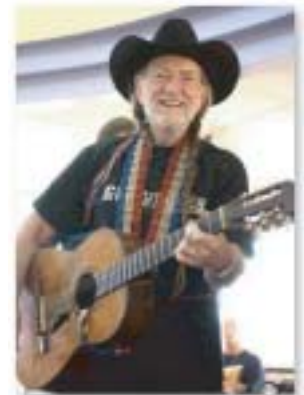


Biofuels could be Willie's Biggest Gig!

By Steve Brown, Director of Diesel Test Australia and Peter Harley, Acting Director of TestSafe Australia

Amid escalating world prices for petroleum, famed American Country and Western singer, Willie Nelson, is urging truck drivers to get back on the road again and convert to environmentally clean biodiesel fuel. He has recently established, with three partners, a company called Willie Nelson's Biodiesel and is marketing the fuel across the American trucking industry. To convert truckies to this new fuel could be his biggest and toughest gig.



His initiative is part of a worldwide trend to establish an alternative to petroleum that takes advantage of sometimes surplus crops of grain and sugar. This is of particular interest to Australia where the sugar industry was excluded from the recently concluded free trade agreement with the USA. Urgency has been further created by the fact that major agricultural producers such as America and Brazil have already stepped up development of this fuel product for the diesel-powered long distance road haulage industry.

Diesel Test in conjunction with TestSafe has established a major emission testing facility and reference laboratory to capitalise on TestSafe's longstanding expertise to test diesel engines on its dynamometers. It has recently completed a Federally funded project comparing emissions from 8 different types of diesel fuels (including low sulphur, low density, diesel water emulsion, and biodiesel blends 5%, 20% and 100%). Four transport engines were extensively tested in the laboratory for particulate and greenhouse gas measurements. These results have been provided to the NSW Roads and Traffic Authority as part of its GREENFLEET program and forwarding to the Federal Government for input into the development of its future fuels policy. In recent weeks the laboratory has also been conducting tests on a



government bus provided by Transport South Australia as they consider moving to operating their fleet on a B20 bio diesel blend. These tests reveal significant emission benefits from the use of Biodiesel.

Australia currently uses 20 billion litres of petrol and 15 billion litres of diesel annually. By contrast Biofuels currently provide only about 0.3% (about 75 million litres of road transport fuel in the form of biodiesel and ethanol).

Ethanol is currently produced from cereal grains and molasses. It is produced both by Manildra Mills at Nowra NSW, and by CSR at its Sarina and Rock Point Mills in QLD.

The Federal Government has recently convened a Taskforce on Biofuels to examine the economic and scientific bases upon which decisions have been made to support ethanol and other biofuels blends internationally. The Taskforce, which will report to the Government on 31 July 2005, will also assess the health and environmental impacts, effects on automobile operation and ability to achieve a modest 350 million-litre national production target. It has sought submissions from interested parties and Diesel Test Australia jointly with TestSafe has made a submission along with 51 other organisations.

Biodiesel is a diesel engine fuel made from either natural vegetable oils and animal fats or re-processed waste cooking oils. The process replaces the glycerine in the oil/fat with an alcohol, creating an oxygenated that is naturally very poor, and from a safety perspective, low in toxicity. Biodiesel has the added advantage of being the only alternative fuel that can be used for a totally unaltered engine configuration. Currently it is also being used in small quantities by petroleum manufacturers to improve the lubricity of their products.

Apart from having a substantial greenhouse benefit, emissions of particulate matter, carbon monoxide and unburnt hydrocarbons are also significantly reduced.

Current biodiesel production facilities in Australia are relying on UCO (used cooking oil) and animal fats (Tallow). The limiting factor in the expansion of the biodiesel industry will be the availability of a resource from the grain and sugar industries, which does not intrude on the food production market. Already the dairy industry has submitted its concerns to the Biofuels Taskforce that it will be forced to compete for grain feedstock, and that this will drive up prices.

The New South Wales government for its part is supportive of the introduction of biofuels and the former Premier Bob Carr stated that the NSW Public Service Fleet Standard is to be modified to include an Ethanol 10% (E10) component. This complements the trials and testing done by diesel Test at TestSafe's site and supports the fuel refining capability in the State.

Australia is in a unique position to develop biofuels as a significant part of the overall fuel environment, and at the same time allow the grain industry to diversify out of a reliance on wheat, and the sugar industry to gain a vital new role.