



by **Daniel C. Ustian**,
Chairman, President, and Chief
Executive Officer, Navistar
International Corp.



Power Stroke diesel engine



Long-haul 9400i truck

The diesel solution

The future of commercial vehicles is a subject that we at **Navistar International** focus on every day. In fact, it's our core business, as we are the nation's largest combined commercial truck, school bus, and mid-range diesel engine producer.

Every company constantly places bets on future products and technologies, and we are no exception. Just this year, we became the first OEM to offer a complete telematics solution that creates visibility into the operation of every truck in our customers' fleets. This technology is a big part of the future of fleet management. And we've committed to delivering the next generation of long-haul trucks, scheduled for delivery in 2007.

For me, though, one of our long-term commitments stands out above the rest: our decision, in the mid-1980s, to focus all our vehicles on a single power technology, diesel. Despite all the changes and new technologies that have emerged since that time, that has turned out to be the right bet. Since then, higher and higher percentages of U.S. commercial vehicles have gone diesel, and we expect this trend to continue.

Today, I'm more convinced than ever that focusing on diesel was a smart decision, and that the leading engine technology for the foreseeable future, indeed for the 21st century, will be diesel.

When placing bets on the future, no smart company does so in a vacuum. We listen to our customers, and they tell us what they need. The companies who listen better tend to do better. The reason we chose diesel over gasoline was that our customers believed in diesel and understood its advantages, including:

- A longer driving range without refueling
- 40 to 60% better mileage than gasoline, due to greater fuel efficiency
- Durability, since diesel engines typically last at least twice as long as gasoline engines
- Performance, with torque that is 30 to 50% higher than gasoline engines
- Increased safety, with reduced risk of flammability
- Extended idling capability, which is one reason virtually all ambulances are diesel.

The challenge is the perception that diesel is "dirty," an image many people still have. But in fact, we aren't making smoky trucks anymore, and haven't for many years. We introduced a smokeless engine in 1989, and haven't looked back since.

The reality is that today's diesel has 98% lower emissions than it did before regulation, and we have led the way in demonstrating that diesel engines in trucks and school buses can be as clean or cleaner than engines powered by any other fuel. Our company's path to low-emitting diesel technology is called International Green Diesel Technology, which combines efficient, high-tech engines that use fuel even more efficiently (and actually start the emissions clean-up in the cylinder); advanced aftertreatment that captures and burns emissions before they escape; and ultra-low-sulfur (ULS) diesel fuel that lets the aftertreatment work, similar to the way that removing lead from gasoline enabled catalytic converters to work in passenger cars.

The enabler is the ULS diesel fuel. Today's typical diesel fuel has 350 ppm of sulfur, while ULS has a maximum of



Medium-duty utility truck application

15 ppm. This ULS fuel is mandated to be sold nationwide by 2006, when 80 to 95% of highway diesel fuel will meet the 15-ppm standard.

At International, we met 2007 federal standards for particulates and hydrocarbons as early as 2001. Today's diesel is also the leader in carbon monoxide and other greenhouse gases, with 40 to 60% lower CO₂ emissions than gasoline. By 2007, particulates will be 99% gone. And by 2010, new diesel vehicles will be equal to or better than gasoline vehicles in every emissions category.

All of this makes diesel the logical answer for tomorrow's commercial vehicles. And in fact, diesel has already proven to be the preferred solution for consumers, business, environmentalists, school districts, and the military. From school buses to ambulances to an increasing number of passenger vehicles, the vehicles that people depend on are diesel-powered.

As I noted, diesel is already the solution for virtually all heavy-duty trucks and almost all medium-duty trucks. Heavy-duty pickup owners are now switching to diesel. With the technology and new fuel widely available, this trend will include diesel in SUVs and light pickups. In the U.S. and Canada, we are on the way to what they are doing in Europe, where roughly 50% of new cars are diesels.

Diesel offers the U.S. the opportunity to save on both fuel economy and emissions. As to fuel economy, the **Department of Energy** estimates that if light-duty diesel achieved only 30% of its market potential—not 50% as in Europe—by 2020, we'd save 700,000 barrels of oil a

day, or one-half the daily energy use of California. By my rough estimate, that translates to over half a billion pounds of CO₂ a day—more than 200 billion pounds a year.

At the national policy level, diesel offers immediate advantages over any other power source. New low-emitting diesel vehicles (such as school buses) are just as clean, if not cleaner, than those using natural gas. Hydrogen fuel cells sound exciting, but are decades away. By contrast, within a short time frame, diesel offers our nation the following opportunities:

- To reduce our cost per mile traveled
- To reduce our imports of foreign oil
- To reduce CO₂ emissions.

When you consider all these advantages, it's clear that the public and national interest stands to benefit from America's strengthening its commitment to low-emitting diesel vehicles. Yet as matters currently stand, the highest costs of making this move will fall on the truck and bus customers who buy new products in 2007.

That is why I believe government needs to do everything possible to provide incentives to help commercial vehicles make the transition to low-emitting diesel. We need to help people in the trucking business today make their purchase commitments for 2007. And we need to accelerate the trend toward diesel, which is in the long-term national interest. I am confident that the marketplace will make the right decision—as it did after we placed our bet on diesel in the mid-1980s. *OHE*



DT466 diesel engine



7000 series severe-duty truck



Building buses since 1907