Educating Consumers:
New Content on Diesel Vehicles, Diesel Exhaust Fluid, and Selective Catalytic Reduction Technologies on the AFDC

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What is the AFDC?

Alternative Fuels and Advanced Vehicles Data Center (AFDC)

- Technology-focused Web site
- Comprehensive alternative fuels and advanced vehicle information
- Tools for the general public, fleets, educators, and consumers
  - Alternative Fueling Station Locator
  - Vehicle Search (alternative fuel and advanced)
  - Cost/Emissions Calculators
  - Laws and Incentives
  - Publications Database
  - Truck Stop Electrification Site Locator

AFDC: *www.eere.energy.gov/afdc*

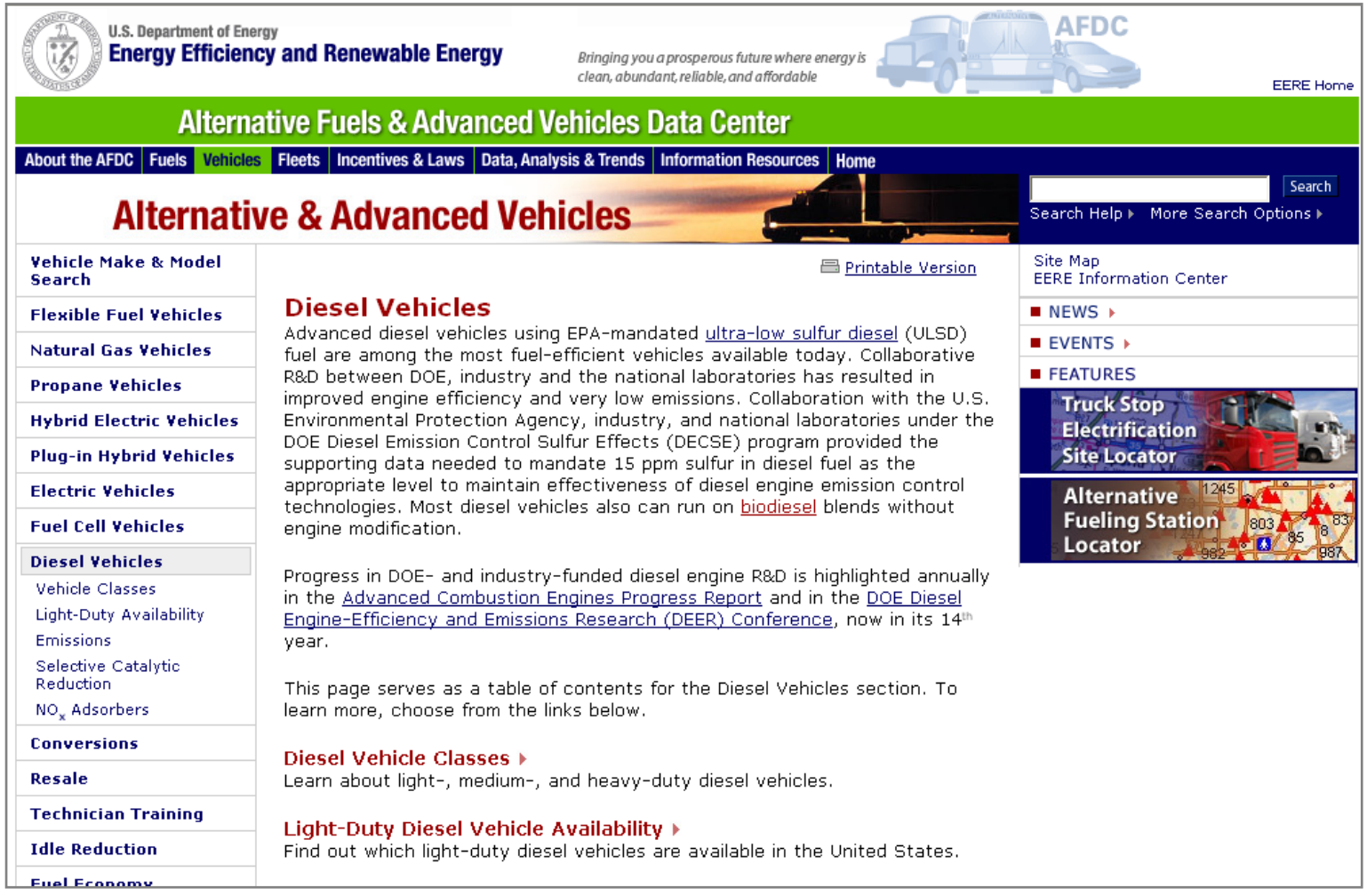
Why Diesel Information?

- Light-duty diesels are ready to enter the marketplace
- Fuel-efficiency improvements to light-duty diesels lead to reduced dependence on foreign oil
- Some light- and heavy-duty vehicles will require diesel exhaust fluid (DEF), and consumers need to be trained on how to use it
- Adding DEF information to the AFDC is a cooperative effort between:
  - U.S. Department of Energy
  - National Renewable Energy Laboratory
  - Alliance of Automobile Manufacturers

Diesel Information on the AFDC

- Content is located in the Diesel Vehicles section and includes links to relevant information
- All vehicle classes are covered (light-, medium-, and heavy-duty)
- Topics covered on the site include:
  - Light-duty vehicle availability
  - Emissions
  - Selective catalytic reduction
  - DEF
  - NO_x traps

Diesel Vehicles Section



Light-Duty Diesel Vehicle Availability

U.S. Department of Energy
Energy Efficiency and Renewable Energy

Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

AFDC

EERE Home

Alternative Fuels & Advanced Vehicles Data Center

About the AFDC | Fuels | Vehicles | Fleets | Incentives & Laws | Data, Analysis & Trends | Information Resources | Home

Alternative & Advanced Vehicles

Search | Search Help | More Search Options

- Vehicle Make & Model Search
- Flexible Fuel Vehicles
- Natural Gas Vehicles
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  - NO_x Adsorbers
- Conversions
- Resale
- Technician Training
- Idle Reduction
- Fuel Economy

Printable Version

Site Map
EERE Information Center

Light-Duty Diesel Vehicle Availability

According to J.D. Power Automotive Forecasting, demand for light-duty diesel vehicles might approximately double in the next 10 years. More auto manufacturers will be producing light-duty diesels, and these vehicles will be more fuel efficient and environmentally friendly than ever.

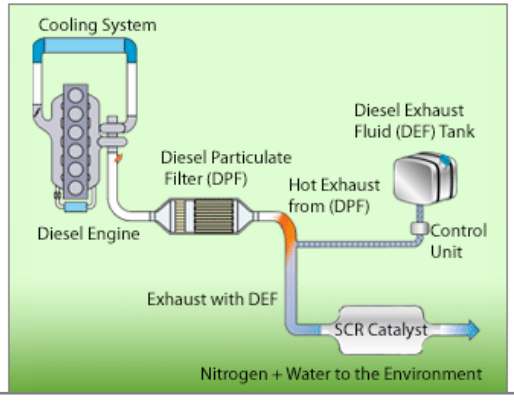
To learn about currently available light-duty diesel vehicles, use the FuelEconomy.gov's diesel vehicle search engine or visit the Diesel Technology Forum's Diesels for Sale in the U.S. (this page lists some larger diesel vehicles as well.)

Diesel Selective Catalytic Reduction

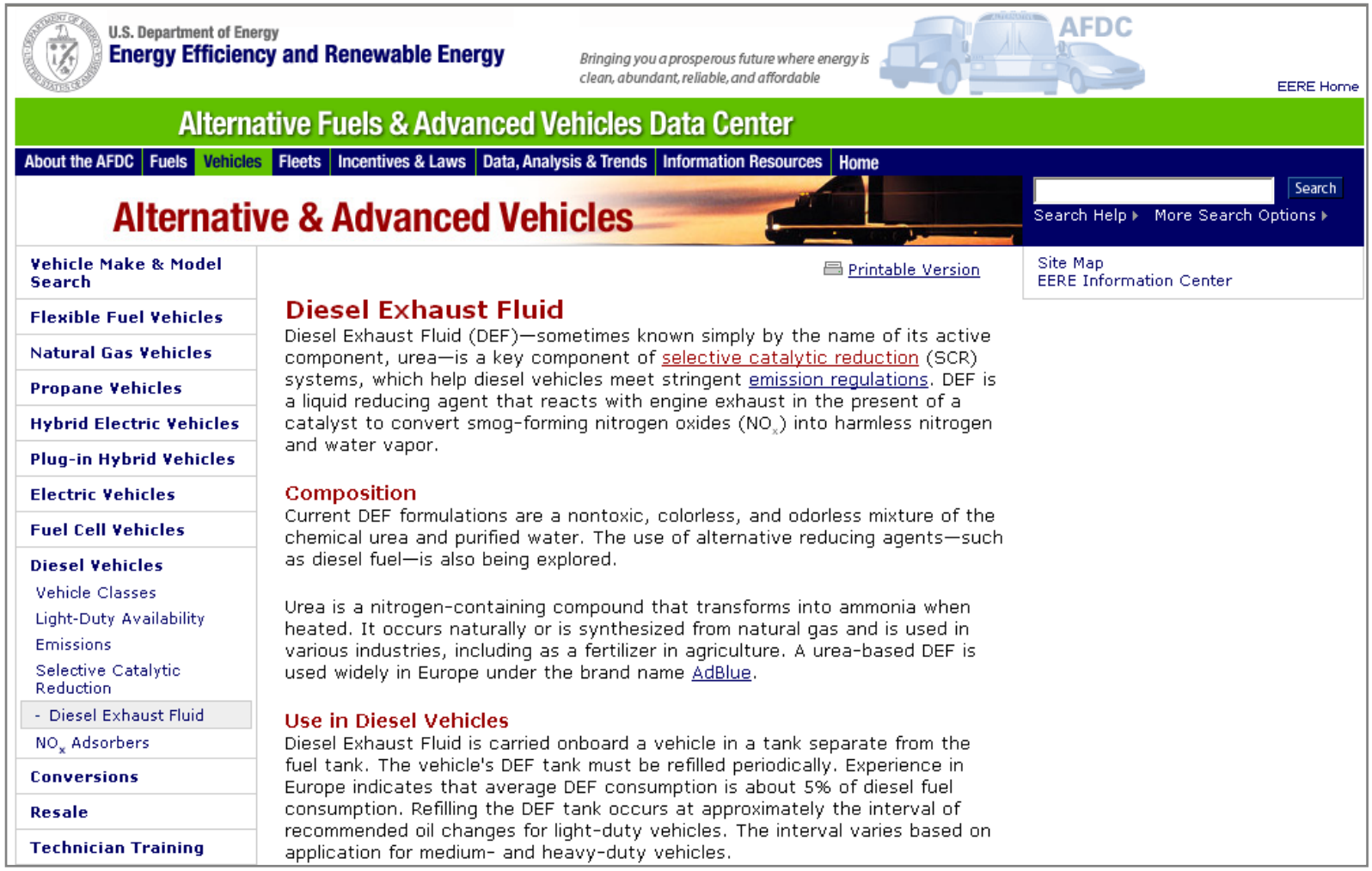
Diesel Selective Catalytic Reduction

Selective catalytic reduction (SCR) is an advanced emission-control technology that can help light-, medium-, and heavy-duty diesel vehicles meet stringent regulations on nitrogen oxides (NO_x) emissions. In an SCR system, a liquid reducing agent composed of urea and water—known as Diesel Exhaust Fluid (DEF)—is combined with engine exhaust in the presence of a catalyst to convert smog-forming NO_x into harmless nitrogen and water vapor. See the diagram below.

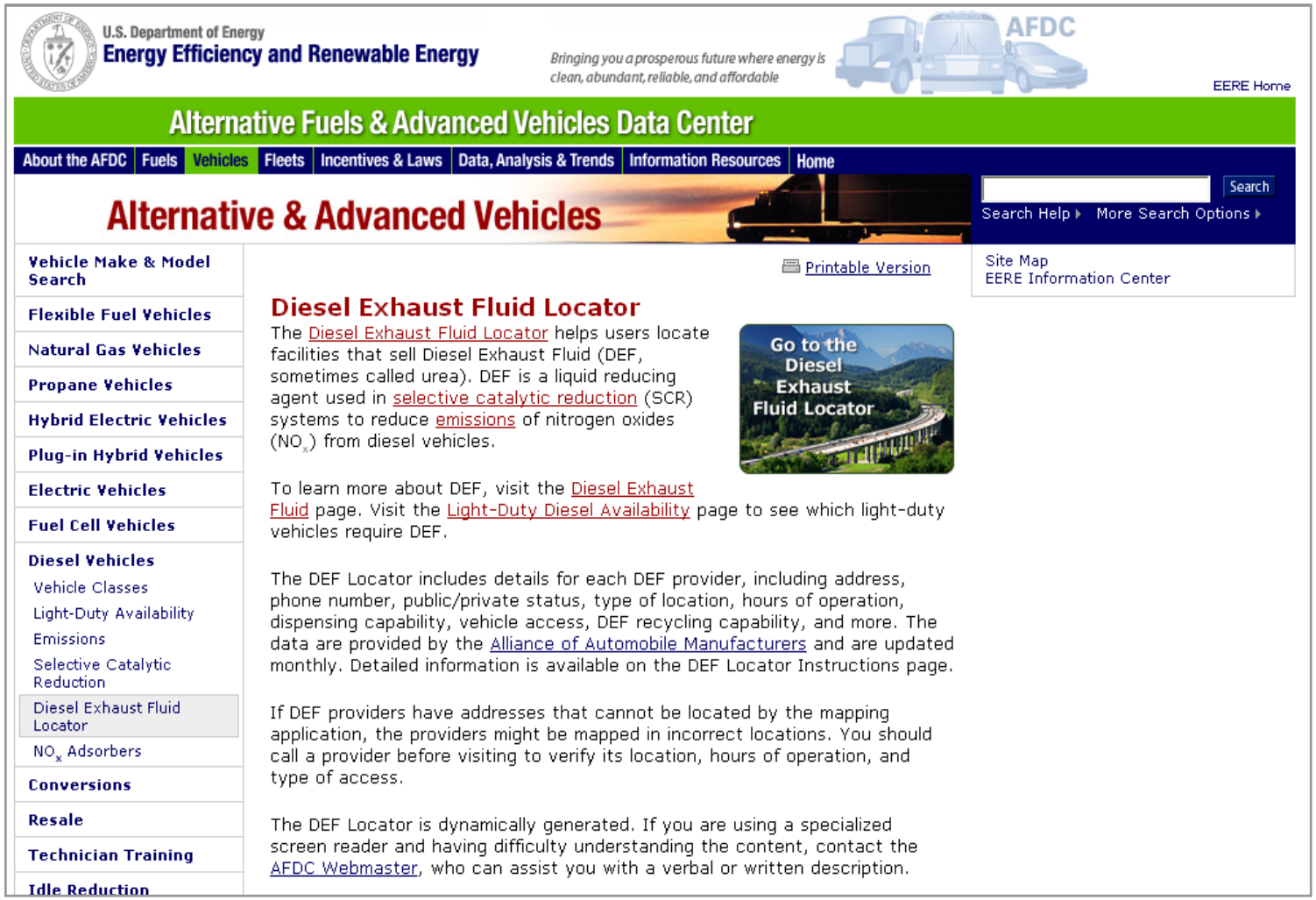
Schematic of a Selective Catalytic Reduction (SCR) System



Diesel Exhaust Fluid



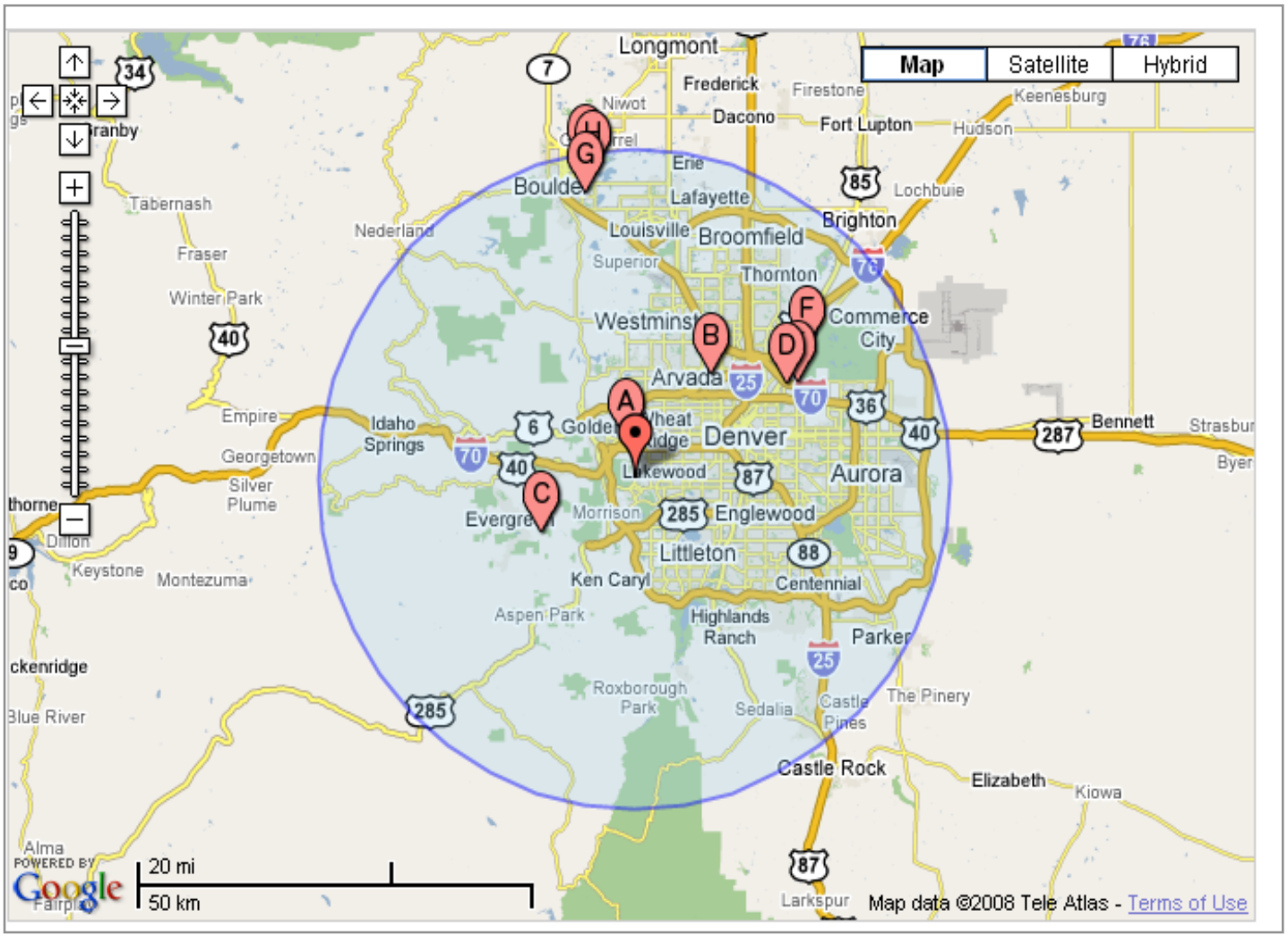
Diesel Exhaust Fluid Locator (Still in development)



Plans for the DEF Locator

- Application will run using Google Maps
- Basic search will provide a quick search for most users' needs
- Advanced search will meet additional needs
  - Will search by location type, access type, DEF dispenser type, vehicles serviced, and payment methods
- Route-mapping capability will also be available

Example Map Output



Scheduled Release of DEF Locator

- Some original equipment manufacturers (OEM) anticipate the public release of light-duty diesel vehicles utilizing DEF in fall 2008
- General-educational portions of the Diesel Vehicles section went live in late July 2008
- Diesel Exhaust Fluid Locator is due to go live early fall 2008 in conjunction with the release of OEM light-duty diesel vehicles