October 22, 2010

David Kolman, editor of Fleet Magazine published an article on Electric Vehicles in the October edition of the periodical. He writes in the print edition:

Commercial Electric Vehicles

Electric vehicles are being manufactured in a variety of technologies, shapes and sizes, suited to a wide range of uses.

Light duty electric vehicles for the commercial industry have advanced into a reliable and marketable product. Electric vehicles are being manufactured in multiple configurations and for diverse applications. The evolution of electric vehicle technology is ever going forward, and developments make electric traction technology already suitable for many applications.

(Resources that were most helpful in providing information and material for this article included Yaron Vorona, TREM Center Director, Institute for the Analysis of Global Security; the Electric Drive Transportation Association; and Robert Stüssi, mobility consultant and president of the European Association for Battery, Hybrid and Fuel Cell Electric Vehicles, and vice president of the World Electric Vehicle Association.)

Full text here: http://www.fleetmag.com/print/Fleet-Maintenance/Commercial-Electric-Vehicles/1$4562

In his blog, Kolman continues with the following

Electric vehicle technologies

During my research for the feature on commercial electric vehicles that will appear in Fleet Maintenance Magazine's October issue of, I had a conversation with Yaron Vorona, director of the TREM Center, Institute for the Analysis of Global Security (IAGS), about electric vehicle technologies.

TREM (Technology & Rare Earth Metals) and IAGS are essential parts of the clean technology and defense industries.

The mission of the IAGS TREM Center (tremcenter.org) is to create a forum where policymakers and companies from the minerals, defense technology, cleantech, automotive and finance sectors can advance policies that ensure secure and diverse supply chains for technology metals.

The TREM Center hosts regular meetings on policy developments in Washington, DC, and abroad. In addition to holding annual TREM conferences in Washington, it holds periodic briefings for members of Congress, their staffs and various branches of the Administration.

The TREM Center also conducts research and issues reports on related issues and convenes stakeholder task forces.

The Institute for the Analysis of Global Security is a non-profit organization which directs attention to the strong link between energy and security, and provides a stage for public debate

on the various avenues to strengthening the world's energy security.

Basically, there are four main types of electric vehicles: pure electric vehicles (also known as battery electric vehicles); hybrid vehicles; plug-in hybrid electric vehicles; and fuel cell vehicles.

I asked Vorona which of these four technologies holds more promise than the others.

In the short term, he said he believes the best technology lies with plug-in hybrid flex-fuel vehicles. Plug-in hybrid electric vehicles allow the driver to travel shorter distances (30-50 miles, depending on the battery) using battery power only. After that, propulsion is provided by an internal combustion engine.

"Using flex-fuel technology gives the driver or fleet manager the power to choose what fuel to use on any given day, depending on the price and availability of fuel," Vorona told me. "The decision at the pump will sound something like this: 'Do I want to fill up on Saudi oil, American corn, Brazilian Sugar, Israeli algae or Canadian switchgrass today?'"

This kind of choice only costs $100 extra per car to produce flex-fuel vehicles, according to Vorona.

"In the medium term, the future is electric," he said. "Battery electric vehicles will likely be the driving force behind transportation - pardon the pun. Advances are constantly being made to charge times, energy densities and lifespan in terms of both time and charge/discharge cycles."

Full text here: http://www.fleetmag.com/interactive/2010/10/01/electric-vehicle-technologies/