

FY09 Budget Request Highlights

The Administration's FY09 budget request includes the funding request for the Department of Energy. Overall, the resources allocated to vehicle technologies and hydrogen technologies programs do not match the Administration's rhetoric about advanced vehicle technology and energy security. And while energy storage and hybrid propulsion programs are slated for increases, they are not of the magnitude that the effort requires, or that H.R.6 outlined.

There is also a significant reduction (\$64 million) and reorganization of the Hydrogen Technologies program, with all technology validation, education and codes and standards activities being moved into the Vehicles Technology program. The Department plans to realign the program to focus on increasing on-board hydrogen storage and reducing the cost of fuel cells, particularly through low cost polymer components.

Congressional reaction to the budget, as a whole, has not been favorable and it is fully expected that Congress will build its own budgets.

Vehicle Technologies

According to DOE, increasing R&D for plug-in hybrid technologies (including high energy batteries, demonstrations, power electronics and motors, is a key activity in the FY09 budget. "Improved hybrid-electric systems and components can provide significant improvements in fuel economy even beyond the current generation of hybrids, and technologies optimized for plug-in hybrids will allow displacement of petroleum by electricity in passenger vehicles in the mid- and long-term."

In Vehicle Technologies, the Hybrid Electric Systems program contains the majority of electric drive subprograms. The request for Energy Storage R&D subprogram, which includes battery research for battery electric, hybrids and plug-in hybrids, is \$50.9 million.

The department sees the vehicles program becoming a "technology integrator" to maximize the synergies between hybrid, fuel cell, and alternative fuels. The Technology Validation program, formerly in the Hydrogen account, is now funded at \$15 million in Technology Integration line of the Vehicle Technologies account.

(dollars in thousands)

	FY 2007 Current Appropriation ¹	FY 2008 Original Appropriation	FY 2008 Adjustment s ²	FY 2008 Current Appropriation	FY 2009 Request
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Vehicle Technologies

Hybrid Electric Systems	0	95,000	-865	94,135	103,361
Vehicle Systems	13,006	0	0	0	0
Hybrid and Electric Propulsion	59,240	0	0	0	0
Advanced Combustion Engine R&D	48,346	45,000	-410	44,591	33,600
Materials Technology	29,044	40,000	-364	39,636	36,903
Fuels Technology	18,413	18,000	-164	17,836	16,122
Technology Integration	0	17,000	-154	16,845	31,100 ⁱ
Innovative Concepts	500	0	0	0	0
Technology Introduction	15,031	0	0	0	0
Total, Vehicle Technologies	183,580	215,000	-1,957	213,043	221,086

The request for the 21st Century Truck Partnership (21CTP), the cooperative effort between the commercial vehicle (truck and bus) industry and major Federal agencies to develop technologies for safer and more efficient commercial vehicles, \$25,195 is also a decrease from FY08 funding, \$ 29,792– which was a substantial decrease from the FY07 level (\$42,021).

Hydrogen Technologies

In the Hydrogen Request, Storage R&D and Fuel Cell Stack Component R&D levels are substantially increased to reflect the revised program focus. Hydrogen Production and Delivery is zeroed out.

	FY 2007 Current Appropriation ³	FY 2008 Original Appropriation	FY 2008 Adjustment s ⁴	FY 2008 Appropriation	FY 2009 Request
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Hydrogen Technology

Hydrogen Production and	33,702	40,000	-364	39,636	0
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¹ Excludes amounts transferred to the Science appropriation for carrying out SBIR / STTR. All subsequent tables in this program also reflect this transfer.

² Reflects amounts rescinded by General Provision, Section 312, of the Omnibus Appropriations Act, 2008.

³ Excludes amounts transferred to the Science appropriation for carrying out SBIR/STTR. All subsequent tables in this program also reflect this transfer.

⁴ Reflects amounts rescinded by General Provision, section 312, of the Omnibus Appropriations Act, 2008.

Delivery R&D					
Hydrogen Storage R&D	33,728	43,900	-399	43,501	59,200
Fuel Cell Stack Component R&D	37,100	44,000	-400	43,600	62,700
Technology Validation	39,413	30,000	-273	29,727	0 ⁵
Transportation Fuel Cell Systems	7,324	8,000	-73	7,927	6,600
Distributed Energy Fuel Cell Systems	7,257	7,700	-70	7,630	10,000
Fuel Processor R&D	3,952	3,000	-27	2,973	0
Safety and Codes and Standards	13,492	16,000	-146	15,854	0 ^a
Education	1,978	3,900	-35	3,865	0 ^a
Systems Analysis	9,637	11,500	-105	11,395	7,713
Manufacturing R&D	1,928	5,000	-46	4,954	0
					146,213
Total, Hydrogen Technology	189,511	213,000	-1,938	211,062	3

Vehicle Technologies chart: ¹ Includes activities previously funded in the Hydrogen Program (Technology Validation, Safety and Codes and Standards, and Education).

⁵ Funding for this activity appears in the Vehicle Technologies budget starting in FY 2009.