

What is a fuel cell?

Our fuel cell solution is a clean, efficient alternative to traditional combustion-based power generation, and is complementary to an energy mix consisting of intermittent sources of energy, such as solar and wind turbines.

What are the benefits of fuel cells?

Fuel cells have several benefits over conventional combustion-based technologies currently used in many power plants and vehicles. Fuel cells can operate at higher efficiencies than combustion engines and can convert the chemical energy in the fuel directly to electrical energy with efficiencies capable of exceeding 60%.

How can a fuel cell platform enable the energy transition?

Our platforms can enable the energy transition by producing hydrogen and storing it for when it's needed. Our fuel cell platform is designed to meet the changing energy strategies of growing communities and organizations on their journey to net-zero.

How do fuel cells work?

Fuel cells take energy like natural gas or hydrogen, combine that with air, and make electricity. The process is done via an electrochemical process, which doesn't burn fuel, making the process cleaner and more efficient than conventional methods.

How do fuel cells and batteries get their energy?

Fuel cells derive their power from hydrogen stored on the vehicle, and batteries obtain their energy from the electrical grid. Both hydrogen and electricity can be made from low or zero carbon sources including renewable energy and nuclear energy.

How does the Department of Energy help fuel cell development?

The U.S. Department of Energy (DOE) is working closely with its national laboratories, universities, and industry partners to overcome critical technical barriers to fuel cell development. Cost, performance, and durability are still key challenges in the fuel cell industry.

Energy Storage Platform. (Under development) FuelCell Energy delivers efficient, affordable, and clean solutions to enable a world empowered by clean energy. Our fuel cell platform is designed to meet the changing energy strategies of ...

FuelCell provides on-site power generation, combined heat and power, distributed hydrogen, carbon capture and hydrogen-based long duration storage. The company provides solutions on areas such as Produce Hydrogen -High-efficiency hydrogen production platforms and Decarbonize power Practical solutions for energy decarbonization The company today has fuel cell projects that run on natural gas and renewable biogas.

The co...

Produce clean hydrogen for use or storage from zero-carbon renewable or nuclear power, managing the peaks and valleys of renewables and providing flexibility to nuclear energy production. Create energy from any ...

The 14-megawatt baseload power project includes 10 fuel cells. It is the second largest fuel cell park in North America following only FuelCell Energy's Bridgeport, Connecticut, park, and it will supply power to thousands of area customers of ...

Pictured above: Fuel cell park located in Bridgeport, Connecticut Bridgeport Fuel Cell Park. In December 2023, the Bridgeport Fuel Cell Park in Connecticut marked its 10th anniversary since it started cleanly, quietly and ...

We have but two choices to power all&#173;electric vehicles: fuel cells or batteries. Both produce electricity to drive electric motors, eliminating the pollution and in&#173; efficiencies of the venerable ...

FuelCell Energy's Solid Oxide Electrolyzer Cell (SOEC) produces hydrogen at nearly 90 percent electrical efficiency without excess heat and can reach 100 percent efficiency when using excess heat. Hydrogen produced from ...

More than 50 years of fuel cell technology innovation and expertise. Patents are for FuelCell Energy, Inc., including our subsidiary Versa Power Systems, Inc. FuelCell Energy delivers efficient, affordable, and clean solutions to enable a ...

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