



Liquid Coal:

More Global Warming Pollution
at Taxpayers' Expense

- LIQUID COAL: DOUBLE THE GLOBAL WARMING POLLUTION OF GASOLINE -

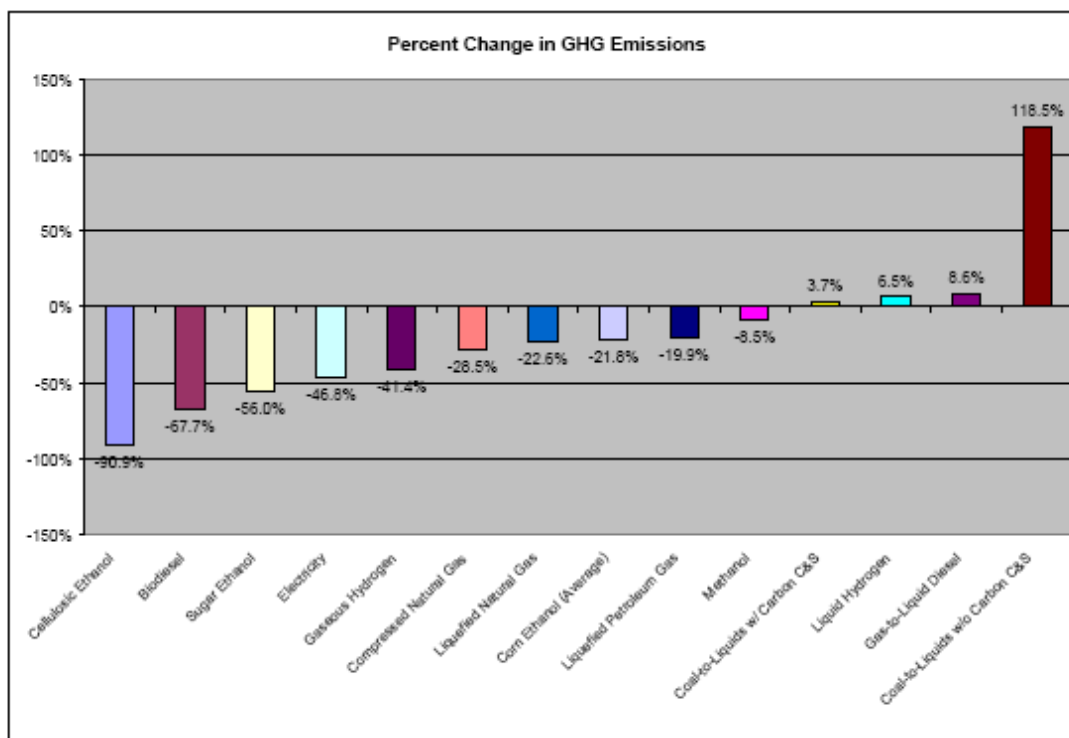
Converting coal into fuel is an inefficient process that requires huge inputs of both coal and energy. As a result, coal-to-liquid fuels produce twice as much carbon dioxide—the primary global warming pollutant—as regular gasoline.¹

The following chart, compiled by the Environmental Protection Agency, shows how replacing traditional gasoline with an energy-equivalent amount of alternative fuels would affect lifecycle greenhouse gas emissions (carbon dioxide, methane, and nitrous oxide). Whereas replacing gasoline with cellulosic ethanol would reduce lifecycle greenhouse gas emissions by 91%, coal-to-liquid fuel would increase lifecycle greenhouse gas emissions by more than 118% if the carbon is not captured and stored.²

Coal-to-liquid fuels produce twice as much carbon dioxide as regular gasoline.

With Wall Street skittish about the massive costs of liquid coal, taxpayers may have to pay for new coal-to-liquid plants—each costing more than \$7 billion.

As the chart also shows, even if we could capture and store the carbon released while converting coal to liquid, liquid coal would still release more global warming pollution than regular gasoline. Moreover, carbon capture and storage—also known as sequestration—is not a silver bullet. It is a nascent and unproven technology that alone will not achieve the emissions reductions we need to avoid the worst effects of global warming.



- LIQUID COAL COULD COST TAXPAYERS BILLIONS -

According to the Department of Energy, a plant producing 80,000 barrels of fuel a day – less than most U.S. oil refineries – would cost more than \$7 billion to build.³ In contrast, a new biodiesel plant costs about one-sixth of the price of a coal-to-liquid plant per installed barrel of capacity.⁴ Industry proponents also often fail to factor the cost of capturing carbon dioxide into their business plans and rhetoric. The Stanford Group—an institutional investor research group—has warned investors to be aware that “any large investment in [liquid coal] would need significant subsidies to offset environmental costs.”⁵

As a result, the coal industry and its supporters in Congress want the U.S. government—and therefore taxpayers—to provide long-term purchasing contracts, price guarantees, tax breaks, and outright handouts to attract skeptical investors on Wall Street.⁶

- LIQUID COAL WILL HARM THE ENVIRONMENT -

Replacing just 10% of forecasted U.S. oil demand with liquid coal fuel in 2025 would require mining an additional 475 million tons of coal a year—a 43% increase from today’s coal production.⁷ New coal mining could have far-reaching environmental effects:

- Coal-to-liquid plants require about 5.0 gallons of water for every gallon of transportation fuel produced, threatening already scarce water supplies in many parts of the country.⁸
- Coal mining creates hazardous and acidic wastes, contaminates drinking water supplies, and destroys wildlife habitat.

- NOTES -

¹ Robert Williams et al., “Synthetic fuels in a world with high oil and carbon prices,” 8th International Conference on Greenhouse Gas Control Technologies, June 2006; EPA, “Greenhouse Gas Impacts of Expanded Renewable and Alternative Fuels Use,” fact sheet, EPA420-F-07-035, April 2007.

² EPA, “Greenhouse Gas Impacts of Expanded Renewable and Alternative Fuels Use,” fact sheet, EPA420-F-07-035, April 2007.

³ National Energy Technology Lab, “Economic Impacts of U.S. Liquid Fuel Mitigation Options,” July 8, 2006. DOE/NETL-2006-1237.

⁴ John M. Urbanchuk, “Contribution of the Biodiesel Industry to the Economy,” September 30, 2006.

⁵ Mark Clayton, “Coal in cars: great fuel or climate foe?,” *The Christian Science Monitor*, March 2, 2007.

⁶ See, for example, the Coal to Liquids Coalition website, <http://www.futurecoalfuels.org/congress.asp/>, detailing how the federal government should financially underwrite new liquid coal plants.

⁷ The National Coal Council, “Coal: America’s Energy Future, Volume I,” March 2006.

⁸ Department of Energy, “Emerging Issues for Fossil Energy and Water,” June 2006.

⁹ Concerned Scientists, *Feasibility of Fuel Economy Improvements: A UCS letter to the National Highway Traffic Safety Administration*, 20 April 2005.

- Mountaintop removal coal mining is devastating Appalachian communities by flattening mountaintops with dynamite and dumping debris from these blasts into nearby valleys and streams, permanently altering the region’s landscape and environment.

- REAL SOLUTIONS AVAILABLE TO REDUCE OUR DEPENDENCE ON OIL -

Using taxpayer dollars to convert coal into fuel is irresponsible given the challenges we face in cutting global warming pollution. The good news is that we have technology at our fingertips to cut America’s dependence on oil while reducing global warming pollution. Congress should:

- Make cars and light trucks achieve at least 40 miles per gallon (mpg) and establish fuel economy standards for heavy duty trucks. The Union of Concerned Scientists has shown that with more aggressive use of high-strength, lighter-weight materials, we could hit the 40 mpg mark in 10 years.⁹
- Replace a portion of vehicle fuel with biofuels or other clean alternatives. Ethanol and biodiesel that are produced cleanly and sustainably have the potential to significantly reduce global warming emissions from transportation – especially if these biofuels are produced from plant wastes and cellulose.

- FOR MORE INFORMATION -

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