



For additional information contact:
Rocky Mountain Institute
(970) 927-3851
outreach@rmi.org
www.oilendgame.com

Winning the Oil Endgame Fact Sheet

STRENGTHEN NATIONAL SECURITY, ENERGY INDEPENDENCE, AND THE ECONOMY

- U.S. global competitiveness, economic stability, and national security are compromised by over-reliance on foreign oil, particularly Middle Eastern oil.
- The United States consumes 26 percent, produces nine percent and owns two percent of the world's oil.
- The United States imports nearly 60 percent of its oil (and rising). With Saudi Arabia the only major producer with capacity to increase supply, national security is a serious issue.
- An \$18 billion annual investment over ten years—the cost of building the tools to get the United States off oil forever—is small compared to America's \$120 billion/year oil import bill and U.S. security investments. For example, the United States spends \$50+ billion annually (in peacetime) for Persian Gulf intervention readiness.
- Getting the United States off oil would decrease carbon dioxide emissions by one-fourth with no additional cost or effort.

SAVE HALF U.S. OIL THROUGH EFFICIENCY, COMPETITIVE BIOFUELS, SAVED NATURAL GAS

- Two-thirds to three-quarters of light vehicles' fuel use is weight-related. Each unit of energy saved at the wheels saves seven to eight units of gasoline.
- In today's average car, 87 percent of fuel energy never reaches the wheels; only half the rest—about six percent of fuel energy—accelerates the car. Less than one percent actually moves the driver.
- Fully using proven technologies to wring more work from each barrel of oil can ultimately save half of projected 2025 U.S. oil. Saving each barrel would cost \$12 (in 2000 dollars). Compared with the government's 2025 price forecast of \$26 per barrel, that means an annual savings of \$133 billion by 2025.
- Once half the oil is saved by efficient use, the other half can be profitably replaced by competitive biofuels, such as ethanol and biodiesel, and by saved natural gas.
- The European Union produced 17 percent more biofuels last year than the United States did.
- Brazil has replaced one-fourth of its gasoline with cost-competitive, unsubsidized ethanol made from sugarcane grown on five percent of its total cropland. Initial startup subsidies have been repaid 50 times by oil savings.

- A modern U.S. ethanol industry would be based on woody crops (like switchgrass and poplar) that would not interfere with food-crop production.
- Growing and refining biofuels will create 750,000 new agriculture jobs by 2025.
- A 2025 fleet as efficient as the best hybrid cars and SUVs on the market this year would save one-sixth of all 2025 oil use or \$45 billion per year, equivalent to two Persian Gulfs of oil imports.
- A \$90 billion investment to revitalize transportation equipment, combined with a \$90 billion investment to reinvigorate rural economies, would create one million new jobs.

EMBRACE INNOVATION TO BECOME GLOBALLY COMPETITIVE

- U.S. automakers face stiff competition from Japan and the European Union—both already invest considerable resources in developing fuel-efficient vehicles.
- U.S. automakers' market share for light vehicles is steadily declining, with SUVs making up the last profit bastion. Toyota has market capitalization greater than the “Big Three” combined.
- Boeing's fuel-efficient *7E7 Dreamliner* uses one fifth less fuel than previous models, yet sells at the same price or less.

BELIEVE IN SPEED-OF-CHANGE

- Major technological transformations take 12–15 years to go from 10 to 90 percent adoption, based on historical examples.
- In the 1920's, U.S. automakers switched from 85 percent open wood bodies to 70 percent closed steel bodies in six years.
- In just six months during World War II, the U.S. switched from making four million light vehicles per year to making tanks and planes that won the war.
- During 1977–1985, the U.S. economy grew 27 percent while oil use fell 17 percent, and oil imports from the Persian Gulf fell 87 percent.
- Speeding entry and adoption of state-of-the-art vehicles would save American motorists an estimated \$390 billion in retail fuel costs through 2025.