



COVERSHEET

Minister	Hon Shane Jones	Portfolio	Associate Energy
Title of Cabinet paper	Updating the Engine Fuel Specifications Regulations 2011 Renewable diesel and other fuel specification changes	Date to be published	21 November 2025

List of documents that have been proactively released

Date	Title	Author
August 2025	Updating the Engine Fuel Specifications Regulations 2011	Office of the Associate Minister for Energy
4 August 2025	Updating the Engine Fuel Specifications Regulations 2011 CAB-25-MIN-0261 Minute	Cabinet Office
October 2025	Renewable diesel and other fuel specification changes	Office of the Associate Minister for Energy
15 October 2025	Renewable diesel and other fuel specification changes ECO-25-MIN-0165 Minute	Cabinet Office

Information redacted

YES / NO (please select)

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Some information has been withheld for the reason of constitutional conventions.

In Confidence

Office of the Associate Minister for Energy
Cabinet Economic Policy Committee

Renewable diesel and other fuel specification changes

Proposal

- 1 This paper seeks Cabinet's agreement to update the *Engine Fuel Specifications Regulations 2011*.

Relation to government priorities

- 2 Enabling renewable and alternative fuels is listed as a key action in the 'Infrastructure pillar' of the Government's 'Going for Growth' plan. The proposals in this paper will remove regulatory barriers to the importation and production of renewable diesel.

Background

- 3 The *Engine Fuel Specifications Regulations 2011* (the **Regulations**) set the parameters for the quality of petrol, diesel, ethanol, biodiesel, marine fuel oils, and blends of these fuels, that are supplied in New Zealand. The Regulations need to be reviewed periodically to ensure they keep up with innovations in the fuel and vehicle technology sectors and changing vehicle standards. The last time that the Regulations were amended was in 2016/17.
- 4 On 11 February 2025, Cabinet agreed to release a discussion document on updating our fuel specifications [EXP-25-MIN-0002 refers]. The discussion document sought feedback on a new specification for renewable diesel, and updates to petrol and diesel specifications to align with Euro 6/VI¹ vehicle standards.²
- 5 On 4 August 2025, I brought a paper to Cabinet with proposals related to renewable diesel and the Euro 6/VI vehicle standards. Constitutional conventions
[REDACTED]
- 6 Cabinet invited me to undertake further consultation on the aromatics proposal [CAB-25-MIN-0261 refers]. I have therefore directed officials to consult further with targeted stakeholders and intend to report back to Cabinet by December 2026.
- 7 This paper contains the same proposals as the earlier paper ('Updating the Engine Fuel Specifications Regulations 2011'), without the proposals on the aromatics level for petrol. It recommends making amendments to the Regulations to allow 100 per

¹ Euro 6 standard focuses on light vehicles, while Euro VI standard focuses on heavy-duty diesel vehicles.

² The European Union has common standards for fuel and engine specifications. The Euro 6/VI standard was introduced there in 2014. However, New Zealand currently allows vehicles to enter the fleet that meet the outdated Euro 5 vehicle standard. Europe previously introduced the Euro 5 standard in 2009.

cent renewable diesel to be sold in New Zealand, alongside other technical changes to fuel specifications.

Analysis

- 8 I seek your agreement to amend the Regulations as set out in **Annex One**. These changes will update our fuel specifications for the first time since 2017.
- 9 The majority of these proposals are technical and will not have an impact on fuel prices. The most significant proposal relates to renewable diesel, which I discuss below.

Renewable Diesel

- 10 Renewable diesel (also known as hydrotreated vegetable oil, or HVO) is gaining traction in global markets as a cleaner, drop-in alternative to conventional diesel and biodiesel. It offers reductions in greenhouse gas emissions without requiring engine modifications, unlike biodiesel. Australia has recently updated their fuel specifications to enable renewable diesel. I propose we do the same.
- 11 Currently, New Zealand's fuel specifications allow for a blend of up to 7 per cent of *biodiesel* with conventional diesel. However, there is no separate specification for *renewable* diesel. This is creating confusion and potential renewable diesel importers have asked for clarity.
- 12 I propose to introduce a new standard for pure renewable diesel (i.e., not blended with conventional diesel) based on the European specification (EN15940). This specification is used by other countries, including Australia, and will be very familiar to renewable diesel producers and businesses. All submitters supported this proposal.
- 13 Blends of diesel with more than 25 per cent renewable diesel would be subject to the conventional diesel specification, with the exception of density limits.
- 14 This is because renewable diesel tends to be less dense than conventional diesel (and therefore contains less energy). I therefore recommend that pure renewable diesel and blends of more than 25 per cent be labelled as such at the pump, and subject to a bespoke density limit of 765–820 kg/m³ at 15°C. This is lower than the range for conventional diesel (820–850 kg/m³) to reflect the general lower density of renewable diesel.
- 15 For blends with up to 25 per cent renewable diesel, I propose that they be fully subject to the specification for conventional diesel and may be labelled in a flexible manner (either as conventional diesel or renewable diesel). These lighter blends are expected to behave like conventional diesel and motorists should not notice any difference.

Reviewing the Excise and Excise-equivalent Duties Table, and Climate Change (Liquid Fossil Fuels) Regulations.

- 16 I recommend that the New Zealand Customs Service and the Ministry for the Environment engage with Ministry of Business, Innovation and Employment (**MBIE**) to review the fuel classifications in *Excise Duties Table*, Tariff Working Document and the *Climate Change (Liquid Fossil Fuels) Regulations 2008*.

- 17 There is some inconsistency between the *Engine Fuel Specifications Regulations 2011*, the Excise and Excise Equivalent Duties Table and the *Climate Change (Liquid Fossil Fuels) Regulations 2008*. It would be beneficial to harmonise all three to provide clarity about how legal requirements, such as those relating to the New Zealand Emission Trading Scheme, apply to different fuel products.

Cost-of-living Implications

- 18 The proposals in this paper are not expected to impact on the cost of living.

Financial Implications

- 19 The proposals in this paper do not have any financial implications.

Legislative Implications

- 20 Implementing the recommendations in this paper will require amendments to the *Engine Fuel Specifications Regulations 2011*. The Amendment Regulations would come into force 28 days after they have been gazetted.

Impact Analysis

Regulatory Impact Statement

- 21 The Ministry for Regulation has determined that this proposal is exempt from the requirement to provide a Regulatory Impact Statement on the grounds that the economic, social or environmental impacts are limited and easy to assess.

Climate Implications of Policy Assessment

- 22 The Climate Implications of Policy Assessment (CIPA) team has been consulted and confirms that the CIPA requirements do not apply to this policy proposal, as the threshold for significance is not met. The proposed changes are expected to reduce toxic emissions that harm air quality and human health but will not have a direct impact on greenhouse gas emissions.

Population Implications

- 23 Some of the proposed fuel specification changes, including reducing the polycyclic aromatic hydrocarbons (**PAH**) limit and introducing a standard for renewable diesel standard, may help to reduce noxious emissions. Communities living close to major transport routes could benefit more from these proposals.

Human Rights

- 24 The proposals in this paper are consistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

Consultation

- 25 Public consultation took place between February and April 2025. MBIE received 17 submissions from vehicle manufacturers, fuel companies and transport industry organisations.
- 26 The Ministry of Transport, Ministry for the Environment, the New Zealand Customs Service, NZ Transport Agency Waka Kotahi, the New Zealand Defence Force, the Energy Efficiency and Conservation Authority, and Maritime New Zealand have been consulted. The Department of Prime Minister and Cabinet has been informed.

Communications

- 27 MBIE will contact fuel importers and other key stakeholders by the end of October 2025 to inform them of the final policy decisions.
- 28 The World Trade Organisation will be notified in accordance with New Zealand's international trade obligations.

Proactive Release

- 29 I propose to proactively release this Cabinet paper subject to any necessary redactions. This will be done within 30 business days following confirmation of Cabinet's decisions.

Recommendations

The Associate Minister for Energy recommends that the Committee:

- 1 **Note** that the *Engine Fuel Specification Regulations 2011* sets standards for engine fuel quality in New Zealand, and that these Regulations are not fully compatible with modern vehicle standards;
- 2 **Note** that public consultation on proposals to update the *Engine Fuel Specification Regulations 2011* took place between February and April 2025;
- 3 **Agree** to amend the *Engine Fuel Specifications Regulations 2011*, in accordance with the changes set out in **Annex 1**;
- 4 **Note** that the Associate Minister for Energy intends to undertake further consultation and report back to Cabinet by December 2026 on the maximum allowable aromatics level for petrol, which is currently higher than that recommended under the Euro 6d vehicle standard;
- 5 **Agree** that, for consistency with the *Engine Fuel Specifications Regulations 2011*, Customs and the Ministry for the Environment will engage with the Ministry for Business, Innovation and Employment to review the fuel classifications in *Excise Duties Table*, Tariff Working Document and the *Climate Change (Liquid Fossil Fuels) Regulations 2008*;

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- 6 **Invite** the Associate Minister for Energy to issue drafting instructions to Parliamentary Counsel Office to give effect to the decisions referred to in the recommendations above;
- 7 **Authorise** the Associate Minister for Energy to make further policy decisions consistent with the policy in this paper;
- 8 **Note** that the Associate Minister for Energy intends to issue a press statement announcing the policy decisions proposed in this paper.

Authorised for lodgement

Hon Shane Jones

Associate Minister for Energy

Annex One: Full list of proposed amendments to the Engine Fuel Specifications Regulations 2011

<i>Petrol</i>			
<i>Proposal</i>	<i>Rationale</i>	<i>Stakeholder feedback</i>	<i>Expected impact</i>
<i>Allow fuel suppliers to use more modern test methods if they originate from a recognised international method that has a valid precision statement.</i>	Overseas fuel suppliers might use more advanced test methods than those specified in the Regulations. The certificate of fuel quality provided by overseas fuel suppliers would typically list the test methods.	Z Energy and bp suggest that fuel suppliers should be allowed to use more modern test methods than those prescribed in the Regulations.	More flexibility to fuel importers. No impact on robustness of fuel quality monitoring – in a dispute, the test method prescribed in the Regulations shall be used to determine compliance.
<i>Introduce a silver strip corrosion test for active sulphur.</i>	Testing for active sulphur is normal practice across industry. Imposing this requirement in regulations will ensure this practice continues to protect the quality of fuel supplied in New Zealand.	All submitters either agreed with or did not submit on this proposal.	No impact on the price of fuel.
<i>Relax the 10 ppm maximum allowable sulphur level for ethanol denaturants.</i>	Would give fuel suppliers the flexibility to denature ethanol outside of Australia and New Zealand without causing any significant impact on the sulphur content of petrol or ethanol. The sulphur limit for petrol and denatured ethanol would remain the same.	Z Energy and bp supported relaxing the sulphur level to create optionality for sourcing fuel. Gull and Mobil suggested the change appears to conflict with the trend towards tightening sulphur limit on fuel. However, the proposed change relates to the sulphur limit of fuel that is used to make <i>ethanol</i> unfit for human consumption. It would not impact the sulphur limit for <i>petrol</i> .	Improved flexibility for fuel importers.
<i>Introducing a petrol density specification of 720 – 755 kg/m³.</i>	Would align with Euro 6 standards, reduce particulate emissions and protect consumers from unexpectedly high fuel consumption caused by low-	Most fuel importers do not consider this specification necessary. However, the change is a consumer protection mechanism. It would protect consumers from unwittingly	No impact on the price of fuel. No onerous compliance cost on fuel importers.

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	density petrol.	purchasing petrol with a lower energy content.	
<i>Amend the definition of petrol to reflect a boiling point of 210°C.</i>	Technical correction to ensure that the definition of petrol is consistent with the specification for petrol.	All submitters that commented agreed with this proposal.	No impact on the price of fuel.
<i>Amend the silver strip test standard in for fuel ethanol to ASTM D7667/D7671.</i>	This is a technical correction. The test standard for fuel ethanol – Schedule 1A should refer to ASTM D7667 and D7671 (the test standard for silver strip corrosion) rather than ASTM D130 (the test standard for copper strip corrosion).	Most submitters supported this change.	No impact on the price of fuel.
<i>Change the ethanol range in fuel ethanol by lowering the range starting from '70 per cent to 85 per cent' to '51 per cent to 83 per cent' as in ASTM D5798.</i>	Would ensure consistency with international standards.	Most submitters supported this change.	No impact on the price of fuel.
<i>Diesel / biodiesel</i>			
<i>Proposal</i>	<i>Rationale</i>	<i>Stakeholder feedback</i>	<i>Expected impact</i>
<i>Introduce a renewable diesel specification, with different rules for blends above and below 25 per cent.</i>	Would clarify the conditions under which renewable diesel can be sold in New Zealand.	Enabling non-retail sale of pure renewable diesel received broad support.	If pure renewable diesel and diesel blends with high renewable diesel content could be sold at retail sites, transport operators and other consumers would be able to access them as low-carbon alternatives easily.
<i>Reducing the maximum allowable density of diesel (from 850 kg/m³ to 845 kg/m³) and biodiesel (from 854 kg/m³ to 849 kg/m³).</i>	Would bring New Zealand's diesel specification into line with the European diesel standard (EN590), reducing particulate emissions and	Many submitters supported this proposal. In particular, fuel companies supported a higher maximum density limit for biodiesel	No impact on the price of fuel – New Zealand diesel is already very low in sulphur (10 ppm) and therefore tends to be within the proposed maximum

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	improving air quality.	blends.	allowable density.
<i>Add an appearance test and remove the colour test for diesel and biodiesel.</i>	The New Zealand specification does not currently have an appearance test but rather a colour test (ASTM D1500). Many other overseas fuel specifications use the appearance test. This test would help MBIE to detect the presence of particulates and water quickly, and triage samples that need deeper lab analysis.	Z Energy and bp submitted that such a test is not necessary.	No impact on the price of fuel. The test would be based on visual inspection by MBIE (a method used to assess the clarity and cleanliness of fuel samples). It would not increase operational costs for MBIE.
<i>Reducing polycyclic aromatic hydrocarbons (PAH) limit from 11 per cent to eight per cent.</i>	PAHs in exhaust fumes can irritate eyes and lungs and are potentially carcinogenic and mutagenic. An 8 per cent limit would align the Regulations with the European specification (EN 590).	No submitters opposed this proposal.	Unlikely to have any impact on price of fuel — the PAH content of diesel supplied to New Zealand is typically below 4 per cent.
<i>Reducing Filter Blocking Tendency from 2.5 to 2.</i>	If fuel filters are clogged, fuel cannot circulate properly, causing serious engine operation problems. Fuel with a higher Filter Blocking Tendency (FBT) is more likely to block engine filters.	Most submitters support this. Australia also uses a FBT specification of 2.0.	No impact on the price of fuel. Fuel quality monitoring data shows that the FBT of diesel supplied in New Zealand is typically below 2.0, so it would not increase compliance costs for industry.
<i>Replace the maximum limit for diesel's total contamination of 24 mg/kg with 20 mg/l.</i>	The current New Zealand diesel total contaminant requirements are measured in mg/kg and should be made consistent with the test method (mg/l).	All submitters either agreed with or did not submit on this proposal.	No impact on the price of fuel. The proposed level for the specification maximum in mg/l is 20 and this is consistent with the current specification of 24 mg/kg.
<i>Revise the definition of diesel to reflect a biodiesel blending limit of up to 7 per cent.</i>	Technical correction – the maximum biodiesel blending limit is 7 per cent	All submitters either agreed with or	No impact on the price of fuel.

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	(not 5 per cent, as described in Regulation 5).	did not submit on this proposal.	Corrects a technical error in the Regulations.
<i>Clarify which regulations apply to diesel supplied for marine use.</i>	Technical correction. The introduction of Regulation 17A in 2022, covering marine fuel oil sold by non-retail sale, created ambiguity with Regulation 15, which applies to diesel sold by non-retail sale.	No submitters opposed this proposal.	No impact on the price of fuel. Would clarify which regulations apply to diesel supplied for marine use.
Implementation of the Fuel Quality Monitoring Programme			
<i>Proposal</i>	<i>Rationale</i>	<i>Stakeholder feedback</i>	<i>Expected impact</i>
<i>Revise the description of the types of engine fuels the regulations apply to so that it is focused on exemptions for engine fuels, which are meant for internal combustion engines.</i>	Would clarify the scope of the Regulations.	No submitters opposed these proposals.	Technical corrections. No impact on the price of fuel.
<i>Revise the definition of 'engine fuel' to include marine fuel oil.</i>	Marine fuel oil is an engine fuel and should be captured by the Regulations.		
<i>Update the reference to ISO standard 9001 relating to accreditation for engine fuel sampling or testing, so that it does not refer to a specific year of issue and instead refers to a requirement for accreditation to ISO 9001, ISO 17020 or ISO 17025.</i>	ISO 9001, ISO 17020 or ISO 17025 reflect the latest ISO accreditation that the industry has adopted for fuel sampling and testing.		
<i>Revise the description of accreditation to specify that an organisation or agency can be authorised to take fuel samples or to conduct testing of engine fuel, rather than just an individual person or employee.</i>	Individuals who collect samples are required by the <i>Energy Act 1989</i> to obtain written authorisation from MBIE. As MBIE usually sub-contracts fuel sampling and testing tasks to large third-party organisations (which tend to	No submitters opposed this proposal.	Enabling organisations to gain accreditation would streamline the authorisation process.

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	have many employees), written authorisation to an individual in every instance can be challenging.		
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