Both Sarea and I are coming over to your meeting this afternoon, as she is acting Margaret and I am acting Sarea.

Please also find my somewhat hasty notes fyi,
Vehicle Emissions Working Group – Stakeholder Consultation 7 Dec Sydney

We need to be mindful that costs could increase for consumers. Regarding fuel quality – Australians want big cars. On technology – We need to consider how Intelligent Transport Systems (ITS) can alleviate congestion. Eco driving will also be important (to reduce emissions).

I am keen for discussion paper to consider financial costs for purchasing new vehicle technologies. Also want govt to consider equitable treatment of urban and rural and regional consumers and the relative cost of abatement for improving vehicle efficiency compared to other sectors. Finally raised issue of unintended consequences of improved efficiency – would drivers actually start to drive more if vehicles more efficient? (behaviour change).

To get to a Low Carbon economy it will be important to have mandatory efficiency standards. How can we encourage best practice? We need long term targets to give industry enough time to change. Fleet purchasing agreements are also a useful tool for govt. And can have positive effect on second hand market as well. Also would like to see acceleration of infrastructure for EV’s.

Minister Fletcher – Wants to hear if there are efficiencies in aligning Australia with other countries.

We need a combination of carrot and stick. So we can ‘refresh’ the vehicle fleet. ITC and smoothing traffic flow will also be important.

From a supply side perspective says mandatory standards are important from the supply side. From a demand side perspective – we need good information on the cars we buy (stickers etc) outlining the gap between more efficient and less efficient vehicles. Fuel is the second or third highest cost for households. There needs to be a cost/benefit analysis on up-front costs vs cheaper running costs.
The only technology requiring 10ppm sulphur is a technology that is not being used very much in Aus market.

Contradicted abovementioned comment by saying gasoline injected engines are increasingly expected to be sold in Aus.

Wants taxation support to cover low emission vehicles. Glad to see a whole of business approach. Age of fleet profile is important and EV’s are worth considering.

Gave example of countries where tax incentives are provided.

Cost benefit analysis important. Also need to consider customer satisfaction. The consumer will need to know the tangible benefits of more efficient vehicles, so good communication on the technology to consumers important, delivered in a timely manner.

New technologies – outline the overseas precedents. Dominant GDI technologies (mentioned earlier by ..., do not need 10ppm sulphur, only lean-burn GDI. Diesel uptake increases particulates, so need to include Health Dept analysis on the paper. Responded that we are including their input.

Re testing – the biggest concern is what happens in 15 years. Need to focus on the future. Some technologies are less durable than others. Maintenance is extremely important to ensure the car is at its most efficient, regardless of the technology.

If the overall aim is to reduce CO2 emissions, then improved vehicle emission standards must be included in the govt’s policy.

Avoided carbon emissions need to be values in the work that the govt does. EV integration needs to work in with power supply. Also need to take a long term approach and consider power supply issues.
Poor health outcomes need to be a regulatory approach to CO2 emissions. EE fuels are a different issue. Need to encourage innovation to reduce the costs of bringing in vehicles for example, standardising testing with other countries’ regimes (EUR, UN).

Fuel economy is important. Need to be aware of making new technology available in regional areas. There is also the issue of weight of trucks. And the occasional overheating of more efficient (more lightweight) vehicles that can then overheat and start a fire (apparently some new trucks have self-combusted).

Jurisdictional issue. Need to acknowledge the degradation of the vehicle in the paper. There is a significant difference between performance of vehicle, based on its age eg if you don’t replace components, the vehicle’s efficiency drops. Fleet testing in California is very useful example to explore.

We need to consider existing technologies in the mix.

Re tax reform, why don’t we use the diesel fuel rebate to influence truck purchasing behaviour eg removers rebates from low efficiency trucks (eg old clunkers) and give full 13 c per litre for those with Eur 3 and above trucks. We need to include heavy duty OFF ROAD trucks in the Paper to bring in the agricultural and resources sectors.

XXX

Need more stringent real world testing. Recommend aligning with current process being driven through Europe and North America need better diagnosis processes, so mechanics and repairers can diagnose the issues in these new technologies cos currently many having difficulties.

Need to consider variation between rural and regional and urban areas. Also need to consider how this feeds into the Tax Review process.
VEHICLE EMISSIONS MINISTERIAL FORUM

Draft Minutes

1st Meeting - 24 November 2015

MEMBERS ATTENDING

CHAIR: The Hon Paul Fletcher MP
Minister for Territories, Local Government and Major Projects, Commonwealth

MEMBERS: The Hon Josh Frydenberg MP
Minister for Resources, Energy and Northern Australia
The Hon Greg Hunt MP
Minister for the Environment

MINISTERIAL STAFF
Alex Waldren Office of Minister Fletcher
Jessie Foran Office of Minister Frydenberg
Alex Caroly Office of Minister Hunt

OFFICIALS ATTENDING

Department of Infrastructure and Regional Development
Michael Sutton Acting Executive Director, Surface Transport Policy Division
Donna Wieland General Manager, Strategic Policy Branch
Secretariat

Department of the Environment
Helen Wilson First Assistant Secretary, Emissions Reduction Fund Division

Department of Industry, Innovation and Science
Helen Bennett General Manager, Energy Productivity Branch
1. WELCOME AND ADMINISTRATION

The Chair:
- Welcomed members to the 1st meeting of the Vehicle Emissions Ministerial Forum (the Forum)
- Adopted the 1st Council meeting agenda

2. CURRENT AUSTRALIAN GOVERNMENT APPROACHES TO VEHICLE EMISSIONS

The Forum:
1. NOTED the paper on current Australian Government approaches to vehicle emissions.

3. MINISTERIAL FORUM ROLE AND FUNCTIONS

The Forum:
2. ENDORSED the proposed roles and functions of the Forum and Working Group
3. AGREED to invite the Climate Change Authority to participate in the Working Group

4. MINISTERIAL FORUM WORKPLAN

The Forum:
1. REQUESTED the Working Group amend the workplan to reflect:
   a) the announcement of the Review of the Fuel Quality Standards will occur by 29 April 2016

5. STAKEHOLDER ENGAGEMENT

The Forum:
1. NOTED that consultation processes are currently underway in relation to several matters identified in the Ministerial Forum Terms of Reference
2. AGREED the proposed stakeholder list and timing for stakeholder consultation.

6. DISCUSSION PAPER

The Forum
1. AGREED to the proposed outline for the vehicle emissions discussion paper including that electric vehicles and technology be considered in the discussion paper.
2. AGREED the Working Group prepare a draft discussion paper for consideration by the Ministerial Forum at the next meeting in February 2016.
VEHICLE EMISSIONS MINISTERIAL FORUM

Draft Minutes

2nd Meeting - 4 February 2016

MEMBERS ATTENDING

CHAIR: The Hon Paul Fletcher MP
Minister for Major Projects, Territories and Local Government.

MEMBER: The Hon Josh Frydenberg MP
Minister for Resources, Energy and Northern Australia

MINISTERIAL STAFF
Malcolm Southwell Office of Minister Fletcher
Jessie Foran Office of Minister Frydenberg
Alex Caroly Office of Minister Hunt
Karyn Freeman Office of the Prime Minister

OFFICIALS ATTENDING

Department of Infrastructure and Regional Development
Judi Zielke Acting Deputy Secretary
Michael Sutton Acting Executive Director, Surface Transport Policy Division
Donna Wieland General Manager, Strategic Policy Branch

Department of the Environment
Gayle Milnes Assistant Secretary, Emissions Reduction Fund Division

Department of Industry, Innovation and Science
Mark Weaver Acting General Manager, Energy Productivity Branch

Assistant Director, Energy Efficiency Policy and Engagement Team
1. WELCOME AND ADMINISTRATION

The Forum:

**NOTED** the minutes from the first Ministerial Forum meeting on 24 November 2015 and revised work plan.

2. UPDATE FROM THE WORKING GROUP

The Forum:

**NOTED** the update from the working group.

3. VEHICLE EMISSIONS DISCUSSION PAPER

The Forum:

**AGREED** to the discussion paper (subject to minor amendments to be settled between departments); to public release of the paper on 11 February 2016; and to schedule a further stakeholder forum in Canberra, with timing to be resolved as soon as possible.
For info — not sure if you have been asked to draw up info on light vehicle sales. Is that info available in the NTC report?

Hi

I hope you had a good long weekend.

As discussed last Friday (or was it Thursday?!): 

i. following are the key points from the ministers’ meeting last week.

iii. I’d also be grateful if you could gather the additional information Minister Frydenberg has requested (on the number of brands selling light vehicles in Australia, the best selling models by brand and the share of each brand). Can you draw on existing information to provide that by Thursday? Let us know if you could do with some help.
iv. Do we need to update PMC ahead of the IDC? Do they have a copy of the letter from Minister Fletcher
to the PM?

All the best,

Gayle

From: Milnes, Gayle (Potected)
Sent: Tuesday, 13 June 2017 8:10 AM

Subject: Vehicle emissions: revised timeline and model fuel efficiency standard [SEC=PROTECTED,
DLM=Sensitive:Cabinet]

Colleagues,

A message to update you on the outcomes from Minister Fletcher and Frydenberg’s discussion last
Monday 5 June, following further discussions with our infrastructure colleagues and Minister
Frydenberg’s office, and to seek your views by COB Wednesday 14 June s34(3)

Outcomes from ministers’ meeting

(ii) ministers have asked us to press on with draft fuel quality draft RIS to build the best case possible

(iv) ministers will meet again on vehicle emissions in the last week of June (Minister Frydenberg’s office
has suggested 26 June but Minister Fletcher’s office is yet to confirm)

(v) Minister Frydenberg has requested additional information on the number of brands selling light vehicles in Australia, the
best selling models by brand and the share of each brand.
(vii) ministers are keen that we engage health and defence portfolios.

Thanks everyone.

Gayle

From: 
Sent: Friday, 2 June 2017 6:03 PM
To: Sagala, Frances (Protected)

Subject: MS17-900290 - Proposed fuel efficiency standard and emissions reductions in the transport sector [SEC=PROTECTED, DLM=Sensitive:Cabinet]
From: Milnes, Gayle (Protected) <Gayle.Milnes@protected.environment.gov.au>
Sent: Monday, 12 February 2018 9:20 PM
To: SPENCE Pip
Subject: FW: Vehicle emissions: key points from today's meeting with Ministers Fletcher and Frydenberg [SEC=PROTECTED, DLM=Sensitive:Cabinet]

Pip,

Grateful your views too.

Gayle

From: Milnes, Gayle (Protected)
Sent: Monday, 12 February 2018 9:18 PM
To: SPENCE Pip, Gayle (Protected)
Subject: Vehicle emissions: key points from today's meeting with Ministers Fletcher and Frydenberg [SEC=PROTECTED, DLM=Sensitive:Cabinet]

Helen, Finn,

Following are my takeaways from today’s discussion. Do these gel with you?

Gayle
- Attendees: Steven Kennedy, Pip Spence, Finn Pratt, Helen Bennett, Gayle Milnes, Frances Sagala, Nathan (Adviser, Minister Fletcher's office), Daniel Caruso, Sid Marris (PMO)
Thanks

That is a good summary and gives a pretty clear steer I think. Could you please arrange a meeting with Pip to regroup – might be possible tomorrow or Thursday or else next week.

Alex

From: DONNA
Sent: Monday, 12 February 2018 5:57 PM
To: WIELAND Donna <Donna.Wieland@infrastructure.gov.au>; FOULDS Alex <Alex.Foulds@infrastructure.gov.au>
Subject: Ministers workshop [SEC=PROTECTED, DLM=Sensitive:Cabinet]

Alex/Donna

Main headline feedback from Ministers

Coming back from the House with Pip she suggested we regroup shortly to plan next steps.

Emissions Testing
Supportive for an on-road emissions testing program
Secretary to give talk to AAA in a couple of weeks
May be feasible to have a roundtable with member groups on emissions to seek compromise

**Electric Vehicles**
Ministers interested in roundtable with EV stakeholders to map a way forward.
Min spoke to EV Council today - Interested in mandating standard connector under an ADR

---

Director Environmental Standards Section
Transport Technology Futures Branch
Department of Infrastructure, Regional Development and Cities
GPO Box 594, Canberra ACT 2601

Hi Gayle

That’s great – thanks heaps.

I’ve had a play, just tightening it up a bit – let me know what you and think.

Pip

From: Milnes, Gayle (Potected) [mailto:Gayle.Milnes@protected.environment.gov.au]
Sent: Monday, 12 February 2018 9:20 PM
To: SPENCE Pip <Pip.Spence@infrastructure.gov.au>
Subject: FW: Vehicle emissions: key points from today’s meeting with Ministers Fletcher and Frydenberg [SEC=PROTECTED, DLM=Sensitive:Cabinet]

Grateful your views too.

Gayle

From: Milnes, Gayle (Potected)
Sent: Monday, 12 February 2018 9:18 PM
To: BENNETT, Helen (Protected); PRATT, Finn (Protected)
Cc: Evans, Jo (Protected); Wilson, Helen (Protected)
Subject: Vehicle emissions: key points from today’s meeting with Ministers Fletcher and Frydenberg [SEC=PROTECTED, DLM=Sensitive:Cabinet]

Helen, Finn,

Following are my takeaways from today’s discussion. Do these gel with you?

Gayle
- Attendees: Steven Kennedy, Pip Spence, Finn Pratt, Helen Bennett, Gayle Milnes, Frances Sagala, Nathan (Adviser, Minister Fletcher's office), Daniel Caruso, Sid Marris (PMO)
Colleagues,

The attached captures the outcomes from yesterday's discussions. Thanks for your feedback.

Now for us to action!

Gayle
SUMMARY OF STAKEHOLDER ENGAGEMENT INFORMATION SESSION on VEHICLE EMISSIONS

3pm-5pm, Monday 7 December, 2015
Brisbane Room, Sofitel Sydney Wentworth, 61-101 Phillip Street, Sydney

**Minister Attending**
The Hon Paul Fletcher MP
Minister for Major Projects, Territories and Local Government

**Ministerial Advisor Attending**
Alex Caroly
Office of the Minister for the Environment, the Hon Greg Hunt MP

**Australian Government Departments Attending**

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<th>Infrastructure and Regional Development</th>
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**Attending Organisations**

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<th>ABMARC and Society of Automotive Engineers</th>
<th>Australasian Fleet Management Association</th>
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<td>Australian Automobile Association (AAA)</td>
<td>Australian Automotive Aftermarket Association</td>
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<td>Australian Automotive Dealers Association</td>
<td>Australian Imported Motor Vehicles Association</td>
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<td>Australian Industry Group</td>
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<td>Australian Livestock and Rural Transporters' Association</td>
<td>Australian Trucking Association</td>
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<td>Biofuels Association of Australia</td>
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<td>BMW</td>
<td>Business Council of Australia</td>
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<td>Choice</td>
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<td>Climate Institute</td>
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<td>Elgas</td>
<td>Federal Chamber of Automotive Industries (FCAI)</td>
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<td>World Wildlife Fund</td>
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1
Ms Zielke welcomed Minister and attendees.

Ms Zielke advised that the purpose of this meeting was to provide an overview of the activities of the Ministerial Forum, its processes and timing, and to hear from stakeholders in relation to the issues that should be covered.

Minister Fletcher expressed thanks to all those who attended and noted that the number of people at this meeting represented the importance of the issues and policies in relation to vehicle emissions.

Minister Fletcher also noted:

- The intent of this session was to have a high level discussion to have an integrated whole of government look at the policy settings.

- Different parts of the Australian Government are pursuing complementary initiatives in relation to noxious emissions, fuel efficiency, fuel quality and greenhouse gas emissions.

- The aim of the Forum is examine these issues in a holistic way.

- Minister Frydenberg announced the release of the National Energy Productivity Plan on 4 December also noted fuel efficiency can bring down domestic and business costs.

- Minister Hunt has made similar sentiments and noting improved fuel efficiency and fuel quality is good for Australia’s air quality.

- Most developed countries have adopted Euro 6 and CO2 standards and Australia has its own Australian Design Rules in place to make Euro 5 mandatory.

- The government is a member of the G20 Transport Task Group and is collaborating on work to improve the efficiency and emissions performance of vehicles.

- The Government approach to date to encouraging the uptake of fuel efficient vehicles has been through education and information:
  - A mandatory fuel consumption labelling scheme is in place for all new vehicles sold in Australia.
  - The Government has an online Green Vehicle Guide that enables car buyers to compare the environmental performance of new vehicles.

- The Clean Energy Finance Corporation is providing $50 million in low interest loans to fleet buyers to support the increased uptake of low emissions vehicles.
Current research from the Bureau of Infrastructure, Transport and Regional Economics indicates that the average CO2 emission intensity of light vehicle sales is forecast to decline to a level of between 155-160 g/km by 2025 under a business as usual scenario. CO2 emissions from new light vehicles, on average, will continue to improve although not at the rates in other countries where mandatory standards are in place.

The review of the Fuel Quality Standards Act 2000 is underway and a report is due to government by April 2016.

The Government will release a discussion paper in the 1st quarter next year which will look at:
- Euro 6 noxious emission standards (for light and heavy vehicles)
- Fuel quality
- Fuel efficiency/CO2 measures for light vehicles
- Non-regulatory measures such as incentives, fleet purchasing policy, consumer information, technology and alternative fuels
- Emissions testing

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<th>High level stakeholder discussion</th>
<th>Minister Fletcher</th>
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Minister Fletcher hosted a discussion in which the following issues were raised by stakeholders:

- There is broad support for the consultative approach that the government is taking
- There are differing views on whether Australia has the appropriate fuel quality to take advantage of low emission technologies. A comprehensive risk assessment process could be undertaken on the environmental and vehicle operational costs from any changes to fuel quality.
- How can new technologies, such as Intelligent Transport Systems (technology), be used to smooth traffic flow and reduce congestion?
- What is the role of consumer preferences in encouraging the uptake of low emission vehicles and to what extent are those preferences dependent on what vehicles are available in the market?
- Driver behaviour is an important issue to consider when developing emission reduction measures.
- New technologies (e.g. electric vehicles) will require the appropriate infrastructure for support.
- Vehicle manufactures will require a lead time of up to 60 months to adjust and modify to new measures/standards.
Australia’s truck fleet is relatively old and almost 50% have either zero or low Euro standards. There is a need to provide appropriate support for the uptake of new heavy vehicle technologies.

A proper cost benefit analysis is needed to look at the impacts on all stakeholders from the adoption of new technologies to meet more stringent emissions measures.

It will be important to investigate the relative abatement from light vehicles as compared to other sectors.

Are there unintended consequences from more stringent fuel efficiency measures in relation to safety and driver behaviours?

Emissions targets/measures should also focus on government and fleet as they have an important knock on effect into the second hand car market.

What are the efficiencies and the risks in Australia being aligned with overseas standards?

Taxation policy could be used to encourage consumers to purchase low emission vehicles and to also lower the age of the fleet.

Explore options outside the Euro 5/6 models where better emission outcomes could be achieved.

The pursuit standards for CO2 may lead to increases in other noxious emissions. In Europe the shift in fleet from fuel to diesel has led to increases in noxious air emissions and particulate numbers.

Urban planning and public transport has a role for reducing emissions.

How will new technologies impacts on the life and safety of the vehicle and how do we ensure appropriate support to maintain these technologies in in rural and regional Australia?

How can we ensure ageing vehicles continue to maintain emission standards as they age?

What is the most appropriate emission testing regime for Australia?

Minister Fletcher thanked everyone for their input and observed that there will be a diverse range of interests affected by work of the Forum and that this discussion highlighted the need to have a good fact base underpinning the various aspects of this complex issue.

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<th>Q and A in relation to process and potential outcomes.</th>
<th>Judith Zielke</th>
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Ms Zielke provided additional information on the process noting that:

- the discussion paper will likely be released in February 2016;
- industry consultation will occur through March; and
- the working group will provide options to Government on measures to reduce harmful emission by June 2016.
Ms Zielke also advised that:

- The government will undertake a rigorous cost benefit analysis as part of Regulatory Impact Statement (RIS) process. The RIS will look at impacts on consumers, manufacturers, dealers etc.
- The process will also take account of the Government’s deregulation agenda and is interested in looking at ways to reduce the regulatory costs, and explore other efficient non-regulatory measures.
- The government is also working closely working with its European counterparts on the issues of emission testing and are focused on vehicles important to Australia.

In summary Ms Zielke noted that there were a range of issues that came to the fore by various stakeholders that had not been identified previously as key issues. These included:

- the role of Intelligent Transport Systems in reducing congestion, and therefore fuel usage;
- how consumer behaviour in vehicle selection differs between Australia and other countries and its potential influence on fuel efficiency measures;
- Insurance for heavy vehicles - new components to manage emissions may have an increased fire risk; and
- understanding how new technologies can impact on the life of the vehicle, if those technologies are not as durable and require regular maintenance (especially an issue in rural/regional areas); and
- considering the health costs/benefits of adopting (or not) proposed measures.

Meeting Close
SUMMARY OF 2\textsuperscript{nd} STAKEHOLDER ENGAGEMENT INFORMATION SESSION on VEHICLE EMISSIONS

3pm-5pm, Monday 4 April, 2015

In-Blue Rm, Mezzanine Floor, Infrastructure House, 111 Alinga St, Canberra

Ministers Attending

The Hon Paul Fletcher MP, Minister for Major Projects, Territories and Local Government

The Hon Greg Hunt MP, Minister for the Environment

The Hon Josh Frydenberg MP, Minister for Resources, Energy and Northern Australia.

Australian Government Departments Attending

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<td>Federal Chamber of Automotive Industries</td>
<td>Mr Tony Weber, CEO</td>
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<td>Mr James Hurnall, Technical Director</td>
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<td>Mr Ashley Wells, Policy Director</td>
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<td>Truck Industry Council</td>
<td>Mr Mark Hammond, Chief Technical Officer</td>
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<td>Toyota Motor Corporation of Australia</td>
<td>Mr Andrew Willis, Manager Government Affairs &amp; Environment Policy</td>
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<td>Volkswagen Group Australia</td>
<td>Mr Paul du Preez, General Counsel &amp; Company Secretary</td>
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<tr>
<td>BMW Group Australia</td>
<td>Ms Lenore Fletcher, General Manager Corporate Communications</td>
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<td>Nissan Motor Co (Australia) Pty Ltd</td>
<td>Mr Richard Emery, Managing Director &amp; CEO</td>
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<td>Mitsubishi Motors Australia Limited</td>
<td>Mr Ashley Sanders, Manager, Certification and Regulation Compliance</td>
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<td>Fuels Industry</td>
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<td>Australian Institute of Petroleum</td>
<td>Mr Paul Barrett, CEO</td>
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<td>Biofuels Association of Australia</td>
<td>Mr Mark Sutton, CEO</td>
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<td>ELGAS</td>
<td>Mr Warring Neilsen, Manager Corporate Affairs</td>
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Summary

Welcome and introductions | Ms Judith Zielke, Deputy Secretary
Department of Infrastructure and Regional Development

Ms Zielke welcomed attendees and advised that the purpose of the meeting was to discuss the issues raised in the discussion paper in more detail, and help inform submissions to the discussion paper.

Ms Zielke confirmed that the next steps would the development of Regulation Impact Statements (RIS) to consider the introduction Euro 6/VI for light and heavy vehicles and standards for fuel efficiency (CO2).

She also advised that an updated National Framework for Intelligent Transport Systems will be considered at the next meeting of the Transport and Infrastructure Council. A key focus of this framework would be a coordinated approach between governments.
Minister Hunt opened the discussion on greenhouse gas emissions. He emphasised that the Government would keen to work with all interested parties on a whole of government package of measures for motor vehicles.

He noted that Australia was on track to meet its emission reduction targets for 2020. He also noted that the transport sector accounts for about 17% of Australia’s greenhouse gas emissions, but would only be expected to contribute 10% of the abatement required to achieve Australia’s 2030 emission reduction target.

He also noted that the efficiency of the Australian and US light vehicle fleets had historically been similar but was starting to diverge as a result measures adopted in the US and indicated that the proposed abatement would aim to realign with the US trajectory in the longer term.

Vehicle manufacturers indicated a willingness to work with government to drive changes in consumer behaviour.

Minister Hunt advised that were no plans to influence consumer behaviour through fuel prices, but modest proposals for incentives could be considered, as long as it meets a net saving to Government and provides a net benefit to consumers.

Vehicle manufacturers raised concerns about the risk of parallel imports undermining the effectiveness of mandatory standards for vehicle efficiency, if manufacturers were forced to restrict the availability of certain models.

Vehicle manufacturers also noted that standards in US offer a range of credits for low emission vehicles and improvements outside the standardised test (such as air conditioning refrigerants), which may complement proposed abatement from ozone measures.

Minister Hunt indicated a willingness of consider other measures (such as vehicle inspections), if a net benefit and net saving to government could be demonstrated.

In relation to a start date for fuel efficiency standards, it was raised that some manufacturers have signed off on engines for the Australian market up until 2020-21, which could potentially cause issues.
Approaches to Noxious Vehicle Emissions | The Hon Paul Fletcher MP, Minister for Major Projects, Territories and Local Government

Minister Fletcher opened the discussion on noxious emissions, with a key focus being on the level of fuel quality required to support the introduction of Euro 6.

The petroleum industry advised that domestic refineries produced around 70% of petrol sold in Australia, despite recent closures and this may increase to as high as 90% in the longer term as a result improved capacity and static petrol consumption.

Around 30% of petrol sold in Australia is premium unleaded petrol. The Petroleum industry advised that fuels sold in Australia already had sulfur levels well below legislated limits.

Vehicle manufacturers considered that the introduction of Euro 6 had to be linked to the availability of 95 RON 10ppm sulfur petrol.

The petroleum industry considered that it would take two years to determine the cost of moving to 10ppm sulfur petrol, with another 5 years to implement any changes. The petroleum industry also highlighted that the investment requirement is likely to threaten the refineries viability.

Vehicle manufacturers advised lower tolerances at the later stages of Euro 6 would be difficult to meet and that lean burn Gasoline Direct Injection (GDI) with turbocharging was expected to become the dominant technology by 2030.

When asked about the measures adopted by manufacturers to manage existing sulfur risk, manufacturers advised that some detuning was required, as it was difficult to encourage consumers to use premium unleaded petrol due to the higher cost.

When asked about the suitability of 50ppm sulfur petrol, manufacturers advised that higher sulfur content in any case may require a different specification for Australia, as changes to precious metal content in catalysts may be required. Vehicle manufacturers agreed to provide further advice on any testing conducted on current market fuels.

There was agreement that the government would work with vehicle manufacturers and the petroleum industry to engage a credible technical expert to examine the fuel sulfur issue.

When asked about the cost of moving to Euro 6, truck manufacturers advised that the technology required for heavy vehicles would reduce the legal payload for these vehicles and this may discourage operators from purchasing newer trucks. To offset this issue, the government could consider higher mass limits for trucks meeting later standards. The introduction of low emission zones in Europe had helped encourage the uptake of these vehicles in Europe.

The gas industry suggested similar concessions should be offered for gas powered trucks.

When asked about timing, the vehicle industry considered that the introduction of Euro 6 should be linked to the availability of 10ppm sulfur petrol, which based on the advice of the petroleum industry suggested that 2025 would be more appropriate than 2020.
The Hon Josh Frydenberg MP, Minister for Resources, Energy and Northern Australia.

Minister Frydenberg opened discussion on the role alternative fuels and vehicles could play in reducing vehicle emissions and the opportunities for these vehicles in Australia. It was noted that take up of electric vehicles has been sluggish to date, but costs were expected to come down in the longer term.

Vehicle manufacturers advised that they had faced challenges in marketing these vehicles to consumers due to higher cost and concerns about range and supporting infrastructure.

It was suggested that education about the benefits of alternative fuels and vehicles could help.

Vehicle manufacturers considered that collaboration between government and industry was important, without necessarily picking winners. However, they nevertheless expected that internal combustion would remain the dominant technology up to 2030.

Credits and government fleets could support new technologies.

The taxi industry has played a role in supporting the uptake of LPG and hybrid vehicles in Australia and has helped demonstrate their reliability. However, concerns were raised that the introduction of age limits for taxis in some states would hamper the ability of the taxi industry to support new these technologies in the future.

It was suggested that electricity market reform may be required to support a wider uptake of electric vehicles.

Governments could play a role in the coordination of infrastructure for alternative fuels and vehicles.

**MEETING CLOSE**
SUMMARY OF 3rd STAKEHOLDER ENGAGEMENT INFORMATION SESSION on VEHICLE EMISSIONS

8.30am-10am, Wednesday 15 February
Senate Main Committee Room, Parliament House, Canberra

Ministers Attending
The Hon Paul Fletcher MP, Minister for Urban Infrastructure
The Hon Josh Frydenberg MP, Minister for the Environment and Energy

Australian Government Departments Attending
Infrastructure and Regional Development
Environment and Energy

Attending Organisations

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<tr>
<th>ABMARC</th>
<th>Australasian Convenience and Petroleum Marketers Association</th>
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<tr>
<td>Australasian Fleet Management Association</td>
<td>Australian Automobile Association</td>
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<td>Australian Automotive Aftermarket Association</td>
<td>Australian Fleet Lessors Association</td>
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<td>Australian Industry Group</td>
<td>Australian Institute of Petroleum and member companies (BP, Caltex, ExxonMobil and Viva Energy)</td>
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<td>Australian Taxi Industry Association</td>
<td>Australian Trucking Association</td>
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<td>Biofuels Association of Australia</td>
<td>Cancer Council Australia</td>
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<td>ClimateWorks Australia</td>
<td>Federal Chamber of Automotive Industries and member companies (Allied Auto, Audi, BMW, GM Holden, Hyundai, Mazda, Mercedes-Benz, Mitsubishi, Nissan, Subaru and Toyota)</td>
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<tr>
<td>Gas Energy Australia</td>
<td>Green Truck Partnership/MOVEM3NT</td>
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<td>Motor Traders Association of Australia</td>
<td>National Farmers Federation</td>
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<td>Truck Industry Council</td>
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Welcome and introductions

- Ms Zielke welcomed attendees
- Ms Zielke advised that the purpose of the meeting was to seek feedback on the proposed measures released for consultation (fuel efficiency standards, fuel quality standards and noxious emission standards for light and heavy vehicles).
- Ms Zielke advised that the meeting would comprise three session, the first on fuel efficiency standards (led by Minister Fletcher), fuel quality standards (led by Minister Frydenberg) and (Euro 6/VI) noxious emission standards (led by Minister Fletcher)

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<tr>
<th>Fuel efficiency standards</th>
<th>The Hon Paul Fletcher MP, Minister for Urban Infrastructure</th>
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<tr>
<td>- Minister Fletcher opened session on fuel efficiency standards, specifically seeking feedback on the options under consideration.</td>
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<td>- The FCAI reaffirmed its support for the Ministerial Forum and measures to reduce vehicle emissions</td>
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<td>- FCAI proposed targets based on BAU until 2022 to allow sufficient lead time for their parent companies.</td>
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<td>- They advised that they would need a clearer understanding of changes to fuel quality and complementary to determine whether the targets would be feasible.</td>
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<td>- AIP advised that they did not support any changes to fuel quality standards at this time, as they considered there would be minimal environmental and operability benefits.</td>
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<td>- GM Holden considered that there was a place for complementary measures, particular measures to accelerate the adoption of less greenhouse intensive air conditioning refrigerants.</td>
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<td>- GM Holden advised that similar measures in the US had helped accelerate the phase out of more greenhouse intensive refrigerants and a typical car in Australia contained one tonne of CO2 equivalent in air conditioning refrigerants.</td>
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<td>- FCAI advised that the industry wants to apply industry best practice, noting that the mix of vehicles sold in Australia is closer to US than the EU.</td>
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<td>- They considered that separate targets for passenger and commercial vehicles would be appropriate.</td>
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<td>- GM Holden advised that Australian had a preference for larger vehicles, with the shift away from large sedans leading to an increase in SUV and light commercial vehicle sales.</td>
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<td>- They considered that the mix of vehicles sold would make it difficult to meet European targets with mix of vehicles sold in Australia and a detailed study of the fleet should be undertaken to determine an appropriate target.</td>
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<td>- Ms Zielke advised that the RIS was seeking feedback on both the targets and the design elements</td>
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<td>- AAA advised that it supports orderly transition to clean vehicle fleet, have a strong interest in the process, and impacts on fuel and vehicle choice.</td>
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<td>- They advised that the timeline for the consultation process was their most immediate consent and recommended that 10 March deadline for Euro 6 and CO2 be extended until further information is available for fuel quality.</td>
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• Minister Flechter asked about the linkage between fuel quality and CO2.
• AAA considered there was a tangential link, as more efficient cars sold in other markets were built to a Euro 6 specification, and fuel quality needs to adequate for manufacturers to supply these vehicle to Australia.
• They considered that the timing of the reforms needed to align better than present and a better understanding of the capacity of refineries and manufacturers to comply was required to minimise impacts on consumers.
• They found it difficult to thoroughly consider the analysis, given many related elements are yet to be resolved and would like another opportunity to comment before any decisions are made.
• Toyota advised that Target A would require an 8.8% annual reduction, which would be difficult to achieve, especially while other aspects unresolved.
• ClimateWorks commented that although the mix of vehicles sold in Australia is different, manufacturers could adapt technology from other markets.
• They noted that annual improvements of 5.5% have been possible in the US and technology has improved, costs have come down since CCA report.
• They also advised that the US adopted an 18 month lead time and Saudi Arabia adopted ambitious targets with a very short lead time.
• They also noted International Council for Clean Transportation (ICCT) does not consider fuel quality not barrier to reducing CO2 in Australia.
• FCAI proposed targets to 2030, business as usual targets from 2018-2022, with more stringent targets possible from 2023 once Euro 6 and fuel quality parameters are clear.
• Ms Zielke asked whether would it possible to respond in August, if all three measures were clearly defined.
• FCAI advised that they would be in better position to respond, but would also need clarity complementary measures.
• Minister Fletcher advised that the government has made specific commitments in regards to the timing of this process.
• The Australian Industry Group noted the low cost of abatement from vehicles, and although there are concerns about implementation and detail, these cost savings should be grasped.
• The Australian Convienience and Petroleum Marketers Associations considered that this review was not just about engines, but also need to consider electrification.
• They also noted that health benefits deteriorate overtime on high mileage (over 140,000km) and there was a need to consider these.
• AAA agreed there was a need consider impacts on existing vehicles, but also consider the benefits and costs may be different in the real world and would like to understand these better.
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<th>Fuel Quality Standards</th>
<th>The Hon Josh Frydenberg MP, Minister for the Environment and Energy</th>
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<tr>
<td>- Minister Frydenberg opened discussion on the review of fuel quality standards.</td>
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<td>- He noted that the current fuel standards are due to sunset in 2019, and the Government has released a discussion paper with options, seeking better health and consumer outcomes.</td>
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<td>- He also noted that an ageing population and increasing urbanisation would also impact on urban air quality.</td>
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<td>- He considered that it was not good enough that Australia fuel quality 66th in the world.</td>
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<td>- He advised that there was a March deadline for submissions, and the Department would consider extensions on case by case basis.</td>
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<td>- The options considered in the paper ranged from no change at all to alignment with European standards.</td>
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<td>- AIP advised that the fuel industry has history of cooperation where benefits have been demonstrated, but did not consider that benefits had demonstrated for 10ppm sulfur petrol.</td>
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<td>- They noted that market fuel quality is generally well below regulated limit, and therefore considered that any benefits will be small and there was unlikely to be a net benefit, as refineries will incur substantial costs.</td>
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<td>- They noted although Australia’s fuel quality may be 66th in the world, the government should also consider Australia air quality relative to other countries.</td>
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<td>- They considered that minimising any cost impacts would give refineries the best chance of survival and help ensure supply security.</td>
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<td>- They suggested that 10ppm sulfur petrol could be available from 1 July 2027, and any changes would need to ensure sufficient supply of 10ppm was available for import.</td>
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<td>- They added that the investment required would yield no net gain to refineries, and noted the Government previously implemented incentives to encourage the earlier introduction of lower sulfur fuels.</td>
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<td>- While the AIP does not have a position on incentives, they noted that some member companies may put forward a proposal for incentives.</td>
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<td>- They also advised that 10ppm sulfur petrol would also increase refinery emissions and there was no guarantee refineries would remain open, even if 10ppm sulfur petrol was not mandated.</td>
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<td>- They considered that Option E, which proposes a phased sulfur reduction would not reduce costs, but suggested that any concerns about backsliding could be addressed by annual reporting requirements.</td>
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<td>- They also suggested that an 80ppm pool average 120ppm cap may be possible with no changes, but this need not be legislated</td>
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<td>- FCAL reaffirmed a need to look at three together as well as any complementary measures</td>
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<td>- They noted that Australia comprise 1.5% of global vehicle sales, and the best research and development is done for 95RON, 10ppm, therefore we need best fuel for best technology</td>
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<td>- GM Holden advised that Australia as a small market cannot afford a local solution, so a global fuel specification is required.</td>
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- AIP advised that their proposed 2027 start date was not ambit claim, but a goodwill offer to break deadlock, which was agreed after considerable discussion by its board members (CEOs)
- ClimateWorks advised that although it support improvement to fuel quality, they did not consider this would be a barrier to improvements in CO2, as we can utilise other technologies that do not require these fuels
- AAA advised that they have no view on optimal fuel standard, but consider that fuel standards needs to be resolved before costs and benefits of other measures can be reliably considered.
- They also considered that more attention was required on impacts of existing vehicles
- Minister Frydenberg advised that the Government wants to do pursue improvements in a considered way

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<th>Noxious Emission Standards</th>
<th>The Hon Paul Fletcher MP, Minister for Urban Infrastructure</th>
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- Minister Fletcher opened the third session on noxious emission
- He note that there was a global set of standards, which set a clear direction, which Australia has generally followed.
- He then sought feedback on the benefits
- The ATA advised that they had three issues with benefit-cost analysis, the first being assumed median life of trucks. They advised that NEVDIS data suggested median life is much shorter and consider this should be split by categories.
- They also considered that maintenance costs should be brought into the core analysis, and the sensitivity teste did not reflect cost impacts for dealers that offer maintenance packages.
- They also raised concerns that no US/Japanese alternative standards were discussed in RIS, and any cost implication were not considered in the benefit-cost analysis.
- The Truck industry Council (TIC)advised that previous standards allowed US/Japanese alternative standards to allow vehicle meeting equivalent standards, without the cost of retesting.
- The Australian Industry Group noted that the modelled benefits for noxious emission standards were 10 to 20 times smaller than CO2 and questioned whether there was sufficient benefit in pursuing these standards.
- FCAI advised that 2019-20 would be too early, but could not specify an alternative date until fuel quality was resolved.
- TIC advised they shared ATA’s concern about maintenance costs and advised that Euro VI has a real world testing component, considers deterioration of after treatment.
- They suggested that aftertreatment systems need to be replaced after 10 years, at a cost of $6billion.
- They also noted that although productivity losses were considered, the RIS did not losses to the operator, which they estimated could cost $39,000 in lost revenue, in addition to an $11,000 increase in purchase cost.
- They considered that these cost imposts may impact on new truck sales and turnover in the truck fleet.
- Gas Energy Australia advised that gas fuelled vehicles could help reduce noxious emissions.
• They noted that the modelling for CO2 anticipates an increase in diesel vehicles which poses risks for air quality and be conscious that standards do not increase diesel vehicles.
• AIP considered that the modelling needs to be unpacked, as the Euro 6 RIS notes average fuel quality and health benefits need to be aligned between the RISs.
• They added that they do not support change to diesel cetane.
• In regards to the suggestion that 30ppm sulfur may be adequate for Euro 6, GM Holden advised that Euro 6 requires vehicles to meet on-board diagnostic requirements, on-road compliance, gasoline particle filters.
• They added that 10ppm sulphur petrol would reduce ash deposits, which would reduce regeneration and improved durability of particle filters.
• The also added that sulphur reduces oxygen storage capacity and GM has experienced issues with US product, which meant they had to negotiate with EPA to roll back on-board diagnostic requirements.
• The Cancer Council suggested cancer risks could be outlined better, and they would like to see lower benzene in petrol and polycyclic aromatic hydrocarbons in diesel.
• ABMARC considered it important to consider real world emissions.
• They noted that vehicles certified in EU and US, would be certified on cleaner fuels, and to understand benefits in Australia, vehicles would need to be tested on Australian fuels.
• ATA raised concerns about a lack of focus on complementary measures.
• They noted that off-road diesel vehicles and engines were not subject to any emission requirements.
• They considered that in for measures to reduce capital and productivity impacts to be successful, vehicle based productivity measures should be considered at same time.
• GM Holden suggested that given small benefits and impacts any review of these measures should take as long as necessary to get these right.
• AIP noted low levels of diesel in the Australian passenger fleet.
• Australian Industry Group noted that that meeting had not discussed electric vehicles and queries whether we should be talking about a transition.
• FCAI advised that electric vehicles comprise less than 1% of vehicle sales and were likely to remain low until 2030.
• Minister Fletcher closed the meeting at 1000
• He noted the tight timeframe for this review and advised Departments could consider requests for extensions on a case by case basis.