

Zacks Small-Cap Research

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Ayro Inc

(AYRO-NASDAQ)

AYRO: A specialty EV manufacturer hits the reset button

We use a blended average multiple of successful EV companies, the acquisition multiple used for industry leader Club Car and the company's strong balance sheet to arrive at our price target of \$1.30.

OUTLOOK

AYRO has developed a premium, low-speed electric vehicle targeting a market dominated by commoditized products between light-duty pick-up trucks and golf carts.

The company has completely transformed its product offering, supply chain, manufacturing, and distribution in the past 18 months.

The company can be viewed as a startup despite its operating history because it has fundamentally changed its business model.

Current Price (03/24/23) \$0.58
Valuation **\$1.30**

SUMMARY DATA

52-Week High \$1.42
52-Week Low \$0.37
One-Year Return (%) -57.68
Beta 3.41
Average Daily Volume (sh) 61,878

Shares Outstanding (mil) 37.3
Market Capitalization (\$mil) \$22
Short Interest Ratio (days) N/A
Institutional Ownership (%) 9.7
Insider Ownership (%) 4.3

Annual Cash Dividend \$0.00
Dividend Yield (%) 0.00

5-Yr. Historical Growth Rates

Sales (%) N/A
Earnings Per Share (%) N/A
Dividend (%) N/A

P/E using TTM EPS N/A

P/E using 2023 Estimate N/A

P/E using 2024 Estimate N/A

Zacks Rank N/A

Risk Level Above Avg.
Type of Stock Speculative
Industry Specialty EVs

ZACKS ESTIMATES

Revenue
(in millions of \$)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2021	1 A	1 A	1 A	1 A	3 A
2022	1.0 A	1.0 A	0.4 A	0.6 A	3.0 A
2023	0.3 E	0.1 E	0.4 E	1.4 E	2.1 E
2024	1.8 E	2.2 E	2.5 E	3.8 E	10.3 E

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2021	-\$0.18 A	-\$0.22 A	-\$0.33 A	-\$0.21 A	-\$0.94 A
2022	-\$0.12 A	-\$0.16 A	-\$0.15 A	-\$0.16 A	-\$0.62 A
2023	-\$0.17 E	-\$0.17 E	-\$0.16 E	-\$0.15 E	-\$0.66 E
2024	-\$0.15 E	-\$0.14 E	-\$0.14 E	-\$0.15 E	-\$0.58 E

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KEY POINTS

We are initiating coverage of AYRO, Inc. (NASDAQ: AYRO) with a valuation of \$1.30 per share. AYRO is a manufacturer of low-speed electric vehicles (LSEV) that resembles the popular kei-class mini-trucks from Japan in shape and footprint but that's where the similarities end. The recently introduced AYRO Vanish is a novel product for this market, focusing on high-quality components, reliability, and user comfort in ways that have not existed before in our opinion. AYRO has completely revamped its product offering and its operating model in the past 18 months. A new management team has addressed their supply chain issues (changing both the geographic location of suppliers and the quality of the components), redesigned their principal product, brought manufacturing in-house, and modified distribution. These changes are likely to lead to some lumpy results in the near term as the company changes its product line-up, but we think that the changes will lead to greater opportunities in the long term. In 2023, the company will begin taking orders for its new LSEV, the Vanish, while additional product launches based on the same core architecture will likely come in the second half of 2023 or early 2024. It is important for investors to recognize that while there is an operating history at AYRO, today this is an entirely new product line and business model that is just launching. The company can be viewed as a niche EV startup with over \$40 million in cash on the balance sheet.

Low-Speed Electric Vehicles (LSEVs) are four-wheeled vehicles that are limited to a maximum speed of 25 mph. The AYRO Vanish is programmed to cap its speed at 25 mph which means it will be considered a street-legal vehicle on most roads with a posted speed limit below 35 mph. AYRO designed the Vanish to be recharged via a standard 110v outlet so the vehicle does not require specialized charging infrastructure. Based on the market that AYRO is targeting with the Vanish, vehicle range isn't a primary consideration so to keep the total vehicle weight down the Vanish has a smaller battery pack than most consumer EVs. The company believes that the real-world range of the Vanish will be about 50 miles depending upon factors like payload, weather, and road conditions. Fifty miles of range should be sufficient for the targeted applications (college/corporate campuses, indoor arenas, short deliveries, etc.). The Vanish has a maximum payload of 1,200 pounds which compares favorably to the Ford F-150 which has a maximum payload of 1,985lbs.

Demand for specialty, low-speed electric vehicles like the Vanish, is a bit of an unknown in the US as the market need has been met to date with a mix of traditional pickup trucks, small cargo vans, or older low-speed vehicles (principally golf carts or utility vehicles). While we can identify end-user demand for low-speed vehicles and substitutes like pickup trucks/cargo vans, we believe the Vanish will target a market not yet served by major industry players.

According to marketsandmarkets.com, the total global demand for low-speed vehicles is anticipated to grow from \$8.9 billion in 2021 to over \$14.4 billion in 2027. Most of this demand is in the US and is directly tied to use on golf courses, in gated communities, and on large campuses (corporate and universities). While AYRO intends to utilize its platform to target the consumer market in the future, the Vanish will be sold to commercial customers and fleets initially, where multiple payload configurations and zero emissions are the primary selling points today. We think the Vanish has the potential to create a new category of premium LSEVs that has not existed previously.

The primary use cases for a vehicle like the AYRO Vanish are

- Last mile delivery
- Micro distribution
- University & corporate campuses
- Construction & landscaping contractors
- Any enclosed space where exhaust fumes or noise must be avoided (arenas/airports)

One of the key points of differentiation that will be key to AYRO's success will be an ability to prove that the AYRO Vanish provides a lower total cost of ownership, despite its premium price tag. We believe that there are three ways that AYRO may reduce the total cost of ownership for their customers:

- 1) The longer expected life for the AYRO Vanish relative to what exists in the market today.
- 2) Anticipated lower annual maintenance costs of an EV versus a vehicle powered by an internal combustion engine.
- 3) Reducing the number of specialty vehicles in a fleet if one AYRO Vanish can replace two or more existing fleet vehicles (like a small pickup and a utility vehicle).

We view the low-speed EV market as being in a similar position to the e-bike market roughly 5 years ago. At that time existing bike models were almost all traditional bikes and a handful of e-bike startups. However, e-bike adoption grew incredibly quickly because the product offered speed and convenience at a low price. Almost all these commodity bikes were of low quality but that didn't matter to early adopters. Ultimately, high-end, established manufacturers saw this demand as an opportunity and began to design high-quality e-bikes with integrated reliable battery systems. Today, the LSEV market is still in the commodity phase with few premium products on the market. The end users in most markets targeted by AYRO initially will be commercial buyers, so adoption rates will be impacted by some factors beyond the company's control (like economic conditions) but we believe when fleet managers see the Vanish side by side with the current competition, sales growth could accelerate quickly.

Key reasons to own AYRO shares:

- The new Vanish is a unique vehicle in the low-speed EV market, engineered like an automobile with high-quality components and smart design features. For those users who find a light-duty truck too expensive or unnecessary and a small utility vehicle or golf cart not in keeping with their branding, the Vanish could be the first premium North American-sourced utility LSEV to gain real market share.
- AYRO has distribution agreements in place with Master Golf Carts, Element Fleet management (a company with 1.5 million cars under management), and Gallery Carts for customized refrigerated units. We anticipate additional distribution deals will be inked once the Vanish starts appearing in public and the company recently stated they are in various stages of negotiation with over 50 additional dealers in North America.
- Product line expansion opportunities exist by using the core of the Vanish platform to create new products namely a premium people mover in 2023 (the Valet) and an ultra-premium neighborhood vehicle/golf cart (the Vapor) in late 2023 or 2024.
- AYRO has completely reinvented its operations in the last 18 months – starting with a new vehicle design, entirely new sourcing focused on North America, a new manufacturing and assembly model, a new management team, and a revamped sales strategy, all while reducing the company's monthly burn rate from 2021 to 2022.

In this report, we provide a review of the low-speed vehicle market and AYRO's positioning in that market. We follow with an in-depth description of AYRO's recent strategic shifts, its current product launch in 2023, and additional opportunities to expand its lineup of vehicles. The report reviews the competitors in the LSEV market as well as other vehicles that could be considered substitutes and discusses key management figures. In closing, we review our model and we conclude the report with our valuation. We discuss the anticipated lack of revenues in the near term as a result of the shift in the product line-up and our assumptions for revenue and margins for the Vanish product line. Based on

these assumptions, comparable valuations, and the current balance sheet, we have established a valuation of \$1.30 per share.

AYRO, Inc. (NASDAQ: AYRO) is a provider of low-speed electric vehicles targeting the space in between light-duty trucks and utility vehicles with a premium EV.

The company is based in Round Rock, Texas, and has a market capitalization of roughly \$22 million.

The company launched a model refresh in 2023, shifted its supply chain from being mostly overseas to mostly based in North America, and lowered its cost structure significantly in 2022.

The company is growing from a small base (about 300 vehicles delivered to date). After an initial dip in sales as they transition from their old model to the new Vanish, growth rates could be substantial.

The company's products are principally competing with existing light-duty trucks, small vans, and various forms of low-speed vehicles (like golf carts and utility vehicles). The company's new Vanish product line will be priced at a premium over the existing offerings, but we believe that when customers see the new Vanish's superior build quality in person and if they evaluate the total cost of ownership over the Vanish's anticipated longer useful life, the value proposition offered by AYRO will be compelling.

The company is led by an experienced management team with deep experience in engineering and production but they are relatively new to the EV world. Understanding their customers' priorities and delivering products that meet those needs will be key to the successful transition at AYRO.

As of 12/31/22, the company had \$48.9 million in cash and marketable securities on their balance sheet which management has stated gives them more than 2 years of runway. This liquidity offers investors a measure of protection as the company works toward becoming cash flow positive.

There remains some uncertainty surrounding the prospects for special purpose EVs like the Vanish, particularly at a premium price point, but we believe that the quality of the Vanish will be eye-opening for customers and competitors alike.

OVERVIEW



Source: AYRO.com

AYRO Inc., (NASDAQ: AYRO) is a manufacturer of low-speed electric vehicles (LSEVs) that has undergone a meaningful transformation in the last 18 months. The change has been so significant that while we will discuss some of the history of the company, it is important to remember that this is effectively a startup, launching a completely new product into the market despite its legacy operations. The company was founded in 2017 as Austin Electric Vehicles to address the gap in the market with short-distance, low-speed EVs. The Company later changed its name to AEV Technologies, Inc, before becoming AYRO, Inc. in 2019. In late 2019, AYRO, Inc., merged with publicly traded DropCar, Inc. in an all-stock transaction (the surviving company's ownership was 80% AYRO shareholders and 20% DropCar shareholders). The operations of DropCar were sold to former the management team of DropCar and the surviving company was effectively just AYRO, Inc.

Today AYRO, Inc., designs, assembles and markets a new LSEV (branded as the Vanish) targeting last-mile delivery, campus mobility, and other specialty markets where branding, appearance, reliability, user experience, and payload capacity matter more than speed or vehicle range. The company has already announced plans to utilize the core of the Vanish platform to develop additional products in the LSEV space, namely a 6-seat vehicle and an ultra-premium golf cart-like vehicle.

The company has just over 40 employees split roughly equally between R&D, engineering, operations, and sales. We anticipate that there could be additional assembly hiring in the second half of 2023 as production accelerates. The company has announced at least one new distribution agreement recently and they indicated that they are in negotiations with over 50 additional dealers on their year-end conference call. We anticipate more dealer distribution agreements will be announced in the coming months when the Vanish is available for delivery.

The company's CEO has extensive engineering, production, and automotive-related experience but is new to the EV market. Mr. Wittenschlaeger was part of the management team that made a bold decision to offer high-end suspension systems and shocks at Fox Factory (NASDAQ: FOXF) at a price point well above the existing market. The approach of offering a high-quality, well-engineered product at a premium price point in a commoditized market parallels the approach now taken by AYRO.

As a result of the stock market mania surrounding all things related to EVs in early 2021, the company's stock price jumped sharply from roughly \$2.50/share before peaking above \$11 in February 2021. The company capitalized on this market enthusiasm for EVs selling roughly 7.7 million shares and raising close to \$60 million in cash to shore up the balance sheet. As of 12/31/22, the company still had \$48.9 million in cash and marketable securities on its balance sheet (roughly \$1.30/share), we believe that the company has sufficient operating capital to fund its near-term growth plans and the company has stated that they have more than a 2-year runway at current cash levels.

Figure 1: The AYRO Vanish



Source: Company website

OVERVIEW OF THE LOW-SPEED ELECTRIC VEHICLE MARKET

The first thing that comes to mind we discuss low-speed electric vehicles (LSEVs) may be the image of a golf cart cruising through a gated community in Arizona or Florida. While this is certainly a strong use case for LSEVs and a market that AYRO will likely target in 2024, it is far from the only use case, as LSEVs are also a perfect solution for last-mile delivery, campus/arena/site operations, and short distance mobility.

In a broader sense, any vehicle with a maximum speed of 25 mph and a gross vehicle weight of less than 3,000 pounds falls into the category of low-speed vehicles or if powered by an electric battery, a low-speed electric vehicle. Electrified low-speed vehicles typically have a range of roughly 50 miles or less.

The LSV market today is principally comprised of:

- Traditional golf carts for the on-course market
- Golf carts (occasionally referred to as neighborhood vehicles) used in a residential setting as a replacement for an automobile
- Commercial turf vehicles (e.g., the “Gator” from John Deere)
- Industrial utility vehicles (often flatbed carts)
- People movers/shuttles (often for airport or resort use)

Within these markets, the new AYRO Vanish will not be competing with on and off-course golf carts but we think it will compete strongly against products like the John Deere Gator and flatbed carts like those from Taylor-Dunn.

While the electrification of this segment of the market is not new, the advances in battery technology and a push to offer a greener alternative (particularly for many government fleets) have sparked a great deal of new interest in LSEVs.

Upmarket from LSEVs there are numerous pickups or vans that buyers can choose from including but not limited to:

- Ford – makers of the bestselling F150 and Econoline Vans
- GM – leading seller of all pickups in the US and
- Ram (owned by Stellantis) – makers of Promaster vans

These vehicles are reliable, come from established brands, and are supported by vast dealer networks. However, these vehicles have become increasingly costly as features have been added and the electric versions of most full-sized vehicles have even higher upfront costs. There are also a host of new EV-only pickup truck manufacturers like Rivian and Lordstown that have entered the market. If a fleet manager is in the market for an eighty thousand dollar electric pickup, it is likely that the fleet vehicles require range that the AYRO Vanish will not provide.

Down-market from the Vanish there are several small utility carts that are based on formats like golf carts. There are some companies in this market with long operating histories like E-Z-Go, Yamaha, Club Car, and GEM to name a few – so their reliability has been established but these vehicles tend to have a shorter range, limited cargo holds and they are principally used for moving people.

The utility cart market is one where very little design innovation has occurred in recent years. The vehicles that you see on the street or in an airport, tend to have low-cost components and for lack of a better phrase, they generally feel “cheaply made”.

We believe that this leaves a gap in the market for a well-engineered, high-quality, LSEV that can offer emissions-free transportation like the AYRO Vanish.

AYRO: AN UNDERAPPRECIATED TRANSFORMATION

In September 2021, after the new CEO, Tom Wittenschlaeger, joined AYRO the company began the process of reviewing its supply chain and designs to analyze its cost structure and ensure its products were meeting the needs of users. As a result of this review, the company canceled plans to develop a three-wheel high-speed EV and reviewed its existing product line.

Prior to 2023, AYRO was partnered with Cenntro Automotive (NASDAQ: CENN) to manufacture a component kit for the company. It is worth noting that Cenntro owns the design of the AYRO 411 and AYRO had North American rights to that design.

The company had a complex licensing agreement with Cenntro which contained minimum purchase levels and other obligations for AYRO to maintain the license. In May 2022, Cenntro sent a notice to the company that it was terminating all agreements and contracts. In June 2022, the company conducted an inventory review and determined that 17 vehicles had over 40 unique (previously undisclosed) failures and these vehicles would not be sold, so the company wrote off that inventory completely. As of September 2022, the company ceased production of the Cenntro vehicles and began the process of developing the Vanish.

When the company was importing the Cenntro kits, they were assembled by Karma Automotive in California before final shipping to customers.

Finally, the company had a five-year distribution agreement with Club Car which gave Club Car exclusive rights to sell AYRO's four-wheeled vehicles in North America (provided certain minimum orders were placed). Club Car did not meet the minimum number of orders in 2020-2022. The company has indicated that as a result of the shift in focus toward the Vanish model, they will be reevaluating the Club Car relationship. We believe that as a part of this distribution agreement Club Car was granted a right of first refusal on the Vanish and Club Car elected not to pursue a distribution agreement. We believe the company has no further obligations under this old agreement with Club Car.

To recap – in 2021, AYRO was importing vehicle kits manufactured by Cenntro, that were assembled by Karma and sold by Club Car. The company was almost operating a drop shipping business model but instead of t-shirts on Amazon, they were selling basic low-speed EVs. AYRO was not alone in pursuing this model as several EV startups had similar strategies.

A Revamped AYRO Emerges in 2023

Given the challenges facing the company, management elected to make a difficult decision and substantially pivot in 2022. The company identified new potential suppliers while they began the process of redesigning their principal product. By the end of 2022, the company had leveraged management's contacts in the industry to change their supply chain partners so that most parts are now sourced in North America (roughly 85% of the parts for the Vanish come from North American suppliers). The majority of the company's suppliers are now within a one-day drive of their manufacturing facility in Round Rock, Texas, which gives the company incredible flexibility in terms of ordering and inventory management.

Management also elected to utilize existing staff and new hires to bring the vehicle design process in-house. It is increasingly rare to have a management team so dedicated to operations and engineering but at AYRO, the CEO is not just involved but actively leading the charge to improve the designs of components like seats, wheels, and tires.

At the same time, the company elected to end its assembly agreement with Karma and instead decided to shift assembly to its headquarters which was previously an underutilized space. We have had the opportunity to tour this facility and we believe it will be an affordable way for the company to launch its manufacturing operation.

Finally, the company changed its distribution strategy away from the exclusive arrangement with Club Car to non-exclusive distribution agreements and plans to target large fleet sales.

By early 2023, AYRO could no longer be described as an EV drop shipper, but rather a company

- **designing their EVs from the ground up**
- **assembling them in a virtually brand new facility in the US with components primarily from North American suppliers and**
- **controlling their own sales channel.**

Finally, despite these drastic steps that might on the surface appear to be more costly AYRO was able to reduce its operating costs from \$31 million in 2021 to \$20.2 million in 2022. We believe the company's burn rate will be roughly \$5 million/quarter and with close to \$50 million of cash and equivalents on the balance sheet, the company has some financial flexibility as they launch their vehicle lineup.

We believe the company only has a handful (likely less than twenty) of the old Cenntro manufactured AYRO 411xs in their inventory. Given the fact that the company is effectively "starting over" with a new product, sales in the first half of 2023 are likely to be minimal (likely the old Cenntro units and possibly some replacement parts). We believe that cost controls and the successful delivery of early orders of the Vanish in Q3 2023 will be key metrics to monitor in the near term.

THE AYRO VANISH

In February 2023, the company introduced a model refresh of the AYRO 411x, called the AYRO Vanish in a live webcast. Management has indicated that the Vanish will be the first of three vehicles to be launched in 2023/2024 all built on effectively the same platform.

Figure 2: AYRO Vanish Configurations



Source: Company presentation

The company is currently taking pre-orders for the Vanish with delivery slated to begin in the third quarter. As you can see in figure 2, one of the key points of differentiation for the company is the fact that the Vanish offers multiple configurations – flatbed, box truck, ladder racks, etc., - to meet a customer's needs.

The Vanish is undoubtedly a premium product in a market dominated by commoditized vehicles and it is difficult to grasp the differences in photos or a webcast. There are some obvious premium features like a rearview camera, air conditioning, and premium seating which make the vehicle feel more “car-like” that were added in the hopes of differentiating the Vanish from the competition. As mentioned, we recently had the opportunity to visit the company's factory in Round Rock, TX. We came away with an understanding that this is a different product in many significant ways than what currently exists on the market. We think when potential customers get the opportunity to sit in the new Vanish and compare it side by side with other vehicles serving the market, the gap between the two will be apparent.

One of the big unknowns facing the company is whether the market will pay for premium features in a utility vehicle. Historically, buyers in this market have placed a priority on reliability and low cost over high-quality components or additional features. We believe that the quality of the vehicle and the premium appearance of the AYRO vehicle will make difference for some buyers. For buyers concerned with brand image, we believe it is like a high-end bakery that could use any stand mixer but chooses instead to invest in six matching KitchenAid commercial mixers because it portrays an image of quality to their customers.

The company has indicated MSRP for the base model of the Vanish will be around \$34,900 but we have modeled \$32,000 for each unit initially, as we expect some slight discounting. We have not factored in any customization yet as we would like to see how customers elect to use the Vanish, but we believe that customization packages of \$1,000-\$5,000 provide additional upside to our revenue estimates.

We think that two factors can justify buyers paying a premium for the AYRO Vanish:

- 1) The Vanish can improve buyers' ROI on their fleet by enabling them to replace two or more vehicles with a single unit.
- 2) The premium appearance of the Vanish for buyers focused on offering a high-end experience to their guests or employees.

However, while we believe this to be the case until orders begin to emerge for this vehicle it will remain unknown.

The company has not disclosed their battery pack manufacturer for the Vanish but we believe it is North American assembled and roughly 12.5kwh (though it may come in multiple configurations). There is no special charging infrastructure required for the Vanish as it charges via a standard 110 outlet which has become the standard among LSEVs. The company has completely redesigned the chassis, designed custom tires and wheels, and incorporated lightweight, sustainable materials where appropriate. The result is that the vehicle feels significantly more substantial than the competition but it remains very lightweight relative to a light-duty truck and thus, the maximum payload will be at least 1,200 pounds. The Vanish offers regenerative braking as is standard on most EVs and utilizes an axial flux motor. This motor design simplifies much of the motor assembly and is lighter than a standard motor which again helps lower the gross weight of the Vanish.

The base configuration for the Vanish is a standard flatbed design that most closely resembles a Taylor-Dunn Bigfoot or Cushman Titan with an enclosed cab.

Figure 3: ARYO Vanish vs Cushman Titan



Source: Company Presentation and Zacks Small Cap Research

The additional configurations of the Vanish beyond the base flatbed include:

- The Vanish Cargo Van Box, a fully enclosed cargo box
- The Vanish Pickup, which resembles a mini-pickup truck

Given that the flatbed of the ARYO Vanish is longer and wider than most of the LSEV competition and would comfortably fit a 4' x 8' sheet of plywood or sheetrock we feel there could be additional construction applications as a material handling vehicle on the job site. Many large housing complexes being built in gated communities have one centralized material warehouse and use heavy-duty trucks to move materials to the job site. We imagine the Vanish will be a compelling alternative for many residential communities where construction is ongoing.

Obviously, as an emissions-free vehicle, there are many applications where LSEVs like the Vanish as an indoor vehicle make sense. Convention centers and large sports arenas are two target markets that could utilize a Vanish for cargo, emergency services, and maintenance.

We also envision the possibility of fleet sales to delivery companies where the average distance traveled is less than 50 miles. UPS, FedEx, and Amazon among others are constantly trying to find ways to ease delivery, improve delivery driver satisfaction and reduce the environmental impact of their deliveries. A nimble LSEV with a cargo hold would be easy to park and drive in major metropolitan areas. Finally, converting fleets from diesel delivery trucks to EVs would be seen as an eco-conscious step for delivery companies.

While the average passenger car emits 4.6 tons of carbon dioxide per year¹, the average diesel delivery van (think UPS/FedEx) emits 18.7 tons of carbon dioxide per year². Most of the major delivery companies and retailers have indicated that they will make a strong push to electrify their delivery fleets in the coming years to address their carbon footprint. For example, the US Postal Service has announced plans to purchase 66,000 battery electric vehicles between now and 2028³. While it is a long way from announcing a product to securing orders from major delivery companies, we can't help but look around our cities and see streets clogged with oversized delivery vehicles and imagine a day when fleets of LSEVs could help these companies meet their last-mile delivery needs.

The final application for the Vanish is harder to quantify because the demand may be driven by customers who need to present an upscale image. Whether it is customer-facing or not, buyers at premier resorts, marinas, corporate campuses, or universities want to have higher quality products onsite because it fits with their branding. The Vanish will certainly provide a more polished look compared to the competition and we think this will be a driver for some initial demand.

Lower Total Cost of Ownership

One of the selling points that AYRO has cited is that based on the engineering and the high quality of the components utilized, it is believed that the Vanish will have an average life expectancy of at least 5 years while the current industry average is roughly three years. We found this to be a bold claim when the company launched the Vanish in February, however, since touring the company's facility near Austin, we now believe that this is likely to prove to be accurate.

In the same way that you can feel a tangible difference between a basic GE oven and a Viking range, we feel customers will see the value in spending for a premium product that will have a longer useful life and provide a better experience for the operator.

Until we are certain of the true price of the Vanish and the service life of the vehicles, this is a bit of a wild card but after seeing the chassis, suspension, motor, battery, steering, and brake systems we feel like the company's claims that the total cost of ownership will be lower despite a higher upfront cost will likely turn out to be true.

Will Fleets Convert to EVs?

To date, most of the focus in the EV world has been providing an equivalent vehicle to current internal combustion engine (ICE) powered passenger vehicles on the road. The consensus has been that the fastest way to speed adoption was by making the vehicles look, feel, and perform like traditional ICE vehicles. This has led manufacturers to focus obsessively on vehicle range and battery sizing. However, for commercial fleets, the average distance traveled each day is roughly 50 miles per day (assuming 5 day work weeks and 12,000 miles annually for light duty trucks/light duty vehicles⁴) so building a vehicle with a range of 300+ miles is not the best solution for most small commercial fleet vehicles.

We believe that most fleet vehicles currently in operation are not candidates to be replaced by the relatively small LSEVs offered by AYRO because most fleet vehicles are still large Class 8 trucks (gross vehicle weight over 33,000 pounds). However, for the subsegment of light-duty vehicles, there could be several applications that would draw fleet managers to look at the AYRO.

As previously noted, we think the **lower total cost of ownership** will be compelling to fleet managers. This presumes that the actual useful life of the vehicle is significantly longer than the current models in the market.

As with most EVs, LSEVs like the Vanish should have substantially **lower operating costs** due to less annual maintenance required and possibly lower energy costs. AYRO has indicated that they expect annual maintenance to involve little more than a brake check every six months and consistent charging of the battery system. This varies from a traditional ICE-powered LSV which will require oil changes, transmission fluid, brakes, filters, coolant, etc.

Finally, we believe that broader regulations or a push to embrace sustainable practices will lead fleet owners to consider ways to embrace EV technologies. This will not be a primary driver of fleet conversions but if the Federal government offers incentives to shift to LSEVs we would likely see adoption rates increase.

FUTURE PRODUCTS

AYRO has indicated that they intend to use the new Vanish platform as a base to launch additional products into the low-speed vehicle market. The company anticipates that by utilizing a common chassis, subsystems, and components, it can speed up the time to market with multiple new products. Initially, AYRO's management indicated that they would introduce three new vehicles (including the Vanish) in 2023 but we think it is possible that the golf cart (the Vapor) slips into 2024. The current layout of the factory floor in Round Rock is geared toward producing the Vanish so it remains to be seen if the company will be able to produce additional models in this facility or if additional assembly lines will be required.

The Valet:

The Valet is likely to be introduced formally in the second half of 2023 and will be a traditional people mover competing with some of the larger cart models from GEM, E-Z-Go, Club Car, and Yamaha. At this point, all we have seen is a rendering of the Valet but we would note that the styling is in keeping with the Vanish which will immediately differentiate it from the competition.

Figure 4: The AYRO Valet rendering vs. Club Car Villager 6



Source: Company presentation and Zacks Small Cap Research

When looking at the two products side by side, we think brand-conscious customers like high-end resorts and large corporate campuses may prefer the more “car-like” styling of the Valet relative to the stretched-out golf cart models offered by the competition.

The company has not indicated pricing on this model yet but given the premium components and the size of the vehicle, we believe it will be in the same range as the Vanish (\$30,000-35,000).

The Vapor:

Figure 5: The Vapor Golf Cart



Source: Company Presentation

We think it is possible that the company will introduce the Vapor in Q4 2023 or possibly early 2024. While details are limited at this time beyond the rendering provided in a company presentation, we expect it will be based on the same platform as the Vanish just with a much shorter wheelbase and more attention paid to styling. The Vapor will likely be a two-passenger side-by-side vehicle built for the off-course market or a “neighborhood EV” but beyond this, we don’t have much information.

Since, the golf cart market is very crowded with many large, legacy players cracking this market will be more difficult but potentially the most lucrative for AYRO as it is the largest segment of the LSEV market.

DISTRIBUTION

Distribution will be of increased importance in 2023 and beyond for AYRO as their previous arrangement with Club Car as the sole distributor of their vehicles has ended.

The company has an existing distribution agreement with Gallery Carts of Denver which is a provider of customized and standard food and beverage carts and merchandising carts.

Figure 6: Gallery Cart mobile cart



Source: AYRO, Inc. website

While this has been a strong relationship to demonstrate the value of an LSEV platform for mobile vendors and the company continues to support existing vehicles that it has sold under this agreement, we believe that the close relationship between Club Car and Gallery Carts means that in future sales discussions, Club Car will likely be competing with AYRO.

The company also has a distribution agreement with Element – the world’s largest auto fleet management company with over a million vehicles under management.

In mid-January AYRO, Inc., announced a partnership with Masters Golf and Utility Vehicles, a dealer/fleet solutions company based in Oshawa, Ontario. Currently, Masters Golf and Utility offers traditional golf carts, utility vehicles, and customized vehicles to customers in a range of industries and the company has 700 rental vehicles in its fleet inventory.

On the company’s fourth quarter, 2022 earnings call the company announced that it was in negotiations with 50 additional dealers in North America.

INDUSTRY OUTLOOK

Market size:

Based on a March 2022 report from marketsandmarkets.com, the Low-Speed Vehicle market where AYRO competes is expected to grow from \$8.9 billion in 2021 to 14.4 billion in 2027, or roughly an 8% annual growth rate.⁵

This market estimate includes all low-speed vehicles (electric, diesel, and gasoline), street legal, and those that do not meet National Highway Traffic Safety Administration standards to be street legal. While this is an admittedly broad description capturing a wide range of vehicles with diverse applications, it is the best measure of the market size that we can identify right now.

The principal use cases for LSVs are: 1) on the golf course, 2) at hotels, marinas, and resorts, 3) in airports, 4) in arenas and convention centers, 5) in gated retirement and residential properties and 6) on corporate/college campuses. The main drivers of growth vary by vehicle use but they include – steady golf participation rates, increased emphasis on user experiences at hotels/resorts where premium LSEVs like the Vanish are seeing added demand, booming growth of retirement communities and corporate/college purchasers that are converting to LSEVs on their campuses.

Stronger emissions standards particularly in North America and Europe are driving a shift from traditional LSVs toward LSEVs. Additionally, the preference for many companies, universities, and governments to improve their sustainability profile is expected to drive additional conversions to LSEVs. Thus, within the overall growth of low-speed vehicles, we expect LSEVs to gain a greater share of the market.

One additional long-term driver that we believe may emerge in the US will be a more cohesive EV battery policy. There are limited quantities of the minerals that go into the typical lithium-ion battery (mainly lithium and cobalt) and yet in the US, there are plans to build capacity for close to 10-13 million long-range, full-size EVs annually. Unfortunately, manufacturing full-size EVs with a range of 250-350 miles per charge locks up a tremendous amount of battery potential in vehicles that will not use that energy since most vehicles average under 50 miles per day.

Our expectation is that policymakers will see the flaw in this strategy and encourage vehicle and battery manufacturers to shift toward producing vehicles with ranges that are more appropriate to real-world use (under 100 miles for example). Instead of producing one vehicle with one battery capable of traveling 400 miles, the smarter resource strategy would be to use the same amount of minerals to produce 4–6 smaller vehicles with a range of 50-100 miles. Some portion of these vehicles would undoubtedly be LSEVs and that would further boost demand.

INDUSTRY POSITION/COMPETITION

The most prominent name in the low-speed vehicle industry is Club Car as it has built up a significant market share in both the on-course, utility vehicle and neighborhood vehicle markets. The previous relationship between Club Car and AYRO appears to have ended in 2022 and the companies will be direct competitors going forward.

Club Car is the number one manufacturer of golf carts in the world and their consumer line has at least 7 models seating 2 to 6 passengers and ranging in price from \$12,000-\$19,000. They also have at least three consumer utility vehicles and an additional 9 commercial utility vehicle offerings. Recently, the company announced the Club Car Urban which appears to be the successor to the AYRO 411x that was distributed by Club Car. The Urban has a starting price of \$25,000 and it will benefit from the enormous distribution advantage that Club Car has over its competitors.

Club Car recently announced a new line of vehicles – the Club Car CRU – that features enhanced styling and that is geared toward the Neighborhood Electric Vehicle (or NEV) market. These vehicles come with a hefty price tag, starting at \$27,000, which is considerably more than the current comparable offering from GEM (discussed below). The degree to which Club Car brings the high-end features of the CRU to the rest of its product line-up may play a role in how competitive AYRO will be with its current product line. In 2022, Club Car also purchased the Garia Carts for an undisclosed sum. Garia carts are high-end luxury carts with enhanced styling and retail price points for new models ranging from \$35k to \$40k. We anticipate that the Vapor cart from AYRO may have premium features like the Garia but until we see a production model we won't speculate further.

Club Car was purchased from Ingersoll Rand (NYSE: IR) for \$1.7 billion by the private equity firm Platinum Equity in 2021. Revenue for Club Car in the last year it was reported (2020) was \$741 million and adjusted EBITDA was \$138.6 million which was a 2.3 times revenue multiple and 12.1 times EBITDA multiple.

E-Z-Go is another well-established brand in the golf cart industry operated as a subsidiary of Textron (NYSE: TXT). Textron also owns:

- Cushman which makes a variety of utility vehicles, like the Titan, that could compete with the Vanish
- Arctic Cat is a well-known snowmobile manufacturer with a line of side-by-side UTVs that could be a substitute for the Vanish.

Given the size of Textron's business (revenues are nearly \$13 billion) there is no breakout of E-Z-Go's revenue and cash flow though we did see one estimate that E-Z-Go's annual revenues exceeded \$500 million. Currently, E-Z-Go offers 7 personal vehicles ranging in price from \$8,000 for a single-seat unit to \$16,000 for the largest unit. E-Z-Go also offers 5 models of carts sold to golf courses for their rental fleets.

Yamaha is the third major player in the on-course golf cart market and manufactures a line of 2 and 4-seat side-by-side vehicles that can be used in ways like the Vanish. Yamaha has a strong brand and a reputation for quality products, but some industry insiders have noted a lack of innovation as of late.

The big 3 – Club Car, Yamaha, and E-Z-Go are believed to hold over 50% of the total market share and while firm data is hard to secure, we believe their share of the market is probably over 75%.

Beyond the big three of the golf cart industry, the LSEV market has a few companies that make products that have features that are comparable in one way or another to the AYRO Vanish. WAEV, Inc., was formed as a result of a management buyout of the Taylor-Dunn and GEM cart businesses from Polaris at the end of 2021. GEM makes a stylish off-course cart that is popular in retirement communities with an MSRP ranging

from \$17,000 to \$24,000. The Dunn-Taylor LSEVs are no-frills work vehicles (popular with rental equipment companies) with two seats and a large flatbed for transporting cargo.

Additional Specialty Players:

- **BRP** (NASDAQ: DOOO) manufactures side-by-side UTVs under the Can-Am brand.
- **Deere and Company** (NYSE: DE) manufactures a variety of vehicles under the John Deere brand, but its “Gator” utility cart is a strong player in the utility cart market.
- **Toro** (NYSE: TTC) along the same lines as Deere and Company, Toro offers a utility vehicle through its dealer network that could be a substitute for the Vanish.

There have been several new golf cart manufacturers launched in specific regions targeting the retirement communities of the US. These companies include Bintelli Electric Vehicles, Icon Electric Vehicles, and Star Electric Vehicles. Beyond some positive press about their products, we don’t have much information on their market positioning.

As we’ve said before the AYRO Vanish sits between golf carts and utility vehicles on the low-end and light-duty trucks and EV Pickups on the high-end. There are several companies that have made very big splashes in recent years trying to tap into the EV pickup truck and delivery truck market. Companies like Arrival (NASDAQ: ARVL), Workhorse (NASDAQ: WKHS), Rivian (NASDAQ: RIVN), Lordstown (NASDAQ: RIDE), and others have raised (and burned) incredible amounts of money trying to bring a reliable EV pickup or delivery van to the market. However, early recalls of many of their vehicles and other production delays make it likely that some, if not all, of these companies, will struggle to survive. Currently, we believe the market is lumping AYRO in with these struggling EV makers as they look very similar on the surface. We think over time the market will begin to understand that AYRO has undergone a significant change and is well-positioned to bring its new products to the market in 2023.

Finally, we have the legacy automakers who are moving to bring EV solutions to the truck and van market. The popular small contractor van – the Mercedes Sprinter, will get the “e” treatment with the release of the e-sprinter in the second half of 2023. Also, the ubiquitous Ford Transit Van will be offered as an E-Transit model in 2023. However, both vehicles are priced above \$50,000 and they are unlikely to directly compete with the AYRO Vanish. Legacy automakers are also pushing to bring electric versions of their most popular trucks – like the F-150, Ram 1500, and Chevrolet Silverado – to the market. These vehicles are substantially more expensive and include options and capabilities far beyond those offered by a specialty vehicle like the Vanish, but for certain government fleet sales, it is possible that these EV pickups could be considered competitive products for the AYRO Vanish.

MANAGEMENT

There has been a meaningful change in the management team at AYRO in the past 18 months and we believe that this change is not fully appreciated by the investing community.

Tom Wittenschlaeger, CEO/CTO, has served as the company's CEO since October 2021 and has been instrumental in guiding the company's transition to designing and building its own vehicles. Mr. Wittenschlaeger has deep connections within the powered vehicle supply chain as a result of his years spent as the president of the powered sports division of Fox Factory (NASDAQ: FOXF). The combination of experience working with the North American vehicle supply chain and Mr. Wittenschlaeger's deep technical understanding has enabled the company to completely overhaul its design, production, and vehicle lineup in a short amount of time. Mr. Wittenschlaeger has over four decades of product development experience including 16 years at General Motors Hughes Electronics and five years at Fox Factory. Mr. Wittenschlaeger has been awarded 46 patents in advanced networking, supercomputing, communications, and vehicle technologies.

David Hollingsworth, CFO, CIO, CHRO, joined AYRO roughly a year ago as the company's interim CFO before assuming the title in August 2022. Mr. Hollingsworth has worked as a controller and consultant for firms including Wondercide, Bridgepoint Consulting, CPI Products, and Sunworks, Inc. Mr. Hollingsworth has a deep understanding of all accounting and financial functions, including inventory, supply chain management, and manufacturing which will benefit AYRO in the long run.

While it is apparent that the management team is small now, we believe that is by design as the company attempts to operate as lean as possible until their products are in the market and operations are generating cash flow.

RECENT NEWS

In mid-January AYRO, Inc., announced a partnership with Masters Golf and Utility Vehicles, a dealer/fleet solutions company based in Oshawa, Ontario. Currently, Masters Golf and Utility offers traditional golf carts, utility vehicles, and customized vehicles to customers in a range of industries and the company has 700 rental vehicles in its fleet inventory. The Dealer Program from AYRO offers territory exclusivity, the right of first refusal on future AYRO products, and volume discounts.

We find it encouraging that a sizeable dealer in Canada would take a chance on AYRO and prominently display the Vanish on their website.

In March 2023, the company announced it had been awarded a patent for technologies that limit the impact of vehicles on the environment. Though the press release was somewhat vague, we believe that the company could be working on a set of tools for vehicles designed to run on trails or beaches that would reduce or eliminate the impact of the vehicle on a trail or sand.

VALUATION

As of 12/31/22, AYRO had \$48.9 million in cash and equivalents on its balance sheet. We estimate that the current monthly burn rate is somewhere between \$1.6 and \$1.8 million per month so at the time of this report, the company will likely have around \$43.5 million still on its balance sheet or \$1.16 per share. We believe that the strength of the balance sheet provides investors with a level of protection at the current prices as the stock is trading at roughly half of these levels.

We believe that AYRO is bringing a premium product to a market awash in commoditized vehicles and the company is well-positioned to capitalize on trends toward fleet electrification. The company will be competing with large, well-established brands but recent ownership changes at Club Car and GEM/Taylor-Dunn give the company an opportunity to capitalize while the focus of these companies will be on controlling costs.

Investors remain focused on the fallen EV unicorns that are scattered around the public and private markets. AYRO is being lumped in with these companies and on the surface that may seem warranted as the company is likely to go through a period of 6 months with virtually no revenues as they transition from their old model to the new Vanish. The combination of weak outlooks for many s EV startups and a lack of understanding of the changes at AYRO have weighed on the stock and shaken investor confidence.

We are forecasting very limited sales in the first half of 2023 (mainly just the sales of the remaining 411x inventory and repairs/support revenue on previously sold vehicles) with the first orders for the Vanish coming in the second half of 2023. We are forecasting revenue growth of 460% in 2024 versus 2023 as the company's full lineup of vehicles is available for sale. Given the size of the domestic off-course golf cart market, demand for premium vehicles, and sustainability initiatives that will drive higher EV adoption, we believe that it is possible that the company will see sustained growth through 2027. We hope to refine our model as we get a better understanding of the initial demand for the company's products in 2023.

Most of the company's competitors have long operating histories and/or are part of larger industrial conglomerates, which makes it difficult to value the company based on a traditional blended value of comparable companies. We believe that the valuation of Club Car during the 2021 acquisition by Platinum Equity provides a clear measure of valuation in this industry. Platinum Equity paid 2.3x revenues for Club Car which deserves a premium as the market leader. If we apply a discounted revenue multiple based on the Club Car acquisition and premium EV valuations to our 2025 revenue estimate and discount it back to 2024, we get a valuation for AYRO of \$1.10/share. We feel the company's strong balance sheet adds \$0.20/share of value and thus, we arrive at a 2024 target of \$1.30.

Admittedly, this estimate is more art than science at this point because the company has not sold any of the products that we are forecasting substantial growth in the next three years. We will refine this model during 2023 as pricing and demand become more evident. We believe there is an equal possibility that our estimates prove to be very conservative and that our model will have to be adjusted to reflect strong demand. We also feel that investors will have opportunities to wait for attractive entry points in early 2023. There is likely to be very little financial news to move the stock in the first half of 2023 and it may trade in concert with the overall EV market which could provide attractive long-term entry points for investors.

We have included additional peers in our valuation table that operate in the broader market for EVs but the valuations of these companies range so widely that they don't provide much additional insight.

Key valuation considerations:

- 1) We expect limited revenues for the first half of 2023 as the company refreshes its product offering. In the second half of 2023. We have projected 58 deliveries of the Vanish in 2023 which we think is a very attainable goal. Since this is only about 2 weeks of production at the company's facility, we believe we have been conservative with our estimates and think there is upside to this revenue forecast.
- 2) The industry leader – Club Car – was acquired at roughly 2.3 times 2021 revenues and 12 times 2021 EBITDA and they deserve a premium valuation relative to AYRO which is effectively starting over from scratch as a manufacturer of LSEVs. While new startups often receive a premium to established players given their higher anticipated growth rates, we feel that the fact that AYRO has been operating since 2017 means the market will likely not give them a startup premium initially despite the complete overhaul of their business. However, with AYRO trading at just 2.0 times our 2024 revenue estimate and roughly 1.0 times our 2025 revenue estimate, we believe that if the company hits these targets the valuation spread relative to the purchase price for Club Car will shrink.
- 3) The company's strong balance sheet with cash balances of \$1.30 a share on 12/31/22 (and we estimate around \$1.16/share at the time of this report) should provide additional support for the share price. As the company will not be cash flow positive in the next 24 months, we are conservatively adding \$0.20/share to our valuation based on the strength of the balance sheet (for a total target valuation of \$1.30).
- 4) Finally, there are several intangible items that are difficult to quantify but add value to the company. Principally, the deep commitment from management to engineering and manufacturing premium, high-quality vehicles in a market dominated by commoditized products. Coupled with the fact that two industry leaders – Club Car and Gem – recently changed ownership (which likely means they will be focused on controlling costs), we believe there will be an opportunity for AYRO to surprise investors and competitors. This cannot be easily quantified in our model but adds to the value of AYRO's shares.

Figure 7: AYRO Comparable Analysis

Company	Ticker	Price*	Market Cap*	Sales 2022E Consensus	Sales 2023E Consensus	Mkt Cap/Sales 2022E	Mkt Cap/Sales 2023E
Arcimoto	FUV	1.41	9	7	14	1.4x	0.7x
Arrival	ARVL	0.15	114	N/A	N/A	N/A	N/A
Canoo	GOEV	0.59	259	3	305	86.3x	0.8x
Centro	CENN	0.41	107	N/A	N/A	N/A	N/A
Faraday Future	FFIE	0.37	279	140	335	2.0x	0.8x
Lion Electric	LEV	1.85	409	292	589	1.4x	0.7x
Nikola	NKLA	1.50	832	155	570	5.4x	1.5x
Ree Automotive	REE	0.28	68	1	31	71.8x	2.2x
Lordstown Motors	RIDE	0.64	153	4	34	42.1x	4.4x
Electrameccanica	SOLO	0.48	57	6	60	9.1x	1.0x
Workhorse Group	WKHS	1.27	218	89	324	2.4x	0.7x
Group Average							1.4x
Li Auto	LI	23.38	23,526	13,620	20,290	1.7x	1.2x
NIO Inc	NIO	9.07	15,188	N/A	N/A	N/A	N/A
Xpeng Inc	XPEV	9.62	8,251	3,960	6,270	2.1x	1.3x
Group Average							1.2x
Tesla	TSLA	190.41	602,214	100,298	132,190	6.0x	4.6x
Fisker	FSR	5.73	1,834	2,080	4,140	0.9x	0.4x
Lucid Group	LCID	8.19	14,993	1,340	3,200	11.2x	4.7x
Polestar	PSNY	3.30	6,947	2,460	3,888	2.8x	1.8x
Rivian Automotive	RIVN	13.62	12,080	4,110	8,670	2.9x	1.4x
Group Average							2.6x
Club Car			1,680	740		2.3x	
WAEV							
Yamaha							
E-Z-Go							
AYRO	AYRO	\$0.58	\$22	3	2	8.3x	13.5x

*3/24/23 closing prices

Source: Yahoo Finance & Zacks SCR

Revenues	2025	\$	21,012
Club car multiple		\$	48,328
Premium manufacturer multiple		\$	55,111
Avg of Rev multiples		\$	51,719
20% discount		\$	41,375
Valuation based on Revenues			\$1.10

Source: Zacks Small Cap Research and Yahoo Finance

RISKS

- The company received a notice on 9/30/22 that the company was not in compliance with the NASDAQ minimum bid requirement of \$1. To regain compliance, the company's stock would have to trade over \$1 for 10 consecutive days. The company has 180 days from the date of the initial notice to achieve compliance and as of the date of this report, they are still out of compliance. We anticipate the company will likely apply for an extension of another 180 days, but a reverse split may be required later in 2023 to maintain the NASDAQ listing.
- If the Master Purchase Agreement with Club Car is terminated (as we expect it will be) the company will have to build its own sales channel to sell the Vanish and additional products.
- If the company loses its license to manufacture the AYRO 411x (as expected) Cenntro could sell an identical or similar vehicle. The difference between the Vanish and the AYRO 411x is significant enough that they would not be considered comparable vehicles by most outside observers which mitigates this risk to some degree.
- Since the expiration of the Karma agreement, the company will be responsible for all manufacturing going forward.
- The company has been in the market with three previous vehicles – the 311, the 411, and the 411x – and thus, the AYRO brand is associated with these vehicles. If the company cannot distance itself from the quality issues associated with those models it may be difficult for the company to sell its new model.
- As with most companies in this space, the company has a history of losses and has never been profitable. There can be no assurance that they will be profitable.
- The company may not be able to execute its growth and sales strategy which would impact the financial condition of the company.
- Most of the company's sales to date have been to one customer, Club Car, and that relationship has ended. Replacing this sole customer with new buyers will be a key and represents a significant risk.
- The company noted that there were some prior accounting deficiencies and the company has been engaged with its accounting firm to address these issues.

INSIDER TRADING AND OWNERSHIP

Given the recent changes in the management team and board of directors at AYRO, the current board and management hold relatively small stakes in the company. The current board of directors owns collectively 1.6 million shares or about 4.3% of the outstanding stock. Roughly another 5% of the outstanding shares are held by former management.

¹ <https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle#:~:text=typical%20passenger%20vehicle%3F-A%20typical%20passenger%20vehicle%20emits%20about%204.6%20metric%20tons%20of,8%2C887%20grams%20of%20CO2.>

² <https://environmentamerica.org/center/articles/electrify-ups-a-zero-emission-shipping-strategy/#:~:text=The%20average%20diesel%20delivery%20truck%20emits%2018.7%20tons%20of%20carbon%20dioxide%20annually.>

³ <https://about.usps.com/newsroom/national-releases/2022/1220-usps-intends-to-deploy-over-66000-electric-vehicles-by-2028.htm>

⁴ <https://start.askwonder.com/insights/fleet-vehicles-average-annual-miles-class-1-thru-8-gank4so72>

⁵ <https://www.marketsandmarkets.com/Market-Reports/north-america-low-speed-vehicle-market-1965274.html>

PROJECTED INCOME STATEMENT

AYRO, Inc.

3/27/23

(USD in 000's; December Year-End)

	2020	2021	Mar 1Q22A	June 2Q22A	Sept 3Q22A	Dec 4Q22A	2022A	Mar 1Q23E	June 2Q23E	Sept 3Q23E	Dec 4Q23E	2023E	Mar 1Q24E	June 2Q24E	Sept 3Q24E	Dec 4Q24E	2024E
Revenues:																	
Old Product Revenue	1,506.0	2,419.8	919.3	918.8	332.8	545.6	2,716.6	225.0	50.0	-	-	275.0	-	-	-	-	-
New Product Revenue	-	-	-	-	-	-	-	-	-	390.0	1,440.0	1,830.0	1,760.0	2,220.0	2,520.0	3,770.0	10,270.0
Shipping Revenue	94.1	227.1	107.5	22.8	35.5	63.3	229.0	24.8	5.5	-	-	30.3	-	-	-	-	-
Other Revenue	3.9	36.7	-	40.0	4.9	-	44.9	4.0	4.0	-	-	8.0	-	-	-	-	-
Sales	1,604.0	2,683.6	1,026.8	981.6	373.2	608.9	2,990.5	253.8	59.5	390.0	1,440.0	2,143.3	1,760.0	2,220.0	2,520.0	3,770.0	10,270.0
% change (yoy)							11%			5%	136%	-28%			546%	162%	379%
Cost of Revenues	1,771	4,775	1,177	2,828	955	1,084	6,044	375	83	359	1,310	2,128	1,549	1,937	2,198	3,302	8,987
Gross Profit	(167)	(2,091)	(150)	(1,846)	(582)	(475)	(3,053)	(121)	(24)	31	130	16	211	283	322	468	1,284
% change (yoy)															931%	261%	8049%
Gross Profit Margin	-10.4%	-77.9%	-14.6%	-188.1%	-155.9%	-78.0%	-102.1%	-47.8%	-40.0%	8.0%	9.0%	0.7%	12.0%	12.7%	12.8%	12.4%	12.5%
Operating Expenses:																	
Research and Development	1,920.5	11,449.6	872.6	1,046.8	1,837.5	3,088.5	6,845.5	3,150.3	3,197.5	2,717.9	2,582.0	11,647.7	2,323.8	1,859.0	1,952.0	1,991.0	8,125.9
Sales and marketing	1,415.3	2,419.2	844.8	337.2	384.7	307.9	1,874.7	298.6	301.6	331.8	381.5	1,313.6	435.0	500.2	575.2	661.5	2,171.9
General and Administrative	6,604	17,169	2,698	2,742	3,000	3,064	11,504	2,972	3,002	3,032	3,062	12,069	3,093	3,124	3,218	3,298	12,733
	9,940	31,038	4,415	4,126	5,222	6,461	20,224	6,421	6,501	6,082	6,026	25,030	5,852	5,483	5,745	5,951	23,030
% of Sales	619.7%	1156.6%	430.0%	420.3%	1399.4%	104.0%	384.7%	NM	NM	1559.4%	418.5%	563.1%	332.5%	247.0%	228.0%	157.8%	224.2%
Operating Income (Loss)	(10,106)	(33,129)	(4,565)	(5,972)	(5,804)	(6,936)	(23,277)	(6,542)	(6,525)	(6,051)	(5,896)	(25,014)	(5,641)	(5,201)	(5,423)	(5,483)	(21,747)
Other Income, net	(330)	52	9	11	52	111	182	98	98	86	86	369	44	44	19	22	128
Net Interest Expense	327	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unrealized gain/(loss) on marketable securities	0	0	(22)	(13)	(32)	66	(2)	0	0	0	0	0	0	0	0	0	0
Realized gain	-	-	0	0	103	58	161	0	0	0	0	0	0	0	0	0	0
Income before Taxes	(10,763)	(33,079)	(4,579)	(5,974)	(5,682)	(6,701)	(22,935)	(6,444)	(6,426)	(5,964)	(5,810)	(24,645)	(5,597)	(5,157)	(5,405)	(5,461)	(21,619)
Income Taxes or Benefit	0	-	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-
Deemed Dividend	(433)																
Net Income (Loss) reported	(11,196)	(33,079)	(4,579)	(5,974)	(5,682)	(6,701)	(22,935)	(6,444)	(6,426)	(5,964)	(5,810)	(24,645)	(5,597)	(5,157)	(5,405)	(5,461)	(21,619)
EPS reported	(0.73)	(0.94)	(0.12)	(0.16)	(0.15)	(0.18)	(0.62)	(0.17)	(0.17)	(0.16)	(0.15)	(0.66)	(0.15)	(0.14)	(0.14)	(0.15)	(0.58)
% change (yoy)			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EBITDA reported	(9,659)	(32,601)	(4,385)	(5,776)	(5,582)	(6,772)	(22,515)	(6,371)	(6,347)	(5,846)	(5,665)	(24,228)	(5,386)	(4,933)	(5,129)	(5,179)	(20,882)
Depreciation & Amortization	447	528	180	196	222	164	762	171	178	205	232	786	255	268	294	303	865
Share-based Compensation Expense	1,827	7,556	288	304	332	316	1,240	326	336	346	356	1,363	360	365	380	392	2,400
EBITDA Adjusted (excl stock comp)	(7,832)	(25,045)	(4,097)	(5,472)	(5,250)	(6,455)	(21,275)	(6,045)	(6,011)	(5,500)	(5,309)	(22,865)	(5,026)	(4,568)	(4,749)	(4,788)	(18,482)
Diluted Shares (weighted average)	15336.6	35171.9	36907.2	36982.4	37094.6	37211.7	37049.0	37286.1	37360.7	37435.4	37510.3	37398.1	37585.3	37472.9	37660.5	37547.9	37566.6
Margins:																	
Gross Margin	-10.4%	-77.9%	-14.6%	-188.1%	-155.9%	-78.0%	-102.1%	-47.8%	-40.0%	8.0%	9.0%	0.7%	12.0%	12.7%	12.8%	12.4%	12.5%
Selling & Marketing % of Revenues	619.7%	639.8%	430.0%	420.3%	1399.4%	104.0%	384.7%	NM	NM	1559.4%	418.5%	563.1%	332.5%	247.0%	228.0%	157.8%	124.0%

Source: Zacks SCR, Brian Lantier, Company Filings

BALANCE SHEET

AYRO, Inc.

Balance Sheet in USD

12/31/22

Assets

Current Assets

Cash	39,097
Marketable Securities	9,849
Accounts Receivable (net)	510
Inventory	970
Prepaid expenses and other current assets	<u>1,479</u>
Total current assets	51,905

Non-Current Assets

Property & Equipment (net)	2,192
Operating leases	819
Deposits	<u>74</u>
Total non-current assets	3,085

Total Assets	<u>54,990</u>
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Liabilities

Current Liabilities

Accounts payable	1,107
Accrued expenses	965
Current portion of operating lease liability	<u>166</u>
Total current liabilities	2,238

Non-Current Liabilities

Operating lease liability, net of current portic	694
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Total Liabilities	2,932
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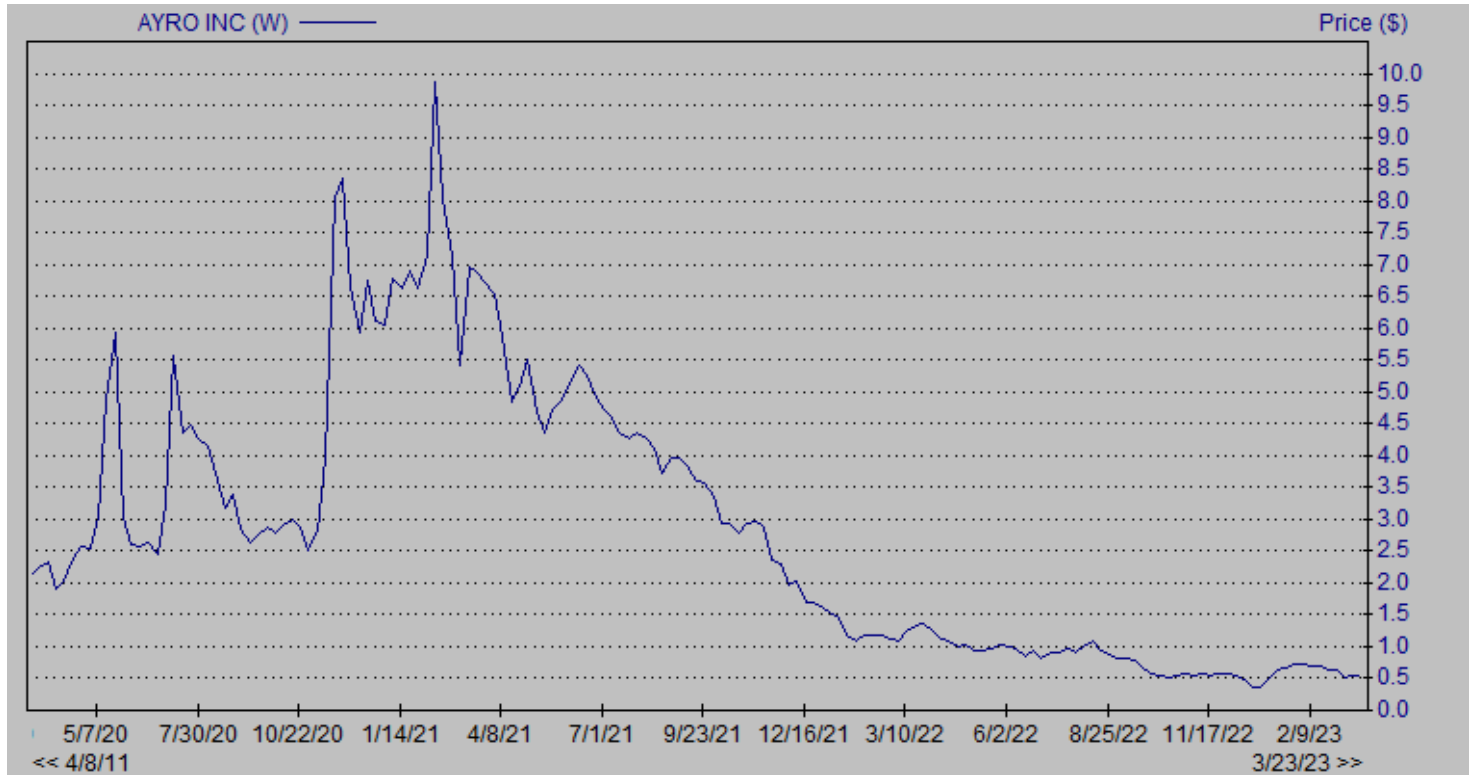
Shareholder's Equity

Common Stock	4
Additional Paid-in Capital	133,224
Accumulated deficit	(81,170)
Shareholder's Equity (Deficiency)	52,058

Total Liabilities & Shareholder's Equity	<u>54,990</u>
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Source: Company filing

HISTORICAL STOCK PRICE



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