Sustainable automotive Engineering is a newly formed branch of Engineering which deals with finding out new alternatives to power automotive with increasing greenhouse emissions and global warming creeping upon us everyday.

Increasing the share of renewable energy used in the transport sector is seen as an important step to globally reduce greenhouse gas emissions and sustain the resources for future generations .

As the name suggests E-bike or Electric Bike is a 2 wheeler which runs on battery. Electric Vehicles in General a low center of gravity, which greatly improves handling, and adds rigidity, making the vehicle safer in a crash. It also opens up more space for passengers and cargo. It also requires less maintain ace and prove economical over long run.

**The chassis frame forms the backbone of a vehicle.**It is analogous to an animal's skeleton. The automotive

chassis is tasked with holding all the components togetherwhile driving and transferring vertical and lateral loads,

caused by accelerations, on the chassis through the suspensionand the wheels. It is considered as the most important part of the vehicle.

Chassis design is an essential step and must be done with extra care as faulty design can lead to catastrophic results.