

European biofuel sector requirement for GHG with practical examples on fulfilling the requirement

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European Renewable Energy directive set a mandatory requirement for green house gas (GHG) performance for bioenergy in 2009. This requirement has caused concerns for farmers both inside and outside of EU, as the GHG is an issue which is not typically measured in agriculture. In practice, EU's GHG calculating methodology is fairly straight forward as it measures direct emissions. In reference to fossil fuels, most biofuels offer GHG savings when the direct emissions are calculated. With oil palm, the requirement can be fulfilled currently with 3 methods:

- 1) The use of grandfathering for plantations and mills operated prior to 2008
- 2) Use of default values from the directive (If methane capturing is installed in oil palm mills)
- 3) Calculating the actual GHG performance (with EU approved GHG calculator)

Oil palm has great potential of being high performance crop in terms of GHG, due to high energy output/input ratio. However, there is vast difference of the end GHG result depending on the oil palm production methods.

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