

[^{F1}ANNEX IV

**RULES FOR CALCULATING LIFE CYCLE
GREENHOUSE EMISSIONS FROM BIOFUELS**

Textual Amendments

F1 Substituted by Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC (Text with EEA relevance).

D. Disaggregated default values for biofuels

Disaggregated default values for cultivation: 'e_{cc}' as defined in Part C of this Annex

Biofuel production pathway	Typical greenhouse gas emissions(gCO_{2eq}/MJ)	Default greenhouse gas emissions(gCO_{2eq}/MJ)
Sugar beet ethanol	12	12
Wheat ethanol	23	23
Corn (maize) ethanol, Community produced	20	20
Sugar cane ethanol	14	14
The part from renewable sources of ETBE	Equal to that of the ethanol production pathway used	
The part from renewable sources of TAEE	Equal to that of the ethanol production pathway used	
Rape seed biodiesel	29	29
Sunflower biodiesel	18	18
Soybean biodiesel	19	19
Palm oil biodiesel	14	14
Waste vegetable or animal ^a oil biodiesel	0	0
Hydrotreated vegetable oil from rape seed	30	30
Hydrotreated vegetable oil from sunflower	18	18
Hydrotreated vegetable oil from palm oil	15	15
Pure vegetable oil from rape seed	30	30

^a Not including animal oil produced from animal by-products classified as category 3 material in accordance with Regulation (EC) No 1774/2002.]

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

Biogas from municipal organic waste as compressed natural gas	0	0
Biogas from wet manure as compressed natural gas	0	0
Biogas from dry manure as compressed natural gas	0	0

a Not including animal oil produced from animal by-products classified as category 3 material in accordance with Regulation (EC) No 1774/2002.]
