

MINISTRY OF TRANSPORT REPORT

Subject: IMPACTS OF 2007 VEHICLE EXHAUST EMISSIONS RULE IN 2012

Date: 10 June 2011 **Docmin no.:** WGTA14163

Attention: Hon Steven Joyce (Minister of Transport)

Priority: Routine **Security level:**

Deadline: N/A

Reason for deadline: N/A

Purpose of report

1. This memorandum provides a briefing on the possible impacts of the 2007 Vehicle Exhaust emissions Rule on the imports of used vehicles in 2012 and provides a draft response to Mr David Vinsen, Chief Executive of the Imported Motor Vehicle Industry Association (IMVIA), who has written to you again on this topic.

Contact for telephone discussion (if required)

Name	Position	Telephone		Suggested First Contact
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Minister of Transport's office actions

- Noted*
 Seen
 Approved
- Needs change*
 Referred to
- Withdrawn*
 Not seen by Minister
 Overtaken by events

RELEASED UNDER THE OFFICIAL INFORMATION ACT

Executive Summary

2. The IMVIA has announced it plans to launch a campaign to try to convince you to amend the requirement set out in the 2007 Vehicle Exhaust Emissions Rule (the emissions Rule) that used petrol vehicles meet the Japan 05 emissions standard as a minimum from January 2012. Before commencing their campaign they have written to you once again asking you to amend the emissions Rule [M100252 refers].
3. The IMVIA has consistently opposed the timing of the introduction of emissions standards since they were first introduced in the 2007 emissions Rule. The IMVIA argues that the current economic conditions and especially the effects of the tragic earthquake and tsunami in Japan, mean that the effects of the new requirement would be greater than anticipated when the emissions Rule was prepared. It argues that the industry is already struggling in the difficult economic conditions. The IMVIA also argues that the New Zealand fleet would become older and emissions would increase if the import of used vehicles declined.
4. We have looked at the IMVIA's claims and concluded that there would be little effect on the wider New Zealand vehicle fleet from a reduction in imports of used vehicles in 2012. Our modelling shows that the most important variable for the New Zealand fleet is the rate at which older vehicles leave the fleet and that this would be unlikely to be affected by any change in imports in 2012. Our work also shows that the state of the New Zealand economy is the most important factor determining the volume of imports of used vehicles.
5. It is clear that used vehicle importers are struggling under the current trading conditions. It is possible that imports of used vehicles would be reduced in 2012, because they will be required to be newer and therefore more expensive vehicles. However, any reduction would only last for one or two years, as more vehicles become available with time in Japan.
6. If there is not going to be a measurable impact on the New Zealand vehicle fleet, the issue is whether any economic impact on the used vehicle importers from a reduction in imports is sufficient to justify a change to the emissions Rule. To answer this properly would require a detailed economic cost benefit study which we have not had an opportunity to prepare. This would be a relatively large undertaking.
7. On balance though, we think that it is not necessary to amend the emissions Rule. We have drafted a reply to Mr David Vinsen advising him that you have again considered the situation and do not intend to amend the emissions Rule. If you agree with this approach we also recommend that you agree to prepare a press release on this decision as the matter is of wider interest.

Recommendations

The recommendations are that you:

- (a) **Note** that Mr David Vinsen, Chief Executive of the Imported Motor Vehicle Industry Association (IMVIA) has again written to you asking to defer the introduction of the requirement set out in the 2007 Vehicle Exhaust emissions Rule (the emissions Rule) for used petrol vehicles to comply with the Japan 05 standard from 1 January 2012
- (b) **Note** that the IMVIA is planning to mount a public campaign to seek changes to the emissions Rule
- (c) **Note** that the IMVIA argues that the requirement to import newer used

vehicles will reduce import volumes, resulting in significant disruption to their industry, and that it will cause the fleet to age and emissions to increase

- (d) **Note** that the Ministry has looked at the likely effects on the vehicle fleet from any reduction in imports of used vehicles in 2012 and concluded that it would not have a measurable effect on the vehicle fleet
- (e) **Note** that the Ministry has not conducted a detailed cost benefit analysis of the effects on the used vehicle industry, or on the wider New Zealand economy, from any reduction in imports of used vehicles in 2012
- (f) **Agree** that on balance it is not appropriate to amend the requirement in the emissions Rule for light petrol vehicles to comply with the Japan 05 standard from 1 January 2012 Yes/No
- (g) **Agree** to sign the attached reply to Mr Vinsen of the IMVIA [M100252 refers] advising him that you have again considered the issue of whether to amend the emissions Rule and decided not to amend it Yes/No
- (h) **Agree** that your office work with Ministry officials to prepare a pro-active press release on this decision before releasing the reply to Mr Vinsen Yes/No

Iain McGlinchy
Principal Adviser, Environment

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General Manager Aviation and
Maritime

MINISTER'S COMMENTS:

MINISTER'S SIGNATURE:

DATE:

Impacts of 2007 Vehicle Exhaust Emissions Rule in 2012

Purpose

8. As requested at your meeting with Ministry of Transport officials on 3 May 2011, this memo provides a briefing on the possible impacts of the 2007 Vehicle Exhaust Emissions Rule on imports of used vehicles.
9. The memo also provides a draft response to Mr David Vinsen of the Imported Motor Vehicle Industry Association (IMVIA) who has written to you again on this topic [M100252 refers].

Background

10. The Land Transport Rule: Vehicle Exhaust Emissions 2007 (the emissions Rule) came into effect on 3 January 2008. With some specific exceptions, the emissions Rule set minimum exhaust emissions standards that must be met for all vehicles when they are first registered for use in New Zealand. On 1 January 2012 the minimum standard for used petrol vehicles built to Japanese standards will increase from the current minimum standard of Japan 00/02 to the Japan 05 standard.
11. Although the standard is known as Japan 05 for the year it came into effect in Japan, some vehicles began to be made to the standard in 2004. However, the bulk of vehicles sold in Japan did not comply with this standard until 2006 and some did not comply until 2007.
12. The requirement (or at least the timing of the requirements) in the emissions Rule for vehicles to meet minimum emissions standards has always been strongly opposed by used vehicle importers. These importers are represented by the IMVIA (and its predecessor the Independent Motor Vehicle Dealers Association (IMVDA)). The IMVIA argues that by setting minimum standards the emissions Rule effectively prevents the import of older, lower cost vehicles which are easier to sell in these financially constrained times.
13. The IMVIA has written to you and to other Ministers on a number of occasions since you became Minister. As a result of the IMVIA's correspondence we have provided you with advice on the emissions Rule on several occasions including:
 - Docmin Number WGTA10981, 5 February 2009, Advice on Used Vehicle Imports and the Effects of the 2007 Vehicle Exhaust Emissions Rule
 - Docmin Number WGTA11376, 5 June 2009, Potential amendments to the 2007 Vehicle Exhaust Emissions Rule
 - Docmin Number WGTA11769, 18 August 2009, Confirming proposed amendments to the 2007 Vehicle Exhaust Emissions Rule
14. More recently, in October 2010, Mr David Vinsen wrote to you asking you to delay the introduction of the 2012 requirement [M60020 refers]. He argued that the requirement would potentially reduce imports by up to 50 percent in 2012. As part of the response to that correspondence we provided you with a file note and the advice in this remains valid (a copy is attached). At that time you advised Mr Vinsen that you were not planning any changes to the emissions Rule.
15. Since December 2010 the IMVIA has been active in putting material into the news media, especially the motor industry newsletters, about their concerns with the emissions Rule. They have also announced that they intend to take legal action to try to delay the requirement, although they have not indicated on what grounds they will make any

challenge. You have recently received a request under the Official Information Act for material as part of this planned legal action [WGTA 14157 refers].

16. In May 2011 Mr Vinsen wrote to you again, asking that you again review the requirement in light of the tragic earthquake and tsunami in Japan [M100252 refers]. This memo looks at some of the claims made by the IMVIA since its letter of October 2010 and again considers whether it is appropriate to amend the emissions Rule to delay the 2012 requirement.

Has the situation changed since the 2007 emissions Rule was signed?

17. The Government was aware of the possible impacts of the emissions Rule on the import of used vehicles when it agreed to the emissions Rule in 2007. It was noted at that time that the 2012 requirement might cause imports to decline because it would require newer vehicles to be imported. It acknowledged that this was likely even after amending the draft of the emissions Rule to delay the requirement for Japan 05 from 2010 to 2012 following consultation.

18. The IMVIA now argues that the economic circumstances have changed since the emissions Rule was signed, and since they last wrote to you. These changes, they argue, mean that the 2012 requirement should be reviewed again. These circumstances include:

- **The deteriorating state of the Japanese economy.** The decline of the Japanese domestic economy, largely as a result of the global recession, has led to reduced volumes of new vehicles being purchased in Japan and therefore a decline in sales of second-hand vehicles as people retain existing vehicles for longer. As Japanese buyers do not need to pay shipping and other costs faced by New Zealand importers (~NZ\$3,500), Japanese purchasers (along with buyers from countries with lower shipping and compliance costs) are outbidding those who are buying vehicles for export to New Zealand. This is leading to a reducing supply of vehicles for New Zealand buyers.
- **The earthquake and tsunami in Japan.** Although the earthquake and tsunami will have damaged vehicles in Japan, the absolute number is tiny compared to the size of their fleet. The key concern from New Zealand's perspective is that damage to infrastructure has caused disruption to the supply of new vehicles into the Japanese (and also New Zealand) markets. This contraction of supply is further reducing the sales of second-hand vehicles within Japan as people retain existing vehicles for longer, again reducing supply for New Zealand importers.
- **Changes in types of vehicles being sold in Japan relative to what the New Zealand public is purchasing.** Sales of used vehicles into the New Zealand market are dominated by relatively large station wagons (eg Subaru Legacy, Toyota Camry), large people movers (eg Honda Odyssey and Toyota Previa) and sports type cars (eg Subaru Impreza, BMW 3 series). Sales of these vehicles have declined significantly in Japan since 2005 as the Japanese market has moved towards smaller (<1,500cc) and more fuel efficient cars. Although models popular in New Zealand continue to be sold in Japan, the pool of these vehicles that also comply with the Japan 05 emissions standards is significantly smaller than the pre-2005 pool. This is further reducing the pool of compliant vehicles for New Zealand importers to purchase from.
- **The generally poor state of the New Zealand and global economy at present.** The effects of the global recession and Christchurch earthquake have meant decreased demand for newly imported used vehicles in New Zealand. Purchasers have been unwilling (or unable) to pay prices that importers are now required to pay in Japan, especially for vehicles complying with the Japan 05 standard. In response,

vehicle importers have been importing older vehicles because they cost less. As a result, the average age of light vehicle imports has been trending upwards from 7.8 years in the second and third quarters of 2010 to reach 8.8 years in the first quarter of 2011.

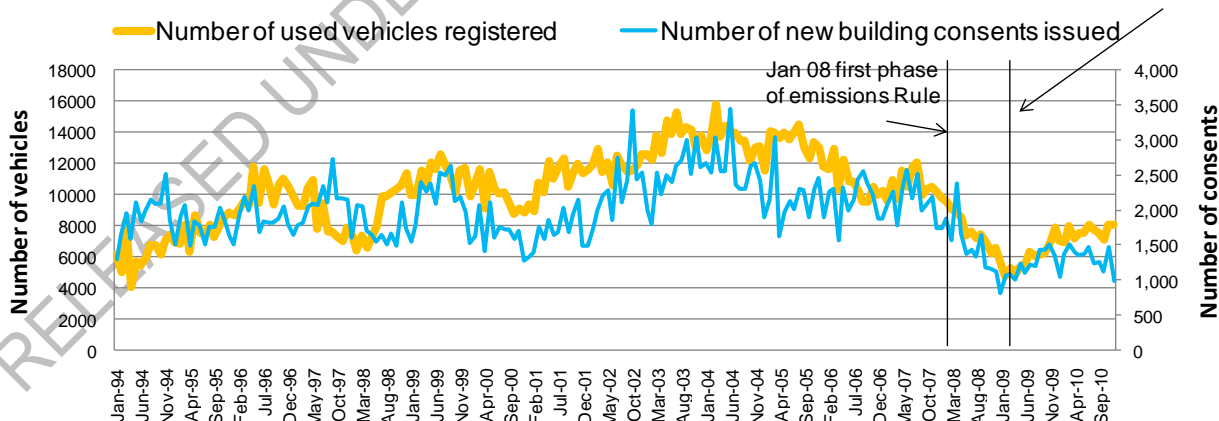
19. Given these wide ranging issues affecting the import of used vehicles, the IMVIA is seeking to change the one variable that can be changed — the emissions Rule.

Have the previous requirements of the emissions Rule significantly altered the volume of vehicles being imported?

20. Evidence collected by the Ministry strongly indicates that for the past ten years, the New Zealand economy has been the single most important variable affecting the total number of vehicles being imported.
21. The volume of imports of used vehicles reached a peak in late 2003 and has been in decline since then (see chart below). For petrol vehicles (which are the vast bulk of used vehicle imports) the two key dates at which new (higher) standards have been implemented are January 2008 and January 2009. Data shows that while imports of used vehicles dipped at these points, the dips appear to have coincided with dips in the economy.
22. The following chart compares the volume of used vehicles imported with the number of building consents issued. Building permits are considered a key indicator for the state of the domestic economy and especially the willingness of private citizens, as opposed to companies, to borrow money. There are some periods where the relationship is clearly not strong reflecting other external variables, such as the ban of diesel vehicles in Tokyo in 2005 that led to an influx of low cost diesel vehicles into New Zealand at that time. However, there has been a very strong correlation since 2006. This shows that the effect of the global recession on the domestic economy is highly likely to have affected the number of used light vehicles being imported.

**Building consents and registrations of used vehicles
Jan 1994 to Dec 2010**

Jan 09 second phase of emissions Rule



23. A similar relationship to that seen above can also be seen between the number of used vehicles being imported and the Japanese Yen/NZ Dollar exchange rate. (This advice was included in the file note attached to M60020). Fluctuations in the volume of imports relative to the exchange rates are thought to reflect the relative strengths of the two economies at that time, rather than changes in vehicle prices, as there has been little movement in used vehicle prices over the period.

24. We have found that approximately 80 percent of the fluctuation in the volume of used vehicles imports can be described using the economic data shown above. While government controls and other external variables are likely to have had an effect over this time any effect appears to be relatively small.

Would reducing the number of used vehicles being imported in 2012 make the fleet 'worse'?

25. The IMVIA claims that if imports of lower cost (albeit older) vehicles are reduced, people will not be able to replace existing vehicles. They will therefore retain these for longer, making vehicle emissions worse and the fleet older. This does not appear to be the situation. Although used vehicle imports have brought clear benefits to New Zealand, most of the positive changes to variables such as average fleet age have been made through adding to the size of the fleet and not by used imports replacing older vehicles.

26. The Ministry has developed a model¹ to look at the effects of a range of variables associated with the fleet, including average age. As noted in the file note attached to M60020, we found that the New Zealand light vehicle fleet is so large (roughly 3 million vehicles) that what enters the fleet in any one year makes little measurable difference (positive or negative) to any variable. This is especially the case if new vehicle sales are expected to continue at similar volumes. The model shows that the most important variable determining the size and average age of the New Zealand light vehicle fleet in the next ten years will be the rate at which older vehicles are scrapped, not the rate vehicles enter.

27. The results from the two scrappage schemes conducted by the Ministry in 2007 and 2009 found that there was little connection between the rate at which vehicles are scrapped and the rate at which they are imported. People who scrapped their vehicles did so because the vehicle had reached the end of its mechanical life. The decisions to scrap their vehicles were not reportedly influenced by the availability of a replacement and it is therefore unlikely that a reduction in imports of used vehicles, especially if only for one or two years, would alter people's decisions to scrap their vehicles. Reduced scrappage is only likely to occur in response to a long term reduction in the supply of vehicles.

Will the 2007 emissions Rule cause imports of used vehicles to be reduced in 2012?

28. The IMVIA argues that the requirement to import newer vehicles will cause imports to decline by 50 percent (over 2010 levels) to around 45,000 vehicles in 2012. The IMVIA has not provided any justification for how they have arrived at this figure. Nor have they provided any advice on what they predict the import volumes would be without the emissions Rule. The IMVIA made similar predictions in 2008 and 2009 about the effects of previous phases of the rule and these did not eventuate.

29. The requirement to import newer and therefore potentially more expensive vehicles² may cause some reduction in imports of petrol vehicles in 2012 (over 2010 levels). However, as noted above, officials consider it is the state of the economy that is likely to be the most significant variable affecting the import volumes in 2012.

30. If there is a reduction in imports of used vehicles in 2012 due to the effects of the emissions Rule (as opposed to any of the external variables) it would not be permanent. More compliant vehicles will become available in Japan each year. In the absence of any other changes we would expect import levels to return to 2010 levels in one or two years.

¹ We have reported on the findings of our use of this model separately in the sector report on the aging of the light vehicle fleet [WGTA 14169 refers].

² The media often portrays this as increasing the price of used vehicles. The Rule does not affect prices, but prevents the import of older and therefore lower cost vehicles. The price of a compliant vehicle is unchanged.

Should the emissions rule be amended?

31. We observe that the IMVIA, and its predecessor, has consistently predicted the demise of used vehicle imports, along with significant price increases for vehicle purchasers. They have made such predictions following the introduction of successive land transport rules since at least 2005. However, the industry has proved itself to be very resilient and adaptable and has survived these previous controls as well as fluctuating economic conditions. Prices of imported vehicles have also remained relatively stable over this time. In the absence of any evidence as to how the IMVIA arrived at their current predictions for reduced imports, we cannot determine if their claims are any more realistic on this occasion.
32. A reduction in the volume of imports of 45,000 vehicles, as predicted by the IMVIA, has not been seen in any one year previously. Such a reduction, if it occurred, would be difficult for the sector to absorb in one year, although the sector has already coped with a reduction from the peak of 161,000 light vehicles imported in 2003 to 71,000 in 2009. If import volumes did fall by 45,000 vehicles in 2012, the IMVIA's predictions for job losses would appear plausible, noting that any losses may be temporary if imports pick up again.
33. The IMVIA's proposed solution to the current difficult trading conditions is to allow importers to continue to import vehicles built to the Japan 00/02 standard for a further two years. This would be positive for those involved in importing and selling used vehicles, although, by their own accounts, they are struggling even under the conditions they wish to extend. It is not clear that if the emissions Rule was amended and trading conditions did not improve, that the IMVIA would not again seek to have the emissions Rule amended in 2013 to further delay the standard.
34. We are mindful that one of the key reasons that the emissions Rule was implemented in 2007 was a concern that New Zealand was not getting the benefit from newer vehicles entering the fleet. The emissions Rule was implemented when the average age of used petrol vehicles being imported was 7.8 years. Amending the emissions Rule to allow the continued import of vehicles compliant with the 00/02 standard would essentially be agreeing to allow the continued import of vehicles that could be up to 14 years old by 2014 (or older, as compliant vehicles began to be manufactured in 1998). It is difficult to see how importing such vehicles could be argued to be improving the fleet.
35. While the volume of vehicles being imported will be different, the IMVIA's proposal to allow the continued import of early 2000 model vehicles for a further two years would essentially recreate the conditions that led to the current peak of 1995–1997 model vehicles. Creating another peak of vehicles is unlikely to be beneficial in the long run.
36. Regardless of the size of any reduction in imports in 2012, our analysis is that a reduction for one or two years would be unlikely to have a significant effect on any of the key variables of the fleet as a whole.
37. If there is not going to be a measurable impact on the New Zealand vehicle fleet, the issue is whether any economic impact on the used vehicle importers from any reduction in imports is sufficient to justify a change to the emissions Rule. Before we could answer this question we would need to do a cost benefit analysis and we have not had the opportunity to carry out such an analysis. However, on balance we think it is appropriate to leave the emissions Rule unchanged.

Position of other relevant groups on possible amendments

38. The Motor Industry Association, which represents the new vehicle importers, has written to you on several occasions recently asking that you not change the emissions Rule [M61397 and M60798 refer].

39. The Motor Trade Association, which campaigned against the original 2007 emissions Rule, has not made any media statements recently about the 2012 requirements. They have indicated that they wish to remain neutral on the issue and will not be taking part in planned activities by the IMIVA. MTA staff have said via email:

MTA is of the view that exhaust emissions standards are one of many factors impacting on the viability and strength of the used import market. Other factors including exchange rates, NZ economic conditions, buying competition in Japan, new vehicle price competition in NZ, changing consumer preferences as a result of fuel prices, are all well beyond the control of any industry party in NZ. It is also relevant to note that all of these factors are in a constant state of change given our open market environment (notwithstanding the periodic imposition of exhaust emissions standards). Deferral of the standard will at best maintain current business volumes.

MTA's preference is to introduce a rolling age ban, which would be a better control mechanism to ensure refreshment of the NZ vehicle fleet. If we defer the standard, dealers would continue to bring in very old cars – back to 2000/01. This would not be good for our fleet. Conversely, moving to the original intent of 2005 standard imposes a significant industry effect.

40. The Automobile Association, representing motorists, has maintained a low profile on this issue but generally supports the improvement of quality of the fleet by the use of standards. Concerns with the supply of vehicles have not been raised by their members as an issue.

Press release

41. As noted, the IMVIA is reported to be preparing a media campaign in an effort to convince you to amend the emissions Rule before 2012. It is likely that the IMVIA will seek to publicise your reply in both the trade press and mainstream media.
42. If you agree that the emissions Rule should not be amended, we recommend that we work with your office to produce a press release about this decision and the reasons that it has been taken. We recommend that this is released at the same time as you reply to Mr Vinsen.

Annex 1

Copy of file note from M60020

October 2010

Content of draft response

You have received a submission from the Imported Motor Vehicle Industry Association (IMVIA) requesting that you amend the 2007 Land Transport Rule: Vehicle Exhaust Emissions (the Rule) to delay the implementation of the requirement that newly registered used petrol vehicles must be built to the Japan 05 exhaust emissions standard from 1 January 2012.

The attached draft response declines their request. This is based on your decision not to do so, and subsequent public announcement in 2009 [WGTA10981 refers]. We also understand from the IMVIA's Chief Executive, David Vinsen, that you have conveyed this advice to him verbally at a recent public function.

We have not had the opportunity to undertake a detailed analysis of the IMVIA's claims about the likely scale of any reduction in used vehicle imports, or any flow on effects for their sector.

Alternative reply

If you would prefer, we could instead draft a holding reply. This would enable the Ministry to carry out further work to investigate the claims about the possible impacts and report back to you more formally before you reply.

Background information

Could the Rule be amended before 2012?

It would be possible to amend the Rule before January 2012. Development of an amendment would need to start shortly for any change to be in place before 1 January. This would be new and unplanned work.

Are the IMVIA's predicted impacts on used vehicles realistic?

We have carried out a very quick analysis of the emissions standards of vehicles being registered in 2010 and have verified that many currently popular models did not comply with the Japan 05 standard until their 2006 or 2007 model. This implies that importers would need to purchase vehicles only 6 or 7 years old, and not those 8 or 9 years old as they do at present. The IMVIA do not state explicitly how they have arrived at their estimate of a 50 percent reduction, but this appears to be the basis of their claim.

The Ministry's impression is that if there were to be a 50 percent reduction in used vehicle imports in 2012, then the economic impacts would broadly be along the lines the IMVIA outline. However, we do not think that a 50 percent reduction (over 2010 import volumes) in 2012 is actually likely.

The IMVIA states that their prediction depends on an assumption that there will be no changes to several key economic variables in both New Zealand and Japan. This is unrealistic and neither party can predict how they might change. An analysis of past trends shows that the exchange rate is at least, if not more important than government policy, in determining the volume of imports of both new and used vehicles (see graph below).

The IMVIA also does not discuss to what level they assume that their members will anticipate the new standard (which has been set out in law since late 2007) and either alter current buying patterns or stockpile vehicles in advance.

It should also be noted that on each occasion in the past 10 years that the government has sought to apply minimum standards on used vehicles (for example, seat belts, frontal impact and exhaust and climate change emissions), the IMVIA (and its predecessor the Independent Motor Vehicle Dealers Association (IMVDA)) has made similar public statements. They have consistently predicted the imminent collapse of the used vehicle market and consequent rise in vehicle prices because of the new policy. Despite their claims, the trade continues, albeit we understand with lower profit margins and fluctuating volumes.

Would air quality or the overall quality of the vehicle fleet be affected by the introduction of the Japan 05 standard in 2012?

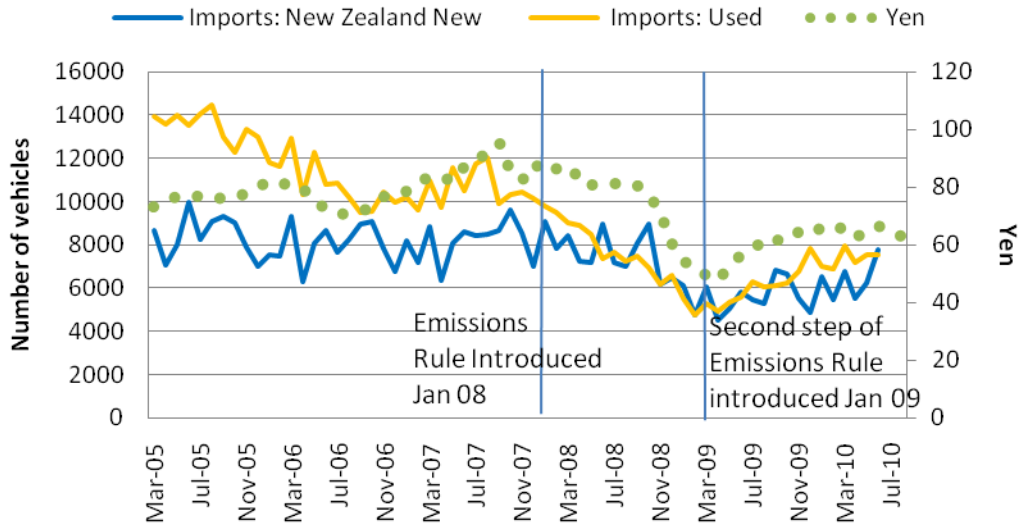
We have developed a basic spreadsheet-based model to look at fleet turnover. The model shows that the New Zealand vehicle fleet is so large (approximately 3 million light vehicles) that differences to the overall fleet as a result of the import of plus or minus 50,000 vehicles in any year are almost imperceptible. Because of the size of the existing fleet, air quality (or the average safety of the fleet) would not suffer measurably if the Japan 05 standard was delayed by 1 or 2 years, but it would suffer if it was never introduced.

Will people retain their existing vehicles longer if imports of used vehicles from Japan were reduced?

The findings from the two scrappage schemes (Auckland in 2007 and Wellington/Christchurch in 2009) show that there is not a direct relationship between those scrapping cars and those buying 'new' used vehicles from Japan. The studies showed that most people scrapping cars either purchased vehicles already in New Zealand, or did not purchase replacements at all.

The rate of vehicle scrappage did decline in 2008 and 2009 compared to earlier years, but this decline shows no relationship with the level of used vehicle imports. It is more likely it was related to the effects of the recession than the lack of imports.

Monthly registration of new and used light vehicles vs. NZ\$ exchange rate with Japanese Yen



Number of light vehicles registered and scrapped 2006 - 2009

