

"A man is
great by
deeds, not by
birth"
-Chanakya

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**Comparison of Environmental Impact of Electric Vehicles and
Conventional Vehicles: A Systems Perspective**

Jerome P. Thomas ¹
Radhakrishna Pillai R ²

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Please contact the corresponding authors for queries.

¹Doctoral Candidate, Indian Institute of Management Kozhikode, IIMK Campus PO, Kunnamangalam, Kozhikode, Kerala 673 570, India

²Professor, Information Systems Area, Indian Institute of Management Kozhikode, IIMK Campus PO, Kunnamangalam, Kozhikode, Kerala 673 570, India; Email - krishna@iimk.ac.in, Phone Number - 0495 2809105

Comparison of Environmental Impact of Electric Vehicles and Conventional Vehicles: A Systems Perspective

Abstract:

Environmental pollution is a growing concern. This concern has made people seek out the pollution impact of their daily activities and seek out alternatives. Once such activity recognized is polluting effect of the transport sector. Realizing this, Electric Vehicles (EV) have been introduced. This paper focuses on the impacts of EV on sustainability when compared to the conventional fossil fuel vehicles, from a systems perspective. The various environmental impacts are covered using the LCA assessment. Though the overall impact of EVs is positive, the environmental, industrial and social aspects need to be understood better. The environmental aspect of EV will require further research considering the means of electricity generation, EV manufacture, Battery manufacture and recyclability. These have to be assessed before adopting the EVs at large scale. Hydrogen vehicles, Hybrid vehicles and heavy EVs are not considered due to the low adoption rate. Since EVs are relatively new to the world, long-run impacts of mass usage of EVs are yet to be determined.



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Research Office
Indian Institute of Management Kozhikode
IIMK Campus P. O.,
Kozhikode, Kerala, India,
PIN - 673 570
Phone: +91-495-2809237/ 238
Email: research@iimk.ac.in
Web: <https://iimk.ac.in/publications>

