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Microcontroller-based Heavy Electric Vehicle With Pantograph Mechanism

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Abstract: *The project "Microcontroller-based Heavy Electric Vehicle with Pantograph Mechanism" focuses on designing and implementing an autonomous electric vehicle intended for transporting heavy loads on highways. This innovative vehicle employs a pantograph mechanism to charge its battery from overhead electric lines while in motion, facilitating continuous operation and enhanced energy efficiency.*

This solution holds significant potential to reduce greenhouse gas emissions and promote sustainability, offering a promising alternative to traditional fossil fuel-based transportation systems. By leveraging electric power and the pantograph mechanism, the project aims to develop a cost-effective, eco-friendly transport solution for the future, thereby improving the efficiency of goods.

Keywords: Pantograph mechanism, Overhead electric lines, Efficient goods transportation, Heavy load transport, Rechargeable Battery Pack, IoT-based Monitoring

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