

Review Form 3

Journal Name:	Journal of Energy Research and Reviews
Manuscript Number:	Ms_JENRR_124549
Title of the Manuscript:	DEVELOPMENT OF PREDICTIVE MODELS FOR ENERGY DEMAND AND CO2 EMISSION TRENDS FOR HOUSEHOLDS IN MAKURDI METROPOLIS
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>The paper is significant to the research community for several reasons:</p> <ol style="list-style-type: none"> 1. Predictive Models: The development of predictive models for energy demand and emissions can serve as a methodological framework that other researchers can adapt or replicate in different contexts. 2. Informed Decision-Making: The findings can guide local and national policymakers in crafting effective energy policies and emission reduction strategies tailored to the specific needs of the community. 3. Community Engagement: The insights gained can empower local communities to adopt more sustainable practices, leading to tangible benefits such as cost savings and improved environmental quality. 	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Yes, the title of the article is suitable for several reasons including:</p> <ol style="list-style-type: none"> 1. Energy Demand and Climate Change: With increasing global concerns about energy consumption and climate change, studying energy demand and CO2 emissions is highly relevant. 2. Impact on Households: Understanding energy consumption patterns in households can inform policies that improve living conditions and economic stability for local communities. 3. Under-Researched Area: Many regions, especially in developing countries, lack comprehensive studies on energy demand and emissions. This research can fill that gap and contribute to the global body of knowledge. 4. Informed Decision-Making: The findings can aid policymakers in crafting targeted strategies for energy management and emission reduction, making the research practically applicable. 5. Collaboration Opportunities: The topic encourages collaboration across various fields such as environmental science, economics, and urban planning, enhancing its academic value. 	

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<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>The abstract is quite comprehensive and provides a solid overview of the study. However, here are some suggestions for additional points that could enhance clarity and depth:</p> <ol style="list-style-type: none"> 1. The primary objective should be clearly stated at the beginning of the study. For example, "The primary objective of this study was to develop predictive models..." 2. The writer should briefly mention the importance of understanding energy demand and CO2 emissions in the context of sustainability or local policy-making. For instance, "This research is significant for informing local energy policies and promoting sustainable practices in the region." 3. The author should include a brief mention of the sample size or selection criteria for households to provide context on the data's representativeness. 4. While mentioning the significance and R-squared values, summarizing key findings related to energy demand or emissions trends that emerged from the analysis should be considered. 5. The author should consider adding a sentence about how these models can be utilized in future research or policy-making, such as "These models can serve as a basis for future studies on energy efficiency and emissions reduction strategies." 6. Acknowledgement of any potential limitations of the study briefly, could enhance the transparency of the research. 	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The subsections and structure are not the best for this study, I suggest the following:</p> <p>2.0 MATERIALS AND METHODS 2.1 Materials and Equipment 2.2 Study Area and Sample Selection 2.3 Data Collection 2.4 Data Analysis for CO2 Emissions and Energy Consumption Assessment 2.5 Development of CO2 Emission and Energy Demand Predictive Models 3.0 RESULTS AND DISCUSSION 3.1 Distribution of Average Monthly Electricity Consumption of the Households 3.2 Modelling of CO2 Emission and Energy Demand of Households</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>The manuscript is can be described as scientifically robust and technically sound because</p> <ol style="list-style-type: none"> 1. It demonstrates a strong adherence to scientific rigor through its systematic approach to data collection and analysis. 2. The use of established methodologies, such as the guidelines from the Intergovernmental Panel on Climate Change (IPCC) for CO2 emissions assessment, lends credibility to the findings. 3. In addition, the application of statistical tools like ANOVA and the presentation of fit statistics (R² values) provide a robust framework for evaluating the predictive models developed for CO2 emissions and energy demand. 4. Overall, the manuscript effectively integrates empirical data with theoretical models, contributing valuable insights into energy consumption patterns and their environmental impact in the specified region. 	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :</p>	<p>The references are highly inadequate and old. Out of the nine references used only one was published in 2019 being five years ago. The oldest was published in 1992, which makes it 32 years old, while the rest were published between 2015 and 2001, that is between 9 and 23 years ago. These references are too old to contribute meaningfully to</p>	

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	the study. Basing a generalisation or conclusion on these references could be a misrepresentation. I therefore recommend that the author(s) identify more recent literature and review them. Additionally, I suggest that more references be used, as it is a way of showing how extensive and thorough the work is.	
<u>Minor REVISION</u> comments Is the language/English quality of the article suitable for scholarly communications?	The quality of language used in the manuscript is quite suitable for scholarly communication	
<u>Optional/General</u> comments		

PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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