CFRA

Air Products and Chemicals, Inc.

Recommendation	Price	12-Mo. Target Price	Report Currency	Investment Style
STRONG BUY ★★★★★	USD 268.71 (as of market close Sep 06, 2024)	USD 345.00	USD	Large-Cap Value

Equity Analyst Matthew Miller, CFA

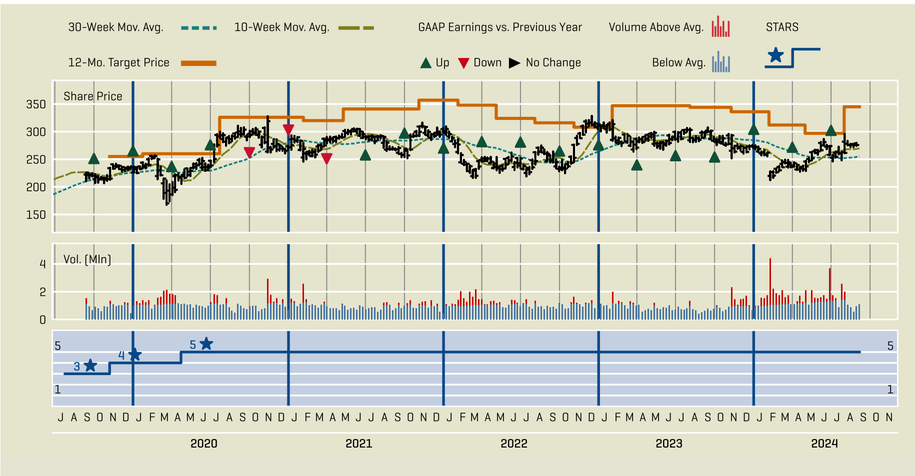
GICS Sector Materials
Sub-Industry Industrial Gases

Summary This major producer of industrial gases and electronic and specialty chemicals also has interests in environmental and energy-related businesses.

Key Stock Statistics (Source: CFRA, S&P Global Market Intelligence (SPGMI), Company Reports)

52-Wk Range	**USD 307.71 - 212.24**	Oper.EPS2024**E**	**USD 12.45**	Market Capitalization[B]	**USD 60.81**	Beta	**0.83**
Trailing 12-Month EPS	**USD 12.02**	Oper.EPS2025**E**	**USD 13.85**	Yield [%]	**2.59**	3-yr Proj. EPS CAGR[%]	**11**
Trailing 12-Month P/E	**22.36**	P/E on Oper.EPS2024**E**	**21.58**	Dividend Rate/Share	**USD 7.08**	SPGMI's Quality Ranking	**A**
USD 10K Invested 5 Yrs Ago	**13,527.0**	Common Shares Outstg.[M]	**222.00**	Trailing 12-Month Dividend	**USD 8.81**	Institutional Ownership [%]	**89.0**

Price Performance



Source: CFRA, S&P Global Market Intelligence
Past performance is not an indication of future performance and should not be relied upon as such.
Analysis prepared by **Matthew Miller, CFA** on Aug 01, 2024 12:37 PM ET, when the stock traded at **USD 290.53**.

Highlights

- We forecast a sales decrease of 3% in FY 24 (Sep.) on lower energy-cost pass-through, mostly offset by new project start-ups and a recovery in merchant volume. Disciplined price attainment should continue to be a tailwind in FY 2024 and FY 2025, along with strong acceleration in hydrogen demand, as demand for jet fuel increases and Gulf Coast demand increases. We are bullish on APD's backlog of growth projects with a focus on expanding the scope of syngas supply agreements, acquiring air separation units, and new agreements in large industrial gas projects. APD is well positioned to capitalize on gasification related to carbon capture and hydrogen mobility, which are long-term secular tailwinds.
- In FY 2022, the surge in energy-cost pass-through was partly offset by higher volumes and price, resulting in a contraction in the adjusted EBITDA margin of 417 bps to 33.4%. The adjusted EBITDA margin surged 387 bps in FY 2023 to 37.3% on higher prices and lower variable costs. We forecast adjusted EBITDA margin of 40.7% in FY 2024.
- As of Aug. 1, 2024, APD's estimated future capacity for capital deployment totaled $30.8B, with $19.5B currently in backlog. We see $5.0-$5.5B capex in FY 2024 and FY 2025.

Investment Rationale/Risk

- Our Strong Buy view is driven by clear visibility for double-digit EPS growth over the next several years (although FY 2024 is likely only high-single digits) due to APD's on-site (take-or-pay) business combined with a record backlog. APD is poised to generate robust free cash flow to fund new projects and grow the dividend. While APD is already a leader in grey hydrogen (using energy generated from hydrocarbons), clean hydrogen projects in Alberta and Louisiana are focused on blue hydrogen (hydrocarbons with carbon capture), and with the NEOM project in Saudi Arabia and the hydrogen projects in New York and Texas, APD should become a leader in Green Hydrogen (from wind, solar, and hydro).
- Risks to our outlook and target price include negative trends in global industrial production, declining demand for APD's products, and higher raw material input costs.
- Our 12-month target price of $345 is 24.9x our FY 25 EPS estimate, in line with APD's five-year average forward P/E. We think our valuation accounts for macroeconomic uncertainty while giving APD credit for what we view as solid operational performance, strong secular growth, balance sheet strength, and a robust project pipeline.

Analyst's Risk Assessment

LOW | **MEDIUM** | HIGH

Our risk assessment reflects the stable growth of the industrial gases industry and what we see as the company's relatively strong balance sheet, partly offset by the company's exposure to cyclical industries.

Revenue/Earnings Data

Revenue (Million USD)

	1Q	2Q	3Q	4Q	Year
2025	**E** 3,278	**E** 3,178	**E** 3,335	**E** 3,606	**E** 13,398
2024	2,997	2,930	2,986	**E** 3,352	**E** 12,265
2023	3,175	3,200	3,034	3,191	12,600
2022	2,994	2,945	3,189	3,570	12,699
2021	2,387	2,502	2,605	2,841	10,323
2020	2,255	2,216	2,065	2,320	8,856

Earnings Per Share (USD)

	1Q	2Q	3Q	4Q	Year
2025	**E** 3.30	**E** 3.30	**E** 3.46	**E** 3.79	**E** 13.85
2024	2.82	2.85	3.20	**E** 3.58	**E** 12.45
2023	2.64	2.74	2.98	3.15	11.51
2022	2.52	2.38	2.62	2.89	10.41
2021	2.12	2.08	2.31	2.51	9.02
2020	2.14	2.04	2.01	2.19	8.38

Fiscal Year ended Sep 30. EPS Estimates based on CFRA's Operating Earnings; historical earnings are adjusted. In periods where a different currency has been reported, this has been adjusted to match the current quoted currency.

Dividend Data

Amount (USD)	Date Decl.	Ex-Div. Date	Stk. of Record	Payment Date
1.7700	Jul 18	Oct 01	Oct 01	Nov 12 '24
1.7700	May 17	Jul 01	Jul 01	Aug 12 '24
1.7700	Jan 25	Mar 28	Apr 01	May 13 '24
1.7500	Nov 15	Dec 29	Jan 02	Feb 12 '24

Dividends have been paid since 1971 . Source: Company reports
Past performance is not an indication of future performance and should not be relied upon as such.
Forecasts are not a reliable indicator of future performance.
Dividends paid in currencies other than the Trading currency have been accordingly converted for display purposes.

Air Products and Chemicals, Inc.

Business Summary Aug 01, 2024

CORPORATE OVERVIEW. Air Products & Chemicals (APD) is one of the largest global producers of industrial gases, and has a large specialty chemicals business. APD reported fiscal-year 2023 (ending in September) results under five segments: the Americas; Asia; Europe; the Middle East and India; and Corporate and Other.

The regional Industrial Gases (the Americas, Asia, Europe, and the Middle East and India) segments produce and sell atmospheric gases such as oxygen, nitrogen, and argon (primarily recovered by the cryogenic distillation of air) and process gases such as hydrogen, carbon monoxide, helium, syngas, and specialty gases. These segments supply gases to many industries, including metals, glass, chemical processing, energy production and refining, food processing, metallurgical industries, medical, and general manufacturing. APD is the world's largest provider of hydrogen, which is used by refiners to facilitate the conversion of heavy crude feedstock and lower the sulfur content of gasoline and diesel fuels. The Americas accounted for 43% of FY 23 (Sep.) sales, Asia 26%, Europe 24%, and the Middle East and India 1%.

The Corporate and other segment (7% of FY 23 sales) includes cryogenic and gas processing equipment sales for air separation and includes centralized global administrative costs, product development costs, and research & development costs associated with all the Industrial Gases segments. The equipment is sold worldwide to customers in a variety of industries, including chemical and petrochemical manufacturing, oil & gas recovery and processing, and steel and primary metals processing. This segment also includes the LNG sale of equipment business, and the liquid helium and liquid hydrogen transport and storage container businesses, and corporate support functions that benefit all the segments. Corporate and other also includes income and expense that cannot be directly associated with the business segments, including foreign exchange gains and losses and stranded costs resulting from discontinued operations.

PROPERTIES. The Americas segment operates from more than 425 production and distribution facilities in North and South America, 10% of which are integrated sites that serve dedicated customers as well as merchant customers. The Europe and the Middle East and India segments operate from more than 200 production and distribution facilities in Europe, the Middle East, India, and Africa. The Asia segment operates from more than 200 production and distribution facilities within Asia.

COMPETITIVE LANDSCAPE. APD is one of the largest international producers of industrial gases. The capital-intensive industrial gases industry has historically expanded up to twice as fast as the overall economy. APD is the world's leading supplier of hydrogen and carbon monoxide products (HYCO) and helium.

APD does not have a homogeneous customer base or end market and no single customer accounts for more than 10% of the company's revenues. However, APD does have concentrations of customers in specific industries, primarily refining, chemicals, and electronics. Within each of these industries, APD has several large-volume customers with long-term contracts.

IMPACT OF MAJOR DEVELOPMENTS. In November 2023, APD announced the new capital budget for its blue hydrogen energy complex in Louisiana is $7.0 billion, an increase from $4.5 billion in October 2021. Much of the increase is driven by cost inflation and including the interest component of capital in the budget, and a smaller amount of the increase is driven by an expanded scope, supported by strong demand.

In July 2020, APD, in conjunction with ACWA Power and NEOM, announced the signing of an agreement for a $5 billion world-scale green hydrogen-based ammonia production facility powered by renewable energy. The project, which will be equally owned by the three partners, will be sited in NEOM, a new model for sustainable living located in the north west corner of the Kingdom of Saudi Arabia, and will produce green ammonia for export to global markets. The project is scheduled to be onstream in 2026. APD will be the exclusive off-taker of the green ammonia and intends to transport it around the world to be dissociated to produce green hydrogen for the transportation market. In addition to the one-third investment in the $5 billion investment on the production side, APD plans on investing an additional $2 billion downstream for the distribution of green hydrogen, for a total investment of $3.7 billion.

In November 2019, APD announced an $11.5 billion acquisition in Saudi Arabia at the Jazan refinery, which will be owned by a new joint venture (JV) company called the Jazan Integrated Gasification Company. The JV will be owned 50.6% by APD. The 400,000 barrels per day refinery produces high-sulfur vacuum resid, which can no longer be used to fuel ships due to new IMO 2020 regulations. The liquid resid will be mixed with oxygen and gasified to produce synthetic gas, which will be almost equivalent to natural gas. The syngas will be used to power turbines to produce 3,900 megawatts of power. The JV is acquiring all of the assets, including the air-separation units, the gasifiers, power generation, and the related utilities. The JV will deliver power and hydrogen to Saudi Aramco for a monthly fee, which is the same business model as APD's traditional on-site business. The deal was closed in Q1 FY 22.

FINANCIAL TRENDS. In FY 23, APD generated sales of $12.6 billion (down 0.8% Y/Y), driven by 6% lower energy cost pass-through and 3% negative currency translation, partly offset by 3% higher volume and 5% higher price. Adj. EBITDA increased by 11% to $4.7 billion, as the adjusted EBITDA margin expanded 387 basis points to 37.3%, driven by price and volume, partly offset by higher costs and unfavorable currency translation. APD posted FY 23 adjusted EPS of $11.51, an increase of 12%. Return on invested capital (ROIC) in FY 23 was 12.0%, up 80 basis points from 11.1% in FY 22.

Through the first nine months of FY 24, APD reported a sales decline of 5.3% Y/Y, but adjusted EBITDA was up 5.7% Y/Y. Guidance for FY 24 was cut in Feb. 2024 due to weaker Chinese demand, softer helium demand, and depreciation of the Argentinian peso.

Corporate information

Investor contact
S. Manjeshwar (610 481 4911)

Office
1940 Air Products Boulevard, Allentown, Pennsylvania, 18106-5500

Telephone
610 481 4911

Fax
N/A

Website
www.airproducts.com

Officers

EVP of Mergers & Acquisitions, EVP of Sustainability, General Counsel and Secretary
S. D. Major

Chairman, President & CEO
S. Ghasemi

Senior VP & CFO
M. N. Schaeffer

VP, Controller & Chief Accounting Officer
W. J. Pellicciotti

Executive Director of Technology
R. Dewing

Board Members

C. I. Cogut	L. A. Davis
E. L. Monser	M. H. Paull
E. Marcegaglia	P. Faure
F. Caio	S. Ghasemi
G. Boyce	S. Zaldumbide
H. Y. Ho	T. M. Calaway
J. Krumnow	W. A. Loader
J. T. Graziano	W. T. Smith

Domicile
Delaware

Auditor
Deloitte & Touche LLP

Founded
1940

Employees
21,850

Stockholders
4,425

Air Products and Chemicals, Inc.

Quantitative Evaluations

Fair Value Rank

1	2	3	4	5
LOWEST				HIGHEST

Based on CFRA's proprietary quantitative model, stocks are ranked from most overvalued (1) to most undervalued (5).

Fair Value Calculation — **USD 256.97** — Analysis of the stock's current worth, based on CFRA's proprietary quantitative model suggests that APD is overvalued by USD 11.74 or 4.37%

Volatility — LOW | AVERAGE | HIGH

Technical Evaluation — **BULLISH** — Since August, 2024, the technical indicators for APD have been BULLISH"

Insider Activity — UNFAVORABLE | NEUTRAL | FAVORABLE

Expanded Ratio Analysis

	2023	2022	2021	2020
Price/Sales	5.01	4.08	5.52	7.48
Price/EBITDA	15.74	13.64	15.51	19.28
Price/Pretax Income	21.90	18.80	22.73	27.32
P/E Ratio	24.62	22.36	28.39	35.54
Avg. Diluted Shares Outstg. (M)	222.70	222.50	222.50	222.30

Figures based on fiscal year-end price

Key Growth Rates and Averages

Past Growth Rate (%)	1 Year	3 Years	5 Years
Net Income	1.95	6.83	8.96
Sales	-0.78	12.47	7.13
Ratio Analysis (Annual Avg.)			
Net Margin (%)	18.26	18.79	19.48
% LT Debt to Capitalization	35.52	33.34	31.53
Return on Equity (%)	15.88	15.84	15.98

Company Financials Fiscal year ending Sep 30

Per Share Data (USD)	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Tangible Book Value	59.03	53.97	55.14	48.65	44.63	43.87	41.20	26.90	26.05	25.82
Free Cash Flow	-6.39	1.37	3.96	3.42	4.45	4.40	2.40	8.24	6.08	3.88
Earnings	10.30	10.08	9.12	8.55	7.94	6.59	5.16	5.04	4.29	4.62
Earnings (Normalized)	11.51	10.41	9.02	8.38	8.21	7.45	6.31	7.55	6.57	5.78
Dividends	6.87	6.36	5.84	5.18	4.58	4.25	3.71	3.39	3.20	3.02
Payout Ratio (%)	65.06	61.31	59.87	58.49	56.48	59.94	26.26	114.00	53.02	63.30
Prices: High	328.56	316.39	327.89	310.74	232.47	175.17	152.26	157.84	158.20	137.45
Prices: Low	224.75	216.24	245.75	167.43	148.44	150.55	129.00	114.64	118.20	102.23
P/E Ratio: High	28.50	30.40	36.40	37.10	28.30	23.50	24.10	20.90	24.10	23.80
P/E Ratio: Low	19.50	20.80	27.20	20.00	18.10	20.20	20.40	15.20	18.00	17.70
Income Statement Analysis (Million USD)										
Revenue	12,600	12,699	10,323	8,856	8,919	8,930	8,188	7,504	7,824	10,439
Operating Income	2,652	2,458	2,352	2,249	2,184	1,925	1,845	1,607	1,404	1,653
Depreciation + Amortization	1,358	1,338	1,321	1,185	1,083	971.00	866.00	855.00	858.00	957.00
Interest Expense	178.00	128.00	142.00	109.00	137.00	130.00	121.00	115.00	103.00	125.00
Pretax Income	2,882	2,755	2,507	2,424	2,290	2,015	1,416	1,555	1,266	1,365
Effective Tax Rate	19.10	18.20	18.50	19.70	21.00	26.00	18.40	27.80	23.70	27.10
Net Income	2,300	2,256	2,099	1,887	1,760	1,498	3,000	631.00	1,278	992.00
Net Income (Normalized)	1,917	1,761	1,544	1,453	1,398	1,225	1,067	1,001	864.50	1,049
Balance Sheet and Other Financial Data (Million USD)										
Cash	1,962	3,338	5,817	6,373	2,440	3,004	3,689	1,313	224.00	360.00
Current Assets	5,200	6,283	8,376	8,685	4,618	5,082	5,877	4,317	2,794	3,295
Total Assets	32,003	27,193	26,859	25,169	18,943	19,178	18,467	18,029	17,335	17,779
Current Liabilities	3,896	3,466	2,799	2,417	1,821	2,338	2,489	3,283	3,644	2,963
Long Term Debt	9,511	7,169	7,170	7,423	3,218	3,353	3,425	3,922	3,950	4,825
Total Capital	26,779	22,120	22,340	20,760	14,716	15,003	14,182	12,437	13,261	13,946
Capital Expenditures	4,626	2,926	2,464	2,509	1,990	1,568	1,040	908.00	1,162	1,363
Cash from Operations	3,206	3,230	3,342	3,265	2,970	2,534	1,562	2,661	2,470	2,187
Current Ratio	1.33	1.81	2.99	3.59	2.54	2.17	2.36	1.32	0.77	1.11
% Long Term Debt of Capitalization	35.50	32.40	32.10	35.80	21.90	22.30	24.10	31.50	29.80	34.60
% Net Income of Revenue	18.30	17.80	20.30	21.30	19.70	16.80	36.60	8.40	16.30	9.50
% Return on Assets	5.60	5.69	5.65	6.37	7.16	6.39	6.32	5.68	5.00	5.80
% Return on Equity	15.90	16.20	15.40	16.30	16.00	14.00	13.30	15.40	12.70	12.90

Source: S&P Global Market Intelligence. Data may be preliminary or restated; before results of discontinued operations/special items. Per share data adjusted for stock dividends; EPS diluted. E-Estimated. NA-Not Available. NM-Not Meaningful. NR-Not Ranked. UR-Under Review.

Air Products and Chemicals, Inc.

Sub-Industry Outlook

We have a positive fundamental outlook for the Industrial Gases sub-industry for the next 12 months. CFRA thinks industrial gas businesses are highly resilient to economic shocks, such as the one caused by the Covid-19 pandemic. During the Great Recession of 2008-2009, free cash flow remained robust in this sub-industry; the same was true during the recession of 2020 (which was caused by the global pandemic). Industrial gas companies benefit from a high percentage of revenue derived from stable on-site businesses, which have fixed monthly charges and/or minimum purchase requirements. In general, industrial gas companies have a good degree of pricing power and have been able to consistently expand margins, even during periods of high inflation.

We project that the business environment for the industrial gases sub-industry will continue to improve, aided by the start-up/ramp-up of new projects. Consumption of industrial gases over the longer term will likely continue to increase at the historical rate of 1.5x-2.0x that of industrial production, in CFRA's view. We see some secular tailwinds driving earnings growth for several years, including hydrogen mobility and carbon capture.

We think major industry consolidation has ended following the 2018 merger between Praxair and Linde. This deal leaves a small number of major global players in the industrial gases sub-industry, but with many smaller players. We see ongoing acquisitions of smaller industrial gases companies by the larger companies continuing industry consolidation at a much smaller pace.

Industrial gases are produced primarily by air separation (extracted from the atmosphere). Examples of gases produced in this manner are nitrogen, oxygen, argon, and other rare gases. However, some gases, including hydrogen, acetylene, and carbon dioxide, are co-products or by-products of other processes. In the dominant cryogenic air separation process, air is cooled and pressurized until it becomes a liquid, with the various gases extracted through fractional distillation. However, non-cryogenic production technologies are a growing source of nitrogen and oxygen. There are three basic distribution methods for industrial gases: on-site plants, bulk (merchant) supply, and cylinder (small volume packaged gas). Most of the industrial gas producers and a large number of independent companies also serve the packaged gas market.

Much of the growth in this sub-industry should come from penetrating and expanding markets outside the U.S. and involve larger and more complex projects, including world-scale gasification projects. This exposes companies in this area to heightened levels of geopolitical and exchange rate risk. More recently, there has been significant growth opportunities inside the U.S., as industries are striving to reduce their carbon footprint and as reshoring of American industry gains momentum.

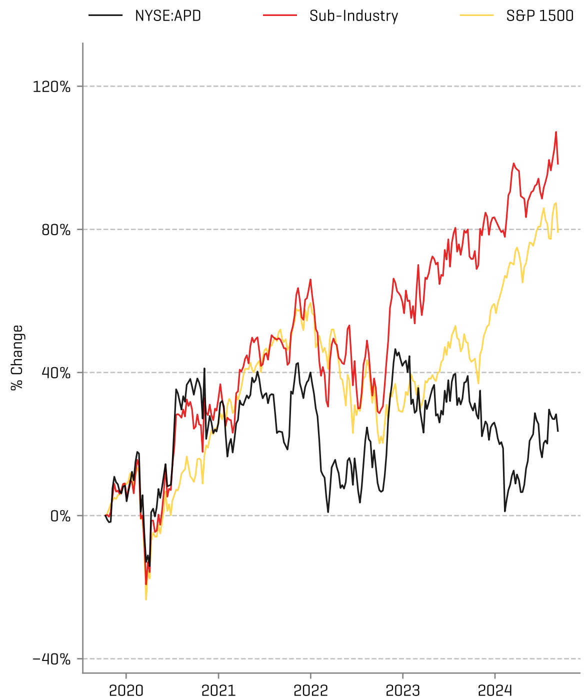
As of June 21, 2024, the year-to-date appreciation for the S&P 1500 Industrial Gases Index was 5.9%, versus the S&P Composite 1500 Index increase of 13.6%. In 2023, the S&P 1500 Industrial Gases Index rose 14.8%, versus the S&P Composite 1500 Index increase of 23.4%. As of June 21, 2024, the five-year compound annual growth rate (CAGR) for the S&P 1500 Industrial Gases Index was 13.4% versus the S&P Composite 1500 Index CAGR of 12.7%.

/ Matthew Miller, CFA

Industry Performance

GICS Sector: **Materials**
Sub-Industry: **Industrial Gases**

Based on S&P 1500 Indexes
Five-Year market price performance through Sep 07, 2024



NOTE: A sector chart appears when the sub-industry does not have sufficient historical index data.

All Sector & Sub-Industry information is based on the Global Industry Classification Standard (GICS).

Past performance is not an indication of future performance and should not be relied upon as such.

Source: CFRA, S&P Global Market Intelligence

Sub-Industry: Industrial Gases Peer Group*: Industrial Gases

Peer Group	Stock Symbol	Exchange	Currency	Recent Stock Price	Stk. Mkt. Cap. (M)	30-Day Price Chg. (%)	1-Year Price Chg. (%)	P/E Ratio	Fair Value Calc.	Yield (%)	Return on Equity (%)	LTD to Cap (%)
Air Products and Chemicals, Inc.	**APD**	**NYSE**	**USD**	**273.55**	**60,814.0**	**-1.8**	**-6.8**	**23.0**	**256.97**	**2.6**	**16.2**	**41.2**
Linde plc	LIN	NasdaqGS	USD	465.52	222,287.0	4.5	21.4	31.0	N/A	1.2	16.2	27.7

*For Peer Groups with more than 10 companies or stocks, selection of issues is based on market capitalization.
NA-Not Available; NM-Not Meaningful.
Note: Peers are selected based on Global Industry Classification Standards and market capitalization. The peer group list includes companies with similar characteristics, but may not include all the companies within the same industry and/or that engage in the same line of business.

Air Products and Chemicals, Inc.

Analyst Research Notes and other Company News

August 01, 2024
12:29 PM ET... CFRA Maintains Strong Buy Opinion on Shares of Air Products and Chemicals, Inc. (APD 291.69*****):
We increase our 12-month target by $48 to $345, or 24.9x our FY 25 (Sep.) EPS estimate, in line with APD's five-year avg. forward P/E. We raise our FY 24 EPS estimate by $0.13 to $12.45 and keep FY 25 at $13.85. APD posted FQ3 adj. EPS of $3.20 vs. $2.98, $0.16 above consensus, with a sales miss of 1.7%. Americas sales fell 2% Y/Y, due to 3% lower energy cost pass-through, 1% lower volumes, and 1% unfavorable currency, partly offset by 3% higher prices. Asia sales declined 4% Y/Y on 4% unfavorable currency and 1% lower volumes, partly offset by 1% higher pass-through. Europe sales fell 2% Y/Y, driven by 2% lower pass-through and 1% unfavorable currency, partly offset by 1% higher volumes. FQ3 adj. EBITDA margin expanded 261 bps Y/Y to 42.4%. We think APD has turned the corner and we anticipate a return to double-digit EPS growth in 2025. APD has recently been trading at trough valuation (relative to forward P/E during the last five years) and we think it will benefit from P/E expansion over the next 12 months. / Matthew Miller, CFA

May 01, 2024
02:11 AM ET... CFRA Maintains Strong Buy Opinion on Shares of Air Products and Chemicals Inc. (APD 236.34*****):
We decrease our 12-month target by $15 to $297, or 24.1x our FY24 (Sep.) EPS estimate, in line with APD's three-year avg. forward P/E. We trim our FY24 EPS estimate by $0.18 to $12.32 and keep FY25's at $13.85. APD posts FQ2 adj. EPS of $2.85 vs. $2.74, $0.15 above consensus; sales missed by 4%. The adj. EBITDA margin in FQ2 expanded 490 basis points Y/Y to 40.9%, driven by higher pricing, lower costs, and a 250 basis point increase from lower energy cost pass-through. The quarter benefitted from robust on-site activities, driven by strong demand for hydrogen and contributions from new assets. FQ2 volume declined 2% Y/Y due to weak demand for merchant products, but this was partly offset by pricing up 1%. We were disappointed with FQ3 guidance but we think it is mostly driven by major plant turnarounds in Europe and the U.S. We forecast a strong finish to the year, with 14% growth in FQ4 adj. EPS driven by new assets coming on-stream. We expect the double-digit EPS growth momentum to continue throughout FY25. / Matthew Miller, CFA

February 06, 2024
04:01 PM ET... CFRA Maintains Strong Buy Opinion on Shares of Air Products and Chemicals, Inc. (APD 218.05*****):
We drop our 12-month target by $24 to $312, or 25.0x our FY 24 (Sep.) EPS view, in line with APD's three-year average forward P/E. We lower our FY 24 EPS view by $0.62 to $12.50 and FY 25's by $0.65 to $13.85. APD posted FQ1 adj. EPS of $2.82 vs. $2.64, $0.18 below consensus, on a sales miss of 6.6%. While APD achieved solid earnings growth Y/Y, it was below guidance and APD cut its full-year guidance. The biggest factors leading to the miss and guidance cut were weaker-than-expected demand in China, lower helium demand globally in electronics end markets, higher costs for a sale-of-equipment project, and the negative impact from Argentina's currency devaluation. Although APD is now guiding to adj. EPS growth of less than 10% (guide range of 6%-9% growth), we still have strong confidence in APD achieving a 10% CAGR in adj. EPS over the next three years. We forecast a muted FQ2 followed by strong growth in the second half of FY 24, which should help APD re-rate toward its historical average earnings multiples. / Matthew Miller, CFA

November 09, 2023
06:30 AM ET... CFRA Reiterates Strong Buy Opinion on Shares of Air Products and Chemicals (APD 259.93*****):
We decrease our 12-month target price by $8 to $336, or 25.6x our FY24 (Sep.) EPS estimate, in line with APD's three-year avg. forward P/E. We raise our FY24 EPS estimate by $0.06 to $13.12 and start FY25's at $14.50. APD posts FQ4 adj. EPS of $3.15 vs. $2.89, $0.04 above consensus despite a sales miss of 4.7%. The biggest news from FQ4 (leading to weakness in APD shares) is the higher capital costs at the blue hydrogen complex in Louisiana (one of APD's largest projects). The capital budget for this project is now $7.0 billion, up from $4.5 billion in Oct. '21; about $1.0 billion of the increase is from cost inflation, while the remainder is due to an expanded scope of the project and adding in the interest component of capital. APD continues to forecast an IRR above 10% on the project and we remain bullish on APD's leadership in clean hydrogen. We think APD provides clear visibility to adj. EPS growth above 10% in both '23 and '24, driven by new projects coming on stream and a robust on-site base business. / Matthew Miller, CFA

August 04, 2023
03:31 AM ET... CFRA Maintains Strong Buy Opinion on Shares of Air Products and Chemicals (APD 281.82*****):
We trim our 12-month target price by $3 to $344, or 26.3x our FY24 (Sep.) EPS estimate, in line with APD's three-year avg. forward P/E. We trim our FY23 EPS estimate by $0.02 to $11.50 and keep FY24's at $13.06. APD posts FQ3 adj. EPS of $2.98 vs. $2.62, $0.07 above consensus, but sales missed by 8%. FQ3 sales declined 5% Y/Y, driven by volume up 3% Y/Y, price up 4% Y/Y, energy cost pass-through down 11% Y/Y, and negative currency exchange of 1%. FQ3 adj. EBITDA margin expanded by 590 bps Y/Y to 39.8% and return on capital employed improved 130 bps Y/Y to 12.0%. We remain bullish on APD's pricing power, while volume has increased Y/Y for 9 consecutive quarters, driven by strong on-site performance (including higher hydrogen demand in Americas) and several new assets that have come on stream. APD completed the financial close of its NEOM project, the world's largest green hydrogen production facility, and we think green hydrogen projects will start to be a significant portion of APD's backlog in upcoming years. / Matthew Miller, CFA

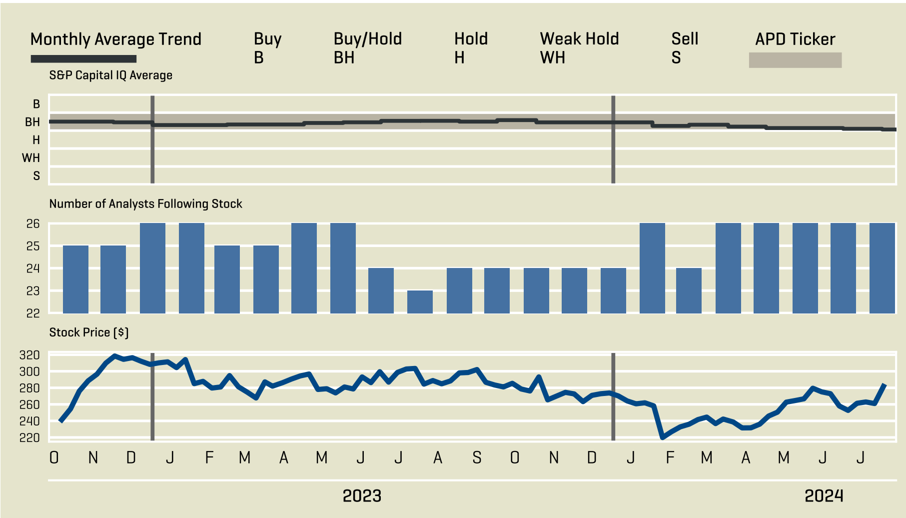
May 11, 2023
01:28 PM ET... CFRA Maintains Strong Buy Opinion on Shares of Air Products and Chemicals (APD 277.02*****):
We keep our 12-month target price at $347, or 26.6x our FY 24 (Sep.) EPS estimate, in line with APD's three-year average forward P/E. We raise our FY 23 EPS estimate by $0.02 to $11.52 and maintain FY 24's at $13.06. APD posts FQ2 adj. EPS of $2.74 vs. $2.38, $0.08 above consensus, on a top-line beat of 4%. FQ2 sales rose 9% Y/Y, on 8% higher pricing and 6% higher volume, partly offset by 4% negative currency and 1% lower energy cost pass-through. FQ2 adj. EBITDA increased 13% Y/Y and the adj. EBITDA margin of 36.0% is up 140 basis points Y/Y, as higher volume and pricing in all regions more than offset higher costs. After two consecutive quarters of sequential adj. EBITDA margin expansion, we expect pricing action and lower energy cost pass-through to continue to drive strong sequential (and Y/Y) improvements in the adj. EBITDA margin in upcoming quarters. We are bullish on the growth of APD's base industrial gas business and the significant potential of new projects tied to hydrogen, LNG, and carbon capture. / Matthew Miller, CFA

February 02, 2023
06:39 PM ET... CFRA Reiterates Strong Buy Opinion on Shares of Air Products and Chemicals (APD 297.77*****):
We increase our 12-month target price by $39 to $347, or 26.6x our FY24 (Sep.) EPS estimate, in line with APD's three-year avg. forward P/E. We decrease our FY23 EPS estimate by $0.16 to $11.50 and maintain our FY24 EPS forecast at $13.06. APD posts FQ1 adj. EPS of $2.64 vs. $2.52, $0.04 below consensus, while revenue missed by 2.8%. FQ1 adj. EBITDA increased 8.1% Y/Y, but missed consensus by 2.7%. We are pleased to see the modest rebound in adj. EBITDA margin to 34.1%, up 60 bps Y/Y and up 200 bps Q/Q. The adj. EBITDA margin peaked at 40.9% in FY20, falling to 37.6% in FY21 and 33.4% in FY22, with two-thirds of the contraction in margin (from its peak) driven by higher energy cost pass-through, which increases sales but doesn't impact profit. We think adj. EBITDA margin is poised to rebound in FY23 by at least 120 bps, on strong pricing and higher volumes leveraging fixed costs. Recent announcements of new projects related to green hydrogen reinforce our bullish view of strong secular growth in this industry. / Matthew Miller, CFA

Note: Research notes reflect CFRA's published opinions and analysis on the stock at the time the note was published. The note reflects the views of the equity analyst as of the date and time indicated in the note, and may not reflect CFRA's current view on the company.

Air Products and Chemicals, Inc.

Analysts Recommendations



	No. of Recommendations	% of Total	1 Mo.Prior	3 Mos.Prior
Buy	6	23	6	7
Buy/Hold	4	15	4	5
Hold	14	54	14	11
Weak hold	0	0	0	1
Sell	1	4	1	1
No Opinion	1	4	1	1
Total	26	100	26	26

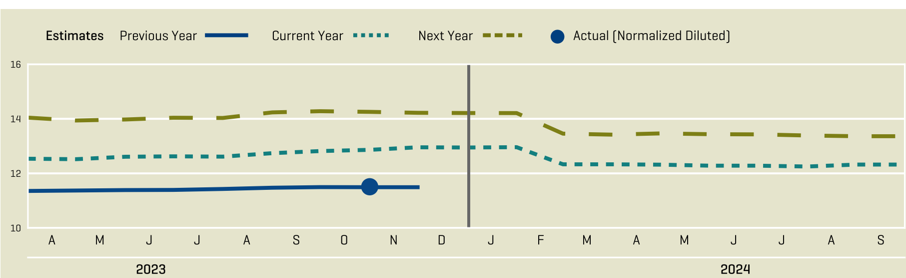
Wall Street Consensus Opinion

Buy/Hold

Wall Street Consensus vs. Performance

For fiscal year 2024, analysts estimate that APD will earn USD 12.32. For fiscal year 2025, analysts estimate that APD's earnings per share will grow by 8.43% to USD 13.36.

Wall Street Consensus Estimates



Fiscal Year	Avg Est.	High Est.	Low Est.	# of Est.	Est. P/E
2025	13.36	14.27	12.00	23	20.47
2024	12.32	12.50	12.16	23	22.20
2025 vs. 2024	**▲ 8%**	**▲ 14%**	**▼ -1%**	**N/A%**	**▼ -8%**
Q4'25	3.55	3.62	3.51	5	77.08
Q4'24	3.50	3.63	3.33	16	78.25
Q4'25 vs. Q4'24	**▲ 2%**	**▼ -0%**	**▲ 6%**	**▼ -69%**	**▼ -1%**

Forecasts are not reliable indicator of future performance.
Note: A company's earnings outlook plays a major part in any investment decision. S&P Global Market Intelligence organizes the earnings estimates of over 2,300 Wall Street analysts, and provides their consensus of earnings over the next two years, as well as how those earnings estimates have changed over time. Note that the information provided in relation to consensus estimates is not intended to predict actual results and should not be taken as a reliable indicator of future performance.
Note: For all tables, graphs and charts in this report that do not cite any reference or source, the source is S&P Global Market Intelligence.

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Air Products and Chemicals, Inc.

Glossary

STARS

Since January 1, 1987, CFRA Equity and Fund Research Services, and its predecessor S&P Capital IQ Equity Research has ranked a universe of U.S. common stocks, ADRs (American Depositary Receipts), and ADSs (American Depositary Shares) based on a given equity's potential for future performance. Similarly, we have ranked Asian and European equities since June 30, 2002. Under proprietary STARS (Stock Appreciation Ranking System), equity analysts rank equities according to their individual forecast of an equity's future total return potential versus the expected total return of a relevant benchmark (e.g., a regional index (MSCI AC Asia Pacific Index, MSCI AC Europe Index or S&P 500® Index)), based on a 12-month time horizon. STARS was designed to help investors looking to put their investment decisions in perspective. Data used to assist in determining the STARS ranking may be the result of the analyst's own models as well as internal proprietary models resulting from dynamic data inputs.

S&P Global Market Intelligence's Quality Ranking

(also known as **S&P Capital IQ Earnings & Dividend Rankings**) - Growth and S&P Capital IQ Earnings & Dividend Rankings stability of earnings and dividends are deemed key elements in establishing S&P Global Market Intelligence's earnings and dividend rankings for common stocks, which are designed to capsulize the nature of this record in a single symbol. It should be noted, however, that the process also takes into consideration certain adjustments and modifications deemed desirable in establishing such rankings. The final score for each stock is measured against a scoring matrix determined by analysis of the scores of a large and representative sample of stocks. The range of scores in the array of this sample has been aligned with the following ladder of rankings:

A+	Highest	B	Below Average
A	High	B-	Lower
A	Above	C	Lowest
B+	Average	D	In Reorganization
NC	Not Ranked		

EPS Estimates

CFRA's earnings per share (EPS) estimates reflect analyst projections of future EPS from continuing operations, and generally exclude various items that are viewed as special, non-recurring, or extraordinary. Also, EPS estimates reflect either forecasts of equity analysts; or, the consensus (average) EPS estimate, which are independently compiled by S&P Global Market Intelligence, a data provider to CFRA. Among the items typically excluded from EPS estimates are asset sale gains; impairment, restructuring or merger-related charges; legal and insurance settlements; in process research and development expenses; gains or losses on the extinguishment of debt; the cumulative effect of accounting changes; and earnings related to operations that have been classified by the company as discontinued. The inclusion of some items, such as stock option expense and recurring types of other charges, may vary, and depend on such factors as industry practice, analyst judgment, and the extent to which some types of data is disclosed by companies.

12-Month Target Price

The equity analyst's projection of the market price a given security will command 12 months hence, based on a combination of intrinsic, relative, and private market valuation metrics.

Abbreviations Used in Equity Research Reports

CAGR - Compound Annual Growth Rate
CAPEX - Capital Expenditures
CY - Calendar Year
DCF - Discounted Cash Flow
DDM - Dividend Discount Model
EBIT - Earnings Before Interest and Taxes
EBITDA - Earnings Before Interest, Taxes, Depreciation & Amortization
EPS - Earnings Per Share
EV - Enterprise Value
FCF - Free Cash Flow
FFO - Funds From Operations
FY - Fiscal Year
P/E - Price/Earnings
P/NAV - Price to Net Asset Value
PEG Ratio - P/E-to-Growth Ratio
PV - Present Value
R&D - Research & Development
ROCE - Return on Capital Employed
ROE Return on Equity
ROI - Return on Investment
ROIC - Return on Invested Capital
ROA - Return on Assets
SG&A - Selling, General & Administrative Expenses
SOTP - Sum-of-The-Parts
WACC - Weighted Average Cost of Capital

Dividends on American Depository Receipts (ADRs) and American Depository Shares (ADSs) are net of taxes (paid in the country of origin).

Qualitative Risk Assessment

Reflects an equity analyst's view of a given company's operational risk, or the risk of a firm's ability to continue as an ongoing concern. The Qualitative Risk Assessment is a relative ranking to the U.S. STARS universe, and should be reflective of risk factors related to a company's operations, as opposed to risk and volatility measures associated with share prices. For an ETF this reflects on a capitalization-weighted basis, the average qualitative risk assessment assigned to holdings of the fund.

STARS Ranking system and definition:

★★★★★ **5-STARS (Strong Buy):**
Total return is expected to outperform the total return of a relevant benchmark, by a notable margin over the coming 12 months, with shares rising in price on an absolute basis.

★★★★☆ **4-STARS (Buy):**
Total return is expected to outperform the total return of a relevant benchmark over the coming 12 months.

★★★☆☆ **3-STARS (Hold):**
Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months.

★★☆☆☆ **2-STARS (Sell):**
Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months.

★☆☆☆☆ **1-STAR (Strong Sell):**
Total return is expected to underperform the total return of a relevant benchmark by a notable margin over the coming 12 months, with shares falling in price on an absolute basis.

Relevant benchmarks:
In North America, the relevant benchmark is the S&P 500 Index, in Europe and in Asia, the relevant benchmarks are the MSCI AC Europe Index and the MSCI AC Asia Pacific Index, respectively.

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Disclosures

Stocks are ranked in accordance with the following ranking methodologies:

STARS Stock Reports:

Qualitative STARS rankings are determined and assigned by equity analysts. For reports containing STARS rankings refer to the Glossary section of the report for detailed methodology and the definition of STARS rankings.

Quantitative Stock Reports:

Quantitative rankings are determined by ranking a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. For reports containing quantitative rankings refer to the Glossary section seof the report for detailed methodology and the definition of Quantitative rankings.

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STARS Stock Reports:

Global STARS Distribution as of June 30, 2024

Ranking	North America	Europe	Asia	Global
Buy	40.3%	35.9%	45.1%	40.5%
Hold	50.2%	54.1%	47.9%	50.5%
Sell	9.5%	10.0%	7.0%	9.1%
Total	100.0%	100.0%	100.0%	100.0%

Analyst Certification:

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