# WELCOME TO THE FUTURE







FUTURETRUCK IS A UNIQUE FOUR-YEAR ENGINEERING PROGRAM THAT BRINGS
TOGETHER THE RESOURCES OF INDUSTRY, GOVERNMENT, AND ACADEMIA IN A
COOPERATIVE EFFORT TO ADDRESS IMPORTANT ENVIRONMENTAL AND ENERGY-RELATED
ISSUES POSED BY THE GROWING DEMAND FOR SPORT UTILITY VEHICLES (SUVS).

FutureTruck 2003 challenges teams of students from 15 top North American universities to reengineer a conventional, mid-size Ford Explorer into a loweremissions vehicle with at least 25% higher fuel economy, without sacrificing the performance, utility, safety, and affordability consumers want. To meet these challenges, students employ cutting-edge automotive technologies, including advanced propulsion systems, lightweight materials, and alternative fuels, such as hydrogen, ethanol, and biodiesel. All of the teams in FutureTruck 2003 are implementing hybrid electric design strategies, which have both an internal combustion engine with a battery and an electric motor.

## WHERE IS FUTURETRUCK?

After months of preparation, teams will participate in eleven days of intense testing and other events, scheduled for June 2-12, 2003. First, vehicles will undergo a comprehensive safety evaluation, followed by dynamic testing and static design events at Ford's Michigan Proving Ground in Romeo. Ford's Allen Park Test Laboratory



will also evaluate the tailpipe and greenhouse gas (GHG) emissions of the FutureTruck vehicles. The competition will culminate in a vehicle display and awards ceremony held in conjunction with Ford's Centennial Anniversary at Ford World Headquarters in Dearborn.

#### WHO IS INVOLVED?

The U.S. Department of Energy (DOE) partnered with Ford Motor Company as the headline sponsors of FutureTruck 2002 and 2003. Ford provided the Explorer SUVs that the teams are modifying, almost \$275,000 in seed and prize money, engineering consulting for each team, competition facilities, and operational support.

DOE provides competition management, team evaluation, and technical and logistical support. More than 300 participants from 15 top North American universities will participate in the program. Thirteen private and public organizations joined DOE and Ford to support this innovative engineering program.

#### WHY IS FUTURETRUCK IMPORTANT?

Today more than 50% of all new vehicle sales are SUVs and light-duty trucks, contributing to increased GHG emissions and further dependence on foreign oil because SUVs historically have been less energy efficient than cars. FutureTruck shows that the cooperation of industry, government, and academia is the best approach to develop more energy-efficient and "greener" automotive technologies, to improve our economy and our environment, and to keep North American technology competitive on a global basis. The competition also helps develop hundreds of highly skilled engineers with a greater awareness of these technologies preparing them to lead the automotive industry in the 21st century.

TITURE 2003 Reaching beyond the horizon.

#### **HEADLINE SPONSORS**

U.S. Department of Energy Ford Motor Company

#### MAJOR SPONSORS

National Science Foundation

Cisco Systems

ArvinMeritor

Delphi

National Instruments

The MathWorks

Michigan Proving Ground

Allen Park Test Laboratory

#### COMPETITION SUPPORTERS

Natural Resources Canada

Aluminum Association

Illinois Department of Commerce and Economic Opportunity

BP

Goodyear Tire & Rubber Company

#### IN-KIND SUPPORTERS

Ricardo, Inc.

Dana Corporation

#### FOR INFORMATION **ABOUT SPONSORING** FUTURETRUCK. CONTACT:

Kristen De La Rosa FutureTruck Program Manager Argonne National Laboratory 2206 East 22nd St., Austin, TX 78722 e-mail: kdelarosa@austin.rr.com phone: 512.481.8876 · fax: 512.481.9043



### The Advantages of **Sponsoring** FutureTruck

The year-round, high-visibility program offers competition-level sponsors:

- International visibility and media coverage
- Opportunities to strengthen their association with advanced automotive technology
- Opportunities to provide a real-world engineering experience to young engineers who will lead the automotive industry in the 21st century
- Avenue for recruiting some of the top engineers in the U.S. and Canada
- First-hand exposure to new technologies, through judging competition events, technical papers, etc.
- Networking opportunities with other industry and government sponsors

### The U.S. Department of **Energy and Ford** Take the Lead

The U.S. Department of Energy, Ford Motor Company, and the other industry and government sponsors are proud to support FutureTruck 2003, in which 15 North American engineering schools explore and develop new automotive technologies. These sponsors support FutureTruck's cooperative approach in developing fuel-efficient SUVs, leading to reduced petroleum use and a stronger economy.

#### PARTICIPATING SCHOOLS

California Polytechnic State University, San Luis Obispo

Cornell University

Georgia Institute of Technology

Michigan Technological University

Ohio State University

Pennsylvania State University

Texas Tech University

University of Alberta

University of California, Davis

University of Idaho

University of Maryland

University of Tennessee

University of Wisconsin - Madison

Virginia Tech

West Virginia University

For more information, visit

#### **FUTURETRUCK.ORG**







FutureTruck is an advanced vehicle technology competition managed by Argonne National Laboratory's Center for Transportation Research