

Hybrid Benefits

The use of hybrid technology results in less fuel being used during portions of a vehicle's drive cycle. This translates into both fuel cost savings as well as a reduction in both smog related emissions and CO₂, a greenhouse gas.

Reduced Fuel Consumption

By utilizing an electric motor with a battery, hybrid-electric vehicles can dramatically reduce the amount of fuel used.

City MPG ratings for most hybrids are significantly better (more fuel efficient) than for similar model non-hybrids. This is due to the fact that a significant benefit of hybrid technology occurs in urban environments where the engine cycles on and off in stop/go traffic as well as reducing idling time. Owners of hybrids who drive mainly on highways may not achieve as significant fuel savings relative to comparable model non-hybrid vehicles.

Use our [Hybrid Savings Calculator](#) to estimate fuel and emission savings from a hybrid vehicle.

Reduced Emissions

A hybrid vehicle produces fewer greenhouse gas and tailpipe emissions than a similar conventional vehicle.

Greenhouse Gases

Carbon dioxide emissions are directly related to the amount of fuel consumed and the lower fuel consumption of hybrids results in a vehicle that has lower greenhouse gas emissions per kilometre travelled.

According to Environment Canada each litre of gasoline used will produce 2.36 kg of CO₂. For every 500 litres of fuel that aren't consumed as a result of driving a hybrid, over a tonne of CO₂ is not emitted into the atmosphere.

SMOG Related Tailpipe Emissions

Hybrids have much lower emissions of Nitrous Oxides (NO_x), Hydrocarbons (HC), Particulate Matter (PM) and Carbon Monoxide (CO). The reason is that hybrids substantially reduce the use of the combustion engine during a vehicle's acceleration phase and when idling.

The dramatic benefits of hybrids can be seen in the case of a plug-in hybrid. Depending on drive cycles it is possible for a short commute application of such a technology to be used for thousands of kilometers without the combustion engine ever being used. In effect, hybrids in this application would be a Zero Emission Vehicle at the tailpipe.