Navistar Continues to Lead the Industry with Comprehensive Line-Up of Alternative Energy Vehicles

Purpose-Built Commercial Trucks, Leading Edge Technologies Demonstrate Commitment to Customers Seeking Alternative Fueled Vehicles

INDIANAPOLIS (March 8, 2011) – At this week's Green Truck Summit at the National Truck Equipment Association (NTEA) Work Truck Show, Navistar showcased a number alternative fueled vehicles for the work truck market.

On display at the event were the Class 2-3c all-electric eStar™ truck, an International® DuraStar®™ Hybrid, and an International® WorkStar® equipped with a compressed natural gas (CNG) powertrain.

"Work truck customers have diverse business needs and are looking for a wide range of truck features to help perform their jobs," said Jim Hebe, senior vice president, North American sales operations, Navistar. "We're proud to offer the broadest, most energy-efficient line of trucks in the industry, helping deliver real-world savings to the bottom line."

eStar All-Electric Commercial Truck

The latest in Navistar's commercial truck line-up is the all-electric eStar truck, the first purpose-built medium-duty commercial vehicle to receive U.S. Environmental Protection Agency (EPA) certification as a clean fuel fleet vehicle as well as California Air Resources Board (CARB) certification as a zero emissions vehicle.

This Class 2c-3 eStar all-electric truck—the first in its category—has a range of 100 miles per charge, making it ideal for many urban applications. When it returns to its home base at the end of the day, it can be plugged in and fully

recharged in approximately 6-8 hours.

Unlike other electric trucks that are reconfigured models of fossil-fuel trucks, the eStar truck has been purpose-built for electric power, allowing for a distinct competitive advantage with a low center of gravity (the battery is between the frame rails, not mounted on top) and a 36-foot turning circle. The eStar is engineered with superior aerodynamics, a walk-through cab and a quick-change cassette-type battery that can be swapped out in 20 minutes, enabling around-the-clock operation. It is capable of carrying payloads up to two tons.

With zero tailpipe emissions, each eStar truck can reduce greenhouse gas emissions by as much as 10 tons annually. Drivers will be able to experience the ultimate in ergonomic design as the windshield provides nearly 180-degree visibility, the low-floor design provides easy loading/unloading and the noise level is near zero, which makes this nimble vehicle ideal for urban areas facing noise challenges.

The eStar all-electric truck transitioned from concept to reality in August 2009, when President Barack Obama visited Navistar's manufacturing plant in Indiana to announce $39.2 million in American Recovery and Reinvestment Act funds from the Transportation Electrification Initiative administered by the U.S. Department of Energy. A year later, Navistar completed testing and validation, developed and delivered prototype vehicles, and received EPA and CARB certifications. The eStar meets all Federal Motor Vehicles Safety Standards (FMVSS) and Navistar is currently taking orders and building these all-electric trucks.

International DuraStar Hybrid

While the International DuraStar Hybrid truck looks like an ordinary work truck, it can deliver dramatic fuel savings of up to 60 percent in utility-type

applications, when the MaxxForce® engine often can be turned off and electric power still operates the vehicle.

Beyond the fuel savings potential, the DuraStar Hybrid produces zero emissions when auxiliary equipment (like an overhead utility bucket) operates solely on the truck's battery power.

The International DuraStar Hybrid diesel-electric hybrid utility truck is powered by the MaxxForce® DT diesel engine in conjunction with a mild parallel-type, diesel-electric hybrid architecture, developed by Eaton Corporation, which leads to less diesel fuel use and fewer emissions.

The hybrid-electric system utilizes a regenerative braking system to recover energy normally lost during braking, stores the energy in batteries and adds power back into the driveline during starts and acceleration. This capability makes the truck more efficient in standard driving, particularly in city and stop-and-go driving. When the truck reaches a work site, the hybrid system can power booms, aerial devices and other tools needed at the location for up to 90 minutes without the engine running, significantly reducing noise, emissions and fuel costs.

Natural Gas International WorkStar

During the Green Truck Summit, Navistar demonstrated a natural gas powered International WorkStar vehicle. The WorkStar features a DT-466 based natural gas engine developed in conjunction with Emissions Solutions Incorporated (ESI) of McKinney, Texas. ESI offers engine ratings from 175-300 horsepower with 460-860 lb.-ft. torque. The engines are capable of supporting both liquefied and compressed natural gas. The natural gas powered WorkStar model with either frame mounted or back-of-cab mounted natural gas tanks is available for customer ordering through International truck dealers

and will be built at Navistar’s Garland Assembly Plant and Truck Specialty Center in Garland, Texas.

Like the other vehicles in Navistar’s portfolio, the natural gas-powered WorkStar will be fully certified to meet 2010 emissions.

“The utility industry is very conscious about their environmental image,” Hebe added. “Recognizing the abundant supply of natural gas in the United States and Canada, we felt very compelled to invest in our products in such a way that enables our customers to expand their usage of very low emissions technologies through our engines. The use of natural gas certainly accomplishes this and we are proud to partner with ESI to install this advanced engine at our facilities.”

For decades, Navistar has demonstrated a commitment to technologies that benefit the environment and its customers. In 1989, Navistar was the first original equipment manufacturer to release the smokeless diesel engine and, in 2001, Navistar was the first engine manufacturer to gain certification from the EPA for meeting particulate and hydrocarbon emissions standards—six years ahead of schedule. The company was also the first to enter line production of hybrid commercial trucks and hybrid school buses.
