

## Statement in Response to *Science* Articles on Biofuels

### *Public Misled About What These Studies Actually Say*

On February 8<sup>th</sup>, several major news outlets covered the emergence of two new studies about the “upstream” or indirect impacts of biofuel production. There was a clear disconnect between what the studies actually said,<sup>1</sup> and what was actually written. The general thesis of both studies is that using pristine lands to grow biofuel feedstock will have serious climate change impacts. Yet, most of the stories suggested or declared that today’s biofuels are worse than gasoline in terms of greenhouse gas (GHG) emissions. Some of the misinformation is directly traceable to the author’s statements.

1) It is simply false to paint Searchinger’s study as a critique of today’s biofuels ...

The Searchinger study assumes 30 billion gallons per year (bgy) of corn ethanol use. This is almost *4 times* the current U.S. ethanol market (8 bgy), and *2 times* greater than the 15 bgy of corn ethanol use required by federal law *through 2022*.<sup>2</sup>

2) It is misleading for the authors of both the Searchinger study and the Tillman study to claim that today’s biofuels are worse than gasoline with regard to GHG emissions ...

Both studies seek to go beyond the current analysis by incorporating indirect “upstream” land use changes into the GHG profile of biofuels. But they fail to incorporate indirect impacts into the petroleum fuel baseline, resulting in a clear “apples to oranges” comparison.

3) The Searchinger study is very clearly a “worst case scenario” analysis, but the article has been promoted as an investigation into the way things are done today ...

Among the worst case scenario assumptions are: (a) an inflated ethanol market size; (b) an inelastic supply/demand land use forecast in which one U.S. hectare used for corn results in one hectare planted elsewhere; (3) all new (displaced) hectares are cultivated in pristine ecosystems (prairie, rainforests, etc.) as opposed to some marginal lands.

4) The Searchinger analysis relies on a long series of highly subjective assumptions ...

The string of assumptions: we will get to 30 bgy corn ethanol production; increased corn demand spikes corn, wheat and soybean prices, reducing exports of corn, wheat, soybeans, pork and chicken; 10.8 million hectares would need to be planted to fill the void; new hectares would be planted on pristine lands in four countries: China, India, Brazil and the United States.

5) It is misleading to refer to land use impacts as an “omission” from previous biofuel studies ...

An upstream/indirect impact is a brand new field of research for any product with incredibly uncertain indicators. These are all “market mediated” effects with dozens of possible socioeconomic, environmental, policy and geopolitical variables. The indirect impacts of oil dependence are countless, and are also omitted.

It is unfortunate that a “worst case scenario” calculation, without a petroleum fuel baseline analysis, was portrayed as a fair and transparent comparison of a business as usual approach. The ongoing analysis of indirect impacts will be incredibly complicated but remains important. The New Fuels Alliance hopes that future studies will be more balanced and more accurately portrayed by all responsible parties.

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<sup>1</sup> The “Tillman study” (“*Land Clearing and the Biofuel Carbon Debt*”) focuses on the amount of carbon released by the initial cultivation of pristine lands. The “Searchinger study” (“*Use of U.S. Croplands for Biofuels Increases Greenhouse Gases Through Emissions from Land Use Change*”) attempts to predict the magnitude of the impact (i.e. how much land use change will actually occur and to what effect).

<sup>2</sup> The study also refers to a sensitivity analysis of slightly lower inputs, but the inputs are still inexplicably large.