

Hydrogen and Fuel Cells R&D FY 2021 Funding Opportunity Announcement

DE-FOA-0002446

These awards are funded by the U.S. Department of Energy's Hydrogen and Fuel Cell Technologies Office within the Energy Efficiency and Renewable Energy Office (EERE), with contributions from EERE's Advanced Manufacturing Office.

Selectee Name	Location (city, state)	Project Title	Federal Share
TOPIC 1: FUEL CELL R&D FOR HEAVY-DUTY APPLICATIONS; SUBTOPIC 1A – LOW-COST, DURABLE BIPOLAR PLATES AND INNOVATIVE, LOW-COST AIR MANAGEMENT COMPONENTS			
General Motors, LLC	Pontiac, MI	Fuel Cell Bipolar Plate Technology Development for Heavy Duty Applications	\$1,998,642
NeoGraf Solutions, LLC	Lakewood, OH	Development of Low Cost, Thin Flexible Graphite Bipolar Plates for Heavy-Duty Fuel Cell Applications	\$1,643,157
Plug Power, Inc.	Latham, NY	Fully Unitized Fuel Cell Manufactured by a Continuous Process	\$1,838,486
Raytheon Technologies Research Center	East Hartford, CT	Low-Cost Corrosion-Resistant Coated Aluminum Bipolar Plates by Elevated Temperature Formation and Diffusion Bonding	\$1,252,404
Treadstone Technologies Inc.	Princeton, NJ	Development and Manufacturing for Precious Metal Free Metal Bipolar Plate Coatings for Proton Exchange Membrane (PEM) Fuel Cells	\$1,415,162
TOPIC 1: FUEL CELL R&D FOR HEAVY-DUTY APPLICATIONS; SUBTOPIC 1B – INNOVATIVE, LOW-COST AIR MANAGEMENT COMPONENTS			
Caterpillar, Inc.	Mossville, IL	Leveraging Internal Combustion Engine (ICE) Air System Technology for Fuel Cell System Cost Reduction	\$2,000,000
Eaton Corporation	Southfield, MI	High Efficiency and Transient Air Systems for Affordable Load-Following Heavy-Duty Truck Fuel Cells	\$2,000,000
Mahle Powertrain, LLC	Plymouth, MI	Durable and Efficient Centrifugal Compressor-Based Filtered Air Management System and Optimized Balance of Plant (BOP)	\$1,600,000
R&D Dynamics Corporation	Bloomfield, CT	Foil Bearing Supported Compressor-Expander	\$1,600,000

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TOPIC 2: EFFICIENT AND INNOVATIVE HYDROGEN PRODUCTION; SUBTOPIC 2A – HIGH TEMPERATURE ELECTROLYZER MANUFACTURING R&D			
Cummins, Inc.	Milpitas, CA	Automation of Solid Oxide Electrolyzer Cell (SOEC) & Stack Assembly	\$5,000,000
Nextech Materials, Ltd.	Lewis Center, OH	Low-Cost Manufacturing of High Temperature Electrolysis Stacks	\$3,333,257
TOPIC 2: EFFICIENT AND INNOVATIVE HYDROGEN PRODUCTION; SUBTOPIC 2B – INNOVATIVE HYDROGEN PRODUCTION FROM BIOMASS WASTE STREAMS			
Pennsylvania State University	University Park, PA	Novel Microbial Electrolysis Cell Design for Efficient Hydrogen Generation from Wastewaters	\$1,000,000
Southern Company Services, Inc.	Birmingham, AL	Novel Microbial Electrolysis System for Conversion of Biowastes into Low-cost Renewable Hydrogen	\$997,897
TOPIC 3: HIGH-FLOW FUELING APPLICATIONS; SUBTOPIC 3A – DOMESTIC SUPPLY CHAIN FOR HIGH-FLOW HYDROGEN FUELING STATIONS			
Czero, Inc.	Fort Collins, CO	Advanced High Throughput Compression System for Medium- and Heavy-duty Transportation	\$2,729,167
Gas Technology Institute	Des Plaines, IL	Cost-Effective Pre-Cooling for High-Flow Hydrogen Fueling	\$1,998,186
Nikola Corporation	Phoenix, AZ	Autonomous Fueling System for Heavy-Duty Fuel Cell Electric Trucks	\$2,010,214
TOPIC AREA 4: COST AND PERFORMANCE ANALYSIS FOR FUEL CELLS, HYDROGEN PRODUCTION, AND HYDROGEN STORAGE			
Strategic Analysis, Inc.	Arlington, VA	Fuel Cells Analysis	\$1,499,960
		Hydrogen Production Analysis	\$999,998
		Hydrogen Storage Analysis	\$999,998