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Hybrid vs. Gas Cars: A Thorough Evaluation

The efficiency of various car types continues to be a topic discussed and debated worldwide. Today, many car dealerships offer a wide variety of vehicles to consumers. Different car types vary in their ability to be both fuel-efficient and eco-friendly simultaneously. That is why most automobile customers must decide whether they prefer a hybrid car or a gas car (Honda). A hybrid vehicle has both a gas engine and an electric motor, whereas a gas vehicle only has a standard gas engine (Progressive). It is important to remember that hybrid and gas cars are very different in nature. In order to make a decision between the two, one must consider the following criteria: cost of the vehicle, its impact on the environment, and its overall performance attributes.

Cost is one of the most important factors to examine when deciding between a hybrid vehicle or a gas vehicle. The initial, maintenance, and insurance costs of a vehicle all play a significant role when being compared to other vehicles in the market. The price difference between hybrid cars and gas cars can be significant. As of 2023, the average initial cost of a gas vehicle is $33,797, while the average initial cost of a hybrid vehicle is $39,040 (Meyer). Hybrid vehicles typically have a higher initial cost due to their advanced technology. Maintenance can also be more expensive due to the amount of technology involved (Progressive). Gas cars, on the other hand, can be far less expensive. They are cheaper to purchase than hybrid or electric

vehicles and don't require additional initial expenses like an at-home charging station. (Meyer). While hybrid cars often wield higher resale values, gas cars offer lower maintenance costs. Since all mechanics will know how to work on a traditional gas car, there is no need to worry about finding a specialist. This ultimately brings maintenance costs down (Giorgi). Evaluating the balance between long-term value and immediate savings is essential in determining the overall cost-effectiveness and long-term financial performance of a vehicle (Honda).

Another important factor is the vehicle's impact on the environment. The hybrid car appeal centers on fuel efficiency. Since a hybrid car can run on a battery some of the time, the driver does not need to fill up or worry about gas prices as often as they would with a typical gas car. By using less fuel, they are also reducing carbon emissions (Progressive). While the benefits of utilizing a hybrid car are not restricted to ecological advantages only, there is a significant decrease in gas release and is generally considered the more environmentally-friendly option (Honda). Because the gas engine in a hybrid is only running part of the time, the gas emissions are significantly less. (Giorgi). However, the battery that makes a hybrid possible might actually be just as bad as burning too much gasoline. Studies have shown that mining for the metals put into these batteries uses a good bit of energy and requires sterile, high-temperature refining processes that use even more energy. In 2011, the Low Carbon Vehicle Partnership commissioned a report that noted that electric and hybrid cars require many more carbon emissions to manufacture than gas cars (Tonn). Though, gas cars are commonly referred to as the less environmentally-friendly option. Internal combustion engines produce large amounts of harmful emissions when they are running. While each new model is more fuel-efficient than the last, gasoline-powered cars still utilize fossil fuels, release emissions into the air, and contribute

to toxic waste from used oil (Meyer). This can have dangerous effects on the environment and, when compared to a hybrid's emissions, may not be worth it in the long run. (Giorgi).

One final factor to consider is the vehicle's overall performance. Gas cars can reach higher top speeds than hybrid cars. Today, most gasoline-powered cars can travel anywhere from 250 to 350 miles per tank, offering a more extensive range of travel (Meyer). They also offer better agility in terms of acceleration and speed. While gas vehicles are the most common alternative, hybrid cars are gradually gaining recognition for their improved performance. Hybrid vehicles offer the advantage of higher mileage and cleaner energy, contributing to reduced fuel dependence (Honda). Generally, the combination of a gas engine and electric motor produces more overall horsepower for a hybrid vehicle. If a certain model is offered in gas and hybrid variations, the hybrid will almost always offer better power. They will also have quicker acceleration and are more responsive with the gas pedal. However, hybrid batteries have a lifespan just like any other type of battery. Most hybrid batteries need to be replaced every eight to ten years. This can be very costly and might not be as sustainable as it should be. While most gas cars have batteries that need to be replaced, they are reasonably inexpensive when compared to a hybrid battery (Giorgi). The choice between the two types ultimately depends on individual preference, with hybrid cars emphasizing sustainability and gas cars prioritizing power and affordability (Honda).

In conclusion, choosing between a hybrid and a gas car involves careful consideration of various factors, each impacting the overall experience of owning a vehicle. While hybrid cars demand a higher initial cost due to advanced technology, gas cars present a more affordable option. The vehicle's environmental impact is also an important factor, with hybrid cars emphasizing fuel efficiency and reduced carbon emissions when being used. When it comes to

performance, gas cars are known for their higher top speeds, extended travel range, and improved acceleration and agility. Hybrid vehicles come with the advantage of higher mileage and cleaner energy consumption, contributing to reduced fuel dependence. Ultimately, the choice between a hybrid and a gas car depends on individual preferences and priorities. By considering the criteria of each vehicle type, consumers can make an informed decision that aligns with their values and meets their specific needs.

Works Cited

Giorgi, Andrew. “Hybrid Cars vs. Gas Cars: Benefits and Drawbacks.” Endurance, 9 Feb. 2023. https://www.endurancewarranty.com/learning-center/general-info/hybrid-vs-gas-car-benefits-and-drawbacks/ Accessed 31 Dec. 2023.

Honda. “Benefits vs Drawbacks: Gas Cars or Hybrid Cars.” *Bob Howard Honda*, https://www.bobhowardhonda.com/electric-hybrid-versus-gas-car/ Accessed 31 Dec. 2023.

Meyer, Susan. “Gas vs. hybrid vs. electric cars: A complete guide.” *The Zebra*, 1 Sep. 2023. https://www.thezebra.com/resources/driving/gas-car-vs-hybrid-car-vs-electric-car/ Accessed 31 Dec. 2023.

Progressive. “Hybrid vs. Gas Cars.” *Progressive Insurance*, 31 Jan. 2023. https://www.progressive.com/answers/hybrid-vs-gas-cars/ Accessed 31 Dec. 2023.

Tonn, Chris. “The Problem with Hybrid Cars That No One Is Talking About.” *Reader’s Digest*, 20 Mar. 2021. https://www.rd.com/article/the-problem-with-hybrid-cars/ Accessed 31 Dec. 2023.