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Dear Sir/Madam,

Please find attached our further submission to the Review Panel from McMillan Shakespeare Limited. This submission updates, further developed and provides analysis and modelling following the reviews consultation paper issued in December 2008.

McMillan Shakespeare would welcome the opportunity to present to some or all of the members of the Review to add further detail and insight to this submission.

McMillan Shakespeare has provided confidential commercial in confidence material in this submission and requests that it not be published on the AFTS website until we have had the opportunity of presenting to the review.

Please contact Anthony Podesta on 03 9635 0100 or [anthony.podesta@mcms.com.au](mailto:anthony.podesta@mcms.com.au).

Yours sincerely  
MCMILLAN SHAKESPEARE LIMITED



Anthony Podesta  
Director



**McMillan Shakespeare Limited**

**Submission to the Review of  
"Australia's Future Tax  
System" - (Henry Review)**

COMMERCIAL IN CONFIDENCE  
NOT FOR PUBLICATION

**McMillan Shakespeare**

*Benefit From Our Experience*

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## 1. Executive Summary

McMillan Shakespeare Limited (**McMillan Shakespeare**) is the leading provider of novated leased motor vehicles in Australia. We have approximately 30,000 motor vehicles under lease and have a very extensive statistical database. As there appears to be little data available on the "company car" (benefit vehicles) sector, we have taken the view that we should provide our information, research and data to the Henry Review (**the review**) in the interests of fully informed public policy making by government.

This submission addresses issues only in relation to fringe benefits tax for motor vehicles provided to employees by their employer in relation to the employee's remuneration.

Our submission specifically addresses the questions raised in the review's Consultation Paper<sup>1</sup> issued in December 2008:

*Q4.6 How can fringe benefits tax be simplified while maintaining tax integrity? Would it be better to adopt the general OECD practice of taxing fringe benefits in the hands of employees, rather than employers?*

*Q13.1 Bearing in mind that tax is one of several possible instruments that can address environmental externalities, what opportunities exist to use specific environmental taxes to address Australia's environmental challenges?*

*Q13.2 Noting that many submissions raise concerns over unintended environmental consequences of taxes and transfers, such as the fringe benefits tax concession for cars, are there features of the tax-transfer system which encourage poor environmental outcomes and how might such outcomes be addressed?*

*Q13.3 Given the environmental challenges confronting Australian society, are there opportunities to shape tax-transfer policies which do not currently affect the environment in ways which could deliver better environmental outcomes?*

There are many stakeholders in the issues raised by these questions. In particular, the review's recommendations need to take into account the interests of the motor vehicle industry, environmentalists, employers, employees, trade unions and government policy.

Our submission tries to take these many and varied interests into account, to find common ground and to recommend some innovative solutions that can underpin good Government policy. We have also tried to balance short and long term objectives.

We have consulted widely in relation to our recommendations and believe that we have the support of the broader motor vehicle industry, the Australian Conservation Foundation and other significant interest groups.

In developing our options and recommendations, we have been conscious of the need to assess and consider:

- the impact on the environment;
- the impact on FBT / ATO revenue;

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<sup>1</sup> Australia's future tax system Consultation paper December 2008

- Vehicle demand – industry viability;  
– jobs.
- the Federal Government's initiative released in November 2008, "*A new car plan for a Green future*".

As a result of our research and analysis, "marketplace testing" and the economic modeling carried out on our behalf by Access Economics and Lateral Economics, we have concluded and therefore recommend the following:

- The fringe benefits taxation concession for "Company" motor vehicles (benefit motor vehicles for employees) is a critical driver of new motor vehicle sales (demand). **Removal of the FBT concession is likely to significantly reduce demand for motor vehicles and will have a disproportionate effect on Australian made motor vehicles as they make up a disproportionately large number of benefit vehicle sales.**
- **The FBT formula should be redesigned so that it is linked to the environmental rating of the motor vehicle and not the kilometres driven.** Our recommendations will reduce carbon emissions of company cars by up to 20% or 1 tonne per motor vehicle, whilst preserving the demand for motor vehicle production and government revenue.
- **There needs to be a "transition phase" for implementing a new "green" FBT formula linked to the environment in order to avoid short-term sales damage to the local Australian Motor Vehicle manufacturers whilst they design and build "green" cars.** This will also allow adequate time for employers and employees to plan for and have a "run-off" before a new FBT formula is implemented.
- **Finally, the call from some quarters to tax fringe benefits in the hands of employees rather than employers should be rejected.** It is likely to create expensive, dual administration and compliance tasks and add new burdens to the circa 1 million employees who receive fringe benefits versus the collection of FBT from 69,000 employers currently who submit FBT returns. It is also likely to make the ATO's collection effort more complex, expensive and less effective.

In summary, we believe our submission demonstrates that these recommendations will complement the Federal Government's initiatives for "*A new car plan for a green future*" by reducing Carbon emissions of company benefit motor vehicles whilst simultaneously supporting locally produced motor vehicle sales. Our recommendations will underpin the preservation of crucial skills and jobs in the manufacturing and related sectors and incentivise manufacturers and consumers to take advantage the Government's a new car plan. **Finally, our recommendations will not erode Government FBT revenue.**

## **2. History and Background of FBT Concession for Motor Vehicles**

- 2.1 Fringe Benefit Tax (**FBT**) was introduced in 1986 to enable non-cash benefits provided to employees by their employer to be taxed. The taxing of any benefits being derived from the provision of such motor vehicles to employees.
- 2.2 FBT on motor vehicles was introduced to ensure the benefit was appropriately based whilst at the same time, supporting the demand side of Australian motor vehicle manufacturing industry.
- 2.3 In the late 1990's the use of novated leasing to provide vehicles to employees by their employer began to take place through all levels of the Australian workforce in both the private and public sectors.
- 2.4 The popularity of novated leasing has enabled all employees the choice to include a motor vehicle in their remuneration package and has enabled employers to reduce their risk of unwanted vehicles on their balance sheet.
- 2.5 During the 1990's industrial awards, agreements, collective agreements or similar were negotiated to include provisions for "flexible salary packaging". Many thousands of awards were varied and agreements made to "allow" for the first time 'award based' employees to participate in flexible salary packaging arrangements. Virtually all industrial instruments contained provisions for employees to salary package. The introduction of the novated lease helped to facilitate and accelerate employees into salary packaging. Effectively employees at the "rank and file" award level within the organisation have access to salary packaging and the "company car" via a novated lease. Our data shows that 50% of employees with a novated lease earn less than \$75k per annum. The "company car" was no longer the exclusive domain of the executive, senior manager. Even for executives that were traditionally provided with a "company car" now had a choice of the make, model and colour under a novated lease rather than the choice of a white Holden Commodore or a Ford Falcon.
- 2.6 The availability of an employer provided vehicle through a novated leasing arrangement has become a standard feature of employment agreements between employers and employees any change to the current FBT arrangements may require employers to renegotiate these agreements with their employees.
- 2.7 From 1986 to the mid 1990's vehicles were generally only provided to executives as part of their remuneration package. Most employees did not receive access to a company vehicle as part of their remuneration package. But since then, the situation has radically changed.
- 2.8 Contrary to the public perception (undoubtedly a hangover from the past) the vast majority of novated leases are taken out by working families. Some telling statistics from our database:
  - Around 3% of McMillan Shakespeare's novated leases are for cars with a value in excess of the luxury tax threshold.
  - The average value of vehicles purchased is \$37,900.
  - 50% of customers taking out a novated lease earn less than \$75,000p.a.

In other words novated leases provide a means and an effective incentive to buy a new vehicle. And that is good for both the environment and the Australian manufacturing sector and related upstream and downstream industries. Some more important statistics:

- Vehicles purchased by novated lease is a large and growing sector of new vehicle sales; we estimate 28%.

- Australia manufactured vehicles are disproportionately represented in the novated leasing sector (11% of all vehicle sales; 21% of novated leases).
- Novated leases incentivise people to buy new cars. New cars in general produce fewer emissions than older cars<sup>2</sup>.

### 3. Benefit Vehicles – The Current FBT Regime

- 3.1 The Fringe *Benefits Tax Assessment Act 1988* (**FBTAA**) requires employers to pay FBT on various benefits provided to their employees.
- 3.2 The provision of a motor vehicle by the employer to an employee is considered to be a taxable benefit. To calculate the FBT payable on a motor vehicle benefit, the employer must determine the taxable value of the vehicle. There are two methods for determining the taxable value of a vehicle:

- (i) The operating cost method (**OCM**);

**Taxable Value = (A x B) – C where:**

A = the total operating costs

B = the percentage of private use, and

C = the employee contribution.

- (ii) The statutory formula method (**SFM**).

**Taxable Value = A x B x C/D – E where:**

A = the cost value of the car

B = the statutory percentage

C = the number of days in the FBT year when the car was used or available for private use of the employee

D = the number of days in the FBT year

E = the employee contribution (if any)

The following table sets out the percentages used in the calculation of the Taxable Value:

Total kilometres travelled during the FBT year (annualised)	Statutory percentage
Less than 15,000	26%
15,000 to 24,999	20%
25,000 to 40,000	11%
Over 40,000	7%

- 3.3 Irrespective of the formula used to determine the taxable value of the vehicle, the Fringe Benefits Tax (FBT) of the motor vehicle provided to the employee by the employer is calculated using the following formula:

<sup>2</sup> Public discussion paper, vehicle fuel efficiency – potential measures to encourage the uptake of more fuel efficient low carbon emission vehicles – September 2008

$$FBT = \text{Taxable Value} \times \text{Gross-up factor} \times \text{FBT rate}$$

- 3.4 The ATO statistics from 2006-07 indicate that the most popular method for determining the taxable value of a vehicle is the SFM (68 %) and that 92% of FBT revenue collect for cars is from the SFM. This is because of the simplicity of the SFM including the reduced record keeping requirements. Additionally, the majority of our customers choose to use the Employee Contribution Method (ECM) to meet their residual tax obligation.

- 3.5 With the changes to personal tax rates since 1986 there has also been a significant increase in employee contributions to reduce the taxable value of benefit vehicles to zero:

*The highest proportion of employee contributions was for Cars – statutory, with 75.9% of employers receiving employee contributions. This represented 74.6% of the total \$452 million of employee contributions.*

- 3.6 There are a number of stakeholders in the current FBT arrangements for benefit vehicles. The following table lists the advantages for each of the major stakeholders.

Stakeholder	Advantages
Employer	<ul style="list-style-type: none"> <li>▪ Tax concessions (lower costs).</li> <li>▪ Simple administration.</li> <li>▪ Recruitment and retention tool.</li> <li>▪ Able to reduce the size of the “fleet” and subsequent risks by adopting novated leasing.</li> </ul>
Employees	<ul style="list-style-type: none"> <li>▪ Tax concession (lower costs).</li> <li>▪ Remuneration benefits.</li> <li>▪ Choice of motor vehicle.</li> </ul>
ATO	<ul style="list-style-type: none"> <li>▪ Simple administration.</li> <li>▪ High level of compliance.</li> <li>▪ More efficient than dealing with individual employees.</li> </ul>
Motor Vehicle Industry	<ul style="list-style-type: none"> <li>▪ Increased sales.</li> <li>▪ Jobs.</li> <li>▪ Industry viability.</li> </ul>
Environmentalists	<ul style="list-style-type: none"> <li>▪ More new vehicles are on the road replacing older vehicles which are likely to have lower emissions.</li> </ul>

- 3.7 The current regime is working for most of the stakeholders.

- 3.8 The major criticism of the existing FBT formula, is that it encourages’ greater kilometres travelled. This in turn impacts negatively on the environment. However, in practice, any extra unnecessary kilometres driven that result in a reduction of FBT otherwise payable, is “offset” by high fixed costs, wear and tear (depreciation) and time costs. In reality, our evidence suggests that few employees of benefit/company motor vehicles actually drive extra kilometres. Rather, false, inaccurate or misleading odometer readings (especially related to fuel cards as the basis for calculation) are much more likely to prevail at FBT year end.

#### 4 Novated Leasing



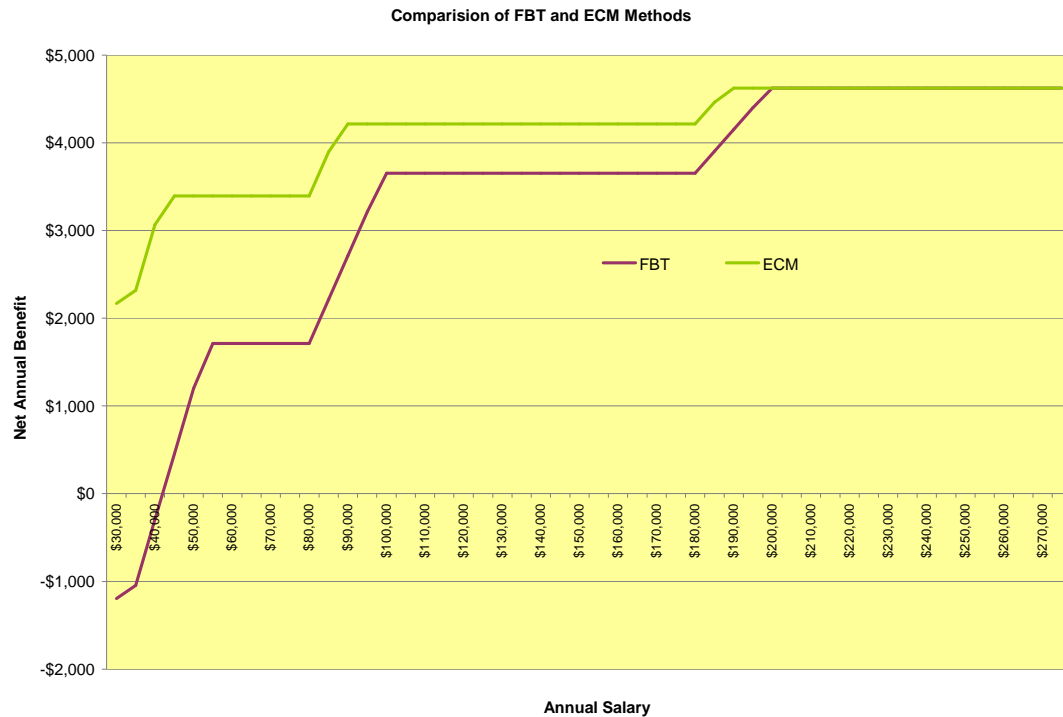
- 4.1 Since about 1995, employers have increasingly been using novated leasing arrangements to provide employees with motor vehicles as part of their salary packaging arrangements.
- 4.2 Under a novated lease, an employee leases a vehicle from a financier using a standard finance lease agreement. The employee, the employer and the financier then enter into a novated lease, which transfers to the employer for the term of the lease:
- the employee's obligation to pay the lease payments;
  - the right to use the vehicle; and
  - other obligations under the finance lease.
- 4.3 Novated leasing of motor vehicles has been in place for about 15 years and is supported with taxation rulings from the Australian Taxation Office (ATO).
- 4.4 Novated leasing is widely available in both the public and private sector, Australia wide.
- 4.5 The main benefits for an employee of a novated lease are:
- Savings through salary packaging the operating and lease costs of the vehicle;
  - Choice of vehicle to meet their needs;
  - The opportunity to buy a new vehicle every 3/ 4 years;
  - Choice in structuring their remuneration in a way that suits their personal and family requirements; and
  - Capacity to access fleet discounts in relation to vehicle pricing, fuel and maintenance.
- 4.6 The main benefits for the employer of a novated lease are:
- Effective way of providing employee benefits;
  - Assists in the retention and attraction of employees;
  - Bargaining tool for employment agreements; and
  - Eliminates the risk of having 'unwanted' company vehicles on the fleet thereby reducing costs.

4.7 The following example illustrates the remuneration benefit of a novated lease to an employee.

Item	No Salary Packaging	Salary Packaging FBT Method	Salary Packaging Employee Contribution Method
<b>Salary</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>
Lease / Running Costs	\$0	-\$15,000	-\$9,000
Fringe Benefits Tax	\$0	-\$5,761	\$0
Input Tax Credits	\$0	\$1,364	\$1,364
GST on Employee Contributions	\$0	\$0	-\$545
<b>Net Salary</b>	<b>\$50,000</b>	<b>\$30,603</b>	<b>\$41,818</b>
Tax & Medicare	-\$9,750	-\$4,150	-\$7,173
<b>Net Cash Salary</b>	<b>\$40,250</b>	<b>\$26,454</b>	<b>\$34,646</b>
Lease / Running Costs	-\$15,000	\$0	\$0
Employee Contributions	\$0	\$0	-\$6,000
<b>Net Benefit Salary</b>	<b>\$25,250</b>	<b>\$26,454</b>	<b>\$28,646</b>
<b>Net Benefit</b>		<b>\$1,203</b>	<b>\$3,395</b>

- The lease has a residual of 45%. and a term of three years.
- The annual lease and operating costs (insurance, registration, fuel, roadside assistance etc) are \$15,000.
- The vehicle travels 20,000 km per annum.
- All input tax credits are refunded to the employee's salary package.
- The Net Benefit is calculated as the difference in making payments with and without salary packaging.
- The Statutory formula is used to determine taxable value.

4.8 The following chart provides an illustration of the benefit for a range of salaries:



## 5 Market Size and Statistics – Benefit Vehicles

5.1 It is difficult to find accurate data on the number of benefit vehicles in Australia. However using a variety of sources and industry information, McMillan Shakespeare estimates that there are about 600,000 to 700,000 vehicles.

5.2 The report<sup>3</sup> published by the Department of Industry, Science and Resources in July 2000 estimated that the total number of cars and light commercial vehicles in fleet use to be approximately 1.3million. The report also broke down the fleet market into the following categories:

- Tools of trade vehicles – vehicles dedicated to a job such as plumbers' and electricians' vans;
- User chooses – vehicles where the executive has a range of vehicles to choose from;
- Pool vehicles – pool vehicles are vehicles that are generally driven by more than one driver.

5.3 The report also provides an estimate of the number of vehicles in each of the categories:

- Tools of Trade - 30%;
- User Chooses - 40%;

<sup>3</sup> Industry, Science and Resources Energy Efficiency Best Practice Program July 2000

- Pool - 30%.

5.4 The following factors have traditionally influenced the choices made by fleet operators.

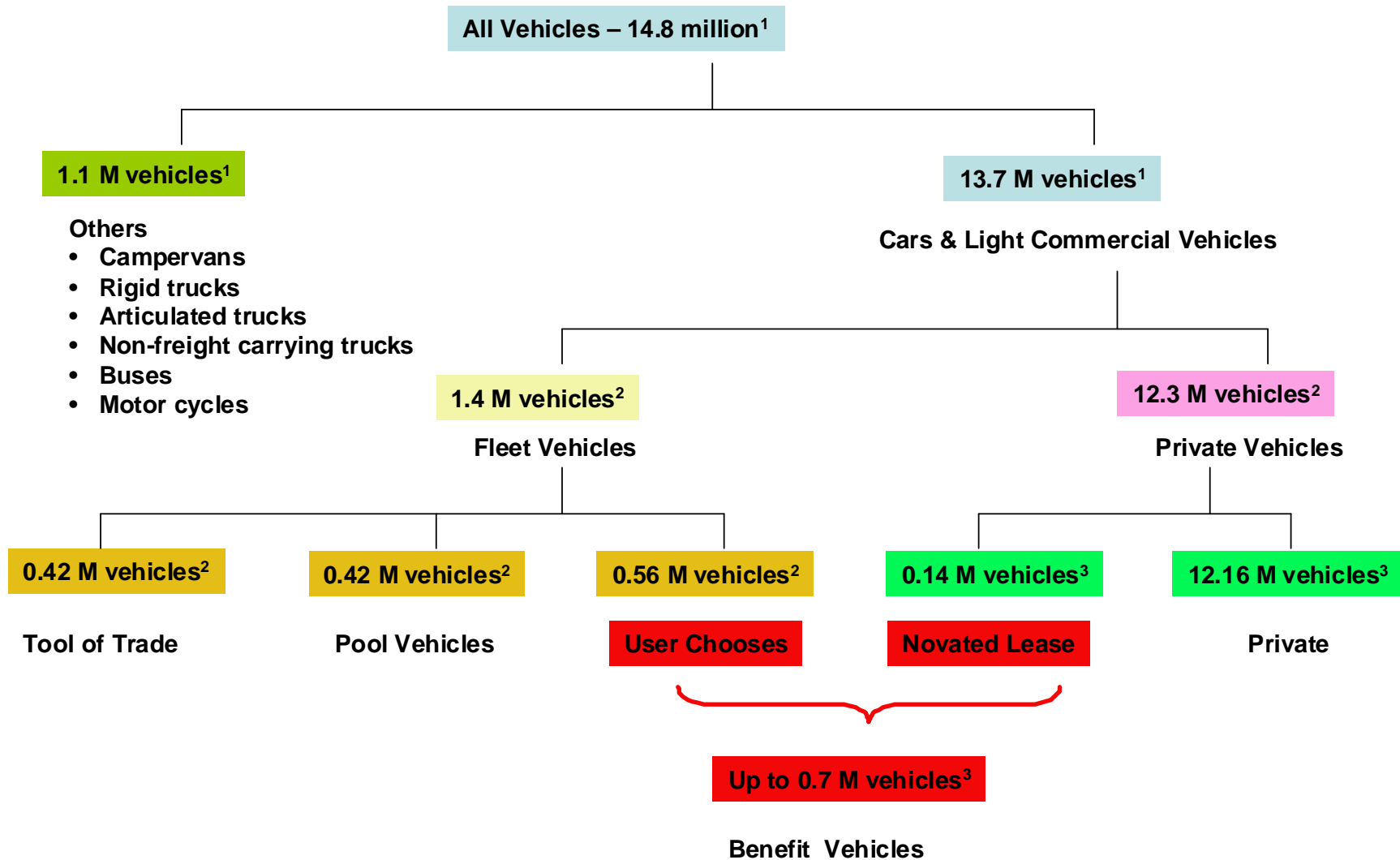
- The great **Australian tradition**. There is a very strong tradition in the industry that a 'real' car is a 6-cylinder Holden or Ford.
- **Local discounts** - the favourable economics of producing large volumes for the local market mean that manufacturers are able to offer substantial discounts of up to 30% for local volume purchasers. This tends to act to entrench industry vehicle choices.
- **Salary packaging** - the inclusion of vehicles in salary packages is routine for employees because industrial agreements or similar accommodate such arrangements and tax savings can be achieved.
- **Compliance** - vehicles must comply with a number of requirements. Some examples are legislative requirements for weight carrying capacity, number of passengers, and union requirements for safety.
- **Fitness for purpose** - vehicles selected for fleet use must be fit for their intended purpose. For example station wagons are likely to be necessary for salespeople carrying samples in the outback and small maneuverable cars are likely to be required for town deliveries.

**Note: Environmental considerations and even fuel efficiencies in vehicle selections have been almost non existent up until very recent times.**

5.5 We estimate that of the 14.8 million vehicles in Australia about 600,000 to 700,000 are benefit vehicles. In 2007 of the 640,000 passenger vehicle sales approximately 177,000 were benefit vehicles and 69,083 were Australian made. The following table and diagrams provides a summary of statistics for the motor vehicle industry in relation to benefit vehicles for the 2007 year and in relation to Australia's car fleet:

<b>New Motor Passenger Sales</b>	<b>640,000</b>
<b>Benefit Vehicle Sales (all Cars))</b>	<b>176,659</b>
Novated Leases (privately registered))	46,667
Government Benefit Vehicles	16,000
Non Government Benefit Vehicles	113,993
<b>Australian Made Benefit Vehicles</b>	<b>69,083</b>
Novated Leases (privately registered))	9,333
Government Benefit Vehicles	14,850
Non Government Benefit Vehicles	44,900

# Australia's Car Fleet - 2007



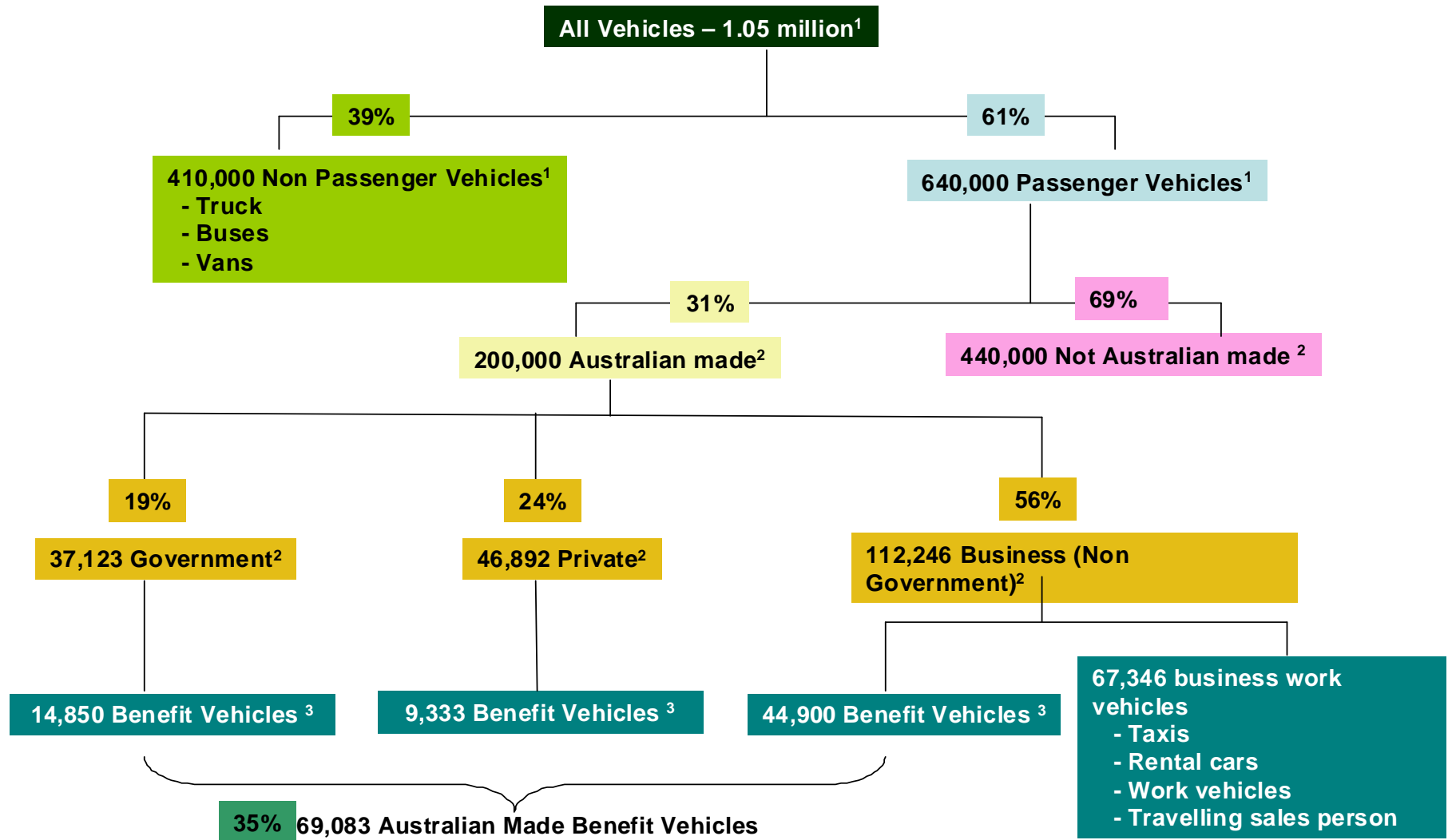
## Definitions

Light Commercial vehicle means a commercial vehicle up to 3.5 tonnes.  
 Tools of Trade vehicles means vehicles dedicated to a job eg plumber's van.  
 User Chooses means vehicles provided to an employee.  
 Pool vehicle means a vehicle driven by more than one driver

## Notes

1: ABS Vehicle Census 007 – 9309.0  
 2. Estimate based on Energy Efficiency Opportunities In Fleet Management , July 2000, Department of Industry, Science and Resources  
 3. McMillan Shakespeare estimate

# New Motor Vehicle Sales - 2007



Notes

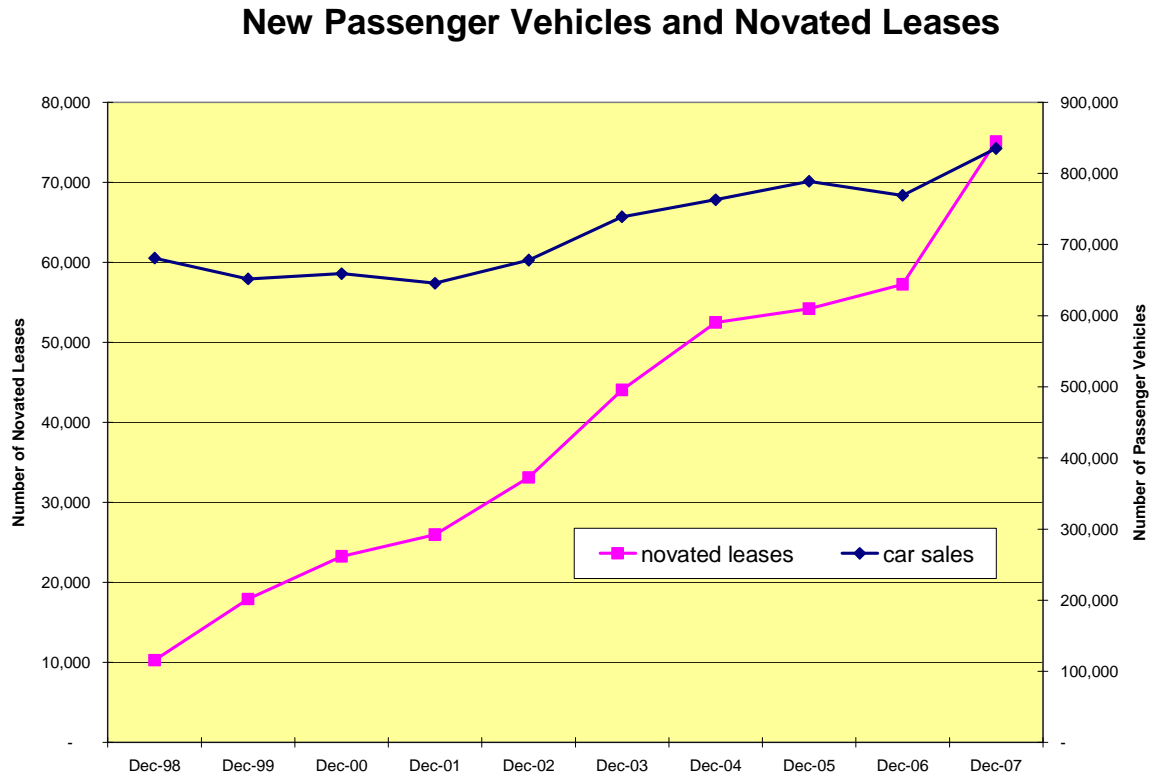
1: FCAI

2. Background Paper – Review of Australian Automobile Industry

3. McMillan Shakespeare estimate

December 2008

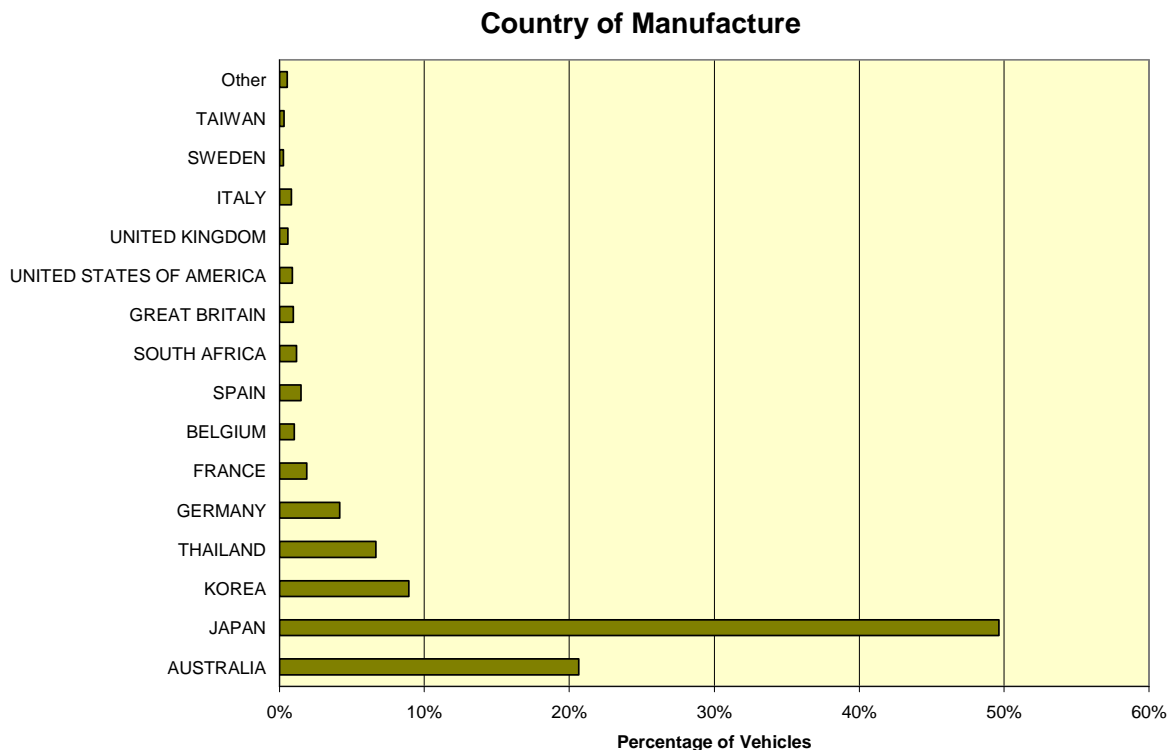
- 5.6 Novated leasing of motor vehicles contributes a significant portion of new motor vehicle sales. The following chart demonstrates the numbers of novated lease vehicles is increasing at a rate of 20% per annum.



- Number of Passenger Vehicles – ABS - 9314.0 - Sales of New Motor Vehicles, Australia, Jun 2008
- Number of Novated Leases – Australian Fleet Lessors Association – December 2007

- 5.7 There were a total of 69,083 Australian made benefit motor vehicles out of 176,659 benefit vehicles in 2007. This represents 39% share of the benefit sector as opposed to a 20% share of the total market.
- 5.8 In fact, the total number of private (total non-business) Australian manufactured vehicle sales is only 37,500 out of the 200,000 motor vehicles produced (less than 20%). By any reasonable measure, “Company” business use, benefit motor vehicle sales are critical to the Australian motor vehicle industry. Therefore, any changes to FBT will need to be very carefully considered to avoid unnecessary negative impacts.

5.9 The utilisation of novated leasing is a significant component of the demand for Australian made vehicles. 21% of the vehicles administered by McMillan Shakespeare as novated leases are Australian made vehicles (only 11% of consumers purchased Australian made vehicles passenger vehicles in 2007.)



Source: McMillan Shakespeare Client Base

5.10 The Government has a commitment to the Australian made motor vehicle industry. The Minister for Innovation, Industry, Science and Research, Senator Kim Carr, stated on 15 August 2008<sup>4</sup>:

*The automotive industry is strategically critical to Australia in terms of exports, employment and innovation. Our economy benefits from the investment, jobs, skills, research and development, innovation and the exports the industry generates.*

5.11 It is likely there will significant affects to the Australian economy and unemployment rate if the Australian motor vehicle industry (and those upstream and downstream businesses connected to it) is impacted by a reduction in new car sales. The use of novated leasing by employees is a key source of demand in relation to the number of sales of Australian made motor vehicles.

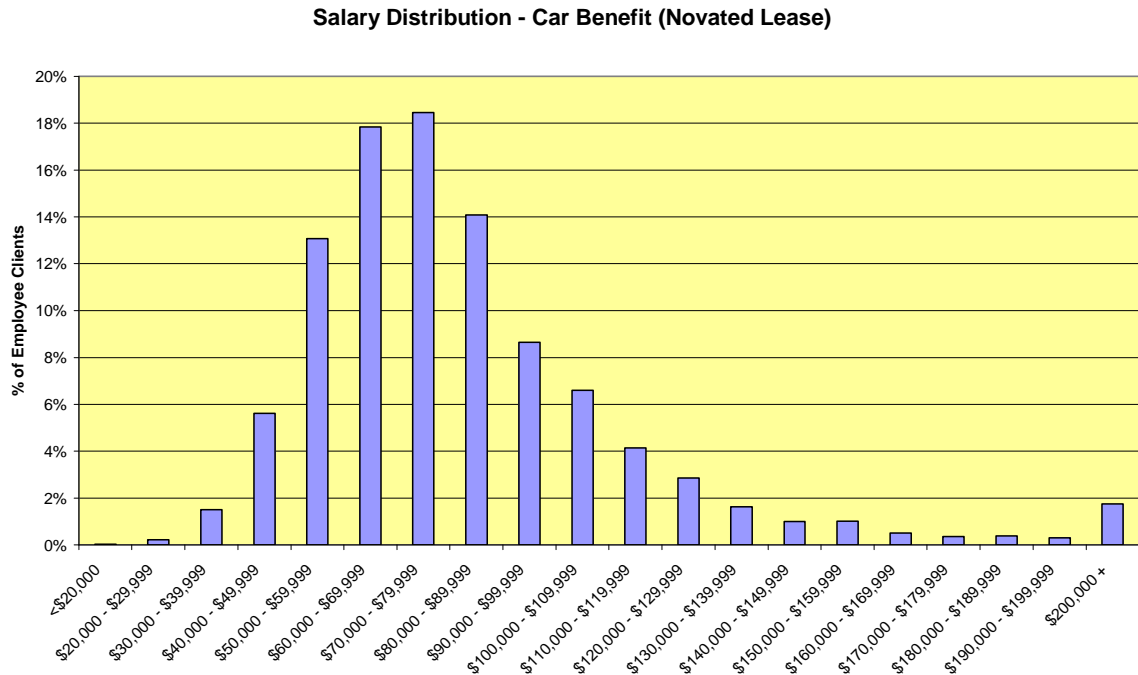
5.12 Novated leasing provides a cost effective way for working Australians to buy a new vehicle which may not be possible if purchasing or financing a new vehicle was the only option.

5.13 Accordingly, the removal of tax concessions for novated leasing would have a greater impact on working Australians than highly paid executives who have the resources to purchase or finance a new vehicle and easier access to increased remuneration to take account of any tax change which may affect their remuneration.

<sup>4</sup> Senator the Hon Kim Carr 15 Aug 2008 Media Release - Bracks' Report Maps Auto Future

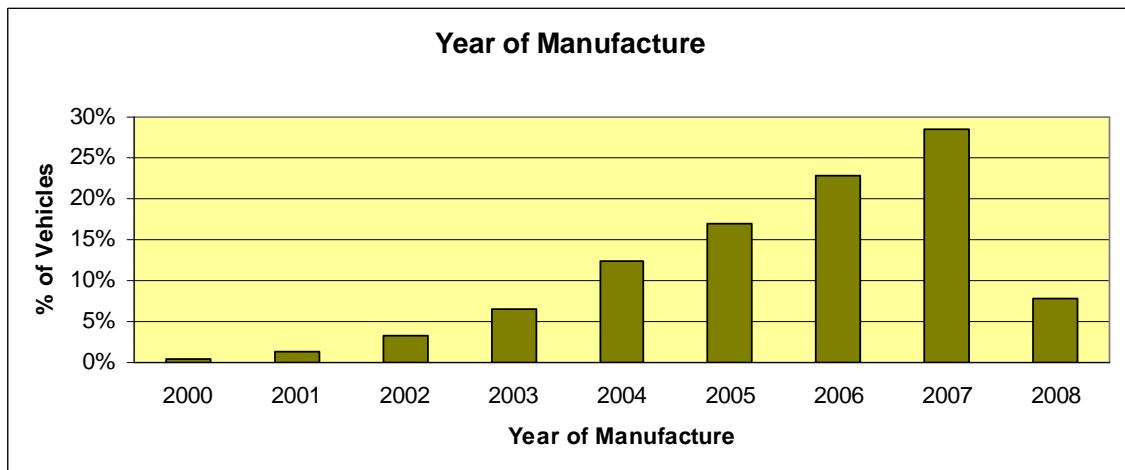


5.14 50% of employees who salary package a car have a salary of less than \$75,000.



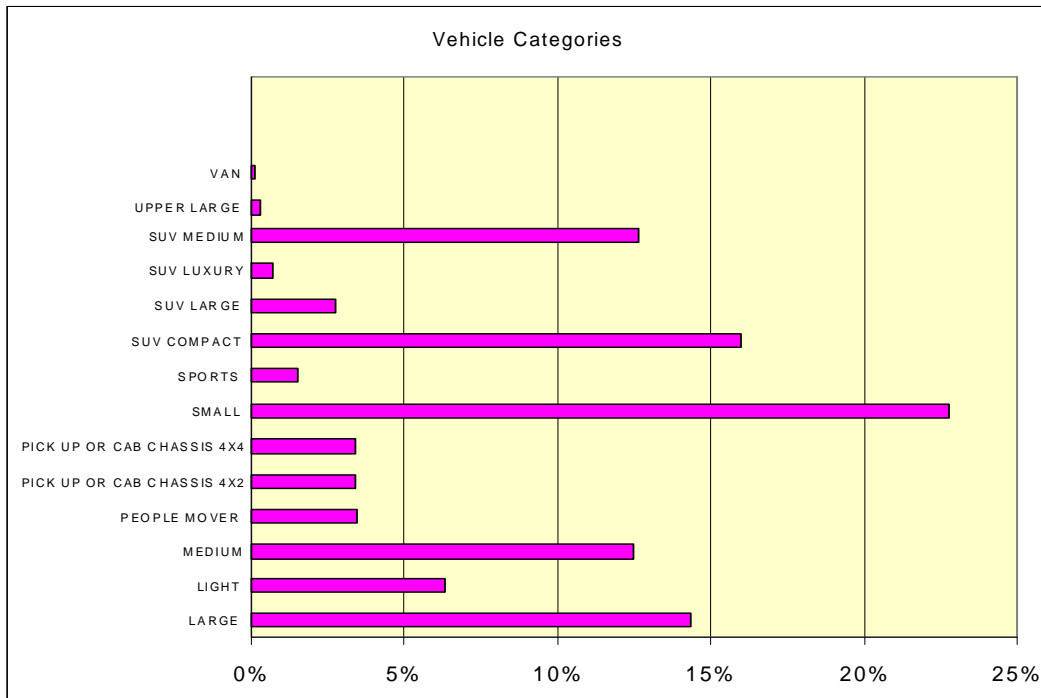
Source: McMillan Shakespeare Client Base

5.15 The average age of a novated lease vehicle is 2.5 years and is more likely to create lower emissions than the average vehicle on the road which is more than 10 years old. Salary packaging creates incentives for people to drive newer cars which are more likely to be less polluting and safer than older cars. These outcomes are significant public and economic goods.



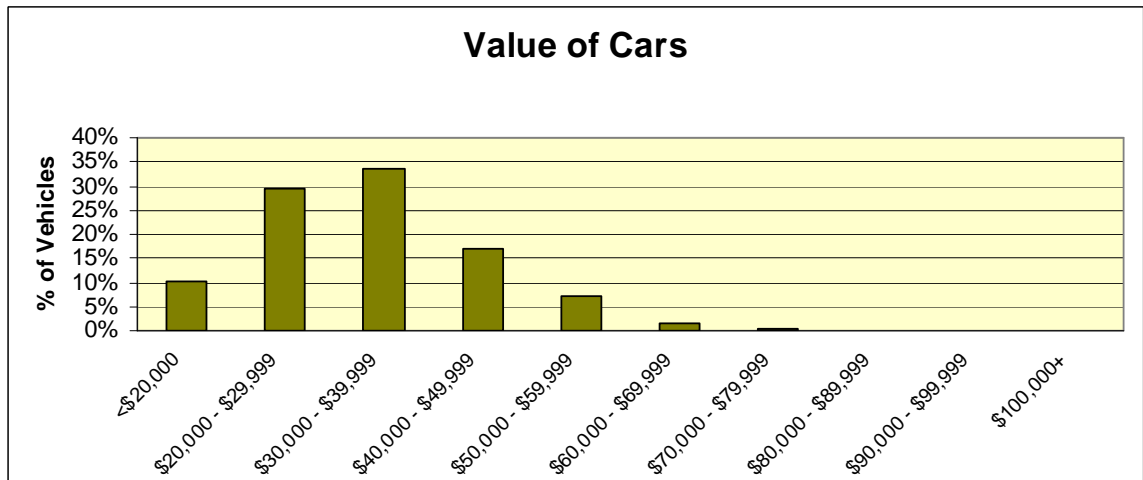
Source: McMillan Shakespeare Client Base

5.16 Two thirds of the vehicles administered by McMillan Shakespeare are small or medium sized vehicles.



Source: McMillan Shakespeare Client Base

5.17 The average value of a vehicle administered by McMillan Shakespeare as a novated lease is \$33,900 and only 3% of the vehicles have a value that exceeds the luxury car tax threshold.



Source: McMillan Shakespeare Client Base

## 6 Environmental Issues

- 6.1 In a speech to the National Press Club on 9 April 2008, Don Henry, Executive Director, the Australian Conservation Foundation stated that the Government should restructure the fuel tax credits scheme (costing \$4.9 billion a year), and do away with the tax break for aviation fuel (\$900 million) and the fringe benefits tax concession for personal use of company cars (more than \$2 billion a year by 2009-10).

*The fringe benefits tax break for company cars invisibly chugs out just as much greenhouse pollution every year as a medium-sized coal-fired power plant, only the fringe benefits tax break for company cars doesn't produce any energy. It's just a dead weight on the economy, the Budget and the environment.*

- 6.2 However it is interesting to note that the position of the ACF in relation to FBT and company cars has changed over recent times. McMillan Shakespeare approached the ACF in late 2008 and provided the ACF with pivotal research and statistics about company cars including the findings contained in this submission. As a result, the ACF now have the following position<sup>5</sup> that is based on the research undertaken by McMillan Shakespeare and is based on this submission.

*The FBT concessions for company cars should be restructured to create positive incentives for efficient vehicles, remove perverse incentives to drive more, generate revenue, and complement efforts to re-tool the Australian car industry for cleaner vehicle production (including through the Green Car Innovation Fund). The best way of achieving this would be to tie the FBT concessions to a vehicle's emissions rating (based on the Green Vehicle Guide) from 1 April 2009.*

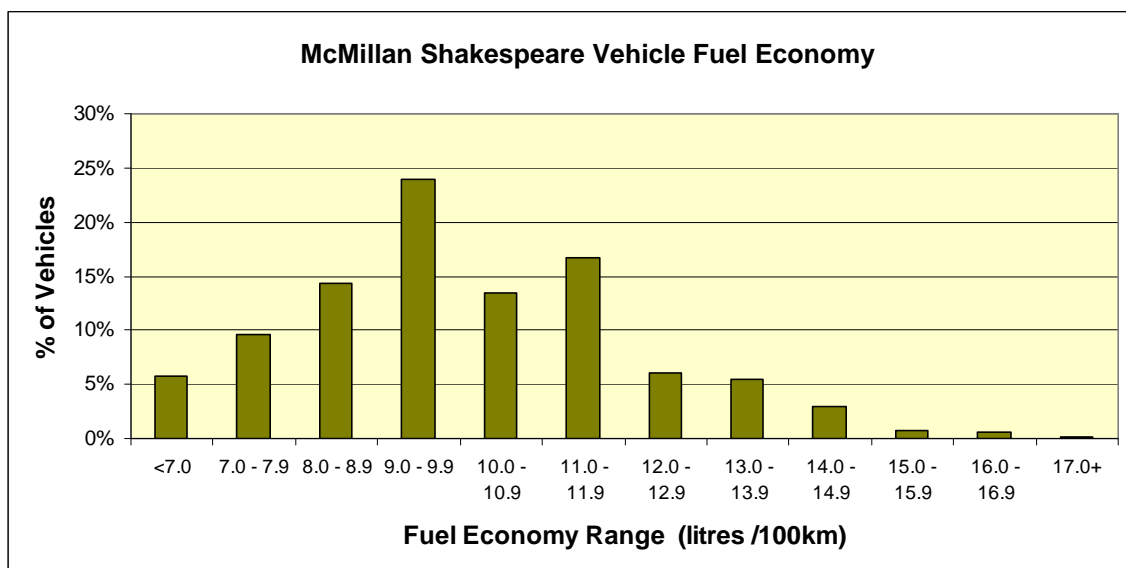
*This approach has the additional benefit of being administratively less burdensome and less susceptible to manipulation than the existing formula, which requires annual self-assessment of distance driven.*

- 6.3 The Government's intention is to implement the Carbon Pollution Reduction Scheme in 2010 and is committed to reducing greenhouse gas emissions.
- 6.4 Australia has set a target of a 60 per cent reduction in greenhouse gas emissions (2000 level) by 2050. Motor vehicles are a contributor to greenhouse gas emissions.
- 6.5 The average rate of fuel consumption for Australian cars is 13.8 litres per 100 km. The voluntary target by the industry is 6.8 litres per 100 km by 2010.

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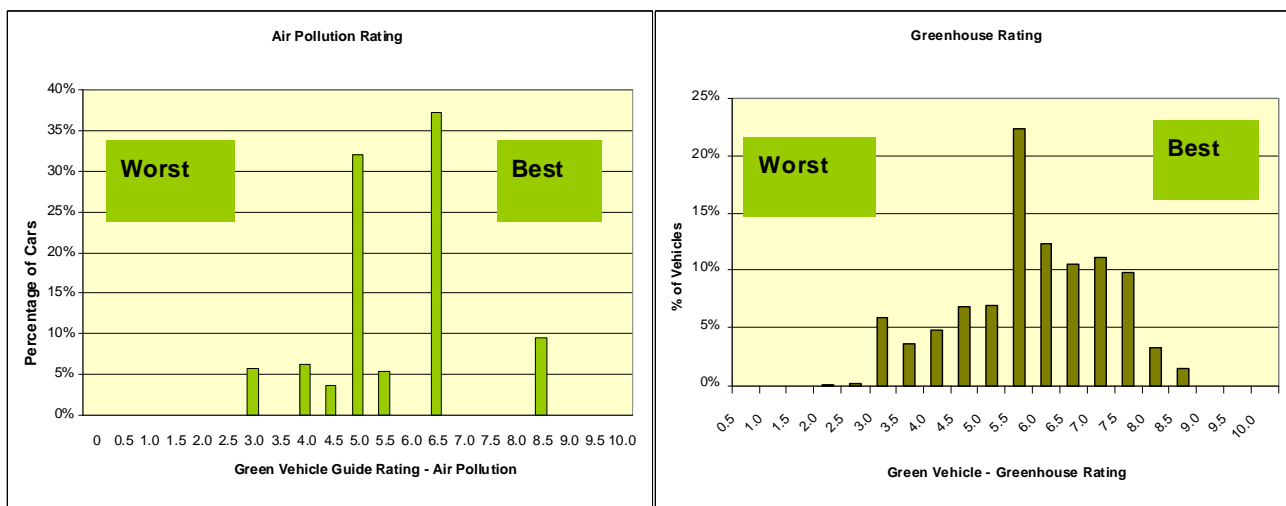
<sup>5</sup> ACF Submission to Department of the Treasury Priorities for the Federal Budget 2009 - 10 January 2009

- 6.6 McMillan Shakespeare leased vehicles have a fuel economy which is 27% better than the Australian average.



Source: McMillan Shakespeare Client Base

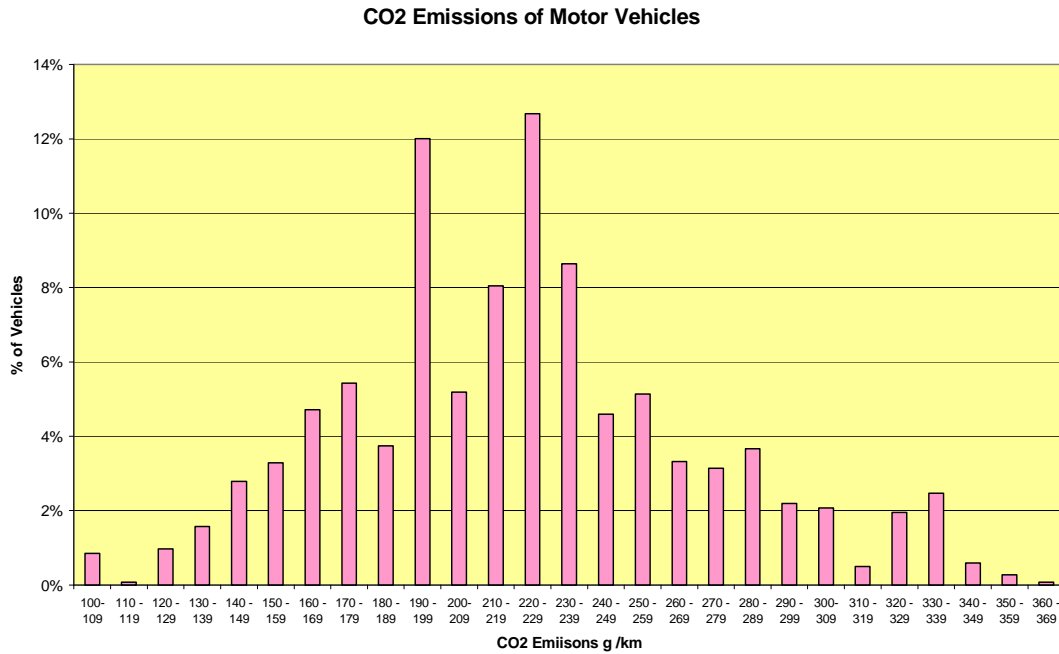
- 6.7 The Australian Government has over recent years developed the “Green Vehicle Guide” for all new motor vehicles manufactured locally and overseas. The Overall Green Vehicle Guide (GVG) rating is based on the sum of the air pollution and greenhouse ratings. Equal weighting is given to both these ratings to arrive at a combined GVG rating (out of 20).
- 6.8 74% of McMillan Shakespeare vehicles have a Green Vehicle Guide rating of greater than 10 for air pollution and greenhouse gas emissions. (35% of the vehicles of the Commonwealth fleet have a rating of 10 or more).



Source: McMillan Shakespeare Client Base

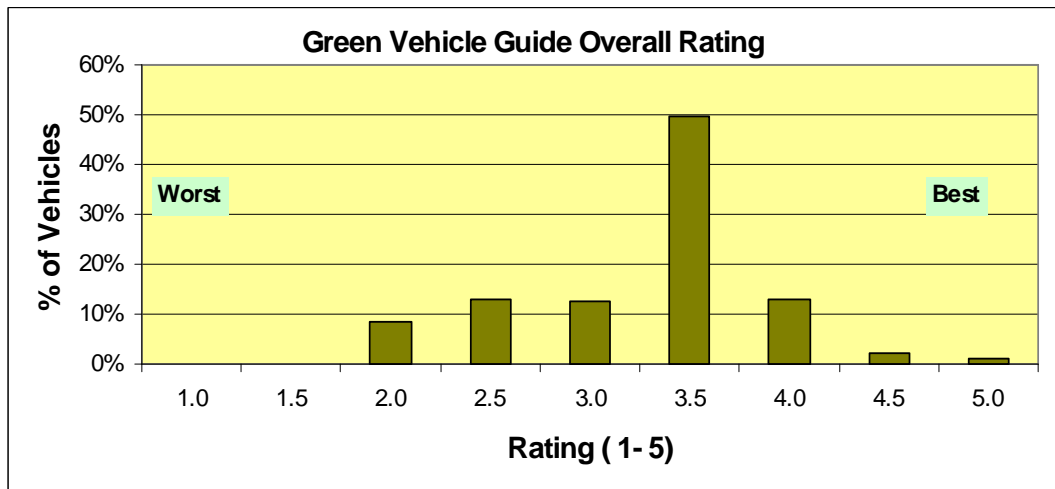
6.9 For CO<sub>2</sub> emissions, the average McMillan Shakespeare vehicle is rated as follows:

- Small cars – 9% less than the highest emitting vehicle in this class;
- Medium cars – 20% less than the highest emitting vehicle in this class;
- Large cars – 19% less than the highest emitting vehicle in this class.



Source: McMillan Shakespeare Client Base

6.10 The combined GVG rating (out of 20), is converted to a Star rating (1 – 5 stars). 74% of McMillan Shakespeare vehicles have Green Vehicle Guide rating of at least 3.5 stars (maximum is 5 stars).



Source: McMillan Shakespeare Client Base

## 6.11 Conclusion

The environmental impact of the motor vehicle is increasingly being debated and questioned by a range of interest groups. The Australian Government has set targets for carbon pollution and designed policies and incentives for the local Australian motor vehicle industry. The evidence presented illustrates that if employees are provided with motor vehicle choice, they will generally select motor vehicles that are more greenhouse friendly (smaller and more fuel efficient producing lower carbon emission). Additionally, the evidence shows that the tax benefit is an effective incentive to people to buy new cars. New cars are increasingly designed to reduce green house emissions.

At this time, there are very few makes and models of locally produced motor vehicles that are considered "environmentally friendly" for employees to choose from. The Federal Governments initiatives for "A new car plan for a green future" will produce a greater range of motor vehicle options for employees and employers over the next few years.

## 7 Climate Change

- 7.1 The Garnaut Climate Change Review was an independent study conducted by economist Professor Ross Garnaut, commissioned by Australia's Commonwealth, state and territory governments in 2007. The Final Report<sup>6</sup> made the following comment in relation to the FBT applying to benefit vehicles in September 2008:

*Some policies reduce the cost of vehicle use or create incentives for use. The fringe benefits tax provisions attempt to value benefits provided by employers to employees as part of salary packages in order to appropriately tax them. However, the current treatment of vehicles and parking spaces distorts decisions towards private vehicle use and greater demand of transport overall (Commonwealth of Australia 2008). These provisions could be improved by:*

- *ensuring the salary sacrifice arrangements are mode neutral*
- *amending the statutory fraction method to ensure it is distance neutral.*

- 7.2 The Prime Minister made the following comments in a speech<sup>7</sup> to announce the Governments White Paper in response to the Final Report of the Garnuat Review:

*In designing the Carbon Pollution Reduction Scheme we've been mindful of the challenges facing the Australian economy today. Our primary objective has been to get the balance right, to set in place a scheme that reduces carbon pollution and supports economic growth. This means supporting Australian jobs and assisting households today while moving to the low pollution economy that will help to create the new jobs of the future.*

*Hundreds of thousands of jobs will be created over time as Australia makes the transition to a low pollution economy. Treasury modeling estimates that taking responsible action on climate change will see the renewable energy sector alone grow to 30 times its current size by 2050, creating new jobs for the future.*

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<sup>6</sup> The Garnaut Climate Change Review – Final Report – page 527

<sup>7</sup> National Press Club Address By Prime Minister Kevin Rudd On The Federal Government's Carbon Pollution Reduction Scheme - 15 December 2008

## **8 Targets for reducing Australia's carbon pollution motor vehicles**

- 8.1 The Government has set aggressive targets in its commitment to reduce carbon emissions caused by motor vehicles. In the white paper,<sup>8</sup> the following information on these targets is outlined:

*The Australian Government has a substantial commitment to reduce our carbon pollution by 60 per cent of 2000 levels by 2050.*

*By 2020, we have committed to reduce Australia's carbon pollution by up to 15 per cent below 2000 levels in the context of a global agreement where major economies agree to substantially restrain carbon pollution and advanced economies take on reductions comparable to Australia.*

*We have also committed to an unconditional 5 per cent reduction in carbon pollution below 2000 levels by 2020, which represents a significant cut of around 27 per cent on a per capita basis.*

*By harnessing the innovation and efficiency of the market, the Carbon Pollution Reduction Scheme will allow Australia to meet these serious targets at the lowest overall cost to our economy.*

*The Bureau of Infrastructure, Transport and Regional Economics has estimated that, in the short term, car fuel use in Australia declines by about 1.5 per cent in response to a 10 per cent increase in the petrol price, but that this decline increases to 4 per cent when longer-term responses are taken into account.*

*Australia, in contrast to European countries, has not had a period of elevated fuel prices for longer than seven years (in the late 1970s and early 1980s). It is possible that the long-run responsiveness to radically higher fuel prices could be even greater, given threshold effects on consumer choices and technological development. International studies have suggested that, at higher fuel prices, consumption declines by up to 7 per cent for every 10 per cent increase in fuel prices, once demand- and supply-side (technology) changes are taken into account.<sup>8</sup>*

*Long-term reductions are the result of changes in vehicle size, vehicle fuel efficiency, vehicle fuel type, technology, mode of transport (for example, road, rail or cycling), and residential location.*

- *In 2003, 30 per cent of Australian purchasers of passenger motor vehicles bought large vehicles; in 2007, 18 per cent. Consumers are also choosing more fuel-efficient vehicles within each size category. This has reduced new vehicle average fuel efficiency under standard test conditions from 9.7 L/100 km in 2003 to 9.0 L/100 km in 2007.*
- *Diesel vehicles, the most fuel-efficient conventional liquid fuel vehicles, increased their share of new vehicle sales from 5 per cent in 2005 to 9 per cent in 2007.*
- *Hybrid vehicles accounted for 0.2 per cent of sales in 2005, and 0.6 per cent in 2007.*

- 8.2 The McMillan Shakespeare submission has taken account of these objectives. Three of our suggested options directly link FBT to carbon emissions. We have evaluated the outcome of carbon emissions for each of our options and in the modeling undertaken by Access Economics one of our options will reduce carbon emissions for each replacement vehicle by 20% or one tonne of CO<sub>2</sub>.

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<sup>8</sup> Carbon Pollution Reduction Scheme Australia's Low Pollution Future, White Paper, Volume 1 December 2008

## 9 Greening the Australian Motor Vehicle Industry

9.1 In February 2008, the Government appointed Mr Steve Bracks, the former Premier of Victoria to conduct of review of the Australian Motor Vehicle Industry. This Review was established prior to the taxation review.

9.2 The automotive industry is a major contributor to Australia's economy<sup>9</sup>:

- It employs over 64,000 people;
- In 2007, about 335,000 cars worth \$7.7 billion were produced;
- Exports of \$4.7 billion and is among Australia's top 10 export earners;
- A major investor in innovation.

9.3 The industry has important links to the rest of the economy, and supports Australia's capabilities in a range of other industries.

9.4 The Minister for Innovation, Industry, Science and Research for Senator the Hon Kim Carr reiterated the importance of the local motor vehicle industry on 22 August 2008<sup>10</sup>:

*The fact is that a car industry is extremely important for Australia's economic and social wellbeing. It is a vital part of our manufacturing base. It provides the spillovers that allow us, in a whole range of other manufacturing industries, to do very well. It even provides the foundations for advances that we make in the mining industry.*

*You can't make a jet fighter without having a strong car industry and that's precisely what we are doing now. It means that we can actually make railway rolling stock, we can provide services to a whole range of other sectors. So it's extremely important that we maintain the capacity and once you lose it, you never get it back.*

9.5 In August 2008, the Brack's Review provided government with its final report to consider and a response was provided by Government in November 2008. The Prime Minister stated in his speech<sup>11</sup>:

*At a time of global financial crisis the Government today takes further decisive action to support Australian industry, to support Australian jobs. Because we believe this industry has a future and a big future in Australia's economy of the 21st Century.*

*We take decisive action to build an internationally-competitive, green economy for the future.*

*Australia needs a green car industry that manufactures the fuel-efficient, low emission vehicles of the future and that creates the well-paid, highly-skilled green jobs of the future.*

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9 Media release Honorable Steve Bracks, 15 August 2008, "Release of Automotive Industry Review report".

10 Interview with ABC Melbourne regarding Ford Australia 22 August 2008

11 Remarks at the launch of the New Car Plan for a Greener Future Auto CRC Melbourne - 10 November 2008



*We do not have to choose between having a growing economy in the short term and a green economy in the medium to long term.*

*We can work effectively to develop both and that's a large part of what today's package is all about.*

*And the automotive industry is critical to a green investment strategy for the nation.*

*The automotive industry is already a cornerstone of manufacturing.*

*What we need is innovative industry. We need a supply chain working together. We will need a supportive policy framework. We also need an automotive industry vision.*

*And that's why I am here today to launch a New Car Plan for a Green Future for Australia.*

*The automotive industry has a key role to play responding to climate change.*

*The industry must reduce vehicle emissions by producing smaller, lighter, and more fuel efficient vehicles that produce fewer greenhouse gas emissions.*

*Faced with this complicated set of industry challenges – markets, economies, and the environment – some might say it's not worth trying to have a car industry. That is not my view. It is not the view of the Australian Government and it never will be the view of any Government which I lead.*

9.6 The Government's response which is detailed in the *A New Car Plan for a Greener Future*<sup>12</sup> provides for the following initiatives to support the vehicle industry:

- *a new, better targeted, greener assistance program, the Automotive Transformation Scheme (ATS), running from 2011 to 2020 and providing \$3.4 billion to the industry;*
- *an expanded Green Car Innovation Fund of \$1.3 billion brought forward to 2009 and running over ten years;*
- *changes to the Automotive Competitiveness and Investment Scheme in 2010 to smooth the transition to the ATS (\$79.6 million);*
- *\$116.3 million to promote structural adjustment through mergers and consolidation in the components sector (from 1 January 2009) and facilitate labour market adjustment (from 1 November 2008);*
- *\$20 million from 2009–10 to help suppliers improve their capacity to integrate into complex national and global supply chains;*
- *\$6.3 million from 2009–10 for an enhanced market access program;*
- *a new Automotive Industry Innovation Council, bringing key decision makers together to drive innovation and reform; and*

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<sup>12</sup> A New Car Plan For A Greener Future – Department of Innovation, Industry, Science and Research – November 2008

- a \$10.5 million expansion of the LPG vehicle scheme, to start immediately, that doubles payments to purchasers of new private use vehicles that are factory-fitted with LPG technology.

9.7 The Prime Minister also stated in relation to the Global Economic Crisis and the Australian Motor Vehicle Industry that<sup>13</sup>:

*At a time when there is a lot of global pressure on the industry, the attitude of Government can either be to wash your hands of it and say, 'not my problem', or to step in as a partner. We believe in partnership. We believe in partnership with the Australian auto industry. And we believe in that partnership for the long term future.*

*Part of our response to the global financial crisis and global economic crisis is to create the rational grounds for confidence in the future as well and us putting a solid step forward with this decisive action today, a \$6.2 billion investment for the future, is part of the confidence equation for the future as well.*

## 10 Henry Review – Fringe Benefits Tax and Motor Vehicles

10.1 The Treasurer<sup>14</sup> announced in May 2008 that it would:

*..... conduct a comprehensive review of Australia's tax system to create a tax structure that positions us to deal with the demographic, social, economic and environmental challenges of the 21st century.*

*The review will encompass Australian Government and State taxes, except the GST, and interactions with the transfer system, and will consider:*

- 1. The balance of taxes on work, investment and consumption and the role for environmental taxes;*
- 2. Further enhancements to the tax and transfer system facing individuals, families and retirees;*
- 3. The taxation of savings, assets and investments, including the role and structure of company taxation;*
- 4. The taxation of consumption and property and other state taxes;*
- 5. Simplifying the tax system, including the interactions between federal, state and local government taxes; and*
- 6. Interrelationships between the elements of the tax system, as well as the proposed emission trading system.*

10.2 One of the taxes under review is Fringe Benefits Tax (**FBT**). In 2006-07 the Government<sup>15</sup> collected a total of about \$3.8 billion in FBT from 69,000 tax payers (i.e. employers).

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<sup>13</sup> Doorstop interview with the Minister for Innovation, Industry, Science and Research, Kim Carr Melbourne, 10 November 2008  
([www.pm.gov.au/media/Interview/2008/interview\\_0594.cfm](http://www.pm.gov.au/media/Interview/2008/interview_0594.cfm))

<sup>14</sup> Treasurer's Media Release - Australia's Future Tax System – NO.O36

<sup>15</sup> Architecture of Australia's tax and transfer system - August 2008

10.3 The following questions were raised in the Consultation paper issued by the Review in December 2008 in relation to FBT and motor vehicles:

*Q4.6 How can fringe benefits tax be simplified while maintaining tax integrity? Would it be better to adopt the general OECD practice of taxing fringe benefits in the hands of employees, rather than employers?*

*Q13.1 Bearing in mind that tax is one of several possible instruments that can address environmental externalities, what opportunities exist to use specific environmental taxes to address Australia's environmental challenges?*

*Q13.2 Noting that many submissions raise concerns over unintended environmental consequences of taxes and transfers, such as the fringe benefits tax concession for cars, are there features of the tax-transfer system which encourage poor environmental outcomes and how might such outcomes be addressed?*

*Q13.3 Given the environmental challenges confronting Australian society, are there opportunities to shape tax-transfer policies which do not currently affect the environment in ways which could deliver better environmental outcomes?*

10.4 McMillan Shakespeare has addressed these key questions in this response.

10.5 The issues that have been raised for the Review to consider as part of the initial consultation phase in relation to the FBT applicable to benefit cars can be summarised into two major issues:

▪ **The availability of the concession:**

- Remove the concession completely;
- Retain the existing concession in its current form;
- Retain a concession designed to help address simultaneously environmental issues and provide a critical source of demand for manufacturers of motor vehicles and upstream/downstream industries;

▪ **The taxation point:**

- Retain FBT as an employer tax;
- Move FBT from an employer tax to an employee tax.

- 10.6 McMillan Shakespeare supports the need to change the current FBT arrangements in favour of a concessional formula based on the environmental rating of the motor vehicle rather than the kilometers traveled. We have articulated and calibrated a new FBT formula in detail later in our submission.
- 10.7 Further, we strongly support the current arrangements whereby employers are responsible for the ultimate payment of FBT.
- 10.8 In terms of pure efficiencies and compliance, shifting the point of taxation from 69,000 employers who currently submit FBT returns, to circa 1 million employees, does not make practical sense. Everyday working Australians need less administration and taxation burdens not more. Additionally, from an ATO perspective collection from employers is more efficient and is likely to have a higher level of compliance.
- 10.9 Moreover employers have well developed systems and programs in place (often for more than 20 years) to easily and systematically process FBT in relation to salary packaging including motor vehicles.
- 10.10 In practical terms the employer almost always insist that employees are also required to salary sacrifice the cost of any FBT incurred to their employer. A “no cost to the employer” policy prevails wherever motor vehicles are provided.

## **11 Exploring the Options for FBT and Motor Vehicles**

- 11.1 McMillan Shakespeare has been researching and investigating the current FBT arrangements and the other options possible since early 2008.
- 11.2 We have committed significant resources to undertake the following:
- Submitted a detailed submission to the Review as part of the first round of consultation;
  - Made available industry statistics in relation to motor vehicle benefits;
  - Attempted to engage stakeholders about the use of salary sacrifice for motor vehicles in the Australia workforce and to dispel the myths that promulgated about motor vehicle benefits;
  - Developed alternative proposals for the taxing of motor vehicle benefits;
  - Engaged in discussion of the issues with the key stakeholders throughout Australia;
  - Undertaken focus groups with various parties in relation to the issues and our proposals;
- 11.3 We have also engaged Lateral Economics and Access Economics to prepare a detailed report on the economic and environmental impact of our alternative proposals. A copy of their report is provided in Appendix 1.

11.4 We considered four options for replacing the current formula for determining the taxable value of a benefit vehicle. The options have been developed in relation to the following criteria:

- Maintaining a tax concession for benefit vehicles;
- Providing a revenue neutral outcome for government in relation to the collection of FBT;
- Continuing the support for the demand side of the Australian motor vehicle industry;
- Supporting the Government's aim of reducing greenhouse gas and CO<sub>2</sub> emissions; and
- Maintaining an administratively simple process for employers.

11.5 McMillan Shakespeare has identified four options that could be used to replace the existing formula (pages 33 to 48 of this report):

- **Option 1** is a modified version of the current FBT system in which there are finer gradations in the statutory rate scale;
- **Option 2** is modeled on the UK's Emissions Rating scheme, with lower emission cars (measured by their CO<sub>2</sub> emissions per kilometre) facing a lower rate; and
- **Option 3** incorporates aspects of both the UK CO<sub>2</sub> scheme and the current scheme by basing the statutory rate on total emissions; and
- **Option 4** proposes a statutory rate based on the environmental rating of the car.

## 12 Removal FBT Concession All Together

12.1 The relative importance of benefit vehicles is that they accounted for 21% of the new car sales in 2007 and 35% of total Australian manufacturing motor vehicles.

12.2 There have been calls for the removal of the FBT concession. As a result, we asked Access Economics and Lateral Economics to model the impacts on overall demand for benefit vehicles. (see Access Economics and Lateral Economics report Appendix 1).

12.3 Overall, the modeling shows the demand for total benefit vehicles is expected to fall by 25% if all employees made no employee contribution; to 31% (if all employees made an employee contribution). That is a reduction in production of local vehicles of up to 21,416 vehicles<sup>16</sup> per annum.

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<sup>16</sup> Access Economics – Fringe Benefits Tax Analysis report

12.4 This would have significant effects on the Australian economy:

- It is likely there would be significant loss of jobs directly and indirectly;
- This would be devastating for the local vehicle industry at a time when the Government has announced a significant plan to support the industry;
- Many hundreds of thousands of employees with “company” benefit motor vehicle arrangements already in place would be greatly disadvantaged;
- As many of these benefits are enshrined in industrial agreements, employees and unions are likely to demand compensating salary increases at a difficult time for business;
- There would be additional workload on the ATO as employees in large numbers will claim travel reimbursements via the taxation system.

12.5 The increase in the effective vehicle price if the existing FBT arrangements were removed is summarised in the following table<sup>17</sup>;

**INCREASE IN EFFECTIVE VEHICLE PRICE OVER CURRENT FBT ARRANGEMENT (PERCENT) OVER THREE YEARS**

<b>FBT Arrangement</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>
Employee post-tax contribution	44.8	43.8	42.8	45.7	42.5	44.3	46.9
No Employee post-tax contribution	33.4	32.6	30.7	34.7	30.4	33.0	35.9

12.6 McMillan Shakespeare has estimated that in 2007 about 180,000 vehicles sales were for company (benefit) vehicles and that about 600,000 to 700,000 vehicles on the road are benefit vehicles. In 2007 about 69,000 locally made vehicles were purchased as benefit vehicles which represents approximately 40% of total purchases of benefit vehicles.

12.7 The following table<sup>18</sup> shows the estimated impact on benefit vehicle sales if the FBT concession were removed:

**ESTIMATED IMPACT ON BENEFIT VEHICLE SALES (PERCENT) THREE YEARS**

<b>FBT Arrangement</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>
Employee post-tax contribution: Total sales	-30.5	-30.4	-31.6	-31.3	-24.9	-41.4	-31.9
Employee post-tax contribution: Local sales	-30.6	-30.3	0.0	-30.4	0.0	-55.4	-30.6
No employee post-tax contribution: Total sales	-23.2	-18.8	-27.5	-27.8	-15.9	-44.5	-26.4
No employee post-tax contribution: Local sales	-23.3	-19.3	0.0	-28.4	0.0	-53.5	-24.4

12.8 The table shows that there would be a dramatic reduction in benefit vehicle sales.

12.9 Given that 35% (69,083 out of 200,000) of locally produced vehicles are benefit vehicles, the impact on the local manufacturing industry will be greater than for imported vehicles.

<sup>18</sup> Access Economics – Fringe Benefits Tax Analysis report

12.10 The following table<sup>19</sup> shows the estimated impact on **total** vehicle sales if the FBT concession was removed:

**ESTIMATED IMPACT ON TOTAL VEHICLE SALES (PERCENT) THREE YEARS**

<b>FBT Arrangement</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>
Employee post-tax contribution: Total sales	-11.6	-8.7	-4.3	-11.4	-2.4	-7.5	-2.7
Employee post-tax contribution: Local sales	-11.9	-8.7	0.0	-12.3	0.0	-10.2	-5.1
No Employee post-tax contribution: Total sales	-8.8	-5.4	-3.8	-10.1	-1.5	-8.1	-2.2
No Employee post-tax contribution: Local sales	-9.0	-5.5	0.0	-11.5	0.0	-9.8	-4.0

12.11 Any removal or diminution of the FBT concessions for motor vehicles will have a substantial impact on sales and is likely to significantly impact the industry's viability.

12.12 Moreover, simply removing FBT concessions for "Company Cars" does not address the issue of the environmental impact of the motor vehicle in terms of carbon emissions. In fact, we argue that fewer new cars will be replacing older cars and therefore more carbon emissions will result because new cars generally emit less carbon emissions than older cars.

**12.13 The removal of FBT Concessions for benefit motor vehicles will have a substantial negative impact on the Australian Motor Vehicle Industry and likewise negatively impact on carbon emissions from motor vehicles.**

### **13 FBT as an Employee Tax**

13.1 One of the issues in relation to FBT management and compliance is the call to shift the tax source from the employer to the employee. That is, the FBT on employer provided benefits will shift from an employer liability to an employee liability. This is a specific question raised in the Henry Consultation paper. Question 4.6 "*How can fringe benefits tax be simplified while maintaining tax integrity? Would it be better to adopt the general OECD practice of taxing fringe benefits in the hands of employees, rather than employers?*".

<sup>19</sup> Access Economics – Fringe Benefits Tax Analysis report



13.2 The arguments put forward for adopting this proposal are:

- FBT is too complex and provides an unnecessary financial and administrative burden on employers;
- Removing FBT will simplify the tax system;
- The employee is receiving the benefit therefore the employee should pay the tax;
- Australia is one of the few OECD countries with fringe benefit taxed in the hands of employers;

13.3 However there are a number of arguments that support the retention of the current regime. Employers will always provide benefits to employees and therefore there still needs to be a method of calculating the taxable value irrespective of whether the employee or the employer pays any applicable tax.

13.4 Those countries that do not have an FBT regime still have regulations and laws to tax employer provided benefits. Therefore simply removing the liability for the tax from the employer will not necessarily ensure that the taxing of benefits is simplified.

13.5 The current method of taxing benefits is the most effective and efficient. The ATO only needs to deal with about 69,000 employers who lodge FBT returns and not have to deal with circa 1 million employees. The following statement was made to the Senate Committee on Economics in June 2008 by a Treasury official:

- *One of the key reasons FBT was introduced as an employer tax was to deal with the complexity that the evaluation of benefits would cause for employees.*
- *We have competing interests here as to who owns the complexity. Applying FBT as an employer tax is, relative to applying it to the individual, a far simpler taxation system. That said, there are some complexities involved. We have 12 or 13 categories of what is a fringe benefit in the law— that is, there are 12 plus the residual of everything that is left. That is part of the balancing arrangements to ensure that remuneration in the form of income and other forms of remuneration, such as non-cash benefits, are taxed appropriately.*
- *There are competing complexities and we need to deal with those. Increasing efficiency and effectiveness within the design of the system is an unending process. However, a very simple system could lead to inequity. So you need to balance those interests. and circumstances, while at the same time looking at the bigger picture. I think they can go hand in hand.*

13.6 In any event, most employers pass on the costs of administration including FBT to participating employees. A “no cost to employer” policy prevails as most employers either outsource the administration of FBT and or have very well developed and robust administration and compliance systems for motor vehicles FBT.

13.7 The provision of car benefits by employers is a major source of (FBT) revenue to government. In addition, there are significant flow on effects to the motor vehicle industry, the economy and employment if there is a shift in the liability for the FBT to the employee. Such a move will

negatively impact on employees, employers and the industry. For example, new and additional complex burdens on “working Australians” will discourage their participation and therefore sales, there will need to be complete changes to payroll systems and the like for employers and outsourced administrators at significant cost. The sum of these costs and the added burden on employees far out-weighs any benefits. It would be change for change’s sake.

13.8 Generally, the strongest proponents of the called to “shift” FBT compliance from employer to employee is being advocated by the accounting and consulting professions. We suggest that the accounting and consulting professionals will stand to gain most from the massive dislocation and confusion that will prevail.

**13.9 Taxing fringe benefits in the hands of employees rather than employers (motor vehicles and/or other fringe benefits) does not stand up to cost/benefit analysis.**

### **Exploring the options for a new FBT regime for motor vehicles**

#### **14 Option 1 - Modification of the Existing Formula**

14.1 The Bracks Review considered the following issues in relation to FBT on motor vehicles:

- *Are there ways of reducing greenhouse gas emissions through changes to Government taxation arrangements and other policies?*
- *Should Australia consider taxes and charges based on, for example, kilometers travelled and vehicle emissions? What would be the impact on the industry of such arrangements?*

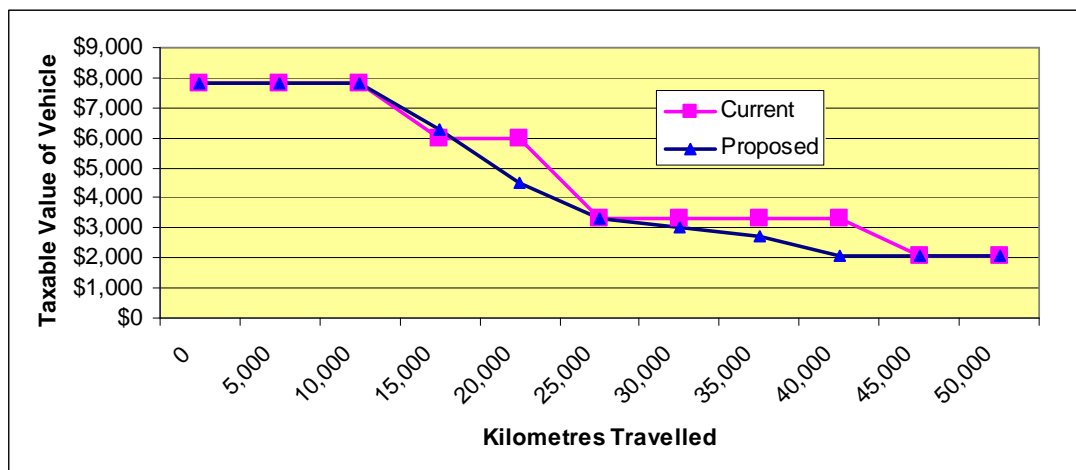
14.2 The report provided to Government by the Brack’s Review stated:

*There is anecdotal evidence that current FBT arrangements encourage drivers to increase the amount of kilometers driven in order to reduce FBT liability. This is at odds with the Government’s broad environmental goals of reducing carbon emissions.*

14.3 The report proposes the following new rate table for consideration:

<b>Km range</b>	<b>Percentage</b>
0 -14,000	26%
14,001 - 16,000	21%
16,001 - 18,000	19%
18,001 - 20,000	17%
20,001 - 22,000	15%
22,001 - 24,000	13%
24,001 - 26,001	11%
26,001 - 34,000	10%
34,001 - 40,000	9%
40,000 +	7%

- 14.4 If the percentages in the table above are applied to a vehicle with a base value of \$30,000, in most cases the taxable value of the vehicle will be less than would apply if the existing rates are used.



- 14.5 The graph above illustrates that the use of these statutory rates will result in a lower taxable value for many vehicles therefore reducing Government revenue. Access Economics have made an estimate of the cost of this formula as detailed in the table<sup>20</sup> below:

Year	2008-09	2009-10	2010-11	2011-12
Cost \$ million	-191	-195	-198	-193

- 14.6 The adoption of statutory rates provided in the Bracks report will result in a 10% reduction in FBT collection.

- 14.7 The recommendation made in the Bracks report stated:

*The Henry Review of taxation should consider the adoption of a new statutory rate table that is more evenly spread across the range of kilometers traveled. The new rate table would encourage drivers to use their vehicles only as necessary.*

- 14.8 The government noted this recommendation in its response<sup>21</sup> and also stated:

*The issue of FBT for motor vehicles will be examined by the review of Australia's Future Tax System (the Henry review).*

<sup>20</sup> Access Economics – Fringe Benefits Tax Analysis report

<sup>21</sup> A New Car Plan For A Greener Future

14.9 McMillan Shakespeare proposes that the following revenue neutral rate table is considered:

Km range	Statutory Rate Bracks Report	Statutory Rate
0 -14,000	26%	29.00%
14,001 - 16,000	21%	23.50%
16,001 - 18,000	19%	21.25%
18,001 - 20,000	17%	19.00%
20,001 - 22,000	15%	16.75%
22,001 - 24,000	13%	14.50%
24,001 - 26,001	11%	12.25%
26,001 - 34,000	10%	11.25%
34,001 - 40,000	9%	10.00%
40,000 +	7%	7.75%

14.10 The rates proposed by McMillan Shakespeare will provide a revenue neutral outcome and provide the "green" benefits suggest in the Bracks report.

14.11 No analysis was undertaken of the effect on either the Australian vehicle industry or the reduction in carbon emissions of this model by Access Economics.

14.12 However it would be expected that there would be a behavioural change in drivers because the incentive to drive unnecessary kilometres would be decreased, therefore reducing carbon emissions.

14.13 The option is very much a business as usual step and would not be expected to impact on motor vehicle sales.

14.14 The administration of this model does not add any complexity to the administrative requirements of employers.

14.15 This option is desirable in the short term (say 6 years) as part of the transition to a formula based on the environmental rating of the vehicle.

## **15 Option 2 - Emissions Rating of the Vehicle**

15.1 This model is an environmentally based model which takes account of the CO<sub>2</sub> emissions of the vehicle.

- 15.2 McMillan Shakespeare is proposing the following option for consideration for determining the taxable value of a benefit vehicle.

$$\text{Taxable Value} = (A \times B \times C)/D - E$$

Where:

A = the base value of the car

B = the statutory percentage (based on carbon emissions of vehicle)

C = the number of days in the FBT year when the car was used or available for private use of employees

D = the number of days in the FBT year

E = the employee contribution

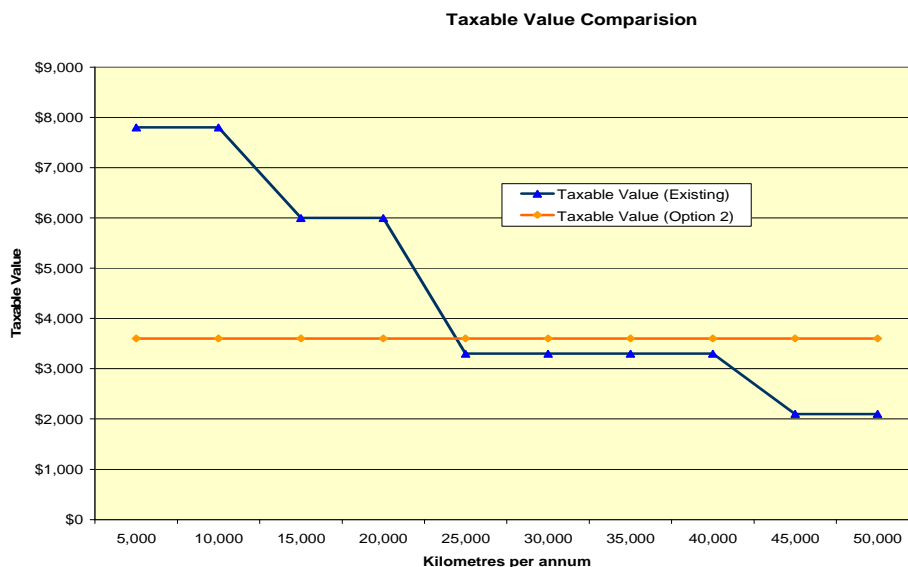
Motor vehicle CO <sub>2</sub> Emissions (g/km)	Statutory Rate Revenue Neutral
< 140	3.00%
145	3.75%
150	4.50%
155	5.25%
160	6.00%
165	6.75%
170	7.50%
175	8.25%
180	9.00%
185	9.75%
190	10.50%
195	11.25%
200	12.00%
205	12.75%
210	13.50%
215	14.25%
220	15.00%
225	15.75%
230	16.50%
235	17.25%
> 235	18.00%

- 15.3 The statutory fractions that are proposed have been calculated by Access Economics to provide a tax revenue neutral FBT outcome and are based on the dataset of vehicles provided to Access Economics by McMillan Shakespeare.
- 15.4 The Government's Green Vehicle Guide is the source of the CO<sub>2</sub> emissions rating for each vehicle used in the dataset provided to Access Economics by McMillan Shakespeare.

- 15.5 The major difference between this model and the existing scheme is that vehicles which have low CO<sub>2</sub> emissions pay less FBT. This is intended to provide an incentive to employers and employees to select vehicles with low emissions.
- 15.6 This model is not linked to the number of kilometres driven.
- 15.7 This model has been used in the United Kingdom since 2002. A major difference is that any fuel used by the vehicle is also subject to FBT in the United Kingdom.
- 15.8 The inclusion of fuel in the FBT calculation would add to the complexity and work load of employers. In addition employees and employers in remote areas would suffer an additional penalty through higher fuel prices. Geographical distances and other related demographic and workplace factors distinguish the United Kingdom from Australia.
- 15.9 The following example illustrates how this model could operate for example:

A vehicle with a Base Value of \$30,000 would have a taxable value of \$3,600 ( $\$30,000 \times 12.5\% = \$3,600$ ) irrespective of the number of kilometers travelled by the vehicle where the vehicle was available for a full FBT year.

The following chart shows a comparison with the existing taxable value for a range of kilometers.



- 15.10 Access Economics were not requested to provide data on the impact of this model on the vehicle industry and the effect on carbon emissions.

**15.11 This option is not recommended because there are more than 20 statutory percentage and CO<sub>2</sub> emission levels with gradual increases. This option is not expected to result in any demonstrable behavioural shift in the choice of “greener” motor vehicles and is less likely than option 4 to be easily recognised and understood.**

## **16 Option 3 - Actual Tonnes of CO<sub>2</sub> Emitted**

16.1 The model is also an environmentally based model which takes account of the actual CO<sub>2</sub> emissions of the vehicle. It therefore requires the employer to collect the actual kilometres traveled by the vehicle during the FBT year as is currently the case.

16.2 For example if the vehicle has a CO<sub>2</sub> rating of 150g/km and the vehicle travels 10,000 kilometres, then the vehicle has emitted 1.5 tonnes of CO<sub>2</sub>.

16.3 McMillan Shakespeare is proposing the following option for consideration for determining the taxable value of a benefit vehicle.

$$\text{Taxable Value} = (A \times B \times C)/D - E$$

Where:

A = the base value of the car

B = the statutory percentage (based on the tonnes of CO<sub>2</sub> emitted)

C = the number of days in the FBT year when the car was used or available for private use of employees

D = the number of days in the FBT year

E = the employee contribution

<b>Motor vehicle Tonnes of CO<sub>2</sub></b>	<b>Statutory Rate Revenue Neutral</b>
1	5.00%
2	6.25%
3	7.25%
4	14.50%
5	18.00%
6	21.75%
7	23.50%
8	25.25%
9	27.00%
10	29.00%

- 16.4 The following table prepared by Access Economics<sup>22</sup> illustrates the percentage change in the effective price of a vehicle as a result of the adoption of the statutory rates listed in the table above.

**INCREASE IN EFFECTIVE VEHICLE PRICE OVER CURRENT FBT ARRANGEMENT (PERCENT) THREE YEARS**

<b>FBT Arrangement</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>
Employee post-tax contribution: Total sales	0.2	-3.1	-3.7	1.3	-2.4	-7.0	3.5
Employee post-tax contribution: Local sales	0.0	-4.3	0.0	9.3	0.0	-7.0	2.6
No Employee post-tax contribution: Total sales	1.4	-4.0	-5.0	2.2	-3.9	-9.6	5.8
No Employee post-tax contribution: Local sales	0.9	-5.2	0.0	14.6	0.0	-9.6	4.3

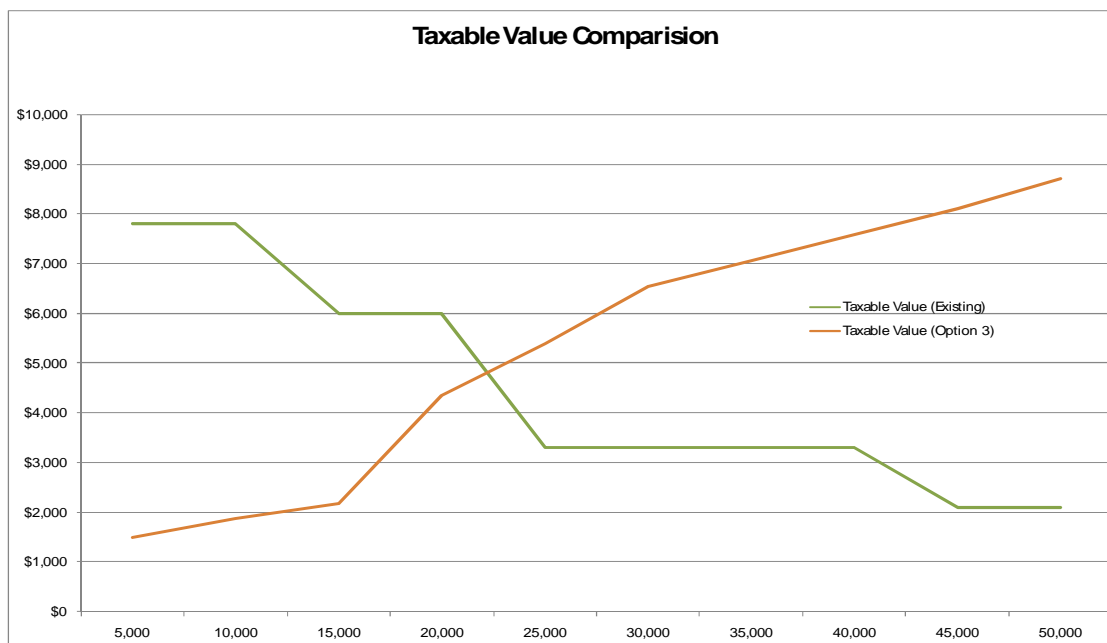
- 16.5 The model is designed to reward cars with low emissions.
- 16.6 Access Economics have estimated that the overall, demand for **total benefit vehicles** is expected to rise by 0.4% and 0.6%. The impact on different vehicle types varies greatly with SUV, light/people-mover and commercial sales expected to decrease, while large, medium, small, and upper-large/sport sales expected to increase.
- 16.7 Demand for all locally produced “benefit” vehicle is estimated to rise by 1.2 to 2.2% depending upon the assumed employee contribution.
- 16.8 The impact on the total vehicle market sales is minuscule at 0.1%.
- 16.9 Access Economics have also estimated that option 3 will produce **NO** overall positive reduction in carbon emissions per vehicle because the price impact on new motor vehicles is not significant enough to change buying behaviour towards greener motor vehicles.
- 16.10 Example Assumptions.

A vehicle with a Base Value of \$30,000 with a CO<sub>2</sub> rating of 200 g/km which traveled 20,000 km would emit 4.0 tonnes of CO<sub>2</sub>. This car would have a taxable value of \$2,175 (\$30,000 x 7.25% = \$2,175) where the vehicle was available for a full FBT year.

<sup>22</sup> Access Economics – Fringe Benefits Tax Analysis report



The following chart shows a comparison with the existing taxable value for a range of kilometers versus the Option 3 model.



**16.11 This option is not recommended because it does not reduce overall carbon emissions and does not reduce the overall “compliance” and administrative burden on employers and employees.**

## 17 Option 4 - Star Rating

17.1 It is proposed to replace the existing formula with a system based on the environmental rating of the vehicle using the government’s Green Vehicle Guide (**GVG**).

17.2 The GVG provides the following information in relation to the determination of the Star Rating for each vehicle:

*The Overall Rating is based on the sum of the air pollution and greenhouse ratings. Equal weighting is given to both these ratings to arrive at a combined GVG rating (out of 20), which then is translated into the star rating (as shown in the table below).*

Overall Rating	Combined Air Pollution & Greenhouse Score
★★★★★	combined score $\geq 16$
★★★★☆	$15 \leq$ combined score $< 16$
★★★★	$14 \leq$ combined score $< 15$
★★★☆☆	$11.5 \leq$ combined score $< 14$
★★★	$9.5 \leq$ combined score $< 11.5$

Overall Rating	Combined Air Pollution & Greenhouse Score
★★★★	8 <= combined score < 9.5
★★★	6.5 <= combined score < 8
★★	5 <= combined score < 6.5
★	combined < 5

The **Air Pollution Rating** is based on the level of air pollutant emissions allowable under the standard to which the particular vehicle has been successfully tested to for supply to the Australian market.

The main greenhouse gas emitted by motor vehicles is carbon dioxide (CO<sub>2</sub>). The level of CO<sub>2</sub> emissions is linked to the amount of fuel consumed by the vehicle, and the type of fuel used. All new vehicle models up to 3.5 tonnes gross vehicle mass sold in Australia are tested to determine both the fuel consumption and the level of CO<sub>2</sub> emissions. This information is displayed on a Fuel Consumption Label attached to the windscreen of new vehicles.

17.3 The GVC list the following vehicles with the best star ratings:

Vehicle	Rating
smart fortwo	★★★★★
Toyota Prius	★★★★★
Fiat 500	★★★★★
Fiat Punto	★★★★★
Toyota Yaris	★★★★★
Citroen C3	★★★★★
Fiat Ritmo	★★★★★
Audi A3	★★★★★
Honda Civic	★★★★
Peugeot 207	★★★★
Audi A4	★★★★
Hyundai i30	★★★★
Toyota Corolla	★★★★
Mercedes-Benz A200	★★★★
Mercedes-Benz B200	★★★★
Honda Civic Hybrid	★★★★
Lotus Elise	★★★★
Mercedes-Benz C200K	★★★★

Vehicle	Rating
Kia Cerato	★★★★★
Lexus GS450H	★★★★★

The top selling vehicles have the following ratings:

Type	Vehicle	Overall Rating	Green-house Rating (10=Best)	Air Pollution Rating (10=Best)	Fuel Cons (L/100 km)
Large	Holden Commodore	★★★★	5	5	10.8
Large	Ford Falcon	★★★★	5	5	10.1
Large	Toyota Camry	★★★★★	6	8.5	8.9
Large	Toyota Aurion	★★★★★	5.5	8.5	9.9
Large	Mazda 6	★★★★★	6.5	6.5	8.4
Large	Honda Accord	★★★★★	5.5	8.5	10
Large	Subaru Liberty	★★★★★	6	6.5	9
Large	Mercedes-Benz C Class	★★★★★	5.5	8.5	9.6
Large	Mitsubishi 380	★★★★	5	5	10.8
Large	Honda Accord Euro	★★★★★	6	6.5	9.1
Medium	Toyota Corolla	★★★★★	7	8.5	7.3
Medium	Mazda 3	★★★★★	6.5	5	8.2
Medium	Honda Civic	★★★★★	7	8.5	6.9
Medium	Mitsubishi Lancer	★★★★	6	5	8.8
Medium	Ford Focus	★★★★★	7	6.5	7.1
Medium	Volkswagen Golf	★★★★★	7	6.5	7.5
Medium	Subaru Impreza	★★★★★	6	6.5	8.8
Medium	Kia Rio	★★★★★	7.5	5	6.7
Medium	Hyundai i30	★★★★★	7	5	7.2
Medium	Holden Viva	★★★★★	7	6.5	7.4
Small	Toyota Yaris	★★★★★	7.5	6.5	6
Small	Hyundai Getz	★★★★★	7.5	5	6.1
Small	Holden Astra	★★★★★	7	6.5	7.2
Small	Mazda 2	★★★★★	7.5	5	6.4
Small	Suzuki Swift	★★★★★	7	5	6.3

Type	Vehicle	Overall Rating	Green-house Rating (10=Best)	Air Pollution Rating (10=Best)	Fuel Cons (L/100 km)
Small	Holden Barina	★★★★☆	7	6.5	6.9
Small	Kia Rio	★★★★☆	7.5	5	6.7
Small	Hyundai i30	★★★★☆	7	5	7.2
Small	Honda Jazz	★★★★☆	8	5	5.7
Small	Nissan Tiida	★★★★☆	6.5	5	7.6

- 17.4 McMillan Shakespeare is proposing the following option for consideration for determining the taxable value of a benefit vehicle.

$$\text{Taxable Value} = (A \times B \times C)/D - E$$

Where:

A = the base value of the car

B = the statutory percentage **(based on the car's environmental rating)**

C = the number of days in the FBT year when the car was used or available for private use of employees

D = the number of days in the FBT year

E = the employee contribution

Rating	Green Vehicle Guide Rating	Statutory Rate Revenue Neutral
Green	4 -5 Stars	6.25%
Amber	3.5 Stars	10.00%
Grey	3 Stars	18.25%
Black	Less than 3 Stars	23.50%

- 17.5 The following example illustrates the point strongly that the FBT option 4 will reward and incentivise employees and employers for selecting new motor vehicles that have a higher star rating.

Vehicle	Star Rating	Value (RRP)	Current Taxable Value	New Taxable Value	% Change
Prius 5D Hatchback	5	\$37,400	\$7,480	\$2,338	-69%
Toyota Landcruiser Prado GX 4WD Wagon - Petrol	2.5	\$46,670	\$9,334	\$10,967	18%

Current Taxable Value based on each vehicle travelling 20,000 km pa. Calculations based on McMillan Shakespeare Fleet.

- 17.6 The statutory fractions that are proposed have been calculated by Access Economics to provide a revenue neutral FBT outcome and are based on the dataset of vehicles provided to Access Economics by McMillan Shakespeare.

- 17.7 The GVG<sup>23</sup> is the source of the vehicle rating.
- 17.8 This formula is simple for employers to administer as the information required to determine the Star Rating is readily available and could be easily displayed on the vehicle's registration label. It also provides the ATO with a simple audit tool because the information required for each vehicle is linked to the vehicle's registration. This is not the case with the collection of odometer readings, therefore ATO compliance would improve significantly.
- 17.9 This use of this type of formula reinforces the Government's desire to reduce vehicle emissions by directly linking the emissions of the vehicle to FBT. At the same time, it underpins the government's commitment to *A New Car Plan For A Greener Future* and a viable, sustainable car manufacturing industry
- 17.10 All new cars in Australia have a star rating. "Company cars" without a star rating (older than 3 years) can be managed by providing employers with sufficient notice prior to implementation. A medium term transition will manage such issues easily and efficiently (see section 20.3 relating to transition).
- 17.11 The basic premise of this model is that vehicles with low emissions have a lower taxable value than those with higher emissions. This model will "shift" both employer and employee buying behaviour in favour of selecting greener motor vehicles as "company cars". It will also provide a source of demand that compliments the incentives the Government is providing on the supply side.
- 17.12 The proposed environmental based formula retains a tax concession for company cars. This new environmental based formula will continue to enable the Government to support the vehicle industry but with a focus on better environmental outcomes. That is, the tax concession is specifically designed to reward "greener" company cars (3 to 3.5 stars and above) and penalise "black" company cars (less than 3 stars). It also supports business by providing an additional incentive to purchase and lease vehicles which reduce emissions.
- 17.13 This option is easily understood by drivers and companies without radical change and is similar to other consumer purchases with environmental ratings such as washing machines, fridges and other household appliances. It can also be easily changed in the future to support the Government's environmental objectives.

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<sup>23</sup> [www.greenvehicleguide.gov.au](http://www.greenvehicleguide.gov.au)

17.14 The Access Economics report<sup>24</sup> provides the following data on the effective vehicle price increase:

**INCREASE IN EFFECTIVE VEHICLE PRICE OVER CURRENT FBT ARRANGEMENT (PERCENT) THREE YEARS**

<b>FBT Arrangement</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>
Employee post-tax contribution: Total sales	2.4	-3.2	-4.0	1.3	-2.5	-6.2	6.4
Employee post-tax contribution: Local sales	2.4	-4.1	0.0	9.7	0.0	-6.2	4.1
No Employee post-tax contribution: Total sales	3.8	-4.0	-5.6	1.8	-3.9	-8.5	10.0
No Employee post-tax contribution: Local sales	3.9	-5.4	0.0	14.7	0.0	-8.5	7.9

17.15 The model provides a price decrease for small cars and an increase for large vehicles which reflects the star rating of the vehicle in most cases.

17.16 The impact in motor vehicle sales (benefit vehicles) is provided in the following table:

**ESTIMATED IMPACT ON BENEFIT VEHICLE SALES (PERCENT) THREE YEARS**

<b>FBT Arrangement</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>
Employee post-tax contribution: Total sales	-5.4	-11.5	14.0	3.1	-11.0	38.1	-6.0
Employee post-tax contribution: Local sales	-5.4	-10.4	0.0	14.5	0.0	28.3	-4.0
No employee post-tax contribution: Total sales	-8.9	-13.6	18.6	4.9	-15.0	48.2	-9.1
No employee post-tax contribution: Local sales	-8.9	-12.2	0.0	22.4	0.0	36.1	-7.3

<sup>24</sup> Access Economics – Fringe Benefits Tax Analysis report

- 17.17 The modeling by Access Economics predicts a reduction in vehicle demand of 0.04%. This is to be expected based on the types of vehicles that are currently available i.e. there is not a lot of choice in the 'green' vehicle market.
- 17.18 Overall benefit vehicles account for around 35% of locally produced sales, so the estimated impact on total local demand is somewhat higher, with the estimated decrease ranging from 1.1% (employee contribution) to 1.7% (no employee contribution). Again, this increase largely reflects the impact on local large vehicle demand.
- 17.19 Since option 4 is mostly neutral with regard to the impact on numbers of vehicles sold another measure of the effectiveness of the option 4 is the reduction of emissions.
- 17.20 Additionally, the possible negative impact on sales can be dealt with by transition arrangements (discussed in Part 20 on page 50).
- 17.21 The average reduction in emissions per vehicle affected by the option 4 is between 17 and 20 percent per vehicle per annum. This reflects the relative efficiency of the vehicles purchased under the old scheme versus the new scheme i.e. the new cars are more carbon friendly than the cars that they are replacing.
- 17.22 It should be noted that less efficient vehicles emit roughly 5 tonnes per year while more efficient vehicles emit roughly 4 tonnes per year. Therefore each new car which replaces an old car will provide about a 20% saving in carbon emissions per vehicle or approximately 1 tonne of CO<sub>2</sub> per replacement vehicle. Therefore both immediately and over the longer term there will be a positive outcome on the environment in terms of a reduction in carbon emissions. Furthermore, if additional unnecessary kilometres are being travelled by employees under the current FBT regime, we would expect this practice to cease under Option 4. Therefore, even further reduction in carbon emissions would prevail.
- 17.23 The ACF in their 2009-10 Budget submission<sup>25</sup> have also submitted that the existing formula should be replaced with the following:

<b>Green Vehicle Guide Rating</b>	<b>Statutory Fraction*</b>
4 -5 Stars	<b>7.5%</b>
3.5 Stars	<b>12.0%</b>
3 Stars	<b>20.0%</b>
Less than 3 Stars	<b>24.0%</b>

- 17.24 The submission states:

*The FBT concessions for company cars should be restructured to create positive incentives for efficient vehicles, remove perverse incentives to drive more, generate revenue, and complement efforts to re-tool the Australian car industry for cleaner vehicle production (including through the Green Car Innovation Fund).*

*Economic modelling by Access Economics and Lateral Economics commissioned by McMillan Shakespeare indicates that the above revised formula for company cars would result in a net positive impact on government revenue of \$186 million annually.*

<sup>25</sup> ACF submission to Department of the Treasury Priorities for the Federal Budget 2009-10 January 2009

17.25 In the ACF model there is an increase in FBT revenue. Likewise, there will be a substantial reduction in carbon emissions (-20% or -1 tonne per motor vehicle). Each new company car that comes into the system that replaces an older private vehicle or older company car which is more likely to have higher emissions that will further add to the reduction in vehicle CO<sub>2</sub> emissions.

17.26 The advantages and disadvantages of this option are summarised in the following table:

Stakeholder	Advantages
Employer	<ul style="list-style-type: none"> <li>▪ Tax concessions (lower costs).</li> <li>▪ Simple administration.</li> <li>▪ Recruitment and retention tool.</li> <li>▪ Able to reduce carbon emissions.</li> </ul>
Employees	<ul style="list-style-type: none"> <li>▪ Tax concession (lower costs).</li> <li>▪ Remuneration benefits.</li> <li>▪ Choice of motor vehicle.</li> <li>▪ Making a contribution to reducing carbon emissions</li> </ul>
ATO	<ul style="list-style-type: none"> <li>▪ Simple administration.</li> <li>▪ High level of compliance.</li> </ul>
Motor Vehicle Industry	<ul style="list-style-type: none"> <li>▪ Increased sales for greener vehicles</li> <li>▪ Supports the Green Car Plan</li> <li>▪ Jobs.</li> <li>▪ Industry viability.</li> </ul>
Environmentalists	<ul style="list-style-type: none"> <li>▪ More new vehicles are on the road replacing older vehicles which are likely to have lower emissions.</li> <li>▪ "Encouragement" to drive extra kilometres by employees is eliminated.</li> </ul>

**17.27 Option 4 is highly recommended as the new basis for calculating FBT for motor vehicles. This option balances support for the Australian motor vehicle industry on the one hand, and positively impacts the environment on the other. It changes the existing FBT regime into a model based on positive environmental impacts rather than tax concessions for the most kilometres driven.**

## 18 The United Kingdom Experience

18.1 From April 2002 the tax on company cars was changed from a statutory formula similar to the current Australian to a formula based on the CO<sub>2</sub> emissions of the vehicle.

18.2 It was estimated in 2001 that Companies purchased approximately 50 per cent of new cars in the UK and about 20 per cent of all vehicle miles are made in company cars. That is a major producer of CO<sub>2</sub> emissions

18.3 The Government has published two reports on the effectiveness of this change in 2004 and 2006.



18.4 The 2004 report<sup>26</sup> states that:

*As this report shows, the change to company car tax is a significant factor in this. The reform has clearly changed the way businesses think about car fleet policies and changed the behaviour of those choosing company cars, be they the fleet manager or company car driver. Car manufacturers have greater incentives than ever to produce greener, more fuel-efficient cars, and CO<sub>2</sub> emissions data is now commonplace on car advertisements.*

*In 2003 alone the reform has saved around 0.15 to 0.2 million tonnes of carbon, equivalent to around 0.5% of the CO<sub>2</sub> emissions from all road transport. Early indications from the evaluation of the company car tax reform suggest that we are on course to meet the originally anticipated reductions CO<sub>2</sub> emissions of between 0.5 and 1 million tonnes of carbon per year in the long-run. This is a significant contribution to our target to reduce CO<sub>2</sub> emissions by 20 per cent by 2010. The reform has also eliminated the incentive for company car drivers to drive unnecessary extra business miles for tax purposes, reducing business travel by an estimated 300 – 400 million miles last year, helping to reduce congestion.*

*The Government recognises that company cars are very important to businesses in the UK and to the economy as a whole. We will continue to monitor and evaluate the company car tax regime to ensure that the charge is appropriate, and achieving our goal in driving down harmful emissions and pollutants.*

18.5 The results in 2006<sup>27</sup> are as follows:

- *The company car tax reform is leading to significant reductions in CO<sub>2</sub> emissions from cars.*
- *The results suggest that the company car tax reform is encouraging substantial numbers of people to choose cars with lower CO<sub>2</sub> emissions figures.*
- *The survey results suggest that around 60% of company car drivers who were given a choice of company car by their employers were influenced by the company car tax reform and as a result chose cars with lower CO<sub>2</sub> emissions figures.*
- *The number of company cars has reduced to around 1.2 million in 2005 compared with around 1.6 million in 2001. (The estimate in the first published evaluation report was that there would be around 1.35 million company cars at the end of 2003.) The company car tax reform is a major reason for this.*
- *The company car tax reform is leading to significant reductions in CO<sub>2</sub> emissions from cars. This was around 0.2 - 0.3 MtC for 2005 and may increase to around 0.35 - 0.65 MtC for 2010 and reach a maximum level of savings in the long run of around 0.4 - 0.9 MtC per year towards the end of the next decade.*
- *The results suggest that the company car tax reform is encouraging substantial numbers of people to choose cars with lower CO<sub>2</sub> emissions figures. Average CO<sub>2</sub> emissions figures from company cars were around 15g/km lower in 2004 than would have been the case if the reforms*

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<sup>26</sup> Report on the Evaluation of the Company Car Tax Reform, Inland Revenue, April 2004

<sup>27</sup> Report on the Evaluation of the Company Car Tax Reform: Stage 2 Her Majesty's Revenue & Customs 22 March 2006

*had not taken place. This estimate refers to the impact of the company car tax reform over and above the general reduction in CO<sub>2</sub> emissions from cars over recent years.*

- *The survey results suggest that around 60% of company car drivers who were given a choice of company car by their employers were influenced by the company car tax reform and as a result chose cars with lower CO<sub>2</sub> emissions figures.*

18.6 The UK method for taxing company cars provides valuable insights into the effects of replacing the taxing of company cars with an environmental basis rather than kilometers travelled. These reports provide guidance for the McMillan Shakespeare models that are based on the carbon emissions of the vehicle. The UK experience strongly supports and establishes clear precedent for the McMillan Shakespeare Option 4 preference.

## **19 Recommendations**

19.1 McMillan Shakespeare Limited recommends the following in relation to the application of FBT to motor vehicle benefits:

- FBT remains an employer tax;
- An FBT concession remains in place for benefit vehicles;
- The following statutory percentages are adopted from 1 April 2010 for calculating the taxable value of a benefit vehicle:

<b>Km Range</b>	<b>Statutory Rate</b>
0 -14,000	29.00%
14,001 - 16,000	23.50%
16,001 - 18,000	21.25%
18,001 - 20,000	19.00%
20,001 - 22,000	16.75%
22,001 - 24,000	14.50%
24,001 - 26,001	12.25%
26,001 - 34,000	11.25%
34,001 - 40,000	10.00%
40,000 +	7.75%

- The following statutory percentages are adopted from 1 April 2016 for calculating the taxable value of a benefit vehicle:

Rating	Green Vehicle Guide Rating	Statutory Rate
Green	4 -5 Stars	6.25%
Amber	3.5 Stars	10.00%
Grey	3 Stars	18.25%
Black	Less than 3 Stars	23.50%

19.2 McMillan Shakespeare believes that our recommendation meets the following criteria:

- Support for the maintenance of a local vehicle manufacturing industry in both the short and long term;
- Provides sufficient lead in time to enable the employers, employees and industry to adjust;
- Enables an immediate impact in relation to the reduction of carbon emissions by company cars;
- No additional workload for employers and employees and is easily understood;
- Provides a solution for reducing carbon emissions consistent with the Government's objectives;
- Is a cost neutral outcome for government;
- Provides incentives for employers and employees to reduce their carbon emissions;
- Retains the FBT concession for motor vehicles and therefore viable sales levels to support the motor vehicle industry;
- Complements the support for the Government's new car plan;
- Enables the local manufacturing industry sufficient lead in time to support customer demand;
- Supports the community's expectation to encourage greener cars;

## 20 Implementation and Transition Arrangements

- 20.1 The success of the recommendation provided by McMillan Shakespeare is dependent on a successful implementation strategy.
- 20.2 The major change does not occur until 1 April 2016 which enables all stakeholders sufficient time to be consulted about the implementation and to make whatever adjustments are necessary.

20.3 The following Transition Rules are proposed:

- From 1 April 2010, implement the Bracks review proposed statutory formula for calculating FBT for motor vehicles as a temporary transition measure.
- From 1 April 2016, the taxable value of all car benefits will be determined in accordance with the new star rating where the vehicle is leased or purchased on or after 1 April 2016 (option 4 star rating). (The announcement of this change, should be made at the sametime as the announcement about the change to the current statutory formula being replaced by the Bracks review formula).
- If the vehicle is leased or purchased between 1 April 2012 and 31 March 2016 , then the employer can elect to use either of the formulas to determine the taxable value of the vehicle subject to the following conditions:
  - The election cannot be changed;
  - If the vehicle is released after 1 April 2016 then the star formula must be used;
- If the vehicle is leased or purchased prior to 1 April 2012 then the star rating must be used from 1 April 2016;
- From 1 April 2020 all vehicles must use the star method irrespective of purchase date.

The objectives of the Transition Rules are to:

- Provide sufficient time to all stakeholders to transition to the new arrangements with minimal disruption;
- Enable the local car industry to meet the requirements and to minimize the impact on the sales of locally produced vehicles;
- Simplify the transition arrangements;
- Minimize any disruption to business, the workforce through the transition to the new formula;
- Maximise the opportunity to reduce CO<sub>2</sub> emissions;

## 21 What does the Future Look Like

- 21.1 McMillan Shakespeare anticipates that by 2014 all vehicles will have one star above their current 2008 rating. McMillan Shakespeare requested that Access Economics model the impact of this change. Based on sample estimates this implies a roughly 20% reduction in average CO<sub>2</sub> emissions.

- 21.2 The impact in the effective vehicle price is illustrated in the table below which shows a uniform decrease in the effective vehicle price:

**INCREASE IN EFFECTIVE VEHICLE PRICE OVER CURRENT FBT ARRANGEMENT (PERCENT) THREE YEARS**

<b>FBT Arrangement</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>
Employee post-tax contribution: Total sales	-6.8	-6.6	-6.3	-5.0	-5.9	-11.7	-3.3
Employee post-tax contribution: Local sales	-6.9	-6.5	0.0	-2.2	0.0	-11.7	-3.3
No Employee post-tax contribution: Total sales	-9.5	-8.8	-9.2	-7.3	-8.9	-16.0	-5.0
No Employee post-tax contribution: Local sales	-9.6	-8.8	0.0	-3.2	0.0	-16.0	-5.0

- 21.3 Access Economics also reported that given the variation in effective prices changes, there will be relatively large changes in market shares of the different types of benefits vehicles.
- 21.4 Overall, the demand for total benefit vehicles is expected to rise by between 6.1% and 9.1%. The table below shows that large, medium and upper/large sales are expected to increase significantly, while small, SUV and commercial sales are expected to rise modestly.

- 21.5 In addition the demand for all locally produced benefits vehicles is estimated to rise by 9.5% (employee contribution) to 12.5% (no employee contribution). This reflects the strong growth in large vehicle sales because these vehicles will have a better tax concession than previously.

**ESTIMATED IMPACT ON BENEFIT VEHICLE SALES (PERCENT)**

<b>FBT Arrangement</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>
Employee post-tax contribution: Total sales	10.4	13.1	2.5	2.5	-7.7	53.0	3.4
Employee post-tax contribution: Local sales	10.4	12.3	0.0	0.0	0.0	40.7	3.4
No employee post-tax contribution: Total sales	13.7	15.8	5.8	5.1	-4.6	60.7	5.2
No employee post-tax contribution: Local sales	13.8	15.1	0.0	1.0	0.0	47.8	5.2

With total benefit sales estimated to be roughly 21% of total vehicle sales, the aggregate demand for vehicles is expected to rise by 1.3% to 1.9% with local sales rising by 3.9 to 5.2%.

- 21.6 There is also expected to be a percentage reduction in emissions despite the significant increase in benefit sales. **Total emissions for benefit vehicles are expected to fall by 12.8 to 15.1%.**
- 21.7 The replacement of older company cars with newer company cars which are more environmentally friendly and the "growth" in company cars replacing older private cars will produce even greater reductions in emissions.
- 21.8 It should be noted, that all of the calculations undertaken by Access Economics provide a "snapshot" in time. We would expect further reductions in carbon emissions from motor vehicles as a result of any change in driver behaviour not driving "unnecessary kilometres" to achieve lower FBT costs. (So called March madness).

## **22 Meeting with Review Panel**

- 22.1 McMillan Shakespeare would welcome the opportunity to present to some or all of the members of the Review panel to add further detail to this submission and to provide further insight on the “benefit” motor vehicle industry.

## **23 Further Information**

For further information on this submission please contact either:

- Anthony Podesta, Executive Director on 03 9635 0100 or [anthony.podesta@mcms.com.au](mailto:anthony.podesta@mcms.com.au)
- Michael Kay, Managing Director and Chief Executive Officer on 03 9900 5678 or [michael.kay@mcms.com.au](mailto:michael.kay@mcms.com.au).

## **24 About McMillan Shakespeare Limited**

McMillan Shakespeare Limited is a public listed company on the Australian Stock Exchange (ASX Code MMS). We provide remuneration services to approximately 1,000 employers throughout Australia, including administration services for salary packaging on behalf of employers to about 200,000 employees and novated motor vehicle leasing services for about 30,000 novated motor vehicle leases.

Our clients include federal and state government departments and agencies, statutory authorities, local government, Public Benevolent Institutions, public and not-for profit hospitals, independent schools and private sector companies.

## **Appendix 1**

**Fringe benefits Tax Analysis a Report for McMillan Shakespeare Limited by Access Economics Pty Limited**





16 March 2009

# Fringe Benefit Tax Analysis

Report by Access Economics Pty Limited  
and Lateral Economics for

**McMillan Shakespeare Limited**

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## EXECUTIVE SUMMARY

Access Economics and Lateral Economics were commissioned by McMillan Shakespeare (MCMS) to prepare estimates of both the revenue impact and auto demand effects of alternative Fringe Benefit Tax (FBT) schemes proposed by MCMS.

Access Economics and Lateral Economics have not offered an opinion on the efficacy of the MCMS-proposed policies in this report. Therefore this report should not be interpreted as advocating or opposing the options proposed by MCMS.

MCMS has identified four options that could be used to replace the existing FBT formula:

- ❑ **Option 1** is a modified version of the current FBT system, with a greater number of gradations in the statutory rate scale.
- ❑ **Option 2** is modelled on the United Kingdom's Emissions Rating scheme, with lower emission vehicles (measured by their CO2 emissions per kilometre) subject to a lower rate.
- ❑ **Option 3** incorporates aspects of both the UK CO2 scheme and the current FBT scheme by basing the statutory rate on total emissions, with the rate schedule rising as vehicle mileage (and CO2 emissions) increases.
- ❑ **Option 4** proposes a statutory rate based on the Green Vehicle Guide (GVG) star rating of the vehicle. Variant 1 (hereafter Option 4-1) uses statutory rates based on the 2008 GVG environmental star ratings, whereas Variant 2 (hereafter Option 4-2) uses statutory rates based on assumed 2014 GVG environmental star ratings.

The statutory rates for each option have been proportionally adjusted and are therefore revenue neutral, with the exception of Option 4-2, where the statutory rates are not revenue neutral (i.e. impacts in 2014 are calculated using 2008 rates) to allow for comparison with the other options.

## REVENUE IMPACT OF MCMS FBT OPTIONS

Estimates of the first round revenue impact of MCMS-proposed FBT options are based on detailed unit record data provided by MCMS that includes information on 20,280 novated lease holders. These data were used in the following way:

- ❑ Step 1: Estimate the aggregate taxable value of 'benefit' for the sample reported in the MCMS dataset (the sample varies according to the option because some criteria are only available for a limited subset of the sample).
- ❑ Step 2: Estimate the aggregate taxable value of the 'benefit' for the sample reported in the MCMS dataset under an initial set of statutory rates provided by MCMS for the four options.
- ❑ Step 3: Estimate the percentage change in revenue for a given proposal (and common sample) using the aggregate taxable value of 'benefit' vehicles calculated in the previous steps.
- ❑ Step 4: Proportionally adjust original statutory rates provided by MCMS to generate revenue neutral statutory rates.

With the exception of Option 1, MCMS's initial statutory rates yielded tax revenue in excess of the amount estimated under the existing FBT arrangement. In these cases the initial

statutory rates were reduced to yield revenue neutral rates. In the case of Option 1 the rates were increased. For example, under Option 4-1, the taxable value of the 'benefit' vehicle (i.e. a vehicle that is concessional FBT) is based on the same formula as the current arrangement, however it uses the statutory rate scale reported in the table below, which is linked to the GVG's environmental star ratings.

**STATUTORY RATE UNDER MCMS OPTION 4-1**

Rating	Green Vehicle Guide Rating	Initial Statutory Rate	Revenue Neutral Statutory Rate
Green	4 -5 Stars	7%	6.00%
Amber	3.5 Stars	11%	9.50%
Grey	3 Stars	20%	17.25%
Black	Less than 3 Stars	26%	22.25%

Applying the estimation methodology outlined above, the FBT revenue paid by users of 'benefit' vehicles under MCMS's initial Option 4-1 statutory rates is estimated to be 17% higher than the current FBT level. In value terms, Option 4-1 is expected to add \$314 million to revenue in 2008-09, yielding total revenue for this FBT line item of \$2,189 million in 2008-09. To put this scheme on a revenue basis with regard to the current scheme, the initial statutory rate schedule was adjusted proportionally to the nearest  $\frac{1}{4}$  of a percentage point.

## AUTO DEMAND IMPACT OF MCMS OPTIONS

Replacing the current concessional FBT arrangement for 'benefit' vehicles with MCMS FBT options will also impact upon the Australian automotive industry in terms of price, market structure and demand. To determine the possible impacts, four scenarios are analysed:

- ❑ **Scenario 1:** Removal of the current concessional FBT arrangement for 'benefit' vehicles.
- ❑ **Scenario 2:** The existing FBT arrangement for 'benefit' vehicles is replaced with Option 3 (i.e. statutory rates are based upon total emissions).
- ❑ **Scenario 3:** The existing FBT arrangement for 'benefit' vehicles is replaced with Option 4-1 (i.e. statutory rates are based upon GVG star ratings).
- ❑ **Scenario 4:** The existing FBT arrangement for 'benefit' vehicles is replaced with Option 4-2 (i.e. statutory rates are based upon MCMS's assumed 2014 GVG star ratings).

The auto demand analysis relies on a sample of 'benefit' vehicle data provided by MCMS and sale price and quantity data for the broader automotive industry provided by the Federal Chamber of Automotive Industries (FCAI) and Glass's Information Services Pty Ltd.

Data provided are used to estimate an econometric model of Australian automotive demand. This model is a partial equilibrium model in the sense that it assumes that the overall spending on automobiles remains fixed and, subject to that constraint, determines the value and volume of demand for different vehicle types based on changes in relative vehicle prices. In the case of the FBT analysis, the model is further simplified by assuming that the market is segmented into those buyers that plan to consume a 'benefit' vehicle and those that do not. Therefore the underlying assumption is that the overall spending on 'benefit' vehicles remains fixed.

Detailed data provided by MCMS on the annual income, vehicle leasing and operating costs, kilometres travelled and vehicle types of current leasing customers is used to calibrate the model, with regard to current FBT benefits, and values and volumes of demand for different types of 'benefit' vehicles.

### Key Findings

Completely removing the current FBT arrangement implies very large effective price increases (in the range of 30% to 40%) for 'benefit' vehicles. Accordingly, the Scenario 1 modelling results demonstrate that total 'benefit' vehicle sales are expected to fall 25% to 31% below their current level. The locally produced large vehicle market is especially impacted, in line with the findings that 'benefit' vehicles account for 38% of large vehicle sales and 69% of all locally produced 'benefit' vehicles sold are large vehicles.

The modelling indicates that there is a negligible impact on the total volume of vehicle sales under Scenarios 2 and 3, which is unsurprising given that the statutory rates are revenue neutral. However, there are important compositional changes to the types of vehicles sold. In general, there is a shift towards fuel efficient vehicles, driven by changes in the relative effective prices of 'benefit' vehicles. In particular, demand for imported small vehicles and SUVs is expected to increase, while demand for locally produced large and medium vehicles and SUVs is expected to decrease.

Scenario 3, the MCMS-preferred option, yields the following results:

- ❑ The effective price of large vehicles will rise by 2.4% to 3.9%. The effective prices of other relatively high emitting vehicles, such as local SUVs and commercial vehicles, are also estimated to rise, while the effective prices of smaller vehicles, including imported SUVs, are expected to fall.
- ❑ Demand for total 'benefit' vehicles is expected to fall by 0.1% to 0.4%. The impact on vehicle segments varies considerably, with small vehicle, SUV and upper/large vehicle sales expected to increase, whereas large, medium and light/people-mover vehicle sales are expected to decrease.
- ❑ Demand for locally produced 'benefit' vehicles is estimated to fall by 4.4% to 7.8%.
- ❑ There will be a negligible impact on the total sales of all vehicle types, with total sales expected to fall by less than 0.1%. However, total sales of locally produced vehicles (which account for a large proportion of 'benefit' vehicles) are estimated to decrease within the range of 1.5% to 2.7%.
- ❑ The fall in demand of high emitting 'benefit' vehicles is offset by an increase in demand of lower emitting 'benefit' vehicles, which implies a modest reduction in total 'benefit' vehicle emissions. The average reduction in emissions per substituted 'benefit' vehicle is around 20% (i.e. outgoing less-efficient vehicles emit roughly 5 tonnes per year, while the incoming more-efficient vehicles emit roughly 4 tonnes per year).

In contrast, under Scenario 4, demand for total 'benefit' vehicles is expected to rise by 6.5% to 9.2%, depending on assumed employee contribution. There is strong growth in large and medium vehicle sales, especially locally produced large vehicles, where sales are expected to rise by 3.5% to 4.6%. These results reflect the lower effective prices that are implied by higher efficiency (i.e. by 2014, emissions per vehicle are assumed to be 20% below their current levels). Significantly, after taking into account the increase in sales, total 2014 'benefit' vehicle emissions are expected to fall by 12.8% to 15.1% below the current level.

### Access Economics and Lateral Economics, 2009

# 1. INTRODUCTION

Access Economics and Lateral Economics were commissioned by McMillan Shakespeare (MCMS) to prepare estimates of both the revenue impact and auto demand effects of alternative Fringe Benefit Tax (FBT) schemes proposed by MCMS.

Access Economics and Lateral Economics have not offered an opinion on the efficacy of the MCMS-proposed policies in this report. Therefore the report should not be interpreted as advocating or opposing the options proposed by MCMS.

MCMS has identified four options that could be used to replace the existing FBT formula:

- ❑ **Option 1** is a modified version of the current FBT system, with a greater number of gradations in the statutory rate scale.
- ❑ **Option 2** is modelled on the UK's Emissions Rating scheme, with lower emission vehicles (measured by their CO2 emissions per kilometre) subject to a lower rate.
- ❑ **Option 3** incorporates aspects of both the UK CO2 scheme and the current FBT scheme by basing the statutory rate on total emissions, with the rate schedule rising as vehicle mileage (and CO2 emissions) increase.
- ❑ **Option 4** proposes a statutory rate based on the Green Vehicle Guide (GVG) star rating of the vehicle. Variant 1 (hereafter Option 4-1) uses statutory rates based on the 2008 GVG environmental star ratings, whereas Variant 2 (hereafter Option 4-2) uses statutory rates based on assumed 2014 GVG environmental star ratings.

Section 2 of the report outlines the existing FBT arrangement and then provides estimates of the first round (i.e. no behavioural change) revenue impact of the four options proposed by MCMS.

Section 3 describes the econometric model of Australian auto demand and explores the impact on the Australian automotive industry under four scenarios:

- ❑ **Scenario 1:** Removal of the current concessional FBT arrangement for 'benefit' vehicles.
- ❑ **Scenario 2:** The existing FBT arrangement for 'benefit' vehicles is replaced with Option 3 (i.e. statutory rates are based upon total emissions).
- ❑ **Scenario 3:** The existing FBT arrangement for 'benefit' vehicles is replaced with Option 4-1 (i.e. statutory rates are based upon GVG star ratings).
- ❑ **Scenario 4:** The existing FBT arrangement for 'benefit' vehicles is replaced with Option 4-2 (i.e. statutory rates are based upon MCMS's assumed 2014 GVG star ratings).

The analysis relies heavily on a sample of 'benefit' motor vehicle data provided by MCMS. These data contain detailed unit records on 20,280 novated lease holders for the 2007-08 tax year. Typical caveats therefore apply with regard to micro-datasets in that they may not be representative of the population data. However, MCMS's dataset constitutes a relatively large share of the population of leased vehicles.

## 2. REVENUE IMPACT OF ALTERNATIVE FBT OPTIONS

MCMS has identified four options that could be used to replace the existing FBT arrangement for 'benefit' vehicles. This section provides estimates of the first round (i.e. no behavioural change) revenue impact of these proposals.

### 2.1 EXISTING FBT ARRANGEMENT

'Benefit' motor vehicles, which include privately registered vehicles operating under a novated lease, and government and non-government vehicles provided by employers for private use, are concessional tax for FBT.

Under the current FBT system, the taxable value of a 'benefit' vehicle is calculated using the statutory rate formula:

$$\text{Taxable Value} = A \times B \times C/D - E$$

where:

A = the cost value of the car

B = the statutory rate

C = the number of days in the FBT year when the car was used or available for private use of the employee

D = the number of days in the FBT year

E = the employee post-tax contribution (if any).

Table 1 sets out the statutory rates used in the existing FBT arrangement:

**TABLE 1: STATUTORY RATES FOR THE EXISTING FBT ARRANGEMENT**

Total kilometres travelled during the FBT year (annualised)	Statutory rate
Less than 15,000	26%
15,000 to 24,999	20%
25,000 to 40,000	11%
Over 40,000	7%

The actual FBT of a motor vehicle provided to the employee by the employer is calculated using the following formula:

$$\text{FBT} = \text{Taxable Value} \times \text{Gross-up factor} \times \text{FBT rate}$$

There is no official measure of the breakdown of FBT revenue by type of benefit. In order to make progress the analysis here follows the approach of Warren (2006) in estimating



revenue by type using the taxable value of benefit reported by the Australian Tax Office (ATO).<sup>1</sup>

According to the latest ATO tax statistics for tax-year 2005-06 the taxable value of benefits relating to cars using the statutory formula for the 2006-07 FBT year was \$1,621 million. Note this figure is net of Australian Government department FBT statistics.

Using a gross-up factor of 2.0647 and an FBT rate of 46.5% implies that the revenue collected from FBT due to cars using the statutory formula for the 2006-07 FBT-year was \$1,558 million (again this figure is net of Australian Government department FBT statistics). This revenue represented 46% of the total revenue collected for the 2006-07 FBT-year. Applying this method to earlier years suggests that this share has varied little over the life of the current taxing arrangement.

Table 2 applies this share to the Treasury's latest estimates of the future total FBT collections reported in Australian Government Budget Paper 1, Statement 5 to get an estimate of the expected revenue attributable to cars using the statutory formula. According to these estimates the expected revenue paid by 'benefit' vehicle users under the current statutory rate formula is \$1,875 million for 2008-09.

**TABLE 2: ESTIMATED REVENUE OF FBT OPTIONS USING INITIAL STATUTORY RATES**

<b>\$ million</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>
Total FBT	4,110	4,190	4,260	4,145
FBT - Cars using statutory formula	1,875	1,912	1,944	1,891
FBT – Option 1	1,684	1,717	1,745	1,698
FBT – Option 2	3,171	3,233	3,287	3,198
FBT – Option 3	2,597	2,648	2,692	2,619
FBT – Option 4-1	2,189	2,232	2,269	2,208

## 2.2 COSTING MCMILLAN SHAKESPEARE'S FBT OPTIONS

Estimates of the first round revenue impact of MCMS-proposed FBT options are based on detailed unit record data provided by MCMS that includes information on 20,280 novated lease holders. These data were used in the following way:

- ❑ Step 1: Estimate the aggregate taxable value of 'benefit' for the sample reported in the MCMS dataset (the sample varies according to the option because some criteria are only available for a limited subset of the sample).
- ❑ Step 2: Estimate the aggregate taxable value of the 'benefit' for the sample reported in the MCMS dataset under an initial set of statutory rates provided by MCMS for the four options.
- ❑ Step 3: Estimate the percentage change in revenue for a given proposal (and common sample) using the aggregate taxable value of 'benefit' vehicles calculated in the previous steps.
- ❑ Step 4: Proportionally adjust original statutory rates provided by MCMS to generate revenue neutral statutory rates.

<sup>1</sup> Warren, N. (2006) Fringe benefit tax design: Decision time, The Institute of Chartered Accountants in Australia, February 2006.

## 2.2.1 OPTION 1 – STATUTORY RATE BASED ON ANNUAL KILOMETRES TRAVELLED

Option 1 is a modified version of the current system, with a greater number of gradations in the statutory rate scale (see Table 3).

**TABLE 3: STATUTORY RATE UNDER OPTION 1**

Km range	Initial Statutory Rate	Revenue Neutral Statutory Rate
0 -14,000	26%	29.00%
14,001 - 16,000	21%	23.50%
16,001 - 18,000	19%	21.25%
18,001 - 20,000	17%	19.00%
20,001 - 22,000	15%	16.75%
22,001 - 24,000	13%	14.50%
24,001 - 26,001	11%	12.25%
26,001 - 34,000	10%	11.25%
34,001 - 40,000	9%	10.00%
40,000 +	7%	7.75%

The estimation methodology outlined above implies that the FBT revenue paid by users of 'benefit' vehicles under the initial Option 1 statutory rates provided by MCMS would be 10% lower than the current tax take. In other words, this option would reduce revenue by \$191 million in 2008-09, yielding total revenue for this line item of \$1,684 million in 2008-09 (see Table 2). This reflects the fact that the proposed scale imposes a lower burden per kilometre travelled than the current scheme.

The revenue neutral statutory rates under Option 1, which are the initial rates adjusted proportionally adjusted to the nearest ¼ of a percentage point, are reported in column 3 of Table 3.

These revenue estimates and tax rates estimates rely on the same basic information as that used in the current FBT scheme. This means that the estimates are based on a relatively large sample of novated lease holders, with around 88% of the total sample of 20,280 provided by MCMS used in the calculations. The shortfall reflects missing information on kilometres travelled or days the car was available (i.e. subject to FBT).

## 2.2.2 OPTION 2 – STATUTORY RATE BASED ON VEHICLES' EMISSIONS RATING (UK MODEL)

Option 2 is based on the UK's Emissions Rating scheme with lower emission cars (measured by their CO2 emissions per kilometre) subject to a lower statutory rate. MCMS's initial statutory rates for this option are reported in Table 4.

Applying the methodology implies that the FBT revenue paid by users of 'benefit' vehicles under the initial Option 2 statutory rates provided by MCMS would be 69% higher than the current tax take. In value terms option 2 is expected to increase revenue by \$1,296 million in 2008-09, raising total revenue for this line item to \$3,171 million in 2008-09 (see Table 2).

Column 3 of Table 4 reports the adjusted statutory rates under Option 2 that yield the same revenue as the current scheme. Again rates have been adjusted to the nearest ¼ of a percentage point.

**TABLE 4: STATUTORY RATE UNDER OPTION 2**

<b>CO2 Emissions (g/km)</b>	<b>Initial Statutory Rate</b>	<b>Revenue Neutral Statutory Rate</b>
< 140	5.0%	3.00%
145	6.3%	3.75%
150	7.5%	4.50%
155	8.8%	5.25%
160	10.0%	6.00%
165	11.3%	6.75%
170	12.5%	7.50%
175	13.8%	8.25%
180	15.0%	9.00%
185	16.3%	9.75%
190	17.5%	10.50%
195	18.8%	11.25%
200	20.0%	12.00%
205	21.3%	12.75%
210	22.5%	13.50%
215	23.8%	14.25%
220	25.0%	15.00%
225	26.3%	15.75%
230	27.5%	16.50%
235	28.8%	17.25%
> 235	30.0%	18.00%

The informational requirements for costing this option are greater than the current FBT scheme, since it requires data on the emissions rating of individual vehicles. MCMS's database has limited information on emissions, with CO2 emissions per kilometre reported for roughly 17% of the total 20,280 leased vehicle sample. In general, prediction error is inversely related to the size of the sample underlying the prediction, with smaller samples implying larger prediction errors. This suggests that there is a larger margin of error underlying the revenue estimates for Option 2 than would be expected if the full sample was used.

### **2.2.3 OPTION 3 – STATUTORY RATE BASED ON ACTUAL TONNES OF CO2 EMITTED**

Option 3 incorporates aspects of both the UK CO2 scheme and the current FBT scheme by basing the statutory rate on total tax year emissions. In contrast to the current schedule, the statutory rate schedule proposed by MCMS rises with vehicle mileage (see Table 5).

Repeating the earlier approach suggests that the FBT revenue paid by users of 'benefit' vehicles under the initial Option 3 statutory rates provided by MCMS would be 39% higher than the current tax take. In other words, total revenue for this line item under the initial statutory rates is expected to be \$2,597 million in 2008-09, which represents an expected increase in revenue by \$722 million (see Table 2).

**TABLE 5: STATUTORY RATE UNDER OPTION 3**

Tonnes of CO2	Initial Statutory Rate	Revenue Neutral Statutory Rate
1	7.0%	5.00%
2	8.5%	6.25%
3	10.0%	7.25%
4	20.0%	14.50%
5	25.0%	18.00%
6	30.0%	21.75%
7	32.5%	23.50%
8	35.0%	25.25%
9	37.5%	27.00%
10	40.0%	29.00%

Column 3 of Table 5 reports the proportionally adjusted statutory rate schedule under option 3 that yields the same revenue as the current FBT scheme.

#### **2.2.4 OPTION 4-1 – STATUTORY RATE BASED ON VEHICLES ENVIRONMENTAL RATING**

Option 4-1 proposes a statutory rate based on the overall environmental rating of the vehicle, where the environmental rating is explicitly tied to the 5 star environmental rating reported by the Green Vehicle Guide ([www.greenvehicleguide.gov.au](http://www.greenvehicleguide.gov.au)). The Green Vehicle Guide (GVG) ratings are calculated using data provided by manufacturing from testing vehicles against Australian standards. A vehicle's overall environmental rating is based on its air pollution and greenhouse ratings. Equal weighting is given to both these components to arrive at a combined GVG rating out of 20, which is then translated into a 5 star rating. More environmentally friendly vehicles have a higher star rating.

Under this option the taxable value of the 'benefit' is based on the same formula as the current arrangement, however it uses the statutory rate scale reported in Table 6, which is linked to the GVG's environmental star ratings.

**TABLE 6: STATUTORY RATE UNDER OPTION 4-1**

Rating	Green Vehicle Guide Rating	Initial Statutory Rate	Revenue Neutral Statutory Rate
Green	4 -5 Stars	7%	6.00%
Amber	3.5 Stars	11%	9.50%
Grey	3 Stars	20%	17.25%
Black	Less than 3 Stars	26%	22.25%

Using the estimation methodology outlined above implies that the FBT revenue paid by users of 'benefit' vehicles under MCMS's initial Option 4-1 statutory rates would be 17% higher than the current FBT take. In value terms, Option 4-1 is expected to add \$314 million to revenue in 2008-09 (see Table 2), yielding total revenue for this line item of \$2,189 million in 2008-09 (see Table 2). The proportionally adjusted revenue neutral rates for this option are reported in Column 4 of Table 6.

MCMS's GVG information is limited to new vehicles, so the revenue estimates reported in Table 2 are based on a relatively small sample of novated lease holders, with only 11% of the total sample of 20,280 used in the making the calculations.

## 2.2.5 OPTION 4-2– UNDER ASSUMED ENVIRONMENTAL RATING AS AT 2014

MCMS also requested modelling to assess the impact on future revenue years (e.g. in 2014) if the revenue neutral statutory rates proposed for Option 4-1 were maintained under an assumed improvement in the environmental rating of all 'benefit' vehicles. In particular, MCMS requested revenue estimates under the assumptions that:

- ❑ The 2014 GVG star rating of all vehicles in 2014 will be one star level above their current 2008 rating; and
- ❑ The average fall in CO2 emissions per vehicle in 2014 is to be equal to the average percentage change in the level of emissions per star rating estimated from the MCMS dataset (estimated to be around 20%).

For comparability with the earlier results, the impact of this scenario is calculated in terms of the 2008-09 (to 2011-12) revenues. Following the same methodology used above, Option 4-2 revenue yields the revenue estimates reported in Table 7.

**TABLE 7: ESTIMATED REVENUE IMPACT OF OPTION 4-2**

<b>\$ million</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>
Current statutory formula	1,875	1,912	1,944	1,891
Option 4 with 2014 star rating	1,050	1,071	1,088	1,059
<b>Net revenue</b>	<b>-825</b>	<b>-841</b>	<b>-855</b>	<b>-832</b>

Under these assumptions Option 4-2 is expected to yield only 56% of the current FBT revenue. In 2008-09 dollars this implies revenue of \$1,050 million, which is a shortfall of \$825 million over the revenue estimated under the current FBT arrangement.

### 3. AUTO INDUSTRY IMPACT OF ALTERNATIVE FBT OPTIONS

This section explores the impact on the Australian automotive industry of removing the current concessional FBT arrangement for 'benefit' motor vehicles. The analysis relies on a sample of 'benefit' motor vehicle data provided by MCMS and sale price and quantity data for the broader automotive industry provided by the Federal Chamber of Automotive Industries (FCAI) and Glass's Information Services Pty Ltd.

Data provided by the FCAI and Glass's is used to estimate a model of automotive demand. This model is a partial equilibrium model in the sense that it assumes that the overall spending on automobiles remains fixed and, subject to that constraint, determines the value and volume of demand for different vehicle types based on changes in relative vehicle prices. In the case of the FBT analysis the model is further simplified by assuming that the market is segmented into those buyers that plan to consume a 'benefit' vehicle and those that do not. Therefore the underlying assumption is that the overall spending on 'benefit' vehicles remains fixed.

Detailed data provided by MCMS on the annual income, vehicle leasing and operating costs, mileage and vehicle types of current leasing customers is used to calibrate the model, with regard to current FBT benefits, and values and volumes of demand for different types of 'benefit' vehicles.

#### 3.1 DEFINING AUTOMOTIVE SEGMENTS

To make the analysis tractable it is necessary to define automobile segments. The classification of vehicles in the Australian automotive industry used by FCAI and in the VFACTS reports is based primarily on the size of the vehicle, the gross vehicle mass and the predominant purpose for which the vehicle was designed. This report basically follows the VFACTS classifications.

At the top level, vehicles are classified as either a passenger motor vehicle or a commercial vehicle. In the passenger motor vehicle class, vehicles are predominantly a means of conveyance or transportation of persons from one location to another. In contrast, commercial vehicles are a means of transporting goods, as well as persons, from one location to another.

For the purposes of this analysis, sport utility vehicles (SUVs) are seen as closer to passenger motor vehicles than to commercial vehicles and so are included in the passenger motor vehicle classification.

##### 3.1.1 SEGMENTS

A **light** vehicle can either be a hatch or sedan. Light vehicles are typically smaller in dimension and engine capacity than small vehicles, but are similar in other aspects. Examples of light vehicles include the Toyota Starlet and the Honda Jazz, with variants of each having small four cylinder engines of less than 1400cc.

Similarly, **small** and **medium** vehicles also have four cylinder engines, but have higher engine capacities of at least 1400cc and 1900cc, respectively. Typical examples of small and medium vehicles include the Toyota Corolla (small) and the Audi A4 or Toyota Camry (medium).

The **large** and **upper large** segments are similar in most respects, with an upper large vehicle having slightly larger dimensions relative to a similarly equipped large vehicle. A typical large or upper large vehicle would be equipped with a six or eight cylinder engine and would be a sedan or wagon. Examples include the Toyota Aurion (large) and the Holden Statesman (upper large).

Examples of **people movers** are the Honda Odyssey and the Chrysler Voyager.

An **SUV** is typically a four wheel drive with high ground clearance and closed cargo space. Examples include the Honda CRV and the Ford Territory.

**Sports** vehicles are in a distinct segment. A typical sports vehicle is a convertible or coupé and the segment includes the expensive marques such as Porsche, as well as the Honda Integra and the Mazda MX5.

For various statistical reasons the estimated model of Australian automotive demand captures the behaviour of six passenger vehicle segments: large, small, medium, SUV, combined light and people movers, and combined upper large and sports.

### 3.1.2 COMMERCIAL VEHICLES

The 4X2 and 4X4 pickup/cab-chassis segment of the commercial vehicle sector is also included in the analysis. For simplicity, we refer to vehicles in the commercial segment as either 4X2 commercial or 4X4 commercial, without further distinguishing between pick-ups and cab-chassis.

Competitive influences on commercial vehicles are modelled separately from those on the passenger motor vehicles. While there are overlaps between the segments, a key distinguishing feature is that passenger vehicles are designed primarily to transport people from one location to another, whereas commercial vehicles are designed to transport goods and materials.

### 3.1.3 COUNTRY OF ORIGIN

Passenger motor vehicles and commercial vehicles are also classified according to whether the country of origin is Australia (**locally manufactured**) or overseas (**imported**). Passenger motor vehicles are locally manufactured by Ford, Holden, Mitsubishi and Toyota; and are imported from over 25 countries.

## 3.2 DATA SOURCES

Data on vehicle sales used in estimating the model were made available by FCAI. The VFACTS data gives monthly sales, covers the period January 1991 to August 2007, and contains data on segment, country of origin, marque, model, and so on.

Data on prices used in estimating the model were made available by Glass's Information Services Pty Ltd. The data gives prices quarterly, covers the period March 1993 to June 2008, and contains prices by marque, model, variant, and so on.

The sales data were aggregated from monthly to quarterly to match the price data. Seasonality is evident in the sales data whereas the price of a model is typically fixed throughout the year.



### 3.2.1 AUTOMOTIVE PRICE INDICES

It is straightforward to aggregate the sales data from individual models to segments and origin. Defining prices for the segments and origins is a more difficult task.

A price index is a numerical time series designed to help show how the price of some class of goods, taken as a whole, differs between time periods. By design, a price index reduces all the distinct prices for the class of goods in question to a single number. The classes of goods in question are the sets of vehicles in segment/origin combinations, such as small imported vehicles and large locally manufactured vehicles.

Some automotive price indices are currently available. Australian Automobile Intelligence (AAI) publishes price indices for locally manufactured and imported vehicles and the Australian Bureau of Statistics (ABS) produces a CPI motor vehicle index.

Those price indices are not at the level of aggregation needed in this project. Therefore price indices have been constructed for the segment and origin split.

We begin by discussing two methods for defining the prices of motor vehicles over time:

- ❑ average prices; and,
- ❑ chain price indices.

### 3.2.2 AVERAGE PRICES

The average price in the segment – the total value of vehicles sales divided by the number of vehicles – is not necessarily the best way to study prices over time. Average prices embody changes in the mix of marques and models within the segment and in the quality and specifications of the vehicles.

Improvements to vehicle specifications mean that consumers are getting more value in their purchases for every dollar amount spent. An obvious example is the inclusion of air conditioning and electric windows in many new vehicles as part of a standard package, rather than as options at additional cost to the consumer.

### 3.2.3 CHAIN PRICE INDICES

Chain price indices take into account the changes in the mix of marques and models within segments.

In particular, a model enters into the index measuring the price change over two periods only if it is sold in both of the periods. Hence, new marques and models do not appear in the index until the second period in which they are sold.

As an example, consider the upper large imported segment. For many years, the segment was dominated by the Audi A8 and the BMW 7 series, with prices of around \$200,000. In recent years, the Chrysler 300C appeared on the market, at a price of around \$60,000. In the first period in which the Chrysler sold, the average price for the segment fell from \$200,000 to around \$65,000. But the chain price index only includes the Chrysler in the second period in which it sold. The prices did not change between the first and second periods and so the chain price index is flat.

- ❑ The index comparing the two periods is formed from weighted averages of the prices, where the weights are the sales quantities in the first of the two periods. In other words, the index estimates the change in price for a fixed 'basket' of goods.



Extending the index from two periods to a longer period of time is done by 'chaining together' the two-period price comparisons.

The model estimation makes use of the chain price indices.

### **3.3 AN ECONOMETRIC MODEL OF AUSTRALIAN AUTO DEMAND**

The specification of the econometric model begins with a theoretically sound economic model of demand. That economic model motivates the basic relationships between demand and its drivers. The structure of the equations in the econometric model follows the commonly used translog functional form.

#### **3.3.1 THE UNDERLYING ECONOMIC MODEL OF AUTOMOBILE DEMAND**

The underlying economic model assumes that there is a single representative consumer. This representative consumer has nested preferences in which they make the following sequence of decisions when buying an automobile:

- ☐ Given their aggregate level of consumption, the representative consumer faces the choice between buying automobiles or other goods. (The resulting demand for automobiles is referred to as aggregate demand.)
- ☐ Given their decision to buy automobiles, the representative consumer faces the choice between a 'benefit' and 'non-benefit' automobile. (This is referred to as 'benefit' segment demand.)
- ☐ Given their decision to consume a 'benefit' or 'non-benefit' automobile, the representative consumer faces the choice between the different segments. (This is referred to as segment demand.)
- ☐ Given the decision to buy automobiles within a segment, the representative consumer faces the choice of between locally manufactured and imported automobiles. (This is referred to as origin demand.)

This nested structure allows for the different stages of demand to be modelled separately, taking the previous step as given.

#### **3.3.2 AGGREGATE AUTOMOBILE DEMAND**

The possible drivers of aggregate automobile demand include:

- ☐ the aggregate level of consumption on all goods, which is a function of wealth and labour income;
- ☐ the constant quantity price index of automobiles;
- ☐ the constant quantity price index of other goods;
- ☐ the interest rate facing consumers buying automobiles on credit; and
- ☐ other costs of running an automobile (fuel, maintenance, insurance and road taxes).

A key assumption underlying this part of the model is that all prices, interest rates, and other costs are exogenous to model. That is, prices are determined outside of, or prior to, the vehicle purchase decision.

Automobiles are assumed to be normal, rather than inferior, goods. That is, holding all else constant, an increase in wealth and/or income is expected to raise the demand for

automobiles. Similarly, higher prices of other goods are expected to raise the demand for automobiles; while higher automobile prices, interest rates and running costs are expected to lower the demand for automobiles.

### 3.3.3 AUTOMOBILE SEGMENT DEMAND

The quantitative analysis reported here takes total value of demand for 'benefit' vehicles as given. This allows the analysis to focus on how the sales in each of the automobile segments respond to various economic drivers. The possible drivers underlying segment demand include:

- ☐ Aggregate automotive demand (given in the previous step).
- ☐ The typical prices within the segments.
- ☐ Other costs of running a car (fuel, maintenance, insurance and taxes).
- ☐ Shifts in underlying preferences between segments.

The model assumes that prices, preference shifts and other costs are exogenous to the decision to buy in one segment or another. This means that prices are treated as given in the segment demand model.

The economic model assumes that the representative consumer's choices across automobile segments are consistent with a utility-maximising framework – the consumer allocates spending across the segments, given the prices within those segments, in a manner which maximises his satisfaction or utility. That leads to the equations for the segment demands.

The dependent variables in those demand equations are the 'budget shares' – the shares of total spending for each of the segments. Hence, as noted above, the appropriate left hand side variable in the demand equation for a segment is the value share for that segment.

We model the value shares using translog functions. Translog functions are widely used in the estimation of utility and production/cost functions. The appeal of the translog stems from the fact that:

- ☐ its inputs are relatively easy to calculate;
- ☐ it is relatively easy to estimate with current computing technology; and
- ☐ it has proven to be a reliable framework for estimating utility and production/cost functions.

The equations are closely related to those in the almost ideal demand system.

The basic explanatory variables in the demand equations are the chain price indices for the individual segments. The share for each segment depends on the price for that segment as well as the prices for the other segments. It is expected that the share for a segment will fall when the price for that segment rises relative to the prices for other segments. The share for a segment may either rise or fall in response to a price increase for another segment, depending on the degree of substitutability between the segments. For example, we would expect some substitution between light vehicles and small vehicles; likewise for large and upper large vehicles. That is because the median price differential between the associated segments is likely to be small and, moreover, consumer preferences are likely to overlap across similar segments.

A price change for a segment also changes the overall demand for motor vehicles. For example, a price fall for imported vehicles may mean more money to spend on other goods, including locally manufactured goods.

The basic model can be expanded to include other factors potentially related to the value shares of segments, such as the price of petrol. Increases in that price are expected to shift demand away from large cars to smaller cars.

The interpretation of the estimated parameters is not straightforward. For example, the effect of a price change for a particular segment depends on both the direct effect on the segment as well as the indirect effect through other segments. Hence, we do not discuss the results here.

That said, we note that some of the car price responses are stronger in the model without petrol prices than in the model with petrol prices. For example, the model with petrol prices predicts a decline in the large segment as a result of an increase in petrol prices. The increase in petrol prices has occurred at the same time as the relative increase in the price of locally manufactured large cars. Hence, when petrol prices are not included in the model, some of their predicted effect on the large segment is taken up by the car price response.

The model with petrol prices is preferred on statistical grounds. First, the overall fit of the model with petrol prices is superior, with significantly more of the variation in value shares explained with the addition of petrol prices (after adjusting for the increase in the number of explanatory variables). This is especially true for the large segment in which the explained variation rises from 65% to 86%. Second, the coefficients on petrol prices are statistically different from zero. This means that, given the variables in the model without petrol prices, fluctuations in petrol prices have a statistically significant impact on value shares.

Since the current FBT arrangement lowers the effective cost of petrol and other leasing costs proportionally the petrol price effect identified in the model has no bearing on the demand impact estimates.

### 3.3.4 AUTOMOBILE ORIGIN DEMAND

The representative consumer is also faced with the option of buying an automobile manufactured locally or imported. Within the nested preference structure the main drivers of origin demand are:

- ❑ Aggregate segment demand (from the previous step); and
- ❑ The price indices of locally manufactured and imported vehicles within the segment.

Again, the model assumes that prices are exogenous to decision. Petrol prices are not included in the model under the assumption that changes in petrol prices have similar effects on the demands for locally manufactured and imported vehicles.

The translog functional form is again employed.

## 3.4 SCENARIO ANALYSIS

This section estimates the impact on Australian automobile demand under four scenarios:

- ❑ **Scenario 1:** Removal of the current concessional FBT arrangement for 'benefit' vehicles.

- ❑ **Scenario 2:** The existing FBT arrangement for 'benefit' vehicles (summarised in Table 1) is replaced with Option 3 (i.e. statutory rates are based upon total CO2 emissions summarised in Table 5).
- ❑ **Scenario 3:** The existing FBT arrangement for 'benefit' vehicles (summarised in Table 1) is replaced with Option 4-1 (i.e. statutory rates are based upon GVG star ratings summarised in Table 6).
- ❑ **Scenario 4:** The existing FBT arrangement for 'benefit' vehicles (summarised in Table 1) is replaced with Option 4-2 (i.e. statutory rates are based upon MCMS's assumed 2014 GVG star ratings).

### 3.4.1 SCENARIO 1 – REMOVING THE EXISTING FBT ARRANGEMENT

#### Estimated effective price change

The existing concessional FBT arrangement lowers the effective price of a 'benefit' vehicle. Estimating the size of this effective price reduction relies on estimates of the actual benefit enjoyed by leasing customers under the current FBT arrangement. Data provided by MCMS on customer incomes, mileage, leasing and operating costs and vehicles types is used to calculate the increase in effective vehicle price. On the advice of MCMS, the average time of a lease is assumed to be three years, with a residual value of 45%.

According to the sample provided by MCMS for 2007-08 tax year, which included detailed data on 12,410 customers, the increase in the effective price of a 'benefit' vehicle if the existing FBT arrangement was removed depends on the extent of the customer's post tax contributions. For example, the average percentage increase for consumers of large 'benefit' vehicles is estimated to be 33.4% if the customer makes no post-tax contribution and 44.7% for customers that make a post-tax contribution (see Table 8 below).

**TABLE 8: INCREASE IN EFFECTIVE 'BENEFIT' VEHICLE PRICE OVER CURRENT FBT ARRANGEMENT (PERCENT)**

Employee contribution assumption	Large	Medium	Small	SUV	Light/ People Mover	Upper large/ Sport	Comm-ercial	Total
Post-tax contribution	44.8	43.8	42.8	45.7	42.5	44.3	46.9	44.7
No post-tax contribution	33.4	32.6	30.7	34.7	30.4	33.0	35.9	33.4

This table also shows that despite the variation in average price and operating costs across these different vehicle types, the estimated increase in effective vehicle prices are similar, with the highest effective price increase for SUVs roughly 4 percentage points higher than the lowest increase for the light/people mover segment. This suggests that there would be little substitution across different types of vehicles following the removal of the existing FBT arrangement.

#### Estimated size and importance of the 'benefit' vehicle market

MCMS has estimated that the total number of 'benefit' vehicles sales in 2007 was 176,660, with roughly 40% of sales accounted for by locally produced vehicles (see Table 9). According to their estimates the bulk of 'benefit' vehicles are purchased by private users. Vehicles are purchased under a variety of methods, with roughly one third of all 'benefit'

sales involving a novated lease arrangement in which the employee effectively purchases the 'benefit' vehicle.

**TABLE 9: 'BENEFIT' VEHICLE SALES**

Type of vehicle sale	All vehicles (local and imported)	Australian made (local)
Novated lease (privately registered)	46,667	9,333
Government 'benefit' vehicle	16,000	14,850
Non-Government 'benefit' vehicle	113,993	44,900
Total	176,660	69,083

The relative importance of 'benefit' sales by vehicle type is estimated using MCMS's 'benefit' sales estimates and data on the total number of sales in 2006-07 provided by the FCAI. According to these data, 'benefit' vehicles accounted for 21% of the total sales vehicles in 2006-07.

The total number of 'benefit' vehicles by type is estimated by combining total sales with the total and local distribution of 'benefit' vehicles derived from the MCMS novated lease data.

**TABLE 10: DISTRIBUTION OF 'BENEFIT' VEHICLES BY TYPE**

Sales measure	Large	Medium	Small	SUV	Light/ People Mover	Upper large/ Sport	Comm- ercial
Volume share: Total sales	27%	12%	17%	27%	7%	2%	7%
Volume share: Local sales	69%	12%	0%	11%	0%	2%	6%
Value share: Total sales	26%	12%	14%	33%	6%	2%	7%
Value share: Local sales	67%	9%	0%	15%	0%	2%	7%

At around 27% of the total 'benefit' market sales, the largest individual segments by volume are large vehicles and SUVs. Jointly these segments account for 54% of the total volume of 'benefit' vehicle sales (see Table 10). The SUV value share is somewhat higher than that of large vehicles because the average price of an SUV in the sample is around \$40,000, while the average price of a large vehicle in the sample is much lower at \$32,000. Medium and small vehicles combined make up roughly 30% of the volume of 'benefit' sales and a slightly smaller share of the value of sales.

Large vehicles dominate the sales of locally made 'benefit' vehicles, with 69% of the volume and 67% of the value of all locally produced 'benefit' vehicles sold attributable to large vehicles. This reflects the fact that local vehicle production is concentrated in large vehicles. The next largest categories are medium vehicles and SUVs, which make up roughly 23% of the volume and value of all locally produced 'benefit' vehicles sold.

**TABLE 11: 'BENEFIT' SHARE OF TOTAL SALES BY SEGMENT**

<b>Sales measure</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Comm- ercial</b>	<b>Total</b>
'Benefit' vehicle share of total sales in segment	38%	29%	14%	36%	10%	18%	8%	21%
'Benefit' vehicle share of local sales in segment	39%	29%	0%	40%	0%	18%	17%	34%

Turning to individual segments, 'benefit' cars account for 38% of large vehicle sales. This is closely followed by SUVs, with a 36% share, and medium vehicles, with a 29% share. 'Benefit' vehicles account for a smaller proportion of the small, light, people-mover, upper large and sport segments.

The 'benefit' vehicle share of local sales is similar to that of total vehicle sales, however, 'benefit' vehicles account for 34% of total locally produced vehicle sales, which compares with a 'benefit' vehicle share of total sales of 21%. This suggests that the greatest impact of the removal of the existing FBT arrangement will be on the locally produced large, SUV and medium vehicle segments.

### **Estimated impact on auto industry demand**

The impact on 'benefit' market segment volume and value of sales is estimated using:

- ☐ the change in value of sales shares for different types of vehicles estimated by the automotive segment demand model described above;
- ☐ the estimated change in effective 'benefit' vehicle price; and
- ☐ the estimated total value of annual 'benefit' sales (estimated at \$5.9 billion for 2006-07).

Combining these three pieces of information implies the change in 'benefit' vehicle sales reported in Table 12. The auto demand model relies on changes on relative prices. Given the similarity of the estimated change effective prices the model predicts a slight change in value shares of different vehicles under Option 3. The biggest influence on demand, therefore, is the increase in effective prices.

**TABLE 12: ESTIMATED IMPACT ON 'BENEFIT' VEHICLE SALES FROM REMOVING FBT (PERCENT)**

<b>Employee contribution assumption</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Comm-ercial</b>	<b>Total</b>
Post-tax contribution: Total sales	-32.2	-29.5	-30.1	-30.4	-29.4	-38.0	-31.9	-30.9
Post-tax contribution: Local sales	-32.2	-29.8	0.0	-30.2	0.0	-53.4	-30.6	-31.9
No post-tax contribution: Total sales	-24.8	-18.9	-26.3	-26.0	-24.1	-37.0	-26.4	-24.9
No post-tax contribution: Local sales	-24.9	-19.6	0.0	-25.4	0.0	-48.9	-24.4	-24.7

Demand for total 'benefit' vehicles is expected to fall by 24.7% to 30.9%, depending on assumed employee contribution. Table 12 shows that the impact on different vehicle types is similar to the impact on total sales. For example, in the case where employees make post-tax contributions, the estimated impact ranges from an expected decline in light/people-mover vehicles of 24.9% to upper-large/sport vehicles of 38.0%.

A similar picture emerges for locally produced 'benefit' vehicle sales. Demand for all locally produced 'benefit' vehicles is estimated to fall by 24.9% to 31.9% %, depending on assumed employee contribution. The change in the expected volume of sales is similar across segments with demand for locally produced large, medium and SUVs expected to fall by around 30% in the post-tax contribution case. In terms of 2007 sales that represents an expected fall in demand of 22,062 locally produced vehicles.

**TABLE 13: ESTIMATED IMPACT ON TOTAL VEHICLE SALES FROM REMOVING FBT (PERCENT)**

<b>Employee contribution assumption</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Comm-ercial</b>	<b>Total</b>
Post-tax contribution: Total sales	-12.2	-8.4	-4.1	-11.0	-2.8	-6.9	-2.7	-6.4
Post-tax contribution: Local sales	-12.5	-8.5	0.0	-12.2	0.0	-9.8	-5.1	-10.9
No post-tax contribution: Total sales	-9.4	-5.4	-3.6	-9.4	-2.3	-6.7	-2.2	-5.2
No post-tax contribution: Local sales	-9.7	-5.6	0.0	-10.3	0.0	-9.0	-4.0	-8.4

'Benefit' sales are estimated to be roughly 21% of total vehicle sales which implies a fall in aggregate demand for vehicles is of 5.2% to 6.4%, depending on assumed employee contribution. Table 13 shows that the biggest impact is expected to be in the large vehicle market with the fall in total demand ranging from 9.4% to 12.2%.



Around 40% of locally produced sales are attributable to 'benefit' sales. Therefore the estimated impact on total local demand is somewhat higher, with the expected fall in sales ranging from 8.4% to 10.9%, depending on assumed employee contribution. This decline reflects in large part the impact on locally produced large vehicle demand.

### 3.4.2 SCENARIO 2 – STATUTORY RATE BASED ON ACTUAL TONNES OF CO2 EMITTED

#### Estimated effective price change

Table 14 reports the estimated impact on effective vehicle prices in shifting from the current FBT statutory rate system to that proposed for Option 3. These estimates are based on the actual tax and emissions data of existing novated lease holders supplied by MCMS for the 2007-08 tax year and the revenue neutral tax rates derived above.

This option appears to have a negligible impact on the effective cost of the average 'benefit' vehicle. In fact, the effective price of the average 'benefit' vehicle is expected to fall slightly under this option. The prices of large vehicles and SUVs are however expected to rise and that is reflected by an increase in the effective prices of local 'benefit' vehicles.

**TABLE 14: OPTION 3 INCREASE IN EFFECTIVE VEHICLE PRICE OVER CURRENT FBT ARRANGEMENT (PERCENT)**

Employee contribution assumption	Large	Medium	Small	SUV	Light/ People Mover	Upper large/ Sport	Comm-ercial	Total
Post-tax contribution: Total sales	0.2	-3.1	-3.7	1.3	-2.4	-7.0	3.5	-0.4
Post-tax contribution: Local sales	0.0	-4.3	0.0	9.3	0.0	-7.0	2.6	1.0
No post-tax contribution: Total sales	1.4	-4.0	-5.0	2.2	-3.9	-9.6	5.8	-0.1
No post-tax contribution: Local sales	0.9	-5.2	0.0	14.6	0.0	-9.6	4.3	2.3

#### Estimated impact on auto industry demand

The auto demand model predicts that expected change in relative effective prices under Option 3 will lead to relatively small changes in the value shares of different 'benefit' vehicle segments. Combining these model predictions with changes in effective prices implies the impacts on 'benefit' vehicles sales reported in Table 15.



**TABLE 15: OPTION 3 ESTIMATED IMPACT ON 'BENEFIT' VEHICLE SALES (PERCENT)**

<b>Employee contribution assumption</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>	<b>Total</b>
Post-tax contribution: Total sales	3.9	0.3	7.0	-3.1	-16.4	35.3	-3.3	0.6
Post-tax contribution: Local sales	4.1	1.8	0.0	-9.9	0.0	26.7	-2.6	2.2
No post-tax contribution: Total sales	2.6	-0.8	9.7	-3.1	-19.4	44.7	-5.5	0.4
No post-tax contribution: Local sales	3.3	0.9	0.0	-13.5	0.0	34.1	-4.1	1.2

There is very little change in demand for total 'benefit' vehicles, with sales expected to rise under Option 3 by between 0.4% and 0.6%, depending on assumed employee contribution. The impact on different vehicle segments varies greatly with SUV, light/people-mover and commercial sales expected to decline, while large, medium, small, and upper-large/sport sales are expected to rise.

Similarly, demand for all locally produced 'benefit' vehicles is estimated to rise by 1.2% to 2.2%, depending on assumed employee contribution. Underlying this estimate is a modest increase in large vehicles sales that is partly offset by a strong reduction in demand for SUVs.

Local vehicles sales increase under Option 3, despite experiencing higher prices, because the negative effect of their higher relative prices is more than offset by a positive income effect resulting from the fall in total vehicle prices. This is best illustrated by a simple two good example where the price of just one good falls and the goods are poor substitutes. In this case, relative price changes imply little substitution between goods. Since a price fall in one good means that you can buy more of both goods, this leads to greater demand of both goods. This is essentially what is occurring in the 'benefit' vehicle market in Option 3. The auto demand model suggests that there is little to no substitution between large and small cars. Under Option 3 the price of small vehicles is somewhat lower, but the price of large cars is roughly unchanged. Therefore, given that there is little substitution between small and large cars, the less expensive small vehicles imply an increase in both small and large vehicle sales.

Table 16 reports the impact of Option 3 on the total vehicle market. With the exception of the relatively small, upper-large/sports market, the impact on segment demand is expected to be negligible. The impact on the total vehicle market is also minuscule with sales expected to rise by 0.1% under Option 3.

**TABLE 16: OPTION 3 ESTIMATED IMPACT ON TOTAL VEHICLE SALES (PERCENT)**

<b>Employee contribution assumption</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>	<b>Total</b>
Post-tax contribution: Total sales	1.5	0.1	1.0	-1.1	-1.6	6.4	-0.3	0.1
Post-tax contribution: Local sales	1.6	0.5	0.0	-4.0	0.0	4.9	-0.4	0.8
No post-tax contribution: Total sales	1.0	-0.2	1.3	-1.1	-1.9	8.1	-0.5	0.1
No post-tax contribution: Local sales	1.3	0.3	0.0	-5.5	0.0	6.3	-0.7	0.4

'Benefit' vehicles account for a larger share of locally produced sales, so the estimated impact on total local demand is somewhat higher. The estimated increase in local sales is expected to range between 0.8% and 0.4%, depending on assumed employee contribution. This increase reflects higher sales of locally produced large vehicles.

### Estimated impact on emissions

Table 17 combines the estimated change in sales volume with the estimated average annual volume of emissions for each type of car derived from the MCMS novated lease data to estimate the impact on carbon emissions under Option 3. Option 3 implies a small increase in total emissions in the case of employee contributions and a slight decrease in the case of no employee contributions. This table also shows that increases in emissions flowing from greater sales of locally produced vehicles are fully or partially offset by falls in emissions from reduced sales of imported vehicles.

**TABLE 17: OPTION 3 ESTIMATED IMPACT ON CARBON EMISSIONS (TONNES)**

<b>Employee contribution assumption</b>	<b>Local sales</b>	<b>Total sales</b>
Post-tax contribution	3,158	1,420
No post-tax contribution	475	-930

Table 18 expresses the reductions as a percentage of total 'benefit' vehicle emissions for 2007. Overall the policy option implies a negligible impact on 'benefit' vehicle emissions.

**TABLE 18: OPTION 3 ESTIMATED REDUCTION IN 'BENEFIT' VEHICLE EMISSIONS**

<b>Employee contribution assumption</b>	<b>Local sales</b>	<b>Total sales</b>
Post-tax contribution	1.4%	0.2%
No post-tax contribution	0.2%	-0.2%

### 3.4.3 SCENARIO 3 – STATUTORY RATE BASED ON ENVIRONMENTAL RATING

#### Estimated effective price change

Table 19 reports the estimated impact on effective vehicle prices in shifting from the current FBT statutory rate system to that proposed for Option 4-1, based on the GVG star rating. Again, these estimates are based on the actual tax and emissions data of existing novated lease holders supplied by MCMS for the 2007-08 tax year and the revenue neutral tax rates derived above.

MCMS's data sample implies that the effective price of large vehicles will rise by 2.4% to 3.9% under the Option 4-1 statutory rate system. The effective prices of other relatively high emitting vehicles such as local SUVs and commercial vehicles are also estimated to rise by more than large vehicles, while the effective prices of smaller vehicles, including imported SUVs, are expected to fall.

**TABLE 19: OPTION 4-1 INCREASE IN EFFECTIVE VEHICLE PRICE OVER CURRENT FBT ARRANGEMENT (PERCENT)**

<b>Employee contribution assumption</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Comm-ercial</b>	<b>Total</b>
Post-tax contribution: Total sales	2.4	-3.2	-4.0	1.3	-2.5	-6.2	6.4	0.3
Post-tax contribution: Local sales	2.4	-4.1	0.0	9.7	0.0	-6.2	4.1	2.8
No post-tax contribution: Total sales	3.8	-4.0	-5.6	1.8	-3.9	-8.5	10.0	0.6
No post-tax contribution: Local sales	3.9	-5.4	0.0	14.7	0.0	-8.5	7.9	4.6

#### Estimated impact on auto industry demand

The auto demand model suggests that the estimated changes in relative prices under Option 4-1 will lead to significant changes in share of sales of different 'benefit' vehicle segments. In particular, the share of sales of large, medium and light/people mover segments are expected to fall under Option 4-1.

Combining these value share estimates, with estimates of the effective vehicle price under Option 4-1, implies the impacts on 'benefit' vehicles sales reported in Table 20.

**TABLE 20: OPTION 4-1 ESTIMATED IMPACT ON 'BENEFIT' VEHICLE SALES (PERCENT)**

<b>Employee contribution assumption</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>	<b>Total</b>
Post-tax contribution: Total sales	-3.9	-10.2	16.0	2.0	-16.5	29.1	-6.0	-0.1
Post-tax contribution: Local sales	-4.1	-8.1	0.0	-6.3	0.0	22.1	-4.0	-4.4
No post-tax contribution: Total sales	-8.0	-13.9	23.0	4.4	-22.3	36.1	-9.1	-0.4
No post-tax contribution: Local sales	-8.0	-11.0	0.0	-8.2	0.0	27.8	-7.3	-7.8

Demand for total 'benefit' vehicles is expected to fall by 0.1% to 0.4% depending on the assumed employee contribution. The impact on vehicle segments varies greatly, with small, SUV and upper/large sales expected to increase, while large, medium and light-people mover sales are expected to decrease.

The SUV result is counterintuitive given that the effective own-price of SUVs is expected to rise. This outcome stems from the fact that the estimated auto demand model has a very strong complementarity between small vehicles and SUVs, which causes the demand for SUVs to rise with a fall in small vehicle prices. This may reflect the fact that households make joint purchasing decisions for small vehicles and SUVs.

Demand for locally produced 'benefit' vehicles is estimated to fall by 4.4% to 7.8% depending on the assumed employee contribution. This reflects falls in sales for locally produced large and medium vehicles and SUVs.

Table 21 shows that switching from the current FBT arrangement to Option 4-1 will have a negligible impact on the total sales of all vehicle types, with total sales expected to fall by less than 0.1%. 'Benefit' vehicles account for a larger share of locally produced sales, so the impact on sales of locally produced vehicles is expected to be somewhat larger, with the estimated fall in sales ranging from 1.5% to 2.7%, depending on the assumed employee contribution.

**TABLE 21: OPTION 4-1 ESTIMATED IMPACT ON TOTAL VEHICLE SALES (PERCENT)**

<b>Employee contribution assumption</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Commercial</b>	<b>Total</b>
Post-tax contribution: Total sales	-1.5	-2.9	2.2	0.7	-1.6	5.3	-0.5	-0.0
Post-tax contribution: Local sales	-1.6	-2.3	0.0	-2.5	0.0	4.1	-0.7	-1.5
No post-tax contribution: Total sales	-3.0	-4.0	3.2	1.6	-2.1	6.6	-0.8	-0.1
No post-tax contribution: Local sales	-3.1	-3.2	0.0	-3.3	0.0	5.1	-1.2	-2.7

### Estimated impact on emissions

Table 22 combines the estimated change in the sales volume with estimates of the average annual volume of emissions for each type of car derived from the MCMS novated lease data to estimate the change in carbon emissions stemming from the introduction of Option 4-1.

**TABLE 22: OPTION 4-1 ESTIMATED IMPACT ON CARBON EMISSIONS (TONNES)**

<b>Employee contribution assumption</b>	<b>Local sales</b>	<b>Total sales</b>
Post-tax contribution	-9,511	-4,030
No post-tax contribution	-16,882	-6,767

According to these estimates, total emissions would be lower under Option 4-1. In fact, Table 22 suggests that the increase in emissions flowing from a rise in sales of imported small vehicles and SUVs is more than offset by the decrease in emissions flowing from the fall in sales of moderately high emitting locally produced large, medium and SUV sales.

**TABLE 23: OPTION 4-1 ESTIMATED REDUCTION IN 'BENEFIT' VEHICLE EMISSIONS**

<b>Employee contribution assumption</b>	<b>Local sales</b>	<b>Total sales</b>
Post-tax contribution	-4.3%	-0.7%
No post-tax contribution	-7.7%	-1.2%

Table 23 expresses the reductions as a percentage of total 'benefit' vehicle emissions in 2007. The switch from the current FBT arrangement to Option 4-1 implies a modest reduction in 'benefit' vehicle emissions of 0.7% to 1.2%, depending on the assumed employee contribution.

The switch to Option 4-1 is largely neutral with respect to the impact on the number of vehicles sold. Therefore the reduction in total emissions reflects the net effect of a reduction in sales of high emitting vehicles and an offsetting increase in sales of lower emitting vehicles. When viewed through this lens, the policy has considerably more impact from the standpoint that the average reduction in emissions per substituted vehicle is between 17% and 20% depending on the assumed employee contribution. This is an intuitive result, since

the outgoing less-efficient vehicles emit roughly 5 tonnes per year, while the incoming more-efficient vehicles emit roughly 4 tonnes per year.

### 3.4.4 SCENARIO 4 – UNDER MCMS’S ASSUMED 2014 ENVIRONMENTAL RATING

#### Estimated effective price change

MCMS requested an analysis of the impact on vehicle sales in 2014 assuming the current FBT arrangement is replaced by the revenue neutral statutory rates proposed under Option 4-1. The key difference between this and the previous scenario is that MCMS has assumed that by 2014 the GVG star rating of all ‘benefit’ vehicles will rise by 1 star, so that a vehicle that had a 3 star rating in 2008 will have a 4 star rating in 2014.

Table 24 reports the estimated impact on effective vehicle prices in shifting from the current FBT statutory rate system to that proposed for Option 4-2 under MCMS’s assumed 2014 GVG star rating. The average fall in effective price is estimated to be 5.9% to 8.4% depending on assumed employee contribution.

**TABLE 24: OPTION 4-2 INCREASE IN 2014 EFFECTIVE VEHICLE PRICE OVER CURRENT FBT ARRANGEMENT (PERCENT)**

Employee contribution assumption	Large	Medium	Small	SUV	Light/ People Mover	Upper large/ Sport	Comm-ercial	Total
Post-tax contribution: Total sales	-6.8	-6.6	-6.3	-5.0	-5.9	-11.7	-3.3	-5.9
Post-tax contribution: Local sales	-6.9	-6.5	0.0	-2.2	0.0	-11.7	-3.3	-6.0
No post-tax contribution: Total sales	-9.5	-8.8	-9.2	-7.3	-8.9	-16.0	-5.0	-8.4
No post-tax contribution: Local sales	-9.6	-8.8	0.0	-3.2	0.0	-16.0	-5.0	-8.4

#### Estimated impact on auto industry demand

The auto demand model predicts relatively small changes in value shares of the different ‘benefit’ vehicle segments for this scenario. Therefore the main driver of changes in sales is changes in effective prices. Combining these components of the analysis implies the impacts on ‘benefit’ vehicle sales reported in Table 25.

Demand for total ‘benefit’ vehicles is expected to rise by 6.2% to 9.2% depending on assumed employee contribution. The impact on different vehicle segments varies, with large, medium and upper/large sales expected to increase significantly, while small, SUV and commercial sales are expected to rise modestly.

Similarly, the demand for all locally produced ‘benefit’ vehicles is estimated to rise by 10.4% to 13.4 % depending on assumed employee contribution. This reflects strong growth in large and medium vehicle sales.

**TABLE 25: OPTION 4-2 ESTIMATED IMPACT ON 2014 'BENEFIT' VEHICLE SALES (PERCENT)**

<b>Employee contribution assumption</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Comm-ercial</b>	<b>Total</b>
Post-tax contribution: Total sales	12.0	12.9	3.5	1.7	-10.5	49.7	3.4	6.2
Post-tax contribution: Local sales	11.9	12.2	0.0	0.8	0.0	38.4	3.4	10.4
No post-tax contribution: Total sales	15.3	15.6	6.8	4.2	-7.5	57.2	5.2	9.2
No post-tax contribution: Local sales	15.3	15.1	0.0	0.3	0.0	45.3	5.2	13.4

Table 26 shows that aggregate demand for vehicles is expected to rise by 1.3% to 1.9% depending on assumed employee contribution. The policy switch is expected to have a significant impact on total sales of locally produced large vehicles, with local large segments sales expected to rise by 3.5% to 4.6%.

**TABLE 26: OPTION 4-2 ESTIMATED IMPACT ON 2014 TOTAL VEHICLE SALES (PERCENT)**

<b>Employee contribution assumption</b>	<b>Large</b>	<b>Medium</b>	<b>Small</b>	<b>SUV</b>	<b>Light/ People Mover</b>	<b>Upper large/ Sport</b>	<b>Comm-ercial</b>	<b>Total</b>
Post-tax contribution: Total sales	4.5	3.7	0.5	0.6	-1.0	9.0	0.3	1.3
Post-tax contribution: Local sales	4.6	3.5	0.0	0.3	0.0	7.1	0.6	3.5
No post-tax contribution: Total sales	5.8	4.5	0.9	1.5	-0.7	10.4	0.4	1.9
No post-tax contribution: Local sales	5.9	4.3	0.0	0.1	0.0	8.3	0.9	4.6

To implement this scenario, an assumption had to be made about the implied reduction in emissions per vehicle by 2014. The MCMS data sample suggests that a one star improvement implies a 20% reduction in average CO2 emissions.

### **Estimated impact on emissions**

The estimated impact on carbon emissions under Option 4-2 with the assumed 2014 star rating is provided in Table 27. These estimates combines the change in the sales volumes with the 2014 adjusted average annual volume of emissions for each type of car derived from MCMS novated lease data.

**TABLE 27: OPTION 4-2 ESTIMATED IMPACT ON 2014 CARBON EMISSIONS (TONNES)**

<b>Employee contribution assumption</b>	<b>Local sales</b>	<b>Total sales</b>
Post-tax contribution	-27,202	-86,477
No post-tax contribution	-22,062	-73,108

**TABLE 28: OPTION 4-2 ESTIMATED REDUCTION IN 2014 'BENEFIT' VEHICLE EMISSIONS**

<b>Employee contribution assumption</b>	<b>Local sales</b>	<b>Total sales</b>
Post-tax contribution	-12.3%	-15.1%
No post-tax contribution	-10.0%	-12.8%

As expected the scenario implies a significant reduction in 'benefit' vehicle emissions. These reductions are reported in Table 28 as a percentage of total 2007 'benefit' vehicle emissions. Total 'benefit' vehicle emissions are expected to fall by 12.8% to 15.1%, depending on the assumed employee contribution. In all cases the reduction in emissions of total 'benefit' vehicles is less than 20% because of the expected increase in sales.



## 4. REFERENCES

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## AUSTRALIAN AUTOMOBILE DEALERS ASSOCIATION

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Mr Anthony Podesta  
Executive Director  
McMillan Shakespeare Limited  
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Dear Mr Podesta

I write to advise that the Directors of AADA met on 16 April and considered the McMillan Shakespeare presentation in relation to "Fringe Benefit Tax and Company (Benefit) Motor Vehicles provided to Employees.

In the result, I am pleased to advise that the AADA Board endorsed the "Star FBT Option" model as outlined in that presentation. AADA believes that the model, which links FBT to the environmental star rating of a vehicle, is innovative and will assist in generating long-term sustainable demand for locally produced vehicles. Importantly, the model successfully achieves a balance between environmental concerns on the one hand and the need to support the local automotive industry on the other. AADA emphasises, however, the need for an appropriate transition period in respect of such a change to the current FBT arrangements.

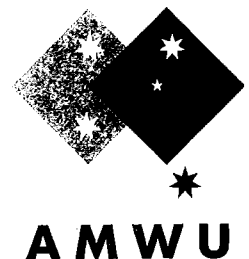
As well, AADA offers its strong support for the continuation of the FBT concessions applying to salary sacrificed leased motor vehicles. Given the large number of new vehicles purchased that are facilitated by the FBT concession, it is in the interest of dealers that the FBT concessions continue, albeit linked in the future to better environmental outcomes.

I thank you for bringing this model to AADA's attention.

Yours sincerely

**MICHAEL DELANEY**  
Executive Director

4 May 2009



Mr Anthony Podesta  
Executive Director  
McMillan Shakespeare Limited  
Locked Bag 18  
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Date 1 May 2009

Dear Mr Podesta

I write to offer my support for McMillan Shakespeare's submission to the Henry Review of Taxation.

The Australian Manufacturing Workers Union (AMWU) Vehicle Division supports open and reasonable contributions to the public policy debate on issues that are relevant to our members and their interests. Chief among those interests is the long term viability and sustainability of the Australian motor vehicle industry.

Having examined McMillan Shakespeare's submission to the Henry Review, I am convinced that should the government be of a mind to alter the current FBT arrangements, the "Star FBT Option" for linking FBT to the environmental star rating of the vehicle is innovative and will help to generate long term sustainable demand for locally produced vehicles. As such, this proposal successfully achieves a balance between environmental concerns on the one hand, and the need to protect local automotive industry jobs on the other.

The "Star FBT Option" also aligns with the federal government's initiatives for "A new car plan for a green future" by delivering reductions on carbon emissions of company cars by up to 20% or 1 tonne per motor vehicle.

I would also like to indicate the AMWU Vehicle Division's strong support for the continuation of the FBT concessions applying to company and benefit motor vehicles. Given the large number of new vehicle purchases that are facilitated by the FBT concession, it is in the interest of workers employed in the local industry for the FBT concessions to continue albeit linked in the future to better environmental outcomes.

This is the sort of taxation, economic and social policy analysis that is needed if Australia is serious about maintaining a viable motor vehicle industry, as well as dealing with the challenges presented by climate change.

Thank you for providing me with a copy of your submission. Congratulations on McMillan Shakespeare's contribution to this important issue. I wish it every success.

Yours sincerely

  
Ian Jones  
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15 September 2009

Mr Anthony Podesta  
Executive Director  
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Dear Mr Podesta

I am writing to offer my support for McMillan Shakespeare's submission to the Henry Review of taxation.

The Committee for Melbourne is working with employers to help them encourage their staff to use sustainable modes of transport to commute to work in the CBD. As part of that effort, we have been working with a new network of employers, Access Melbourne, to help employers develop workplace travel plans.

As part of the research to develop such plans, employers have told us that the current taxation system presents a major barrier to them encouraging staff to use sustainable modes of transport, such as public transport, walking and cycling. At the same time, employers have expressed their wish to tackle current FBT arrangements for work vehicles, but I am mindful of the negative impact that changes may have upon staff recruitment.

The Committee supports McMillan Shakespeare's proposal to replace the existing formula for calculating FBT with a system based on the environmental rating of the vehicle using the government's Green Vehicle Guide.

The star option put forward presents an alternative arrangement which will have a real impact on the carbon emissions of company cars, and also present a viable future pathway for the Australian car manufacturing industry.

This proposal is in line with the Committee's recent Climate Change Taskforce which recommended reform of federal tax arrangements to remove incentives that maximise car use and discourage public transport use, and in particular reform of current FBT incentives.

Thank you for providing me with a copy of your submission, and we wish you well in your endeavours.

Yours sincerely

Susan Vale  
Policy Director