



PRESS RELEASE

Ecofys study presents new evidence that the European Commission underestimates the greenhouse gas savings of biofuels

BRUSSELS, 12 November, 2014 – A report published today by Ecofys, a leading consultant in energy and climate policy, concludes that the European Commission does not adequately capture the greenhouse gas (GHG) emission savings of biofuels. Indeed, it underestimates the emissions of fossil fuels in the Renewable Energy Directive (RED) and in the Fuel Quality Directive (FQD) by underestimating the “fossil comparator” which *de facto* reduces the evaluation of the GHG emissions that biofuel save.

Speaking on behalf of the biodiesel supply chain, Raffaello Garofalo highlighted: “*Ecofys finds that biofuels’ GHG savings are 80% higher than the levels calculated by the Commission. In the current European legislative debates on Indirect Land-Use Change and Fuel Quality, decision-makers should ensure a fair and balanced assessment of biofuels*”.

To assess the benefits of biofuels, the Renewable Energy and the Fuel Quality Directives compare their lifecycle GHG emissions to a ‘fossil fuel comparator’. The existing EU legislation defines this reference point as the average GHG intensity of fossil fuels in the EU transportation market and establishes its value at 83.8 gCO₂_{eq} / MJ. However, this evaluation does not reflect the current intensity of the **EU’s fossil fuel mix** for two reasons:

- Conventional fossil fuel extraction is increasingly difficult as large existing fields are depleted and smaller fields need to be rapidly operationalized; and
- Unconventional fuels with high carbon footprints of 135 gCO₂_{eq} / MJ are progressively taking a larger share of the global market and use¹.

Underestimating the “fossil comparator” *de facto* reduces the evaluation of the GHG emissions that biofuels save. It therefore needs to be readjusted to reflect the real average carbon intensity of the EU fossil fuels mix.

¹ These fossil fuels are also referred to as marginal fossil fuels.

Biofuels *replace* “marginal fossil fuels” with an average carbon intensity of 115.5 gCO₂_{eq} / MJ, which is 31.7 gCO₂_{eq} / MJ higher than the “fossil comparator” valued at 83.8 gCO₂_{eq}/MJ.

Furthermore, the Ecofys study argues that the accurate assessment of biofuels' GHG savings must account for the fossil fuels that they *replace* in the transportation market, and not only with the EU average fossil fuel mix. The researchers have developed a 'marginal approach'² to analyse which fossil fuels would be used if biofuels were not available and concluded that:

- Unconventional fuels such as light tight oil, oil sands and kerogen oil, would replace biofuels; and
- The average carbon intensity of the replaced fuels is evaluated approximately at 115.5 gCO₂_{eq} / MJ. This represents 31.7 gCO₂_{eq} / MJ more than the current fossil comparator,

Biofuels deserve a fair and balanced assessment: their GHG savings should be re-evaluated by 80% above their current levels.

These conclusions illustrate that biofuels still represent today a solution to decarbonize the EU's transportation sector. The European Commission as well as the Parliament and Council must fairly and consistently reflect the contribution of biofuels to the GHG reduction targets in the legislation they adopt.

This is all the more important since the 31.7g CO₂_{eq} / MJ underestimation is of the same order of magnitude as the ILUC figures currently proposed by the Commission in the indirect land-use change directive.

The recent FQD “methodology directive”: unfair and irrational

It is even more unfair and irrational that the recent Commission implementing measure of Article 7 under the FQD introduces a 2010 baseline for the carbon intensity of EU fossil fuels at 94.1 gCO₂_{eq} / MJ (representing the average carbon intensity of the EU fossil fuels mix, while the 115g of the Ecofys study represent the marginal fossil fuels replaced by biofuels), but still proposes to compare biofuels with the previous 83.8 gCO₂_{eq} /MJ fossil comparator. It also misleads public opinion and damages our industry's efforts to make a sustainable contribution to growth and jobs in Europe.

² The marginal approach or marginal analysis assumes that biofuels in Europe substitute fossil fuels that are most sensitive to demand/price, as these fossil fuels are more difficult to extract and bear a higher carbon footprint.

Note to editors:

The European Biodiesel Board (EBB) is a non-profit organization established in January 1997. Today, EBB gathers nearly 80 members across 21 Member-States, which represents 75% of the European output. Biodiesel is the main European solution to reduce emissions from transport and dependence on imported oil. EBB aims to promote the use of biodiesel in the European Union and is committed to fulfil the International standards for sustainability in GHG emissions and sustainable feedstock. EBB is constantly working towards the development of improved and greener technologies.

The European Oilseed Alliance (EOA) brings together the oilseed organizations of the major European producing countries (Germany France, United Kingdom, Poland, Czech Republic, Finland, Belgium) EOA members represents 90 % of EU oilseed production - EOA works in association with the European organizations representing the oilseed supply chain, producers, processors, and seed breeders: Copa-Cogeca, Fediol, EBB, ESA.

FEDIOL represents the interests of the European vegetable oils and protein-meal industry. With over 150 facilities in Europe, the sector provides over 20.000 direct employments. Our members process approximately 56 million tonnes of basic products a year for the food and non-food markets. Oilseed crushing produces vegetable oils and proteinmeals as co-products. While vegetable oils are used for food and technical uses (pharmaceuticals, paints, detergents, biodiesel, etc.), proteinmeals are used to meet the increasing global demand for meat and protein.

About the study

To view the report please visit: <http://www.ecofys.com/en/publication/greenhouse-gas-impact-of-marginal-fossil-fuel-use>