

MOTOR INDUSTRY ASSOCIATION

Motor Industry Association (Inc) 2 Brook Street, Lower Hutt 5010 PO Box 31221, Lower Hutt 5040 New Zealand

T: +64 4 972 5663 W: www.mia.org.nz

Consultation: Sustainable Biofuels Mandate Energy Markets Policy Building, Resources and Markets Ministry of Business, Innovation and Employment PO Box 1473, Wellington 6140

Email: energymarkets@mbie.govt.nz

Sustainable biofuels mandate

26 July 2021

New Zealand

Please find below the MIA's submission on the MBIE & MoT Sustainable Biofuels Mandate consultation paper.

The Motor Industry Association (MIA) is a voluntary trade association set up to represent the interests of the new vehicle industry specifically the official representatives of overseas vehicle manufacturers. Members account for over 98% of all new vehicles imported and sold in New Zealand across the passenger car, light and heavy commercial vehicle and motorcycle (including on and off-road).

The Association has over 44 members (official distributors appointed by vehicle manufacturers) covering 81 different marques.

We have not answered all questions in the consultation paper; our responses focus only on Part 3A: How the Sustainable Biofuels Mandate would work.

Nothing in this submission is confidential, and the MIA permits it to be published in full.



David Crawford Chief Executive Officer



Mark Stockdale Principal Technical Advisor

Withheld under section 9(2)(a)

Executive summary

- The MIA supports policies to increase the use of sustainable renewable fuels which are important in the transition to zero emissions, and overall we support the proposed biofuels mandate as it is agnostic in terms of the type of renewable fuel. In the MIAs view, advanced biofuels or synthetic fuels like e-fuel are the most powerful initiative to decarbonise transport.
- While the proposed mandate does give fuel suppliers the freedom to decide which fuels and markets they choose to target, there is a risk that they could choose to meet the mandate by blending bioethanol in every grade of petrol. Not only will this mean that the burden on reducing transport emissions is not evenly distributed across the transport sector, but more importantly it risks operability issues for owners of biofuel-incompatible vehicles and machinery. The MIA suggests this risk needs to be mitigated by ensuring a 100% mineral "protection" grade of petrol is made available.
- For this reason, the MIA also supports a comprehensive public information campaign around the compatibility, and retail availability, of conventional (first-generation) biofuels.
- The MIA believes that focus needs to be on developing the production of synthetic fuels at scale, as these will help the mandate be met without the concerns around compatibility that limit the use of conventional biofuels.

MIA submission

The MIAs responses to these questions are conditional upon the level of conventional biofuel blends supplied in NZ being compatible with the NZ vehicle fleet (see our additional comments at the end of this section).

1. Do you support having a GHG emissions reduction mandate?

Yes, the proposed mandate focuses on reducing GHG emissions rather than supplying a set amount of biofuels, which depending on feedstock can have varying levels of GHG emission reductions. An overall GHG emissions reduction mandate also gives fuel suppliers flexibility to decide which fuels and markets they choose to target, which could include other alternative fuels like hydrogen and synthetic fuels. This provides for a market-driven response rather than regulators determining what they think is the best means to meet the objective – reducing GHG emissions.

2. Do you support the proposal to require certification of lifecycle emissions of biofuels sold in New Zealand using international standards?

Yes, not all biofuels are created equal and some have better GHG emissions reductions than others. We do not want to encourage the supply of biofuels with marginal GHG emissions reductions, so certifying their lifecycle emissions will encourage the uptake of biofuels with the maximum GHG emissions reductions, and also ensure a level playing field for fuel suppliers. The MIA endorses the proposition that this will encourage fuel suppliers to adopt advanced drop-in biofuels as they offer the best opportunity to reduce GHG emissions from the existing transport fleet, due to being fully compatible with any internal combustion engine (ICE). Whilst conventional biofuels are commercially available and likely to be adopted to meet the mandate, these have compatibility issues which limit the amount that can be blended (and for some ICE cannot be used), which will constrain the ability to reduce GHG emissions from transport. Drop-in biofuels or synthetic fuels to not have these limitations, and so the MIA encourages measures like this to support their uptake, including hypothecating the ETS revenue to commercialise their production.

3. Do you support applying the Sustainable Biofuels Mandate to all liquid transport fuel?

Yes, the MIA supports the mandate applying to all liquid transport fuel as this gives flexibility to fuel suppliers in deciding where to deploy biofuels. This should also help reduce GHG emissions across the transport sector, rather than just focusing on road transport as the previous mandate did, which limited the amount of biofuel that could be deployed due to regulated blend limits in retail fuel for conventional biofuels. By applying to all transport fuel, fuel suppliers could choose to deploy higher biofuel blends to some transport sub-sectors (e.g. rail, ships), and not be constrained by the blend limits for retail fuel. This will also help decarbonise parts of the transport sector where electrification is not practical or commercially proven yet.

4. Are the proposed initial emission reduction percentages for 2023–2025 appropriate for New Zealand? If not, what should they be?

The MIA has no comment on this, the fuel suppliers are best qualified to answer. The target will depend on what can be practically achieved in terms of global biofuel supply, and how it would be most effectively be deployed in NZ. The MIA would be concerned if this target led to fuel suppliers focussing on blending bioethanol into petrol in such a way that risked operability issues for older (incompatible) vehicles in the fleet – see our additional comments below.

5. Do you support having single GHG emissions reduction percentages across all fuel types, or do you favour separate reduction percentages? Why and how many separate percentages would you suggest we have?

While the MIA supports the flexibility the proposed mandate provides for fuel suppliers (see our answer to question 1 above), there is also merit in having separate percentages for some fuels e.g. petrol, diesel, aviation or marine fuel. The MIA concurs with the proposition that *"separate percentages would better support the deployment of biofuels in the hard to abate sectors and better support advanced biofuels"*. As noted above, the MIA supports policies that encourage the development of advanced biofuels and synthetic fuels. We also concur that there is a risk that a single GHG emissions reduction percentage across all fuels risks the fuel suppliers focussing on the cheapest, conventional biofuels (i.e. bioethanol) which would mean that only one sub-sector of the transport market (petrol consumers) would reduce its emissions and thus the policy will not lead to GHG emission reductions across all of the transport sector. Further, focusing on petrol could lead to engine compatibility issues which would pose an unreasonable impost on some consumers, as we outline in our additional comments below.

6. Do you support provisional emission reduction percentages being set for 2026–2030 and 2031–2035 with the percentages being finalised in 2024 and 2029 respectively?

Yes, the MIA supports setting emission reduction percentages in 5-year periods as this allows the provisional percentages to be informed by reviewing the operation of the mandate (and the cost impacts) and adjusting these percentages as necessary to reflect either supply challenges or positive developments in biofuel supply.

We note that the mandate proposes that fuel suppliers could defer meeting their required emissions reductions in 2023 and 2024, recognising that some suppliers may not be able to source sufficient biofuel volumes quickly enough. However a penalty will apply for deferrals. The date for the introduction of the mandate is less than 18 months away, which may not be sufficient time for fuel importers to fix contacts for biofuel supply, and to establish biofuel storage and blending facilities. The MIA thinks the regulations should be flexible enough to allow the deferral of the mandate if it becomes clear fuel suppliers will not meet the mandate in time, rather than penalising them for deferring due to the short lead-in time of the mandate.

7. Do you support the proposal that biofuel producers must be certified against an established sustainability standard to count towards achievement of the emissions reduction percentage?

Yes, the MIA supports the mandate requiring biofuels to be sustainably-sourced. As noted previously, not all biofuels are equal, and besides differences in GHG emission reductions, production of some biofuels can have other detrimental effects on the environment and it would be undesirable to use in order to meet the objective of reducing transport GHG emissions. This requirement, along with the certification of lifecycle emissions (question 2) will help ensure that only the most environmentally-friendly biofuels are used, and will also help support the uptake of advanced biofuels and synthetic fuels.

8. Do you support having a joint fuel industry/government information campaign to inform New Zealanders about biofuels and the Sustainable Biofuels Mandate?

Yes, the MIA supports a PR campaign to inform New Zealanders about the mandate and more importantly about the availability and use of biofuels, specifically:

- what the different biofuel blends are;
- where they are available for sale; and
- what vehicles and engines they can and cannot be used in.

If bioethanol is widely deployed in retail petrol as a result of this mandate, which is probable, then there needs to be a thorough campaign to inform consumers about the risk of using it in incompatible ICE, such as older cars, marinecraft, propellor aircraft, and garden machinery. They need to not only be aware of these risks, but know which fuel brands are retailing blended fuel, and in what petrol grades (see our additional comments below) in order that they can make an informed purchase decision, and more likely choose to buy a 100% mineral blend from an alternative retailer.

9. Do you support the labelling proposal that informs consumers about specific biofuels at the point of sale?

Following our comments to question 8 above, the MIA fully supports labelling biofuels at the point of sale. The main objective should be to inform consumers of the percentage of biofuel in the fuel, which is already a legal requirement for bioethanol above 3% (E3), and biodiesel above 5% (B5). This must continue. However, the other information suggested for the labels (lifecycle emissions, sustainability) is not essential and could instead be required to be provided by retailers by other means, such as a leaflet at the point of sale, or on the fuel brands website. Providing this additional information on the label at the pump could amount to visual clutter and may be confusing and detract from the key message of blend percentage which can be considered more as "safety" information so that consumers don't buy a blend that is incompatible with their vehicle and thus risk a mechanical breakdown.

10. Should New Zealand try to overcome the challenges that domestic biofuel producers face in maintaining access to affordable supplies of domestically produced feedstocks? Do you have any suggestions for how this challenge could be overcome?

Yes, MIA would support investigating policies to support local biofuel production (along with other renewable fuels that would come under the mandate i.e. syntetic fuels and hydrogen). Current domestically-produced biofuels are byproducts of other prinmary production and so are sustainable whilst also avoiding far more 'carbon miles' than imported biofuels, not to mention being positive for New Zealand's balance of payments.

Additional MIA comments

The MIA notes that the consultation paper only briefly mentions the risk of using biofuels in non-compatible ICE (namely bioethanol, and biodiesel above 5%), and does not discuss how to manage this.

We note the comment on page 19 in respect of the engine fuel specifications: "With this regulation, fuel consumers can be confident that an expansion in biofuel supply will not pose a risk to vehicles and engines."

The MIA disagrees with this statement – the proposed mandate *does* pose a risk to owners of incompatible vehicles and machinery if fuel suppliers choose to comply with the mandate by blending bioethanol in *every* grade of petrol. The mandate as proposed does not prohibit this, and there is no comment in the consultation paper on how to mitigate this risk.

It may be that this risk could be mitigated through the suggestion of separate GHG emissions reduction percentages for different fuels (question 5), which could mean that the targets may be met by only blending ethanol in the most common grade of petrol (91 octane) for example. This would need to be analysed further.

This issue of engine compatibility was well canvassed during consultation on the previous Biofuels Sales Mandate (BSO), and the concerns raised by the MIA then were based on feedback from the Japanese Automobile Manufacturers Association (JAMA). While that was over a decade ago and the NZ vehicle fleet is more modern today, it remains a fact that there are significant number of cars and motorcycles that are not compatible, specifically with bioethanol. While NZ-new cars and motorcycles (including off-road like all-terrain vehicles) produced approximately since the mid-2000s are compatible up to E10, used-Japanese imports are generally only compatible up to 3%, while older cars and motorcycles – what can be considered "classic" (generally carburettor-fed) – are not compatible at any ethanol blend. If these vehicles do use a bioethanol blend, or a blend above E3 in the case of newer Japanese-imports, then the owner risks suffering a fuel system failure due to the ethanol corroding metal or breaking down rubber components in the fuel system.

Conversely, all diesel engines are compatible with biodiesel up to 5% (B5), but New Zealand's fuel specification regulations permit blends up to B7 (which the MIA did not support). Only a couple of car marques in NZ endorse B7, and several heavy vehicle marques endorse no more than B5 (JAMA does not endorse the use of greater than B5, unless certain conditions of use are met which is unlikely in NZ¹).

The MIA is concerned that if B7 is widely retailed in favour of B5, and owners of most new diesels were to use it, they also risk voiding the manufacturer's warranty if engine damage could be attributed to the use of B7 (this is why the MIA insisted that biodiesel blends above B5 be labelled at the point of sale so that consumers are aware of what blend they are being offered).

Whilst Europe has adopted B7, it would be wrong to assume that new diesel vehicles sold in NZ are similarly compatible, as they are manufactured to a different specification. For example, diesel utes dominate in the NZ light commercial vehicle market, and these are almost exclusively manufactured in Thailand with the vast majority of sold in Asia, Australia, New Zealand and South Africa. This vehicle type is not sold into Europe in any significant numbers, meaning design and production parameters are therefore focused on this region and the specific fuel specification requirements.

The MIA suggests the compatibility of the NZ vehicle fleet (including heavy vehicles and farm vehicles) with conventional biofuels needs to be established in order to understand the implications of the proposed mandate.

We also note that this risk does not just apply to owners of incompatible motor vehicles, but also owners of watercraft, propellor aircraft, and garden machinery (lawn mowers, chainsaws etc.) which are unlikely to be ethanol-compatible. New Zealanders purchase fuel for these machines from service stations, and thus they also need to be aware of the risks. Hence the importance of an information campaign so that the owners of incompatible vehicles are aware of the risk, and the need for clear labelling at the point of sale, so that they can avoid buying a petrol grade with a blend percentage that is not compatible.

The MIA suggests that this issue needs to be mitigated via the regulations underpinning the design of the mandate. We propose that there needs to be consideration of regulating the provision of 100% mineral petrol grade (a "protection" grade) that is available for consumers to use in incompatible vehicles and machinery (we suggest this would likely be 95 octane which is less than 20% of all petrol sales volume).

Finally, we note that these concerns about the need to accommodate New Zealanders with incompatible vehicles and machinery only applies to conventional biofuels. Advanced biofuels, as mentioned in the consultation paper, and synthetic petrol and diesel are fully compatible with any ICE at up to 100%. Thus these issues could be avoided with the widespread deployment of advanced biofuels and synthetic fuels and therefore there needs

1

http://www.jama.or.jp/eco/wwfc/pdf/FAME JAMA Supplementary Position Statement Decem ber2016.pdf

to be a focus on developing the production of synthetic fuels at scale, as these will help the mandate be met without the concerns around compatibility that limit the use of conventional biofuels. Therefore any measures to protect owners of incompatible vehicles and machinery could be an interim measure until conventional biofuels can be replaced with compatible renewable fuels.