Linde plc (NYSE: LIN)

Team Lever Up Linde

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Undergraduate Investment Conference ENGAGE Stock Pitch Competition

I

Company Overview

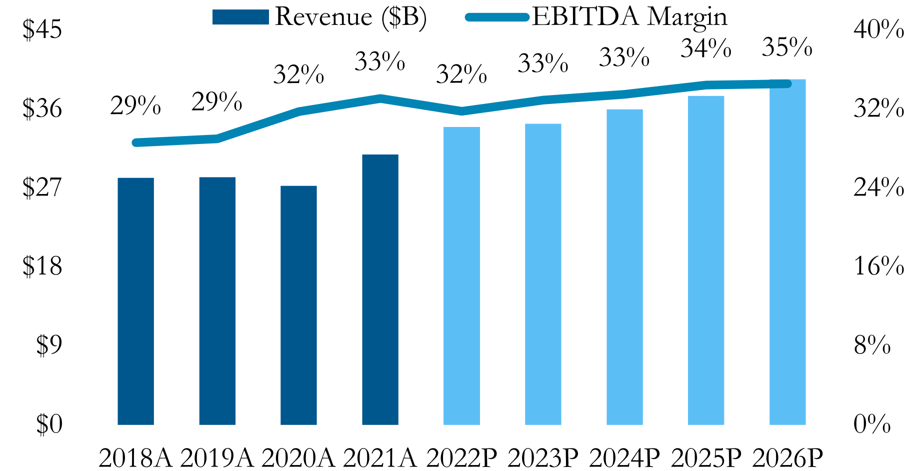
Company Overview

Linde is the largest global industrial gas producer. Linde segments their business into geographic and operating segments and has seen stable revenue and profitability growth, which is projected to continue

Company Snapshot

Foundation	Services
Formed from a 2018 merger with Praxair, Linde is the largest global industrial gas producer competing mainly with US based Air Products and Chemicals and French L'Air Liquide	Linde provides process gases (CO2, hydrogen, etc.) and atmospheric gases (oxygen, nitrogen, etc.) to businesses in various end markets, including healthcare, technology, and manufacturing

Revenue & EBITDA Margin Trend



Selected Financials

Metric	3Q22 Y/Y Growth
Revenue Growth	15%
SG&A Expense	(3%)
EBIT Margin	9%
EBITDA Growth	7%

Management Team

Sanjiv Lamba – CEO & Director
- Has served in various executive positions within Linde
- 20 years of experience in the industry

Matthew White – Executive VP & CFO
- Formerly CFO & Senior VP, President of Praxair Canada, and Treasurer & VP at Praxair
- 15 years of experience in the industry

Sources: Company Filings, S&P CapitalIQ, Team Research

Core Investment Thesis & Rationale

We recommend a "**Buy**" for Linde because of their position as the largest global industrial gas producer coupled with its financial resilience, balance sheet strength, and brand reinforcement focused on ESG initiatives

Rationale

1

Resistance to Recessionary Pressure

Linde can mitigate the effects of the current inflationary environment through their cost pass-through clauses, take-or-pay contracts, and on-site distribution network

2

Under-Levered Linde

Linde's net leverage (Net Debt / EBITDA) is currently 1.1x, compared to their historical average net leverage of 2.5x – 3.0x. Given Linde's consistent cash flow generation, they could gain ~$15B capital if they were to lever back up to 2.5x

3

Brand Reinforcement

Linde plans to deploy capital to capture value in the green energy space. As an industrials company, Linde can best position themselves for the future by spearheading sustainability initiatives and reinforcing their position as the clean player in the market

Price Target
$406.07
25.1% upside to $324.70

II

Industry Overview

Industrial Gas Industry Overview

The industrial gas industry is an oligopoly dominated by Linde, Air Products, and L'Air Liquide. The industry is subject to high energy costs and environmental regulations, but has seen a shift to capital intensive, clean energy projects

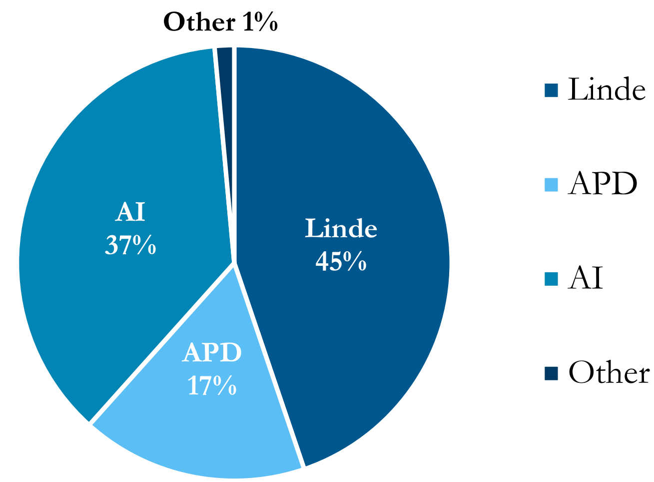
Industry Description

Linde is the most diverse of the three players as the market leader or runner-up in every geographic area they operate in

Air Products and Chemicals is the fastest growing player, and the second largest in the Americas

L'Air Liquide is the second biggest of the three, and has the most market share in Europe

Market Share & Major Players



Industry Risks

1. **Energy costs**, due to fluctuations in crude and natural gas prices, can substantially decrease margins
2. **Economic downturn** can decrease demand for industrial gases
3. **Inflationary environments** can harm industrial gas producers' ability to generate profit

Notable Trends

Hydrogen production has been a large focus because of the global focus on renewable energy, climate change, and electric vehicle manufacturing

The tax incentives associated with **carbon capture and sequestration** have led to spending on the construction and routing of pipelines

Capital Intensive Projects

Sources: IBISWorld, Company Filings, Air Products 10-K, L'Air Liquide Annual Report

III

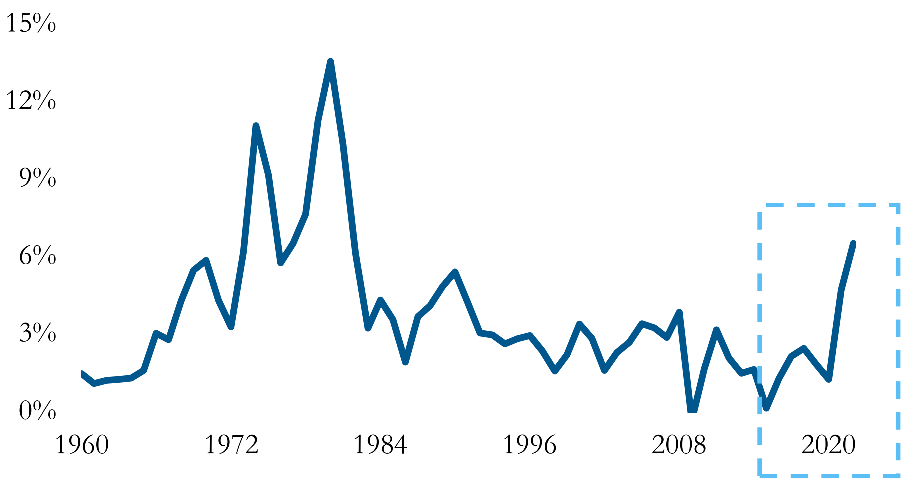
Investment Rationale

1. Resilience

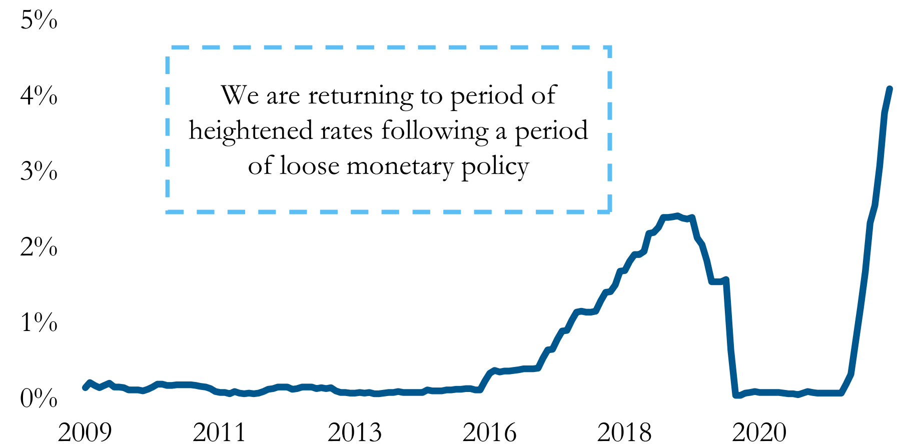
Turbulent Backdrop Emphasizes Defensibility

The macroenvironment ahead is likely going to be characterized by heightened inflation, with interest rates following. Commodities have also seen significant volatility, posing unique issues for businesses and government alike

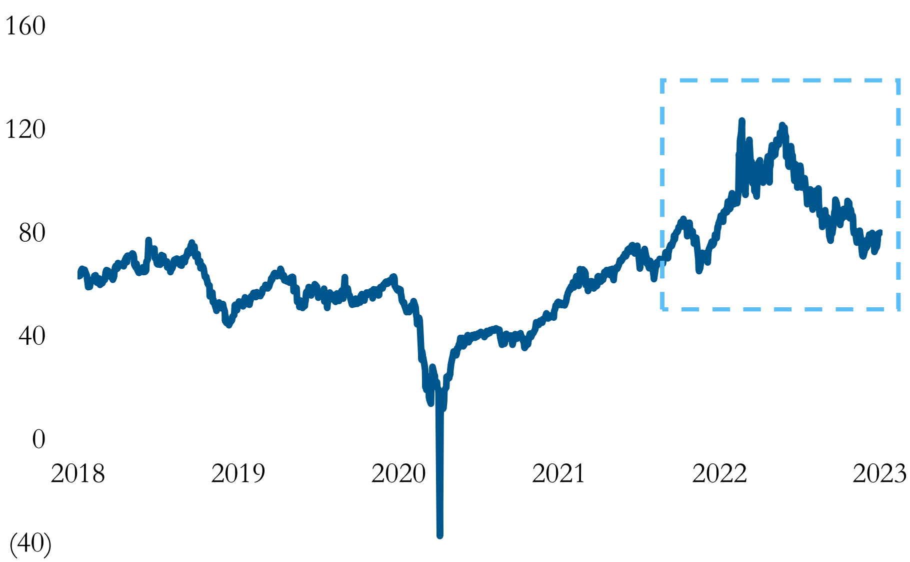
Inflation (Annual CPI % Change)



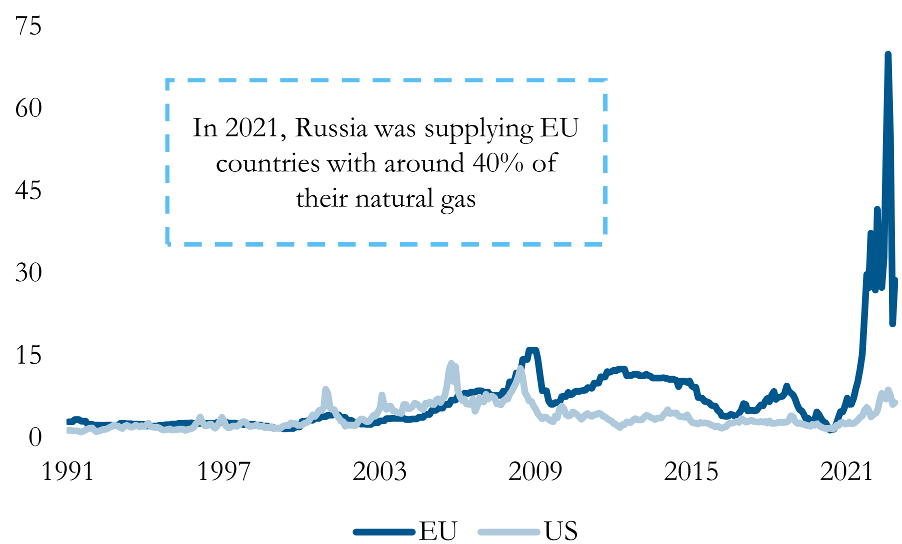
Interest Rates (Federal Funds Rate)



West Texas Intermediate ($/barrel)



Natural Gas ($/million Btu)



Sources: St. Louis Federal Reserve, Bloomberg, BBC

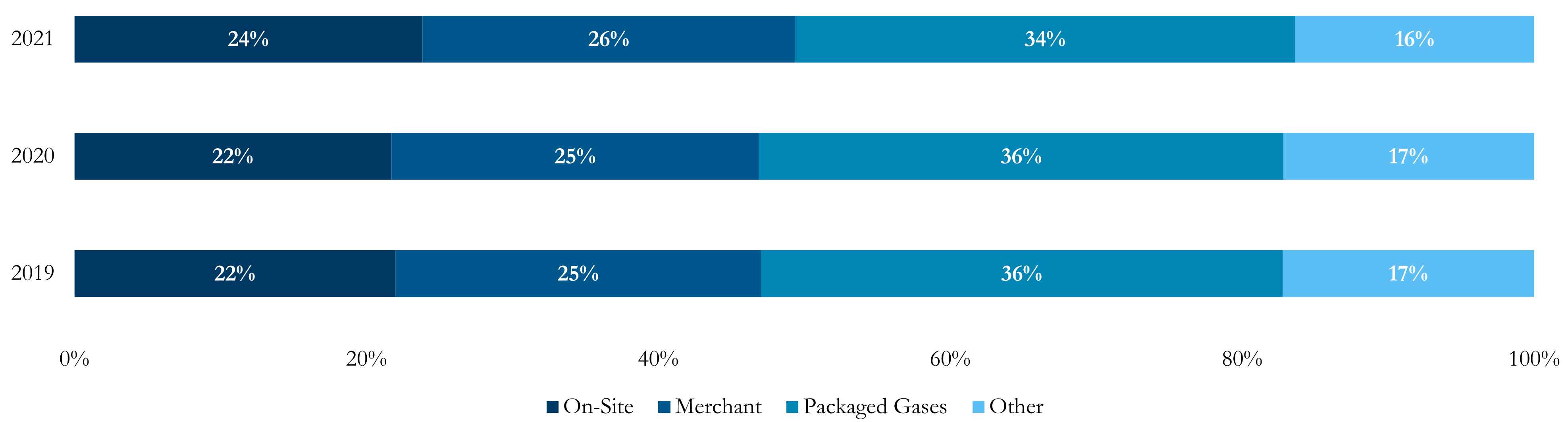
Linde's Distribution Methods

Linde has three main distribution types: on-site involves constructing plants and pipelines on a customer's site. Merchant involves delivering industrial gas products via tanker trucks. Packaged gases involves the sale of pressurized gas cylinders

Distribution Comparison

Distribution Type	Contract Length	Take-or-Pay?	Cost Pass-Throughs?	% of Total Revenue
On-Site	10-20 years	Yes	Yes	24%
Merchant	3-7 years	Yes	Yes	26%
Packaged Gases	1-3 years	No	Yes	34%

Historical Distribution Breakdown (% of revenue)



Sources: Company Filings, Team Research

Stability Levers

Linde has three main advantages over their competitors: take-or-pay contracts, on-site distribution, and cost pass-throughs. Take-or-pay contracts and on-site distribution establish revenue stability, while cost pass-throughs create margin stability

Competitive Advantage

	Take-or-Pay	On-Site	Pass-Throughs
LIN	✓	✓	✓
APD	✗	✓	✓
AI	✓	✓	✗

Revenue Stability

Take-or-Pay

- Majority of customer contracts are 3-20 year total requirement and minimum purchase requirement contracts
- Linde's customers are obligated to purchase a certain amount of product

On-Site

- Not a big expense for their customers, but industrial gas is crucial for operations
- For on-site customers, Linde's facilities make switching to a competitor cost-prohibitive

Margin Stability

Cost Pass-Throughs

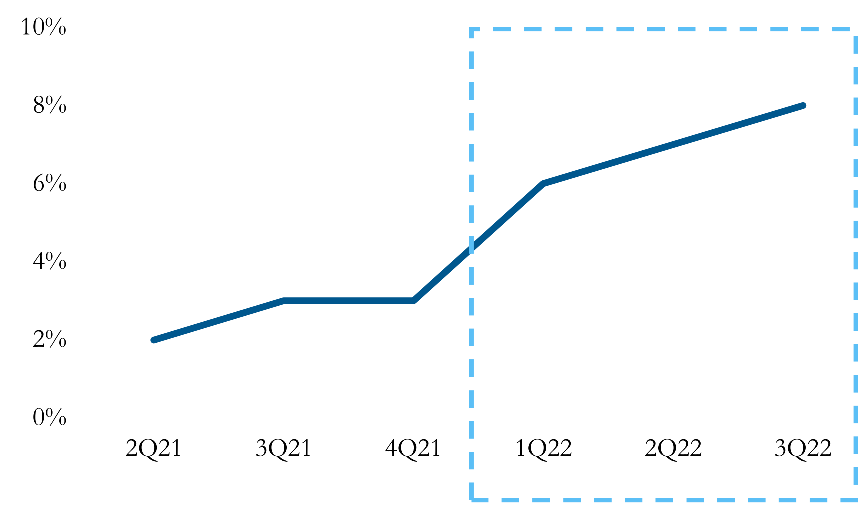
One of the most important tools in an inflationary environment is the ability to pass costs along to customers

These cost pass-through clauses are primarily implemented to mitigate energy costs – Linde's largest cost item

This serves to protect Linde's dollar profit per unit, insulating Linde from potential economic and commodity fluctuations

Contribution to Sales

Contribution to Sales Growth (%)



IV

Investment Rationale

2. Under-Levered Linde

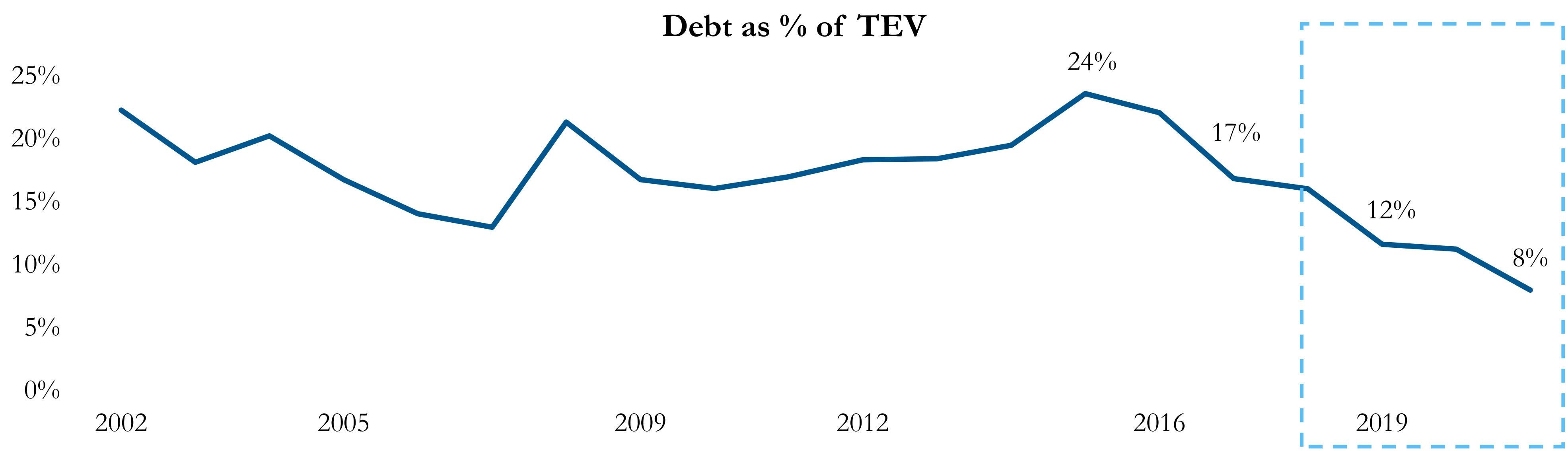
Capital Structure

With the return to a focus on fundamentals such as deleveraging and profitability, Linde has strengthened their balance sheet considerably and placed themselves in a favorable position looking forward

Balance Sheet Strength

Metric	20 Year Average	LTM	Air Products	L'Air Liquide
Net Leverage	2.0x	**1.1x**	1.0x	1.9x
Debt to Equity	96.2%	**39.4%**	51.7%	63.5%
Interest Coverage	21.0x	**70.8x**	27.6x	18.9x

Consistent De-Leveraging



Capital Deployment

Even with major commitments already in the project pipeline, Linde has immense opportunity to deploy capital. This re-levering would provide a longer-term opportunity for investment returns

Positioned For Future Deployment

Quantitative	+	Qualitative	=	Deployment Opportunity
Under-Levered		Favorable Tailwinds		**New Capital Projects**
Cash Stockpile		Government Subsidies		Share Buybacks
Attractive Returns		Incumbent Position		Dividends

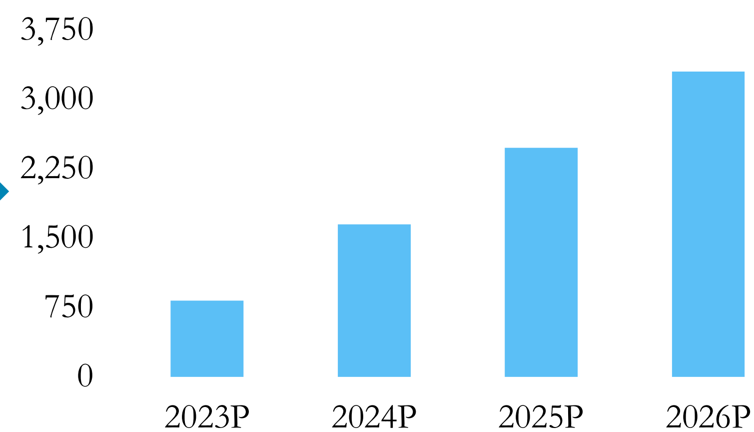
Liquidity and Return on Capital

$3.8B LTM Cash + ~$15B Leverage

- ~$500M per project
- ~40 new capital projects
- 2.5x Net Debt / EBITDA

22% ROC 3Q22

Estimated Sum of Project Cash Flows ($M)



Sources: Equity Research, Company Filings, S&P CapitalIQ

V

Investment Rationale

3. Brand Reinforcement

Inflation Reduction Act & Carbon Capture

The Inflation Reduction Act included greater tax incentives for the sequestration of carbon oxides. Linde's experience with pipeline routing and construction puts them in prime position for the future of ESG and creates new revenue streams

Carbon Capture Overview

Sequestration of carbon oxides is the process of capturing natural or byproduct carbon oxides and storing it

Carbon capture usually involves constructing and routing pipelines for the moving of carbon oxides to storage areas

The passing of the Inflation Reduction Act in 2022 increased the tax incentive for carbon capture from $55 to $85/metric ton

Why Linde?

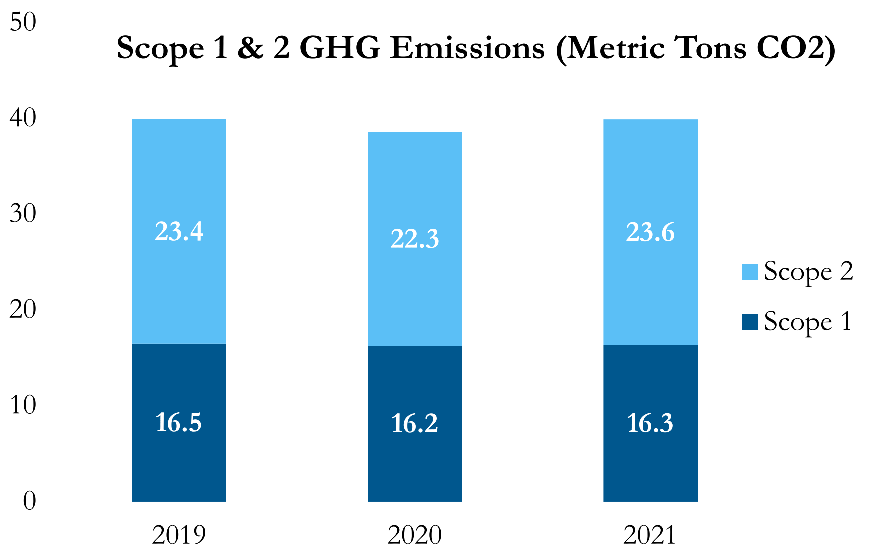
Linde has experience with pipelines – Linde would be able to efficiently capitalize on the IRA

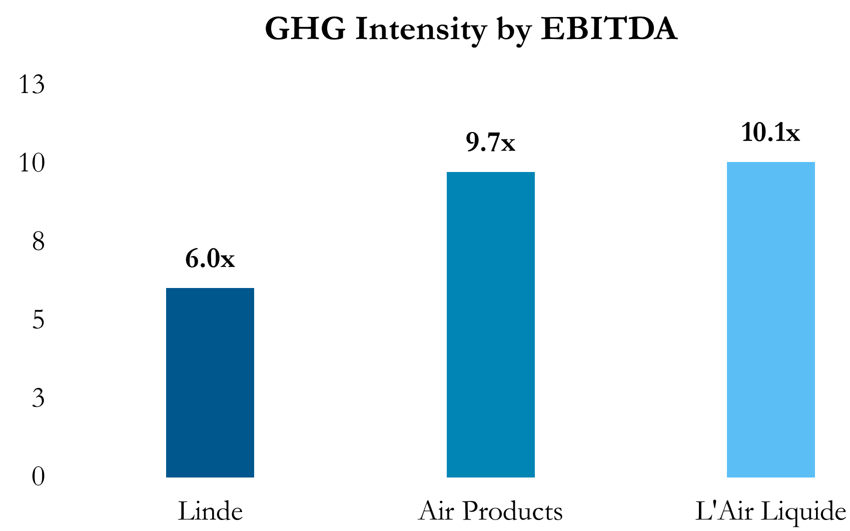
Linde has significant room to issue debt for carbon capture pipeline construction/routing and other capital projects

Tax benefits of carbon capture would protect Linde's ROC for carbon capture projects

Position as an environmentally friendly industrials firm distinguishes it from competitors

Greenhouse Gas Emissions





Sources: 2021 Linde Sustainability Report, Equity Research, Air Products Sustainability Report, L'Air Liquide Sustainability Report, S&P CapitalIQ

The Future of Hydrogen

Hydrogen as an energy source has a very promising future. While more sustainable forms are currently under-utilized due to their cost of production, Linde is a leader in the development and implementation of hydrogen solutions, setting the bar for the industry

Power of Hydrogen

1. Produces **zero GHG emissions** upon use
2. Highly versatile; wide variety of applications and use cases
3. Essentially infinite supply; most abundant element in the universe
4. Efficient energy source compared to traditional forms

Color Spectrum

Type	Description	Direct Emissions (CO_2)
Grey	Most common form of hydrogen, but does not capture GHG from production	9 - 11
Blue	Similar production process to grey, but utilizes carbon capture to trap excess carbon	0.5 - 4
Green	**Produced from using a surplus of renewable sources leading to no direct GHG emissions**	**~0**

Dominating the Value Chain

Production → **Distribution & Storage** → **Applications**

Production: Largest liquid hydrogen production capacity and the market leader for green hydrogen production

Distribution & Storage: Largest hydrogen distribution system in the world

Applications:

1. Hydrogen serves as a feedstock for various industries including chemistry, refining, and steelmaking
2. Linde can leverage their pre-existing infrastructure to meet new demands, as shown by their FuelTech

Sources: 2021 Linde Sustainable Development Report, Company Website, U.S. Department of Energy, Statista

VI Final Recommendation

DCF Output

We value Linde at a blended implied share price of $406.07, or an upside of 25.1% from their current share price of $324.70. We used a WACC of 7.49%, a terminal multiple of 15.5x, and a terminal growth rate of 4.0%

Terminal Value Assumptions	
Terminal EBITDA (2027F	15,649
Terminal Multiple	15.5x
Terminal Value	**243,249**
Discount Period	4.5
Discount Factor	0.72
PV of Terminal Value	**175,718**

Terminal Value Assumptions	
FCF 2027P	8,602
Terminal Growth Rate	4.0%
Terminal Value	**256,021**
Discount Period	4.5
Discount Factor	0.72
PV of Terminal Value	**184,944**

Share Value Multiple Method		
Total Enterprise Value		**203,914**
(-) Debt		(11,335)
(+) Cash		2,823
Equity Value		**195,402**
Share Outstanding		493
Share Price	**$**	**396.71**
Upside / Downside		*22.2%*

Distribution of Value	
PV of Period Cash Flow	28,197
PV of Terminal Value	175,718
Total	**203,914**
Period Cash Flow	13.8%
Terminal Cash Flow	86.2%
Total	**100.0%**
Implied PGR	3.8%

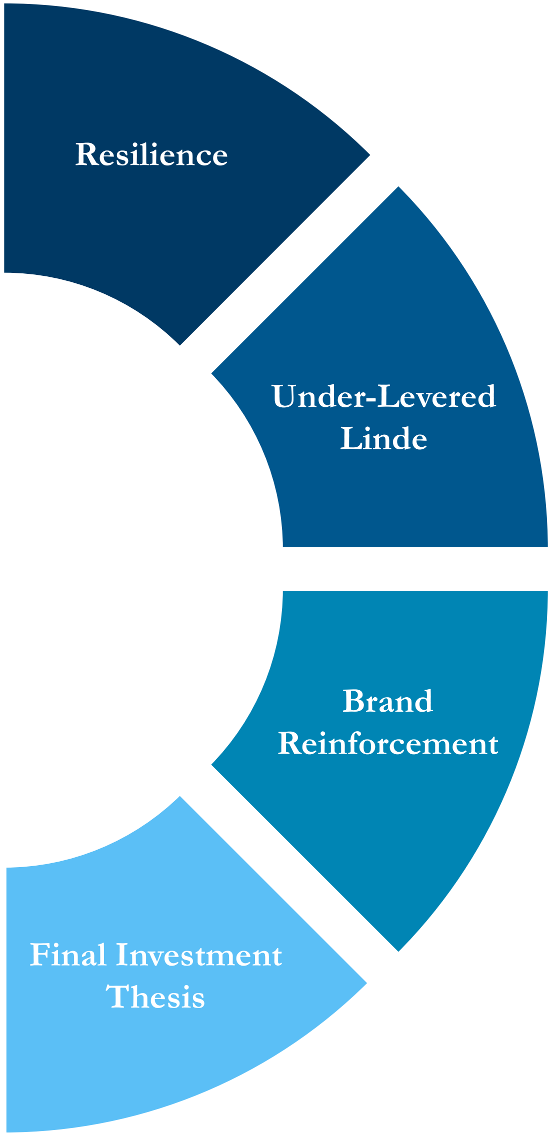
Distribution of Value	
PV of Period Cash Flow	28,197
PV of Terminal Value	184,944
Total	**213,140**
Period Cash Flow	13.2%
Terminal Cash Flow	86.8%
Total	**100.0%**
Implied Exit Multiple	16.4x

Share Value Perpetuity Growth Meth		
Total Enterprise Value		**213,140**
(-) Debt		(11,335)
(+) Cash		2,823
Equity Value		**204,628**
Share Outstanding		493
Share Price	**$**	**415.44**
Upside / Downside		*27.9%*

Blended Implied Share Price		
Multiple Method	$	396.71
Perpetuity Growth Method	$	415.44
Blended Implied Share Price	**$**	**406.07**
Upside / Downside		*25.1%*

Sources: Team Findings

Final Recommendation



1. Linde can mitigate the effects of the current inflationary environment through their cost-pass-through clauses in their supply contracts, long-term, take-or-pay contracts, and on-site distribution

2. Linde's net leverage is currently 1.1x, compared to their historical average net leverage of 2.5x - 3.0x. Given Linde's consistent cash flow generation, they could gain ~$15B capital if they were to lever back up to 2.5x

3. Linde plans to deploy capital to capture value in the green energy space. As an industrials company, Linde can best position themselves for the future by spearheading sustainability initiatives and reinforcing their position as the clean player in the market

4. We recommend a "**Buy**" for Linde because of their position as the largest global industrial gas producer coupled with its financial resilience, balance sheet strength, and brand reinforcement focused on ESG initiatives

Price Target
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VII

Appendix

ENGAGE
UNDERGRADUATE
INVESTMENT
CONFERENCE

TEV / LTM EBITDA

Linde has historically traded at a premium compared to Air Products. Linde is currently trading 1.5 turns lower than Air Products, indicated that the company has room for multiple expansion more in line with their peers

Sources: S&P CapitalIQ

Catalysts

1

Linde continues to increase their backlog, demonstrating the continued availability of profitable opportunities

2

Continuous earnings beats, reinforcing the defensibility and fortified moat of the business

3

Linde is able to maintain and even expand their margin while the broader macroeconomic environment experiences turbulence

4

Development of new green projects, initiatives, or technologies and continued participation in ESG and green technology forums

5

On March 1, Linde will be delisted from the Frankfurt stock exchange, creating technical selling pressure, without changing the fundamentals of the investment or company

Sources: Company Investor Relations