

Study: US biofuels policies flawed

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The United States needs to fundamentally rethink its policy of promoting ethanol to diversify its energy sources and increase energy security, according to a new policy paper by Rice University's Baker Institute for Public Policy.

The paper, "Fundamentals of a Sustainable U.S. Biofuels Policy," questions the economic, environmental and logistical basis for the billions of dollars in federal subsidies and protectionist tariffs that go to domestic ethanol producers every year. "We need to set realistic targets for ethanol in the United States instead of just throwing taxpayer money out the window," said Amy Myers Jaffe, one of the report's authors.

Jaffe is a fellow in energy studies at the Baker Institute and associate director of the Rice Energy Program.

As an example of the unintended economic consequences of U.S. biofuels policy, the report notes that in 2008 "the U.S. government spent \$4 billion in biofuels subsidies to replace roughly 2 percent of the U.S. gasoline supply. The average cost to the taxpayer of those 'substituted' barrels of gasoline was roughly \$82 a barrel, or \$1.95 per gallon on top of the retail gasoline price (i.e., what consumers pay at the pump)." The report questions whether mandated volumes for biofuels can be met and whether biofuels are improving the environment or energy security.

The report, which includes analysis by environmental scientists, highlights the environmental threats posed by current biofuels policy. "Increases in corn-based <u>ethanol production</u> in the Midwest could cause



an increase in detrimental regional environmental impacts," the study states, "including exacerbating damage to ecosystems and fisheries along the Mississippi River and in the Gulf of Mexico and creating water shortages in some areas experiencing significant increases in fuel crop irrigation." Moreover, the report challenges claims that ethanol use lowers greenhouse gas (GHG) emissions and argues, "There is no scientific consensus on the climate-friendly nature of U.S.-produced corn-based ethanol, and it should not be credited with reducing GHGs when compared to the burning of traditional gasoline."

In 2007, Congress passed the Energy Independence and Security Act (EISA) that mandated production targets for "renewable fuels," mainly biodiesel and ethanol. The bill mandated ambitious production targets of 9 billion gallons of biofuels a year in 2008 and rising to 36 billion gallons a year by 2022. Corn ethanol is capped at 15 billion gallons a year in the law, but even that level will be difficult to reach given logistical and commercial barriers, according to the study. The Baker Institute report finds, however, that the use of flex-fuel vehicles is not likely to be extensive enough to overcome the barriers to achieving the Energy Independence and Security Act of 2007 mandates for U.S. ethanol market saturation.

The EISA also called for 21 billion gallons of advanced biofuels, produced from sources like switchgrass, corn stover and algae, to be used in the nation's fuel supply by 2022. But the report determines "existing mandated targets for advanced biofuels are not currently achievable -- scientifically or commercially -- and should be revisited."

As a result, the report's authors wrote, "we encourage Congress to revisit these mandates and revise them to be in line with realizable targets and time frames to create an improved policy that will reduce uncertainty for refiners and allow a more orderly implementation of achievable goals and mandates by the EPA."



Finally, the report questions the tariff imposed on ethanol imported from Latin America and the Caribbean. Because sustainable production of U.S. domestic corn-based ethanol faces limitations, the report finds "tariff policies that block cheaper imports are probably misguided." As a result, the report states that, "we believe on balance that the economic and geopolitical benefits to this trade with select regional suppliers would outweigh any 'energy security' costs to having some larger percentage of U.S. <u>ethanol</u> supplies arriving from foreign sources."

More information: To read the complete study, go to <u>www.bakerinstitute.org/program ... u.s.-biofuels-policy</u>

Provided by Rice University

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