

**Toward a Renewable Power Supply:
The Use of Bio-based Fuels in Stationary Fuel Cells**

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This report presents constructive information about the opportunities and challenges associated with the use of bio-based fuels in stationary fuel cells. Recent research indicates that biomass power is the second-most used renewable electricity resource in the U.S. This research focuses on seven technologies that convert biomass feedstocks to useable fuels and the bio-based fuels they produce. It also examines the four main types of fuel cells currently under development and explores some of the key market, policy and economic issues that influence the development of bio-based fuel cell systems. Ultimately, this study is intended to serve as a resource for technology developers and policy makers to help ensure the development of a stationary fuel cell industry within which biofuels play an important and visible role.