

Review of: "Analytical Study and Amelioration of Plastic Pavement Material Quality"

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Potential competing interests: No potential competing interests to declare.

The paper should be revised as follows:

- 1. Adds addresses the issue of plastic waste management through recycling into pavement materials, contributing to sustainable urban infrastructure.
- 2. Provides a clear description of the formulations and procedures for mixing plastics (PP and PET) with sand, adding transparency to the methodology.
- 3. The comparison with existing pavements in Cameroon adds practical value, demonstrating potential for improving pavement quality.
- 4. Research questions or hypotheses should be clearly stated in the introduction to better structure the study.
- 5. The literature review could include more recent studies on plastic waste in pavement production, particularly those covering other polymers or geographical contexts.
- 6. Figures (e.g., 6, 7, and 8) need clearer labels, more descriptive captions, and inclusion of units for better clarity.
- 7. More detailed reasoning should be provided for the selection of plastic-to-sand ratios, especially for combined formulations like 10% PP + 20% PET.
- 8. The discussion of results could be expanded to include environmental benefits, long-term durability, and limitations of plastic pavements.
- 9. The sustainability benefits, such as life cycle assessment (LCA), energy savings, or reduced carbon footprint, should be discussed more thoroughly.
- 10. The conclusion should better summarize the study's contributions and offer clearer recommendations for future research.



- 11. The study should briefly address potential environmental or safety concerns, such as microplastic generation or harmful substances during degradation.
- 12. A section on future research directions should be included, suggesting testing pavements in different climates or for different load-bearing capacities.
- 13. The writing flow, especially in the results and discussion sections, can be improved by smoother transitions between paragraphs for better readability.