



## Department of Energy

Washington, DC 20585

Dr. Robert W. Shaw, Jr.  
HTAC Chair  
P.O. Box 1299  
Center Harbor, New Hampshire 03226

Dear Dr. Shaw:

Thank you for your March 2011 letter to Energy Secretary Chu transmitting the 2010 Annual Report of the Hydrogen and Fuel Cell Technical Advisory Committee (HTAC). We appreciate receiving the committee's recommendations for improving the hydrogen and fuel cell programs in the Department, and for reporting on the key domestic and international achievements during 2010. We greatly value the input of the committee, and look forward to more feedback as you continue to evaluate the progress and challenges in hydrogen and fuel cells.

Although the Department's Fiscal Year 2012 budget request prioritizes technologies with advanced transportation choices with immediate impacts and at less cost than hydrogen fuel cells (such as biofuels and plug-in hybrids), we are still committed to our continued support of the technology. From 2007 to 2010, the Department invested more than \$1 billion in hydrogen and fuel cells technologies, enabling much progress in the field. These investments along with others over the last several years resulted in a decline in other programs' budgets. The 2012 request rebalances our portfolio overall and hydrogen and fuel cell technologies are part of the portfolio.

For example, the Department provided an additional \$42 million under the American Recovery and Reinvestment Act to support near-term fuel cell deployments in key emerging markets such as backup power and forklifts. These funds will enable the deployment of up to 1,000 fuel cells and help create domestic jobs immediately in fuel cell manufacturing, installation, and support service functions. This funding will also help develop a supply base that could eventually support automotive applications and enable domestic leadership in a growing high tech sector. In fact, our fuel cell project was one of the first underway in the Department, and we have already delivered 300 fuel cells. As these projects come to fruition with the participation and over 50 percent cost-share of major companies such as Sprint, AT&T, FedEx, Whole Foods, Sysco, Wegmans and Coca-Cola, fuel cells are starting to reach the mainstream.

Moving forward, industry and state governments are taking the reins bolstered by business case studies and market successes demonstrated by the Department's Recovery Act and market transformation projects. We are encouraged by the progress in places like Hawaii and California where the economic viability of hydrogen and fuel cells are making an impact.

Maintaining agency and international partnerships are also important. Partnerships with other agencies facilitate the early market introduction of hydrogen and fuel cell technologies, increase information and performance data sharing, and encourage state and local involvement in the public sector. These partnerships also accelerate market transformation by raising public awareness, building end users' technical expertise and increasing market demand.



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Since 2007, we have had a longstanding and fruitful partnership with the Department of Defense (DOD) that has led to more than 100 fuel cells deployed with applications ranging from backup and prime power to forklifts. This vital partnership with DOD, as well as the Department of Commerce, Department of the Interior, the Department of Transportation, the Federal Aviation Administration, National Aeronautics and Space Administration, the Department of Agriculture, and the General Services Administration will continue to play an important role in the advancement of fuel cells technologies.

The Department also continues working with our international partners to solve critical issues that enable commercialization, such as facilitating the technical advancements that are needed in order to build hydrogen infrastructure at a large scale. The Department, through the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE) and in partnership with the National Renewable Energy Laboratory and the California Fuel Cell Partnership, conducted an international workshop bringing together business and government to help identify potential policies, technologies, and incentives that enable successful hydrogen fuel retailers to support a growing fuel cell market as the infrastructure expands. This is one of the key challenges to hydrogen and we continue to support innovative research to help bring costs down.

Again, we greatly appreciate your efforts at compiling recommendations to increase development in the hydrogen and fuel cell arena, and look forward to receiving input from the committee as it continues in its advisory role for Secretary Chu. As HTAC reports through the Assistant Secretary of Energy Efficiency and Renewable Energy, I will engage with you further, as you have requested. Thank you again for your dedicated service to the Department and your valuable recommendations.

Sincerely,

*Signed June 7, 2011*

Henry Kelly  
Acting Assistant Secretary  
Energy Efficiency and Renewable Energy