

ALTERNATIVE FUELS PROJECT

In November 2003, Newcastle City Council (NCC) launched Australia's first biodiesel fleet. Biodiesel is a cleaner burning fuel made from renewable sources such as recycled restaurant oils and can be used in unmodified diesel engines.

The **NSW Roads and Traffic Authority (RTA)** has conducted comprehensive emissions testing on 13 Council vehicles. Testing included garbage trucks, passenger and light commercial vehicles. The emissions test results demonstrate a 30% reduction in black smoke and 39% reduction in particulates when using B20.



The benefits of biodiesel for NCC are threefold:

The **environmental** benefits include the reduction in Council's greenhouse gas emissions, our reliance on burning fossil fuels and volume of waste going to landfill.

If used by the entire fleet, B20 biodiesel would replace 20 percent of the approximately 1.2 million litres per annum of petroleum-derived diesel consumed by NCC with a renewable fuel. This equates to a reduction in greenhouse gas emissions of approximately 540 tonnes per annum, or a 14 percent reduction in the City's overall vehicle fleet emissions (including both diesel and petrol powered vehicles).

With the ever-increasing cost of diesel, the **economic** benefits of biodiesel as a cheaper alternative, are obvious.

Health benefits are obtained by reducing the amount of tailpipe smoke which contributes to smoke haze. The results of the RTA emissions tests demonstrate biodiesel is safe, biodegradable, and reduces serious air pollutants and toxins such as soot, particulates, carbon monoxide and unburnt hydrocarbons.



The recently installed biodiesel tank at the Council depot now supports the second stage of testing. 13 Council vehicles are participating in a maintenance analysis program that aims to identify benefits or drawbacks associated with the use of B20.

The Council's Flower Power Kombi has been using biodiesel since the beginning of the trial in November 2003. In this time, the Kombi has travelled over 95,000 kilometres with no drawbacks from the use of biodiesel identified. The Kombi has saved Council money, whilst also helping to reduce the City's greenhouse gas and black smoke emissions.



Contact: Peter Dormand
City Energy and Resource Management
(02) 4974 2542
pdormand@ncc.nsw.gov.au