

# TECHNOLOGY DEVELOPMENT PROJECT FACT SHEET

## FF003: H-CNG VEHICLES – FORD F150 30/70 H-CNG TRUCK

The F-150 is a model year 2000 regular cab pickup truck equipped with a factory CNG engine and 3600 psig carbon steel fuel tanks with an 85-liter capacity. It was modified by NRG Technologies in Reno, Nevada to run on a blend of CNG and up to 30% hydrogen (by volume). Modifications included supercharging, ignition modifications and exhaust gas recirculation. Upon completion, the vehicle was placed in service in the APS fleet in June 2001.



Testing on low percentage blend fuel was conducted on the vehicle resulting in no mechanical, operating or safety problems. With 50,000 miles of operation, the maintenance cost for the vehicle was \$.032 per mile. The F-150 demonstrated consistent and reliable performance with very low emissions.

MILES PER GALLON (MPG)		
30% HCNG	FTP	13.5
Gasoline	FTP	14.3
15% HCNG	FTP	13.27

Fuel Blend	Test	Emission Test Results (gram/mile)					
		NMHC	CO	NOX	CO <sub>2</sub>	Non-CO <sub>2</sub> /CO Emissions	CO <sub>2</sub> /CO Emissions
30% HCNG	FTP	0.024	0.267	0.094	437.4	0.118	437.667
15% HCNG	FTP	0.017	0.379	0.118	469.2	0.135	469.579
Gasoline	FTP	0.122	1.644	0.17	620.0	0.292	622.3

