

Energizing Tomorrow: Analyzing the Transformative Potential of Electric Vehicle Adoption

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Abstract

INTRODUCTION: A developing economy lacks the infrastructure required to produce renewable energy sources on a large scale that can be coupled with conventional resources. This prevents the economy from taking advantage of these types of resources. The emergence of the electric vehicles (EVs) industry has been a primary catalyst for both the expansion of the economy and the production of new employment opportunities. The manufacturing and distribution of electronic automobiles have cleared the way for the construction of new manufacturing locations as well as a supply chain. This has been made possible as a result of the increased demand for EVs.

OBJECTIVES: The objectives of this article are to know the overall impact of EVs on the environment through a review of the literature and to study if ongoing changes affect the economy of India.

METHODS: The systematic review of literature is used to fulfil the objectives of the study.

RESULTS: EVs offer a solution to reducing air pollution and greenhouse gas emissions due to their zero tailpipe emissions. They eliminate pollutants like nitrogen oxide and particulate matter, improving air quality and public health. EVs, powered by renewable energy sources like solar, wind, or hydroelectric power, reduce reliance on fossil fuels. Their higher energy efficiency and technological advancements in batteries also create employment and innovative economic opportunities. Additionally, EVs contribute to quieter and more serene environments, especially in densely populated areas, due to their silent operation.

CONCLUSION: It can be concluded that the adoption of EVs has both positive and negative impacts on economy countries. But as compared to negative impacts, positive impacts are very high on the economic condition of any country.

Keywords: Environment, Electric Vehicles, Renewable Energy, Sustainable Development, Review

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1. Introduction

Despite the fact that renewable resources provide a substantial potential to halt or stop the degradation of the environment, the expense of developing the necessary infrastructure has been a factor that has limited the use of these resources. This has been a limiting factor for the use of renewable resources. A developing economy lacks the

infrastructure required to produce renewable energy sources on a large scale that can be coupled with conventional resources. This prevents the economy from taking advantage of these types of resources. When it comes to finding solutions to the problems that develop with investments and finances, the word “distributed” is the most important clue. The most effective solution to this problem is to carry out a scattered investing strategy. It is not possible to build a new infrastructure, but it is conceivable for end users to benefit from investments that have already been made in the system.

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