Oil from spill could have powered 38,000 cars (and more) for a year, researcher says

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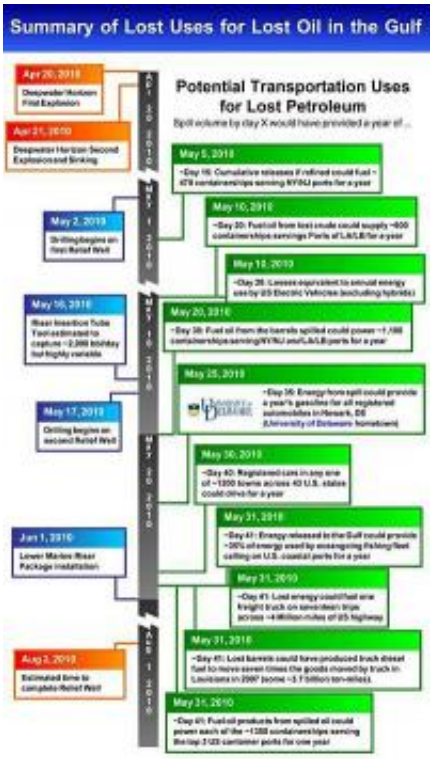

This is a summary of lost uses for lost oil in the Deepwater Horizon Spill, Gulf of Mexico. Credit: Prof. James Corbett/University of Delaware

As of today (Wednesday, June 9), if all the oil from the Deepwater Horizon spill in the Gulf of Mexico had been used for fuel, it could have powered 38,000 cars, and 3,400 trucks, and 1,800 ships for a full year, according to University of Delaware Prof. James J. Corbett. That's based on the estimated spill rate of 19,000 barrels of oil per day.

Corbett, a professor of marine policy in UD's College of Earth, Ocean, and Environment, works on energy and environmental solutions for transportation. He has launched a website that reports the impact of the Deepwater Horizon oil spill in terms of lost uses of the lost fuel on a daily basis: http://www.ceoe.udel.edu/getinvolved/oilSpill.aspx.

Visitors to the website can choose the spill rate they believe is most accurate from a range of reported estimates, and the website will automatically calculate how many cars, trucks, and ships could have been powered for a year, based on Bureau of Transportation Statistics.

Here are just a few of Corbett's findings:

- By May 5 (15 days after the spill), the oil lost could have fueled 470 container ships serving New York and New Jersey ports for a year.
- By May 25 (35 days after the spill), energy from the spilled oil could have provided a year's gasoline for all registered automobiles (about 26,000 cars) in Newark, Del., where UD's main campus is located.
- By May 31 (41 days after the spill), the lost energy could have fueled one freight truck on 17 trips across all 4 million miles of U.S. highway.

Corbett says he developed the website to help put the oil spill in a perspective to which everyday users of petroleum, including most Americans, can relate.

Transportation activities consume about two-thirds of all petroleum in the United States -- more than 20 billion barrels per day, according to

Corbett. Gasoline for automobiles accounts for about two-thirds of U.S. total transportation energy, diesel fuels power most of our goods movement, and most international containerized cargoes are delivered by ships -- the largest vehicles ever built.

"Energy resources offshore are being explored because each of us petroleum consumers is demanding more," Corbett says.

The website also may help us decide how to reduce risks of future oil spills.

"Drilling this exploratory well by the Deepwater Horizon was an extremely high-risk proposition," Corbett says. "At $75 per barrel of crude oil, the oil spilled would have been worth about $90 million in terms of spill oil value if extracted for refining. Some experts are now estimating damages from the spill to exceed $10 billion. That's a potential 100 to 1 loss, given the spill damage-to-value ratio."

Corbett's research collaborations focus on ways to improve the energy performance of transportation systems using ships, trucks, trains, and other vehicles. There are ways to reduce the need for offshore oil drilling, Corbett says:

- If we improve automobile fuel economy to 35.5 miles per gallon (mpg), as proposed by the current administration, we would offset demand equivalent to the gasoline energy lost by 199 years of Deepwater Horizon daily releases.

- If we add only 2 mpg to the fuel economy for trucks, as proposed by the Union of Concerned Scientists, we would offset diesel-driven energy demand equivalent to 12 years of Deepwater Horizon daily releases.

- Rebalancing how we transport goods would achieve substantial energy savings. A shift from truck to rail for specific commodities/routes would require about 20 percent of the energy per ton-mile compared to trucking. Achieving this would require an investment in infrastructure and green logistics to facilitate intermodal combinations of trucking and rail rather than treating the modes as competitors.

- Shifting passengers from single-occupant cars to car-sharing/carpooling and better transit also would produce important reductions.

"The wise use of petroleum and other energy resources is an opportunity for each of us," Corbett says. "We can reduce the need to drill deeper into environmental risk. Within a few miles of our communities, we can do a lot to reduce energy demand."

Provided by University of Delaware