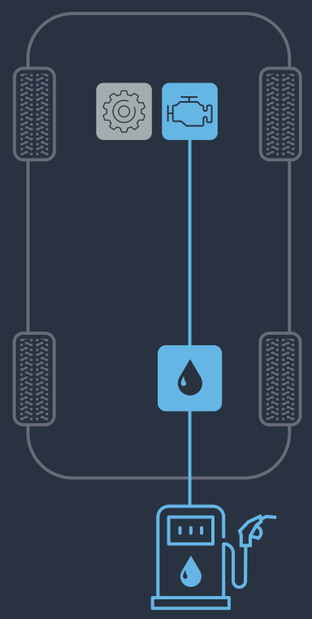
Swiss Re

From Internal Combustion Engine (ICE)
To Battery Electric Vehicle (BEV)

ICE

Sources of energy

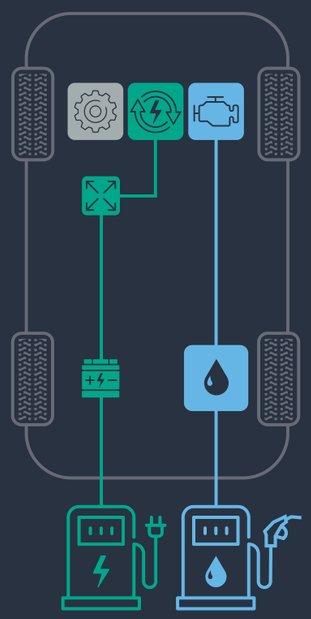
Traditional **internal combustion engine.**



HEV

Sources of energy

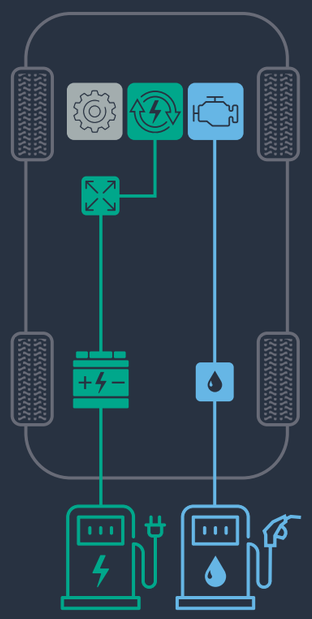
Hybrid Electric Vehicles have a combustion engine and an electric battery. The battery is charged using the combustion engine.



PHEV

Sources of energy

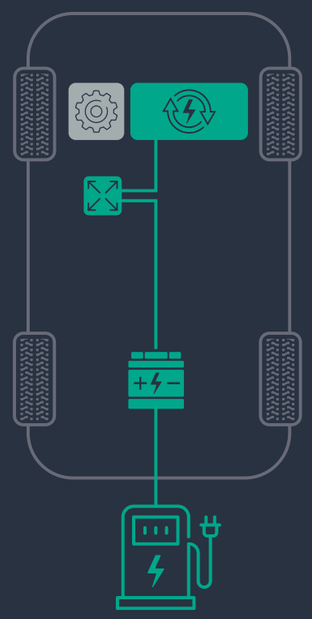
Plug-in Hybrid Electric Vehicles also have both a combustion engine and an electric battery. The battery is recharged from a plug.



BEV

Sources of energy

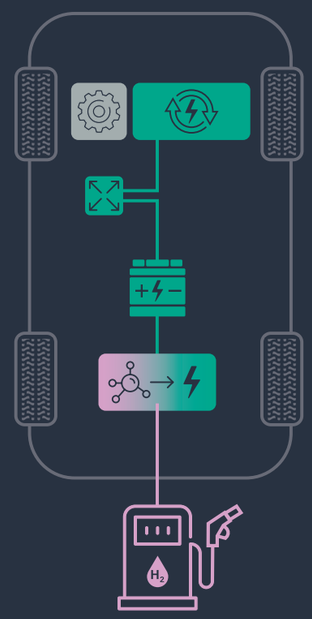
Battery Electric Vehicles do not have a combustion engine but are fully electric. The electric battery is again charged by plugging into the electric grid.



FCEV

Sources of energy

Fuel-Cell Electric Vehicles are fully electric but are powered by a fuel cell. The electricity is generated by using hydrogen from an on-board storage tank and oxygen from the air.



Gear box · Combustion engine · Fuel tank · H_2 tank · EV battery · Electric motor · Contol monitoring