



Submission:

Non-Road Diesel Engines - Noxious Emission Standards
Impact Analysis – May 2023

ISSUE: Non-Road Diesel Engines: Noxious Emission Standards

SUBJECT: BIA submission in response to the Federal Government paper titled: Non-Road Diesel Engines: Noxious Emission Standards - Impact Analysis – May 2023

INTRODUCTION:

The Boating Industry Association Ltd (BIA) is the peak industry body in Australia that represents the interests of boating which includes designers, manufacturers, importers, brokers, insurers, retailers, charters, yacht and boat clubs, marinas, events, surveyors, and trades from boat builders to riggers, and more. BIA is an advocate for boaters and the boating lifestyle and supports safe, responsible, and enjoyable boating. BIA has members in all States and Territories.

The boating economy generates significant benefits through employment. The BIA reports industry national turnover of \$9.64 billion, directly employed more than 25,000 people with more than 7000 contractors. Seventy-five per cent are in small family businesses, employing local workers and supporting local communities.

With more than 85 per cent of the population living within 50km of the coast, it is little wonder that almost 1 in 5 households can have a boat or watercraft. People of all ages, gender and ability can participate in boating across paddle, sail and power for leisure and sport.

Boating is also a significant contributor to the economy that spans metropolitan, rural and regional Australia.

SUBMISSION:

BIA acknowledges and welcomes the Australian Government Department of Climate Change, Energy, the Environment and Water (The Department) call for comment on the paper titled: Non-Road Diesel Engines: Noxious Emission Standards - Impact Analysis – May 2023.

BIA has liaised with The Department and understands the following:

1. The Department is evaluating the potential for a new standards regime to manage emissions from non-road diesel engines.
2. The Department is limiting its considerations for engines up to 130kW as engines above this rating are covered by MARPOL enacted in Australia under AMSA regulation, such as adoption of Engine International Air Pollution Prevention (EIAPP).
3. Australia currently has no regulations to control noxious emissions from non-road diesel engines, and options being considered will include no change to current arrangements, voluntary and regulatory options.
4. A [cost-benefit analysis report](#) of the options has been produced and showed:
 - a. The number of non-road diesel engines is about 3% of the number of on-road engines. Non-road diesel engines also account for around 6% of national greenhouse gas emissions in 2018. Non-road diesel engines include those from categories such as mining, construction, forestry, manufacture, and agricultural sectors, along with marine. The latter being a minor percentage of the total in this non-road categorisation.
 - b. In 2018 the report indicates recreational boats had 5539 units. While the total in scope against all sectors was 639,696 which put recreational boats at 0.865 per cent of all non-road sectors.
5. In mid-2022 the evaluation – a cost-benefit analysis – was completed. It assessed the potential outcomes of three different management scenarios. The three scenarios were assessed for the most important noxious emissions, population exposure, health impacts costs and benefits. These were compared to what is likely to happen if no action is taken (i.e. business as usual).
6. The three management options considered were:
 - 1) Management Scenario 1: Industry agreement (non-regulatory). Industry would, in cooperation with government, agree to meet targets for sales of new non-road diesel engines which align with international best practice emission standards (US Tier 4f).
 - 2) Management Scenario 2: Phased standards (Commonwealth regulation). In this scenario, interim emission standards (US Tier 3) would be introduced as soon as practicable, with a subsequent transition to standards that align with international best practice emission standards (US Tier 4f).

- 3) Management Scenario 3: Best practice standards (Commonwealth regulation). In this scenario, emission standards that align with international best practice (US Tier 4f) would be introduced as soon as practicable.
7. The evaluation found that Management Scenario 3 would be the most effective approach. Immediately implementing the highest engine emission standard would result in the best health and economic return for the community over the long term.

The BIA further understands the Department is limiting its considerations to:

- Main target is noxious emission polluting non-road diesel engines from categories such as mining, construction, forestry, manufacturing and agricultural sectors. Marine is caught up in the matter of non-road diesel engine and is a significantly minor percentage of the total emissions in this non-road categorisation grouping
- new engines and imported used engines only
- 'Noxious' emissions for health concerns and not Green House Gas which is covered by other regulatory measures
- alignment with international standards eg US/EPA, EU standards
- not apply a retrospective approach
- not apply any change to used, parts for used or sale of used engines
- not be considering stationary engines
- marine diesel engines under 130kW because higher rated engines are already regulated under MARPOL and European, and US standards.

BIA submits recreational boating is an extremely minor contributor to emissions:

- The vast majority (est., 90%) of boats in the national fleet use outboards and are already subject to standards under Non-road Spark Ignition Engines and Equipment (NRSIEE)
- The domestic marine sector contributes less than 0.3% of pollutant emissions within the non-road sector
- Internationally recreational boating is said to emit 0.00084% of global GHG emissionsⁱ
- Diesel engines last a long time and have a relatively low turn-over of stock



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- Recreational boats have typically modest to low levels of usage including frequency (approx. 1.3 trips per month per boat) and duration (more than 50% of trips are less than 10km)ⁱⁱ
- Australia's larger boat builders are exporting and the OEM, and importers are already compliant to international standards.

BIA believes the recreational boating sector is already compliant regarding new marine diesel engines which are currently all imported and are manufactured to be compliant with international European and/ or US standards. Furthermore, BIA calls upon The Department to recognise the recreational boating sector is a significantly minor contributor to emissions and should not be imposed with additional red-tape, financial penalties, and/ or any damaging policy or legislated mechanisms which may be a burden or threat to the boating industry and boating-related jobs as a result of being captured by categorisation with other industry sectors under 'non-road diesel engines.

Consultation questions

1) Do you agree that the information above and provided in the CBA Report supports the introduction of non-road diesel engine emission standards in Australia?

A. New/ imported marine diesel engines are already compliant under European and/ or US standards

2) Are there other avenues that are available to address the harm caused by non-road diesel engine emissions?

A. For recreational boating, I would support the effort should focus on education and compliance with existing international standards which apply to recreational boating under European and/ or US standards

3) If you do consider there is an alternative pathway, what data and analysis can you provide that supports this?

A. BIA submits recreational boating is an extremely minor contributor to emissions:

- The vast majority (est., 90%) of boats in the national fleet use outboards and are already subject to standards under NRSIEE

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- The domestic marine sector is said to contribute less than 0.3% of pollutant emissions within the non-road sector
- Internationally recreational boating is said to emit 0.00084% of global GHG emissionsⁱⁱⁱ
- Diesel engines last a long time and have a relatively low turnover of stock
- Recreational boats have typically modest to low levels of usage including frequency (approx. 1.3 trips per month per boat) and duration (more than 50% of trips are less than 10km)^{iv}
- Australia's larger boat builders are exporting and the OEM, and importers are already compliant to international standards
- New and/ or imported marine diesel engines are already compliant with European and/ or US standards.

4) Do you agree that the information above and provided in the CBA Report supports the need for government intervention?

A. BIA puts it to The Department that recreational boating sector is a significantly minor contributor and is already moving to further address the issue through ICOMIA by evidence of its work currently being finalise into a Decarbonisation Study for recreational boating and industry response to product development to market demand.

5) In the near to medium term, will be uptake of horizon technology be sufficient to remove the need for new non-road diesel engines and equipment? In all sectors?

A. Market pressure is absolutely resulting in a significant increase in R&D in marine for alternative propulsion systems and improved outcomes in emissions.

6) If so, can you provide data/evidence of such movement in the market that is sufficient to remove the need for government action?

A. see answer under #3 and #4. Also, the sector is demonstrating an increasing willingness to deliver manufacturing and propulsion systems designed to cut emissions. This includes electrification of boats especially for vessels that fit the low frequency, short usage times such a personal watercraft and runabouts. For longer range vessels there are opportunities with alternative fuels (incl., hydrogen, Hydrotreated Vegetable Oil) and hybrid engines with rapid change underway at the time of writing.



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7) Are there other viable management scenarios that should be included in the evaluation?

A. The Department should view the recreational boating sector as significantly minor in its impact when compared with other sectors under non-road diesel engines, and to not treat all sectors as equal in terms of total output of emissions; especially in a time of rapidly evolving technology aimed at cutting emissions.

8) Do you feel that the CBA provides sufficient evidence of health benefits to the community for government to introduce emissions standards?

A. Any response by the government must be cognisant of the fact that recreational boating is a significantly minor contributor to the total emissions. To apply any extra layer of red tape and or burden upon a sector that is already compliant with marine diesel standards in Europe and/ or the USA would threaten business and jobs.

9) Are there any elements in the results of the CBA that you feel do not reflect the true position of the market as a whole?

A. Internationally recreational boating is said to emit 0.00084% of global GHG emissions. Furthermore, Australia's larger boat builders are exporting and the OEM, and importers are already compliant to international standards.

10) Do you believe there has been sufficient consultation with all stakeholders during the development of the cost-benefit analysis?

A. There is always room for more consultation.

11) If no, what other types of consultation would you have liked to have been included and why?

A. An improvement could have been more opportunities for open forums with The Department to hear from the project team and an ability to have questions answered.

12) Which management scenario would best meet your purposes (including BAU)?

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A. BIA suggests a modified 'Management scenario 3' to read: Best practice standards (Commonwealth regulation). In this scenario, emission standards that align with international best practice from Europe and/ or US would be introduced as soon as practicable.

13) What are the arguments to support this option, including priorities you think the government should give more weight to for any decision?

A. New and imported marine diesel engines are already compliant with European and/ or US standards.

14) Why are these priorities more important in the context of providing the best outcome for the whole community?

A. Bring the sector into compliance with best practice in Europe and or the US whilst making every effort to minimise new red tape and unfair hardship on businesses that are already working with internationally compliant products.

15) Is your industry more or is it less supportive of the goals of introducing non-road diesel engine emission standards – i.e., reducing noxious emissions and thereby delivering consequent improvements in human health?

A. marine diesel engines are already compliant with European and/ or US standards. Furthermore, BIA supports education before increased regulation.

16) Some non-road diesel-powered equipment will be fitted with a replacement engine several times throughout its useful life. Under MS2 and MS3, standards would apply to all within-scope equipment introduced into Australia for the first time, including imported second-hand equipment. What approach would support users to source suitable replacement engines?

A. Collaboration with Industry to deliver education noting that recreational boating typically is low frequency use with relatively short operating hours per trip, combining to extend the engine life in a boat.

17) If government decides to regulate, do you believe that the proposed use of the Product Emissions Standards Act is an appropriate approach?

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A. BIA supports education before increased regulation; however, it would appear PES is the logical homeport of an Act. However, BIA does not support increased red tape or a new layer of heavy-handed legislation for recreational boating noting the following:

- The domestic marine sector is said to contribute less than 0.3% of pollutant emissions within the non-road sector.
- Internationally recreational boating is said to emit 0.00084% of global GHG emissions^v
- Diesel engines last a long time and have a relatively low turnover of stock
- Recreational boats have typically modest to low levels of usage including frequency (approx. 1.3 trips per month per boat) and duration (more than 50% of trips are less than 10km)^{vi}
- Australia's larger boat builders are exporting and the OEM, and importers are already compliant to international standards.
- marine diesel engines are already compliant with European and/ or US standards.

18) If not, what alternative approach do you propose?

A. See #12

19) If a mandatory standard was introduced what factors would impact its effectiveness against lower noxious emissions?

A. see #12

20) If Tier 4f based emission standards were introduced into Australia, do you think members of your industry sector would retain their older, lower standard engines longer than planned?

A. see #12



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BIA would like to thank The Department for this opportunity to provide feedback.

Please do not hesitate to contact Neil Patchett, General Manager Government & Public Relations, e. neil@bia.org.au or m. 0418 279 465 as necessary on this matter.

Issue date: 19 July 2023

ⁱ <https://barcheamotore.com/greenhouse-gases-recreational-boating-emits-less-than-0-001-of-the-total/?lang=en#:~:text=The%20role%20of%20recreational%20boating,percent%20of%20greenhouse%20gas%20emissions.>

ⁱⁱ [Industry Data - Boating Industry Association \(bia.org.au\)](#)

ⁱⁱⁱ <https://barcheamotore.com/greenhouse-gases-recreational-boating-emits-less-than-0-001-of-the-total/?lang=en#:~:text=The%20role%20of%20recreational%20boating,percent%20of%20greenhouse%20gas%20emissions.>

^{iv} [Industry Data - Boating Industry Association \(bia.org.au\)](#)

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^{vi} [Industry Data - Boating Industry Association \(bia.org.au\)](#)