

Stationary

Fuel cells generate electricity using an electrochemical reaction, not combustion, producing zero or near-zero polluting emissions, depending on the fuel source.

Fuel cells are providing both primary power and back-up power to hundreds of sites across the country in a range of applications, including data centers, utilities, hotels, grocery stores, retail sites, hospitals, telecommunication towers and more.

Benefits

Fuel cells are reliable, efficient, quiet, and significantly cut carbon emissions.

Fuel cells can be installed as part of the electric grid, or in parallel to it, and are extremely reliable and generate high quality power, making them a valuable technology for data centers, hospitals, banks, call centers, or other facilities where power outages due to grid failure or weather are not an option.

Besides electricity, the only byproducts a fuel cell generates are water and useful heat. When fuel cells are sited near the point of energy use, heat can be captured for heating (called combined heat and power [CHP] or cogeneration), or even cooling and refrigeration, resulting in system efficiencies of 90% or greater. CHP allows users to reduce or eliminate the need for boilers or water heaters and their associated costs and emissions.

Emissions from fuel cells are so low that some states have exempted fuel cells from air permitting requirements.

Fuel cells are also much quieter than many incumbent technologies, allowing them to be sited indoors or outdoors, in urban or residential areas that may have noise restrictions. In addition, fuel cells are compatible with other energy technologies – whether renewable such as solar, wind or biogas, or traditional, such as natural gas or batteries.

Expanding Fuel Cell Markets

Businesses of all sizes are increasingly adopting cost-effective fuel cell technology to improve electrical power reliability, increase efficiencies, and reduce carbon emissions of operations. Fuel cells are helping customers save money on labor and energy costs as well as conserve water and fuel. The impressive list of fuel cell users keeps growing and includes Fortune 500 companies such as Walmart, IBM, Google, Coca-Cola, Verizon, Apple, eBay, AT&T, and more.