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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Potential competing interests: No potential competing interests to declare.

Extensive introduction, with repetitive statements not supported by references to scientific literature.

The consensus algorithms are poorly introduced, and what is more important, there are some relevant ones not included (non-exhaustive examples):

- Proof of Elapsed Time (PoET)
- Proof of Burn (PoB)
- (Delegated) Byzantine Fault Tolerance (DBFT, BFT)
- Proof of Capacity (PoC)
- Proof of Identity (PoI)

The literature review presents a list of fragmented references, without any logic behind.

The proposed methodology section is limited to describe the objective of the study, but does not describe a scientific methodology. On the other hand, it is highly questionable whether the key criteria listed in this section may involve an environmental impact (i.e., Security, community and industry support, ….). Anyhow, these criteria are not further found in the study.

The examples shown in the section "Carbon fingerprint calculations" do not correspond to any particular consensus algorithm. They are completely general, with no comparative value; furthermore, they are not based on actual data (at least the origin of this data is not provided).

In summary, the article does not provide any scientific evidence; thus, the conclusions cannot be considered valid or relevant.