

# Examining Electric Vehicle Drive Train Technologies in Depth

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**Abstract:** *Transportation is the second-largest source of greenhouse gas emissions because it produces CO<sub>2</sub> gas through the burning of fossil fuels. One potential remedy for this issue is thought to be electric automobiles, or EVs. Electric automobiles can reduce CO<sub>2</sub> emissions since they use an electric motor as a propeller rather than an internal combustion engine. EVs have the potential to become zero-emission vehicles when paired with renewable energy sources. The numerous varieties of electric drive trains are discussed in this paper along with their designs, benefits, and drawbacks. The objective is to outline the latest developments in the rapidly changing field of electric car technology. Additionally, the energy density and efficiency, specific energy and power, cost, and application of batteries—the main energy storage system—are compared.*

**Keywords:** Transportation