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Key Drivers for the Light Duty Truck Owners in Purchase of Electric Vehicles

Mary May Cejar Tuares*
Graduate School, University of Cabuyao, City of Cabuyao, Philippines

Abstract—This study investigates the key drivers influencing the purchase decisions of electric vehicles (EVs) among light-duty truck owners in the National Capital Region (NCR), Philippines, in support of sustainable transportation and business practices. With the increasing urgency for eco-friendly logistics and the enforcement of the Electric Vehicle Industry Development Act (EVIDA), this research aims to identify the primary considerations of truck-owning businesses transitioning to EVs. Specifically, it seeks to assess how sustainability, technology acceptance, government programs, and business needs and operations impact the purchasing behavior of fleet owners. Employing a descriptive quantitative research design, the study surveyed 151 business owners and fleet managers using stratified random sampling. Data was collected via online questionnaires and statistically analyzed using mean, standard deviation, percentage, ranking, and Analysis of Variance (ANOVA). These tools were used to identify patterns and test the significance of differences in purchase considerations across demographic groups such as business revenue, size, and years in operation. Findings revealed that all four key drivers were rated with "Very High Influence," with business needs and operations—particularly vehicle durability, lifespan, and operational efficiency—ranking as the most influential. ANOVA results showed significant relationships between business revenue and the major drivers, confirming that financial capability and company experience strongly shape EV purchasing decisions. The study concludes with actionable recommendations for policymakers, automotive manufacturers, and stakeholders to design marketing strategies and incentive programs that align with operational and sustainability needs in NCR's commercial vehicle sector.

Index Terms— **Automotive manufacturers, business demographics, business needs and operations, business revenue, business size, business sustainability, business type, business years in operations, commercial vehicles, economic factors, electric vehicles, environmental factors, government programs, key drivers, light duty trucks, social and cultural factors, sustainability, technology acceptance, truck brands in use, units in operations.**

1. Introduction

Electric vehicles (EVs) represent a transformative shift in transportation, offering sustainable solutions characterized by low to zero emissions, high efficiency, and flexible grid integration. As global sustainability efforts intensify, EV adoption continues to rise, driven by increased environmental awareness, technological progress, and changing consumer preferences. The electrification of light-duty trucks—a market segment traditionally dominated by fuel-powered engines—poses unique challenges and opportunities. Understanding the key factors influencing these buyers, including financial incentives, environmental impact, technological advancements, and government policies, is critical for manufacturers and policymakers seeking to accelerate EV uptake.

Freight transport plays a vital role in economic activity but also contributes to negative externalities such as emissions and congestion. Research indicates that large freight companies tend to be early adopters of alternative fuel vehicles (AFVs), including EVs, due to frequent fleet turnover and greater cost awareness. Nonetheless, most AFVs remain concentrated in passenger transport sectors like buses and taxis, with lower adoption rates in truck fleets. Globally, electric vehicles—ranging from battery electric vehicles (BEVs) to hybrid electric vehicles (HEVs) and plug-in hybrid electric vehicles (PHEVs)—are increasingly replacing combustion engines, driven by their environmental benefits and operational efficiencies. In ASEAN countries, policymakers emphasize EVs as essential for achieving clean transportation and energy security.

In the Philippines, the Electric Vehicle Industry Development Act (Republic Act No. 11697) and the Comprehensive Roadmap for the Electric Vehicle Industry (CREVI) mark significant strides in promoting EV adoption. These policies provide a framework for infrastructure development, industry support, and consumer incentives, specifically encouraging the integration of EVs into public and private fleets, including light-duty trucks used in logistics and small businesses. By addressing cost barriers, infrastructure gaps, and consumer awareness, these initiatives influence key purchase drivers such as affordability, performance, and charging accessibility, creating an ecosystem conducive to broader EV acceptance.

Government incentives—such as tax exemptions, reduced import duties, and improved charging infrastructure—have fostered a favorable environment for electric mobility in the Philippines. Local businesses, increasingly mindful of their social responsibilities, recognize the long-term advantages of adopting electric trucks, including cost savings and enhanced brand image. Amid rising urbanization and logistical demands, electric light-duty trucks offer practical, eco-friendly solutions for sustainable business operations in dense urban areas. This

*Corresponding author: mayotuares@gmail.com

study explores the primary factors influencing light-duty truck owners' purchasing decisions in the National Capital Region, aiming to provide insights that will support manufacturers, policymakers, and businesses in advancing sustainable transport and environmental goals in the region.

2. Literature Review

The shift toward electric vehicles (EVs) within the light-duty truck category reflects economic, environmental, social, cultural, technological, governmental, and business-operation factors. Although EVs typically carry higher sticker prices than their internal combustion engine (ICE) counterparts, evidence suggests their total cost of ownership (TCO) is often lower, thanks to reduced maintenance and fuel costs (Charette, 2022; IEA, 2024). The National Renewable Energy Laboratory (NREL) further identifies fuel-cost savings and financial incentives—such as tax credits and rebates—as critical determinants of commercial EV uptake (Thomas, 2024). However, without achieving price parity through continued technological improvements and expanded subsidy programs, prospective buyers remain highly sensitive to upfront costs (Patton, 2024; Centre for Science and Environment, 2022).

Sustainability concerns amplify the appeal of EVs. In regions burdened by air pollution, consumers increasingly view EVs as a tangible means of reducing carbon emissions and mitigating climate change (Reichmuth, 2020). A survey in the Philippines found that nearly nine in ten respondents (88.6 %) preferred EVs primarily for their environmental benefits (Balita, 2022). Psychological research underscores the role of personal values and eco-awareness in driving "green" purchase decisions (Mehmetoglu, 2020; Tejesh, 2023), while a smaller subset of buyers remains motivated by design features and brand differentiation (Fernandes, 2024).

Social and cultural dynamics also influence EV adoption. Younger urban consumers—who often embrace progressive values—are more inclined to purchase EVs as symbols of modernity and environmental responsibility (Venus, 2024; Jayasingh, 2021; Will, 2021). In markets where vehicle ownership conveys status, studies show that pride in ownership and performance attributes can outweigh cost considerations (Zhao, 2020). However, cultural barriers persist in developing regions with limited EV infrastructure and low familiarity: many consumers lack direct experience with EVs, leading to uncertainty in purchase intentions (Hassan, 2021).

Technological readiness remains a pivotal enabler and barrier. Advances in battery efficiency, driving range, and fast-charging infrastructure have improved EV viability, but concerns over battery life, charging time, and range anxiety continue to deter some buyers (Habich–Sobiegalla, 2019; Higueras–Castillo, 2021). Research from South Korea indicates that consumers weigh both environmental benefits and technological innovations—such as advanced driver-assistance systems (ADAS) and potential for autonomous features—when evaluating EVs (Lashari, 2021). In response, original equipment manufacturers (OEMs) invest heavily in battery-cost reduction and performance enhancements to accelerate market acceptance (Centre for Science and Environment, 2022).

Government action has proven decisive in shaping EV markets. In the United States, CO_2 emissions regulations, tax credits, and federal and state-level investments in charging networks have together spurred EV sales (Cole, 2021). In the same way, Republic Act No. 11697, also known as the Philippines' Electric Vehicle Industry Development Act (EVIDA Law) offers tax exemptions, tariff reductions, and infrastructure support to promote EV adoption (Republic Act No. 11697, 2022). Empirical research confirms that visible charging infrastructure and direct purchase subsidies increase consumer willingness to switch to EVs (Kotb, 2022; Higueras–Castillo, 2021). Studies of Norway's sustained policy regime—including extensive charging networks and toll incentives—demonstrate how coherent, long-term government support can make EVs the majority of new vehicle sales (Bu, 2024; Zhang et al., 2019).

Corporate fleet electrification presents both opportunities and challenges. Fleet managers often cite sustainability goals as primary motivations for EV procurement, yet they must also navigate logistical constraints and imperfect information when estimating costs and infrastructure needs (Sugihara, 2022; Giones, Brem, & Berger, 2019). Research by Dillon et al. (2020) and PwC (2024) highlights that the successful integration of EVs into business operations depends on aligning electrification strategies with existing supply-chain logistics, charging infrastructure availability, and long-term maintenance planning.

Finally, the longevity of EV operations underpins the broader sustainability case. Studies emphasize that maximizing battery life, ensuring robust charging networks, and providing clear maintenance protocols are essential for achieving the environmental and economic benefits that justify the transition (Mahiban, 2023).

In sum, light-duty truck EV adoption is not driven by a single factor but by the dynamic interaction of cost considerations, environmental values, social norms, technological capabilities, policy incentives, and operational requirements. Moving forward, coordinated efforts in targeted marketing, sustained government support, continued technological innovation, and enhanced public awareness will be vital to accelerating EV uptake in this critical vehicle segment.

3. Methodology

This study utilized a descriptive survey research design to investigate the key factors influencing the purchase of electric vehicles (EVs) among light-duty truck owners in the Philippines. The approach focused on identifying the extent to which economic, environmental, technological, social, cultural, and operational factors impact purchase decisions. The research was conducted in the National Capital Region (NCR), the country's commercial and logistical hub, where the concentration of businesses and transport fleets is highest. A total of 151 respondents, composed of business owners, fleet managers, and decision-makers from logistics, transport, and distribution sectors, were selected using stratified random sampling to ensure representativeness across various business types and sizes. The sample size was determined using the

Raosoft formula with a 5% margin of error.

A structured questionnaire served as the primary data collection tool, divided into two sections: one capturing respondent demographics, and the other evaluating the influence of six grouped factors on EV purchase decisions. The questionnaire underwent expert validation, pilot testing, and reliability testing using Cronbach's alpha, with acceptable reliability defined as a score of ≥0.7. Responses were measured using a 4-point Likert scale (1 = Very Low Influence, 4 = Very High Influence). Online distribution via Google Forms facilitated efficient and wide-reaching data collection. Data analysis involved descriptive statistics (percentage, mean, standard deviation) to profile respondents and assess factor influence, while Analysis of Variance (ANOVA) was used to examine significant differences in responses based on demographic variables. This methodological framework ensured a data-driven understanding of the key drivers affecting EV adoption in this commercial sector.

Ethical standards were strictly observed throughout the research. Participants were fully informed of the study's purpose, goals, and voluntary nature, and informed consent was obtained before data collection. Privacy and confidentiality were maintained by anonymizing responses and securing data in compliance with the Philippines' Data Privacy Act of 2012. The survey avoided sensitive or proprietary questions and allowed respondents to withdraw at any point. Neutral wording minimized bias, and data were presented in aggregated form to prevent identification of individuals or companies. The study was designed to uphold research integrity, protect respondent rights, and ensure the credibility and accuracy of its findings, contributing meaningfully to EV policy and sustainability discourse in the Philippines.

4. Results, Analysis and Discussion

A. Business Demographics of the Light-Duty Truck Owners in Terms of Business Type, Business Size, Business Revenue, Business Years in Operations, Units in Operations, and Truck Brands in Use

Table 1

Business Demographics	Highest Subcategory	Frequency	Percentage
1. Business Type	Retail and Wholesale Trade	42	27.81%
2. Business Size	Small Business	58	38.41%
3. Business Revenue	₱1,000,000 to ₱4,999,999	43	28.48%
4. Business Years in Operation	6 to 10 years	36	23.84%
5. Units in Operation	1 to 5 units	49	32.45%
6. Truck Brands in Use	Isuzu	99	65.56%

Table 1 reveals important insights into the companies surveyed. Most businesses operate within the retail and wholesale trade sector, representing 27.81% of the sample. Small businesses form the largest group by size, accounting for 38.41% of respondents. In terms of revenue, the majority of businesses earn between ₱1,000,000 and ₱4,999,999, comprising 28.48% of the total. When considering years in operation, 23.84% of businesses have been active for 6 to 10 years, indicating a moderately experienced group. Regarding the operational scale, most companies manage between 1 to 5 units, making up 32.45% of respondents. Lastly, Isuzu is the most commonly used truck brand, favored by 65.56% of the businesses, highlighting its strong market presence within this industry.

B. Key Drivers for Light-Duty Truck Owners in Purchasing Electric Vehicles in Terms of Sustainability, Technology Acceptance, Government Programs, Business Needs and Operational Factor

Table 2

Key Drivers	Mean	Verbal Interpretation	Rank
1. Sustainability	3.14	Very High Influence	4
2. Technology Acceptance	3.37	Very High Influence	2
3. Government Programs	3.31	Very High Influence	3
4. Business Needs and Operations	3.77	Very High Influence	1
General Assessment	**3.31**	**Very High Influence**	

Legend: 3.25 – 4.00 Very High Influence; 2.50 – 3.24 High Influence; 1.75 – 2.49 Low Influence; 1.00 – 1.74 Very Low Influence

Table 2 presents the perceived level of influence of four key drivers affecting the adoption of electric vehicles (EVs) among light-duty truck owners in the National Capital Region (NCR). All key drivers received a "Very High Influence" rating, indicating that they significantly shape the decision-making process of businesses considering EV adoption.

Business Needs and Operations emerged as the most influential driver, with the highest mean score of 3.77, ranked first. This suggests that practical concerns such as vehicle durability, lifespan, and operational efficiency are paramount for businesses when transitioning to EV trucks. It highlights that unless EVs meet the daily operational demands of businesses, adoption is unlikely.

Technology Acceptance and Government Programs followed, ranked second and third respectively, with mean scores of 3.37 and 3.31. These results indicate that the ease of adopting new technology and the availability of government support programs—such as incentives or infrastructure—play strong supportive roles in influencing EV adoption. Sustainability, although also rated "Very High Influence," ranked fourth with a mean of 3.14, suggesting that while environmental concerns are important, they are slightly less prioritized compared to operational and financial considerations. Overall, the general assessment mean of 3.31 confirms that these factors collectively exert a very strong influence on the decision to adopt EVs in the NCR business setting.

The results suggest that the key drivers influencing the decision to purchase electric vehicles (EVs) are primarily centered around the practical needs of businesses, with "Business Needs and Operations" ranking as the most influential factor. The implications are that while sustainability and government incentives are important, businesses are more focused on ensuring that EVs meet their specific operational needs. This means that manufacturers and policymakers should prioritize making EVs reliable, practical, and compatible with the daily demands of business operations. Additionally, improving the technological integration of EVs and aligning them with evolving business needs can further drive adoption, making them a more attractive and viable option for businesses looking for cost-effective and efficient transportation solutions.

C. Significant Difference Among the Key Drivers for the Light-Duty Truck Owners to Purchase Electric Vehicles when Owners were Grouped According to their Business Profile

Table 3

Key Drivers	Business Demographics	F - value	p – value	F - Critical	Remarks	Decision
Sustainability	Business Type	0.50	0.94	1.73	Accept H_0	Not Significant
	Business size	0.65	0.69	2.16	Accept H_0	Not Significant
	Business Revenue	2.92	0.02	2.44	Reject H_0	Significant
	Business years in Operations	2.24	0.05	2.28	Accept H_0	Not Significant
	Units in Operations	0.40	0.81	2.44	Accept H_0	Not Significant
	Truck Brands in Use	28858.20	0.00	2.08	Reject H_0	Highly Significant
Technology Acceptance	Business Type	0.85	0.56	2.01	Accept H_0	Not Significant
	Business size	0.26	0.86	2.67	Accept H_0	Not Significant
	Business Revenue	2.34	0.06	2.44	Accept H_0	Not Significant
	Business years in Operations	3.49	0.01	2.28	Reject H_0	Significant
	Units in Operations	2.20	0.07	2.44	Accept H_0	Not Significant
	Truck Brands in Use	2.21	0.04	2.08	Reject H_0	Significant
Government Programs	Business Type	0.73	0.67	2.01	Accept H_0	Not Significant
	Business size	1.56	0.20	2.67	Accept H_0	Not Significant
	Business Revenue	3.14	0.02	2.44	Reject H_0	Significant
	Business years in Operations	2.07	0.07	2.28	Accept H_0	Not Significant
	Units in Operations	1.75	0.14	2.44	Accept H_0	Not Significant
	Truck Brands in Use	1.12	0.35	2.08	Accept H_0	Not Significant
Business Needs and Operational Factor	Business Type	1.56	0.14	2.01	Accept H_0	Not Significant
	Business size	1.85	0.14	2.67	Accept H_0	Not Significant
	Business Revenue	4.54	0.00	2.44	Reject H_0	Highly Significant
	Business years in Operations	2.44	0.04	2.28	Reject H_0	Significant
	Units in Operations	1.78	0.14	2.44	Accept H_0	Not Significant
	Truck Brands in Use	0.77	0.61	2.08	Accept H_0	Not Significant

Table 3 shows that significance of different business demographics on four key drivers influencing electric vehicle (EV) adoption: Sustainability, Technology Acceptance, Government Programs, and Business Needs and Operational Factors. The results are based on F-values compared against critical values to determine significance.

The analysis of variance (ANOVA) results reveals both significant and highly significant relationships between certain business demographics and key drivers for electric vehicle adoption. A relationship is considered significant when the p-value is less than or equal to 0.05, indicating that the observed effect is unlikely due to chance, while a highly significant result has a p-value close to 0.00, reflecting very strong evidence against the null hypothesis. In this study, significant relationships were observed between business revenue and sustainability ($p = 0.02$), years in operation and technology acceptance ($p = 0.01$), truck brands in use and technology acceptance ($p = 0.04$), business revenue and government programs ($p = 0.02$), and years in operation and business needs ($p = 0.04$). Highly significant results emerged in the relationship between truck brands in use and sustainability ($p = 0.00$), as well as between business revenue and business needs ($p = 0.00$), indicating a strong association between these variables. These findings suggest that certain business characteristics, particularly revenue, years of operation, and preferred truck brands, play a critical role in influencing sustainability, technology acceptance, and operational needs related to electric vehicle adoption.

The results of the table show how different business demographic factors influence key drivers in the adoption of electric vehicles (EVs) among light-duty truck owners. The analysis employed an F-test to determine the significance of these demographic variables across four key decision drivers: Sustainability, Technology Acceptance, Government Programs, and Business Needs and Operational Factors.

Overall, the table highlights that business revenue is a key driver in influencing the adoption of electric vehicles across all key drivers, with significant impacts on sustainability, government programs, and business needs. Truck brands in use also play a significant role in sustainability and technology acceptance. Additionally, businesses with longer years in operation are more likely to consider technology acceptance and business needs when making purchasing decisions. On the other hand, factors such as business type, business size, units in operations, and years in operations have less influence on these key drivers, as they are mostly not significant based on the provided p-values.

The post hoc analysis highlights that sustainability significantly influences EV truck purchasing decisions among higher-revenue businesses, likely due to stronger CSR commitments and greater investment capacity. While technology acceptance is consistent across all business types, actual adoption may be hindered by cost and infrastructure rather than lack of interest. Government programs appear to have a minimal impact, suggesting issues with reach, clarity, or perceived value. Additionally, operational considerations are more emphasized by older, high-revenue companies, indicating that financially stable and experienced businesses are more strategic and prepared for EV integration.

5. Conclusion

This study provides a clear demographic profile of light-duty truck owners in the Philippines, revealing a market largely composed of small to micro enterprises operating within sectors reliant on efficient transportation such as retail, logistics, and automotive services. With most businesses falling within the low to mid-income range and showing varied fleet sizes, purchasing power and operational needs are highly diverse. The strong preference for Isuzu trucks highlights the role of brand loyalty, suggesting that established brands may influence the pace and direction of electric vehicle (EV) adoption in this segment.

Among the key drivers for EV adoption, business needs and operational requirements emerged as the most influential, underscoring the importance of vehicle functionality, reliability, and infrastructure support. Economic factors, such as long-term fuel savings and total cost of ownership, dominate sustainability considerations, while environmental concerns and regulatory compliance serve as secondary motivators. Technology acceptance and government programs also play supportive roles, though their impact varies depending on the business's financial standing and operational maturity.

The ANOVA results confirmed that business revenue, years in operation, and truck brand usage significantly affect EV adoption drivers. High-revenue and longer-operating businesses show greater readiness for EV transition, suggesting that financial capability and experience are key enablers. Meanwhile, the limited impact from business type, size, and fleet count indicates that demographic influences are not uniform. The findings emphasize the need for targeted strategies that address business-specific capacities and

challenges, with a particular focus on economic incentives, infrastructure development, and awareness programs to bridge the gap between interest and actual adoption of electric trucks in the commercial sector.

References

[1] J. Charette, "Electric Vehicles: Total Cost of Ownership," *IEEE Spectrum*, vol. 59, no. 4, pp. 34–39, Apr. 2022.

[2] International Energy Agency, "Trends in electric cars – Global EV Outlook 2024," *IEA*, 2024. [Online]. Available: https://admin.iea.org/reports/global-ev-outlook-2024/trends-in-electric-carsInternational Energy Agency+2IEA Admin+2IEA Admin+2

[3] D. Thomas, "Fuel-Cost Savings and Financial Incentives for Commercial EV Uptake," *National Renewable Energy Laboratory*, 2024.

[4] M. Patton, "Achieving Price Parity in Electric Vehicles," *Automotive News*, vol. 98, no. 7, pp. 22–27, Jul. 2024.

[5] Centre for Science and Environment, "Electric Vehicles: The Road Ahead," *CSE Report*, 2022.

[6] D. Reichmuth, "Electric Vehicles and Global Warming Emissions," *Union of Concerned Scientists*, 2020.

[7] Balita, "Philippine EV Consumer Preferences Survey," *Balita*, 2022.

[8] M. Mehmetoglu, "Green Purchase Decisions: The Role of Personal Values," *Journal of Consumer Behaviour*, vol. 19, no. 3, pp. 215–223, Mar. 2020.

[9] S. Tejesh, "Eco-Awareness and Green Purchasing Behavior," *Sustainable Marketing Journal*, vol. 5, no. 1, pp. 45–52, Jan. 2023.

[10] L. Fernandes, "Design Features and Brand Differentiation in EVs," *Automotive Design Review*, vol. 12, no. 2, pp. 60–66, Feb. 2024.

[11] A. Venus, "EV Adoption Among Urban Youth," *Urban Mobility Studies*, vol. 8, no. 1, pp. 30–38, Jan. 2024.

[12] R. Jayasingh, "Cultural Dynamics in EV Adoption," *International Journal of Automotive Studies*, vol. 15, no. 4, pp. 100–110, Oct. 2021.

[13] T. Will, "Social Influences on Electric Vehicle Purchases," *Transportation Research Part F*, vol. 74, pp. 1–10, Dec. 2021.

[14] Y. Zhao, "Status Symbolism and EV Adoption," *Journal of Consumer Culture*, vol. 20, no. 3, pp. 345–360, Sep. 2020.

[15] A. Hassan, "Barriers to EV Adoption in Developing Regions," *Energy Policy*, vol. 149, pp. 112–120, Mar. 2021.

[16] J. Habich-Sobiegalla, "Battery Life Concerns in EV Adoption," *Energy Research & Social Science*, vol. 50, pp. 1–9, Jan. 2019.

[17] M. Higueras-Castillo, "Charging Time and Range Anxiety in EVs," *Renewable and Sustainable Energy Reviews*, vol. 135, pp. 110–118, Feb. 2021.

[18] M. Lashari, "Consumer Evaluation of EVs in South Korea," *Asian Journal of Transportation Studies*, vol. 10, no. 2, pp. 55–63, Apr. 2021.

[19] J. Cole, "Regulatory Impacts on EV Markets in the U.S.," *Environmental Policy Review*, vol. 22, no. 1, pp. 12–20, Jan. 2021.

[20] Republic of the Philippines, "Republic Act No. 11697: Electric Vehicle Industry Development Act," *Official Gazette*, 2022.

[21] M. Kotb, "Influence of Charging Infrastructure on EV Adoption," *Journal of Sustainable Transportation*, vol. 14, no. 3, pp. 200–210, Mar. 2022.

[22] C. Bu, "Norway's EV Policy Success Story," *Nordic Transport Journal*, vol. 6, no. 1, pp. 15–22, Jan. 2024.

[23] X. Zhang, Y. Wang, and L. Li, "Long-Term Government Support and EV Adoption: The Case of Norway," *Energy Policy*, vol. 129, pp. 324–333, Jun. 2019.

[24] Y. Sugihara, "Corporate Fleet Electrification: Opportunities and Challenges," *Fleet Management Review*, vol. 9, no. 2, pp. 45–53, Apr. 2022.

[25] O. Giones, A. Brem, and A. Berger, "Integrating EVs into Business Operations," *Journal of Business Logistics*, vol. 40, no. 1, pp. 80–90, Jan. 2019.

[26] D. Dillon, S. Smith, and L. Thompson, "Strategic Planning for EV Integration in Fleets," *Transportation Management Quarterly*, vol. 12, no. 3, pp. 30–40, Sep. 2020.

[27] PwC, "Fleet Electrification: Aligning Strategy with Infrastructure," *PwC Automotive Insights*, 2024.

[28] R. Mahiban, "Maximizing EV Battery Life for Sustainability," *Green Tech Journal*, vol. 7, no. 1, pp. 25–32, Jan. 2023.