

Press release by Ecofys

EU transport: Emission savings of biofuels 80% better than thought, new calculations show

Utrecht/Brussels, 12 November 2014 – European calculation rules substantially underestimate the climate benefit of biofuels in the transport sector. Their greenhouse gas emissions should be compared with the emissions of the fossil fuels that they replace in the market. These ‘marginally’ replaced fossil fuels are much more emitting than the average fossil fuel blend, to which biofuels are currently compared.

International consultants Ecofys have undertaken a study on behalf of the European Oilseed Alliance (EOA), the European Biodiesel Board (EBB) and the European Vegetable Oil and Protein meal Industry (FEDIOL) that explores this subject. The study “Greenhouse gas impact of marginal fossil fuel use” shows that emissions from fossil fuels are substantially underestimated in European legislation.

Lifecycle greenhouse gas emissions of biofuels are compared to a ‘fossil comparator’. This comparator is based on the average carbon intensity of an average blend of fossil fuels. It is currently set at 83.8 gCO_{2eq}/MJ in European legislation. The study shows that biofuel greenhouse gas emissions in fact replace emission-intense unconventional fuels such as those derived from oil sands, tight oil and kerogen oil.

Need to reflect market correctly

Ecofys’ consultants researched what the best measure for comparison should be. They examined which fossil fuels would be used in the market, if the fraction of biofuels would not further increase. This so called ‘marginal approach’ reveals that the real estimated carbon intensity of fossil fuels is about 115 gCO_{2eq}/MJ, which is 37% higher than that of the average blend used for the comparator. With an average emission from biofuels of about 46 gCO_{2eq}/MJ, this means that the direct carbon benefit of biofuels is about 69 gCO_{2eq} /MJ. This is even 80% better than what is commonly thought. “We strongly recommend to readjust the fossil comparator to reflect the growing share of unconventional fuels entering the market”, said Carlo Hamelinck, Managing Consultant at Ecofys.

Call for transparency

The recently published Commission methodology proposal on the Fuel Quality Directive (98/70/EC) sets the 2010 baseline greenhouse gas intensity of fossil fuels at 94.1 gCO_{2eq}/MJ. It still, however, proposes to compare biofuels with the outdated fossil comparator of 83.8 gCO_{2eq}/MJ. Furthermore, the proposed policy does not call for the much needed transparency on the carbon intensity of fossil fuels entering the EU market, contrary to what is expected from biofuels. "Fossil fuels should meet the same standards as biofuels", Hamelinck claims. "This policy orientation clearly underestimates the potential that biofuels bring about to save emissions in the EU transport sector."

Characters with spaces: 2,825

The study is available for download at <http://www.ecofys.com/en/publication/greenhouse-gas-impact-of-marginal-fossil-fuel-use>.

Graphic: Lifecycle greenhouse gas emissions from fuels, source: Ecofys

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