Center for Transportation Technologies and Systems

Paving the way for:
- Increased energy security
- Improved air quality
- Strengthened economy

Advanced Vehicle Systems
Advanced Fuels and Lubricants
ReFUEL Laboratory
Integration and Utilization

Clean Cities
Advisor
National Renewable Energy Laboratory
Advanced Fuels and Lubricants

- Advanced Petroleum Based Fuels
- Ignition Quality Tester
- Fischer-Tropsch
- QSAR Analysis
- Optimal Fuels
- Hydrogen and Fuel Cells
- Biodiesel
- E-Diesel
- HCCI
- Industry Collaboration
- Natural Gas R&D
- Air Quality Testing

Timeline:
- 2007
- 2010-2020
- >2020

Refuel Laboratory
Freedom CAR
Renewable Oxygenates
Advanced Vehicle Systems
Modeling and Validation – From Components to Systems

Modeling
- Computational Fluid Dynamics
- Power Electronics
- Energy Storage
- Advanced Heavy Hybrid Propulsion Systems
- Essential Power Systems
- Digital Functional Vehicle
- Advisor

Validation

21st Century Truck Partnership

National Renewable Energy Laboratory
Integration and Utilization

... moving transportation technologies into the marketplace through technical assistance, fleet deployment, and information and outreach.