

APi Group Corp (NYSE: APG)

Industry: Industrial Maintenance Services

Date: 05/01/2023

**Blake Gilbert**

bgilbert23@gsb.columbia.edu

Action: Long / PT: ~\$62/ Upside: ~175%

Recommendation:

Long on APi Group Corporation (APG) with a 5-year price target of \$64, implying 175% upside or a ~22.5% IRR, assuming a 2027 exit.

Investment Thesis:

APG is sticky business - a more cyclically driven installation business provides a path to stable recurring revenue in its larger service business, which is protected by regulatory requirements imposed on APG's end markets. The firm has a respectable moat with durable competitive advantages driven by longstanding partnerships and enough reach to service international and large-scale enterprise client contracts. APG is benefiting from long-term secular tailwinds as they are one of a few large participants in a highly fragmented industry which has been rapidly consolidating. Additionally, the firm is poised to experience short to intermediate term growth because of the IIA and CHIPS act as catalysts. Finally, the firm is currently trading at a discount relative to peers.

Variant View: The street underestimates the impact that near term legislation will have on some of APG's end markets, and it is not factoring in the trend of industry consolidation. Additionally, there is concern over the dilutive impact APG's recent acquisition of Chubb will have on its near-term margins, which I believe management is positioned to improve quickly.

Business Description:

APG had its IPO via a SPAC in late 2017. The firm is a global business services provider of safety, specialty, and industrial services globally, with roughly ~62% of its revenues generated in the United States representing ~11% market share based on firm estimates. APG provides statutorily mandated services, predominantly in the fire safety market, to long-standing customers across industries. APi Group has two principal segments:

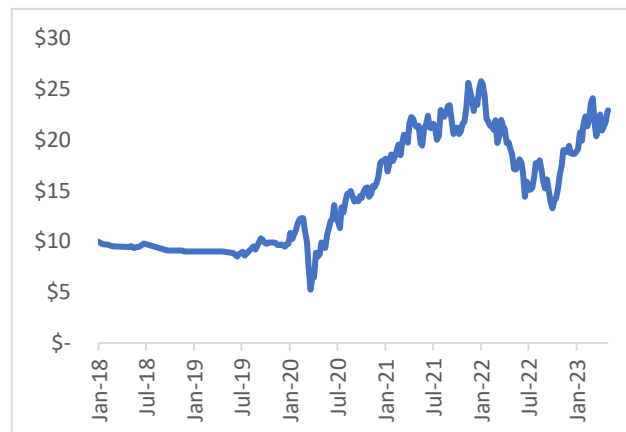
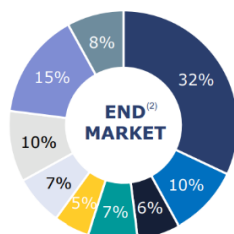
- **Safety Services (69% of revenue / 70% of EBITDA):** Designs and installs fire safety and security solutions, as well as HVAC systems. The company provides initial installation and ongoing inspection, service, and maintenance.
 - **Competitors:** Johnson Controls (est. ~<10% market share in U.S. but #1 player globally), Cintas (est. ~<5% U.S. market share)
 - **Customers:** Over half include a mix of commercial, education, entertainment, industrial, and manufacturing with an average contract size of ~\$5,000. The relatively small contract size allows management to pass through short-term inflation to customers given the faster turning nature of the projects.
 - **TAM:** Fire safety equipment market in the U.S. was \$15.3bn in 2021, and was projected to grow to at a 3.4% CAGR through 2030. Over the next 5 years this value is projected to be much higher thanks to government subsidies. The National Fire Protection Association forecasted

(\$ in mm, except per share)

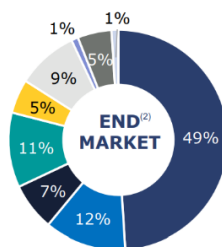
Key Stats	
Currency	USD
Trading	
30 Day Avg Trading Volume	42,933
30 Day Avg Trading Value	\$21.69
Current Price	\$22.68
52 Week Range	\$13.09 / \$24.49
% from Low / High	73% / (7%)
FD Shares Outstanding	234.5
Float (Shares)	189.9
Number of Shares Shorted	3.6
SI as a % of Float	1.87%

Enterprise Value

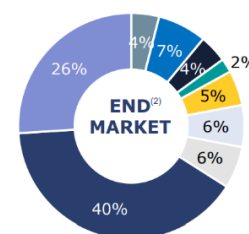
Market Cap	\$5,319
(-) Cash	\$605
(+) Debt & Leases	\$3,028
Net Debt	\$2,423
(+) Preferred Stock	\$840
(+) Minority Interests	\$0
Enterprise Value	\$8,582.30

**Consolidated**

End Market	Revenue
Commercial / Education / Entertainment	32%
Industrial / Manufacturing	15%
Fulfillment and Distribution Centers	10%
Other	7%
High Tech	5%
Healthcare	7%
Government / Infrastructure	10%
Telecom / Utilities	15%
Integrity / Transmission	8%

Safety Services

End Market	Revenue
Commercial / Education / Entertainment	49%
Industrial / Manufacturing	12%
Fulfillment and Distribution Centers	7%
Other	11%
High Tech	5%
Healthcare	9%
Government / Infrastructure	1%
Telecom / Utilities	5%
Integrity / Transmission	1%

Specialty Services⁽¹⁾

End Market	Revenue
Commercial / Education / Entertainment	4%
Industrial / Manufacturing	7%
Fulfillment and Distribution Centers	4%
Other	2%
High Tech	5%
Healthcare	6%
Government / Infrastructure	6%
Telecom / Utilities	40%
Integrity / Transmission	26%

1. Includes Industrial Services which was combined with Specialty Services effective January 1, 2022.
 2. Estimated based on 2022 net revenues.

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the U.S. fire safety market, **including equipment, inspection, and service** to grow 9% CAGR through 2025. Globally the long-term growth CAGR for equipment is expected to be 6.4%. This is significant for APG, as **international revenue now represents 38% of its total revenue base** following its Chubb acquisition in 2022. APG targets roughly a 1-to-1 service to equipment revenue mix for its Safety Services segment

- **Specialty Services (31% of revenue / 30% of EBITDA):** Designs and installs infrastructure and specialized plant services, including electric, gas, water, sewer, and telecommunications infrastructure. The company provides initial installation and ongoing inspection, service, and maintenance. The former Industrial Services business segment, which included oil pipeline infrastructure, access and road construction, and other supporting services to companies in the energy sector, was rolled into Specialty Services in 2021.
 - **Competitors:** Quanta Systems (#1 player with ~10.4% market share), Emcor group (#2 player with 6.7% market share) and Mastec (#3 player with 5.9% U.S. market share)
 - **Customers:** A wide range of fragmented services industries, most of which are private and public utilities, communications, and critical energy infrastructure (integrity/transmission), with an average contract size of ~\$75,000. While there is a service element to revenues here through multi-year master service agreements entered into with customers, most sales are one time contract based.
 - **TAM:** More broadly, Specialty Contracting in the U.S. is a \$164.5bn industry which is very competitive. The industry was forecasted to grow at a CAGR of 5.6% through 2027, but this growth forecast is likely conservative as it does not factor in the near-term spike in government spending.

Across both segments fire, security, and infrastructure is acyclical. General industrial is mid-to-late cycle and non-residential is mid-cycle and the end markets they are exposed to have low correlation.

Competitive Landscape:

- **End Markets:** The Safety and Specialty contracting industries are highly fragmented. **Specialty Contracting** covers a wide range of fragmented services industries – for example, there are over 15,000 water and sewer infrastructure companies in the U.S. alone. Despite the fragmented nature of both end markets, there are **benefits to scale** in both including:
 - **Broad footprint presenting a more compelling option to national customers** who require services in more than one geography
 - Ability to **cross-sell products and services** across different business units (e.g. fire safety, virtual monitoring, and fiber installation) to provide more value to customers
 - Leveraging scale to achieve **favorable supplier pricing** and other synergies
- **PE Firms** have been very active in the fire safety and security market recently, with over 45 PE-backed acquisitions completed since Q1 2019 among a few roll-up buyers.
- Johnson Controls and Cintas have previously been active acquirers in the fire safety market, with JCI acquisitions including New Zealand-based Fire & Mechanical Contracting Ltd in 2019, followed by Ireland-based Provincial Sprinkler Company Ltd and the English firm Nu-Form Fire UK in 2021 (transaction terms not disclosed).
- **Specialty services businesses** have also historically been acquisitive, with Quanta Services buying renewable energy infrastructure solutions provider Blattner for \$2.7 billion in 2021, and MasTec buying Energy Contractor INTREN LLC for \$420 million and utility services firm Henkels & McCoy Group for \$600 million (~8.6x EBITDA) in 2021.

“I think in North America, specifically, the reality is that the smaller organizations are struggling because of cost. I think where the economy is going **with inflation**, it's like the farming industry. **Smaller organizations are getting squeezed out**, and you're starting to sell to the larger organizations like the APis, like the EMCORs of the world.”

- Former APi Director

“(In the EU) The top 3 fire safety players hold 45-50% market share, with the remaining 50% held by 1,500+ other competitors”

- Former Chubb executive

Revenue (\$ million)

Company	Firm Type	2017	% Share	2022	% Share
Quanta Services	Electrical/Utility	9,470	7.6%	17,074	9.8%
Emcor Group Inc.	Mechanical/Electrical/Fire Protection	7,687	6.2%	11,076	6.4%
Mastec Inc	Electrical/Utility	6,607	5.3%	9,778	5.6%
Api Group Inc	Fire Protection/Mechanical/Utility	3,046	2.5%	6,558	3.8%
Brandsafway	Concrete/Asbestos/Painting	4,755	3.8%	4,500*	2.6%
Primoris	Utility	N/A	N/A	4,421	2.5%
Myr Group Inc	Electrical	1,403	1.1%	3,009	1.7%
Centuri Group Inc	Utility	1,247	1.0%	4,960	2.9%
Artera Services	Utility	N/A	N/A	2,600*	1.5%
Rosendin Electric	Electrical	1,542	1.2%	2,000*	1.2%
Top 10		39,043**	31.5%	65,976	38.0%
Total		124,040	100.0%	173,712	100.0%

ENR Top 600 Specialty Contractor Report

*Estimate. Company was acquired by PE

**Includes revenue from previous top 10 firms

APi + Chubb: Serving Customers with Global Footprint



- **Suppliers:** APG sources products for its variety of services from a mix of different suppliers. Johnson Controls, Siemens, Viking, and Honeywell represent some of APG's primary suppliers for its largest fire and life safety end markets. **APG can leverage its scale to get favorable pricing with its suppliers.**

"We have **supplier agreements** with all those to get material **well below list price** which helps to offset the union labor costs that APi has against a lot of competitors in the marketplace".

- Former President and CEO of APi National Service Group

- **Pricing & Inflation:** APG typically focuses on revenue growth through increased contract volume. **The firm does incrementally increase pricing where applicable, and is able to pass through cost increases to its customers.** APG's structures its contracts in a few different ways:

- Most common: APG bids an all-in price for the customer based on their estimate of input costs (labor & materials) and desired margin. The customer pays the bid price regardless of whether estimated costs are the same as the realized cost.
- Less common: APG bids a price for the service component and customer takes the risk and acquires the raw materials required to complete the project.
- Less common: On larger projects, APG works some language into the contract that protects them against large moves in materials pricing. This seems to be more common in Industrial/Specialty Services than Safety Services.

Variable Operating Cost

~\$3.6bn Adjusted COGS ⁽¹⁾



~\$0.9bn Adjusted SG&A ⁽¹⁾



~75% Variable Cost Base

Business Resiliency: the COVID Model ⁽¹⁾

YoY Change	Q2 2019 – Q2 2020	FY 2019 – FY 2020
Organic Net Revenues	(14.3%)	(9.0%)
Adjusted EBITDA	+2.0%	(3.1%)
Adjusted EBITDA Margin	+190 bp	+56 bp
Adjusted Free Cash Flow	\$170	\$443
Adjusted Free Cash Flow Conversion	168.3%	116.3%

Q2 2020 adjusted EBITDA margin expansion of 190bps despite ~14% organic revenue decline during COVID shutdown

The company's installation contracts have a short duration (<6 months on average). Because of this, the company turns around projects quickly and individual projects do not meaningfully impact revenue, thus reducing the impact of inflationary pressures on input costs. Service and inspection revenue is less exposed to materials inflation, but margins are still pressured by wage inflation. The company has noted that its union agreements often contain CPI escalators for wages, and are ~5 years in term, **so wages should grow proportionate to inflation**. It is difficult to see direct impact of commodity inflation on margins, but it is there – APG does not quantify the direct impact in filings, and gross margins have improved despite inflation because of mix shift to inspection/service and Safety Services revenue.

"Our pricing is very much real-time pricing as our visibility curve is very clear as we are quoting projects that are occurring in the near term. We believe that these are competitive advantages that allow us to take focus on real-time pricing and operational efficiency to ensure true costs are reflected in each project that we take on."

- Jim Lillie (Co-Chair), Q3 2021 Earnings Call

"in some of our larger installation work that we have for our service customers, we have built in price escalation and protection from rapid price escalation from a contract language perspective. And I feel like we've done a really nice job of staying out in front of it and communicating with the businesses to make sure that they're well protected from any sort of price increases."

- Russ Becker (CEO), Q3 2021 Earnings Call

Thesis 1: API Group's sticky business driven by statutory requirements, longstanding partnerships, and enough reach to service large-scale enterprise client contracts. This provides APG a meaningful margin of safety.

- **Statutorily Required Services:** According to the National Fire Prevention Association, in 2018, there were over 1.3 million reported fires resulting in 3,655 related civilian deaths, 15,200 related civilian injuries and \$25.6 billion in related property damage. As a result, the life safety industry is highly regulated at the federal, state and local levels and continuous regulatory changes, including **mandated building codes and inspections and maintenance requirements**, continue to generate increasing demand for APG services, **often on a recurring annual basis**. Specifically, the Uniform Building Codes written by the National Fire Protection Association, and the International Code Council regulate fire suppression and sprinkler systems. Among other things, these codes require testing, inspections, repair, maintenance and specific retrofits of building fire suppression and sprinkler systems which generates recurring revenue related to those services. **As these associations and government agencies continue to adopt new, more stringent regulations, the demand for services increases.**
- **Service First Focus:** Most competition within Life Safety business is small local mom and pop operators, which makes for a fragmented marketplace. They typically compete with only a small number of players in each region and often times it is just competition with the incumbent. APG has an inspection first mindset as opposed to **local players that often chase multi-million dollar install work instead of doing smaller dollar inspection work**. APG leverages their back-office infrastructure and resources to go after these smaller ticket items. Furthermore, they are enabled with better technology, which allows them to turn inspection work into deficiency reports faster and **convert that inspection work into incremental service work at a better pace.**
- **A Differentiated Approach to Customer Acquisition:** Competitors focus on submitting proposals to general contractors hired by building owners for new construction work and **after the project is 90-95% complete and systems are installed, they look to begin targeting service and inspection work**. **APG's strategy is reversed, they start with targeting inspection work** at existing facilities with the intent **to generate \$3-4 of service work for every \$1 of inspection work**, and **by delivering to customer expectations in a timely manner they build a sticky relationship that could lead to higher margin new contract opportunities** in the future.
- **Direct Customer Relationships / Cutting Out the Middleman:** APG targets owner direct relationships where possible vs a general contractor as they believe it positions them to better capitalize on future service and inspection work at the property. APG is actively adding inspection sales leaders to their team to be the boots on the ground to get out and call customers and establish relationships in the already built environment. Service work here typically includes items such as deficiency reports, preventive maintenance, direct replacement, modification, repair, testing, monitoring, and emergency service. With a skilled union led labor force and strong apprentice program they can target skilled labor that is differentiated and able to convert sales of inspections to service work. The success of this approach shows. **APG claims their contract retention on the service side is 90%+, which places it amongst the highest in its peer group and well above the estimated industry average of low to mid 80s.**
- **Multinational Footprint:** APG is one of only a handful of operators with a multinational as well as a nationwide footprint across the United States. This makes it a more attractive partner for large enterprise clients than smaller local players, who make up the vast majority of the competitive landscape. Because they are providing bulk deals, with hundreds to thousands of contracts at a time, large clients tend to provide lower margin business as they have more bargaining power and are more price sensitive. What they offer in return is much greater top line growth. While APG does frequently target global enterprises, **they have overall low customer concentration with no single customer accounting for more than 5% of total net revenues as of 2022.**

"Most of our competitors with the exception of Simplex have to use the subcontractor network in order to perform all of the work, whereas APG is primarily using their own companies in order to perform the work. And so, it provides a unique opportunity for customers to have more control, more visibility, more consistency and delivery of product."

- Former President and CEO of Api National Service Group

"(for) a huge chain out there (like Starbucks), (between) \$1 of Starbucks business or \$1 of some random independent restaurant in your location, they would prefer the random independent restaurant in your location because they have a whole lot less bargaining power. They don't have time. That's probably a much stickier client and you have more pricing power over them than \$1 of Starbucks. Now the reality is you don't get \$1 of Starbucks. You get 50 Starbucks locations. So the magnitude is what you got to trade off... those guys cracking the whip on you and driving down your pricing are large customers that can contribute much more to your P&L than that small independent restaurant down the street."

- Executive at a PE Owned Fire Safety Company

When speaking of Fire Safety **SERVICE** gross margins (not incl equipment)

"Your independent small guy might be pushing 50%. The big national chains might be 40%. I'm making that up based on just a weighted average of what it takes to end up in the mid-upper 40s"

- Executive at a PE Owned Fire Safety Company

*"So you have Consolidated Fire Protection, API, Pye-Barker, Summit, all competing for these **national contracts, like Home Depot, Lowe's, Walmart**. And they want one contractor to do all of their **2,500 stores throughout the U.S.** So you're going to negotiate one contract and pricing, and you're going to pay the same for an LA Fitness and now San Marcos, for one, they'll say in Florida."*

So you have different cost of labor throughout the country, but you're telling them that, hey, this is what you're going to pay for one wet riser, this is what you're going to pay for a backflow, this is what you're going to pay for a fire extinguisher. And it doesn't matter if it's in Florida, Texas, Oregon, Washington, California, it's a set price."

- VP of Sales at Millennium Fire Protection

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Thesis 2: Market Leading Position in a Fragmented and Consolidating Industry Leads to Continued Inorganic Growth, Driving More Contract Volume and EBITDA Margin Expansion

- Industry-wide Consolidation:** Both the specialty consulting industry, and the subset fire safety services industry, have seen rapid consolidation over the past 5 years. **The largest 3 fire safety services companies only made up ~17% of the industry in 2017, and that share has ballooned to ~25% by the end of 2022.** This shift is less about APG standing out relative to its larger peers, but rather a few large participants winning the overall market together by incorporating the smaller companies into an assortment of localized brands.

"The larger guys have roughly 20-25% of the market, and 75-80% is still controlled by a bunch of small guys."

- Former APi Director

"I think in the next five years, there's going to be mass consolidation. You're going to see full circle of who's now with the parent company, who's been rolled up and who's been left holding the bag. Last year has probably been the best year to sell company at the peak. And now with interest rates and pressures on cash in your account and supply chain issues, everything else, I think we're coming back down from the peak of acquisition."

But in the next five years, I think it's going to be total domination by the big players to come in and buy up these smaller mom and pops and then we're going to kind of smooth out after that. APi will have a company in every city state in the country. Summit will be where they want to be, geographically speaking. The other private equities will have since rolled out all their opportunities as well. And they're probably going to stay put till the next advance in our industry."

- VP of Sales at Millennium Fire Protection

"I think it's more setting and nurturing for these companies to be bought out by other fire protection companies like mine and people like APi, Summit. I think they're wearier of the private equity guys coming in to buy their business and do an earnout, thinking that, they'll lose faith, lose focus."

They're more concerned about their customers and clients and providing them with good customer service, quality craftsmanship. I think people are hesitant, maybe they would sell out the Cintas just because of maybe what's been going on with their operation over there."

So we're seeing people be more receptive to selling out to like these big APi and Summit and Pye-Barker and staying on board with them, working with them. There's no disruption to their business. They keep their company name. They keep their customers, they keep their employees, but now they're just backed by more money and better resources and technology."

- VP of Sales at Millennium Fire Protection

- Organic growth remains strong despite aggressive M&A:** APG has been active on the M&A front and has completed more than 90 acquisitions since 2005. Their focus historically has been on small family-owned businesses given they operate in a fragmented industry and can roll these small companies up. On valuation, they typically target businesses at D0.9x revenue multiple, and estimated EV/EBITDA multiple of ~5-9x for these small tuck-in deals with one-turn of the purchase price tied to an earnout. Recently however, APG had increased the prices they were paying for acquisitions. In 2020, APG acquired SK FireSafety and three additional companies in safety/specialty services, with an aggregate estimated NTM EBITDA margin of 13% and \$200 million of NTM revenue, for \$300 million in cash. This equates to a 1.5x EV/Revenue and 11.5x forward EV/EBITDA multiple. The firm rounded out its M&A in 2021 by paying a ~14.5x EV/EBITDA multiple for Chubb. Despite the more expensive acquisitions, APG has been on track with meeting its organic revenue growth goals and reached ~12% organic revenue growth in 2022.

	2015A	2016A	2017A	2018A	2019A	2020A	2021A	2022A
Organic Revenue	1,698.0	1,805.3	1,820.2	2,375.7	2,293.4	2,095.4	2,265.3	2,529.3
YoY Growth		6%	1%	31%	-3%	-9%	8%	12%
Incremental Inorganic Revenue	36	399	100	411	15	200	2,275	0
Rolling Inorganic Revenue	751	803	1,226	1,352	1,799	1,492	1,675	4,029
YoY Growth		2%	2%	2%	2%	-18%	-1%	2%
Total Revenue	2,449	2,608	3,046	3,728	4,092	3,587	3,940	6,558
YoY Growth		6%	17%	22%	10%	-12%	10%	66%

IPO

\$ in millions

Date	Company	Revenue
2007	5 acquisitions	93
2008	4 acquisitions	57
2009	3 acquisitions	54
2010	2 acquisitions	9
2011	2 acquisitions	130
2012	10 acquisitions	200
2013	6 acquisitions	48
2014	5 acquisitions	160
2015	6 acquisitions	36
2016	8 acquisitions	399
Feb-17	Minnesota Industrial Services Provider	68
Jan-18	Ohio Based Specialty Services Provider	60
Jan-18	Texas Based Safety Services Provider	56
Feb-18	Minnesota Based Specialty Services Provider	295
Oct-20	SK FireSafety Group and 3 additional acquisitions in Safety and Specialty	200 in 2021
Jul-21	Chubb Fire and Safety	2200
Jul-21	Premier Fire	12
Nov-21	Northern Air Corporation	25

Source: Company reports and J.P. Morgan estimates.

"Each of our businesses maintains its identity, reputation, customer relationships and culture following acquisition, and we invest heavily into cultivating leadership at each business. Our acquired businesses benefit from the resources of direct access to the APG network, which facilitates organizational sharing of knowledge and best practices, increases collaboration across our businesses and develops cross-brand solutions which foster enhanced experience, quality and efficiency."

- APi 10-K

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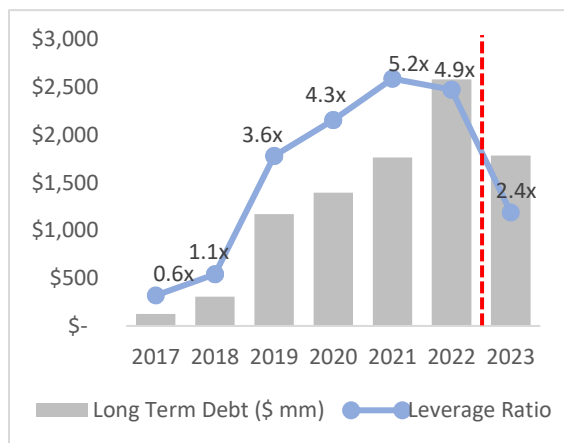
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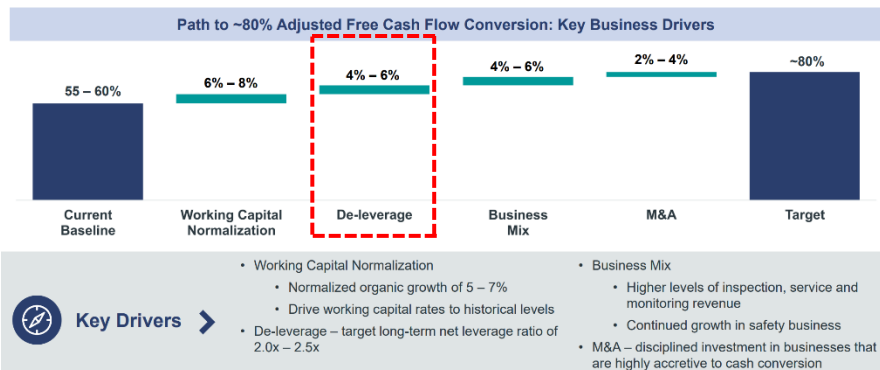
- ROIC Analysis:** As is common with firms pursuing aggressive M&A strategies, APG's ROIC profile looks unappealing at first glance. Unadjusted, it would appear as though is not any clear path towards displaying a competitive advantage with a meaningfully positive ROIC to WACC spread. While APG's adjusted EBITDA value includes a plethora of line items, if you adjust only to account for one off events of SBC in 2019 and Impairment of Goodwill in 2020, one will see a lightly rosier picture. **Ahead of the ramp up in M&A and Covid headwinds, APG enjoyed a healthy 8.4% ROIC in 2019. With ROIC slowly rebounding post COVID and Chubb acquisition.**

Unadjusted						Adjusted for SBC and Goodwill Impairment					
	2018	2019	2020	2021	2022		2018	2019	2020	2021	2022
NOPAT	\$156	(\$27)	(\$110)	\$83	\$171	Adjusted NOPAT	\$160	\$178	\$83	\$83	\$171
Invested Capital	\$1,042	\$3,188	\$3,135	\$3,916	\$5,668	Invested Capital	\$1,042	\$3,188	\$3,135	\$3,916	\$5,668
ROIC		-1.3%	-3.5%	2.3%	3.6%	ROIC		8.4%	2.6%	2.3%	3.6%
LTD Avg ROIC				-0.8%	0.3%	LTD Avg ROIC				4.5%	4.2%
4 Year ROIIC					0.3%	4 Year ROIIC					0.2%
WACC		4.0%	8.3%	10.4%	8.2%	WACC		4.0%	8.3%	10.4%	8.2%

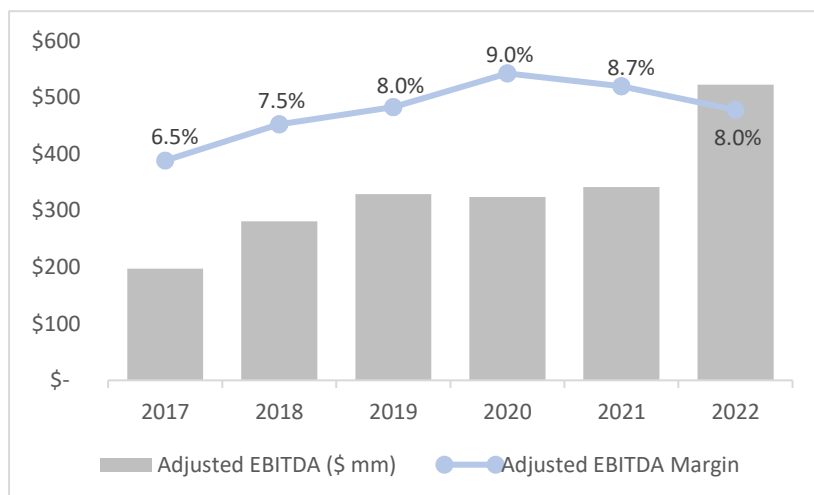
- Leverage Profile:** APG's M&A strategy led to a rapidly increasing leverage profile with a 2021 peak leverage ratio of 5.2x. Cognizant of the negative impact this was having on cash conversion, **management pledged a 2.0-2.5x leverage target exiting FY23. In January, APG announced ~\$200mm in debt repayment, which bodes well to deliver on that target.** With a 2.5x leverage ratio, management believes they will see a 4% improvement in FCF conversion.



APi: Path to ~80% Adjusted Free Cash Flow Conversion



- Margin Profile:** The company appears to be largely achieving margin expansion via its mix shift to safety services, which has a higher adjusted EBITDA margin, historically 14% vs. 11% for specialty services. A major point of concern was margin dilution resulting from the acquisition of Chubb, which had historically had ~2% lower EBITDA margins relative to APG. APG management has identified strong opportunities to improve the margins of the Chubb business, mostly through flattening the organizational structure by reducing mid level management headcount, thus putting regional managers in greater control of their sales force and cross selling opportunities. One year into the acquisition, the dilution impact was a mere 70bps. **Management is targeting ~13% EBITDA margins by the end of 2025.**



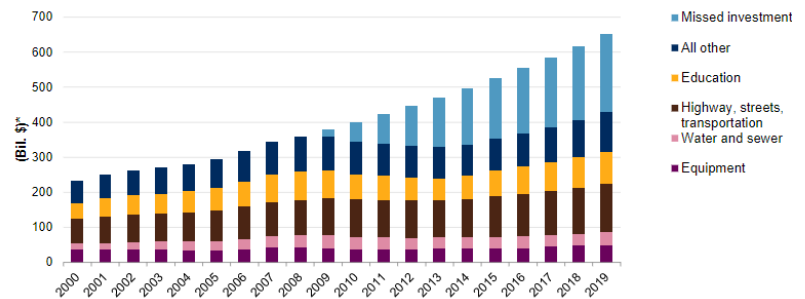
Thesis 3: The IIJA and CHIPS Bills Provide Significant Tail Winds to Key End Markets Which Increases Average Contract Size and Number of Contracts

The bipartisan Infrastructure Investment and Jobs Act provides for \$1.2 trillion in federal spending and the CHIPS and Science Act of 2022 stipulates \$52 billion over the next five years. Both bills aim to reduce costs related to developing key infrastructure and industries for America's security and success. With ~48% of its revenue from end markets that are impacted by these regulations, APG is poised to enjoy a similar growth as their services would be demanded in line with the funds deployed to growth these end market segments. These segments include high-tech, government / infrastructure, telecom / utilities, integrity / transmission, and industrial / manufacturing.

IIJA: Includes \$550bn of newly authorized infrastructure spending over the next 5 years, or about \$110bn annually. Actual spending is likely to be about ~30-50% of the authorized amounts each year, but accelerate towards the end of the program according to the Congressional Budget Office.

- The bill includes \$110bn in new funding for roads and bridges, \$65bn for power grid, \$65bn for broadband, and \$55bn for water infrastructure.
- U.S. telecom capex spending, for example, has seen 4.9%/2.3%/1.1% y/y growth from 2019-2021, is expected to grow ~14% in 2022, but expected to contract ~6% y/y in 2023. Meanwhile utility capex spending has seen 8.2%/3.8%/5.8% y/y growth from 2019-2021, is expected to grow ~11% in 2022, but growth is expected to be flattish in 2023 and reaccelerate afterwards.
- Assuming congressional figures of ~\$300bn in total spend by 2027, that represents a roughly 75% increase in infrastructure spending compared to 2019 levels. ~19% of Safety Service and ~74% of Specialty Services end markets are directly exposed to funding covered in the IIJA. After accounting for APG's market share for each segment, that come out to around a 2% and 1% revenue uplift in the Safety and Specialty segments respectively

U.S. State And Local Government Infrastructure Investment



*Billions of dollars, not seasonally adjusted. BEA defines investment as "the value of purchases of new fixed assets" and government fixed assets as equipment and structures owned by state and local government entities, including government enterprises, located in the U.S. Sources: U.S. Bureau of Economic Analysis, Investment in Government Fixed Assets; S&P Global Ratings. Copyright © 2020 by Standard & Poor's Financial Services LLC. All rights reserved.

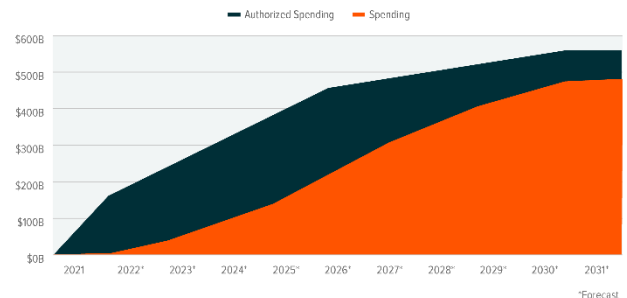
Reauthorized Transportation Funding New Core Infrastructure New Transport



Source: White House, CBO, Moody's Analytics

INFRASTRUCTURE INVESTMENT & JOBS ACT IMPLEMENTATION LIKELY TO ACCELERATE IN COMING YEARS

Source: Congressional Budget Office, 2021.



*Forecast

CHIPS Act: Federal funding has been critical in enabling a 26% increase in investments on new fabrication facilities.

- CHIPS and Science Act: \$39 billion in direct payment subsidies for expanding semiconductor manufacturing, research, packaging, equipment, and materials capacity in the United States
- FAB Act: 25% tax credit toward the purchase, construction, manufacture, or utilization of equipment or property which is integral to the operation of an advanced chip manufacturing facility that will cost the federal government roughly \$24 billion through FY2031
- The total impact of this legislation**, expansion of existing fabs, and equipment and materials supplier projects amount to nearly \$200 billion in company investments and **the creation of approximately 40,000 jobs throughout the U.S. semiconductor supply chain**. Job creation in this sector supports jobs throughout the broader U.S. economy. In fact, a 2021 SIA-Oxford Economic study found that **for each U.S. worker directly employed by the semiconductor industry, an additional 5.7 jobs are supported in the wider U.S. economy**.
- In anticipation of CHIPS Act incentives, some projects have already begun groundbreaking and construction activities, with production to start as early as the end of 2024. Other projects will begin construction in 2023. And some projects incentivized by the CHIPS and Science Act may operate on an even quicker timeline, including such projects as tool upgrades or additions. There are currently 51 new projects which have been announced according to Semiconductor Industry Association.
- If we multiply the number of direct new semi facility projects (51) by the impact multiple projected to be felt by the wider economy, we could roughly assume the addition of about ~291 new facilities which result from these bills, or about 1% of total contract volume in the Specialty Services segment.

APi Group Corp (NYSE: APG)

Industry: Industrial Maintenance Services

Date: 05/01/2023



Blake Gilbert

bgilbert23@gsb.columbia.edu

Action: Long / PT: ~\$62/ Upside: ~175%

Risks:

Wage and material cost increases meaningfully harms APG's margins

- Mitigant:** APG's workforce is largely unionized. Contract terms set with the union stipulate annual wage increases which are pegged to inflation. Short client contract durations coupled with the low dollar value relative to overall facility maintenance costs means **APG can easily pass any cost increases on to their customers.**

When speaking of COGS:

"I think typical rule of thumb is there going to be about 75% labor and engineering on your project and equipment and then 20% material. And then 5%, everything else, your permits, fees. So, it's very heavily labor driven, whether you're union or nonunion."

- VP of Sales at Millennium Fire Protection

Losing market share to peers

- Mitigant:** In the US, its primary geography, APG is the largest participant in the fire safety service and inspection market. It is currently growing faster than other larger peers. While executional risk will always persist, the fragmented nature of this industry means the market is effectively a big pond with plenty of fish and only a few fishermen. Over the next 5 years, these fishermen (**APG, Johnson Controls, Cintas**) will continue to jointly take share from smaller local players.

APG carries a significant amount of goodwill and intangible assets on its balance sheet. Earnings could be impacted by impairment charges.

- Mitigant:** While impairment charges could negatively affect earnings, APG manages strong FCF conversion of 60%+ and targeting 80%+

Acquisitions or investments could be unsuccessful or consume significant resources

- Mitigant:** Experienced leadership executing a disciplined M&A strategy focused on accretive synergies (see mgmt. overview)

"We target companies that align with our strategic priorities and demonstrate key value drivers such as culture, geography, end markets and client base, capabilities, and leadership. Our priorities are unified around maintaining business continuity while identifying and implementing operational efficiencies, cost synergies, and integration of organizational processes to drive margin expansion."

- APG 2022 10-K

Management Overview:

APG has a proven track record of accretive acquisitions, having completely over 90 since 2005. These efforts have contributed to nearly 2/3rds of its revenues and continued margin improvements. APG's CEO, Russell Becker has been with the firm since 2002 through one of its subsidiaries, The Jamar Company. More importantly is APG's board and its co-chairs Sir Martin Franklin and James Lillie who have a solid track record of running public companies including Jarden, a consumer goods company with over 120 brands. From 2001-2016 Jarden expanded revenues both organically and inorganically through M&A through their disciplined M&A strategy. They completed over 10 large M&A transactions during that time frame. Jarden organic growth profile averaged ~5% from 2010-2015, which shows that management was not only capable of acquiring businesses but also integrating and scaling them as they invested in innovation at brands they owned to drive consistent top-line growth. Jarden also had a history of doing large deals, with several deals over \$1bn. There are parallels between Jarden's M&A and business strategy and APGs. Jarden was sold to Newell Brands for \$15.4bn in late 2015. Additionally, management is compensated in a way which promotes sustainable growth. **Executive compensation is pegged to APG's rolling 3-year adjusted EBITDA and share price.**

Jarden's Largest Acquisitions

Completion Date	Target	Deal Value
Oct-15	Jostens	\$1,500
Jul-15	The Waddington Group	\$1,350
Oct-13	Yankee Candle	\$1,750
Aug-12	Pulse and Sobral Invicta	\$155
Dec-10	Quickie Manufacturing Corp	\$190
Oct-10	Aero Products International	\$70
Apr-10	Mapa Spontex	\$450
Aug-07	K2 Inc	\$1,200
Apr-07	Pure Fishing Inc	\$400
Sep-06	Pine Mountain	\$150
Jul-05	Holmes Group Inc	\$625
Jan-05	American Household Inc	\$845
Jun-04	The United States Playing Card Co	\$240
Sep-03	Lehigh Consumer Products Corp	\$155
Feb-03	Diamond Brands Operating Corp	\$110
Apr-02	Tilia International Inc	\$160

Source: Company reports and J.P. Morgan estimates.

Name	Role	Joined	Prior Company	Prior Role	% APG Shares Owned
Sir Martin Franklin	Co-Chair	2017	Mariposa Captial/Jarden	CEO/Founder	5.08%
James Lillie	Co-Chair	2017	Jarden	CEO	0.48%
Russell Becker	CEO	2002	The Jamar Company	CEO	1.28%
Kevin Krumm	CFO	2021	Ecolab Inc	Treasurer	0.01%
Paul Grunau	President, APG International Division	2006	Health Payment Systems	COO	0.24%
James Arseniadis	CAO	2022	United Health Group	VP: Acct	N/A
Tom Bauer	CIO	2021	Hagerty Insurance	VP	N/A

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Valuation:

Unit Economics and Segments

- Management disclosed on their recent earnings call the average contract size for each segment. Bumping that value against segment revenues allows us to determine a rough number for total number of contracts.
- Assume** initial elevated growth in contract size tied to elevated inflation, which tapers off through 2027
- Assume** growth rates tied to each of the primary thesis points, with modest assumptions for organic and inorganic growth based on previous years.
- Assume** gross flat gross margins early (inflation), which grow to match the same 2% increase reflected over the previous 5 years as APG attains some minimal improvements in pricing power as they continue to scale

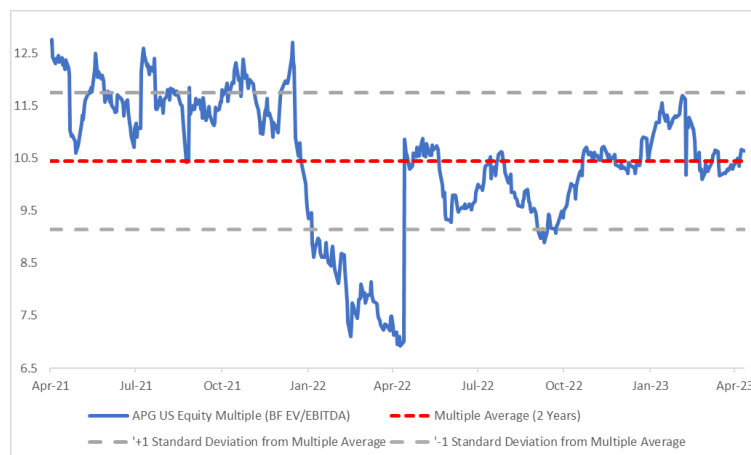
Fiscal Year	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E
Unit Economics											
Safety Services											
Average Contract Size	\$ 4,253	\$ 4,360	\$ 4,469	\$ 4,580	\$ 4,695	\$ 5,000	\$ 5,300	\$ 5,512	\$ 5,677	\$ 5,819	\$ 5,965
YoY Growth		2.5%	2.5%	2.5%	2.5%	6.5%	6.0%	4.0%	3.0%	2.5%	2.5%
Number of Contracts	376,415	391,089	397,663	357,835	443,253	915,000	965,325	1,047,378	1,141,642	1,248,014	1,369,695
IJA Growth						0%	1%	1%	1%	2%	2%
CHIPS Act Growth						0%	0%	0%	0%	0%	0%
Other Organic Growth						5%	5%	5%	5%	5%	5%
Inorganic Growth						0%	3%	3%	3%	3%	3%
YoY Growth		4%	2%	-10%	24%	106%	6%	9%	9%	9%	10%
Life Safety Rev Share	73%	78%	78%	80%	79%	88%	88%	88%	88%	88%	88%
Mechanical Services Rev Share	27%	22%	22%	20%	21%	12%	12%	12%	12%	12%	12%
Specialty Services											
Average Contract Size	\$ 66,289	\$ 67,946	\$ 69,645	\$ 71,386	\$ 73,171	\$ 75,000	\$ 79,500	\$ 82,680	\$ 85,160	\$ 87,289	\$ 89,472
YoY Growth		2.5%	2.5%	2.5%	2.5%	2.5%	6.0%	4.0%	3.0%	2.5%	2.5%
Number of Contracts	22,658	30,642	33,455	27,512	26,049	27,067	28,582	31,040	33,865	37,082	40,461
IJA Growth						0%	0%	0%	1%	1%	1%
CHIPS Act Growth						1%	1%	1%	1%	1%	1%
Other Organic Growth						5%	5%	5%	5%	5%	5%
Inorganic Growth						0%	3%	3%	3%	3%	3%
YoY Growth		35%	9%	-18%	-5%	4%	6%	9%	9%	10%	9%
Infrastructure/Utility Rev Share	47%	54%	58%	58%	55%	57%	57%	57%	57%	57%	57%
Fabrication Rev Share	11%	10%	10%	13%	13%	12%	12%	12%	12%	12%	12%
Specialty Contracting Rev Share	42%	36%	32%	29%	32%	31%	31%	31%	31%	31%	31%
Segment											
Safety Services											
Life Safety Revenue	1,171	1,322	1,378	1,317	1,647	4,025	4,502	5,080	5,704	6,391	7,190
Mechanical Services Revenue	430	383	399	322	434	550	614	693	778	872	980
COGS	1,147	1,206	1,254	1,174	1,426	3,186	3,581	4,041	4,472	5,011	5,556
Gross Profit	454	499	523	465	655	1,389	1,535	1,732	2,009	2,251	2,614
Gross Margin	28%	29%	29%	28%	31%	30%	30%	30%	31%	31%	32%
COGS Adjustment	-	-	(11)	(58)	(1)	(43)	-	-	-	-	-
Adjusted Gross Profit	454	499	534	523	656	1,432	1,535	1,732	2,009	2,251	2,614
Specialty Services											
Infrastructure/Utility Revenue	704	1,123	1,358	1,134	1,057	1,154	1,292	1,459	1,639	1,840	2,058
Fabrication Revenue	171	218	237	251	244	253	283	320	359	403	451
Specialty Contracting Revenue	627	741	735	579	605	623	697	788	885	993	1,111
COGS	1,292	1,794	2,051	1,673	1,622	1,705	1,909	2,156	2,394	2,687	2,968
Gross Profit	208	288	279	291	284	325	364	411	490	550	652
Gross Margin	14%	14%	12%	15%	15%	16%	16%	16%	17%	17%	18%
COGS Adjustment	-	-	(16)	(33)	(4)	(3)	-	-	-	-	-
Adjusted Gross Profit	208	288	295	324	288	328	364	411	490	550	652
Corporate & Eliminations											
Revenue	(57)	(59)	(15)	(16)	(47)	(47)	(50)	(50)	(50)	(50)	(50)
COGS	(57)	(59)	(15)	(16)	(47)	(47)	(50)	(50)	(50)	(50)	(50)
Gross Profit	-	-	-	-	-	-	-	-	-	-	-

Income Statement

- Assume** some modest improvements to SG&A margin as APG continues to scale and is better able to leverage its infrastructure (still elevated compared to pre COVID)

Price Target

- Assume** 10.5x EV/Adjusted EBITDA Multiple which is in line with both the current multiple and historical average, as well as being below the peer average of 13.1x. (Johnson Control 12.4x, Cintas Corp 22.4x, and Emcor 11.2x, among others)
- Assume** additional deleveraging as management is currently making tangible steps towards meeting its 2-2.5x leverage ratio target



"Yes, 10 years ago, I would have said there hasn't been much consolidation at all and maybe just some smaller mom and pops by the bigger guys like APi Group. I think since APi going public or even pre-IPO, for APi, a lot of buying, a lot of acquisitions going on, but it's only 25% in the marketplace.

- VP at a Competitor

Valuation	2023E	2024E	2025E	2026E	2027E
Adj. EBITDA	\$527	\$673	\$846	\$1,048	\$1,293
EV / EBITDA Multiple	10.5x	10.5x	10.5x	10.5x	10.5x
Enterprise Value	\$5,535	\$7,071	\$8,880	\$11,007	\$13,578
(-) Net Debt	\$1,940	\$2,209	\$1,424	\$1,895	\$130
(-) Preferred Stock	\$840	\$840	\$840	\$840	\$840
Total Equity Value	\$8,314	\$10,120	\$11,145	\$13,741	\$14,549
Avg. Shares Outstanding (Ms)	233.0	233.0	233.0	233.0	233.0
Implied Price / Share	\$35.68	\$43.43	\$47.83	\$58.98	\$62.44
Current Price / Share	\$22.68	\$22.68	\$22.68	\$22.68	\$22.68
Upside	57.3%	91.5%	110.9%	160.0%	175.3%
MOIC	1.6x	1.9x	2.1x	2.6x	2.8x
IRR	n/a	38.4%	28.2%	27.0%	22.5%

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Appendix:

Fiscal Year	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E
Income Statement											
Revenue	3,046	3,728	4,092	3,587	3,940	6,558	7,339	8,290	9,315	10,449	11,740
YoY Growth	17%	22%	10%	-12%	10%	66%	12%	13%	12%	12%	12%
COGS	2,382	2,941	3,290	2,831	3,001	4,844	5,440	6,147	6,816	7,648	8,474
Gross Profit	664	787	802	756	939	1,714	1,898	2,143	2,500	2,802	3,266
Gross Margin	22%	21%	20%	21%	24%	26%	26%	26%	27%	27%	28%
SG&A (excl Stock Based Comp)	511	625	849	725	803	1,552	1,761	1,907	2,143	2,299	2,583
SG&A Margin	17%	17%	21%	20%	20%	24%	24%	23%	23%	22%	22%
Other	30	0	12	197							
EBITDA	197	277	124	131	341	522	527	673	846	1,048	1,293
EBITDA Margin	6%	7%	3%	4%	9%	8%	7%	8%	9%	10%	11%
SBC	0	4	193								
Impairment of Goodwill			12	193							
Adjusted EBITDA	197	281	329	324	341	522	527	673	846	1,048	1,293
Adjusted EBITDA Margin	6%	8%	8%	9%	9%	8%	7%	8%	9%	10%	11%
D&A	69	109	147	263	202	304	367	414	466	522	587
D&A Margin	2%	3%	4%	7%	5%	5%	5%	5%	5%	5%	5%
Other	5	6	36	34	3	56	23	23	23	23	23
EBIT	123	162	(59)	(166)	136	162	137	236	357	503	683
EBIT Margin	4%	4%	-1%	-5%	3%	2%	2%	3%	4%	5%	6%
Net Interest Expense	8	22	35	52	60	125	100	75	50	50	50
Other Items	(5)	(6)	(36)	(34)	(12)	(51)	(24)	(24)	(24)	(24)	(24)
One-Time Items					9	(5)					
EBT	120	146	(58)	(184)	79	93	61	185	331	476	657
Current Tax	8	10	10	43	26	67	15	46	83	119	164
Current Tax Rate	7%	7%	-17%	-23%	33%	72%	25%	25%	25%	25%	25%
Deferred Tax			(1)	(74)	6	(47)					
Deferred Tax Rate	0%	0%	2%	40%	8%	-51%	0%	0%	0%	0%	0%
Net Income From Continued Operation	112	136	(67)	(153)	47	73	46	139	248	357	493
NOPAT	119	156	(27)	(110)	83	171	121	195	286	395	530
Adjusted NOPAT	119	160	178	83	83	171	121	195	286	395	530
Earnings to Preferred and Other Securities				222	184	50	25				
Net Income	112	136	(67)	(375)	(137)	23	21	139	248	357	493
Net Margin	4%	4%	-2%	-10%	-3%	0%	0%	2%	3%	3%	4%
Net Income to Common Shareholders	112	136	(67)	(375)	(137)	23	21	139	248	357	493
Amortization		47	76	182	127	227	316	440	613	854	1,190
Adjusted Tax Provision	(8)	(10)	(55)	(54)	(58)	(113)					
Goodwill and Intangible Asset Impairment			12	193			50	50	50	50	50
Share based compensation			193								
Other			52	78	70	151	88	88	88	88	88
Non-GAAP Adjustments	(8)	37	278	399	139	265	454	578	751	992	1,328
Adjusted Net Income	112	183	220	215	218	358	515	763	1,082	1,469	1,985
Diluted WASO			133	170	206	233	233	233	233	233	233
EPS			\$ (0.50)	\$ (2.21)	\$ (0.67)	\$ 0.10	\$ 0.09	\$ 0.60	\$ 1.06	\$ 1.53	\$ 2.11
YoY Growth											
CF before CAPEX	237	268	268	386	265	441	478	704	974	1,278	1,655
CAPEX	(30)	(69)	(52)	(21)	(35)	(62)	(45)	(45)	(45)	(45)	(45)
FCF to Firm	267	337	320	407	300	503	523	749	1,019	1,323	1,700
FCF to Equity	62	(188)	(1,484)	156	61	(2,631)	312	214	393	588	830

APi Group Corp (NYSE: APG)

Industry: Industrial Maintenance Services

Date: 05/01/2023

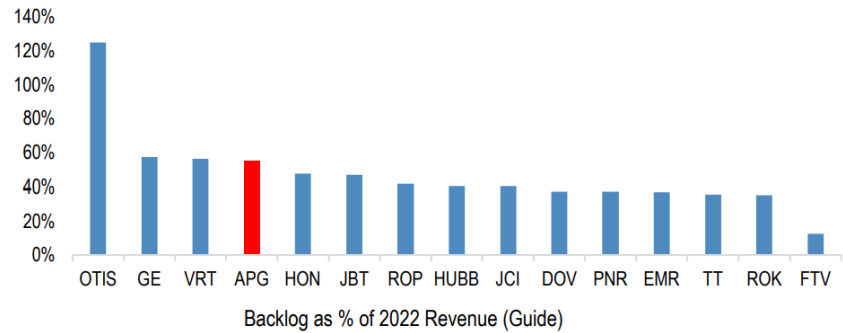


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Action: Long / PT: ~\$62/ Upside: ~175%

Working Capital Build	2018	2019	2020	2021	2022
CA					
Cash	\$54	\$256	\$515	\$1,188	\$605
Receivables	\$765	\$730	\$639	\$767	\$1,313
Inventories	\$56	\$58	\$64	\$69	\$163
Other CA	\$267	\$298	\$219	\$299	\$569
Total CA	\$1,142	\$1,342	\$1,437	\$2,323	\$2,650
CL					
Accounts Payable	\$174	\$156	\$150	\$236	\$490
Accrued Expenses	\$285	\$306	\$315	\$338	\$662
Other CL	\$540	\$361	\$376	\$293	\$769
Total CL	\$999	\$823	\$841	\$867	\$1,921
NWC	\$143	\$519	\$596	\$1,456	\$729
(+) Net PP&E	\$328	\$402	\$355	\$326	\$407
(+) Net Goodwill	\$320	\$980	\$1,082	\$1,106	\$2,382
(+) Intangibles	\$204	\$1,121	\$965	\$882	\$1,784
(+) Other Assets	\$47	\$166	\$137	\$146	\$366
Invested Capital	\$1,042	\$3,188	\$3,135	\$3,916	\$5,668



Source: Company reports and J.P. Morgan estimates.

Table 23: APi Peer Group

Peers	Ticker	Segment	Offerings
Emcor Group Inc	EME	Both	Mechanical and electrical construction and facilities services company.
Brightview Holdings Inc	BV	Both	Offers water management, golf course maintenance, tree growing and moving and snow removal services
Comfort Systems USA	FIX	Safety	Provides heating, ventilation, and air conditioning system installation, maintenance, repair and replacement services
Johnson Controls	JCI	Safety	Offers air systems, building management, HVAC controls, security, and fire safety solutions
ADT Inc	ADT	Safety	Provides commercial security systems and services
ABM Industries	ABM	Safety	Facilities services contractor providing AC, engineering, janitorial, lighting, parking, security and other services
Installed Building Products Inc	IBP	Safety	Installs residential insulation and complementary building products including garage doors, rain gutters, shower doors, closet shelving and mirrors
ISS A/S	ISS	Safety	Global facilities services company
Quanta Services Inc	PWR	Specialty	Provides specialized contracting services to electric utilities, telecommunication, cable television operators and government entities.
MasTec Inc	MTZ	Specialty	Specialty contractor operating across a range of industries
Dycom Industries	DY	Specialty	Provides specialty contracting services to the telecommunications and infrastructure industry
MYR Group Inc	MYRG	Specialty	Contracts electrical infrastructure projects
Primoris Services Corporation	PRIM	Specialty	Provides construction, fabrication, maintenance, and replacement and engineering services to public utilities, petrochemical companies, energy companies, municipalities and other customers
Tutor Perini Corporation	TPC	Specialty	Provide general contracting, construction management and design-build services to private clients and public agencies throughout the US and overseas
Skanska AB	SKAB	Specialty	Offers construction related and project development services
Aspirational			
Cintas Corporation	CTAS	Safety	Designs, manufactures, and implements corporate identity uniforms and provider of entrance mats, restroom cleaning supplies and services, first aid and safety services, and fire protection products and services
CBRE Group Inc	CBRE	Safety	Provides real estate services
JLL Inc	JLL	Safety	Provides real estate and investment management services
Otis Worldwide Corporation	OTIS	Safety	Manufactures, installs, and services building systems

Source: Company reports and J.P. Morgan estimates.

Safety Services at a Glance



Specialty Services at a Glance

