

Review Form 1.7

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_111729
Title of the Manuscript:	Powering Ahead: Current Landscape of Electric Vehicles (EV) in India
Type of the Article	

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Compulsory REVISION comments</p> <ol style="list-style-type: none"> 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> 1. I am confident that the manuscript and the methods used will be of interest to the scientific community. The technical standards of the methods used in the article are based on the study of the existing legislative framework in India, which are related to the creation of favorable conditions for the use of Electric Vehicles in India. The article also examines the well-known method of Life Cycle Analysis (LCA) of electric vehicles (EVs) and provides a comprehensive assessment of the relationship between the state of the environment and the replacement of vehicles with internal combustion engines with electric vehicles. 2. The title of the article fully corresponds to the text of the sections 3. The abstract of the article is exhaustive. 4. The subsections and structure of the manuscript are interconnected. The conclusions presented in the article are completely interconnected with the main text. The statements are balanced and supported by adequate evidence. 5. Conclusions are formulated on real facts and figures. Statistical analysis is present in the article, but it is not complete. 6. Analysis of literary sources showed their current status as of 01.2024. Thus, the data is well controlled and reliable. As a result of checking 25 links, their relevance and adequacy were confirmed. I believe that the following works will allow the authors to expand the horizons of comparing Electric Vehicles (EV) in India with the experience of their use in other countries: 1. Pivniak H., Aziukovskiy O., Papaika Yu., Lutsenko I., Neuberger N. (2022). Problems of development of innovative power supply systems of Ukraine in the context of European integration. <i>Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu</i>, (5), 89-103. https://doi.org/10.33271/nvngu/2022-5/089 2. Beshta, Oleksandr & Fedoreiko, Valerii & Beshta, Oleksandr & Khudoliy, Serhii & Khalaimov, Taras. (2023). The Influence of Route Topology on the Costs of Mechanical Work of an Electric Vehicle. DOI:10.2139/ssrn.4622073. 3. Beshta, O.; Cichoń, D.; Beshta, O., Jr.; Khalaimov, T.; Cabana, E.C. Analysis of the Use of Rational Electric Vehicle Battery Design as an Example of the Introduction of the Fit for 55 Package in the Real Estate Market. <i>Energies</i> 2023, 16, 7927 https://doi.org/10.3390/en16247927 4. A. Balakhontsev, O. Beshta, V. Boroday, S. Khudolii and S. Pirienco, "A Review of Topologies of Quick Charging Stations for Electric Vehicles," 2021 IEEE International Conference on Modern Electrical and Energy Systems (MEES), 2021, pp. 1-4, doi: 10.1109/MEES52427.2021.9598796. 5. O. O. Beshta, S. S. Khudolii, M. Neuberger, N. Neuberger Control of energy flows in electric drivetrain of electric vehicle with extra DC source <i>Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu</i> 2019(2):67-71. https://elprivod.nmu.org.ua/ua/articles/Article%205%20VISNUK2019.pdf 7. The article may be published without significant changes. The content of the article corresponds to its title. At the same time, on page 4 the author draws conclusions based on outdated literature. As an example, the conclusion: "... their market share is steadily expanding (Yong, et al. 2015)", as well as on page 11 an outdated conclusion based on the work of Mohammad et al. 2020. In the section Environmental Impact of Electric Vehicles, the author made a controversial conclusion - Electric vehicle batteries, even after they reach the end of their useful life in vehicles, can be repurposed for energy storage applications. In the text of the article, the author repeats the conclusion more than once - from EV adoption is influenced by factors such as the electricity generation mix and the efficiency of the charging infrastructure (page 8, last sentence of the Air Quality Improvement section). If the author of the article is not the author of the Life Cycle Analysis (LCA) theory, the question arises about the appropriateness of the description in the Life Cycle Analysis of EVs section. 	
<p>Minor REVISION comments</p> <ol style="list-style-type: none"> 1. Is language/English quality of the article suitable for scholarly communications? 	<p>The quality of the English language of the article is suitable for scientific communication.</p>	

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Optional/General comments	The article may be published without significant changes.	
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PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	There are no ethical issues in this manuscript.	

Reviewer Details:

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