

New Cost Tool Helps Fleet Managers Evaluate Hybrid Vehicles

August 4 2005

A new software tool that compares the costs and emissions of hybrid electric vehicles (HEVs) to conventional vehicles is now available for government and business fleet managers interested in reducing fuel costs and protecting air quality.

new software tool that compares the costs and emissions of hybrid electric vehicles (HEVs) to conventional vehicles is now available for government and business fleet managers interested in reducing fuel costs and protecting air quality.

The tool, called the Hybrid Electric Vehicle Fleet Cost and Benefits Calculator Tool, was developed by the U.S. Department of Energy's (DOE's) National Renewable Energy Laboratory (NREL), the Center for a New American Dream, and the American Council for an Energy Efficient Economy (ACEEE) with funding from DOE's Office of Energy Efficiency and Renewable Energy's Clean Cities activity. It is available for free at www.eere.energy.gov/cleancities/hev/cost_calc.html or www.newdream.org/hev/.

"Fleets have a large influence on how much oil our nation uses and HEVs are an important option for fleets to consider," said Stan Bull, NREL's Director of Science and Technology.

The use of hybrid vehicles in the United States has grown rapidly in the last few years. New hybrid vehicle registrations reached nearly 84,000 in 2004, while sales of hybrids in the first five months of 2005 reached

73,000. Public and private fleets are contributing to this surge in popularity. More than 90 city, state and county governments, and some private fleets, use light duty hybrids according to data collected by the Center for a New American Dream.

While the retail price of HEVs can exceed that of their conventional counterparts by several thousand dollars, they can save money when the total cost of vehicle ownership is considered. Federal and state tax incentives can help offset the financial impact for taxable entities, and higher resale values, strong warranties and lower fuel costs can reduce cost of ownership. HEVs also are easier on the environment because they produce fewer emissions and get better fuel economy than conventional vehicles.

"The cost calculator tool confirms that in most cases the higher purchase price of a hybrid is offset by fuel savings and better resale values, yet the greatest advantage of such vehicles remains the lessening of global warming gases and a reduction of our nation's addiction to oil," said Betsy Taylor, president, Center for a New American Dream.

The Hybrid Electric Vehicle Fleet Cost and Benefits Calculator Tool, with fleet cost estimates developed in consultation with PHH Arval, helps fleet purchasers assess potential savings from purchasing HEVs by taking into account purchase price, fuel costs, repair and maintenance costs, resale value, and applicable tax incentives. For example, the tool indicates that at the current average fuel price of \$2.20 per gallon, hybrids are often the most cost-effective vehicle choice. If fuel prices rise to \$2.50 to \$3.00 gallon advanced hybrid vehicles will become even more financially beneficial. Other factors, such as the percentage of city driving and the total number of miles driven per year can also increase the cost-effectiveness of hybrid vehicles.

Cities and counties across the country are grappling with the challenges

of poor air quality and growing emissions of global warming gases. The cost calculator tool will enable fleet owners to adopt technologies that help mitigate emissions of carbon dioxide, carbon monoxide, nitrogen oxides, particulate matter, and hydrocarbons. A comparison of a compact hybrid sport utility vehicle to a conventional compact sport utility vehicle shows a savings of more than \$1,400 and 37,000 pounds of carbon dioxide over seven years.

NREL also provides a cost comparison tool for fleets considering alternative fuel vehicles through the Alternative Fuels Data Center at www.eere.energy.gov/afdc/ .

DOE's Clean Cities activity encourages the implementation of alternative fuels and advanced vehicle technologies that can help reduce our nation's dependence on imported petroleum. The program works through nearly 90 public/private coalitions to promote alternative fuels and vehicles, fuel blends, fuel economy, hybrid vehicles, and idle reduction. For more information go to: www.eere.energy.gov/cleancities

.

Citation: New Cost Tool Helps Fleet Managers Evaluate Hybrid Vehicles (2005, August 4) retrieved 29 June 2024 from <https://phys.org/news/2005-08-tool-fleet-hybrid-vehicles.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.