PitchBook

Electric Vehicles Poised to Reshape Auto Industry

Public market valuations soar as investors envision electric vehicle future

PitchBook is a Morningstar company. Comprehensive, accurate, and hard-to-find data for professionals doing business in the private markets.

Credits & contact

Research

ASAD HUSSAIN Analyst, Emerging Technology
asad.hussain@pitchbook.com

Data

MATTHEW NACIONALES Data Analyst

Design

MARA POTTER Graphic Designer, Design Lead
CAROLINE SUTTIE Graphic Designer, Operations Lead

Contents

Introduction

Strong investor enthusiasm for electrification has led to soaring valuations in the space, with publicly traded companies such as Tesla Motors and NIO experiencing stratospheric stock gains. As of late August, the aggregate value of publicly traded pureplay electric car companies reached $492.3 billion, which is almost on par with the entire $589.0 billion traditional auto industry despite making up only a small fraction of new vehicle sales.[1] To capitalize on this increasingly popular trade, several electric vehicle startups including Canoo, Fisker Inc, Karma Automotive, Lordstown Motors, and Nikola Motors have announced plans to debut on public markets, many through special purpose acquisition company deals.

We believe three primary factors are driving enthusiasm for electric vehicles: improving technology, strong regulatory tailwinds, and ongoing investment into electrification by incumbent automakers. It has become increasingly clear that the next era of the automotive industry will be electric. The technology has matured to the point that electric cars have better performance, design, and safety than gas-powered vehicles, and ongoing investment into improving the convenience and affordability of electric vehicle ownership is likely to expand the market fourfold over the next five years.

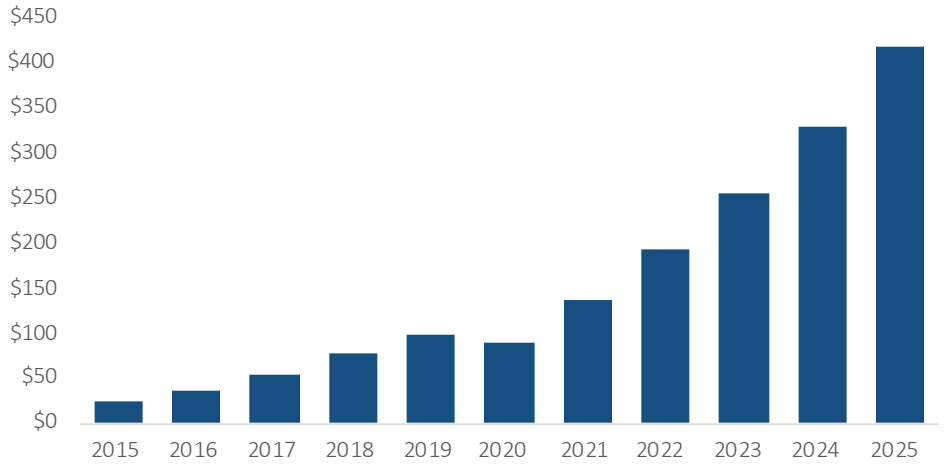
We believe traditional automakers that have taken greater ownership over the battery supply chain and have invested in dedicated electric vehicle platforms will likely be in a favorable competitive position as the shift to electric reshapes the industry. Those less committed to investing in the technology risk being caught flatfooted as a new wave of electric vehicle startups disrupts the automotive industry.

1: "Xpeng Stock Is Hot. Here's How Much the Electric Vehicle Industry Is Worth," Barron's, Al Root, August 28, 2020

Published on September 21, 2020

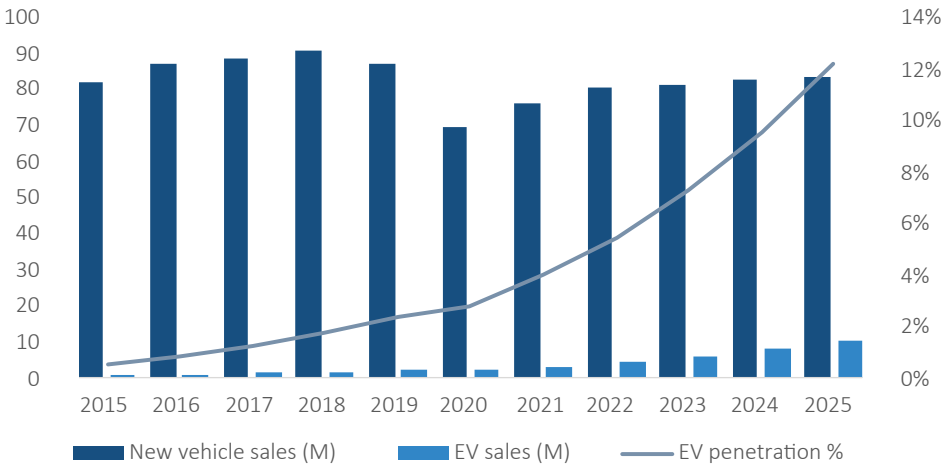
A $400+ billion market opportunity

Electric vehicles market size ($B)



Source: Bloomberg New Energy Finance, internal PitchBook estimates | **Geography:** Global
Note: Refers to sales of passenger electric vehicles.

Electric vehicle penetration



Source: Bloomberg New Energy Finance, internal PitchBook estimates | **Geography:** Global
Note: Refers to sales of passenger electric vehicles.

A large market opportunity is available to electric vehicle technology. We expect the total market for plug-in hybrid and battery-powered vehicles to expand dramatically by the mid-2020s, from $95.4 billion in 2019 to $415.4 billion in 2025. Although several companies have entered the electric vehicle space, we see a strong greenfield opportunity to penetrate a relatively undisrupted market. In our view, electric cars primarily compete with existing internal combustion engine (ICE) cars, not with each other. For context, just 2.4% of global new passenger vehicle sales were electric. We expect this share to increase to 12.2% of new vehicle sales in 2025.

Advantages of electric vehicle powertrains

Electric vehicle powertrains have major design advantages over ICE vehicles. They are smaller, have fewer moving pieces, and can be easily integrated into platforms that underpin multiple car designs, trimming the per-vehicle cost of manufacturing. These platforms consist of skateboard-shaped chassis housing battery packs, motors, driveline, suspension components, wheels, and braking systems—all the building blocks for driving. Electric automakers can dedicate more space for passengers and storage relative to ICE vehicles, which must be designed around bulky engine, transmission, and drivetrain components. This efficient use of space enables greater engineering flexibility, reduced form-factor constraints, and subsequently improved designs. Additionally, electric automakers can use skateboard platforms to accommodate various vehicle shapes beyond passenger vehicles, such as micromobility vehicles, shared shuttles, delivery vans, and even industrial and logistics machinery.

Electric cars also have numerous safety and performance advantages over gas-powered vehicles. Less space dedicated to powertrains allows more for crash zones, which has helped Tesla vehicles consistently outperform in crash tests.[2] The rapid responsiveness afforded by electric vehicle platforms also benefits drivers in emergency situations. Rivian's traction control system modulates power to each wheel based on their real-time torque readings, whereas traditional gas-powered vehicles rely on estimates and are relatively slow to respond.[3] Rapid responsiveness diminishes slip per tire and ultimately gives drivers more control. Finally, the inherent connectivity of electric powertrains means that automakers can more easily integrate driver assistance and autonomous technology into the car. Although battery powertrains are heavier than equivalent ICE powertrains, their lower placement (and subsequent lower center of gravity) leads to much more favorable vehicle-handling dynamics. For example, the electric Porsche Taycan has received stellar reviews and numerous awards for its luxury and performance.[4]

Although electric vehicles have surpassed gas-powered cars in performance and safety, they face roadblocks associated with cost and convenience. Battery powertrains are still expensive relative to ICE powertrains, and charging infrastructure still needs to be built out to solve range anxiety. We believe these issues are solvable and being addressed by sustained investment in the industry.

2: "Tesla Safety Record Continues to Be Exemplary," CleanTechnica, Cynthia Shahan, May 7, 2020
3: "Rivian R1S Electric SUV & R1T Electric PickUp Truck - World Exclusive: Inside Rivian | Fully Charged," Fully Charged Show, Chelsea Sexton, November 6, 2019
4: "World Car of the Year: Porsche Taycan Drives Home a Double Victory," Porsche Newsroom, April 9, 2020

Regulatory tailwinds

We believe that regulatory tailwinds will help spur electric vehicle investment and bring down the cost and convenience hurdles associated with consumer adoption.

Government initiatives in Europe and Asia will play a key role in encouraging funding and adoption of electric vehicle technology. As we note in a recent report entitled COVID 19: A Watershed Moment for Shared Mobility, many consumers are avoiding mass transit due to exposure concerns as they return to work. As of late August, ridership by public transportation is down 20% in the UK, whereas driving is up over 50% relative to baseline levels.[5] Congestion has approached pre-pandemic levels in markets such as Beijing.[6] Rising congestion and emission reduction efforts have prompted some countries to take decisive actions to encourage electric vehicle adoption. The UK, Germany, and France have announced plans to ramp up subsidies for electric vehicles. Chinese government officials have indicated that electric vehicles remain a priority. China's Ministry of Industry and Information Technology has set a target for electric vehicle sales to represent 25% of new vehicle sales by 2025, up from approximately 5% today. Additionally, China has extended subsidies for electric vehicles until 2022 and created exemptions from purchase taxes.

These favorable policies are already having an impact on purchasing behavior and leading to more electric vehicle sales. Total electric vehicle registrations in Europe rose 127% YoY in July.[7] While total new vehicle sales are projected to decline by 20% in 2020, we expect sales of electric vehicles to decline by just 6%. Our market forecast assumes electric vehicles achieve cost parity with gas-powered vehicles in 2025.

The upcoming US election could factor greatly into North America's electrification story. US presidential candidate Joe Biden has made electrification a focal point of his plan to combat climate change, including a plan to invest $2 trillion into electrification and renewables, which includes the installation of 500,000 public charging stations in the next four years.[8] Democratic victories in the White House and Senate could lead to substantial investment in electric vehicle charging networks and increased subsidies for electric vehicles, which could foster adoption across North America by addressing consumer concerns over cost and convenience.

5: "Mobility Trends Reports," Apple Maps, August 25, 2020
6: "TomTom Traffic Index: Beijing," TomTom, August 25, 2020
7: "Tesla Blown Away as Renault Dominates Europe's July Electric Vehicle Sales Party," Forbes, Michael Taylor, August 27, 2020
8: "Biden Outlines $2T Plan to Invest in Renewables, Electrification," Utility Dive, Emma Penrod, July 15, 2020

Automakers must invest in battery tech, dedicated platforms

We believe the traditional automakers that have taken greater ownership over the battery supply chain and invested in dedicated electric vehicle platforms will be in a more favorable competitive position relative to other incumbents as the shift to electric reshapes the industry. Others, which have not been as committed to investing in the technology, risk being caught flatfooted and are rushing to catch up through increased investments and consolidation.

The landscape of the automotive supply chain is rapidly changing. Historically, automakers have served as integrators in the supply chain by purchasing parts from different suppliers and vendors. Today, automakers are realizing that the energy source (the battery) is central to the value proposition, not the motor (as is the case with ICE vehicles). The battery determines the important specifications, including acceleration and weight. Additionally, it is the highest cost component of the platform and ultimately determines the affordability of the end product.

We believe automakers that establish strong partnerships with battery suppliers or vertically integrate battery production will be better positioned to reduce costs and thrive. Tesla, which has been the most successful company in the space and is credited with transforming the industry, has successfully vertically integrated its supply chain by creating a symbiotic relationship with Panasonic, which operates lines in Tesla facilities. As a result, Tesla has simultaneously cut battery costs, improving affordability of its electric vehicles, while also increasing its profits. Additional examples include Volkswagen's contract with Korea's SKI and $540.0 million joint venture with Northvolt, GM's $2.3 billion joint venture with LG Chem, and BYD with its internally produced batteries.

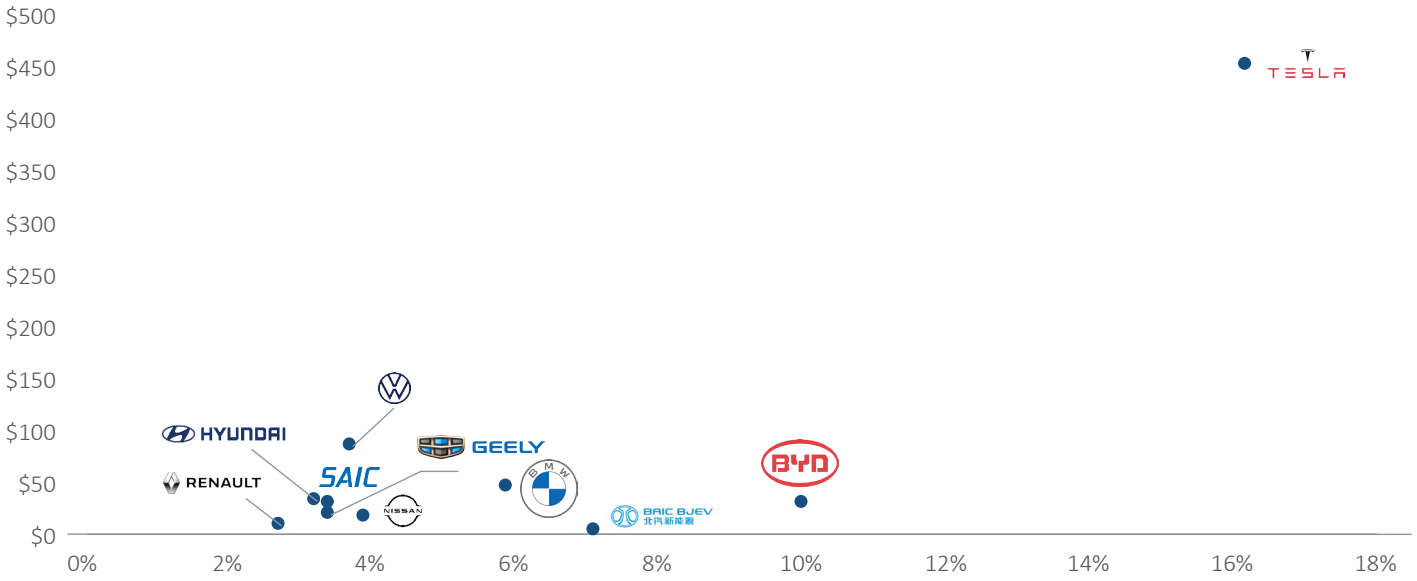
Additionally, we believe aggressive investment into dedicated electric vehicle platforms will be key to success in the industry. For example, Volkswagen has invested $7.0 billion into its MEB electric vehicle platform, which will support multiple sizes of vehicles and is expected to sell 15 million units over the next 10 years.[9] In our view, automakers that have created dedicated electric vehicle platforms are in a more favorable position than those that have instead adapted internal combustion platforms for batteries, such as BMW, Jaguar, and Land Rover. We expect the latter group has adopted this incremental, hybridized approach because of cost considerations and skepticism around the adoption curve of electric vehicle technology. Although automakers can save money in the near term, this incremental approach comes at the long-term expense of subpar performance.

9: "Electric Vehicle Architecture Divides Automakers," Automotive News, Nick Gibbs, September 21, 2019

Landscape of largest publicly traded automakers

The following section profiles the largest automaker incumbents. Market cap figures are as of August 31, 2020.

Market cap ($B) for automaker incumbents versus their share of the electric vehicle market



Source: McKinsey Vehicle Index, PitchBook Data | **Geography:** Global
*As of August 31, 2020

Tesla

Market cap: $464.3 billion
Electric vehicle market position: Best

Tesla is the undisputed leader in the space with its Model S, Model 3, Model X, Model Y, and upcoming Cybertruck offerings. The company ranked first in electric vehicle sales in 2019. Tesla has industry-leading technology, performance metrics, and brand visibility. The company controls its own battery cell supply chain and is well positioned to expand in the Chinese market.

Toyota (Daihatsu, Lexus, Toyota)

Market cap: $185.6 billion
Electric vehicle market position: Moderate

Although the company has not made strong inroads into fully battery electric models, it has invested billions into hybrid vehicle technology, and the Prius is the market leader in the hybrid segment. The company has also explored the hydrogen fuel cell market with the Mirai, but we believe this segment will likely not gain traction.

Volkswagen (Audi, Bentley, Bugatti, Lamborghini, Porsche, Seat, Skoda, Volkswagen)

Market cap: $87.0 billion
Electric vehicle market position: Favorable

The company plans to produce 50 fully electric models by 2025 and is investing $66.0 billion into electrification over the next five years. VW's MEB platform will underpin the ID.3, ID.4, and other upcoming models, including Audi, SEAT, and Skoda cars.

Daimler (Mercedes-Benz, Smart, AMG)

Market cap: $54.4 billion
Electric vehicle market position: Moderate

The company has few electric car models on the market and has remarked that it will struggle to meet stringent European emissions targets. However, we view the company as a leader in the electric freight truck segment.

Honda (Acura, Honda)

Market cap: $44.6 billion
Electric vehicle market position: Poor

The company's first electric car, the Honda e, is a compact hatchback with a higher price and lower range relative to more competitive offerings from Tesla, Renault, and Hyundai. Honda has established a partnership with GM to develop a pair of electric Hondas utilizing GM's global electric vehicle platform powered by Ultium batteries for the 2024 model year. Although these are important steps, it remains unclear whether this partnership will be enough for Honda to remain competitive in the space.

BMW (BMW, Mini, Rolls Royce)

Market cap: $46.4 billion
Electric vehicle market position: Moderate

The company has existing electric vehicle platforms such as the i3 and recently launched Mini Cooper SE. BMW plans to launch additional models such as the iX3, the iNEXT, and i4 in a bid to reach 50% electrification by 2030. However, critics have charged the company's electrification strategy as being incremental. Instead of designing a purpose-built range of vehicles, the company has chosen to electrify platforms originally built for ICE powertrains. As a result, its existing electric vehicles have suffered from limited range relative to competitive offerings. That said, with the company's new leadership, BMW appears to be investing heavily in electrification; the company has announced an ambitious 10-year plan to sell 7 million plug-in hybrid and pure electric vehicles.

General Motors (Cadillac, Chevrolet, GMC)

Market cap: $42.4 billion
Electric vehicle market position: Moderate

The company has electric models on the market currently, including the Chevrolet Bolt. GM has announced a $2.3 billion joint venture with battery company LG Chem and plans to spend $20.0 billion on electric and self-driving vehicles through 2025. In September 2020, GM announced it had struck a deal with electric truck startup Nikola, in which GM will receive $2.0 billion in common stock for GM to provide parts and components to underpin the company's upcoming Badger pickup truck platform, which will reportedly utilize GM technology while granting GM 80% of the electric vehicle regulatory credits, helping the automaker meet emissions regulations.

Renault-Nissan-Mitsubishi Alliance (Dacia, Datsun, Infiniti, Mitsubishi, Nissan, Renault)

Market cap: $15.9 billion (Nissan), $35.2 billion (Mitsubishi), $8.3 billion (Renault)
Electric vehicle market position: Favorable

The alliance is ranked second in electric vehicle sales in 2019. Leading models include the Renault Zoe, Mitsubishi Outlander P-H electric vehicle, and Nissan Leaf. In September 2020, Renault and Nissan announced a strategic partnership with Uber to provide electric vehicles for Uber drivers in European markets.

Hyundai Motor Group (Hyundai, KIA)

Market cap: $34.6 billion
Electric vehicle market position: Favorable

The company is ranked third in electric vehicle sales in 2019. Leading electric vehicle models include the Ioniq and Kona. Additionally, the group has announced partnerships and investments with leading electric vehicle startups Arrival and Canoo and plans to invest over $87 billion to produce 23 electric vehicles by 2025.

Ford (Ford, Lincoln)

Market cap: $27.1 billion
Electric vehicle market position: Moderate

The company has launched the Mustang Mach-E in a major push to electrification. It has also made major investments into electric vehicle startup Rivian. Although the company does not have any fully electric models currently on the market, it plans to spend $20 billion on electric and autonomous tech by 2025 to bring 20 new electric vehicles on the market by 2023, including the Mustang Mach-E, a significant shift for the company's marquee brand.

Stellantis

Market cap: $22.7 billion (FCA), $14.9 billion (PSA)
Electric vehicle market position: Poor

Stellantis will be the result of an upcoming merger between Fiat Chrysler Automobiles (Alfa Romeo, Dodge, Lancia, Maserati, Chrysler, Fiat, Jeep, Ram) & Groupe PSA (Peugeot, Opel, Citroen, Vauxhall). Both PSA and FCA have few electric offerings on the market and are generally regarded as being relatively behind in the race to electrification. The need for both companies to catch up to the market leaders likely prompted this combination.

Geely (Polestar, Volvo)

Market cap: $20.7 billion
Electric vehicle market position: Favorable

The company's shift up market as well as its Polestar-branded electric vehicle range has received favorable reviews. Additionally, the company has strong exposure to China, the world's largest and most rapidly growing market for electric vehicles.

The rise of electric vehicle SPACs

Many emerging electric vehicle startups are on course to enter the automotive market in the next few years and significantly disrupt the incumbent automakers. Recently, several of these new entrants have announced plans to debut on public markets via SPAC reverse mergers. Because they offer quicker time to market and less scrutiny, SPACs are an attractive listing option for electric vehicles companies and, more broadly, startups that are highly capital intensive and in the pre- to early revenue stages.

SPACs enable companies to mitigate market volatility and strike while the iron is hot. Investor enthusiasm for electrification is strong right now, and it is an opportune time for electric vehicle companies to raise capital from public market investors, as valuations in the space are high. Publicly traded electric vehicle stocks have seen a strong runup in the last few months. As of August, Tesla's valuation has surpassed that of Walmart, and Nikola's market cap has eclipsed $15 billion despite having yet to produce even a functional prototype. However, these favorable conditions may not last, and market volatility could return unexpectedly. Hence, we believe electric vehicle management teams may view a traditional IPO as too lengthy of a process.

SPACs also enable companies to face a lower level of scrutiny relative to what is typically faced by companies in the lead up to a traditional IPO. Most electric vehicle startups seeking to raise capital currently will not generate any revenue for at least a year. Additionally, each company will require hundreds of millions of dollars in capital to build out manufacturing facilities and scale production. As a result, it will likely be several years

before these companies reach profitability. While such early-stage, high-risk companies would likely struggle to find buyers in a traditional IPO, a SPAC merger provides a means to raise money via a public vehicle that is already listed on an exchange. As we mention in our recent note, The 2020 SPAC Frenzy, since the SPAC route functions more like a traditional acquisition, the private company primarily negotiates with just one party rather than a host of investors on a road show. This enables greater flexibility for the company to share its vision more easily by providing financial projections without being burdened by regulatory requirements preventing this in a traditional IPO.

Landscape of emerging electric vehicle startups

The following section profiles emerging startups in the electric vehicle space. The valuations are as of August 31, 2020.

Rivian

Valuation: N/A ($6.0B+ raised)

Rivian is a US-based electric vehicle startup that has raised over $6 billion from investors. Its upcoming vehicles, the R1T and R1S, promise more than 400 miles of range at a price starting approximately at $70,000. The company markets itself as an adventure vehicle platform for the environmentally conscious outdoors enthusiast. Although production was originally slated for year-end 2020, the company has delayed its plans to launch into 2021 due to the coronavirus pandemic.

In our view, Rivian is one of the best-positioned electric vehicle startups. It has successfully raised a significant amount of capital and has the backing of transportation industry leaders Ford and Amazon. The company's focus on the relatively untapped premium electric truck market should enable it to gain rapid market adoption. Additionally, the company has an established book of B2B orders, as its investor Amazon has placed an order for 100,000 electric vans.

NIO

Market cap: $21.9 billion

NIO is a China-based electric vehicle company that was founded in 2014 and went public in 2018. After a rough 2019 in which the company faced a cash crunch, NIO saw a rebound in demand in 2020. The company reported strong earnings and raised an additional $1.0 billion investment from several state-owned China-based companies in late April. The company has launched several electric vehicle models, including the ES8 full-size SUV and ES6 mid-size SUV, and EC6 crossover. With a competitive price point and favorable performance metrics, NIO has built a strong following in the Chinese market and now seeks to expand internationally.

In our view, the company's main differentiation comes from its battery-as-a-service (BaaS) business model, which decouples the cost of the powertrain from the vehicle itself. By paying for the battery as a subscription service, consumers can guarantee access to future upgraded batteries at a lower price and avoid concerns over battery degradation. This is a major value add for Chinese consumers, many of whom live in apartment buildings and rely on public infrastructure for their charging needs. In our view, a key question will be whether consumers in North American and European markets (where at home charging is more readily available) will see as much value in BaaS versus alternative flexible vehicle ownership models such as Canoo and Fisker.

Nikola

Market cap: $18.9 billion

Nikola is an US-based startup founded in 2014. In June 2020, the company went through a SPAC merger and began trading on the public markets at a $3.3 billion valuation. The company's valuation has since increased substantially, propelled by increased enthusiasm over its electrification strategy.

Unlike most electric vehicle startups, which are targeting the passenger vehicle segment, Nikola is best known for its upcoming Class 8 trucks. The company utilizes hydrogen fuel cell technology rather than battery electric. We are incrementally less optimistic about the adoption of hydrogen fuel cell technology relative to battery electric, as we believe it faces greater hurdles associated with the high cost of infrastructure deployment.

The company's upcoming Badger pickup truck will reportedly offer both battery and hydrogen-based electric powertrains. In September 2020, GM announced it had struck a deal with electric truck startup Nikola, in which GM will receive $2.0 billion in common stock in exchange for providing parts and components to underpin Nikola's upcoming Badger pickup truck platform. We have a mixed view on Nikola. Being able to tap into GM's manufacturing expertise, dealer networks, and capital base could help Nikola become a formidable competitor in the electric pickup truck space. At the same time, the company does not appear to have any substantial proprietary technology, and the strength of its brand is relatively untested as it has yet to deliver any vehicles to customers. In September 2020, the SEC announced an investigation against Nikola that was kicked off by a short-sellers' allegations that the company misled investors about its technology.

Lucid Motors

Valuation: N/A

Lucid is a US-based electric vehicle startup founded in 2007. The company's CEO Peter Rawlinson was the chief engineer for the Tesla Model S. The company raised $1.0 billion in development capital from Saudi Arabia's Public Investment Fund in late 2018. Lucid Motor's upcoming vehicle, the Lucid Air, is an upmarket luxury sedan meant to compete with upscale German luxury cars ($100,000+ price point). The vehicle has an independently confirmed range of over 500 miles, provides 20 miles per minute of charging, and will reportedly deliver at least 1,000 horsepower and a 0 -60 mph time of under three seconds. In September 2020 the company revealed its upcoming luxury SUV, the Lucid Gravity.

The performance figures that Lucid has unveiled are impressive. The company's powertrain is proprietary as it was developed inhouse, unlike several of Lucid's competitors that have outsourced their powertrains. We expect the Lucid Air to be a formidable new entrant to the broader luxury car segment, which has traditionally been dominated by German brands such as Mercedes and Audi.

Lucid Motors is one of the few remaining major electric vehicle startups that has not announced definitive plans to go public, although the company's CEO has remarked that the company is eyeing a public offering within the next two years. Although Lucid is currently well capitalized, we believe the company will need to raise several hundred million dollars to launch its upcoming SUV platform. In our view, Lucid Motors is an ideal candidate for a reverse merger with a SPAC, following in the footsteps of electric vehicle startups Canoo, Fisker, Lordstown Motors, and Nikola.

Canoo

Valuation: $2.4 billion (announced valuation through SPAC debut)

Canoo is a US-based electric vehicle startup founded in 2017 by executives from BMW and Faraday Future. The company raised $1.0 billion in VC funding in 2018. In early 2020, Canoo announced that it will co-develop an electric platform with Hyundai Motor Group based on Canoo's skateboard design for future Hyundai and Kia electric vehicles. In August 2020, Canoo announced that it has struck a deal with SPAC Hennessy Capital to go public at a $2.4 billion valuation. The company's product, the Canoo seven-seat microbus, is set to debut in 2021 and will reportedly feature a customizable luxury interior and 250 miles of range at a relatively attractive $1000 per month price point.

In our view, Canoo's major differentiator is its flexible vehicle ownership business model. Unlike a traditional car business, Canoo's vehicles will be sold entirely via a no-commitment subscription, bundling together nearly all vehicle ownership costs (financing, maintenance & service, charging, and insurance). In our view, this is a major value add for younger consumers who view car ownership as more onerous and burdensome relative to previous generations.

Canoo's model does not necessitate capital-intensive infrastructure buildouts and seems more tailored for markets in which living in single-family homes is more common, as opposed to multifamily units where charging is less available.

Arrival

Valuation: $3.3B (Jan 2020 Hyundai-Kia investment)

Arrival is a UK-based electric vehicle startup founded in 2015. The company has raised capital from UPS Ventures and Hyundai Motor Company and currently holds a valuation north of $3 billion. Arrival's vehicle is an electric delivery van. In early 2020, UPS placed an order for 10,000 electric vehicles from the startup.

We believe Arrival is a good candidate to go public via a SPAC deal. The company's platform has an attractive B2B use-case. Relative to ICE vehicles, electric delivery vans offer more operating economics. Benefits include reduced emissions, lower fuel costs, up to 20% lower maintenance costs given fewer moving parts to service, less specialized equipment and labor needs, longer warranty lifetimes, and steadily declining battery costs.

Karma Automotive

Valuation: N/A

Karma Automotive is an US-based electric vehicle company owned by China-based supplier Wanxiang Group. The company was formed out of assets purchased from Fisker Automotive for $149.2 million in a bankruptcy auction in 2015. The company's main product is the Karma Revero, a luxury hybrid sports sedan, while the Rivero GT, a fully electric model, is set to debut in 2020 at a $130,000 price point. Karma Automotive is reportedly in talks with investment banks to help it go public, either through a traditional IPO or a SPAC merger.

Fisker

Valuation: $2.9B (announced valuation through SPAC debut)

Fisker Inc is a US-based electric vehicle startup founded by Henrik Fisker. The company is the relaunch of the Fisker brand, which produced the Fisker Karma (which was then purchased by Wanxiang to form Karma Automotive). Fisker Inc is developing two main vehicles: the EMotion, an electric sedan, and the Fisker Ocean, an electric SUV. In July 2020, the company announced that it will go public through a SPAC merger with Spartan Energy Acquisition, an affiliate of Apollo Global Management, at a $2.9 billion valuation. Unlike most electric vehicle companies, which are focusing on vertical integration, Fisker will reportedly outsource its manufacturing to Magna Automtoive. Meanwhile, Fisker's business model will be focused on the vehicle design and a subscription-based service.

Lordstown Motors

Valuation: $1.6 billion (announced valuation through SPAC debut)

Named for its hometown of Lordstown, Ohio, in the US, Lordstown Motors was founded in 2019 and operates out of a reconfigured GM assembly plant. Lordstown's commercial truck, which will reportedly retail for $52,500 and have a range of 250 miles, is on course to launch in 2021. In June, the company announced it had reached a deal to merge with a SPAC called DiamondPeak Holding at a valuation of $1.6 billion.

The company's primary differentiation comes from its unique four-hub electric motor systems. These are essentially larger versions of hub motors found in Bird and Lime electric scooters. This approach reduces the number of moving parts down to just the four wheels and could yield greater efficiency and reduced manufacturing cost. Potential downsides could include high repair bills associated with damaged wheels and greater unsprung weight impairing handling.