

# Fuel Cell "Green Machine" Competition

CLEAN FUEL CELLS USED BY PROGRESSIVE STUDENTS TO  
POWER FUEL CELL "GREEN MACHINE" COMPETITION.

## FUEL CELL "GREEN MACHINE" 2010 ANNOUNCEMENT



**NOW ACCEPTING APPLICATIONS FOR THE NEXT Fuel Cell "Green Machine" Competition.**

**CLEVELAND,** FirstFuelCells.com, a distributor of practical hydrogen fuel cells for personal and educational use, announces exciting new developments for 2010-2011 "Green Machine" competition, designed to encourage young minds to master hydrogen fuel cells.

FirstFuelCells.com developed the first Fuel Cell "Green Machine" Pilot Program in 2006-2007. Where, thirty (30) FIRST Robotics high school teams from twenty (20) states, 1000 people demonstrated the use of fuel cells in competition robots. "Hydrogen can be produced from a wide variety of abundant and renewable energy sources. It is our goal to advance the understanding and use of this clean and efficient energy source" said Diane Sadowski, President of FirstFuelCells.com. "We truly believe that hydrogen and fuel cells hold the key to a clean energy future, and we want young minds to learn how to use these new tools to build a cleaner tomorrow" added Sadowski.

FirstFuelCells.com, Fuel Cell "Green Machine" Competition required registered teams to develop a fundamental understanding of fuel cell technologies and utilize their high school labs, corporate sponsors' resources, and supporting college facilities to integrate fuel cell technology into a diverse mix of robots & remote controls. The competition is being made possible through a wide variety of grassroots volunteers, organizations, and corporate sponsorship. The primary team of sponsors and supporters responsible for its success are FirstFuelCells.com, Wright Fuel Cell Group, Cuyahoga Community College, Graftech, Cleveland Institute of Art, NASA, Ohio Fuel Cell Coalition, South Carolina Hydrogen Fuel Cell Alliance, Ohio Aerospace Institute, CASE Advanced Power Institute Department of Chemical Engineering, Department of Materials Science & Engineering, CASE School of Engineering, CASE Western Reserve, TDM Fuel Cell Technology, Kettering University, TMI Technology Management Inc., Theta Squared, DLS Design Studio, Randolph Publishing, TheEliteTutor.com, PGM Diversified Ind., Change Management, The Entrepreneurs EDGE, Kumon Strongsville, Benjamin Calkins LPA, and Praxair.

FirstFuelCells.com is currently planning a competition for 2010-2011. Proposals have been submitted for the expansion of the Fuel Cell "Green Machine" program. **We are currently accepting "Team Application Forms", the deadline for submission is May 1, 2010. The deadline for purchasing the fuel cell competition kit is July 1, 2010 . Manufacturing of kits start July 1, 2010 and kits start shipping throughout September. Please e-mail [diane@firstfuelcells.com](mailto:diane@firstfuelcells.com) with your contact information and request an application.** Qualified team applicants will be notified by e-mail by second week of May. All communications are sent to the team's coach. The first 50 accepted team applications (schools or clubs) will play the next "Green Machine" competition.

The FirstFuelCells.com "Green Machine" program is an exciting competition-base education system designed to encourage young minds to master hydrogen safety, polymer electrolyte membrane (PEM) fuel cell construction, application, and maintenance concepts. Students engage as mentored teams in innovation using science and engineering with today's fuel cell technologies. The high school level teams conduct the competition challenge in four stages and are judged based on reports submitted for each stage. Each team collectively contributes to the overall knowledge base, promotion and development of the program's practical use of PEM fuel cells.

### Five Stage Fuel Cell "Green Machine" Competition

**Timeline: September through December:** Stage 1 through 4 is played at registered high schools /and or clubs

- Stage 1 : Research & Development
  - Stage 2 : Build & Test a Fuel Cell System
  - Stage 3 : Insertion of a Fuel Cell System into Robotic Unmanned Vehicle
  - Stage 4 : Game Design
- (Currently in development is a "Four Season, Hydrogen Safe, Outdoor Game Floor")

### About FirstFuelCells.com

FirstFuelCells.com is a distributor of practical hydrogen fuel cells for personal and educational use. Hydrogen has the highest energy content per unit weight of any known fuel, and can be produced from a wide variety of abundant and renewable energy sources. It is our goal to advance the understanding and use of this clean and efficient energy source. We truly believe that hydrogen and fuel cells are the key to a clean energy future. To learn more about FirstFuelCells.com and it's products visit [www.FirstFuelCells.com](http://www.FirstFuelCells.com).

**For more information:  
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