

AYRO RECEIVES THE 2023 NEW PRODUCT INNOVATION AWARD

*Identified as best in class in the North American
electric low speed vehicle industry*

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each Award category before determining the final Award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. AYRO excels in many of the criteria in the electric low-speed vehicle space.

AWARD CRITERIA	
<i>New Product Attributes</i>	<i>Customer Impact</i>
Match to Needs	Price/Performance Value
Reliability	Customer Purchase Experience
Quality	Customer Ownership Experience
Positioning	Customer Service Experience
Design	Brand Equity

Match to Needs

The need for low-speed vehicles (LSVs) for specific applications – preferably zero-emissions vehicles with no fumes or smoke – has grown in the last four years. According to AYRO’s estimates, the low-speed vehicle market is projected to grow from \$8.9 billion in 2021 to \$14.4 billion in 2027, at a CAGR of 8.2%, as stringent emission standards and lower costs of electric LSVs help shift preferences toward short-distance electric LSVs.

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Frost & Sullivan’s own research finds that AYRO’s product line is well placed to properly leverage this opportunity, as the company presents sustainable LSV solutions that maximize payload

reconfigurability, payload capacity, and the ability to traverse and operate in environments without harming them through air or noise pollution.

Reliability and Quality

Frost & Sullivan notes that one of AYRO's greatest strengths in executing a robust strategy backed by a quality product is its management team with an established performance history; the senior management team's average age is 61, with over 200 years of cumulative relevant experience. The company recently appointed a new CEO, Thomas M. Wittenschlaeger, who has more than 25 years of executive experience in growing technology-driven engineering and product development companies and executing turnarounds for such organizations.

Unlike other vehicles in the segment, Frost & Sullivan points out that AYRO's solutions are designed and purpose-built to automotive OEM standards, as its product line roadmap engenders a family of derivative platforms utilizing common subsystems. The company recently announced the release of a new vehicle, the 'Vanish', from the AYRO Z platform with production to begin in 2023, in addition to its well-received vehicles for Club Car. When compared to small gas- or diesel-powered trucks or vans, the Club Car features a 50% reduction in weight, approximately 49% reduction in annual operating expenses, and 47% reduction in overall volume or size, allowing it to maneuver in tight spaces and go where other LSVs cannot. Its compact, efficient, and sustainable design fits diverse use cases and is versatile enough for any micro-distribution task - such as serving food on university campuses, supporting local delivery for restaurants, or moving goods and equipment around government or corporate campuses, hospitals, hotel resorts, sports stadiums, and airports.

A true reflection of AYRO's reliability and quality is in its patent files. The company has now filed (and has pending) two new design patents, multiple underlying seminal patents in sustainability, four US utility patents, and two additional US utility patent applications in process.

Positioning

Frost & Sullivan research has determined that AYRO's vehicles are priced in the top quartile of the segment; yet they are impressive break-outs in terms of styling, features, quality, and reconfigurability. These are purpose-built, innovative, and highly customizable (LSEVs) to meet any need in last-mile

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delivery, micro-distribution, and campus/facility mobility. The company has plans to strategically pivot in 2023 to a product family that is uniquely American with components primarily sourced from North America and Europe, with vehicle assembly and integration in its Round Rock, TX facility. This will certainly have an impact on how its products are positioned and perceived in the marketplace.

AYRO's target market segment covers the range of converted golf carts to small pickup trucks, which allows for the leveraging of both adjacent markets, a range where AYRO distinguishes itself through its

products' high payload capacity, payload reconfigurability on the fly, and low cost of ownership, all accompanied by technology upgrades. The company has so far built and sold over 300 vehicles across a variety of applications such as utility, food delivery, landscape, and mobile mechanic.

Case in point: the highly anticipated AYRO Vanish was launched with several stand-out features such as the highly customizable and adaptable bed configurations that make it suitable for both light-duty as well as heavy-duty applications. The vehicle is equipped with a lithium-ion battery with a range of around 50 miles on a single charge, and its starting price is expected at around \$25,000, which makes it nicely competitive. The first test vehicles are expected to roll out this year, and pre-orders will open in early 2023.

Price/Performance Value

AYRO possesses financial strength due to its prudent resource allocation and absolute lack of cash burn, which distinguishes it from many other start-ups. It has seen a steady rise in revenue in the last few quarters, three of them featuring consecutive cost reductions even while developing the new AYRO Z platform and achieving record revenue in the first three quarters of 2022. A rarity in the start-up space, AYRO, as of 30th June 2022, enjoys a strong balance sheet with \$58.9 million in cash and marketable securities and zero debt.

AYRO's definition of best value is an ultra-premium platform at a below-premium price and at a class-leading cost of ownership. Its new zero-emissions LSVs are targeted at the segment of the electric vehicle space where electrification offers the most compelling advantages and where very few alternatives exist as of today, thus establishing the Vanish, in particular, as a significant milestone in AYRO's development.

In addition to designing a next-generation base vehicle, AYRO is developing a customized family of swappable payloads and embedded software operator that helps transform the Vanish platform into much more than just a truck. Its Club Car Current vehicle today navigates campuses and narrow urban streets seamlessly, while also carrying significant loads for meeting last-mile distribution challenges — features that most other EVs are not designed to handle.

Customer Ownership Experience

In a short period of time, AYRO has created a strong network of trusted partners such as Gallery Carts, Element Fleet Management, and Club Car on the sales front, and Karma on the manufacturing and services front. Gallery Carts supplies customized EV solutions that enable the delivery of mobile solutions for food, beverages, retail, and health services. Element Fleet Management is the world's largest fleet management company, with 1 million vehicles under management and over 5,500 clients in 700 industries. Finally, Club Car is a leading supplier of golf carts and small utility vehicles for personal and commercial use with a network of over 500 dealers.

The ownership experience from AYRO's customers has been very positive as evidenced by repeated orders from Club Car, who placed an additional purchase order from Club Car for \$2.9 million in August 2021 on top of its \$2 million order in June 2021, bringing its total orders to a worth close to \$5 million. This demonstrates the strong and even urgent demand for the Club Car as business sustainability goals and EV adoption increase. The next generation of AYRO's LSV is expected to feature more advanced options for

improved safety and comfort in the same compact, customizable design that universities, restaurants, governments, hospitals, hotel resorts, sports stadiums, and airports across the United States have come to appreciate

AYRO's successful partnership with Club Car is validated by its testimony as mentioned in its quarterly reports: "We partnered with AYRO because of the design, manufacturing and supply chain work they did on the Club Car 411, a compact all utility electric vehicle. Complementing our commercial vehicle offerings, AYRO provides automotive electric vehicle expertise and opportunities to enter new markets faster with innovative products and technologies."

Brand Equity

The company relies heavily on technical aspects, making the product strong and focusing to out-innovate the competitors in its segment through embedded technology, connected systems, vehicle quality, and vehicle styling. This is also reflected in its mission statement: "Representing 'true sustainability' in an all-electric, low-speed vehicle fleet engendering near-infinite payload reconfigurability while embracing technologies that maximize efficiency and that allow those vehicles to traverse environments without disturbing them."

The company has ambitious growth plans and intends to carry them out in a steady manner, especially through its business strategy pivot from 2023; this is due to rising shipping costs, shipping times, import duties, ever more frequent supply chain bottlenecks, as well as the highly unpredictable quality of key components imported from China, which resulted in rising warranty overhang.

With this new strategy, AYRO plans to move from off-shoring to on-shoring, from outsourcing to insourcing, thus maximizing its North American and European supply chains while minimizing the trans-Pacific supply chain and, more importantly, designing, building, and supporting products from North America to credibly meet Federal and local "Buy American" requirements.

Conclusion

Since its inception AYRO has remained at the forefront of technological innovation, making it quite challenging for competitors to replicate its unique solutions. One of AYRO's major strengths has been its ability to locate the perfect white spot and offer a product in a hybrid market that fulfills its customers' requirements, as well as its ability to rise to the task of reducing carbon emissions. The company's smart strategy and goal prioritization in its pursuit of larger objectives will surely bear fruit in the long run, as the experience obtained in this segment can prove useful in larger, more competitive markets; this is especially true as its strong technical capabilities and value proposition through cleaner and sustainable solutions are AYRO's unique selling points.

With its strong overall performance, AYRO earns the 2023 North American Frost & Sullivan New Product Innovation Award in the electric low speed vehicle industry.

What You Need to Know about the New Product Innovation Recognition

Frost & Sullivan's New Product Innovation Award recognizes the company that offers a new product or solution that uniquely addresses key customer challenges.

Best Practices Award Analysis

For the New Product Innovation Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

New Product Attributes

Match to Needs: Customer needs directly influence and inspire product design and positioning

Reliability: Product consistently meets or exceeds customer performance expectations

Quality: Product offers best-in-class quality with a full complement of features and functionality

Positioning: Product serves a unique, unmet need that competitors cannot easily replicate

Design: Product features an innovative design that enhances both visual appeal and ease of use

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

