

4 March 2003

Proff Peter Newman
Director
Sustainability Policy Unit
Department of the Premier and Cabinet
197 St Georges Terrace
PERTH WA 6000

Dear Sir

Thank you for the opportunity to comment on the State Government's draft Sustainability Strategy.

As you may be aware the RAC is a membership based organisation that aims to represent the views of its members on public issues of concern. The RAC represents over 438,000 members and our traditional concern with motoring issues means that our submission centres around issues associated with the use of the car.

Making Sense of Sustainability

The RAC understanding of Sustainability is that it is meeting the needs of current generations without environmental, social or economic degradation.

RAC recognises and agrees that social and economic gains, if they are to be sustainable cannot degrade the environment. This means that emissions and waste produced by economic activity must remain within the capacity of the environment (both local and global) to handle without any visible effect.

We also recognise that any reduction in social or economic welfare is also undesirable. Modern society depends heavily on personal mobility. We believe that personal mobility is desired as an end in itself. Families are prepared to spend 10-15% of their income on transport and using cars when car ownership exceeds one per five families¹. The levels of congestion people are prepared to endure to maintain their car use is further evidence of the desire for personal mobility². We therefore believe that any policy that unduly restricts personal mobility is unacceptable and likely to fail.

Sustainability Issues

RAC is concerned with the sustainability of motor vehicle use. We recognise that in the long term the use of fossil fuel for transport is not sustainable. However we do believe that alternatives will become available that can make it sustainable. It is essential that the transition is managed so that personal mobility is maintained.

RAC accepts that if private car use is to be sustainable the balance between car use, public transport, walking and cycling has to be shifted away from the current dominance of car use. The recent Travelsmart program in South Perth shows that this can be done.

The current situation with public transport in Perth is not considered to be sustainable. Urban passenger train services requires an annual operating subsidy of over \$104 million per annum and buses a further \$128 million. This compares with the tax revenue generated by the motorist of approximately 4.6cents per km travelled.

The level of subsidy required will increase further as the rail network expands and the level of utilisation decreases. Experience from the 1970's shows that it is very difficult to grow public transport patronage³. In Perth the patronage on the Northern Suburbs line has already started to level off.

Greenhouse Gas Emissions

The point is often made about the large contribution to greenhouse emissions from transport. However, it is less than a quarter of that produced from stationary energy production and is possibly the least amenable to replacement with alternative sources of energy.

As shown by graph 1 private car use generates less than half the transport emissions and the rate of increase is very small. In fact per capita travel has not increased for the past 20 years. The increase is due to greater numbers of car owners combined with population increases. Recent studies by CSIRO⁴ show that the level of emissions will in fact fall from 2020. Graph 2 shows that Perth's car emissions are expected to fall from 2005.

Transport's growth in greenhouse emissions is caused by growth in commercial vehicle use. Light commercial vehicle is growing rapidly, driven by the increasing use of "just in time" delivery methods.

Private car use in contrast is only growing at the same rate as population growth as car ownership has reached saturation point.

Nevertheless the RAC believes that the car's greenhouse emissions can be reduced. Reducing greenhouse emissions means reducing the amount of fuel used. There are three ways of doing this:

1. Improving the fuel consumption of individual vehicles
2. Reducing the size of vehicles
3. Reducing the use of vehicles

1. Improving Vehicle Fuel Consumption

RAC supports moves to improve fuel consumption such as the commitment for a corporate average fuel consumption of 6.8l/100km by 2010. We also recognise however that attempts to reduce fuel consumption in the USA by the use of a corporate average fuel consumption approach have not been particularly successful⁵

The most successful driver of reduced fuel consumption is to increase fuel prices. However a sudden large increase in fuel prices would be very disruptive. A gradual increase over time can effect a move to more fuel efficient cars. This has in fact occurred in Australia in the past 10 years where 70%⁶ of new car sales to the private non-fleet market are small cars.

The fuel efficiency of vehicles has improved in recent years. The average amount of petrol consumed per vehicle tonne has reduced from over 5 litres per 100 kms in 1979 to under 4 litres per 100 kms in 2001⁷. However fuel consumption has not improved by the same amount as

performance levels have increased and additional features and safety equipment have increased the weight of vehicles. The end result is that fuel consumption has remained relatively steady.

In the future the move to 95 Octane petrol, the adoption of hybrid technology, and ultimately fuel cells will help to reduce fuel consumption.

2. Reducing the Size of Vehicles

It is self evident that all else being equal a smaller lighter car will use less fuel than a larger heavier one.

In recent years the increase in fuel prices along with the availability of cheap small cars that are reliable and comfortable has resulted in the market share of small vehicles increasing. Since 1992 the percentage of small car sales has increased from 34.6% to 43.2%. As mentioned above, 70% of private sales are small vehicles.

As small vehicle are imported the continuing reduction in tariffs will encourage this trend. Small cars do have a disadvantage when it comes to safety, as it is more difficult to achieve satisfactory safety performance with a small car. It can be done however and new small cars are achieving 5 star performance in ANCAP tests.

3. Reducing the Use of Vehicles

Reducing the use of vehicles can also reduce the amount of fuel consumed. Measure such as Travelsmart and working from home can all play a part. RAC environmental strategy includes a number of measures aimed at reducing car use. (See Appendix 1)

Oil Vulnerability

As mentioned previously RAC recognises that oil reserves are limited and should be conserved. Further in view of the fact that future demand and supply cannot be determined the wisest course of action is to plan now for a changeover to alternative fuels.

The RAC has developed an environmental strategy, which incorporates this approach. The position will be subject to some minor changes as a result of negotiations with the other state motoring clubs on a common position.

The RAC recognises that the automotive industry has decided to adopt the fuel cell as the replacement technology for the internal combustion engine. The change however will take at least 20 years and is not likely to effect the general public within the next 10 years.

It is not yet clear which approach to the changeover of infrastructure will be taken. The options are:

1. Supply of petrol or other liquid fuel to the service station with conversion to hydrogen on the vehicle
2. Supply of petrol or natural gas to the service station with conversion to hydrogen at the service station and delivery of hydrogen into the vehicle.
3. Reticulation of hydrogen to service station site from a central plant producing hydrogen.

In the long term in order to be truly sustainable the hydrogen will need to be produced from water using solar energy. However at present this process is expensive.

At present the RAC focus will remain on conserving oil and fuel use.

Urban Planning

As mentioned previously the RAC research has shown that personal mobility is important to people. While RAC supports the general thrust of Livable Neighbourhoods and other planning approaches which seek to reduce car dependency, it must be accepted that many journeys will need a car ie journeys to remote locations, at odd hours, or areas not well served by public transport.

Residential Developments must therefore provide for car ownership by the residents. There is evidence that developments such as East Perth that have not provided for car ownership have run into trouble. Our understanding is that many residents have become dissatisfied with the lack availability of car parking space.

List of Proposed Actions

The attached table summarises the list of proposed actions from the draft strategy and RAC comments on those actions that we feel competent to comment on.

If you require any further explanation or discussion on our submission please contact Mike Upton Senior Engineer (Policy) on 9421 4265.

Yours Sincerely

David Moir
General Manager Group Policy and External Relations

Graph 1 Growth in energy Use by Sector 1946-2051

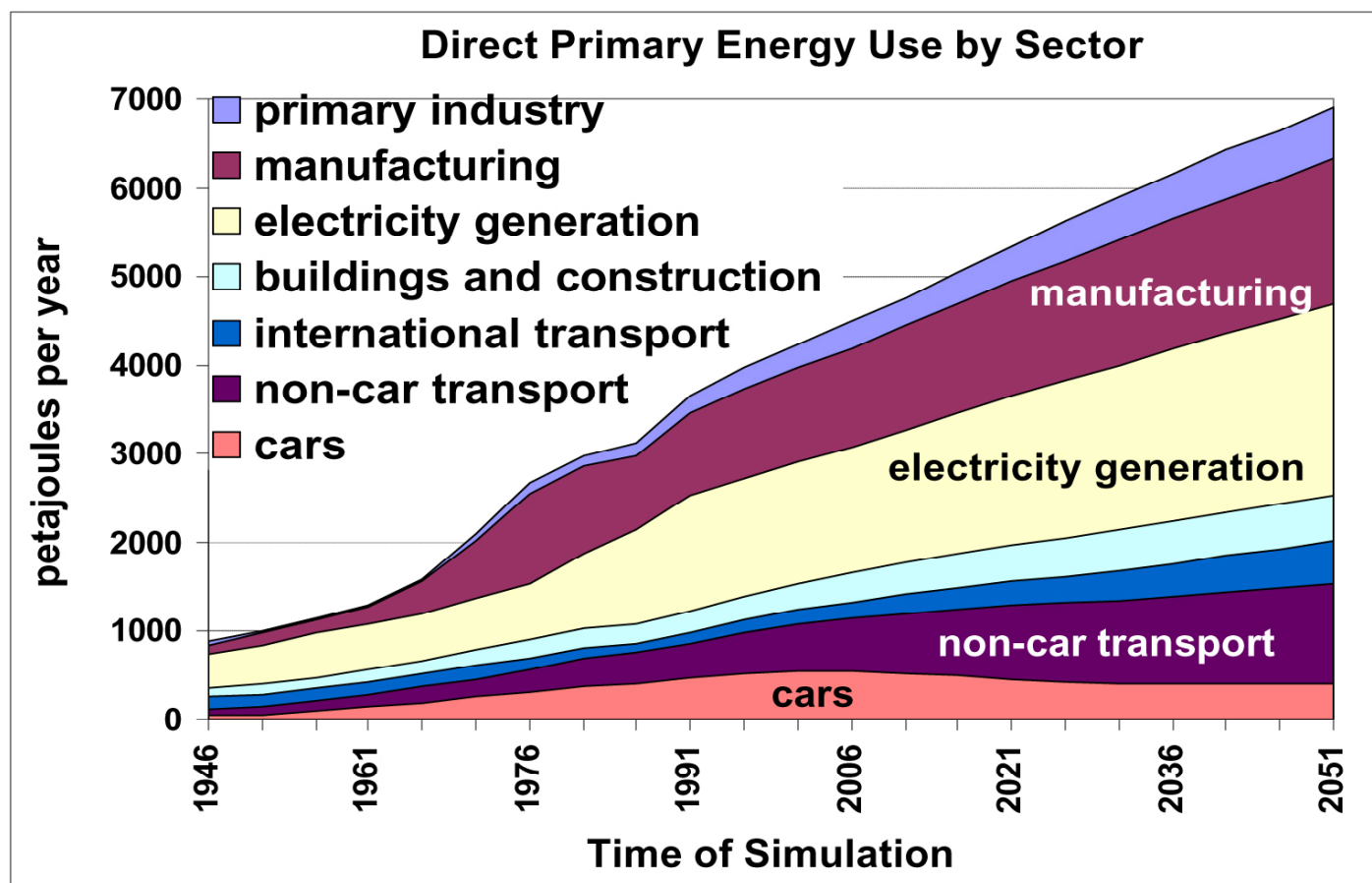
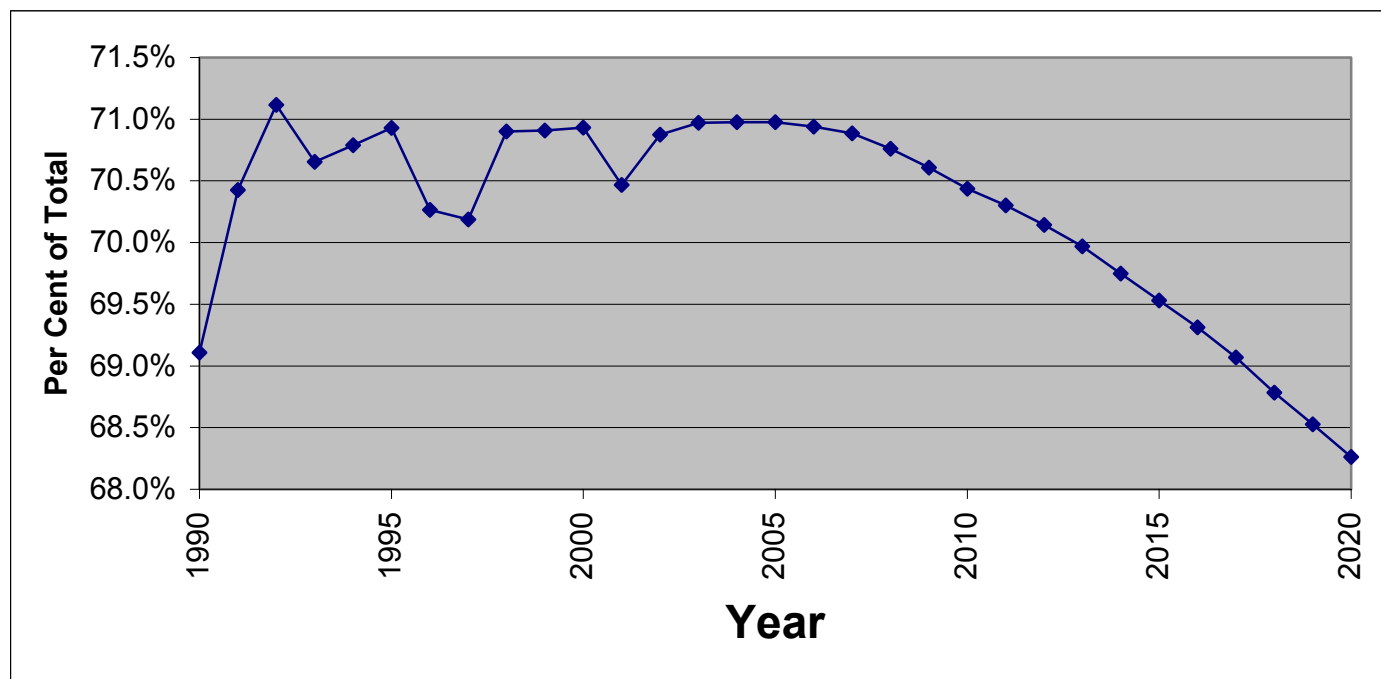


Figure 5.7. Breakdown of total energy use by important sector to 2050 for the base case population scenario. The zero and 0.67%pa scenarios will be similar in composition but different in magnitude (see Figure 5.1).

Graph 2 Passenger Car Carbon Dioxide Emissions in Perth as s Per Centage of Total Transport Emissions



Source 2002 Bureau of Transport and Regional Economics Greenhouse Gas Emissions From Transport. Australian Trends to 2020

Appendix 1

RAC Environmental Strategy Action Plan Listing by Issue

Note: (ST = Short Term 1 – 2 years

MT = Medium Term 3-5 years

LT = Long term 5 years or longer)

Issue 1 Increased use of Cleaner Fuels						
	Actions	Expected Outcome	KPI	Timeframe	Priority	Comments
1.1	RAC will encourage the adoption of cleaner fuel specifications for WA that are harmonised with the rest of Australia.	Any cleaner fuel standards adopted post 2006 are in line with Australian Federal standards.	The introduction of cleaner fuels does not cause fuel prices to rise by more than 2c per litre. Additives such as MTBE that have adverse environmental impacts are banned.	LT	Medium	Lobby Provided for within budget
1.2	RAC to investigate use of examples of alternative fuelled vehicles in their fleet.	First hand experience of alternative fuel technologies. RAC credible advocate Provide advice and encouragement to members	At least 1 alternative fuel vehicle types is investigated by motor clubs each year 1 article per year on alternative fuel vehicles is published in the Road Patrol.	MT	Medium	Investigations carried out in house. Purchase of vehicles from Fleet budget.
1.3	The RAC will ensure that Government is aware of motorist views on alternative fuels.	Uptake of alternative cleaner fuels with minimum disruption and cost.	Level of acceptance by public of alternative fuels.	MT-LT	High	Normal lobby activity.

Issue 2 Reduction of Vehicle Emissions						
	Actions	Expected Outcome	KPI	Timeframe	Priority	Comments
2.1	The RAC will prepare a program of articles on vehicle emissions issues.	Reduction of per capita emissions.	At least 1 Road Patrol and website articles on emissions per year. Annual member survey indicates that 80% of members are aware of impact of emissions from vehicles. Standard of vehicle maintenance members employ.	ST	Medium	Education of members. In house activity.
2.2	The RAC will actively support and assist the actions in the current Perth Air Quality Management Plan that relate to vehicle emissions and give regular updates on progress in the Road Patrol and RAC website.	Successful implementation of AQMP actions that RAC is involved in. AQMP reflects RAC views.	As per AQMP requirements. Degree of alignment with RAC views	S-LT	High	In house activity. Lobbying, education advocacy.
2.3	RAC to investigate how the use of ITS can be facilitated by discussions with appropriate Government Departments.	Smoother traffic flow leading to reduced emissions and fuel consumption. Drivers are advised of alternative trip choices in sufficient time.	Completion of RAC report on opportunities available.	MT	Medium	Investigation. In house activity in 2003 – 04 budget.

Issue 2 Reduction of Vehicle Emissions						
	Actions	Expected Outcome	KPI	Timeframe	Priority	Comments
2.4	RAC will encourage adoption of development on means to smooth traffic flow.	Reduction in the number of stop-starts leading to reduced fuel consumption and emissions.	Number of specific issues identified by RAC. Improved traffic flow. Reduced travel time as measured by MRWA. Travel times survey.	MT	Low	In house activity lobbying, advocacy.
2.5	The RAC will develop a green transport plan for their proposed new offices to encourage use of public transport, walking and cycling.	A definitive plan is produced that provides leadership to other organisations.	Plan is available prior to occupation of new offices.	ST	High	Part of existing project for new premises. Criteria have been set against which alternative sites will be evaluated.

Issue 3 Waste Reduction						
	Actions	Expected Outcome	KPI	Timeframe	Priority	Comments
3.1	RAC to promote responsible disposal by the community of used batteries, tyres and oils at approved locations. .	Increased disposal of waste at suitable sites.	A reduction in the amount of tyres and waste oil being illegally disposed of.	ST	Medium	Education, advocacy. In house activity. May require funding future budget for public education.
3.2	The RAC will undertake a waste audit of its operations.	Less waste generated, more materials sent for recycling, increased use of recycled products.	Availability of Audit which includes identified KPIs for waste reduction and recycling.	MT	Medium	Consultant required est cost \$10,000.

Issue 4 Protection of Water Quality						
	Actions	Expected Outcome	KPI	Timeframe	Priority	Comments
4.1	The RAC will encourage Government initiatives to reduce ground water pollution by fuel additives.	Government programs to control disposal and use of fuel additives.	Ground water pollution levels in WA are not increased by fuel additives.	ST	Low	Lobbying, advocacy in house.
4.2	The RAC will encourage better car maintenance by the community to reduce coolant and oil leaks.	Reduce pollutant discharge from roads into ground water and water courses.	A reduction in pollution in run off from roads to waterways as measured by MRWA.	ST-LT	Low	Education in house activity.
4.3	RAC will lead by example and move away from the bulk storage of fuels, lubricants and chemicals on sites close to aquifers	RAC will not be a source of contamination of aquifers	Removal of underground storage tanks.	MT	High	

Issue 5 Reduction of Social Impacts						
	Actions	Expected Outcome	KPI	Timeframe	Priority	Comments
5.1	RAC to promote environmentally considerate driving.	Reduction in fuel consumption and emissions	Member awareness of environmentally friendly practices.	ST-LT	Medium	Within scope of existing programs.
5.2	RAC will encourage and support government enforcement and education to reduce excessive noise from vehicles	Minimal disturbance from vehicle noise.	To be determined.	ST-LT	Low	Within scope of existing programs

Issue 6 Conservation of Non Renewable Resources						
	Actions	Expected Outcome	KPI	Timeframe	Priority	Comments
6.1	The RAC will show leadership by completing an energy audit of its <ul style="list-style-type: none"> • priorities • operations • vehicle fleet to establish where energy savings can be made.	Improved energy efficiency and reduced greenhouse emissions.	Decrease in the amount of energy used by RAC.	MT	Medium	Consultant required for energy audits
6.2	Ensure that new offices will be energy efficient	Energy use is best practice.	Power bill reduction	ST	High	4 star criteria established for new offices.
6.3	The RAC will encourage increased fuel efficiency through highlighting fuel efficiency in vehicle road tests.	Raised awareness of fuel efficiency issues.	All vehicle reviews in Road Patrol to have specific comments on fuel efficiency.	ST	High	Education. Use in house resources.
6.4	RAC will support moves for reduction of tariff to 5% on imported vehicles of less than 2000cc.	Reduction of fuel use through greater use of smaller cars.	% of new small cars sold.	LT	Low	Lobbying, advocacy. Use in house resources.
6.5	RAC will support moves for large imported 4WDs to be treated the same as cars.	Reduction in growth of large 4WDs.	Number of new 4WD sold p.a..	LT	Low	As above.
6.6	RAC will encourage membership of Men of the Trees	Increased commitment by members to environmental issues	Number of RAC members joining Men of Trees p.a.	LT	Med	

Issue 6 Conservation of Non Renewable Resources						
	Actions	Expected Outcome	KPI	Timeframe	Priority	Comments
6.7	RAC will investigate the feasibility of a “Green Member” concept	Increased commitment by members to environmental issues	No of members committed to conserving resources.	MT	Med	.

Issue 7 Sustainability						
	Actions	Expected Outcome	KPI	Timeframe	Priority	Comments
7.1	Provide submission to WA Government on state sustainability strategy.	Sustainability strategy reflects RAC review	Alignment with RAC	ST	High	Lobbying advocacy. use in house resources.

Issue 8 Review						
	Actions	Expected Outcome	KPI	Timeframe	Priority	Comments
8.1	Review strategy after 4 years.	Revised strategy	Review completed within 3 months	LT	Low	Using existing resources.

Appendix 2 RAC Comments on List of Proposed Actions

The RAC does not have the expertise to comment on many of the actions listed. A summarised list is provided below.

Group	Comment
Sustainability Assessment	Agree
Institutional Change	Agree
Embracing Sustainability in Government Agencies	Generally agree however, would suggest that industry and stakeholders be included in item 1.6 as they will be affected by Government decisions that result from the Sustainability Code of practice.
Partnership for Action	Agree
Planning for Sustainability	Agree
Sustainability in the Regions	Cannot comment
Indigenous Communities and Sustainability	Cannot comment
Research and Development for Sustainability	Support
Sustainability Information Online	Support
Recognising Sustainability Excellence	Agree
Population, Development Aid and Environmental Technology	Cannot comment
Maintaining Our Biodiversity	Cannot comment
Responding to Greenhouse and Climate Change	Agree
Oil Vulnerability, the Gas Transition and the Hydrogen Economy	Support
Sustainable Agriculture	Cannot comment
Sustainable Fisheries and Aquaculture	Cannot comment
Sustainable Forestry and Plantations	Cannot comment
Sustainable Mining and Petroleum Production	Cannot comment
Sustainable Tourism	
Protecting Aquatic Systems	Cannot comment
Sustainable Coastal and Marine Environments	Cannot comment
Sustainable Rangelands Management	Cannot comment
Managing Urban and regional Growth	Cannot Comment
Revitalising Declining Centres and Suburbs	Cannot comment

Group	Comment
Integrating Land Use and Balanced Transport	<p>Generally support except for item 4.22 Any extension of the rail system, bus networks or any other part of the transport system should be based on the results of a full cost benefit analysis.</p> <p>The request under item 4.23 requesting the extension of Australian Design Rules (ADR) to cover noise and environmental issues is not necessary as ADRs are currently under review and noise and other emissions are already addressed.</p> <p>Issues to do with waste and manufacture are Considered to be outside the scope of the design rules and clash with harmonisation.</p>
Managing Freight and Regional Transport	Agree
Preserving Air Quality	Generally agree except for item 4.34.. The Perth Air Quality management Plan is to provide air of a quality that is acceptable to the people. This may not mean that it is the cleanest for a city of its size
Reducing and Managing Waste	Cannot comment
Our Water Future	Cannot comment
Sustainable Energy	Cannot comment apart from item 4.65 which we would support.
Preserving Cultural Heritage, Landscapes and Creating 'Sense of Place'	Cannot comment
Building Sustainability	Cannot comment
Community Services and Development	Cannot comment
Housing and Sustainability	Cannot comment
Sustaining Healthy Communities	Cannot comment
Education and Community Awareness for Sustainability	Cannot comment
Sustainability Through Culture and the Arts	Cannot comment
Multiculturalism and Sustainability	Cannot comment
Training and Facilitation for Sustainability	Cannot comment
Financial Reform and Economic Instruments for Sustainability	Cannot comment
Eco-Efficiency and Industrial Ecology	Cannot comment
Industry Sustainability Covenants	Cannot comment

References

- 1— A Schafer & D Victor. The Past and Future of Mobility Scientific American October 1997
- 2 Bray D 2002 Urban Traffic Congestion: Can transport strategy and road pricing help? Proceedings Transport Policy Colloquium. Bureau of Transport and Regional Economics Canberra 3 October 2002).
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- 4 CSIRO 2002 Energy and the Transport Sector. Outlook to 2020
- 5 2002 Martec White Paper. Fuel Economy: A Critical Assessment of Public Policy in the US vs the EU. April 2002
- 6 VFACTS Figures
- 7 2002 Fuel Consumption by New Passenger Vehicles in Australia. Information sheet 18 Bureau of Transport and Regional Economics.