



# MANILDRA GROUP

100% AUSTRALIAN OWNED

28 October 2019

Dear Registrar,

## Submission from Manildra Group

### RE: NSW Biofuels Statutory Review

Thank you for the opportunity to respond to the Department of Customer Service's Biofuels Statutory Review's Discussion Paper.

Manildra Group is encouraged by the bi-partisan support for the biofuels mandate in New South Wales. Manildra Group has invested major capital expenditure of \$321 million over the years on the NSW ethanol mandate, a bipartisan election commitment and subsequently the Biofuels Act to meet the NSW six per cent ethanol mandate. This investment is under threat due to the non-enforcement of the current legislation.

Since the introduction of the mandate, more than eleven years ago, the mandate has fluctuated up to four per cent of total fuel volume in New South Wales.

However, to date, the August 2019 fuel statistics (Australian Petroleum Statistics<sup>1</sup>), being the most recent reported period, details ethanol volume sales as totalling 2.53 per cent against a 6 per cent mandate volume, therefore indicating that the current 6 per cent ethanol mandate has not been achieved.

Manildra Group is currently the only producer of fuel in NSW, all other fuel is imported. Major foreign-owned oil companies like Shell and Caltex have closed their refineries and are dependent on petrol and diesel from overseas.

To achieve the biofuels mandate at its current legislated level, we submit that substantive changes need to be made including but not limited to:

- a tightening of the exemption regime (with expiration dates) and overall enforcement of the mandate;
- amending the definition of volume fuel retailer;
- an expansion and potential re-launch of the government-led education campaign; and
- implementing changes to the research octane number labelling and accurate ethanol blending to 10%.

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<sup>1</sup> Australian Petroleum Statistics, Table 3B. Sales of Petroleum Products by State Marketing Area (August 2019)

## **Manildra Group**

Manildra Group is an Australian agribusiness, operating state-of-the-art manufacturing sites throughout rural New South Wales.

Manildra Group is Australia's leading producer of ethanol – including a range of grades for food and beverages, pharmaceuticals and personal care, industrial application and transport fuels – as part of an innovative, integrated process at our Shoalhaven Starches site in Nowra, NSW.

Manildra Group employs some 1,000 highly skilled and mainly regional based employees and the group is Australia's largest buyer of local wheat, sourced from some 5,000 local farmers. For over seven decades, Manildra Group has been synonymous with regional and rural NSW, agriculture and value adding to our local industries.

Our ethanol facility is certified sustainable by the internationally renowned Roundtable On Sustainable Biomaterials. Manildra Group manufactures an extensive range of ethanol grades to meet all domestic and international regulations and quality requirements.

Manildra Group supplies sustainable locally made ethanol to fuel companies, who add the ethanol to petrol to produce E10 (94 RON) fuel and E85 (103 RON) fuel.

### **Responses to Reference Questions**

#### 1. Are the objects of the Biofuels Act and Regulation still valid? Why or why not?

Biofuels are used internationally, with more than 64 countries mandating the blending of ethanol in the fuel supply to boost jobs, secure their domestic fuel reserves and de-carbonise their transport sectors.

The current mandate in NSW was introduced in 2007, requiring volume fuel retailers to sell minimum amounts of ethanol. Without the mandate, ethanol would not be offered to NSW motorists because oil companies sole focus is selling their own imported petrol.

The objects of the Biofuels Act today are more topical and relevant than ever, with harmful emissions from petroleum oil-based fuels contributing to significant health and environmental harm; and issues related to oil dependence on unstable governments and regimes remain as precarious as ever.

As part of the global transition to a low-carbon transport industry, the uptake of sustainable fuels has significantly increased over the last few years and it is expected to grow in the future as more sustainable fuel and diversification of fuel sources are demanded by the market.

Biofuels can play a key role in this transition, but currently have no direct access to the motorist. Fuel stations and fuel companies control the marketing and accessibility of E10, including price, promotion and location of the bowser on the forecourt. We note that premium fuels (95 and 98 RON) are sold for a premium price and subsequently are available at the most prominent refuelling positions at fuel stations.

Given motorists' price sensitivity when refuelling, in our experience motorists have a higher propensity to select E10, as it is the cheapest fuel available on the market on any given day; however, E10 must be easily accessible and available at fuel stations. As demonstrated in other Australian states and worldwide, biofuels are not able to have a strong penetration without a mandate and

enforcement. In NSW, when there were more E10 pumps on the forecourt, the ethanol sales were higher.

By supporting the local biofuel industry, the mandate is not only facilitating the decarbonisation of the transport sector, but it is also creating employment opportunities and providing a solid platform for potential collaborations with developers interested in building biofuel manufacturing facilities.

Manildra Group submits that there is a great opportunity for NSW to build a thriving bioeconomy based on the production of biofuels and renewable bio-based products. Given the momentum and investment in other countries, biofuels and bio-products in NSW will only develop with the creation of an enabling environment. This development will offer significant economic growth and will assist in diversifying our economy, creating additional rural jobs, diversifying our agricultural and manufacturing sectors.

2. Are there any other economic, social, environmental and motorist costs and benefits associated with biofuels that Government should further consider ensuring the regulatory regime is effective?

#### *Creating jobs and investment in rural communities*

Growth in ethanol production can drive investment across rural and regional sectors and NSW households. The construction of a new bioethanol plant in NSW with a capacity of 100ML would be expected to result in capital investment of about A\$120m and create revenue exceeding A\$85m per year, much of which would be spent on procuring feedstocks, wages for employees, and procurement contracts in local service industries.<sup>2</sup> In Australia currently, ethanol producers in NSW and QLD employ hundreds of people directly, in rural and regional areas, with thousands more indirectly.

In 2014, a Deloitte Access Economics and Corelli Consulting report commissioned by Queensland University of Technology (QUT) investigated the potential impact of the establishment of biorefinery industries in QLD. The study identified that the growth of biorefinery industries in QLD alone could result in an increase to the Gross State Product of more than A\$1.8 billion per year, and the creation of around 6640 jobs, most of which would be in regional communities. Similar results could be achieved in NSW.

Globally, the biofuels industry continues to create sustainable, high-paying direct and indirect jobs and investment. In 2018, the ethanol industry created and supported nearly 366,000 jobs and contributed nearly US\$46 billion to the nation's Gross Domestic Product in North America.<sup>3</sup>

#### *Creating additional income streams for farmers*

Local biofuels production provides a vital market for Australian farmers, creating new income streams for farming communities.

Sources of biomass are waste residues or by-products of farming in NSW including sugar, sorghum, wheat, canola, cotton, forestry and tallow. There are also several new agricultural crops that offer significant potential for biofuel production from lower-quality agricultural land, including crops like

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<sup>2</sup> Biofuels to Bioproducts: A growth Industry for Australia Discussion Paper, 2018 (Final report: Queensland University of Technology, Brisbane).

<sup>3</sup> Growth Energy, Ethanol Fast Facts (2019) Access: <https://growthenergy.org/wp-content/uploads/2019/05/GROW-19103-Ethanol-Fast-Facts-2019-05-03-R5-FINAL-web-1.pdf>

Agave tequilana (blue agave), sweet sorghum, energy grasses and short-rotation forestry crops. Increasingly, organic wastes such as municipal solid wastes and food wastes are also emerging as feedstocks for the production of biofuels and bioproducts.<sup>4</sup>

NSW is well-positioned to benefit from the growth of the bio-based fuel and chemical sector due to the large amount of biomass available in the state.

#### *Improving fuel quality and vehicle performance*

Ethanol works well in all modern cars and it has the highest blending octane of available additives, which keeps engines running cooler and cleaner, while improving performance.

Higher octane levels in fuel allow engines to operate at higher pressures, enabling increased efficiency and power. Ethanol burns cleaner than regular unleaded fuel, enhancing engine performance. Further, ethanol acts a solvent, helping to remove oil-based grime from engine surfaces and maintaining clean engines. E10 is the best value, least expensive, high octane fuel on the market.

Higher ethanol blends including E15 and E85 deliver even higher octane levels at a lower cost than standard 10 percent ethanol blends. Motorists have driven over 10 billion miles on E15 in the United States with that number continuing to rise.<sup>5</sup>

Australian fuel quality standards currently allow for 1 per cent by volume of Methyl Tertiary Butyl Ether (MTBE), 1 per cent di-isopropyl ether and 1 per cent benzene to be present in petrol. However, locally produced ethanol with an octane rating of 113 would provide a cleaner, sustainable alternative required for enhanced engine performance and potentially removing the necessity to include harmful additives such as MTBE.

With the world transitioning to lower emission vehicles, Australia is also required to take steps to ensure compliance with new fuel and vehicle standards. Biofuels can play a key role in meeting these requirements and therefore represent a valid option for the motorist.

#### *Reducing emissions and improving health*

Ethanol is one of the most effective policy tools we have in assisting with the decarbonisation of our transportation fuels. After taking a lifetime for our planet to produce fossil fuels such as oil, ethanol remains one of the most inexpensive and effective tools available for reducing harmful emissions from the transport sector.

In addition to being carbon reductive, ethanol displaces the need for toxic, cancer-causing chemicals that have been linked to asthma, smog and groundwater contamination. A study undertaken at the Ford Australia node of the Advanced Centre for Automotive Research and Testing concluded that hydrocarbons, NOx, CO<sub>2</sub>, and particulate matter emissions from E10 petrol were respectively 15 per

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<sup>4</sup> Biofuels to Bioproducts: A growth Industry for Australia Discussion Paper, 2018 (Final report: Queensland University of Technology, Brisbane).

<sup>5</sup> Growth Energy, Ethanol Fast Facts (2019) Access: <https://growthenergy.org/wp-content/uploads/2019/05/GROW-19103-Ethanol-Fast-Facts-2019-05-03-R5-FINAL-web-1.pdf>

cent, 18 per cent, 5 per cent and 26 per cent lower compared to regular unleaded petrol.<sup>6</sup> These benefits continue to grow with ongoing innovations in biofuel production.

In fact, each year, ethanol production and its use decreases greenhouse gas emissions, with the full implementation of an Australian-wide E10 and B10 mandate corresponding to a reduction respectively of approximately 2.6 million tonnes and 6.3 million tonnes of greenhouse gas emissions per year.<sup>7</sup>

In the future, bio-based aviation fuels will contribute to a significant decrease in global CO<sub>2</sub> emissions, with biofuels decreasing the carbon footprint of jet fuel by up to 80 per cent based on a full life cycle assessment.<sup>8</sup>

With ethanol there are fewer toxic, dirty chemicals in our fuel, water and air we breathe.

### *Enhancing Energy Security*

Ethanol reduces our dependence on foreign oil by producing a reliable source of domestic energy and securing Australia's energy independence. The value of Australia's total petroleum imports increased to A\$24.7 billion in 2019/2020.<sup>9</sup>

Ethanol is crucial for reducing our reliance on foreign petrol imports, with every truckload of clean burning locally made ethanol displacing imported petrol. The risks associated with transportation fuel security in Australia were highlighted in a landmark report, Australia's liquid fuel security; commissioned by NRMA Motoring and Services, by Royal Australian Air Force Air Vice-Marshal (Retd) John Blackburn AO.<sup>10</sup>

Australia is a member of the International Energy Agency which recommends a 90-day fuel reserve in the event of disruption to the global oil supply chain. Australia currently holds in reserve just three weeks of fuel. In the event of a fuel crisis, emergency services and essential goods could run out in days providing just nine days of dry goods; seven days of frozen goods and three days of hospital and pharmacy operations.<sup>11</sup> The closure of seven oil refineries (in 2012, 2013 and 2015) has reduced Australia's production capacity of refined petroleum products by 45 per cent. Importing the majority of our petrol and diesel from Asia has increased our vulnerability to potential supply disruption due to geopolitical factors.

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<sup>6</sup> Brear, M Comparison of emissions and fuel consumption of a passenger vehicle on two fuels. 2016. Available from: [http://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/pricing-reviews-section-12a-submissions-review-of-a-maximum-price-for-wholesale-ethanol-issues-paper/online-submission-manildra-group\\_k\\_beavon-1\\_aug\\_2016\\_200800000.pdf](http://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/pricing-reviews-section-12a-submissions-review-of-a-maximum-price-for-wholesale-ethanol-issues-paper/online-submission-manildra-group_k_beavon-1_aug_2016_200800000.pdf)

<sup>7</sup> Australian Government and Department of the Environment and Energy. National Greenhouse Accounts Factors – July 2017. Available from: <http://www.environment.gov.au/climate-change/powerhouse-gas-measurement/publications/national/greenhouse-accounts-factors-july-2017>

<sup>8</sup> ATAG. Facts and Figures, May 2016; Available from: <http://www.atag.org/facts-and-figures.html>.

<sup>9</sup> Australian Petroleum Industry Trade – Gasoline, Diesel, Crude Oil and Other Refinery Products, Department of the Environment and Energy as at August 2019

<sup>10</sup> Australia's Liquid Fuel Security Part 1: A report for NRMA Motoring and Services 2013 // Australia's Liquid Fuel Security Part 2: A report for the NRMA Motoring and Services 2014

<sup>11</sup> Australia's Liquid Fuel Security Part 1: A report for NRMA Motoring and Services 2013 // Australia's Liquid Fuel Security Part 2: A report for the NRMA Motoring and Services 2014

The production of biofuels in NSW diversifies our sources of transportation fuels and decreases our reliance on imported petroleum products. With no oil refineries in NSW, Manildra Group is currently the only fuel producer in the state.

#### *Saving Motorists' money at the pump*

Ethanol is a more affordable option at the pump, stabilising prices and providing competition at the bowser. E10 continues to be sold at a discount to regular unleaded fuel across the state and is the best value high octane fuel available on the market. A study conducted by Seven News Sydney found that two family cars driving an average of 26,200km a year, fueling up on E10 compared to premium 95 RON, would save \$433.<sup>12</sup>

The most recent Australian study by Ford Australia node of the Advanced Centre for Automotive Research and Testing compared fuel consumption over the New European Driving Cycle between vehicles driving on E10 and regular unleaded petrol, concluded that E10 fuel consumption was 1% higher, which was considered negligible.<sup>13</sup>

Additionally, a well-regulated fuel supply regime provides motorists with different fuel options which will enhance motorist outcomes. At present, the effective monopoly enjoyed by the oil industry in the distribution of its products is limiting the ability of motorists to utilise renewable and cheaper options in their fuel selection.

#### *Creating Advanced Bio-Manufacturing Industries*

Biorefineries produce a wide range of products such as fuel, animal feed, food and beverage ingredients and chemicals. The biofuels infrastructure, from the feedstock supply chain to ethanol production is a critical element for success and provides an excellent foundation for the expansion of existing biofuels plants into biochemical production. These plants are situated in rural regions near biomass-rich areas, which ensure that rural areas benefit from job-creation and the generation of significant economic growth.

Manildra Group's state-of-the-art manufacturing facilities produce more than just fuel. From each grain of wheat, only a portion of the wheat starch co-product is used to produce ethanol leaving the protein and nutrients to create valuable food and industrial ingredients for domestic and global markets. Manildra Group produces flours, bakery mixes, vital wheat gluten, industrial and food grade starches, syrups including brewers' syrup and glucose, stockfeed and carbon dioxide for beverage and industrial applications.

From the starch co-product, Manildra Group produces ethanol – including a range of grades for food and beverages, pharmaceuticals and personal care, industrial applications and transport fuels – as part of an innovative, integrated process.

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<sup>12</sup> Real World Tests E10 versus premium 95, Seven News Sydney, 18 April 2018

<sup>13</sup> Brear, M Comparison of emissions and fuel consumption of a passenger vehicle on two fuels. 2016. Available from: [http://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/pricing-reviews-section-12a-submissions-review-of-a-maximum-price-for-wholesale-ethanol-issues-paper/online-submission-manildra-group\\_k\\_beavon-1\\_aug\\_2016\\_200800000.pdf](http://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/pricing-reviews-section-12a-submissions-review-of-a-maximum-price-for-wholesale-ethanol-issues-paper/online-submission-manildra-group_k_beavon-1_aug_2016_200800000.pdf)

From Manildra Group's ethanol production we then create highly valuable co-products including thousands of tonnes of high-performance range of dry and pellet supplementary feeds. Our unique processing methods result in very high levels of bypass protein (RUP) while maintaining high levels of amino acid availability. This ensures excellent results for sheep, cattle and goat producers who are boosting production through supplementary feeding.

Critical during the drought and for regular feeding regimes, we have formulated specific feeds for;

- Dairy cows
- Beef cattle
- Lamb and sheep
- Goats
- Horses

Additionally, CO<sub>2</sub> from Manildra Group's ethanol fermentation is captured producing 100 per cent Australian made, food-quality CO<sub>2</sub> for the domestic food, beverage and hospitality markets. The CO<sub>2</sub> is used to create dry ice for transporting frozen food, bubbles in carbonated drinks in the hospitality industry, improve the shelf life of foods through Map Gas, among other uses.

3. Are there any developments, innovations or emerging trends in the broader transport or fuel industry that Government should consider in assessing the biofuels regulatory regime?

There is very limited scope for electrification for aviation, ships and heavy haulage industries, which will continue to rely heavily on liquid fuels, biofuels are the only viable fuel for these applications. To create investment in these industries, we need to create an established first generation locally based liquid biofuels industry. Biofuels is a viable and sustainable solution now. Additionally, electric vehicles will play a role in our future, however with power prices increasing, there is significant economic and energy security costs.

### ***Aviation Biofuels***

The aviation industry produces approximately two per cent of the global greenhouse gas emissions, this is set to increase to 22 per cent by 2050.<sup>14</sup>

The industry has agreed to emission controls through the International Air Transport Association, including a 50 per cent reduction in carbon emissions by 2050 and carbon-neutral growth from 2020.<sup>15</sup>

At least 22 airlines have flown more than 100,000 commercial flights with renewable jet fuel (which can be produced with ethanol, known as alcohol-to-jet technology).<sup>16</sup> With zero opportunity for electrification of air transport – and more than eight million litres of jet fuel utilised daily through Sydney Airport – aviation will provide large long-term markets for future biofuel industries in NSW.

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<sup>14</sup> Biofuels to Bioproducts: A growth industry for Australia Discussion Paper 2018 (Final Report, Queensland University of Technology, Brisbane).

<sup>15</sup> Fact Sheet Climate Change, International Air Transport Association, 2017

<sup>16</sup> It's time to wake up the devastating impact flying has on the environment, The Conversation, 11 January 2017

### ***Marine Biofuels***

Biofuels are the only viable low-carbon technology for shipping applications, with vessels moving towards domestic and sustainable fuels.

During recent trade visits, a Memorandum of Understanding (MOU) have been signed between the Queensland Government and the United States Navy, as part of the Great Green Fleet Initiative.

The Great Green Fleet is a US Navy commitment to source 50 per cent of fuel from renewable sources by 2020.<sup>17</sup> Additionally, the Queensland Government has established the US Navy Biofutures Industry Forum bringing together Australian and International Biofutures industry leaders for the entire supply chain, uncovering the partnerships and pathways that will deliver new biofuel and biofuture projects in QLD.

### ***Ethanol Fuel Cell Vehicles***

New technologies – such as the Nissan ethanol solid oxide fuel cell – use ethanol as a liquid fuel to power cells, resulting in vehicles with similar environmental and health benefits to battery electric vehicles but with a comparable driving range and refuelling time to conventional petrol-fuelled vehicles.<sup>18</sup>

### ***Electric Vehicles***

In the next several decades, an increase in electric vehicles in the global passenger vehicle fleets is expected. While challenges remain to be overcome in driving range and recharge times, improvements in technology and cost reduction will see the number of electric passenger vehicles increase throughout the next several decades. Notwithstanding increasing demand, electric vehicles are projected to account for only 8 per cent of the global vehicle fleet by 2040.<sup>19</sup>

4. Are there any entities that should be included or excluded from the Act? If so, what entities and why?

Internationally, more than 64 countries have successfully integrated bioethanol into the transportation fuel markets, achieved with government mandates. In the United States, government programs have promoted biofuels to address issues of energy security, sustainability and regional jobs – with a minimum of 10 per cent ethanol in every litre of fuel sold across all fuel grades. The development of a vibrant bioeconomy in NSW offers a significant growth opportunity that will diversify our economy, sustain regional and rural jobs.

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<sup>17</sup> Media Statement, Premier Anastacia Palaszczuk, Queensland to partner US Navy in massive biofuel initiative, August 17, 2016

<sup>18</sup> Wong, J. Nissan developing bio-ethanol fuel-cell for electric vehicles. 15 June 2016: Available from: <http://www.caradvice.com.au/453676/nissan-developing-bio-ethanol-fuel-cell-for-electric-vehicles/>

<sup>19</sup> International Energy Agency, World Energy Outlook, 2016; Paris, France

5. Are the definitions of volume fuel retailers and primary wholesalers adequate? If not, how could the definitions change?

The current volume fuel retailer definition is unsustainable, and Manildra Group submits that it ought to be widened.

Manildra Group submits that the current definition of a volume fuel retailer, being one who owns or operates 20 or more sites, is inadequate and excludes a significant portion of the fuel retail market.

Further, Manildra Group submits that an outlet selling 900,000 litres of all grades of petrol and diesel per quarter ought to be considered a substantial fuel seller and large business.

Manildra Group submits that the above definitions ought to be considered as being indicators of substantial and sophisticated businesses, and the threshold excludes a significant portion of the market.

Manildra Group submits that the current situation is inadequate, as an operator, cannot under any reasonable circumstances be considered a small business when it operates 20 or more fuel sites or sells nearly 1 million litres of fuel per quarter.

Manildra Group submits that the definition ought to be amended and a volume fuel retailer should be defined as one that:

- owns or operates 10 or more sites; or
- sell more than 500,000 litres of all grades of petrol at any site in a calendar quarter.

6. Does the Act appropriately balance the interests of small businesses with the broader objectives of the mandate? Please provide comments.

Manildra Group submits that the fuel ethanol mandate promotes the interests of small business by allowing fuel stations to provide additional choice to their customers in the form of a cheaper, high performance product. It is in the interest of fuel stations to stock and promote the use of E10 within their product mix and further, the oil majors ought to (as they do overseas) embrace the E10 mandate as providing a sustainable, cleaner and environmentally friendlier addition to the total fuel mix. Additionally, the mandate balances small businesses interests, by excluding small businesses from the mandate in cases where they sell less fuel than what is required of a 'volume fuel retailer'.

7. Should the prescribed mandate for ethanol and biodiesel sales remain at the current rate? If not, how should it change and why?

Manildra Group submits that a six per cent mandate is a realistic target for industry to achieve, however it requires government enforcement and a more rigorous exemptions scheme. Manildra Group submits that if E10 fuel is made available on the forecourt, motorists will choose E10 as it is the lowest cost, highest octane, option on the market.

8. Are the biofuel sustainability standards adequate? Please provide comments.

Manildra Group submits that the current sustainability standards, that are internationally recognised are adequate.

Manildra Group is certified with the Roundtable on Sustainable Biomaterials (RSB), an international initiative that brings together farmers, companies, non-government organisations, experts, governments, and inter-governmental agencies certifying the sustainability of bio-materials production and processing.

Since 2007, Manildra Group has maintained this certification through the implementation of RSB's environmental, social and economic principles and criteria. This includes regular audits from the RSB.

Manildra also maintains the internationally-recognised certification of ISO 14001 (Australian Government Department of the Energy and Environment).

The Environmental Management System (EMS) monitors Manildra Group's environmental performance, through the assessment, reduction and achievement of environmental impacts. The certification also helps to minimise environmental liabilities, reduce waste and maximise the efficient use of resources.

#### 9. Are there emerging industry standards or developments that should be taken into consideration?

Manildra Group submits that any sustainability standards should be internationally recognised, and that existing schemes should be supported including the Roundtable On Sustainable Biomaterials standard, which ethanol producers have already embraced.

Additionally, Manildra Group submits that the reliability of supply of the fuel and associated infrastructure and its source should be considered in the sustainability assessment. As an example, in the sustainability evaluation of the electric vehicles, the following parameters should be considered: battery materials sourcing, electricity generation for charging and end of life battery disposal.

#### 10. Is the exemption process for not meeting the minimum biofuel requirements adequate? Should the factors that the Minister must consider before granting an exemption change?

Manildra Group submits that the current exemption process is not adequate. The breadth and ease of the process degrades the efficacy of the biofuels mandate and consequently threatens the success of this government policy.

Under the Biofuels Act, the exemptions regime should be tightened significantly, as a matter of urgency.

Under the Act, a volume fuel retailer should only be exempt from complying with the ethanol mandate if the Expert Panel is satisfied that

- the volume fuel retailer is unable to source sustainable biofuel or sustainable biofuel blend to comply with the requirement because of a shortage in the supply of the biofuel or blend; or
- complying with the requirement would threaten the viability of the volume fuel retailer's business; or
- there are other extraordinary circumstances justifying the grant of the exemption.

To our knowledge, volume fuel retailers are continually receiving exemptions, often for three quarters in advance without any discernible rationale.

Manildra Group submits that the exemption application process and reasons for granting exemptions ought to be more transparent. Currently, there is no ability for stakeholders to better understand the reasons for exemptions being continually granted. The exemption process has been a continual process not to commit to the mandate, with no effective enforcement policy in place.

Manildra Group submits that the extraordinary circumstances provisions ought to be better defined and be subject to a particular time period.

Manildra Group submits that prior to being granted an exemption, the following factors ought to be taken into account:

- Previous exemptions;
- Rectification Plan and timeframe; and
- Verified supporting documentation

Additionally, enforcement, including substantial monetary fines must be issued if volume fuel retailers do not meet the required and mandated levels of biofuels purchases.

Manildra Group also highlights that an extended transitional period of more than a decade has been provided to the industry for infrastructure upgrades, therefore, the granting of exemptions ought to be tightened and granted only in exceptional circumstances.

The fuel ethanol mandate has been in operation for more than eleven years and Manildra Group considers this as ample time for volume fuel retailers to have undertaken their infrastructure programs and assessment upgrades in view of compliance with the Act. Without penalties issued and enforcement major oil companies have no incentives to offer E10 to motorists, as their sole focus is pushing and marketing expensive premium proprietary brands.

11. What is the process like to seek an exemption? Are there any changes that could be made to ensure the process is as seamless and as user-friendly as possible?

Not available to Manildra Group.

12. Is the Biofuels Exemptions Framework and Guidelines document easy to understand and comply with? Should any of the matters outlined in the guidelines be included instead of the Biofuels Regulation to ensure abundant legal clarity?

The Biofuels Exemptions Framework should be brief, clear and unarguable and provide for a clear and easy to understand narrative whereby only in the most pressing circumstances, and for a brief and defined period, any exemptions ought to be granted.

13. Are the current registration, return and record keeping requirements adequate? Please provide comments.

Not available to Manildra Group.

14. How much time approximately does it take primary wholesalers, volume fuel retailers and other operators of service stations to provide the return to NSW Fair Trading?

Not available to Manildra Group.

15. What other reporting and financial regulatory requirements are primary wholesalers, volume fuel retailers and other operators of service stations required to comply with? For example, at the Commonwealth level.

Not available to Manildra Group.

16. Are IPART's functions and role adequate to help achieve the objectives of the Biofuels Act? Please provide comments.

Manildra Group is encouraged by the continued engagement with stakeholders by IPART and its' continued ongoing roles under the Biofuels Act to:

- determine and periodically review a 'reasonable wholesale price' ('wholesale price') for ethanol for use in the production of petrol-ethanol blends such as E10, and
- monitor the retail market (including prices) of petrol-ethanol blends and make reports to the Minister on the effect of a determination of the reasonable price for wholesale ethanol.

Manildra Group supports the continued application of a light-handed approach to setting maximum price of wholesale ethanol and strongly supports the continued determination of wholesale ethanol prices using an IPP methodology on a quarterly basis.

Manildra Group also supports the continuation of IPART's role in monitoring and critically, ensuring there is widespread availability of E10 so that motorists have effective choice between different types of fuel.

Additionally, Manildra Group supports the continued use of a quarterly wholesale price for ethanol.

17. Are there any other functions, research or role could IPART take in the biofuel's regulatory regime?

IPART is currently monitoring imported fuel pricing, Manildra Group submits that IPART's role should be expanded to monitor the retail pricing component of all premium fuels (95 and 98 RON), in terms of the price differential between the alternative high-octane grades of fuel and E10. Therefore, IPART could ascertain the need for ethanol to be added to premium fuels to meet the changing modern fuel quality standards and further provide an additional market for locally made ethanol.

18. What information and data would be useful in ensuring regulation fosters a competitive biofuels industry?

The NSW fuel ethanol mandate has been in place since 2007, and, during this time no fines or enforcement or breaches have been enforced, due to the exemption regime.

Manildra Group submits that the lack of enforcement or penalties for non-compliance is a significant issue leading to the non-performance of this government policy.

In previous years, the NSW Fair Trading website published two sets of quarterly figures for the performance of the ethanol and biodiesel mandate.

The published figures provided firstly, a tabulated breakdown outlining the volume fuel retailer, whether they received a partial exemption and the result for each quarter, then, an overall biofuel content for all major regulated entities.

Secondly, a graph was published, displaying total sales of E10 by regulated entities as a percentage of their total petrol sales.

The last recorded ethanol mandate performance figures published on the NSW Fair Trading website were for Q4 2017.

Manildra Group submits that to ensure transparency and better enforcement of the mandate, the NSW Fair Trading Department ought to resume the publishing of the above figures.

Additionally, Manildra Group submits that there is a lack of transparency within the exemption application process. Stakeholders are unable to access the rationale for the granting of exemptions, leading to fewer than half of the volume fuel retailers meeting their legal obligations.

19. Is the current compliance and enforcement approach working well? Please provide comments.

The current compliance and enforcement approach is not effective in ensuring the success of the mandate, with ethanol volume sales currently being 2.53 per cent by volume, therefore indicating that the 6 per cent ethanol mandate has not been achieved. In addition to enforcement, any monetary penalty ought to be directed to a targeted marketing campaign directed at motorists.

20. Is the current approach appropriate and should any changes be made (such as to penalty amounts) to make the compliance and enforcement approach more effective?

Manildra Group submits that failing to administer the penalty units is a greater threat to the mandate's success.

Further, Manildra Group submits that any monetary penalty ought to be of a range and quantum that provides an effective and realistic deterrent to any volume fuel retailer breaching their obligations.

21. Is the role of composition of the Biofuels Expert Panel still valid? Please provide comments.

The Expert Panel has presided over an ethanol mandate, which lingers at less than half the mandated levels.

Manildra Group submits that the Expert Panel be reconstituted to include fewer departmental representatives and include a greater number of industry producers, including on a rotational basis at least one of the three major ethanol suppliers.

Further, Manildra Group submits that there are no substantive reasons as to why the deliberations of the Expert Panel should not be made publicly available.

22. Do you have any other general comments on the biofuel's regulatory regime? Please provide further detail.

### **Octane**

It is the experience of the Manildra Group that motorists refer to the RON when selecting their fuel, and Manildra Group submits that the current RON labelling of E10 is misleading, confusing and incorrect.

Manildra Group has been encouraged by the Department's proactive actions in relation to the implementation, enforcement and monitoring of the change to 94 RON labelling for E10 fuel in NSW. Prior to this, E10 fuel was being labelled with a range of research octane numbers from 91 to 94. This is despite the product (E10) being consistently a minimum 94 RON.

We note the current Regulation 12 (2) which states *"The octane rating is the research octane number for the petrol rounded down to the next whole number, and in the case of a blend of petrol, is for the whole blend"*. Globally the approach is known as the American Society for Testing and Materials (ASTM), when calculating the level octane for publication purposes.

We submit that this standard, which dictates the rounding up of the octane level be also adopted by the Department of Fair Trading to determine what level of RON ought to be advertised.

The ATSM standard is also adopted by the Australian Federal Department of Energy and Environment. It does not appear logical that Australia seeks to create its own method of mathematical rounding which is inconsistent with this global system.

Manildra Group recommends that the Regulation be amended to read *"The octane rating is the research octane number for the petrol rounded according to ATSM standards, and in the case of a blend of petrol, is for the whole blend"*.

### **Blending**

Manildra Group submits that motorists are purchasing E10 on the understanding that they are purchasing 90% petrol and 10% ethanol, with motorists paying for this exact volume blend at the fuel station.

Blending ethanol into petrol at precisely 10% is technically possible within very fine tolerances, instead of the current industry practice in NSW of blending ethanol at 9%. By blending E10 fuel to exactly 10% ethanol would assist in the uptake of ethanol. Intertek, a leading, internationally-recognised independent fuels testing and analysis service with over 1000 laboratories in over 100 countries has provided Manildra with technical documents and evidence confirming the above.

Manildra Group submits that exact blending at the prescribed volumetric level would increase the level of ethanol uptake and avoid misconception in the marketplace regarding the level of ethanol in the E10 blend. It would also assist in maintaining an octane number for E10 closer to 95 RON.

### **E10 Pump positions**

The removal of E10 pumps has directly led to the reduction in E10 sales. When E10 was more available in NSW, it was the highest selling fuel type across all grades.

Fuel stations and fuel companies effectively control the marketing and accessibility of E10, including the price, promotion and location of the bowser. We note that premium fuels (95 and 98 RON) are sold for a premium price and subsequently are available at the most prominent refuelling positions at fuel stations.

Generally, high-demand pumps are positioned at the front of the forecourt, near the roadside, whereas, fuel retailers often relegate E10 pumps to the rear areas of the forecourt, thus preventing motorists from conveniently exercising their fuel choice; resulting in artificially lower ethanol sales.

Given motorists' price sensitivity and search for convenience when refuelling, in our experience motorists have a higher propensity to select E10, as it is the cheapest fuel available on the market on any given day; however, E10 must be easily accessible and available at all fuel stations. To improve this availability, nozzles can easily be converted to increase the availability of E10.

As an example, if E10 was only available at 25% of refuelling positions and 100% of customers selected E10 when they could, it would be impossible to achieve the mandate without extensive queueing, something many motorists will not do if there are spare refuelling positions.

Manildra Group submits that a clause ought to be inserted in the Regulation to specify that E10 should be made available at every refuelling position in equal proportion with other fuels, easily accessible and correctly labelled and marketed.

### ***Marketing Campaign***

Manildra Group submits that the New South Wales Government's campaign "Fuel for thought", did not have the desired effect of promoting and encouraging biofuel sales. Ultimately, marketing and the availability of product on the forecourt is crucial to success.

The Queensland Government's "E10 OK" campaign, launched with similar goals, achieved results of increased biofuel uptake and educating motorists. Amongst other initiatives, the successful Qld campaign introduced a user-friendly and easily accessible mobile phone application that assists motorists identify whether E10 is compatible with their vehicle.

Manildra Group submits that the motor industry be encouraged to contribute to a comprehensive educational campaign, reinforcing the government's campaign messages to highlight the compatibility of biofuels in vehicles.

In addition to a general education campaign to highlight biofuels' benefits, a fuel labels campaign should also be considered relating to the research octane number of E10. Motorists refer to the RON when re-fuelling, the current RON labelling of E10 is misleading, confusing and incorrect.

Manildra Group submits that the New South Wales Government ought to focus its marketing efforts to maximise both reach and frequency of its message as follows:

Firstly, motorists should be educated on the benefits and importantly compatibility of biofuels in vehicles.

Secondly, auto mechanics / apprentices and associated industries should be proactively involved in a campaign. It would be appropriate to engage the local Motor Traders Association to create a state-based training package for apprentices and professional development courses for advanced mechanics. This campaign should be more focused on technical issues and detail the chemical

differences between fuel grades, and, how the chemistry of each grade interacts with combustion technologies and emission profiles.

Finally, Manildra Group submits that there is a lack of education, training and awareness for automotive sales staff selling motor vehicles. It is common that automotive sales staff advise potential customers of a vehicle's inability to use biofuels, despite the vehicle manufacturers advice of compatibility.

If you have any questions, please feel free to contact me via email [REDACTED] or [REDACTED].

Kind regards

*Kirsty Beavon*

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**Manildra Group**