

### ANNEX III

#### Energy content of transport fuels

| <b>Fuel</b>  | <b>Energy content by weight(lower calorific value, MJ/kg)</b> | <b>Energy content by volume(lower calorific value, MJ/l)</b> |
|--|---|--|
| Bioethanol (ethanol produced from biomass)   | 27  | 21   |
| Bio-ETBE (ethyl-tertio-butyl-ether produced on the basis of bioethanol)  | 36 (of which 37 % from renewable sources)                     | 27 (of which 37 % from renewable sources)                    |
| Biomethanol (methanol produced from biomass, to be used as biofuel)  | 20  | 16   |
| Bio-MTBE (methyl-tertio-butyl-ether produced on the basis of bio-methanol)   | 35 (of which 22 % from renewable sources)                     | 26 (of which 22 % from renewable sources)                    |
| Bio-DME (dimethylether produced from biomass, to be used as biofuel)   | 28  | 19   |
| Bio-TAEE (tertiary-amyl-ethyl-ether produced on the basis of bioethanol)   | 38 (of which 29 % from renewable sources)                     | 29 (of which 29 % from renewable sources)                    |
| Biobutanol (butanol produced from biomass, to be used as biofuel)  | 33  | 27   |
| Biodiesel (methyl-ester produced from vegetable or animal oil, of diesel quality, to be used as biofuel)   | 37  | 33   |
| Fischer-Tropsch diesel (a synthetic hydrocarbon or mixture of synthetic hydrocarbons produced from biomass)  | 44  | 34   |
| Hydrotreated vegetable oil (vegetable oil thermochemically treated with hydrogen)  | 44  | 34   |
| Pure vegetable oil (oil produced from oil plants through pressing, extraction or comparable procedures, crude or refined but chemically unmodified, when compatible with the | 37  | 34   |

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

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| type of engines involved and the corresponding emission requirements)  |    |    |
| Biogas (a fuel gas produced from biomass and/or from the biodegradable fraction of waste, that can be purified to natural gas quality, to be used as biofuel, or wood gas) | 50 | —  |
| Petrol   | 43 | 32 |
| Diesel   | 43 | 36 |