

# Review of: "Performance Evaluation and Analysis of Electric Vehicle Parameters – A Test Bench"

Noreffendy Tamaldin<sup>1</sup>

<sup>1</sup> Universiti Teknikal Malaysia Melaka

**Potential competing interests:** No potential competing interests to declare.

The title seems to give a brief overview of global EV performance evaluation. However, the introduction section (2nd line) starts with Indian GDP growth in the E-mobility market related to EV. The fuel cost reduction is also illustrated in the Indian Rupee. This seems to be out of context, making the audience distracted by focusing on the Indian perspective instead of the global view. The 8 references provided also bias toward Indian literature. If the focus of this paper is on Indian EVs, then it's better to revise the title to specifically address "Indian EV."

The 3 categories of EVs need references, as category ii) (Solar-powered EV) is uncommon in typical literature.

Examples of EV manufacturers also need specific references, especially related to the fastest EV in the market with a top speed of 355 km/hr & an acc of 2.4 s to 25.6 s. Currently, this fact is based on Reddy K S et al., 2020 (may not be the most updated/correct data); you need to find more reliable sources, not limited to Indian authors only.

II. The driving cycle also needs improvement and the latest references, as defining only 2 driving cycles

EU std NEDC/Japanese 10-15 mode vs. the transitory cycle/FTP75/Artemis cycle, referring to Parekh V et al., 2015, is not the best way to describe the driving cycle. Find the most recent references within 2020-2024 for this matter.

Fig 1: NEDC is not the norm for the EU driving cycle; it is the New European Driving Cycle -

[https://en.wikipedia.org/wiki/New\\_European\\_Driving\\_Cycle](https://en.wikipedia.org/wiki/New_European_Driving_Cycle)

III. Electric vehicles - the Li-Ion battery energy density from 150-250 Wh/kg-1 was outdated, as it is referring to a journal from 2019 (5 years ago). Today's energy density has improved drastically. Find the most recent references.

Fig 18 - assuming a 0 gradient force needs strong justification, as alpha a is not well defined (in fig 14).

Generally, major improvements are needed, especially in the quality of references used, which should reflect the contents of this paper. Good luck!

