

Review of: "Longevity of Electric Vehicle Operations"

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Potential competing interests: No potential competing interests to declare.

EV Paper

This paper seeks to examine the longevity of electric vehicles (EV). However, while many aspects of EV longevity are named, the focus of the paper is mainly on EV batteries and fuel source. The paper could have been far more insightful had those other aspects of EVs been taken into account as well. This is specially notable, since the abstract promises a review of factors other than batteries, but the paper itself doesn't go into much detail about them.

The study of EV batteries starts with an overview of the charging infrastructure. While good suggestions are made here, I wish the issues of longer charging times and difficulties associated with unreliable network maintenance were also covered in this section, as they are also important factors contributing to "range anxiety."

Next, the paper reviews policies that can contribute to EV usage. But once again, what's offered is only a brief overview. I would've loved to see more details pertaining to successful policies and more numerical data about the details of the policies, their effectiveness, and their outcomes.

After this, the paper focuses on EV emissions. Once again, a more detailed comparison would've been welcomed. In this section, the paper compares the tailpipe emissions of EVs and traditional vehicles. This is not a fair comparison (which is also acknowledged in the paper) and a lifecycle analysis should have been conducted instead.

Overall, the paper does a good job of shedding light on areas where EVs could have advantages over their traditional counterparts. However, not enough scientific data evidence is provided to prove this point. In general, the paper lacks numeric data or other forms of hard evidence. To this end, the authors could've utilized existing literature in a better manner. All of this causes the overall novelty of the work to feel lacking. Finally, the title and abstract are not indicative of the final paper. The authors promise to evaluate the longevity of EVs, but in actuality the paper offers only a brief description of EVs and their characteristics. I think the topic is really interesting and a more thorough study is justified, I just wish the authors had done a better job at delivering what their abstract initially promises.

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