JOURNAL OF HUMANITY AND MANAGEMENT SCIENCES
https://www.worldlinkpub.com/journals/journal-of-humanity-and-management-sciences/
ISSN: 3141-6012

ASSESSMENT OF E-MOTOR LICENSING PRACTICES ON EMPLOYEE PERFORMANCE IN TRANSPORTATION INDUSTRIES IN THE NORTH CENTRAL REGION, NIGERIA

***Nduji Romanus and Pearl Tamunoibim Bakare**
Department of Business Administration, School of Administration, Business and Management Sciences, African University of Science and Technology (AUST) Abuja, Nigeria
*Correspondence: romanusnduji@yahoo.com

Received: 23 May 2026
Accepted for publication: 15 June 2026
Published: 01 July 2026

ABSTRACT

The transition to electric motors (e-motors) in the transportation industry presents significant challenges, particularly concerning licensing and regulation. The core problem lies in the complexities of integrating e-motors into existing transportation frameworks, which demands a comprehensive understanding of the economic, environmental, and regulatory implications. The study is on assessment of e-motor licensing practices on employee performance in transportation industries in the North Central Region, Nigeria. The study sought to: assess the effect of electric vehicle charging infrastructure on employee performance in transportation industries, ascertain the effect of technological innovation on employee performance in transportation industries in the North Central Region, Nigeria, investigate the effect of economic indicators on employee performance in transportation industries and determine the effect of Environmental Impact on employee performance in transportation industries. The population of interest to this research are the 4299 employees of selected transportation industries. The sample size for this study was 366 both junior and senior staff. The instrument for data collection is questionnaire while the hypotheses were tested using of linear regression techniques. The findings reveal that e-motor licensing practices have effect on employee performance in transportation industries in the study area, Nigeria. It was concluded that effective e-licensing practices not only streamline regulatory processes but also establish a framework that supports the adoption of electric vehicles (EVs) and related technologies. Also, it was recommended that: Government should ensure that charging stations are strategically located in urban centers, along major highways, and in rural areas to guarantee accessibility for all potential users, introduce comprehensive training initiatives focused on the latest EV technologies and charging systems, implement financial support schemes such as low-interest loans or subsidies for businesses and individuals purchasing electric vehicles and develop regulatory frameworks that encourage the use of electric vehicles in public transportation and logistics

Key words: E-Motor Licensing, Employee performance, Technological innovation, Transportation Industries.

1.0 INTRODUCTION

In the global environment, the transportation industry is essential for global commerce, facilitating the movement of goods and people while fostering trade and economic development. It plays a pivotal role in job creation and infrastructure enhancement, significantly impacting GDP growth (Nduji *et al.,* 2024). In Nigeria, the transportation sector is critical due to its vast geography and population. Efficient transport systems improve access to markets, healthcare, and education, thereby uplifting communities. With the rise of electric vehicles (EVs), e-motor licensing becomes increasingly important. This licensing ensures compliance with safety and environmental standards, promoting the adoption of EVs and reducing carbon emissions. Moreover, integrating e-motor licensing in Nigeria can enhance energy efficiency and stimulate local industries, paving the way for sustainable economic growth while addressing environmental challenges. Together, these elements drive innovation and improve the nation's road to sustainability (Nduji *et al.,* 2023).

The emergence of electric vehicles (EVs) has transformed the landscape of transportation industries across the globe. E-motor licensing plays a critical role in addressing environmental concerns and promoting sustainable transportation. The transportation industry has undergone a significant transformation in recent years, driven by the increasing adoption of electric vehicles (EVs) and the need for efficient and sustainable mobility solutions. One crucial aspect of this transformation is the implementation of e-motor licensing, which has had a profound impact on the industry and its various stakeholders. E-motor licensing refers to the regulatory framework that governs the use and operation of electric motors in vehicles. This includes the requirements for licensing, registration, and the maintenance of electric vehicles, as well as the infrastructure and support systems necessary for their widespread adoption (Hartmann *et al.*,

2018). The implementation of e-motor licensing has been driven by the growing awareness of the environmental and economic benefits of electric transportation, as well as the need to address the challenges posed by traditional internal combustion engine (ICE) vehicles. The global transition towards electric vehicles has been primarily driven by the urgent need to combat climate change and reduce greenhouse gas emissions. According to the International Energy Agency (IEA, 2022), transportation accounts for approximately 24% of global CO2 emissions, urging governments to explore alternative energy solutions. The adoption of e-motors stands as a promising solution, as EVs produce zero tailpipe emissions, thereby aligning with international efforts to achieve net-zero emissions by 2050 (IPCC, 2021). E-motor licensing encompasses the regulatory processes and standards necessary for the production, sale, and operation of electric vehicles and their components. This licensing framework is essential for ensuring safety, efficiency, and environmental compliance (Verma and Shankar, 2020). The standards may include battery disposal regulations, manufacturing certifications, and operational guidelines for e-motor systems. Consequently, the efficacy of e-motor licensing significantly influences not only vehicle manufacturers but also consumers and regulatory bodies.

Keeney *et al* (2021) argued that one of the primary challenges associated with e-motor licensing is the regulatory complexity involved. The existing transportation framework has historically been designed for internal combustion engine (ICE) vehicles, resulting in a lack of standardized regulatory procedures for EVs. This lack of clarity often leads to inefficiencies and substantial delays in getting EVs to market, subsequently hindering the growth of the electric transportation sector. E-motor licensing also presents significant investment barriers for manufacturers, particularly for small and medium-sized enterprises (SMEs) venturing into the electric vehicle market. These companies often lack the resources required to navigate the intricate licensing processes, which can deter potential innovators from entering the market (Feng *et al*., 2021). The financial uncertainty associated with compliance can stifle competition and reduce the overall number of electric vehicle options available to consumers. Consumer awareness remains another significant hurdle in the widespread adoption of electric vehicles, affected by perceptions regarding the reliability and range of EVs (Graham-Rowe *et al*., 2020). E-motor licensing policies can inadvertently contribute to consumer skepticism if they do not adequately address concerns surrounding charging infrastructure, battery lifespan, and vehicle performance. Without effective communication and education mechanisms, the market penetration of electric vehicles is likely to remain limited.

Sierzchula *et al*. (2014) argued that the benefits of e-motor licensing are substantial. One of the most significant advantages is its contribution to environmental protection. By enforcing stringent licensing requirements, regulatory bodies can ensure that electric vehicles adhere to emissions standards that minimize their impact on the environment. This regulatory oversight encourages manufacturers to invest in cleaner technologies, subsequently fostering a more sustainable transportation ecosystem. E-motor licensing also presents various economic opportunities. The transition to electric vehicles can stimulate job creation in sectors such as battery manufacturing, charging infrastructure development, and EV maintenance services (BNEF, 2021). As the demand for electric vehicles rises, industries related to e-motor technologies have begun to flourish, contributing to local economies and fostering innovation and technological advancements. Furthermore, e-motor licensing can spur technological innovation in the transportation industry. As manufacturers strive to meet compliance standards, they are incentivized to invest in research and development. This competitive environment fosters innovation, leading to advances in battery technology, energy efficiency, and performance enhancements in electric vehicles (Breetz *et al*., 2018).

To address the challenges associated with e-motor licensing, it is essential to streamline regulatory processes. Governments should collaborate with industry stakeholders to develop standardized licensing frameworks that alleviate the complexity of compliance (Knittel, 2022). Simplified regulations can not only enhance the speed of bringing electric vehicles to market but can also promote greater competition amongst manufacturers. Additionally, targeted support for small and medium-sized enterprises is vital. Financial assistance programs and grants can help mitigate the costs associated with compliance for emerging manufacturers. By providing resources for navigating the regulatory landscape, governments can encourage innovation and expand the range of electric vehicles available to consumers (Feng *et al*., 2021). Moreover, enhancing public awareness campaigns about the benefits and capabilities of electric vehicles is crucial for fostering consumer acceptance. Educational initiatives should address common misconceptions and provide comprehensive information about the advantages of electric transportation (Graham-Rowe *et al*., 2020). By improving consumer knowledge, regulatory bodies can help instill confidence in electric vehicles, thus facilitating their adoption, The aim of the study was to assess the effect of E-Motor licensing practices on employee performance in transportation Industries in the North Central Region of Nigeria**.**

RESEARCH METHODOLOGY

Descriptive research design was adopted for this study because it is wide and practical and useful in identifying the current conditions and needs as regards to e-motor licensing practices and performance of transportation industries. It involves the systematic gathering of facts about assessment of e-motor licensing on performance of selected transportation industries in the North Central Region, Nigeria. Convenience sampling of respondents was used to ensure that those employees found at their workplaces were the ones used for

the study. The descriptive survey is suitable for this study. The population of interest to this research are the 4299 employees of selected transportation industries in the North Central Region, Nigeria. as at November 2024 (source: Nominal Roll of the HR Department, NURTW, Abuja). However, due to difficulties in sampling the entire population associated with time constraint and lack of financial resources, a representative sample of the whole population was selected from the employees of selected transportation industries in the North Central Region, Nigeria using Taro Yamani Formula. Therefore, after solving equation above, the sample size for this study is 366 three hundred and sixty-six employees, both junior and senior staff of selected transportation industries in the North Central Region, Nigeria represented. Furthermore, the researcher increased the sample size by 9.3 percent to 400 employees. The questionnaire used for this study consist of two sections ''A was based on the respondents' bio-data using five items, section ''B'' contained 25 statements cornering performance appraisal and employee performance. Five – Likert scale (5= strongly Agree, 4= Agree, 3= undecided, 2= Disagree, 1= Strongly Disagree) that best describes the extent to which the respondents agree with each item in the questionnaire used. The choice of linear regression techniques is because it has ability to explain the effect and relationship between two or more variables of interest. Analysis of result were carried out using SPSS (Statistical Package for Social Sciences) version 22.

Models Specification

This study consists of two variables, e-motor licensing practices being the independent and employee's performance of selected transportation industries in the North Central Region, Nigeria; which is the dependent variables. The relationship between the two variables can be mathematically represented as flows:

$Y=f(X);$

……

……*Equation 1*

Where Y= dependent variable= employees' performance of selected transportation industries in the North Central Region, Nigeria, f = function, X= independent variable= e-motor licensing practices. Also, employee's performance of selected transportation industries as the proxy for dependent variable while, Electric vehicle charging infrastructure, Technological innovation, Economic indicators and Environmental Impact are proxies for e-motor licensing practices (independent variables). Thus, the model is:

$EMP=\beta 0 + \beta 1EVI + \beta 2TEI + \beta 3ECI + \beta 4ENI + \varepsilon$

……*Equation 2*

Where β1, β2, β3, β4 > 0, and EMP= employee performance as proxy for dependent variable, β0= intercept (Constant Term); EVI = Electric vehicle charging infrastructure; TEI = Technological innovation; ECI = Economic indicators; ENI = Environmental Impact; ε= Error Term respondents. The descriptive statistics, correlation, and regression are presented as follows:

DISCUSSION OF RESULTS

Table 1 summarizes the descriptive statistics of the variables included in the Regression Models as presented. This was done to make meaning from the data and to discover trends like mean, median, maximum, minimum, standard deviation and observation of the variables. The standard deviation value implies that the answers provided by the respondents are clustered around the mean value and that they are no outliers. It also shows that employee performance (EMP) has the lowest value followed by Environmental impact (ENI).

Table 1: Description of Variables

	EMP	EVI	TEI	ECI	ENI
Mean	3.714	4126	4.065	3.158	3.555
Median	2.667	3.333	2.750	2.8755	2.963
Maximum	4.167	3.500	4.750	3.500	4.231
Minimum	1.167	2.000	1.833	1.750	1.699
Std.D.	3.714	4.612	4.065	3.158	3.355
Observation	376	376	376	376	376

Source: Researcher's felid work using (SPSS)

Correlation Result

The correlation matrix in Table 2 shows whether there is bivariate relationship among the dependent, independent variables in the Regression Model. There is a positive and significant correlation exists between EMP and EVI. This relationship was also found to be strong and significant as indicated by the strong correlation coefficient value of 0.7542, and with an associated p-value of 0.0125. More so, positive and significant strong correlation was found to exist between EMP and TEI. This was captured by the correlation coefficient value of 0.8547 (and a p-value of 0.0024) between the two variables of interest. Furthermore, the correlation between EMP and ECI was further found to be significant, strong and also positive as indicated by the strong correlation coefficient value of 0.5624 and with an associated p-value of 0.0425. Lastly, the correlation between EMP and ENI was also found to be significant, strong and positive as indicated by the strong correlation coefficient value of 0.7411 (with a p-value of 0.0121). Therefore, among the three correlations of interest based on the model specification, the correlation between EMP and TEI was found to be the strongest; and in summary showed that e-motor practices and employees' performance have strong correlational association.

Table 2: Correlation Matrix of Model Variables

	EMP	TEI	ECI	ENI
EMP	1			
EVI	0.7542 (0.0125)	1 ------		
TEI	0.8547 (0.0024)	0.4125 (0.2521)	1 -------	
ECI	0.5624 (.0.0425)	0.2352 (0.1247)	0.2151 (0.0885)	1 -----
ENI	0.7411 (0.0121)	04235 (0.0966)	0.3221 (0.0899)	0.3221 (0.0775)

Source: Authors Computation, 2025 (SPSS)

Diagnostic tests were conducted to establish if the independent variables were significantly related to each other instead of being related to the dependent variable. The results are contained in Table 3. Their variance inflation Factors (VIF) of between 1.388 and 2.067 were acceptable within the threshold of between 1 and 10. Tolerance values (TV) were between 0.480 and 0.701, well within the range of 0.2 to 1. The results indicate that there was no multicollinearity among the variables hence meeting the requisite assumption.

Table 3: Diagnostic Test Table

Variable	Tolerance Value	VIF
Electric vehicle charging infrastructure (EVI)	0.480	1.496
Technological innovation (TEI)	0.701	1.388
Economic indicators (ECI	0.678	1.475
Environmental Impact (ENI)	0.484	2.067

Regression Analysis

Regression analysis was used to test the relationship between the independent variable and dependent variable. This enabled the researcher to establish: the effect of electric vehicle charging infrastructure, technological innovation, economic indicators and environmental impact on employee performance of transportation industries in the North Central Region, Nigeria. Thus, the four hypotheses formulated in this study were tested using t-test statistics, as well as its associated p value. The level of significance for the study was 5percent (or 95% confidence levels). The decision rule for accepting or rejecting the null hypothesis was based on the Probability Value (PV). If the PV is less than 5% or 0.05 (that is, PV < 0.05), it implied that the independent variable in question is statistically significant at 5% level; otherwise, it is statistically insignificant at 5%

The coefficient of determination (R square) indicates that the model was reasonably fit in prediction. The result indicates that the Electric vehicle charging infrastructure, Technological innovation, Economic indicators and Environmental Impact Practices cause 77.4 percent variation in Employees' performance, while the remaining 22.6 percent are attributable to other Factors not considered in the study and were captured by the error term. The model also indicated that there is no autocorrelation among the variables as indicated by Durbin Watson (DW) statistic of 1.669. This showed that the estimates were unbiased and can be relied upon for policy decisions. From the empirical analysis conducted in this study, it was discovered that electric vehicle charging infrastructure has significant effect on employee performance of transportation industries. The findings indicated that the electric vehicle charging infrastructure positively caused major influence at enhancing employee performance of transportation industries in the study area; thus, indicating that effective electric vehicle charging infrastructure is essential for any organization that has the intention of meeting its target and help employees focus on their work activities to achieve the organizational goals. The findings of this study are in-line with Mathieu and Zajac (2019) who conducted a study to examine the impact of electric vehicle charging infrastructure on employee performance in European transport Organizations. The findings revealed that there was a significant relationship between electric vehicle charging infrastructure and employee performance in European transport Organizations.

Economic indicators (ECI) were discovered to have a significant and positive on employee performance of transportation industries. The implication of this finding is that economic indicators significantly impact on employee performance of transportation industries. This is in agreement with Loisel *et al*. (2014) who explored the effect of Environmental Impact on transport industries in Spain. The finding indicated that environmental impact affected the performance of transport industries in Spain. The study showcased significant associations between environmental impact and the performance of transport industries in Spain.

Table 4: Model Summary

Model	R.Square	Adjusted R Square	F-Statistics	F-(P-Value)	Durbin-Watson
1	0.774	0.685	9.552	0.000	1.669

a. Predictors: (Constant), Financial control
b. b. Dependent Variable: Organizational performance

Table 5: Coefficients of Model

Model	**Unstandardized coefficient**	**Unstandardized coefficient**	**T**	**Sig**
	B	**Std . Error**		.
(Constant)	0.151	0.038	3.965	0.000
Electric vehicle charging infrastructure	0.761	0.197	3.866	0.000
Technological innovation	0.985	0.358	2.745	1.000
Economic indicators	0.352	0.114	3.091	0.000
Environmental Impact	0.495	0.234	2.115	0.013

Source: Authors Computation, 2025 (SPSS)

Technological innovation has a positive and significant effect on employee performance. This finding implies that Technological innovation such as new ideas, creativity and vision significantly enhances employee's performance. This is in agreement with the findings of Weiss *et al*. (2017) who explored the correlation between Technological Innovation and transportation system in Italy. The study was guided by the descriptive research design. Interviews were used to collect data for the study. The data collected were analyzed using frequency tables and percentages and hypotheses were

tested using student t-test method. The finding has it that there was a correlation between Technological Innovation and transportation system in Italy. Findings also revealed that Environmental Impact; has a significant effect on employee performance of transportation industries. Market condition when taking management decisions helped them to identify their areas of strength and weaknesses for standard productivity. This agrees with the findings of Loisel *et al*. (2014) who explored the effect of Environmental Impact on transport industries in Spain. The finding indicated that environmental impact affected the performance of transport industries in Spain. The study showcased significant associations between environmental impact and the performance of transport industries in Spain.

CONCLUSION

In conclusion, the efficacy of e-motor licensing practices profoundly influences employee performance within selected transportation industries in the North Central Region of Nigeria. Effective licensing practices not only streamline regulatory processes but also establish a framework that supports the adoption of electric vehicles (EVs) and related technologies. By fostering a conducive environment for training and development, these practices empower employees with the necessary skills and knowledge to adapt to evolving transportation paradigms. Furthermore, well-structured licensing protocols enhance operational efficiency, encourage compliance with environmental standards, and ultimately contribute to improved job satisfaction among employees. In tandem, these factors promote a culture of accountability and innovation within transportation enterprises, leading to heightened productivity and performance. Thus, it is imperative that policymakers and industry stakeholders prioritize the refinement of e-motor licensing practices as a strategic imperative for organizational development and workforce empowerment in the region's transportation sector

REFERENCES

Adebayo, A. (2013). Public administration in Nigeria: A developmental approach. Spectrum Books Limited.

Akinbile, L. A., and Alani, R. A. (2020). Performance management and service delivery in selected ministries in Lagos State, Nigeria. *African Development Review*, 32(1), 122-133.

Bahago, S.B., Nduji, R., Enem, U.E. and Gotip, N.W. (2022). The Impact of Information, Communication and Technology (ICT) on Coca-Cola Industry Performance in Enugu, Nigeria: What Role Does Performance Counseling Play? *International Journal of Creative Research Thought (IJCRT)*

Becker, G. S. (1964). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. Columbia University Press.

Biresselioglu, M. E., Kaplan, M. D., and Yilmaz, B. K. (2018). Electric mobility in Europe: A comprehensive review of motivators and barriers in decision making processes. Transportation Research Part A: Policy and Practice, 109, 1-13.

BNEF. (2021). *Electric Vehicle Outlook 2021*. Bloomberg New Energy Finance.

Bourdieu, P. (1986). *The Forms of Capital*. In J. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). Greenwood Pres.

Bowles, S., and Gintis, H. (1975). *Schooling in Capitalist America: Educational Reform and the Contradictions of Economic Life*. Basic Books

Breetz, H. L., M. J. and D. D. (2018). "Regulatory Innovation in the Energy, Transportation and Technology Sectors." *Energy Policy*, 119, 168-178.

Carley, S., Siddiki, S., and Nicholson-Crotty, S. (2013). Evolution of plug-in electric vehicle demand: Assessing consumer perceptions and intent to purchase over time. Transportation Research Part D: *Transport and Environment*, 2(1), 30-39.

Feng, J., Liu, Y., and Yang, C. (2021). "Challenges and Opportunities of Electric Vehicle Market Development in the Era of Big Data." *Sustainability*, 13(8), 4457.

Gnann, T., Funke, S., Jakobsson, N., Plötz, P., Sprei, F., and Karlsson, S. (2018). Fast charging infrastructure for electric vehicles: Today's situation and future needs. Transportation Research Part D: *Transport and Environment*, 6(2), 314-329.

Graham-Rowe, E., Skippon, S., Gardner, M., and Abraham, C. (2020). "What Factors Influence Consumers' Intent to Use Electric Vehicles?" *Transportation Research Part A: Policy and Practice*, 85, 112-126.

Habib, S., Khan, M. M., Abbas, F., Sang, L., Shahid, M. U., and Tang, H. (2015). A comprehensive study of implemented international standards, technical challenges, impacts and prospects for electric vehicles. *IEEE Access*, 3, 477-498.

Hardman, S., Jenn, A., Tal, G., Axsen, J., Beard, G., Daina, N. and Plötz, P. (2018). A review of consumer preferences of and interactions with electric vehicle charging infrastructure. Transportation Research Part D: *Transport and Environment*, 62, 508-523.

Igbokwe-Ibeto, C. J., Osakede, K. O., Nkomah, B. B., and Kinge, R. F. (2019). Performance management and service delivery in Nigerian public organizations: The critical links.

International Journal of Public Administration, 42(3), 276-287.

Keeney, R., Lu, H., and Huang, Y. (2021). "The Transition to Electric Vehicles: A Study of Market Regulations." *Journal of Cleaner Production*, 286, 125467.

Knittel, C. (2022). "Regulatory Policies and Electric Vehicle Adoption in the US." *Energy Economics*, 108, 105822.

Liao, F., Molin, E., and van Wee, B. (2017). Consumer preferences for electric vehicles: a literature review. *Transport Reviews*, 37(3), 252-275.

Loisel, R., Passaretto, A., Cutululis, N. A., and Pineda, I. (2014). The potential of electric vehicles in the EU energy system. *Energy,* 77, 372-381.

Mincer, J. (1974). *Schooling, Experience, and Earnings*. National Bureau of Economic Research.

Nduji, R. and Oriaku, C. (2020). Effect of E-commerce on performance of commercial banks in Nigeria (A case study of first bank plc, Bwari area council, Abuja). *Journal of African Studies and Development*, 3(10)

Nduji, R. and Oriaku, C. (2024). Effect of Online Bus Booking on Customer Satisfaction: A Study of ABC Transport, Utako Terminals, Abuja, Nigeria, *Rowter Journal*. 3 (2):117-129.

Nduji, R., Oyenuga and Oriaku, C. (2023). Assessing E-Business and Organizational Performance in Nigeria Today: Evidence from Jumia Ltd. *Britain International of Humanities and Sciences Journa*l, 2685-1989

Nduji, R, Bahago, S. B., Gotip, N. W and Oriaku, C. (2025). Optimizing Business Intelligence for Nigerian Small and Medium Scale Enterprises: The Influence of Economics Education and Guidance Counseling on Decision-Making and Growth. *Asian Journal of Education and Social Studies,* 51 (1): 51-69

Noel, L., Zarazua de Rubens, G., Kester, J., and Sovacool, B. K. (2019). Vehicle-to-grid: A sociotechnical transition beyond electric mobility. *Energy Research and Social Science*, 55, 79-85.

Okunola, O. M., and Akinboade, O. A. (2019). Challenges and prospects of performance management system in the Nigerian public sector. *African Journal of Public Affairs*, 11(2), 87-100.

Psacharopoulos, G., and Patrinos, H. A. (2004). *Returns to Investment in Education: A Further Update*. *Education Economics*, 12(2), 111-134.

Rezvani, Z., Jansson, J., and Bodin, J. (2015). Advances in consumer electric vehicle adoption research: A review and research agenda. Transportation Research Part D: *Transport and Environment,* 34, 122-136.

Schultz, T. W. (1961). *Investment in Human Capital*. *The American Economic Review*, 51(1), 1-17.

Sierzchula, W., Bakker, S., Maat, K., and van Wee, B. (2014). "The Influence of Financial Incentives and Regulations on Electric Vehicle Adoption." *Energy Policy*, 68, 154-165.

Sovacool, B. K., Kester, J., Noel, L., and de Rubens, G. Z. (2018). The demographics of decarbonizing transport: The influence of gender, education, occupation, age, and household size on electric mobility preferences in the Nordic region. *Global Environmental Change*, 52, 86-100.

Verma, K., and Shankar, R. (2020). "A Policy Perspective on Electric Vehicle Adoption." *Journal of Business Research*, 124, 455-467.

Weiss, M., Cloos, K. C., and Helmers, E. (2017). Energy efficiency trade-offs in small to large electric vehicles. *Environmental Sciences Europe*, 29(1), 1-12.