

Caltex Talkingpoint

BIOFUELS – THE BENEFITS ARE REAL

WHAT ARE BIOFUELS?

Fuels made from plant material and waste fats. The main types used in Australia are ethanol (made from molasses and grains) and biodiesel (made from used cooking oils and animal fats).

WHY ARE BIOFUELS IMPORTANT?

Because they can help address two of the greatest issues of our time – climate change and energy security. Caltex believes biofuels have an important contribution to make on each issue – biofuels typically have lower greenhouse gas emissions than petrol or diesel over the whole life-cycle of production and use. They will also help fill the gap when conventional crude oil supply starts to fall short of demand.

WHY ARE BIOFUELS SOMETIMES CONTROVERSIAL?

Because there is concern overseas some biofuels may do more harm to the environment than good. Crops used for biofuels production may put further pressure on already stretched agricultural activities, resulting in food shortages. Some biofuels production overseas may exacerbate global warming through increased carbon dioxide emissions through loss of rainforest cover or burning of peatlands.

CAN WE BE SURE BIOFUELS IN AUSTRALIA ARE SUSTAINABLY PRODUCED?

Australian farming practices for producing feedstocks to make biofuels have a high level of sustainability. Our ethanol comes from wheat, in the form of waste from wheat starch manufacturing, from molasses, a byproduct of sugar refining, and soon from sorghum, a stock feed. It does not “compete” with food supplies. Caltex only sources locally manufactured biodiesel made using locally grown feedstocks processed in Australian plants. Caltex will not consider buying imported biodiesel feedstocks like palm oil until it can be sure they have been sustainably produced.

CAN I USE BIOFUELS BLENDS IN MY VEHICLE?

Ethanol-petrol blends must meet national fuel quality standards and can be used in most new and many older vehicles. (Check www.fcai.com.au for a list of compatible vehicles). Biodiesel blends must meet the national fuel quality standard for diesel if they are sold as diesel. Check with your manufacturer if you have any concerns about compatibility, particularly for blends above five per cent.



Bio E10 Unleaded loading bay
at Caltex's Banksmeadow terminal
in Sydney.



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HOW DO BIOFUELS HELP THE ENVIRONMENT?

Most importantly they reduce our reliance on fossil fuel. The twin pressures associated with oil security of supply and recognition that greenhouse gas emissions must be reduced to fight global warming provide the context for the current discussion about these fuels.

There is an increasingly urgent need to adapt the world's transport to alternative fuels and power sources. Alternative fuel sources like hydrogen or electricity from renewable, mains-based electricity are too far off to start solving the problems now. Biofuels are a more immediate option that can also form part of a long term sustainable transport system).

Ethanol is a good substitute for petrol because it can be used in suitably designed internal combustion engines (and most new vehicles are designed to use up to a 10 per cent ethanol blend). Biodiesel is a good substitute for diesel at blends up to five per cent in most vehicles and above that level in other vehicles. Both fuels can be accommodated by existing infrastructure without the major upheavals associated with the introduction of new technology.

Though biofuels help reduce carbon dioxide emissions, the amount of reduction varies depending on how they're produced.

For example, government figures show that a blend of 10 per cent ethanol with regular petrol reduces greenhouse gases when compared with normal unleaded petrol by between 1.7 per cent (when the ethanol is produced from wheat) to 5.1 per cent (when it's made from molasses).

A CSIRO study shows greenhouse emission savings for biodiesel based on waste vegetable oil range from 87 per cent for B100 (100 per cent biodiesel) to 4.2 per cent for B5 (a five per cent biodiesel blend) when compared with normal diesel. The emissions for biodiesel based on tallow range from 75 per cent less for B100 to 3.7 per cent less for B5.

According to information supplied by the new Dalby Bio-Refinery ethanol plant in Queensland – which sells ethanol to Caltex – throughout its life cycle, ethanol made from sorghum produces fewer than half the greenhouse gases emitted by fossil fuels.

Biofuels are now being sold at over 380 Caltex-branded locations around Australia.

