PROJECT REPORT ON

"A study on Role of Electric Vehicles towards Circular economy and Environmental Sustainability- A Mixed Method research"

Submitted by

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Submitted to



VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

In partial fulfilment of the requirements for the award of the degree of

MASTER OF BUSINESS ADMINISTRATION

Under the Guidance of

INTERNAL GUIDE

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HOD of P G Department of Business Administration Alva's Institute of Engineering and Technology



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ALVAS INSTITUTE OF ENGINEERING AND TECHNOLOGY SHOBHAVANA
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Date: 09/09/2024

CERTIFICATE

This is to certify that Sandeep Raviprasad Acharya bearing USN 4AL22BA082, is a bonafide student of Master of Business Administration course of Alva's Institute of Engineering and Technology, Moodbidri for the batch 2022-2024, affiliated to Visvesvaraya Technological University, Belagavi. The Project report on "A Study on the Role of Electric Vehicles towards Circular Economy and Environmental Sustainability – A Mixed Method Research" is prepared by her under the guidance of Mrs. Priya Sequeira, Associate Professor, in partial fulfilment of the requirements for the award of the degree of Master of Business Administration of Visvesvaraya Technological University, Belagavi, Karnataka.

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DECLARATION

I Sandeep Raviprasad Acharya, USN: 4AL22BA082, hereby declare that the Project report titled "A study on Role of Electric Vehicles towards Circular economy and Environmental Sustainability-A Mixed Method research" prepared by me under the guidance of Mrs. Priya Sequeira, HOD, PG Dept. of Business Administration, Alva's Institute of Engineering and Technology.

I also declare that this project work is towards the partial fulfilment of the university regulations for degree of MASTER OF BUSINESS ADMINISTRATION by Visvesvaraya Technological University, Belgaum.

I have undergone a project for a period of six weeks. I further declare that this project is based on the original study undertaken by me and has not been submitted for the award of any degree/diploma from any other University/Institution

Date: 20 - 09- 2024

Place: Mijay

signature of the student

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Executive Summary:

This study explores the role of electric vehicles (EVs) in promoting circular economy practices and environmental sustainability in India. As the country increasingly embraces EVs, it is essential to understand how these vehicles contribute to reducing environmental impacts, improving resource efficiency, and fostering long-term sustainability.

The research uses a mixed-method approach, combining quantitative data from 200 EV owners and qualitative insights from 25 industry experts, including environmentalists, government officials, product developers, and material scientists. The owners' survey, with 20 questions, focused on assessing satisfaction with EV performance, battery reliability, and awareness of sustainability practices. In contrast, the expert interviews provided deeper insights into challenges such as battery recycling, circular economy integration, and government policy effectiveness.

Key findings show that EV adoption is driven primarily by younger, environmentally conscious consumers who value the reduced emissions and long-term cost savings EVs offer. The study also reveals that while EVs play a crucial role in reducing carbon emissions and enhancing sustainability, their full potential can only be realized through effective battery recycling systems and comprehensive government policies. Experts agree that technological advancements, especially in battery technology, and the expansion of charging infrastructure will be pivotal in driving the industry's growth.

Moreover, the study identifies several research gaps, such as the need for more robust circular economy practices, deeper understanding of regional infrastructure disparities, and a long-term analysis of sustainability outcomes. These gaps highlight areas for future research and policy development. In conclusion, the study emphasizes that while electric vehicles are a vital component of India's sustainability efforts, achieving a fully circular economy will require continued collaboration between consumers, manufacturers, policymakers, and environmental experts. Addressing challenges in infrastructure, recycling, and consumer education will be critical to ensuring that EVs contribute effectively to environmental sustainability in the long term.