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Let's Bust Some Myths About Hydrogen

The case for hydrogen fuel cell vehicles and fueling is growing. But misinformation about its safety, viability, cost, and environmental impact persist.



Hydrogen gas is hazardous to store or use.

FACT:

Due to its **nontoxicity and low volatility,** hydrogen can be less hazardous than conventional fuels.





Unlike conventional fossil fuels, a hydrogen fuel spill is non-toxic to the environment.



When handled and maintained properly, pressurized gas storage is safe. A global multibillion-dollar industry has been producing and transporting hydrogen for decades.

MYTH:

Hydrogen-fueled vehicles are not a practical long-range solution.



Hydrogen has high energy density and can deliver a **comparable driving range to traditional fuels.**



Range @700 Bar Pressure: 644–805 km (400–500 mi.)

Time to Refuel: 3-4 Minutes



Time to Refuel: 30 Minutes-12 Hours





Hydrogen is the most abundant element in the universe.

MYTH:

Hydrogen is not environmentally friendly or sustainable.



Hydrogen refueling equipment can be added to existing refueling station infrastructure and deliver comparable refueling times to gas and diesel.

FACT:

There are several ways to generate hydrogen, and **most of them are more environmentally friendly than fossil fuels.**

Most hydrogen production processes reduce or eliminate CO₂ emission.



Gray Hydrogen: H_2 produced from fossil fuels emits a reduced amount of CO_2 .



Blue Hydrogen: CO₂ is captured and stored as hydrogen is produced from natural gas.



Green Hydrogen: Renewable electricity converts water to H_2 and O_2 , yielding no emissions.



Using hydrogen in a fuel cell creates no smoke or waste, and the only outputs are energy and pure water.

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(CO2)

FACT:

Carbon capture technology offers a way to sequester carbon and permanently store it (or use it) for industrial purposes.

MYTH:

Hydrogen is too expensive.

Conventional fuel remains cheaper today, but the price of green hydrogen continues to fall.





The price of green hydrogen is projected to be cheaper than natural gas by 2050.



High-quality components reduce the occurrence and cost of unexpected maintenance.

Working on developing safe, leak-tight systems? Contact our clean energy specialists to learn more about solutions for hydrogen fueling systems.

LEARN MORE ABOUT CLEAN ENERGY SOLUTIONS



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