

Major Fuel Trial Announced To Stimulate North East Biofuel Industry

Energenics Pte Limited of Singapore and Primary Dispersions Limited (PDL), a subsidiary of The Centre For Process Innovation (CPI), are pleased to announce a major biofuels trial in the North East of England.

The North East is rapidly emerging as a significant biofuels hub with major investments from Biofuels Corporation, Ensus and V Fuels. It also boasts a robust supply chain with respect to certain feedstock, as the area consistently produces high yields of oilseed rape and wheat compared to the remainder of the UK.

In the UK, from April 2008, the Renewable Transport Fuel Obligation (RTFO) requires the renewable content of transport fuels to be 2.5 percent and which will rise over time in line with UK and European targets. In addition, in December 2008, the European Union approved an Energy and Climate Package which commits the region to achieve a legally binding target of 20% renewable energy by 2020. The new Renewable Energy Directive, a key part of the package, includes a sub-target to achieve a minimum of 10% renewable energy in transport by 2020.

The Directive sets legally binding targets for each member state, to reach an overall European Union target of a 20% share of overall renewable energy including electricity, heating and cooling and transport fuel by 2020. The renewable energy target for the UK is to increase to 15% in 2020. This target will be met largely through biofuels, although renewable electricity and hydrogen can also be counted.

In terms of the fuel trial, it is expected that this strategic and groundbreaking trial will stimulate additional biofuel demand within

the region and generate additional economic benefit, together with future investment. The trial will include involvement of regional companies, regional fleets, fuel companies, vehicle manufacturers and distributors/garages. This in turn will potentially lead to an increase in regional biofuels market demand; increase in regional agricultural demand; increase in demand for new biofuel vehicles, resulting in added value to regional biofuels image.

The fuel blend to be trialled will utilise the "Energiesel" technology of blending 7.7% bioethanol, 0.5% additives and 20% biodiesel with 71.8% fossil diesel.

Also part of the proprietary additive package will be "Enercat" nanoparticle ceria fuel catalyst which improves fuel efficiency and emissions and will mitigate against loss of fuel efficiency when using the 28% bioblend diesel. This product is the 3rd generation of the original nanocatalyst technology successfully tested and used from 2002 to 2007 by a major UK fleet operator. The 3rd generation product utilises lattice engineered particles that match catalytic activity to the combustion requirements for the first time ever. The catalytic reactivity of this new formulation is over 40 times greater than current cerium oxide fuel additives being sold in the UK.

The principle benefits achieved by this trial will be:

- The use of biofuels in this trial satisfies the principle aim of the strategy – increasing the uptake of biofuels in the region.
- The potential to decrease undesirable emissions, notably NOx, which tend to increase when biodiesel fuels are used.

- The potential to offset losses in fuel efficiency that can occur with the use of biofuels, and indeed offer a comparative gain in fuel efficiency.

Background on Participants

Energenics is a supplier of alternative energy solutions and technologies. Their Energiesel technology for point-of-fill blending of bioethanol and diesel is commercial in the Far East, India and the Europe with over 8,000 fleet vehicles migrating to the technology. Energenics also supply a nanoparticle ceria fuel catalyst formulation, which has been shown to improve diesel fuel efficiency (up to 10% FE gain has been measured with extended product use in straight diesel fuel). Both of these technologies are protected by a strong IP position.



Primary Dispersions Ltd (PDL) is a subsidiary of CPI Innovations Services, the private trading arm of CPI Ltd, located at The Wilton Centre, Redcar, NE England. PDL is developing and commercialising a novel new dispersion technology optimised for dispersing hard nanoparticles down to 5nm in size. CPI's expertise lies in process innovation across a wide range of markets and applications.



Primary Dispersions

For more information on the trial, or any of the participants, please call Allen Reid on:
t +44 (0)1740 625 732 or
e allen.reid@primarydispersions.com