

# A Systematic Review of Recent Trends and Developments of Regenerative Braking in Electric Vehicles

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**Abstract:** *Hydraulic braking system is employed in normal conventional vehicles. The regenerative braking method is implemented in Electric Vehicles (EV) which converts friction braking energy into electrical energy which results in an increase of the output energy for a given actual energy input to a vehicle thereby efficiency of the vehicle is improved. Aside from energy conservation, minimal wear, less consumption of fuel and more efficient braking are the merits of regenerative braking over mechanical braking. Energy recovery depends on the control strategies applied to electric motors used in the EV. In this paper, the various motors employed in EVs and their efficiency of energy conservation, and speed regulation are analyzed.*

**Keywords:** Regenerative Braking, Electric vehicle, BLDC Motor, PMSM motor, Induction motor