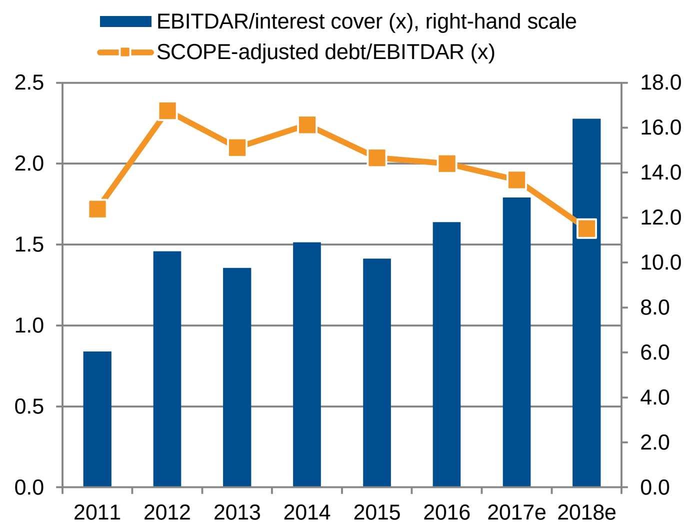
As a result, key credit metrics improved again slightly over 2016, in line with the ratio guidelines for Linde.

Figure 3: EBITDA margins industrial gas suppliers



Source: Linde, Scope Ratings

Figure 4: Credit metrics continue to improve



Source: Linde, Scope Ratings, 2017 and 2018 values reflect mid-point projections

Scope adjusts Linde's net debt by hybrids (50% equity content) until 2015, operating leases and pensions (50% of unfunded pension obligations, as pension assets cover annual payments significantly in excess of 6x, our threshold for this treatment according to Scope's Corporate Rating Methodology). In 2016, EUR 441m of operating leases and EUR 613m of pension obligations were added to adjusted debt, while we deduct from gross adjusted debt all off-balance sheet cash and marketable securities, except for EUR 200m of cash that is deemed restricted and is therefore not centrally available. We have adjusted for hybrids (50% equity content) until 2015, in line with our view that deeply subordinated and permanent instruments with flexible payment mechanisms are equity-like. As Linde paid back its hybrid bonds in 2016, this item is no longer included in Scope-adjusted debt.

Liquidity

Extremely conservative liquidity management

We consider Linde's liquidity management to be extremely conservative. This is based on the significant excess cash on balance sheet – far ahead of business requirements – on a sustained basis. At the end of 2016, Linde had balance sheet liquidity of EUR 1.6bn, of which we would qualify only EUR 200m as restricted and therefore not centrally available at all times to potentially pay back debt. In combination with an undrawn committed bank line of EUR 2.5bn and annual free cash flow of more than EUR 400m after dividends and interest, Linde's available liquidity by far outstrips its short-term financial debt maturities of EUR 1.8billion.

Short-term rating of S-1+

Based on the facts detailed above and Linde's solid investment grade rating, Scope's short-term rating is S-1+. This reflects our perception of the company's protected and cash-generative business model on a sustained basis. If all internal and external sources of liquidity are included, coverage of short-term debt is well above 2x, a level we view as commensurate with the ratings.

Financial risk profile rated A-

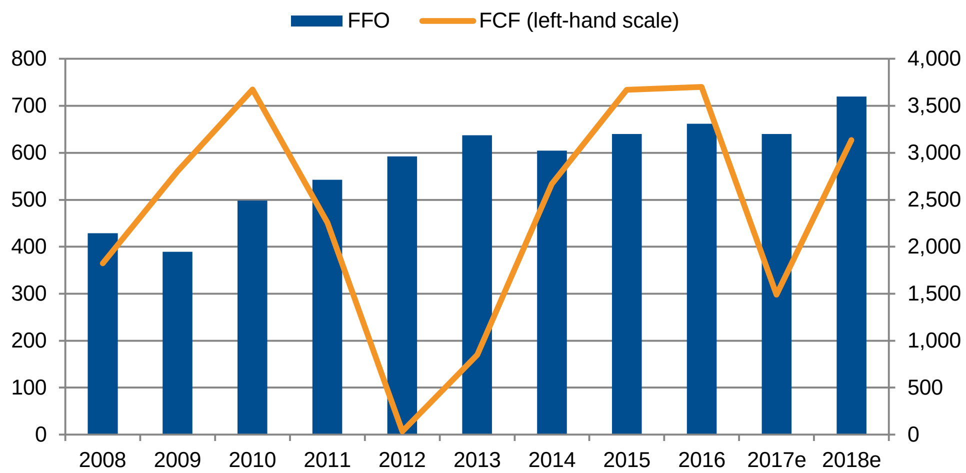
Scope assesses Linde's financial risk profile as A-. This reflects the level of its financial key metrics as well as our view of the company's sound liquidity profile.

Key supplementary rating drivers

Conservative financial policy

Scope regards Linde's financial policy as sound and committed, underscored by its deleveraging trend since 2012. We also take the view that management's official leverage target of a 2.5x maximum net-financial-debt-to-EBITDA needs to be seen in context. While this target does translate into a Scope-adjusted leverage of about 2.8x (2015), we believe that this figure is of a more theoretical nature given management's commitment to strong investment grade ratings, without being realistically applicable to the future. Looking to 2018, we believe the risks for testing Linde's official leverage target are very low as the business is very cash-generative and we do not realistically see any acquisitions of Lincare's magnitude.

Figure 5 – Supportive free cash flow generation (EUR m)



Source: Linde, Scope Ratings

Outlook

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Regulatory disclosures

Important information

Information pursuant to Regulation (EC) No 1060/2009 on credit rating agencies, as amended by Regulations (EU) No. 513/2011 and (EU) No. 462/2013

Responsibility

The party responsible for the dissemination of the financial analysis is Scope Ratings AG, Berlin, District Court for Berlin (Charlottenburg) HRB 161306 B, Executive Board: Torsten Hinrichs, Dr Stefan Bund

Rating prepared by	**Rating committee responsible for approval of the rating**
Olaf Tölke, Lead Analyst	Werner Stäblein, Committee Chair

The rating outlook indicates the most likely direction of the rating if the rating were to change within the next 12 to 18 months. A rating change is, however, not automatically ensured.

The long-term and short-term issuer ratings for Linde AG were first assigned and last updated on 11 August 2016.
The long-term and short-term issuer ratings for Linde Finance B.V. were first assigned and last updated on 18 October 2016.
The senior unsecured debt issued by both Linde AG and Linde Finance B.V. were first rated and last updated on 10 February 2017.

Information on interests and conflicts of interest

The rating was prepared independently by Scope Ratings but for a fee based on a mandate of the rated entity. The issuer participated in the rating process.

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Prospectus, website of the rated entity/issuer, valuation reports, other opinions, annual reports/semi-annual reports of the rated entity/issuer, current performance record, detailed information provided on request, annual financial statements, data provided by external data providers, interview with the rated entity, external market reports, interview with the issuer, press reports / other public information

Key sources are the issuer, third parties, public domain and Scope internal sources.

Methodology

The methodology applicable for this rating (Corporate Rating Methodology) is available on www.scoperatings.com. The historical default rates of Scope Ratings can be viewed on the central platform (CEREP) of the European Securities and Markets Authority (ESMA): http://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml. A comprehensive clarification of Scope's default rating, definitions of rating notations and further information on the analysis components of a rating can be found in the documents on methodologies on the rating agency's website.

Examination of the rating by the rated entity prior to publication

Prior to publication, the rated entity was given the opportunity to examine the rating and the rating drivers, including the principal grounds on which the credit rating or rating outlook is based. The rated entity was subsequently provided with at least one full working day, to point out any factual errors, or to appeal the rating decision and deliver additional material information. Following that examination, the rating was not modified.

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