

Submission in response to

the proposed New Vehicle Efficiency Standard

prepared by
Environmental Justice Australia
04 March 2024

About Environmental Justice Australia

Environmental Justice Australia (**EJA**) is a national public interest legal centre. We use the law to empower communities, to protect and regenerate nature, to safeguard our climate and to achieve social and environmental justice.

We are proudly non-profit, non-government, and funded by donations from the community. Our legal team combines technical expertise and a practical understanding of the legal system to protect communities and our environment.

For further information on this submission, please contact:



Submitted to:

Department of Infrastructure, Transport, Regional Development, Communications and the Arts

Via online submission portal

Executive Summary

This submission relates to the new fuel efficiency standards proposed by the Australian Government published on 4 February 2024, contained in the report *Cleaner, Cheaper to Run Cars: The Australian New Vehicle Efficiency Standard – Consultation Impact Analysis* (the Impact Analysis).

EJA welcomes the introduction of a fuel efficiency standard in Australia. Of the three options proposed by the Government in the Impact Analysis, EJA recommends Option C. Option C contains the most aggressive rate of emissions reductions, allowing Australia to catch up to our international counterparts and rapidly reduce greenhouse gas emissions from passenger vehicles. It also includes a stronger penalty rate for entities who do not meet their target requirements under the New Fuel Efficiency Standards (**NVES**) and provides for stricter implementation of the credit banking and trading component.

EJA recognises that Option B is preferred by the Government and supports several features of this option. Option B proposes a rate of emissions reduction that, while slower than Option C, still ensures Australia is comparable to the best-practice international standard by 2028. Importantly, it also does not include the use of extra credits such as 'supercredits' and 'off-cycle credits' that allow manufacturers to present misleading statistics to meet the standards. Option B also creates the necessary categorisation of all SUVs and 4WDs as passenger vehicles (**PVs**), ensuring they are subject to the strictest standards available. While these features of Option B are commendable and should be pursued, EJA believes they do not go far enough and Option C is preferred.

Finally, EJA recommends the following amendments to be made to the proposed standards, irrespective of which option the Government ultimately pursues.

Recommendation 1: Bring the headline targets forward by one year.

Recommendation 2: Amend the fleet limit curve (that is, the concession given to heavier cars) to avoid providing a perverse incentive for bigger, heavier vehicles. This can be done by flattening the slope of the curve and/or reducing the upper limit of the concession (the 'break point') to 1800kg.

Recommendation 3: Remove or strictly limit the credit banking and trading system that provides loopholes for suppliers to meet their target requirements. Otherwise, suppliers and manufacturers can accumulate credits in the early years of a scheme while the targets are lenient, and then use banked or purchased credit in stricter years to ensure they stay above the overall standard. This has occurred in other jurisdictions and would undermine the efficacy of the scheme.

1 Introduction

- 1. Transport represented 21% of Australia's greenhouse gas emissions in 2023, with vehicles making up the majority of these emissions.¹ Despite this, and despite the continued growth in Australia's vehicle market,² Australia is one of the few major markets without a set of regulated fuel efficiency standards.³ This has resulted in Australia's cars being less fuel-efficient than comparable international markets and has hampered our access to improving fuel-efficiency technology, namely electric vehicles (EVs).⁴
- 2. Fuel efficiency standards are a necessary inclusion to a broader policy and legislative framework combatting vehicle-related pollution and carbon emissions. If the government is to meet its legislated emissions reduction targets,⁵ consumer trends towards bigger, more polluting vehicles⁶ must be addressed at least partly through regulatory intervention, and an effective, ambitious set of fuel-efficiency standards is one such regulatory mechanism.
- 3. We note that fuel efficiency standards are only one component of the broader reforms required to support cleaner and more efficient transport options in Australia, particularly for lower socio-economic segments of the community.

2 Please rank the proposed options in order of preference

4. We recommended the following order:

First Preference: Option C

Second Preference: Option B

Third Preference: Option A

5. There is a distinct gap between Options C and B, and Option A. EJA strongly recommends against the adoption of Option A, as it sets targets that result in an unchanged estimated

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¹ Australian Government, *Australia's emissions projections 2023 - November 2023*, (Report, 2023), https://www.dcceew.gov.au/climate-change/publications/australias-emissions-projections-2023.

² Federal Chamber of Automotive Industries, 'Australia breaks all-time new vehicle sales in 2023' (webpage, 4 January 2024) < https://www.fcai.com.au/news/index/view/news/815>.

³ Australian Government, *Cleaner, Cheaper to Run Cars: The Australian New Vehicle Efficiency Standard*, Consultation Impact Analysis (February 2024)

https://www.infrastructure.gov.au/department/media/publications/cleaner-cheaper-run-cars-australian-new-vehicle-efficiency-standard-consultation-impact-analysis ('Impact Analysis') 25. 4 ibid 15. 16.

⁵ Climate Change Act 2022 (Cth) s 10.

⁶ Jake Evans, 'Should government step in to help Australians quit their big car habit?' *ABC* (online), (online at 9 January, 2024) https://www.abc.net.au/news/2024-01-09/australian-cars-getting-bigger-should-government-intervene/103287604.

reduction of carbon emissions between 2030 and 2050,7 includes multiple loopholes to allow vehicle manufacturers to ostensibly meet targets ⁸ and contains inadequate penalties. ⁹ EJA recommends the adoption of Option C over Option B, for the reasons listed below.

6. Regardless of which Option is chosen, we suggest bringing the headline targets forward by one year (**Recommendation 1**). It is critical that Australia reduce vehicle emissions as quickly as possible to reduce our climate change contributions. Given that fuel efficiency standards are well-established in other markets, and that systems are already in place in Australia to monitor compliance with voluntary targets, it is EJA's view that suppliers have had sufficient time to prepare.

3 What are your reasons for your choice? (Option C)

Higher rate of emission reduction to make up for lost time

- 7. Australia is one of the last major markets to have no regulated fuel efficiency standards. This has had and will continue to have a significant detrimental impact on the Australian government's ability to meet climate commitments under international law, as well as the legislated emissions reductions target of 43% below 2005 levels by 2030 and net zero by 2050.¹⁰
- 8. This increases the necessity of adopting an aggressive rate of emissions reduction over the coming years, as we do not have the luxury of slowly transitioning to acceptable targets. In 2022, Australia's average vehicle emissions across the new car fleet were 146.5g CO₂/km for PVs. 11 This is 35% higher than the 2022 European Union (**EU**) rate of 108.2g CO₂/km. 12

More appropriate penalty setting

9. EJA supports the Option C penalty of \$200 per gram of CO₂ emitted each kilometre above the fuel-efficiency standard. The penalty of \$100 per g/km proposed by Option B falls well short of the EU's penalty of €95 per g/km – which in 2023 equated to \$197 AUD in

⁷ Impact Analysis (n3) 33.

⁸ ibid 35.

⁹ ibid.

¹⁰ Australian Government, *International Climate Action*, (webpage 2023) https://www.dcceew.gov.au/climate-change/international-climate-action#:~:text=Under%20the%20Paris%20Agreement%2C%20Australia,of%20this%20NDC%20in%202022; *Climate Change Act 2022* (Cth) s10(1)(a)-(b).

¹¹ Climate Council, *Fuel efficiency standards: priority policy settings to deliver cleaner cars that are cheaper to run*, (Briefing Note, 2023) https://www.climatecouncil.org.au/wp-content/uploads/2023/07/CC MVSA0369-CC-Briefing-Note-Fuel-Efficiency-Standards-Priority-Policy-Settings V4-FA-Screen-Single.pdf>

¹² European Environment Agency, *CO2 performance of new passenger cars in Europe*, (webpage, 2023) < https://www.eea.europa.eu/en/analysis/indicators/co2-performance-of-new-passenger>.

¹³ Impact Analysis (n3) 35.

- purchasing power parity. ¹⁴ Option C's penalty provides a stronger incentive to manufacturers to produce more fuel-efficient vehicles.
- 10. Less fuel-efficient cars generally provide higher profit margins to vehicle manufacturers. ¹⁵ Therefore, if the penalty amount is set too low, there is a risk that manufacturers choose to incorporate the penalty into their cost of doing business instead of shifting towards more fuel-efficient vehicles. ¹⁶ This would undermine the central purpose of the scheme, which is to reduce emissions and provide the Australian market with more efficient vehicles.

Credits last 2 years instead of 3

11. As will be discussed in more detail below, a credit banking and trading system – which allows entities who overachieve their emissions targets to sell credits to entities who did not meet their emissions targets ¹⁷ – has the potential to undermine the ability of the scheme to influence manufacturer and supplier behaviour. However, ensuring credits expire a short time after they are accumulated is an important mechanism for tempering this, such as by reducing the ability of entities to take advantage of less stringent standards earlier in the scheme. ¹⁸ Therefore, Option C's 2-year credit expiry is to be preferred over Option B's 3-year expiry.

Lack of evidence for any supply problems

- 12. The Impact Analysis expresses the concern that Option C's accelerated emission reduction curve could lead to vehicle supply problems in the short-term. ¹⁹ The technology costs that suppliers and manufacturers will have to bear are estimated to be \$1.8 billion higher for Option C than Option B, a cost which may hinder suppliers' ability to invest money and resources to support the transition. ²⁰
- 13. However, there is no evidence that the difference in technology costs between Option B and Option C would affect supply of EVs and other fuel-efficient vehicles to the extent suggested by the Impact Analysis. Under both Option B and C, the starting target is a modest 141g/km of CO₂ emitted, before Option C starts to reduce more dramatically.²¹ This gives suppliers time to prepare for the technology costs and production implications associated with the more stringent targets in later years. Manufacturers have operated

¹⁴ Australian Government, *The Fuel Efficiency Standard – Cleaner, Cheaper to Run Cars for Australia*, Consultation Paper (April 2023), p 27 <

https://www.infrastructure.gov.au/sites/default/files/documents/fuel-efficiency-standard-cleaner-cheaper-run-cars-australia-consultation-paper-april2023.pdf>.

¹⁵ Dirk Baur, Neda Todorova, 'Automobile manufacturers, electric vehicles and the price of oil' (2018) 74 *Energy Economics* 252 https://doi.org/10.1016/j.eneco.2018.05.034.

¹⁶ Institute for Policy Integrity, 'Fuel-economy standards, corporate penalties, and a very costly rollback' (webpage, 20 February 2020) < https://policyintegrity.org/projects/update/fuel-economy-standards-corporate-penalties-and-a-very-costly-rollback >.

¹⁷ Impact Analysis (n3) 34.

¹⁸ Benjamin Leard, and Virginia McConnell, 'New markets for credit trading under US automobile greenhouse gas and fuel economy standards' (2017) *RFF Report* https://www.ourenergypolicy.org/wp-content/uploads/2017/05/RFF-Rpt-AutoCreditTrading.pdf.

¹⁹ Impact Analysis (n3) 46.

²⁰ ibid 45.

²¹ ibid 32.

under fuel efficiency frameworks for more than a decade in other markets, so the technology has had time to develop. Furthermore, the number of EVs in the market both globally and domestically is increasing significantly each year.²² Therefore, EJA submits that supply issues are not likely to be a significant barrier to implementing Option C.

Broader public benefits of Option C

14. Option C is projected to bring considerable benefits and provides the best public interest outcomes. As demonstrated in the Impact Analysis, the increase in fuel savings, health benefits, reduced vehicle maintenance, and reduced GHG emissions are significant advantages of Option C that will be distributed across the community. These benefits balance any technological costs borne by the manufacturers, ensuring that Option C has a similar benefits-costs ratio to Option B.²³ As mentioned above, suppliers are in a good position to proactively respond to these technological costs and have known for decades that a regulatory scheme such as this would eventuate. We submit that the widely dispersed benefits of Option C are to be preferred over a more conservative approach that potentially saves suppliers costs, at the expense of benefits to the public.

4 Do you support the Government's preferred option (Option B)?

- 15. As noted above, we recommend Option C. In the event that the Government adopts Option B we make the following suggestions to improve that option.
- 16. **Recommendation 1** (bring headline targets forward by one year) applies in all cases. Table 1 below shows how far Australia's targets lag behind international standards. The targets should be brought forward so that the 2026 standard applies in 2025, and so on.
- 17. The Impact Analysis states that Option B aims to catch up to the US around 2028, without going beyond that standard. ²⁴ Table 1 below shows it will likely achieve that aim. However, Australia's emissions targets should be calculated in accordance with what is needed to meet the commitments in the *Climate Change Act 2022* (Cth). Transport is projected to be Australia's largest source of emissions by 2030²⁵ and as such, will likely require ambitious and effective action. It is critical that in implementing Option B, NVES targets are calculated with Australia's overarching emissions reduction commitments in mind, rather than only with a comparison to the US standard.

²² Electric Vehicle Council, *State of Electric Vehicles*, (Report, 2023) < https://electricvehiclecouncil.com.au/wp-content/uploads/2023/07/State-of-EVs_July-2023_.pdf; Nick Carey, 'Global electric car sales rose 31% in 2023 – Rho Motion', *Reuters* (online), (online at 11 January, 2024) < https://www.reuters.com/business/autos-transportation/global-electric-car-sales-rose-31-2023-rho-motion-2024-01-11/>.

²³ Impact Analysis (n3) 45.

²⁴ ibid 32.

²⁵ Impact Analysis (n3) 20.

Table 1 – Fuel efficiency standards across international jurisdictions for PVs (measured in CO₂g/km)

Year	USA ²⁶	New Zealand ²⁷	European Union ²⁸	Australia – Option B ²⁹	Australia – Option C ³⁰
2025	92.58	112.6	93	141	141
2026	82.02	84.5	93	117	103
2027	83.26	63.3	93	92	66
2028	72.08	N/A	93	68	51

18. Like Option C, Option B does not allow suppliers to earn extra credits such as supercredits, off-cycle credits and air-conditioning credits that they can use to meet their emissions targets. This is vital to the success of the scheme, as the use of these credits reduces the transparency of manufacturers reporting their emissions by allowing captured vehicles to be counted more than once which distorts the true emissions performance of a manufacturer in a given year. Furthermore, off-cycle technologies in particular do not have a significant impact on reducing emissions, so credits earned from their use would provide a reward to suppliers that is disproportionate to emissions reduction and would undermine the intention of the scheme.

²⁶ Federal Vehicle Standards, *Center for Climate and Energy Solutions*, https://www.c2es.org/content/regulating-transportation-sector-carbon-emissions/; Proposed Rules, https://www.govinfo.gov/content/pkg/FR-2023-05-05/pdf/2023-07974.pdf.

²⁷ Land Transport (Clean Vehicles) Amendment Act 2022; https://www.transport.govt.nz/area-of-interest/environment-and-climate-change/clean-cars/.

²⁸ Jay Dornoff, 'CO2 emission standards for new passenger cars and vans in the European Union', *International Council on Clean Transportation*, (Policy update, May 23, 2023) https://theicct.org/wp-content/uploads/2023/05/eu-co2-standards-cars-vans-may23.pdf.

²⁹ Impact Analysis (n3) 32.

³⁰ ibid.

³¹ ibid 35.

³² ibid 42.

³³ Dave Cooke, 'EPA can't let "off-cycle" credits become an off-ramp for automakers' *The Equation*, (online at 28 July, 2021) < https://blog.ucsusa.org/dave-cooke/epa-cant-let-off-cycle-credits-become-an-off-ramp-for-automakers/; Cory Kreutzer et al., *U.S light-duty vehicle air conditioning fuel use and the impact of four solar/thermal control technologies*' (SAE Thermal Management Systems Symposium, 2017) < https://www.nrel.gov/docs/fy18osti/69047.pdf>.

- 19. In Option B, all SUVs and 4WDs are categorised as PVs, not Light Commercial Vehicles.³⁴ This is an important classification which we support because, unlike in Option A, SUVs and 4WDs are then subject to more stringent emission standards.³⁵
- 20. Option B's 'break point cap' the upper limit of the concession given to heavier vehicles is 2000kg for PVs.³⁶ We suggest reducing this cap to 1800kg or less (**Recommendation 2**). As will be discussed below, less stringent standards for heavier, bigger vehicles means there is no incentive for suppliers and manufacturers to shift towards lighter, smaller, more fuel-efficient vehicles.

5 Are there any components of the scheme present in all three options that you would change?

Amend the fleet limit curve

- 21. EJA is concerned about the effects of giving too generous a concession to heavier vehicles in the NVES. As observed in the Impact Analysis, heavier vehicles naturally use more fuel. The Impact Analysis asserts that people legitimately need larger, heavier vehicles for work. However, it is important to be aware of the strong consumer trends towards large, heavy SUVs. Reducing overall transport emissions requires pushing back against these trends, not facilitating them. Allowing heavier vehicles to be subject to less stringent standards incentivises manufacturers to continue producing large amounts of heavy vehicles, which the Impact Analysis acknowledges are typically less fuel-efficient, higher polluting vehicles.³⁷
- 22. Australian buyers continue to trend towards heavier vehicles, with SUVs or LCVs making up all of the top ten selling cars of 2023.³⁸ This is problematic, as not only do heavy vehicles require more energy to manufacture and produce more carbon emissions in operation than lighter vehicles,³⁹ but they also exacerbate multiple other vehicle-related pollutants, such as air pollution particles stemming from the wear of vehicle brakes, tyres, and roads.⁴⁰ The introduction of a fuel efficiency scheme which encouraged the uptake of larger, more polluting vehicles would be a perverse outcome that should be guarded against. As such, EJA recommends amending the fleet limit curve to avoid incentivising heavy vehicles (**Recommendation 2**).

(online), (online at 8 September 2023)

³⁴ Impact Analysis (n3) 33.

³⁵ ibid 32.

³⁶ ibid 27.

³⁷ Impact Analysis (n3) 27.

³⁸ Jake Evans (n5).

³⁹ 'The 2022 EPA automotive trends report – greenhouse gas emissions, fuel economy, and technology since 1975' < https://www.epa.gov/system/files/documents/2022-12/420r22029.pdf
⁴⁰ Gary Fuller, '"Autobesity" on course to worsen air pollution caused by motoring', *The Guardian*

https://www.theguardian.com/environment/2023/sep/08/autobesity-on-course-to-worsen-air-pollution-caused-by-motoring.

- 23. Lowering the 'break point' (the upper limit of the weight-based concession) to 1800kg (or less) for PVs would help to reduce the incentivisation of larger, heavier vehicles. This will capture a wider range of mid-size SUVs, whose size can range anywhere from 1600-2700kg.⁴¹
- 24. Flattening the limit curve is another change that should be considered. If the slope is too steep, manufacturers will have an incentive to sell heavier vehicles if the CO₂ targets increase more than the vehicle's emissions.⁴² For example, if a vehicle is just over the emissions limit, but adding 100kg in would give it a more lenient target, there is an incentive to make it heavier. The steeper the slope, the greater this effect. The slope currently proposed in the Impact Analysis is drawn using the data from Australia's fleet of two years prior (which is a lenient basis for calculation, since our fleet is already lagging behind most of the global new car market).⁴³ It appears to be approximately twice as steep as the slope currently used in the EU.⁴⁴
- 25. Another alternative to using a mass-based standard is to follow the US's approach of using vehicle footprint as the attribute, calculated by measuring the area between the four wheels of a vehicle. 45 The International Council on Clean Transportation notes that a footprint-based limit curve creates a greater incentive for manufacturers to improve vehicle efficiency by weight reduction through innovative lightweight materials, 46 and research has also shown that it is less open to manipulation than a weight-based standard. 47 However, the footprint-based standard still risks incentivising bigger cars (even if they are lightweight and aerodynamic), with the US having a similar problem as Australia in terms of trends towards bigger cars. 48 Flattening the curve and reducing the break point limits are preferable settings.

Limit credit trading and banking

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⁴¹ Magnus Sellén, 'How much does a car weigh? Average weight by car type' *Mechanic Base* (online), (online at 9 March 2023), <https://mechanicbase.com/cars/car-weight/>; 2022 EPA automotive trends report (n37); Natalie Todoroff, 'Average car weight' *Bankrate* (online), (online at 25 December, 2023). https://www.bankrate.com/insurance/car/average-car-weight/#average-weight-of-c-car.

⁴² Peter Mock, Uwe Tietge, and Jan Dornoff, "Adjusting for Vehicle Mass and Size in European Post-2020 CO2 Targets for Passenger Cars," Briefing (Washington, D.C.: International Council on Clean Transportation, August 8, 2018), https://theicct.org/publication/adjusting-for-vehicle-mass-and-size-in-european-post-2020-co2-targets-for-passenger-cars/

⁴³ Impact Analysis (n3) 26.

 $^{^{44}}$ Slope of 0.0663 for passenger vehicles: Impact Analysis p 26. Slope of 0.0333 in the EU: Mock, Tietge and Dornoff (n 40) p 5.

⁴⁵ Ben Elliston, 'Fuel efficiency standards explained' < https://aeva.asn.au/articles/fuel-efficiency-standards-explained-how-they-work-and-what-they-do/

⁴⁶ International Council on Clean Transportation, *Footprint versus mass: how to best account for weight reduction in the European vehicle CO2 regulation*, (Fact sheet, October 2017) https://theicct.org/sites/default/files/CO2-reduction-technologies_fact-sheet_10102017_vF.pdf.

⁴⁷ Peter Mock, Uwe Tietge, and Jan Dornoff (n 40).

⁴⁸ Angie Schmitt, 'Big cars are killing Americans', *The Atlantic* (online), (online at 29 December, 2021) < https://www.theatlantic.com/ideas/archive/2021/12/suvs-trucks-killing-pedestrians-cyclists/621102/

- 26. EJA recommends the severe limitation or removal of credit banking and trading as a feature of the scheme (**Recommendation 3**). Historically, manufacturers who exceed fuel efficiency standards have done so without being rewarded with credits.⁴⁹ Therefore, when they are able to sell those credits, the primary change will be the ability for manufacturers who do not meet the standards to buy credits to avoid penalties and avoid changing their behaviour as a result.⁵⁰
- 27. Credit banking and trading in international jurisdictions has allowed manufacturers to accumulate credits in the early years of a scheme where the standards are less stringent, in order to use them to produce above-standard emission performance when the standards tighten.⁵¹ This occurred in the US in the early 2010s, and more recently in 2022, where 7 of the 8 manufacturers who ended the year with emission performance above the overall standard, used banked or purchased credits to do so.⁵²

6 Briefly describe how the NVES might impact your organisation.

- 28. EJA has a long history of advocating for a safe and healthy environment and a just energy transition. EJA has worked closely with people, communities and environmental organisations to encourage and compel governments to act, to transform industries, and to ensure justice for the people most affected by pollution and climate change.
- 29. Our goal is to advocate for fast and fair pathways to emissions reduction. The benefits of a strong NVES will be appreciated by EJA's clients, the communities we serve and all those impacted by climate change.
- 30. Fuel efficiency standards for new vehicles is only one part of the picture and the consumer benefits will take time to flow to those who do not have the purchasing power to buy new cars. EJA will continue to advocate for broader solutions, including improvements to existing vehicle standards, improvements in public and active transport options to facilitate mode shift and transport equity, and reductions in diesel and other transport emissions.

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⁴⁹ Benjamin Leard and Virginia McConnell, 'New markets for pollution and energy efficiency: credit trading under automobile greenhouse gas and fuel economy standards' (2015) *Resources for the Future Discussion Paper 15-16* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2622698 bid.

⁵¹ Benjamin Leard, and Virginia McConnell, 'New markets for credit trading under US automobile greenhouse gas and fuel economy standards' (2017) *RFF Report* https://www.ourenergypolicy.org/wp-content/uploads/2017/05/RFF-Rpt-AutoCreditTrading.pdf.

⁵² The 2023 EPA automotive trends report – greenhouse gas emissions, fuel economy, and technology since 1975' https://www.epa.gov/system/files/documents/2023-12/420s23002.pdf.

Organisation questionnaire response

Privacy Setting: I agree for my response to be published with my name and position withheld.

What organisation do you represent?	Environmental Justice Australia			
(required)				
Please rank the proposed options in order of preference.	Option A - 3rd, Option B - 2nd, Option C - 1st			
(optional)				
Briefly, what are your reasons for your choice?	Please see attached submission.			
(optional, 3000 character limit)				
Do you support the Government's preferred option (Option B)?	NULL			
(optional)				
Do you have any feedback on the analysis approach and key assumptions used?	Please see attached submission.			
(optional, 3000 character limit)				
Briefly, describe how the NVES might impact your organisation	Please see attached submission.			
(optional, 3000 character limit)				
Who should the regulated entity be?	NULL			
(optional, 3000 character limit)				