BIOFUEL MANDATE QUESTIONS AND ANSWERS

Why does New Zealand need a biofuels mandate?

The Government is committed to transition to a clean, green, carbon neutral New Zealand.

We need to ensure a transition to a zero carbon and climate-resilient economy and society that also optimises economic development opportunities.

At present, New Zealand uses very little biofuels in transport and use has declined because biofuels currently cost more than fossil fuels.

More than 60 countries, including the US, China and Brazil, have implemented biofuels mandates as they are a proven way to increase the uptake of biofuels and reduce transport emissions.

An increase in domestic demand for biofuels could encourage the development of a biofuels industry in New Zealand, creating much needed job opportunities in the regions.

A biofuel mandate will drive that demand, allowing production or import to grow, which will establish a significant market for biofuels in New Zealand.

By building the market, the economics of biofuels can improve.

A 2011 study by BERL, which looked into the economic impact of the New Zealand Bioenergy Strategy (including a wide range of bioenergy actions beyond biofuels mandate) proposed by the Bioenergy Association of New Zealand, found that biofuels providing 30 percent of the country's transport fuels and meeting 25 percent of its energy needs by 2040 would generate:

- economic growth, with a gain of 1.2 percent in GDP ($6.2 billion per year) and a 1.2 percent improvement in balance of payments (around $2 billion per year) over business as usual
- employment growth, leading to an extra 27,000 regional jobs
- new business opportunities for existing land owners, including Māori who own more than 300,000 hectares of land suitable for afforestation.

How will a biofuel mandate benefit our environment?

Any mandate we put in place would have robust sustainability criteria to make sure only biofuels that are positive environmentally, economically and socially are permitted in New Zealand.

When fossil fuels are combusted in internal combustion engines they release all their ancient underground stored carbon into the atmosphere in the form of CO_2.

But when biofuels replace some or all of the fossil fuels, the net amount of CO_2 emitted reduces. This is because biofuels cycle carbon, rather than being a one-way source released into the atmosphere.

When the biomass the fuels are made from grows, it absorbs CO_2. Roughly the same amount of CO_2 is released when the fuels are burnt. This cycle means that the emissions of sustainable biofuels are much lower than fossil fuels.

The main environmental benefit of biofuels is a reduction of CO2 emissions, but they also have other benefits. Biofuels can improve air quality in urban areas by reducing vehicle exhaust pollutants, which are harmful to human health (sulphur dioxide, nitrogen oxide and particulate matter). The annual social cost of the damage from transport air pollution is estimated to be $2.1 billion.

The Ministry of Transport estimates that if a 10 percent bioethanol blend and a 7 percent biodiesel blend were used in road transport in 2022, around 529,000 tonnes of emissions would be avoided in that year. If the biodiesel blend were increased to 10 percent for the heavy diesel fleet, the emissions avoided would increase to 623,000 tonnes. These estimates indicate that even with a modest level of biofuel use, around 3.7-4.4 percent of road transport emissions in 2022 would be avoided.

What are biofuels?

Biofuels produced from biomass of plant or animal origin, such as, agricultural and forestry crops and residues, agricultural by-products, and waste (excluding plastics waste made from crude oil).

The most common biofuels are bioethanol, which can be blended with petrol for use in cars, and biodiesel, which can be blended with diesel.

What has the Government agreed to?

To encourage the production and use of biofuels the Government has agreed in principle to implement a biofuels mandate**.**

As a first step it has directed officials to review the 2008 Biofuel Sales Obligation for reinstatement.

The Biofuel Sales Obligation was repealed in 2008 before it came into effect by the fifth National Government.

This mandate would have obliged suppliers of petrol or diesel, in New Zealand, to also supply a minimum proportion of biofuels.

The biofuel proportion was initially 0.5 percent of a liable supplier’s petrol and diesel sales, rising to 2.5 percent over four years.

If the Obligation had been implemented and continued with the levels of biofuels increasing after 2012, to 7 percent for biodiesel and 10 percent bioethanol, the Ministry of Transport estimate that around 6,310,000 tonnes of CO2 emissions would have been avoided over 2008–2020.

The officials review will:

- confirm that the 2008 Biofuel Sales Obligation will be of net benefit to New Zealand
- update the 2008 Biofuel Sales Obligation's settings in light of the latest international biofuels developments and overseas policies.