Blueprint for Sustainability

Sustainable Solutions for Every Consumer

Dan Kapp
Director Advanced Powertrain
Ford Motor Company

2008 DEER Conference
August 4, 2008

Defining Sustainability

Economic

Sustainable long-term profitability and stakeholder loyalty consistent with corporate financial goals and long-term viability.

Environmental Preservation

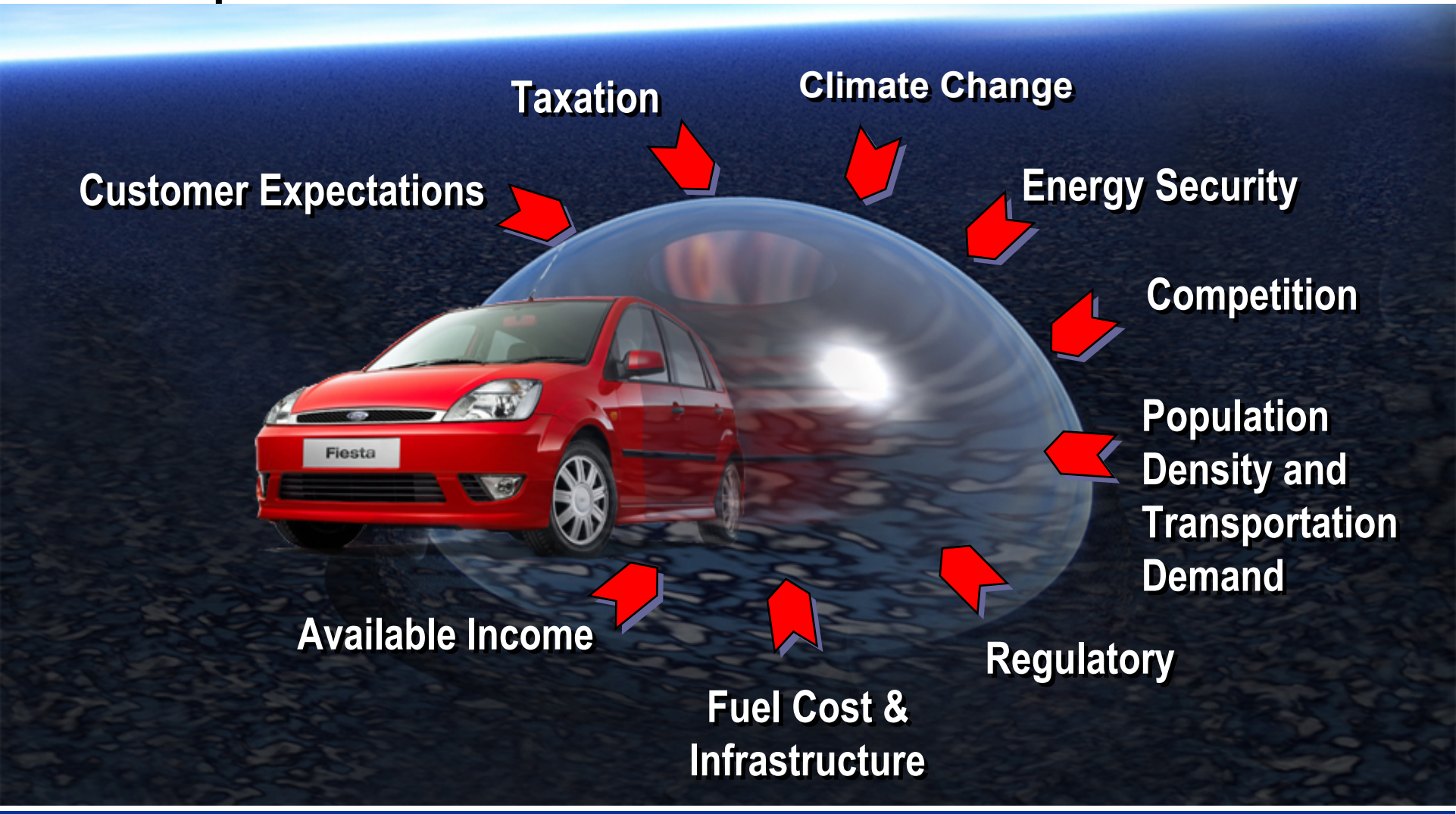
Maintaining a neutral or beneficial environmental footprint. Examples:

- Improving fuel economy and emissions of vehicles.
- Recycled/Renewable/Reused/Recyclable Materials.
- Renewable Energy in Operations
- Zero Waste (to landfills)

Social

Respect and contribute to the communities around the world. Model the highest standards of corporate ethics and integrity.

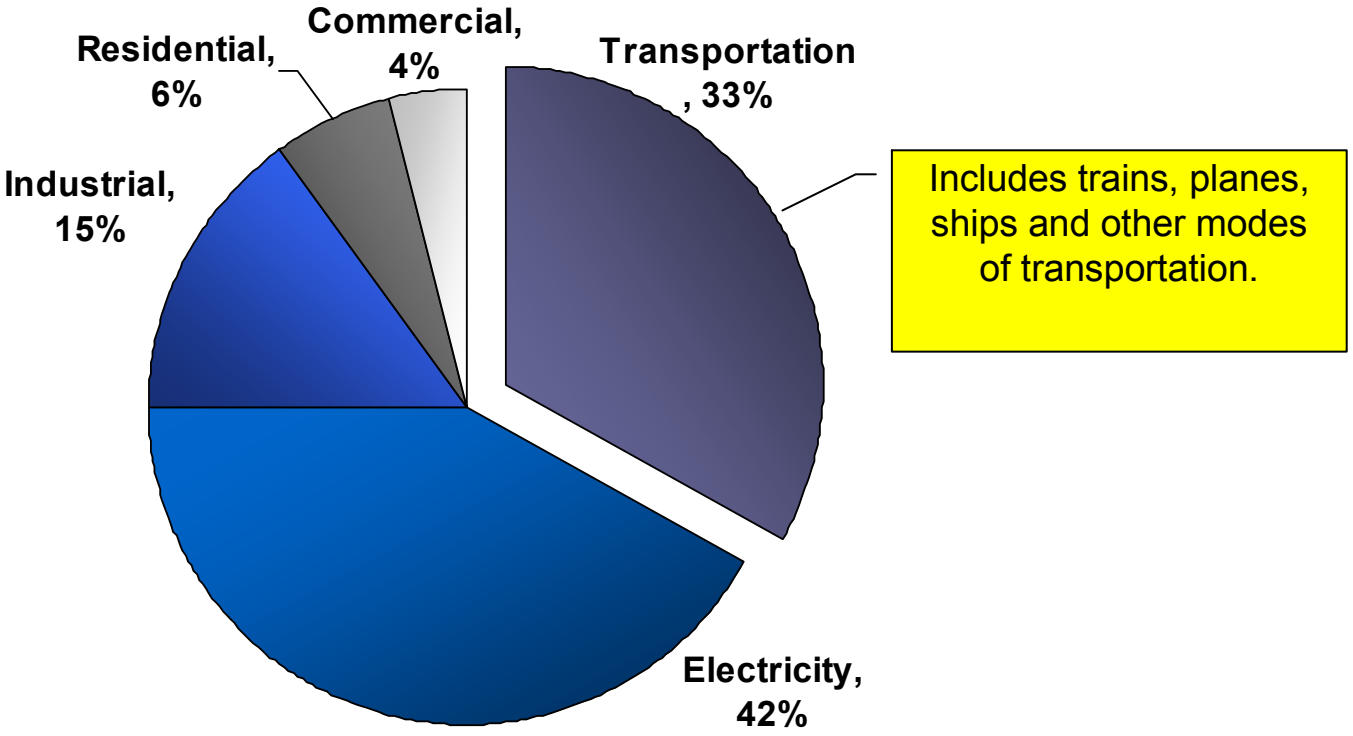
Global Market Drivers



Different needs drive different solutions. No Single Solution Fits All.

U.S. CO2 Emissions Sources (2005)

Vehicles are one, but not the only source



Passenger cars and light-duty trucks contribute about 20% of U.S. and ~11% of global CO2 emissions

Energy Independence and Security Act

Significant mileage increase:

35mpg fleet average by 2020

(40% increase in mileage standards)

CO2 decrease:

Increase in fuel economy will result in 30% reduction of greenhouse gas emissions

Everybody's Concern:
Gas Prices, Energy Security and Reduced CO2

'09 Mercury Mariner: New engine / new 6-speed transmission = improved driving performance and EPA-estimated fuel economy improvements of 1 mpg in both city and high driving

Ford Focus: MPG meets MP3

Fuel Economy in the mid 30's

Ford Escape Hybrid

34 city mpg 30 hwy mpg

Ford's Path to Sustainability

2007 2012 2020 2030

Near Term
Begin migration to advanced technology

Mid Term
Full implementation of known technology

Long Term
Volume roll-out of hybrid electric technologies and alternative energy sources

Near Term

Advanced Gasoline Engines

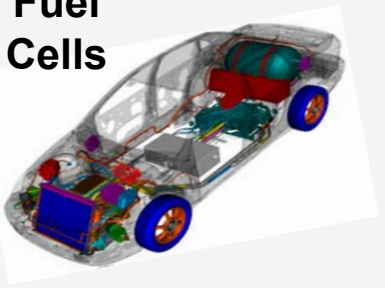
Mid Term

Modern Clean Diesel

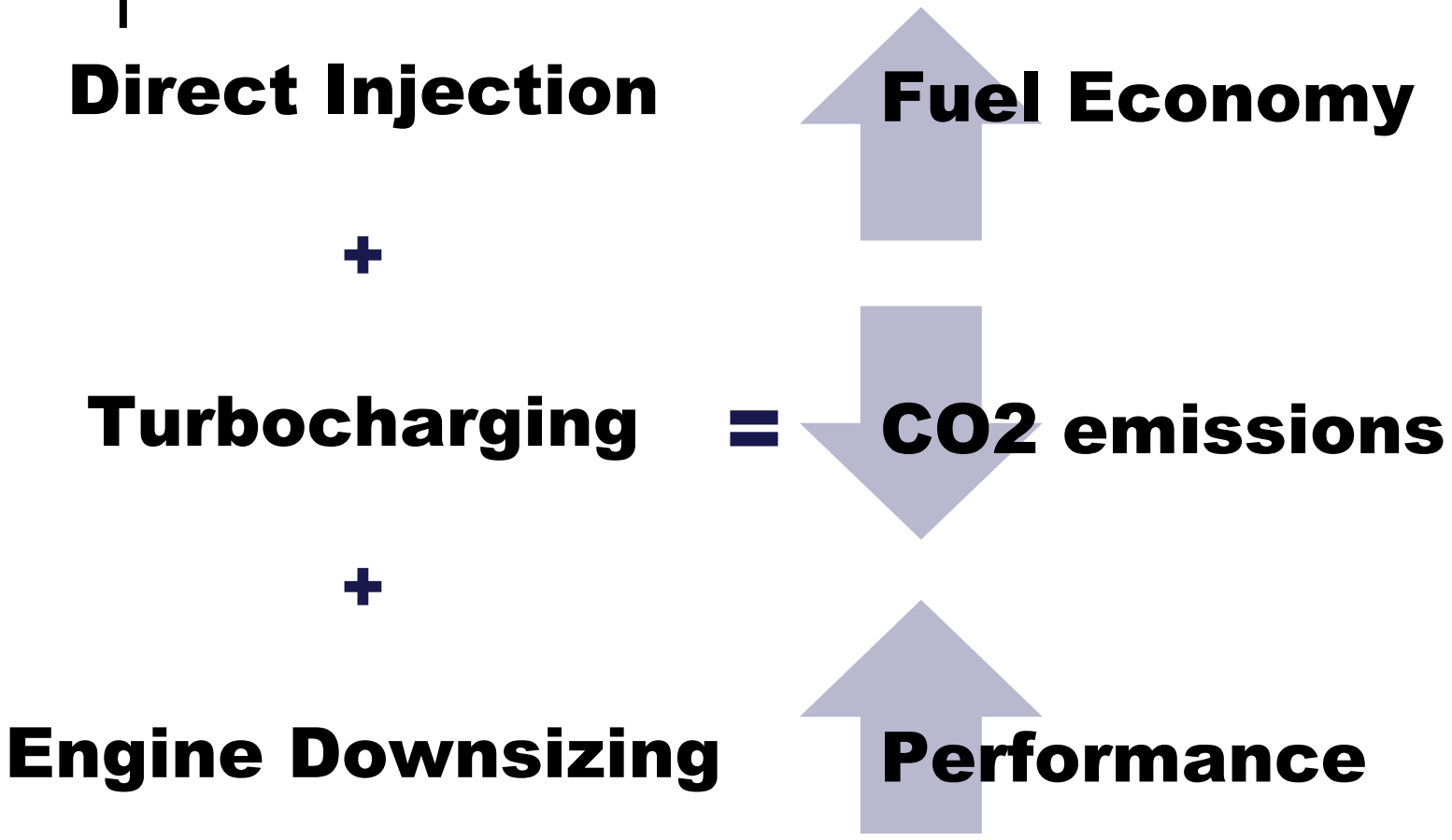
Hybrid Electric Vehicles

Long Term

Fuel Cells

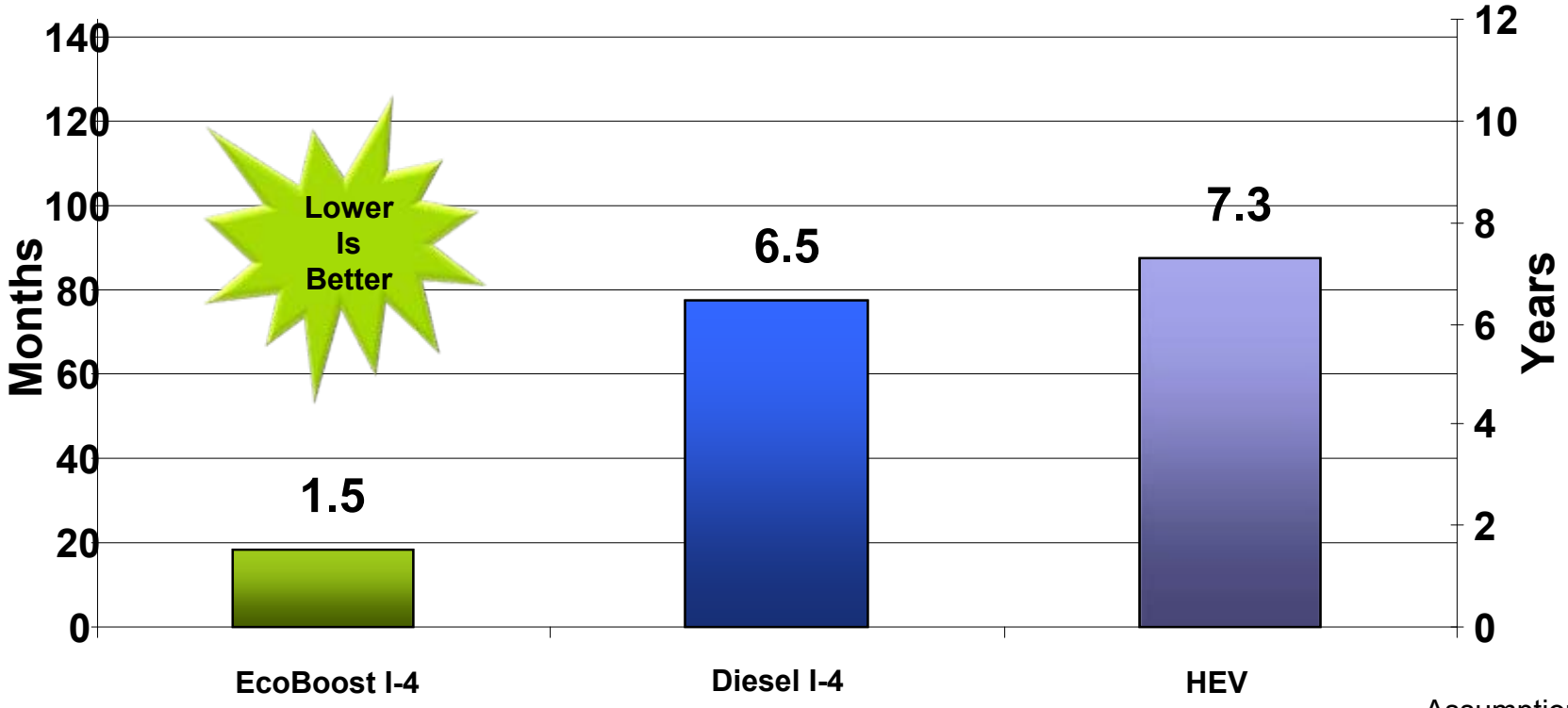


EcoBoost: A high-volume, affordable solution for our customers



Consumer Perspective

Payback of Incremental Purchase Price through Fuel Economy Savings



Assumptions:
15,000 miles / year
Gas: $4.12 / gal.
Diesel: $4.32 /gal.

Ford's Path to Sustainability

2007 2012 2020 2030

Near Term
Begin migration to advanced technology

Mid Term
Full implementation of known technology

Long Term
Volume roll-out of hybrid electric technologies and alternative energy sources

Near Term

Advanced Gasoline Engines

Mid Term

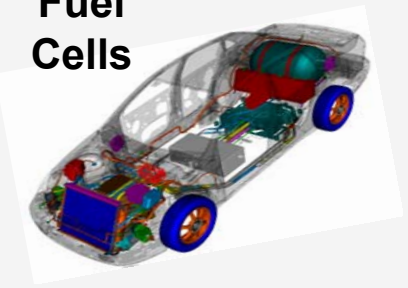
Modern Clean Diesel

Hybrid Electric Vehicles

Weight Reduction

Long Term

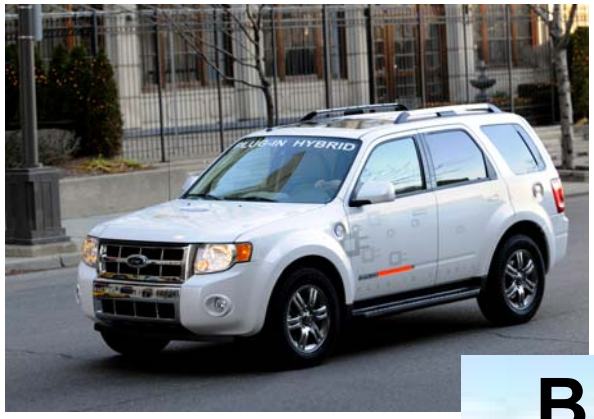
Fuel Cells



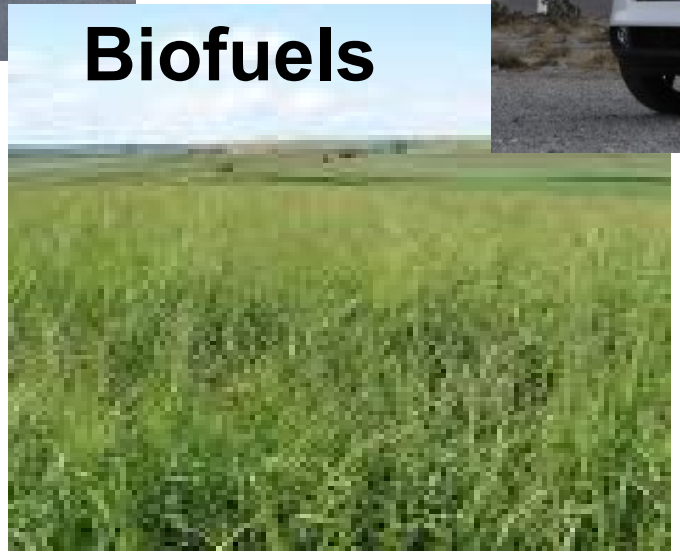
Hydrogen Powered

Advanced technologies

Plug-In Hybrids

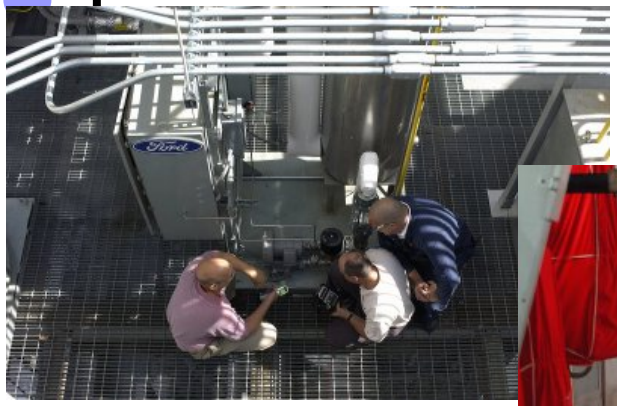


Biofuels



Hydrogen Fuel Cells

Sustainability Solutions



Fumes to Fuel

Wind Power

Wet Paint Process

Rouge Living Roof

Responsible Use of Resources:
Energy and Water Usage
Reduced

Human Rights

Blueprint for Sustainability

- What our customers want
- What our society requires
- What our business demands


Ford