



# ChargePoint Holdings, Inc.

(NYSE: \$CHPT)  
OVERWEIGHT

## Thesis

We are initiating an overweight rating on ChargePoint Inc (CHPT) stock which is currently trading at \$11.02 but possesses a median target price of \$16.92. In its trailing twelve-month financials, the stock evidently marked a downward trading pattern due to regulatory concern and recent earnings misses. However, given the firm's strategic positioning along with the current demand for EVs, there is foundational reasoning to believe that a strong reversal will occur.

## Key Drivers

**EV Infrastructure Investments.** EV adoption rate in the US is accelerating and is still behind that of major European countries. To keep up with growing demand, charging infrastructure must develop to sustain the level of EVs on the road which ChargePoint is well positioned to take advantage of. The recently approved infrastructure plan in the US set aside \$5B for EV charging infrastructure to achieve a goal of 500,000 new public chargers by 2030. Other countries like France and the UK have pledged \$1B and \$100M to EV charging infrastructure, respectively. The Netherlands plans to install 1M chargers by 2030. Both the US and Europe offer tremendous opportunities for ChargePoint to gain market share and increase revenues.

**Alternate Green Financing.** To minimize the barriers to entry, ChargePoint partnered with Goldman Sachs to offer special financing opportunities for customers utilizing ChargePoint as a Service (CPaaS). Financed charging allows customers to pay for charging infrastructure as an operating expense; turnkey charging enables customers that offer public charging to host a station at zero cost. This makes ChargePoint the only company to integrate hardware, cloud-based technology services, and support into one product that can be sold with zero capital expenses.

**Strategic Partnerships.** ChargePoint's partnership with the National Association of Truck Stop Owners (NATSO) leverages a \$1B investment to develop charging stations 4,000 travel plazas and fuel stops along highways and in rural communities. They will also work together to push mutually beneficial policies. The Mercedes-EQ line of electric vehicles utilizes a charging network including 60,000 ChargePoint stations across the US and Europe. US-based Gatik, an autonomous electric vehicle developer, launched its first electric box truck powered by ChargePoint's scalable and reliable charging technology with the goal of decarbonizing the business-to-business logistics market. French-based, Sonepar and ChargePoint are teaming up to deploy 1,400 new chargers throughout France to serve their 100,000 customers and 5,000 associates which includes their own fleet of EVs.

## ChargePoint Holdings, Inc.

Current Price:	\$11.02
Price Target:	\$16.92

## Real Estate & Infrastructure

Vincent Finello Portfolio Manager	vfinello@usc.edu
Jake Freeman Senior Analyst	jsfreema@usc.edu
Rian Jagtiani Associate	rjagtian@usc.edu
Ryan Johnsen Associate	rjohnsen@usc.edu
Daniel Li Associate	dsli@usc.edu
Jocelyn Song Associate	songjoce@usc.edu

## Summary

Market Cap:	\$3,702,000,000
Revenue:	\$241,000,000
LTM EBITDA:	-\$244,000,000
TEV/Total Revenue:	14.2x
P/BV:	6.74x
Quick Ratio:	2.1x



## Company Overview

ChargePoint Holding, Inc. (CHPT) is a relatively new entry within the electrical vehicle (EV) market specializing in charging technology solutions. Founded in 2003 and based in Campbell, California, ChargePoint Holding, Inc. provides growing network charging solutions across North America and Europe. Within its network, the company actively launched and operates 174,000 ports, including 11,500 DC ports. The company tailors its services to different types of EVs, including cars, trucks, delivery vehicles, buses, yard tractors, and 18-wheelers.

**Networked Charging Station** - There are currently two major deliveries of EV charging system infrastructure that comprise ChargePoint's Networked Charging Systems revenue. The first type of infrastructure, and major revenue driver for this segment, are the range of Level 2 AC products used in residential, commercial, and fleet verticals. The second type of infrastructure includes the Level 3 DC goods that are mainly used in commercial and fleet verticals.

**Subscription** - The company's subscription segment revenue consists of CPaaS. ChargePoint as a service, which ties the company's Cloud Services and extended Assure warranties services under a single subscription and serves as the contract for the customers' use of ChargePoint's systems and equipment.

**Other** - The rest of ChargePoint's revenue consists of two different types of fees. The first would be fees from transferring regulatory credits that come with engagement in the low-carbon fuel programs active in specific states. The second is charging fees and transaction fees that customers pay for utilizing ChargePoint technology.

	FY 2022 Revenue	% of Revenue	% YoY Growth	% QoQ Growth
<b>Network Charging</b>	\$173.85 MM	72.1	91.3	52.5
<b>Subscription</b>	\$53.51 MM	22.2	23.1	11.9
<b>Other</b>	\$13.66 MM	5.7	-16.1	11.0

ChargePoint increases annual revenue by 65% year over year. ChargePoint currently have a market capitalization of \$3.49 billion and an enterprise value of approximately \$3.20 billion.

## Management Overview

ChargePoint Holding, Inc. is led by Pasquel Romano, the current Chief Executive Officer. Eight other members comprise ChargePoint's c-suite leadership with an average tenure of 3.7 years. The vast majority of the company's leadership has extensive industry knowledge due to the experience in technology and design retained from working in recognized global companies prior.

The management's discussion emphasizes the strong market positioning the company has gained, especially with recent international expansion plans and the acquisitions of ViriCiti and HTB which are electrification solutions and e-mobility providers based in Europe. In addition to this, management is optimistic about the company due to the demand for EVs. EV adoption has risen and will continue to rise which are factors strongly correlated with their revenue growth.

Finally, given that ChargePoint is based on building a sustainable future, management has reinforced its commitment to push for environmentally friendly business practices which boost ESG outlook.

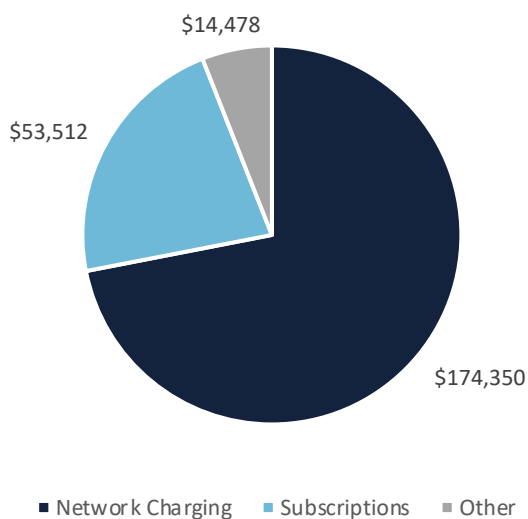
## EV Charging Segment Overview

The global electric vehicle charging infrastructure market size was valued at \$19.26 billion in 2021 and is forecasted to expand at a compound annual growth rate (CAGR) of 30.6% from 2022 to 2030. The main driver for growth in the industry is the rising level of carbon emissions and the pressure on corporations and citizens to adopt cleaner energy alternatives to gas powered vehicles. Fast chargers made up 93% of the market in 2021, however slow chargers (overnight charging) were most often used in government infrastructure initiatives. Asia Pacific made up 59% of the global market in 2021, likely due to countries such as China, Japan, and South Korea making heavy investments in making electric vehicles more accessible to their populations. All-encompassing companies target commercial segments (retail, workplace, parking, recreation, education, and highway fast charge), fleet segments (delivery, logistics, motor pool, transit, and shared mobility), and residential segments (homes, apartments, and condominiums). Revenue streams can include selling networked charging hardware, cloud services subscriptions, and warranties.

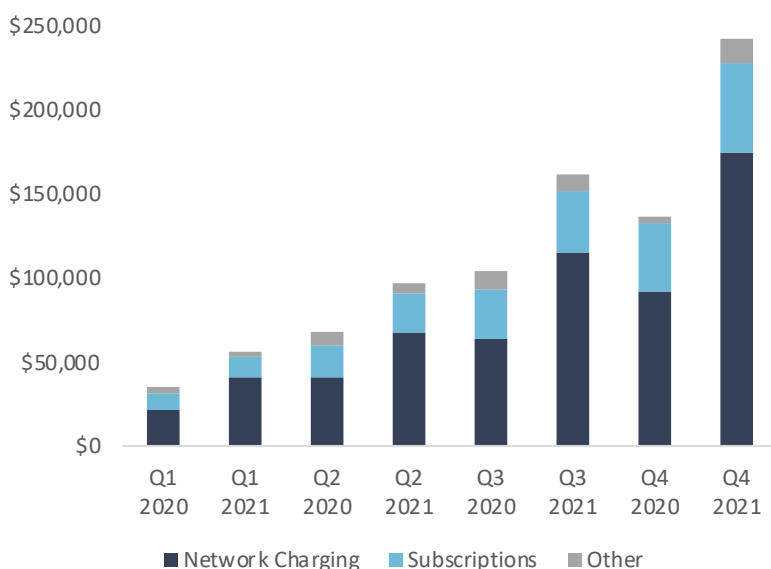
## Revenue Generation

Networked charging stations are upfront revenue streams that account for the largest percentage of ChargePoint’s revenue. ChargePoint offers several services including cloud-based software, warranties, and ChargePoint as a service (CPaaS). The remaining revenue consists of regulatory credits, fees from drivers using company-owned stations, and transaction fees for processing payments. The majority of its revenue comes from North America; however, ChargePoint is steadily expanding in Europe.

FY 2022 Revenue Breakdown



Revenue Comparison (FY 2021-2022)



## Valuation Methodology

To predict cash flows up to FY 2027, analysts’ consensus revenue estimates were used. Then, estimates for various line items on the income statement were supplied based on the company cutting marginal costs as it scales and improving earnings. Assuming no additional stock issuance for mergers, the cash flows were projected. The Gordon Perpetual Growth Model was used to assess the terminal company value of ChargePoint after FY 2027. The real GDP rate was chosen to be 1.14% which reflects a nominal GPD growth of 3.14% and an inflation rate of 2%. These are in line with the Federal Reserve’s long run projections. As the return on equity has historically been very negative, instead of using WACC to discount the cash flows, the cost of capital in FY 2020 was used. This was chosen over more recent data due to similar higher interest rate regimes.

## Comparable Companies Analysis

**Blink Charging Co.** operates 30,000 residential and commercial EV chargers in the United States and internationally. They also offer a cloud-based system that services their charging network and provides charging data to their customers.

**EVgo Inc.** owns and operates its charging network in the US which supports individual consumers, manufacturer charging, fleet dedicated charging, and charging as a service. The company operates the largest network of fast chargers with over 850 to date.

**Volta Inc.** operates charging stations for EV with advertisements to reduce the costs of charging. To date, Volta has installed 2,264 charges across the 23 territories.

**Electrify America** offers 730 charging stations with 2,438 individual stations. Chargers are typically located in parking lots and garages of big box shopping centers.

**Plug Power Inc.** operates 150 hydrogen refueling stations across the country that dispense 40 tons of hydrogen per day to its 40,000 fuel cell systems. The company also manufactures fuel cell engines for vehicles.

**Beam Global** designs and manufactures renewable energy products for EV charging infrastructure. Beam's portfolio includes 52 autonomous renewable charging stations, various solar and battery integrations, and other off-grid methods of charging EVs. Additionally, Beam has been working to provide UAV charging products.

	# Chargers	Price / Sales Growth
<b>ChargePoint Holdings, Inc.</b>	174,000	40.5%
<b>Blink Charging Co.</b>	30,000	52.7%
<b>Evgo Inc.</b>	2,900	132%
<b>Volta Inc.</b>	2,500	-32.8%
<b>Electrify America</b>	2,438	N/a
<b>Plug Power Inc.</b>	150	39.6%
<b>Beam Global</b>	52	31.6%

## Risks

**Competition.** The EV charging market is rapidly growing and is still in its early stages. ChargePoint primarily competes with smaller EV charging station providers, especially in Europe. To capture more market share, ChargePoint and its competitors compete based on their ability to scale channels, installers, teams, and processes. In the US, Tesla continues to build its own supercharger network for its vehicles, thereby reducing demand for ChargePoint's products. There are also many companies, including ChargePoint, providing at-home charging equipment, thereby reducing demand for on premise charging. With this trend, it becomes very possible that many EV owners will find at-home charging to be sufficient, harming one of ChargePoint's revenue streams.

**OEM Risk.** For many of ChargePoint's charging stations, the supplies necessary to manufacture them are sourced from a few if not a single supplier. In the event of an interruption, such as a supply chain disruption like during the COVID-19 pandemic, ChargePoint may not be able to increase capacity from other sources, thus adversely affecting ChargePoint's manufacturing output. This supplier constraint also affects ChargePoint's scalability, where an increase in demand for its charging stations in the future may not be able to be adequately met by ChargePoint's current supply chain.

**Market Adoption Risk.** The EV market currently benefits from the availability of rebates, tax credits, other financial incentives from governments, utilities, and others to offset the purchase or operating cost of EVs and EV charging stations. For example, the Infrastructure Investment and Jobs Act signed into law on November 15, 2021, would provide additional funding for EVs and EV charging infrastructure through the creation of new programs and grants and the expansion of existing programs. If these financial incentives are retracted for any reason, ChargePoint's revenue would be adversely affected. Additionally, if the consumption of renewable transportation fuels, such as ethanol and biodiesel, rises in popularity, the EV market may be damaged heavily as a result.

## Conclusion

ChargePoint stock is undervalued at \$11.02 per share due to regulatory uncertainty and an over emphasis on short term profitability. Electric vehicle infrastructure investments, alternative green financing, and strategic partnerships will contribute to compounding revenue growth over the medium term. Additionally, between cash and shareholder equity, ChargePoint has enough liquidity to weather a rising rate environment. Based on projections of ChargePoint's cash flows and terminal growth, ChargePoint's share price should be \$16.92 which represents a 53.5% upside.