



Deal Logic Linde / Praxair

WHU Finance Society

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Currently in news for the last moment approval from the Federal Trade Commission to make the Praxair and Linde merger a reality, the development of the deal has not been short of hurdles. Initially, Praxair-Linde faced resistance from the European Union under the accusation that the merger would hinder competition. Later, both companies had to undertake multiple selling transactions to meet the anti-trust requirements of the countries in which they operated. Praxair and Linde were finally able to meet the requirements in early November for a successful completion of the merger.

Linde and Praxair, the world's no. 2 and no. 3 industrial gas suppliers respectively, were in the spotlight due to the size of the merger and the impact that it would have on the gas industry, almost making them a monopoly firm.

On 01.06.2017, Linde and Praxair signed a Business Combination Agreement to become a leading industrial gas company. The aim of the merger was to combine and leverage the unique strengths of each company: Linde's long-standing leadership in engineering and technology with Praxair's operational excellence.

The annual synergies and cost reductions from the merger were approximated to be USD 1.2bn and the combined current market value in excess of USD 70.0bn as of 31.05.2017.

After the announcement of the merger, the companies faced hurdles with respect to antitrust approvals in countries such as the United States, Brazil, South Korea, China, and India. And in order to comply with the German financial market rules, Praxair and Linde had to complete the deal by the deadline of 24.10.2018.

On 22.10.2018, two-plus years after it was first announced, the USD 86.0bn merger between Praxair and Linde had been approved by the U.S. Federal Trade Commission, clearing the last significant hurdle to creating the world's largest industrial gas supplier. Praxair and Linde have agreed to divest the required facilities within four months of signing the agreement containing consent orders in October. This will be done in order to settle charges that the merger would violate federal antitrust law and be anti-competitive.

The Munich-based Linde was required to sell off USD 3.3bn of its U.S. operations to German competitor Messer Group, while Danbury-based Praxair sold most of its European operations to Japan's Taiyo Nippon Sanso for USD 6bn.

With the global industrial gases market forecasted to grow from USD 75.51bn in 2016 to USD 106.26bn by 2022, exhibiting a CAGR of around 6%, the deal would reap great benefits for Linde-Praxair. The rising demand from chemical & petrochemical, metal fabrication & production, automobile, healthcare & pharmaceuticals, and food & beverage industries are some of the major reasons for the growth witnessed in global industrial gases market.

Despite a massive global disinvestment drive, the merged entity of Linde-Praxair is still expected to emerge as the leader in global industrial gases market by a reasonably comfortable margin. The merger will change the face of the global industrial gases business, bringing together two leading companies in the industry and leveraging the proven strengths of each, and will employ about 80,000 people across more than 100 countries.

All values in EURm, except Price, Initial (EUR) & Price, Paid (EUR)

Summary

Target	Linde AG
Acquirer	Praxair Inc
Date, Announ.	16.08.2016
Date, Effective	31.10.2018
Deal Attitude	Friendly merger under equal
Consideration	Merger Stock Swap
%Held/%Acq.	0.00 / 100.00
Deal Value	38,181.2
Price, Initial	169.38
Price, Paid	169.38
Total Fees	78.17
Premium*, 1d	31.3
Premium*, 1w	34.2
Premium*, 4w	41.4

* Pre-bid (%)

Sources: Thomson Reuters Eikon; [The Linde Group](#); [Praxair](#)

Synopsis

- Praxair Inc of the US agreed to merge with Linde AG via tender offer, in a stock swap merger of equals transaction valued at EUR 33.8bn (USD 35.2bn).
- Linde ordinary shareholders were to receive 1.54 ordinary shares from the combined company and Praxair common shareholders were to receive 1 ordinary share per share held. Based on Praxair's closing stock price of EUR 118.24 (USD 123) on 19 December 2016, the last full trading day prior to the announcement, each Linde share was valued at EUR 182.09 (USD 189.42)

LTM Transaction Multiples

	Target	Acquirer	Industry†
EV/Sales	2.4x	n/a*	n/a*
EV/EBITDA	11.1x	n/a*	n/a*
EV/EBIT	22.4x	n/a*	n/a*
P/E	27.4x	n/a*	n/a*

*Not available as Praxair, due to missing data

† Of Target

Rationale

- The purpose of the transaction is for Praxair Inc and Linde AG to increase shareholders value, strengthen their operations in the industrial gas markets, creating a more diverse and balanced market portfolio and allowing to offer new solutions to their customers
- As a result of the transaction, annual synergies, in the form of cost as well as revenue synergies, are expected to be EUR 1.1bn (USD 1.2bn).
- This transaction is structured as a tax inversion.

Financial Advisors

Target	Fees	Acquirer	Fees
BAML	14.9	Credit Suisse	21.6
Morgan Stanley	14.9		
Macquarie Group	12.7		
PWP	12.7		
Goldman Sachs	1.5		

All values in EURbn, except EPS

Recent News*

- **2018/11** Linde group will pay the same dividend per share as Praxair.
- **2018/09** Chinese authorities sign off on Linde-Praxair Merger.
- **2018/04** Linde and Praxair intend cash merger squeeze out for Linde AG after completion of business combination.
- **2016/08** German industrial gases group Linde and U.S. rival Praxair have ended talks to create a USD 60+bn market leader [...] after failing to agree where to locate key activities and who would run the business.
- **2016/03** Linde, the world leader supplier of gases to industry and health care providers, has been hit by declining revenues and falling stock price. Now, a merger between French rival Air Liquide and U.S.-based Airgas threatens its pole position.

* Prior To Deal
Sources: : [The Linde Group](#); Thomson Reuters Eikon; Handelsblatt

Company Description

- The Linde group is one of the four leading providers of chemical gases worldwide. The company was founded as a publicly traded company in 1879 in Munich, Germany and had around 55,600 full-time employees at the end of 2017.
- The group comprises of two divisions:
Gases Division: compressed and liquified gases, other chemicals
Engineering Division: gas production and processing services worldwide

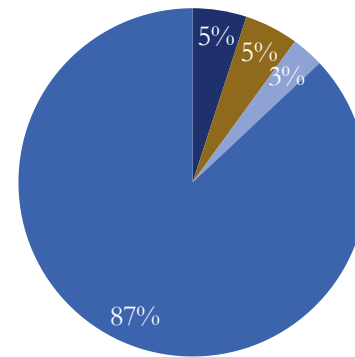
Key Management & Ownership Structure



Prof. Dr. Aldo Belloni
CEO
Since 2016



Dr. Sven Schneider
CFO
Since 2017



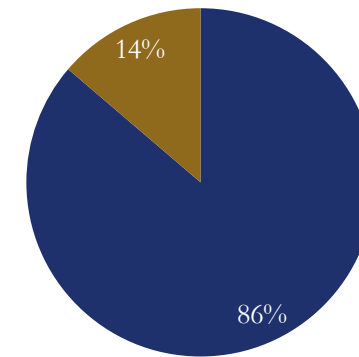
■ Norges Bank ■ MFS
■ Artisan Partners ■ Freefloat

Key Financials

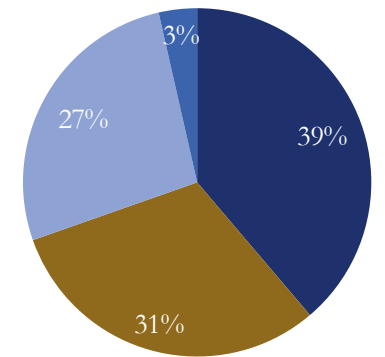
	2016A	2017A	2018E	2019F	2020F
Sales	17.0	17.1	17.3	18.0	18.6
% growth	(5.6)	1.0	1.1	3.8	3.4
EBITDA	4.1	4.2	4.3	4.5	4.7
% margin	24.2	24.6	25.1	25.3	25.5
Net Inc.	1.3	1.7	1.6	1.8	1.9
% margin	7.7	9.8	9.5	9.9	10.5
EPS	6.99	9.04	8.88	9.40	9.98

Sales Split

FY2017



■ Gases ■ Engineering



■ Europe ■ Asia/Pacific
■ North America ■ South America

All values in EURbn, except EPS

Recent News*

- **2018/10** Praxair announces satisfaction of final conditions to close business combination with Linde AG
- **2018/08** EU regulators approve with conditions the Linde, Praxair deal
- **2018/07** Linde and Praxair try to save EUR 73bn merger after antitrust blow
- **2018/07** Linde, Praxair in talks to sell assets to consortium of Messer, CVC
- **2018/07** Japan's Taiyo Nippon to buy some Praxair's European assets for EUR 5.9bn
- **2018/06** Praxair starts up new air separation plants in Southern China petrochemical park
- **2018/05** Linde says could talk to Praxair on threshold for sell-offs

* Prior To Deal
Sources: [Praxair](#), Thomson Reuters Eikon

Company Description

- **Praxair, Inc.** is an American worldwide industrial gases company headquartered in Danbury, Connecticut, United States. It is the largest industrial gases company in North and South America, and the third-largest worldwide by revenue.

- The company operates in three main segments:

Industrial gases: oxygen, nitrogen, argon, and rare gases

Process gases: carbon, dioxide, helium, hydrogen, electronic gases, and acetylene

Surface technologies: wear-resistant and high-temperature corrosion-resistant metallic and ceramic coating and powder

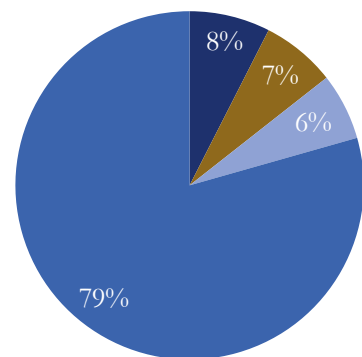
Key Management & Ownership Structure



Stephen F. Angel
CEO
Since 2017



Matthew J. White
CFO
Since 2014



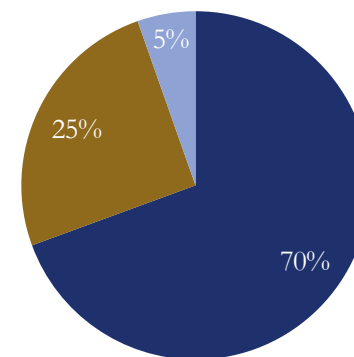
■ Vanguard, Inc. ■ Capital World
■ BlackRock, Inc. ■ Freefloat

Key Financials

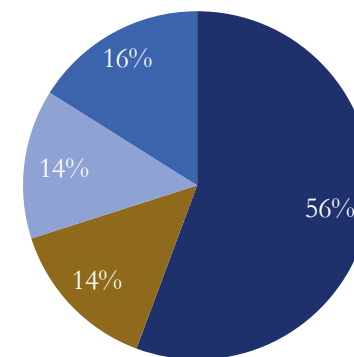
	2015A	2016A	2017A	2018E	2019F
Sales	9.7	9.5	10.1		
% growth	(12.2)	(2.1)	6.3		
EBITDA	3.2	3.1	3.3		
% margin	32.9	32.6	32.7	n/a	
Net Inc.	1.4	1.4	1.1		
% margin	14.4	14.7	10.9		
EPS	4.86	4.75	5.08		

Sales Split

FY2017



■ Atmospheric gases
■ Process gases
■ Surface technologies



■ North America ■ Europe
■ South America ■ Asia

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