

SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

COURSE NAME: 19EEO302 – INTRODUCTION OF HYBRID AND ELECTRIC VEHICLES IV YEAR / VII SEMESTER

BY



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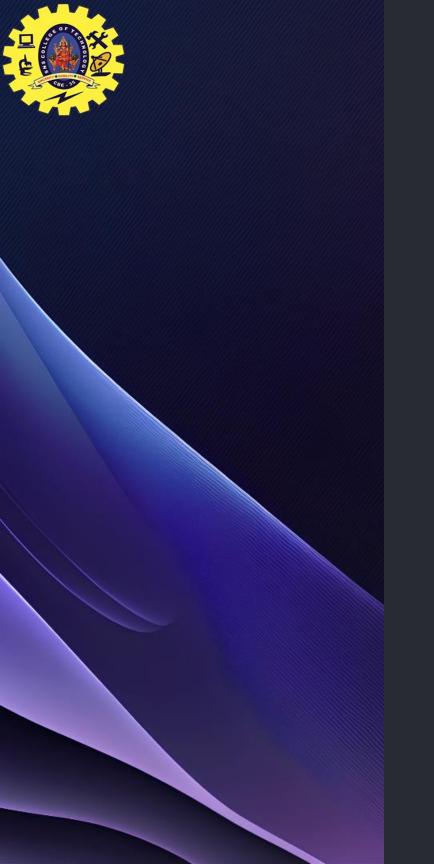


Solar Wireless Charging System For Electric Vehicles

Discover the future of electric vehicle charging with our innovative solar wireless charging system. Say goodbye to cords and hello to sustainable energy!







Importance of Electric Vehicles

Reduced Emissions

Electric vehicles contribute to lower air pollution, helping combat climate change and improve air quality in cities.

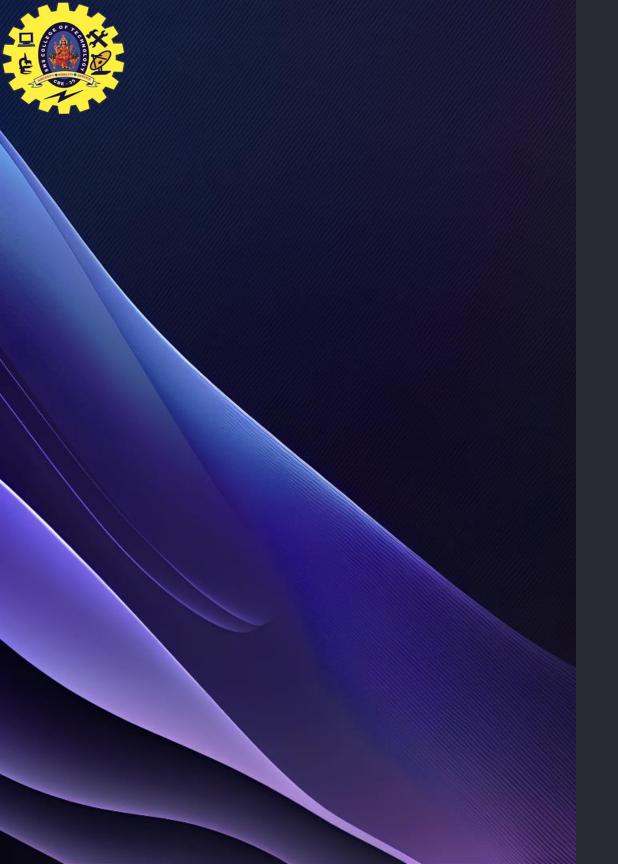
Energy Efficiency

Electric motors are more energy-efficient compared to internal combustion engines, reducing our dependence on fossil fuels.

Noise Reduction

Electric vehicles produce significantly less noise, leading to quieter streets and a more peaceful urban environment.





Overview of Solar Wireless Charging System

- Efficiently charges electric vehicles using solar power without the need for cords or cables.
- Wireless charging pads transfer energy from the solar panels to the vehicle's battery wirelessly.
- It offers numerous advantages over traditional plug-in charging methods.



Advantages over Traditional Charging Methods

1 Eco-friendly & Sustainable 🕈

Utilizes clean and renewable solar energy, reducing carbon emissions and promoting a greener future.

2 Convenience & Flexibility >□

No more dealing with tangled cords or searching for charging stations. Charge your vehicle effortlessly wherever there is sunlight.

3 Cost Savings 🕉

Eliminates the need for expensive infrastructure installations and reduces electricity costs compared to traditional charging methods.





Components of the System

Solar Panels

High-efficiency solar panels capture sunlight and convert it into electrical energy.

Wireless Charging Pads

Wireless charging pads use electromagnetic induction to transfer energy wirelessly to the electric vehicle's battery.

Energy Storage

An energy storage system ensures a steady supply of power even when sunlight is not available.





Benefits of Solar Wireless Charging for Electric Vehicles

Eco-friendly and Sustainable

Reduce your carbon footprint and contribute to a cleaner and more sustainable future.

Convenience and Flexibility

Charge your electric vehicle effortlessly wherever there is sunlight, providing ultimate convenience for everyday use.

Cost Savings

Save on electricity costs and eliminate the need for expensive charging infrastructure.



Implementation and Challenges

Integration with Existing Infrastructure

Adapting solar wireless charging systems to existing infrastructure requires careful planning and coordination.

2 Technical Limitations

Overcoming technical challenges such as efficiency and maintaining consistent power transfer is crucial for widespread adoption.

3 Regulatory and Policy Considerations

Policies and regulations need to be supportive and incentivize the integration of solar wireless charging systems into public and private spaces.





Conclusion

1 Future Prospects

The solar wireless charging system holds great potential to revolutionize the electric vehicle charging landscape, providing a sustainable and convenient solution.

2 Call to Action

Join the clean energy movement and adopt solar wireless charging systems to drive towards a greener and more sustainable future.

