# Review of: "Quantifying the Environmental Impact: A Comparative Analysis of Consensus Algorithms in Blockchain for Carbon Footprint Reduction and Mitigating Climate Change"

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Abstract: Need Revision

Keywords: Good

Introduction: Average/Revised Please

Literature Review: Average

Data Set: Average

Methodology: Weak

Caption, Citations & Footnotes: Good

Pictures, graphs & Flowcharts: Average

Results: Weak

Conclusion: Average

Future Work: Poor

References: Average

----------- Overall evaluation -----------

Suggestion and Recommendation:

The authors present a technical research paper with relevant topic, proper research methodology and potentially good contribution to the field of studies.

The authors are encouraged to resubmit the paper with more clarity on presented performance assessment metrics with the selected relevant Case studies and possible application scenario with assessment metrics. The paper should be

written in proper format, figures should fit within the text, use of font should be uniform in all paper, as well as references should be updated with most recent results.

Suggestion and Recommendation:

1. Authors may elaborate more on the novelty/contribution of their work and how it

2. Authors need to be specific about their problem statement and the scope of their research.

3. Abstract: elaborate more on the problem statement, findings, and contributions.

4. Introduction is not clear. Authors may contribute more towards this.

Contributes to the literature in the second last paragraph of the introduction clearly.

5. Thorough proofreading is recommended.

6. A few of the figures are taken from the sources and are not cited properly, either they may be cited properly with permissions or may be removed/ redrawn.

7. The conclusion is not clear and needs revision and clarity and alignment with the abstract and title.

References:

1. Your references are not listed in good style, as citation style is different from one paper to other.

2. some of your references are not complete please check.

3. Some citations (references) created in wrong manner (Please follow journal's criteria).

Authors are encouraged to base on recent references about the current development in blockchain technology. Moreover, technology collaborates with other technologies to create new paradigms, such as artificial intelligence, such machine learning, deep learning, with federated learning.

Additionally, some important references have been neglected by the authors.

(i) Khan, Abdullah Ayub, Asif Ali Laghari, Thippa Reddy Gadekallu, Zaffar Ahmed Shaikh, Abdul Rehman Javed, Mamoon Rashid, Vania V. Estrela, and Alexey Mikhaylov. "A drone-based data management and optimization using metaheuristic algorithms and blockchain smart contracts in a secure fog environment." Computers and Electrical Engineering 102 (2022): 108234.

(ii) Khan, Abdullah Ayub, Asif Ali Wagan, Asif Ali Laghari, Abdul Rehman Gilal, Izzatdin Abdul Aziz, and Bandeh Ali Talpur. "BIoMT: a state-of-the-art consortium serverless network architecture for healthcare system using blockchain smart contracts." IEEE Access 10 (2022): 78887-78898.

(iii) Khan, Abdullah Ayub, Asif Ali Laghari, Peng Li, Mazhar Ali Dootio, and Shahid Karim. "The collaborative role of

blockchain, artificial intelligence, and industrial internet of things in digitalization of small and medium-size enterprises." Scientific Reports 13, no. 1 (2023): 1656.

(iv) Khan, Abdullah Ayub, Asif Ali Laghari, Zaffar Ahmed Shaikh, Zdzislawa Dacko-Pikiewicz, and Sebastian Kot. "Internet of Things (IoT) Security with Blockchain Technology: A State-of-the-Art Review." IEEE Access (2022).

(v) Khan, Abdullah Ayub, Aftab Ahmed Shaikh, and Asif Ali Laghari. "IoT with Multimedia Investigation: A Secure Process of Digital Forensics Chain-of-Custody using Blockchain Hyperledger Sawtooth." Arabian Journal for Science and Engineering (2022): 1-16.

Major Concerns:

1. In the introduction, the scientific problem of the existing evaluation is missing. There should initially be discussed the actual problem and then the research motivation.

2. Please highlight major contributions of this work in this current version, otherwise the current form shows weak/lack of novelty.

3. Please refine the language of this paper, such as avoid we, they, our, and other related words in this paper.

4. Please improve the portion of problem description and problem formulation of the proposed work. Cannot find novelty in the current form.