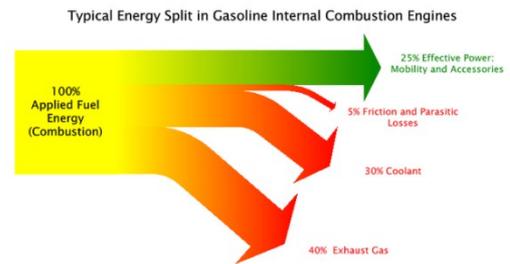


Electric vehicles

First of all, we must understand what electric vehicle is. It is a vehicle propelled by electric motor, using electrical energy stored in some kind of batteries or another storage device. If we compare electric propulsion to internal combustion propulsion we see, that E-motor give vehicle instant torque of 0 Rpm, creating strong and smooth acceleration.

Another very important comparison is energy efficiency.

While internal combustion engine has about 25-30% efficiency, EV on the other side transfers over 90% of energy into effective power. Electric vehicles are also significantly quieter than conventional internal combustion engines. They do not emit tailpipe pollutants, so they contribute to a large local air pollution reduction, and, in many cases a large greenhouse gas and other emissions reduction. But that depends on the method used for electricity generation.



Electric vehicles provide independence from foreign oil, which in several countries is cause for concern about vulnerability of oil price and supply disruption.

Electric vehicles widespread adoption faces several hurdles and limitations, including their purchase cost, lack of charging infrastructure (fast charging stations) and range anxiety (drivers fear that EV energy storage is not enough for their needs – due to limited range of most EV-s). Recharging can take a long time; however, for long distance driving, many cars support fast charging, that can give around 80% charge in half an hour, using public fast chargers.

Electric vehicle types

The term "electric vehicle" refers to any vehicle that uses electric motors for propulsion, while "electric car" generally refers to highway-capable automobiles powered by electricity. Low-speed electric vehicles, classified as neighborhood electric vehicles (NEVs) in the United States, and as electric motorized quadricycles in Europe, are plug-in electric-powered microcars or city cars with weight, power and maximum speed limitations. They are allowed to travel on public roads and city streets up to a certain posted speed limit,

which varies by country.

While an electric car's power source is not explicitly an on-board battery, electric cars with motors powered by other energy sources are generally referred to by a different name: an electric car carrying solar panels is a solar powered vehicle, and an electric car powered by a gasoline generator is a form of hybrid vehicle. Thus, an electric car that derives its power from an on-board battery pack is a form of battery electric vehicle (BEV). Most often, the term "electric car" is used to refer to battery electric vehicles

Types of EV's (refers to size):

- Electric cars
- Quadricycles
- Electric wheel chair
- Electric scooters
- Electric bikes, other

