**LITERATURE SURVEY**

# electric vehicles — Findings in the International Energy Agency (IEA) on Hybrid and Electric Vehicles (HEV)

# Electric vehicles have the potential to substitute for conventional vehicles and to contribute to the sustainable development of the transportation sector worldwide, e.g. reduction of greenhouse gas and particle emissions. There is an international consensus that the improvement of the sustainability of electric vehicles can only be analysed on the basis of life cycle assessment (LCA) including the production, operation and the end of life of the vehicles.

[Gerfried Jungmeier](https://ieeexplore.ieee.org/author/37085434634); [Jennifer B. Dunn](https://ieeexplore.ieee.org/author/37085434587); [Amgad Elgowainy](https://ieeexplore.ieee.org/author/37087834776); [Enver Doruk Özdemir](https://ieeexplore.ieee.org/author/37089656211);

**2)Review on Electric Vehicle: Battery Management System, Charging Station, Traction Motors. IEEE Access.**

Electric vehicles (EVs) are widespread, and their usage is increasing as a result of air pollution and rising fuel costs. EVs are quickly gaining popularity as a green means of transportation. By 2030, most cars will probably be battery-powered EVs. However, the development of EV power transmission is packed with important challenges and is an active topic of research. In EVs, the battery serves to store electrical energy. The DC-DC converter provides a direct current (DC) link between the battery and the inverter. A motor provides the transmission for the vehicle’s motion. Hence, this state-of-the-art provides exhaustive information about battery management systems (BMS), power electronics converters, and motors. Lithium-ion batteries are more efficient for EV applications, and boost converters and full bridge converters are commonly used in EVs. EVs use permanent magnet synchronous motors (PMSM) and induction motors (IM). The renewable energy-based charging station and the fast charging specifications are also clearly addressed for EV applications.

[Saravanakumar Thangavel](https://ieeexplore.ieee.org/author/37090017634); [Deepak Mohanraj](https://ieeexplore.ieee.org/author/37089790225); [T. Girijaprasanna](https://ieeexplore.ieee.org/author/37089291607)