

REDWOOD COAST ENERGY AUTHORITY

HYDROGEN FUEL CELL ELECTRIC VEHICLE (FCEV) FAQ SHEET

Answering some of your FCEV questions.

What is a fuel cell electric vehicle (FCEV)?

An FCEV uses compressed hydrogen gas as its fuel, which is then fed into a fuel cell in the car to combine with oxygen to form water. This process generates electricity, which is harnessed to run a motor, and water vapor, which is the only emission from an FCEV.

What are the advantages of FCEVs?

FCEVs are one of two types of vehicles classified as "zero emission vehicles" by the state of California (along with electric vehicles). FCEVs are quiet and fuel efficient, just like EVs, however, they have much longer ranges (up to 360 miles!) and take only 3-5 minutes to refuel.



2017 Honda Clarity FCEV

What FCEV models are available?

Toyota, Honda, and Hyundai all make fuel cell models.

Where can I buy an FCEV?

You can only buy FCEVs in areas with hydrogen fueling stations. Currently, most fueling stations are in Los Angeles and the Bay Area. Fueling stations are coming soon to the New York City, Connecticut, and Boston areas as well.

Will there be hydrogen fueling stations in Redding any time soon?

We hope so! RCEA is currently working on a grant from the California Energy Commission to identify sites for hydrogen fueling stations along the Interstate 5 corridor. We plan to identify a place for a state-funded hydrogen station within the next year.

How is hydrogen made?

There are a couple of ways. The first is through a process called electrolysis. This involves running an electric current through water to separate it into its components, hydrogen and oxygen. Clean power, such as solar energy, is frequently used to run this process. The other is called steam-methane reformation, which reacts steam with natural gas and a catalyst to make hydrogen.

Isn't hydrogen dangerous?

No more so than gasoline, natural gas, or any other combustible fuel that you use on a daily basis. FCEVs don't use a spark ignition to move as gasoline vehicles do, so in the highly unlikely event of a leak, there's no combustion source for hydrogen.

How can I learn more about FCEVs and hydrogen?

Visit the website for the California Fuel Cell Partnership, the statewide experts in FCEVs, at cafcp.org

