

Main Differences

Hybrid Car

- Powered by an electric motor, which uses energy stored in batteries.
- Battery is charged through the internal combustion engine
- Contains an electric generator that transfers energy back to the battery
- Stores electricity for the motor
- Transmission transfers power from the engine to drive the wheels
- Fuel tank stores gasoline until its needed by the engine

Regular (Gasoline) Car

- Battery provides electricity to start engine and power vehicles' electronics
- Exhaust system channels the exhaust gases from the engine out through the tailpipe
- Fuel pump transfers fuel from tank to the engine's fuel system
- Metal tube or hose transfers fuel from tank to engine's fuel injection system
- Tank stores gasoline

Energy Efficiency Differences

Hybrid Car

- More gasoline efficient of all cars
- Made of lightweight materials, so it uses less energy
- Battery-Powered electric motor
- Electric motor does not produce any exhaust thus reducing smog levels.
- Typically get 48 to 60 mpg. About 20% to 35% better than a fuel-efficient gasoline powered vehicle

Regular (Gasoline) Car

- Uses more gasoline to run
- Gets less miles to the gallon
- Does not have electric motor

Hybrid Cars VS. Regular Cars



Environmental Impacts

Hybrid Car

- Reduce smog producing gases 15% - 21% according to Timothy Banas
- "Plug-in hybrid cars (PHEVs) offer drivers the ability to charge their cars from a 120-volt power source, essentially creating a second fuel source" (Banas).
- "...several states use mostly coal-burning power plants to produce electricity. In these cases, charging PHEVs produces power-plant emissions that can be just as harmful as tailpipe emissions, according to an Ohio State University study" (Banas).

Regular (Gasoline) Car

- According to Jenny Green, human health is affected from diesel engines' exhaust is all sorts of pollution such as soot and metal.
- "Cars and trucks emit carbon dioxide and other greenhouse gases, which contribute one-fifth of the United States' total global warming pollution" (Green).
- "...burning excessive amounts of fossil fuels, such as gasoline and diesel, has caused an increase of 0.6 degrees Celsius, or 1 degree F, in global temperatures since pre-industrial times..." (Green).

Retail Cost Differences

Hybrid Car

Average Retail Cost: \$23,000 - \$35,000

- According to CarsDirect, "most of these are sedan models, ranging in MSRP price from around **\$23,000 to \$35,000** for a brand-new model" (Cars Direct).

Regular (Gasoline) Car

Average Retail Cost: \$31,400

- According to Cars.com, "in 2017 the average price is \$31,400 after incentives" (Cars.com).

Works Cited

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