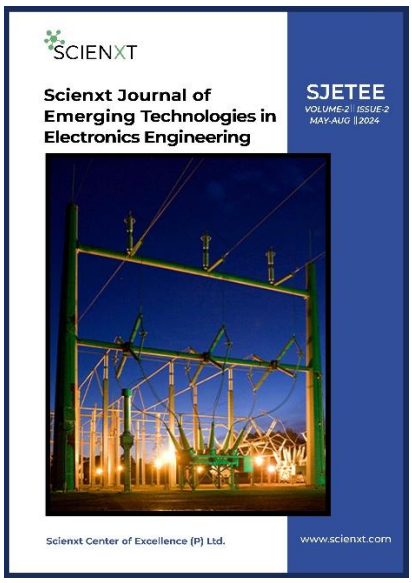

Scienxt Journal of Emerging Technologies in Electronics Engineering
Volume-2 || Issue-2 || May-Aug || Year-2024 || pp. 1-7

A Study on electric vehicles in India opportunities and challenges

[*1]Padmini Katare, [2]Mohani Dehariya, [3]Nancy Singh, [4]Neeraj Kumar Pal, [5]Nelesh, [6]Niyaz Ahmad

[*1]Assistant Professor, Bits College Bangrasia Bhopal, India
[2,3,4,5,6] Bits College Bangrasia Bhopal, India

**Corresponding Author: Padmini Katare*

Abstract:

The abstract outlines the significance of electric cars in reducing greenhouse gas emissions and reliance on fossil fuels. It discusses the evolving models for electric car manufacturing and charging infrastructure, particularly focusing on market penetration rates and optimization techniques. The study highlights the unique challenges faced by developing nations like India in adopting electric vehicles, including inadequate charging infrastructure. It also mentions the potential of vehicle-to-grid technology as a backup power source in regions lacking renewable energy. The abstract concludes by emphasizing the importance of understanding electric vehicles' unique qualities for sustainable mobility and addressing the growing demand for environmentally friendly products. It suggests that electric vehicles are poised to replace petroleum-powered automobiles, offering both environmental benefits and profitability for consumers. Finally, it mentions the global adoption of electric vehicle technology and explores India's chances and challenges in transitioning to electric cars.

Keywords:

Electric vehicle; Pollution; Eco-Friendly; Lithium Battery.