The Fuel Cell Electric Vehicle (FCEV)

FCEVs are available now in southern California and coming soon to a neighborhood near you.

Reduces Greenhouse Gas Emissions

- Gasoline: 50%
- H₂ from natural gas: 90%

Refuels Rapidly

taking only a few minutes and using familiar technology

Can travel 300 Miles

between refills

Emits Only Water

from the tailpipe

Uses Domestic Fuel

- natural gas
- biomass
- water (electrolysis)
- waste products

Operates Efficiently

- internal combustion: 20-30%
- FCEV: 60%

Runs Quietly

even at highway speeds, since there are no mechanical gears or combustion

Scales Up Easily

as fuel cells can be added to the stack to increase power

FCEVs generate electricity via the chemical reaction of combining hydrogen and oxygen into water.

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FCEV

Fuel Cell

Stack

Battery

Power Control Unit

Electric Motor

Fuel Cell Stack

Hydrogen Storage Tanks

Hydrogen from Natural Gas (Methane) or Renewables

Air In

Fuel In

Electric Current

Water and Heat Out

Water

Heat

Electric Current

FCEV

Efficiency

20-30%

60%

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FUEL CELL TECHNOLOGIES OFFICE