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Cost competitiveness – find out more…

A closer look at what biofuel costs are and if they are competitive

When comparing alternative transport fuels, or renewable energy technologies in general, the cost of CO2 abatement is often used to compare the different options. If a biofuel can be produced at the same price as a fossil fuel, if it does not require new infrastructure and if the biomass feedstock is a free resource, meaning that it has no other uses, then the cost of CO2 abatement is zero.

The biomass feedstock can only rarely be regarded as a free resource. An example is agricultural residues that may have no other use, but if removed there is a loss of nutrients and soil carbon, which then induces a cost. The cost of CO2 abatement from biofuels depends highly on the system and fuel analysed as well as local or regional conditions, with estimates varying from €25-150 /tonne[1].

[1] Møller F, Slentø, E, Frederiksen P. (2014) Integrated well-to-wheel assessment of biofuels combining energy and emission LCA and welfare economic Cost Benefit Analysis. Biomass & Bioenergy 60, 41-49. Visit resource centre