

ANNEX V

Rules for calculating the greenhouse gas impact of
biofuels, bioliquids and their fossil fuel comparators

E. Estimated disaggregated default values for future biofuels and bioliquids that were not on the market or were only on the market in negligible quantities in January 2008

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

Biofuel and bioliquid production pathway	Typical greenhouse gas emissions(gCO_{2eq}/MJ)	Default greenhouse gas emissions(gCO_{2eq}/MJ)
wheat straw ethanol	3	3
waste wood ethanol	1	1
farmed wood ethanol	6	6
waste wood Fischer-Tropsch diesel	1	1
farmed wood Fischer-Tropsch diesel	4	4
waste wood DME	1	1
farmed wood DME	5	5
waste wood methanol	1	1
farmed wood methanol	5	5
the part from renewable sources of MTBE	Equal to that of the methanol production pathway used	

Disaggregated default values for processing (including excess electricity): ' $e_p - e_{ee}$ ' as defined in part C of this Annex

Biofuel and bioliquid production pathway	Typical greenhouse gas emissions(gCO_{2eq}/MJ)	Default greenhouse gas emissions(gCO_{2eq}/MJ)
wheat straw ethanol	5	7
wood ethanol	12	17
wood Fischer-Tropsch diesel	0	0
wood DME	0	0
wood methanol	0	0
the part from renewable sources of MTBE	Equal to that of the methanol production pathway used	

Disaggregated default values for transport and distribution: ' e_{td} ' as defined in part C of this Annex

Biofuel and bioliquid production pathway	Typical greenhouse gas emissions(gCO_{2eq}/MJ)	Default greenhouse gas emissions(gCO_{2eq}/MJ)
wheat straw ethanol	2	2

Status: This is the original version (as it was originally adopted).

waste wood ethanol	4	4
farmed wood ethanol	2	2
waste wood Fischer-Tropsch diesel	3	3
farmed wood Fischer-Tropsch diesel	2	2
waste wood DME	4	4
farmed wood DME	2	2
waste wood methanol	4	4
farmed wood methanol	2	2
the part from renewable sources of MTBE	Equal to that of the methanol production pathway used	

Total for cultivation, processing, transport and distribution

Biofuel and bioliquid production pathway	Typical greenhouse gas emissions(gCO_{2eq}/MJ)	Default greenhouse gas emissions(gCO_{2eq}/MJ)
wheat straw ethanol	11	13
waste wood ethanol	17	22
farmed wood ethanol	20	25
waste wood Fischer-Tropsch diesel	4	4
farmed wood Fischer-Tropsch diesel	6	6
waste wood DME	5	5
farmed wood DME	7	7
waste wood methanol	5	5
farmed wood methanol	7	7
the part from renewable sources of MTBE	Equal to that of the methanol production pathway used	