

ASFE's comments on the Commission's Proposal for a Directive on the promotion of the use of energy from renewable sources (COM (2008) 19)

The Alliance for Synthetic Fuels in Europe (ASFE) brings together leading automotive and energy companies sharing a commitment to reducing the environmental impact of road transport through energy efficiency, improved engine technology and cleaner fuels.

Synthetic fuels are clean alternative fuels that can be made from biomass (Biomass to Liquids, BTL), natural gas (Gas to Liquids, GTL) or coal (Coal to Liquids, CTL). They are produced through a chemical transformation process known as Fischer-Tropsch, originally developed in Europe in the 1920s.

Synthetic fuels are available today and can be used with existing vehicles and refuelling infrastructure. Even without engine modifications, synthetic fuels can deliver immediate and significant tailpipe emission reductions (particulate matter, nitrogen oxides, carbon monoxide, hydrocarbons and net carbon dioxide) improving air quality, while diversifying energy supply for road transport. The September 2007 European Parliament Resolution on the Renewable Energy Roadmap acknowledged that "... synthetic fuels [which] can help to diversify energy supply, improve air quality and reduce CO₂ emissions" and that the Commission should therefore examine the possibility of promoting them.

ASFE's specific Comments on the Proposal for a Directive on the promotion of the use of energy from renewable sources (RES Directive):

Sustainability & CO₂ emissions

ASFE supports the European Commission's objective to further promote the use of renewable energy including biofuels for transport and agrees with the principle of prioritising different kind of biofuels based on their sustainability and their greenhouse gases reduction potential.

BTL is a 2nd generation biofuels made from non-food feedstocks such as residues from agriculture and forestry. BTL has the potential to contribute a net reduction of CO₂ emissions of up to 90%¹ compared to crude oil derived fuels when measured on life-cycle basis as calculated in the WtW-study of JRC, EUCAR and CONCAWE.² BTL meets therefore the sustainability criteria defined in the proposal incl. the obligation for biofuels to have at least a 35% greenhouse gas emission saving and not to be made from raw material obtained from land with recognised high biodiversity value or land with high carbon stock as well as the draft sustainability criteria under discussions by the EU institutions.

Availability

The RES Directive proposal emphasises the need to mobilise new biomass resources considering that there are different uses of biomass. In the transport sector, BTL is included among these biomass uses.

BTL has the potential to use biomass domestic resources (residues from agriculture and forestry) and will be produced in Europe, helping the EU to be less dependent on diesel imports as well as enhancing its competitiveness and innovation. Europe is currently at the forefront of the development of the BTL industry and should keep this leading position. A recent study by 'Renew project' indicated that Europe has sufficient biomass available today to build around 50 industrial scale BTL plants and

¹ This 90% CO₂ reduction potential will happen once large scale development of BTL has occurred.

² JRC/EUCAR/CONCAWE joint study: *Well-to-Wheels Analysis of Future Automotive Fuels and Powertrains in The European Context* (2006).

http://ies.jrc.cec.eu.int/fileadmin/Documentation/Reports/Emissions_and_Health/EUR_2006-2007/EUR_22342_EN.pdf

substitute 4% of the individual passenger car diesel fuel demand by 2020.³ The world's first demonstration plant was completed in Freiberg, Germany in April 2008 and industrial scale production is planned in the coming years provided a favourable policy framework that ensures that investments follow.

To justify investments in BTL production a long-term strategy is important that should be implemented as soon as possible. This strategy should be accompanied by an R&D and fiscal framework in the EU.

Support for 2nd Generation Biofuels

In order to implement the current 10% binding target for the biofuels share of transport fuel consumption, the Commission identified the need to create a biofuel sustainability regime including beneficial conditions for 2nd generation biofuels. The EC recognises that the development of 2nd generation biofuels would help boost innovation and maintain Europe's competitive position in the renewable energy sector, as well as offering improved greenhouse gas savings.

ASFE firmly believes that 2nd generation biofuels need specific support. However, the proposal does not provide sufficient incentive for 2nd generation biofuels in general and BTL in particular. BTL has the additional benefit to make the EU less dependent on diesel imports and should get extra support.

The Commission requires that Member States give double weighting in their national biofuel obligations to biofuels originating from different feedstock sources (i.e. biofuels produced from wastes, residues, non-food cellulosic material, and ligno-cellulosic material). ASFE considers that this double counting provision should at least count towards the 10% target proposed by the RES Directive.

Even if amended, this double counting measure will not stimulate alone BTL production or give a sufficient incentive for the building of new BTL plants. Further measures are also needed to support development and market deployment. A favourable policy framework at both the EU and Member State levels is essential to accelerate the development of BTL production capacity as it requires large investments and construction of expensive production plants. BTL should also receive additional financial support (including fiscal advantages) to ensure the necessary market pull from consuming markets.

Biofuels blend

The unique properties of BTL as well as synthetic fuels from other feedstocks can play a key role in mitigating compatibility and blending problems. They can be used neat or blend in any percentage to conventional diesel fuels without compatibility problems with engines and infrastructure.

ASFE: Promoting Sustainable Mobility with Synthetic Fuels

Alternative fuels such as synthetic fuels from other feedstocks (e.g. natural gas) are a complementary option to the use of renewable energy sources in the transport sector. The promotion of these alternative fuels can help the EU achieving its energy and climate goals in the transport sector as it was already acknowledged in the 2001 Commission Communication on alternative fuels for the transport sector⁴ which set as a target for the EU to replace 20% of diesel and gasoline fuels with alternative fuels in the road transport sector by 2020. In this regard, ASFE considers necessary for the EU to reformulate the 2001 targets and include objectives for non-renewables alternative fuels such as synthetic fuels made of natural gas in order to efficiently complement the RES Directive.

Furthermore, synthetic fuels from natural gas (GTL) can also play a role in the development of BTL. As a large part of the production technology is shared between GTL and BTL, any development in the production of GTL will also benefit BTL technology. Therefore, promoting the demand for GTL will accelerate the development of BTL.

³.Renewable fuels for advanced powertrains. Executive Summary (23 April 2008). FP6 RENEW Project. http://www.renew-fuel.com/fs_documents.php

⁴ COM(2001) 547 final

ASFE demands:

The RES Directive should aim at:

- Including BTL among the 2nd generation biofuels to be brought on the EU market by 2020, because of their greatest environmental sustainability and higher potential to reduce greenhouse gas emissions compared to 1st generation biofuels.
- Establishing a strategy in favour of BTL that strongly promotes its development at both Member State and Community levels and encourages additional support, including investment and fiscal incentives.
- Reformulating targets and objectives for transport alternative fuels, including synthetic fuels in order to efficiently complement renewables.

**** ** ****