

LIGHTEN UP

ENERGY MYTHS

BIOFUEL MYTHS



Will plant-based fuels be able to replace oil or cut greenhouse emissions? Not according to Michael Grunwald, an award-winning environmental reporter for The Washington Post. Lobbyists have persuaded U.S. and some European countries to mandate biofuel use based on such propositions. But it seems those lobbyists were wrong about both the benefits and the costs.

Researchers who insist agri-fuels will cut emissions have all made a basic error, says Grunwald. They tout the fact that fuel crops sequester carbon while growing, but never consider that those crops might replace or eliminate plants that sequester even more carbon, which is exactly what happened in Indonesia. Farmers there cut down forests and dug up peat lands to grow palm oil for the European biodiesel market. This skyrocketed the country from 21st to

3rd on the list of the world's top carbon emitters, as the practice quickly put back into circulation all the carbon sequestered in those forests and lands.

It took until 2007 for researchers to look into the carbon losses and gains created by biofuel-oriented deforestation and other land-use changes. One well-focused study found it would take more than four centuries of using biodiesel to break even on the carbon emitted by clearing peat for palm oil.

Indirect damage can be equally devastating. For example, many farmers worldwide have decided to grow corn to cash in on government ethanol subsidies and

mandates. This was a factor in Brazilian farmers' and ranchers' decisions to burn down Amazonian rain forests for cropland. Forests are better at sequestering carbon than seasonal corn crops. Another study estimated it would take 167 years of using corn-based ethanol to emit less CO₂ than just leaving the forests alone.

Deforestation accounts for 20% of global emissions, so it would seem best to leave forests be. But that means limiting the land dedicated to farming, which can be difficult, if not impossible, with a growing world population. And the return from crop-based fuel isn't so hot either. For example, if the U.S. dedicated its entire grain crop to ethanol, it would replace just 20% of the gasoline we currently use.

And replacing food crops with fuel crops makes no sense when there are hungry people in the world. To put it into perspective, the grain needed to fill a 20-gallon fuel tank with ethanol could feed one person for a year. In fact, biofuel mandates have helped send global food prices soaring. So, Grunwald concludes, plans to increase ethanol production inevitably lead to more hunger, deforestation, and emissions.

It's also doubtful biofuels will ever constitute a significant part in the U.S. energy use. Recent studies suggest that any biofuels requiring good agricultural land would be worse than gasoline in causing global warming. ■