



Clean Energy Saves Americans Money

Clean energy is the real solution to the pain of high gasoline prices. Clean energy is cheaper and cleaner than oil, and the amount of fuel we can get from clean energy measures dwarfs what can be scraped from drilling.¹ New NRDC analysis shows that, unlike dirty fuel options, clean energy strategies can actually *save* drivers money while reducing our oil dependency and slashing global warming pollution from the transportation sector.

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September 2008

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Dirty Oil Supplies Are Expensive

There have recently been an abundance of proposals to increase fossil-derived oil supplies by drilling in some of our nation's most pristine environments and by converting coal and shale into dirty transportation fuels. These dirty fuel supply proposals will cost Americans more money because drivers will still be tied to a single source of transportation fuel: oil. Because these plans continue our reliance on oil, they will leave the nation vulnerable to a volatile worldwide oil market that has been plagued with sustained high prices and unpredictable price spikes. And as the nation and the world move toward mandatory controls on global warming pollution, reliance on dirty fuels leaves the United States exposed to even higher fuel prices.

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Clean energy keeps money in the pockets of Americans by cutting the amount of oil that they consume. As shown in Figure 1, unlike dirty

fuel, oil savings measures actually save consumers money because the fuel savings easily outweigh the incremental cost of the measures.

NRDC estimated the cost savings over the life of a number of clean energy measures, including improved fuel economy of new passenger vehicles and heavy trucks; retrofits, like energy-saving low-rolling-resistance tires for cars and heavy trucks on the road today; advanced biofuels production; and building efficiency improvements.

The figure shows the net cost to the economy by calculating the present value of the cost of technologies minus the future fuel savings.² In contrast, as shown in the figure the dirty fuels option will *cost* drivers money, not save money. That cost is driven by world oil prices, which the Department of Energy projects will remain at comparatively high levels.³

Collectively, the measures shown in Figure 1, along with smart growth improvements, can save 10 million barrels of oil per day by 2030—about 11 times more oil than drilling would produce.⁴

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Smart Growth Can Provide Even More Savings

Most notably, policies that promote smart land development—known as “smart growth”—and invest in public transportation can provide huge oil savings at little or no cost. Energy-saving land development provides Americans with walkable, transit-accessible communities so people can opt out of using their car for commuting and routine errands. Public transportation provides an alternative to driving and can be funded through transfers from road tolling, congestion pricing, and economy-wide carbon reduction policies. NRDC is working with a diverse set of stakeholders to quantify the net benefits of smart growth in a study to be released in 2009.

Figure 1: Cost-Effective Oil Savings (\$2006/barrel of oil)

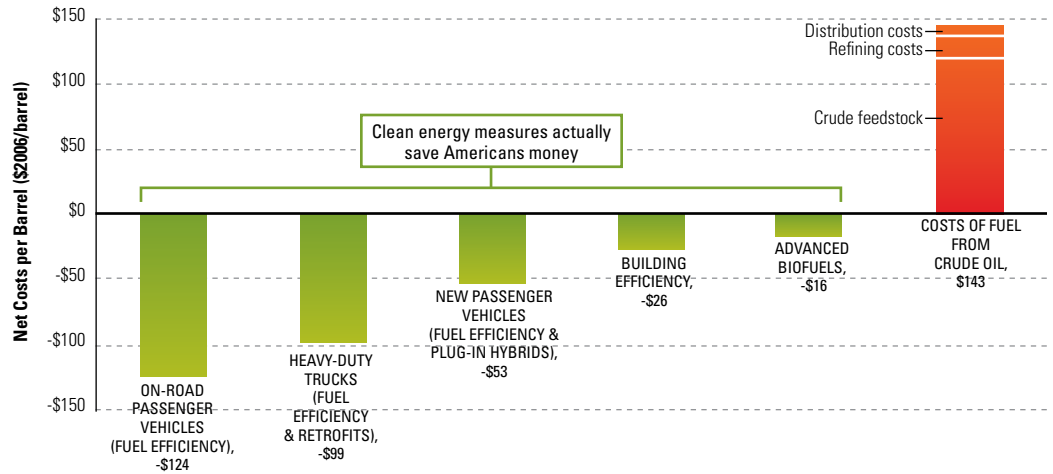
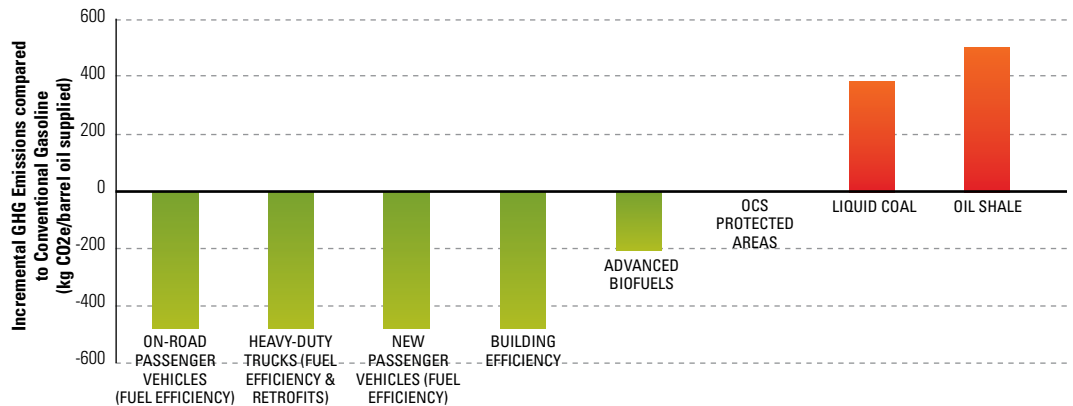


Figure 2: Global Warming Costs of Dirty Fuels



Clean Energy Protects the Environment

Clean energy cuts transportation fuel use and therefore avoids the environmental damage inherent in oil exploration and production and liquid coal and oil shale development. By cutting fuel use, clean energy reduces emissions of global warming pollution as shown in Figure 2. Dirty fuels, especially liquid coal and oil shale, actually increase the global warming emissions compared to today’s gasoline. In fact, liquid coal emits nearly double the global warming pollution, and oil shale more than twice as much, compared to today’s fuel on a full fuel-cycle basis.⁵ Dirty fuels also threaten our environment due to associated oil spills, water pollution and harms to wildlife habitat.

We Need Clean Energy Now

Clean energy is the cost-effective and environmentally sustainable way to slash our oil dependency and spare Americans from a future of harmful price spikes. Investing in clean energy not only saves consumers money at the pump but it can also invigorate the U.S. economy. A new report shows that investing in clean energy, including renewable electricity, transit and biofuels, would create four times as many jobs as spending the same amount of money within the oil industry.⁶ And more of the clean energy jobs will be good paying jobs — paying at least \$16 dollars an hour. Now is the time to invest in clean energy to create jobs, cut pollution, and accelerate adoption of the cost-effective technologies of today and tomorrow.

¹ See NRDC Fact Sheet *Clean Energy: The Solution to High Gas Prices*, <http://www.nrdc.org/energy/gasprices.asp>.

² Our net cost estimates are conservative because they leave out the monetary value of the what economist call “externalities” such as reduced exposure to dangerous climate change, reduced oil security and military costs, and reduced exposure to conventional smog, particle and other conventional pollutants from fossil-fuel production and combustion.

³ We adopt the EIA’s high price forecast of \$119 per barrel as a more realistic estimate for the 2030 timeframe. However our basic point does not change even under the very optimist “reference case” forecast of \$70 per barrel.

⁴ NRDC factsheet, *Clean Energy: The Solution to High Gas Prices*, September 2008. Air travel improvements are not included in Figure 1.

⁵ This estimate includes the emissions associated with extraction, production, transport, and combustion of the fuel (also known as well-to-wheel emissions).

⁶ Robert Pollin, Heidi Garrett-Peltier, James Heintz, and Helen Scharber, *Green Recovery: A New Program to Create Good Jobs and Start Building a Low-Carbon Economy*, Center for American Progress and the Political Economy Research Institute, University of Massachusetts Amherst, September 2008, available online at http://www.americanprogress.org/issues/2008/09/pdf/green_recovery.pdf.