

Five Reasons to Restore Hydrogen and Fuel Cells in FY 2010 Budget

1. Keeps America competitive

- Hydrogen and fuel cell technologies are a core competency in the United States
- A DOE study estimates a net increase of 361,000 to 675,000 jobs¹
- Other countries are investing and setting aggressive commercialization goals; the US needs to keep pace, to compete in a global market.

2. The march to the commercial market has already started

- Billions of dollars of industry and government investments are bearing fruit
- A national industrial hydrogen infrastructure exists, and vehicle fueling stations are operating in 24 states
- Automakers have already started placing fuel cell vehicles with customers
- Fuel cell products are entering other early markets, with federal support
- Transit agencies have fuel cell buses in regular passenger service
- Industry remains committed even in difficult economic times

3. Only with fuel cells can we meet our national greenhouse gas reduction targets

- Serious commitment to low carbon future (80% CO₂ reduction by 2050²) depends on near-zero emission technologies
- FCVs reduce GHGs by 50% or more compared to gasoline vehicles, even when hydrogen fuel is made from natural gas³
- A National Research Council study⁴ found that we can nearly eliminate gasoline use in the light-duty vehicle fleet, if fuel cell vehicles are a major part of the vehicle fleet
- Other technologies will contribute, but the deepest cuts in oil use and GHGs would come from fuel cell vehicles⁵

4. Fuel cells are a smart choice in a portfolio of solutions

- FCVs are full-function, long-range, zero-emission vehicles that are refueled in minutes with a low-carbon fuel. No other option provides all these benefits
- We must be investing today to build the FCV fleet for long-term energy and environmental security
- Supporting market entry for fuel cells of all kinds advances U.S. energy efficiency, job creation and technology development at a fraction of the per unit cost of research

5. It's smart to continue a proven program

- Biofuels, BEVs, PHEVs and FCVs all need technology development and infrastructure deployment. It's impossible to say that one is closer to commercialization than another
- The hydrogen program is a success by DOE's own assessment of progress to goals
- Abandoning the program is a waste of the investment made to date

¹ Effects of a Transition to a Hydrogen Economy on Employment in the United States, July 2008

² http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-at-the-National-Academy-of-Sciences-Annual-Meeting/

³ CARB Low Carbon Fuel Standard, <http://www.arb.ca.gov/regact/2009/lcfs09/lcfsisor1.pdf>

⁴ Transitions to Alternative Transportation Technologies: A Focus on Hydrogen, NRC 2008

⁵ Ibid