European Biofuels Technology Platform Stakeholder Plenary Meeting 31st January 2008

Biofuels and Motor Fuel Quality – Enemies or Allies?

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Spark ignition (SI) engines

- Blend of x % renewable components with gasoline
 - Accepted in new and existing fleets
 - Standardised quality
 - Emissions standards
 - Durability
 - Existing infrastructure
- Ethanol E85
 - Standardised quality
 - Requires adapted vehicles and new infrastructure
- Biogas
 - Requires adapted vehicles and new expensive infrastructure
 - Good GHG potential

Compression ignition (CI) engines

- Blend of x %FAME/FAEE with diesel fuel
- Hydrogenated Renwable Oil blended with diesel fuel
- Biomass to liquid (BTL)
 - Accepted in existing and new vehicle fleets
 - Standardised quality,
 - Emission standards
 - Durability
 - Existing infrastructure
- Ethanol for modified diesel engines
- Heavier alcohols? Acetals? Blended in diesel fuel
- DME
 - Requires adapted vehicles and new infrastructure
 - Good emission performance

Quality of fuels

- Quality specification in EN standards
- Standardisation by CEN technical committees with representation from relevant stakeholders
- Technical basis for specification
- Development work on analytical methods and correlation with performance in vehicles

Summary

- Production routes
 - Efficient use of biomass
 - High GHG reduction potential
 - Sustainability
- Quality important to ensure trouble-free operation of vehicles and acceptance from the public
- Fact based information on biofuels