



What impacts will government-mandated biofuel have on my fuelsystem?

From April 1, 2023 there will be planned emission reduction targets of 1.2% increasing to 2.4% in 2024 and 3.5% in 2025.

Many may know the NZ Government, under the Emission Reduction Plan (ERP), plan to introduce a mandate forcing fuel companies to increase the use of bio-fuels in order to reduce green house gas emissions. From April 1, 2023 there will be planned emission reduction targets of 1.2% increasing to 2.4% in 2024 and 3.5% in 2025.

The government see this as a stepping stone to reducing emissions from the transport sector while the NZ fleet transitions to low-emission vehicles.

How will this impact us?

Bio-diesel blends are created by combining bio-diesel with petroleum diesel - allowing it to be used in most diesel engines without any modifications.

Bio-Fuel can act like a solvent, cleaning your fuel system, removing dirt, varnish and hydrocarbon deposits from tanks and fuel lines. When you change to using a Bio-Fuel be prepared that your fuel filters may have a much shorter life due to this cleaning effect. The older the equipment or machine the worse it could be. Filter life should return to normal after a period of time.

Bio-Fuels can solidify at higher temperatures than petroleum diesel meaning colder climates could see an increase in viscosity related flow issues or waxing. This can block filters and cause sludge build up in tanks.

Bio Fuels hold more free water, it will be important to keep an eye on fuel/water separators or bulk tank storage. Drain free water regularly as Diesel Bug grows in the presence of water.

Bio fuels can contain glycerine, which even in small quantities can contribute to rapid filter plugging. If you have onsite bulk fuel make sure you're system has adequate filtration and a maintenance program.

It is not recommend to change to a more open weave filter during this time with the aim to increase filter life, this will just let larger contaminates through which will be very harmful to your very expensive fuel system.

What should I do to prepare?

Make sure you have stock of the required fuel filters, you will no doubt need to be changing them a lot sooner than normal. Long haul trucks or farm vehicles might want to carry a spare set.

Conduct routine tank maintenance, drain to remove any free water more frequently. Inspect tanks to insure they remain clean and have good quality breathers fitted.

If you have on-site fuel make sure you have good Bulk Fuel Tank Filtration, your TWL Rep can help talk you through this.

Fit older vehicles or engines with a fuel/water separator, this will add an extra level of safety. TWL have kits available.

Information interpreted from:

- Transport Talk, National Party questions biofuels mandate. Article published 29/03/2022
- beehive.govt.nz, Powering NZ's future with biofuels, Release published 15/12/2021
- Donaldson Training Academy Manual F113037 2020

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Intended as generic information.

