



South Australia's
Low Emission Vehicle Strategy
2012 - 2016



**Government
of South Australia**

Message from the Government of South Australia

The South Australian Government is committed to reducing greenhouse gas emissions and improving our environment. Our commitment to urban and transport planning reforms, delivering new road infrastructure, expanding and modernising the public transport system and promoting active travel, such as cycling and walking, are all reducing transport-related emissions.

South Australia's Low Emission Vehicle Strategy addresses the motor vehicles on our roads. The Strategy provides a deliberate approach to removing or mitigating barriers to low emission vehicles and, therefore, accelerating uptake in our State.

Actions under the Strategy build on work the South Australian Government has undertaken to date in relation to low emission vehicles, including:

- Achieving the target to convert 50% of state government cars to lower emission fuels by 2010.
- Committing to a new target to reduce measured SA Government light vehicle emissions by 10% per kilometre by 2014/15.
- In partnership with Adelaide City Council, installing Adelaide's first 'smart' electric vehicle recharging bollards in the Adelaide Central Market carpark.
- Establishing Australia's first grant program for electric vehicle recharging stations.
- Purchasing two of the first volume production electric vehicles to be released in Australia – the Mitsubishi i MiEV – to use in the Government fleet.

- Operating our entire public transport bus fleet on lower emission fuels such as compressed natural gas and biodiesel blends.
- In partnership with Flinders University and Flinders Partners, funding and operating a proof of concept facility for microalgal biodiesel feedstock and value-added products.
- Committing over \$1 million towards a range of AutoCRC projects.

South Australia's Low Emission Vehicle Strategy includes actions to directly combat motor vehicle emissions and respond to emerging vehicle technologies, as well as support activities to maximise the benefits to the State.



**The Hon. Patrick Conlon, MP
Minister for Transport
and Infrastructure**



**The Hon. Paul Caica, MP
Minister for Sustainability,
Environment and Conservation**

Contents

5 *Introduction*

6 *The Case for Action*

South Australian Greenhouse Gas Emissions

South Australian Urban Air Quality

South Australian Industry

8 *The Context*

The South Australian Transport Task

Divergent Low Emission Vehicle Technologies

South Australian Strategic Framework

Travel Behaviour Change and Cultural Shift

10 *The Approach*

Reducing Vehicle Emissions

Policy Principles

The Roles of Government

13 *The Strategy*

Goals

Delivery

Reporting

15 *Strategic Theme 1: Promote Fuel Efficient Vehicles and Maintenance*

16 *Strategic Theme 2: Progress Renewable and Low Emission Fuels*

17 *Strategic Theme 3: Establish Electric Vehicles*

18 *Strategic Theme 4: Research, Development and Commercialisation*

19 *Strategic Theme 5: Support and Connect the Community*



Introduction

There are 1.2 million vehicles on the road in South Australia, or about three vehicles for every four people. Around 80 per cent are passenger vehicles, 14 per cent are light commercial vehicles and the remainder are other types, including heavy vehicles.

Road transport connects communities, allows South Australians to access education, employment, goods and services and helps take South Australia's goods and services to the rest of Australia and the world. Our light and heavy vehicles play a critical role in our social and economic frameworks.

Each year, these vehicles consume approximately 2.3 billion litres of fossil fuels and generate around 6.3 million tonnes of greenhouse gases¹ and the bulk of the state's typical daily air quality impacts².

The purpose of South Australia's Low Emission Vehicle Strategy is to reduce greenhouse gas emissions and air toxic emissions from road-based freight and passenger vehicles by increasing the proportion of low emission vehicles on our roads.

Current South Australian Government initiatives, such as urban planning and transport planning reforms, extending and modernising public transport networks, and encouraging commuters and travellers to consider lower emission modes of transport, are important and effective in reducing our transport-related emissions.

Nevertheless, the importance of road transport in South Australia is expected to continue to grow with our economy and population³. South Australia's Low Emission Vehicle Strategy ('the Strategy'), complementing the initiatives mentioned above, will help reduce the emissions intensity of our transport requirements.

The Strategy has been developed in consultation with a wide range of industry, motorist, research and training organisations, and is designed to prepare South Australian business and the community for a smooth transition to low emission vehicle technologies.

The Strategy will also complement the Australian Government's price on carbon by addressing barriers to low emission vehicles that won't be dealt with by a price signal⁴. It will also complement the Euro 5 and Euro 6 air quality emissions standards scheduled to be implemented over the next few years and the light vehicle CO₂ emission standards under development.

South Australia's Low Emission Vehicle Strategy is a Government commitment to action. This Strategy Document presents the rationale for the Strategy, the context in which it is developed and the Government actions proposed to respond to, and drive, the transformation of our fleet to low emission vehicles.



1 Australian Government Department of Climate Change and Energy Efficiency, *State Greenhouse Gas Inventory (2009)*, includes transport and storage of fuels

2 Environmental Protection Authority of SA, pp 24-25, *The State of Our Environment: State of the Environment Report for South Australia 2008*

3 The Centre for Transport, Energy and the Environment and Adam Pekol Consulting, p 7, Figure H4, *South Australian Transport Facts 2011*

4 Australian Government Department of Climate Change and Energy Efficiency, p xiii, *Securing a Clean Energy Future for Australia*

The Case for Action

Climate change, urban air quality, increasing fuel prices and energy security concerns are driving global advances in low emission vehicle technologies. This has resulted in a step change in the types of road vehicles being sought and offered, and growing divergence in the types of fuels being used to power them.

It is in South Australia’s interest to be prepared for these changes and capture the opportunities they present. These include opportunities for our community, industries and environment, climate change and sustainability goals.

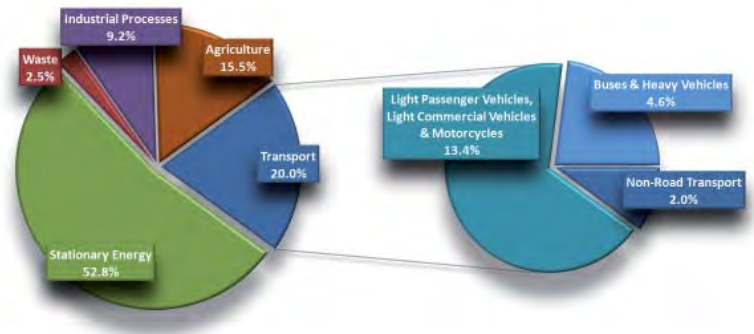
South Australia’s Low Emission Vehicle Strategy provides a deliberate approach to removing barriers and, therefore, accelerating the uptake of low emission vehicles in our state.

By actively addressing the opportunities afforded by low emission vehicles, we will: improve our productivity and, consequently, our competitiveness; seize industry development opportunities; improve our urban air quality; and reduce the link between greenhouse gas emissions and our transport needs.

South Australian Greenhouse Gas Emissions

The transport sector was responsible for 20% of South Australia’s greenhouse gas emissions in 2008/09, excluding the negative emissions from land use, land use change and forestry. At a South Australian sectoral level, transport is second only to stationary energy in terms of total greenhouse gas emissions.

Figure 1: South Australian Greenhouse Gas Emissions⁵



While adaptation to the results of climate change is critical, we can help to mitigate its effects, as well as continuing to improve the State’s environmental credentials and economic competitiveness, by reducing greenhouse gas emissions.

South Australia has a target, set under the *Climate Change and Greenhouse Gas Emissions Reduction Act 2007*, to reduce our total greenhouse gas emissions by 60% (to 40% of 1990 levels) by 2050. Reducing emissions from the transport sector will be critical to achieving this.

The Australian Government’s climate change plan, *Securing a Clean Energy Future*, has explicitly excluded fuel consumed by light vehicles, and deferred the inclusion of fuel used in heavy vehicles. The Australian Government has committed, however, to mandatory carbon dioxide emissions standards for light vehicles from 2015.

⁵ Combined estimate from the *National Greenhouse Accounts 2008-9* (excluding negative emissions from land use, land use change and forestry) and The Centre for Transport, Energy and the Environment and Adam Pekol Consulting, Table 5.1-3, *South Australian Transport Facts 2011*

Complementary measures are therefore needed to address transport-related greenhouse gas emissions, and to prepare the State's transport sector for the expected increases in fuel prices as the reserves of easily accessible conventional supplies continue to fall.

South Australian Urban Air Quality

Motor vehicles are a major cause of urban air pollution in South Australia, contributing most of the carbon monoxide, oxides of nitrogen and benzene in the atmosphere.

Although South Australian air quality is generally good, these air pollutants can have significant health impacts. Susceptible individuals, such as children, the elderly and people with compromised health, are most at risk due to air pollution.

Common effects of air pollution include changes in heart and lung functions with increases in associated medical conditions such as asthma, bronchitis and heart disease. Recent research suggests that health impacts related to reduced air quality result in increased hospital admissions and premature deaths; it is estimated that, in Australia in the year 2000, between 900 and 2,000 early deaths were caused by motor vehicle air pollution⁶.

The Australian Government's commitment to implement Euro 5 and Euro 6 emissions standards from 2013 will, over time, improve the emissions performance of new vehicles.

South Australian Industry

South Australian industry is forward-looking and keen to exploit the opportunities afforded by the transition to low emission vehicles.

South Australia is one of only two vehicle manufacturing states in Australia. The automotive and component industries are strategically important, employing around 8,000 people in South Australia. These industries are already delivering low emission vehicles commercially in the form of high-blend biofuel compatible cars (the new Holden Commodore).

South Australia is also home to a successful technology sector, which may find a range of opportunities to expand as a result of the emergence of low emission vehicles and support systems.

Our motor trades industry is also a significant employer and provides a crucial support role to a functioning transport sector. The industry is already training its members on emerging low emission vehicle technologies such as hybrid electric vehicles.

Our freight and logistics industries are critical to a fluid, efficient economy. The South Australian freight industry employs approximately 20,000 people.



⁶ Australian Government Department of Infrastructure and Transport, Bureau of Infrastructure, Transport and Regional Economics, p 89, *Health impacts of transport emissions in Australia: Economic costs*

The Context

South Australia's Low Emission Vehicle Strategy has been developed considering our reliance on road transport, emerging technologies and policies nationally and around the world, and South Australian initiatives to improve the efficiencies of our transport system and travel behaviour.

The South Australian Transport Task

South Australian road vehicles travelled over 16 billion kilometres in 2008/09, with 60% of that distance covered in Greater Adelaide. Around 93% of all vehicle kilometres were covered by light vehicles.

Road transport accounted for almost 25 billion passenger-kilometres in SA in 2008/09, with around 60% of that task being completed in Greater Adelaide.

The South Australian freight task was 18.7 billion tonne-kilometres in 2008/09. Only one sixth of the State's freight task was undertaken in Greater Adelaide⁷.

Divergent Low Emission Vehicle Technologies

Several low emission vehicle technologies are emerging more or less concurrently, and it is not yet clear which, if any, will become the dominant vehicle technology in the future. South Australians must ensure that we are prepared for the ascent of a range of technology options.

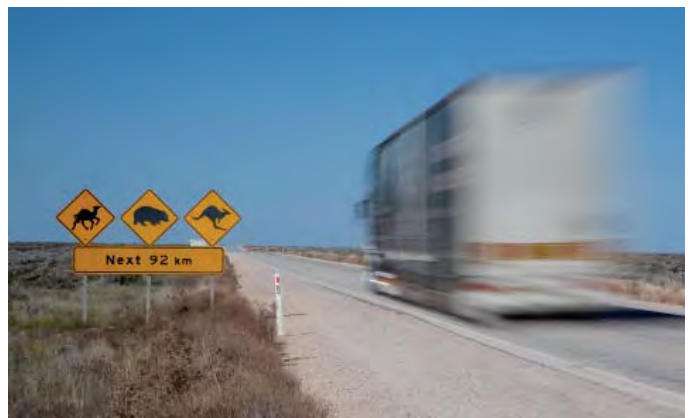
South Australian Strategic Framework

There are various factors which influence vehicle emissions.

Other South Australian Government strategies are addressing the influencing factors of driver and consumer behaviour, transport demand and transport

planning and infrastructure. These include: the South Australian Strategic Plan; urban and transport planning reforms (including the 30 Year Plan for Greater Adelaide); and the Climate Change and Greenhouse Gas Emissions Reduction Act (2007).

South Australia's Low Emission Vehicle Strategy complements these strategies by focussing on the remaining factors that influence motor vehicle emissions: vehicles and fuels.



⁷ The Centre for Transport, Energy and the Environment and Adam Pekol Consulting, *South Australian Transport Facts 2011*

Travel Behaviour Change and Cultural Shift

The South Australian Government applies travel behaviour change principles to encourage safer, greener and more active travel through reductions in motor vehicle use. Individuals and organisations are encouraged to consider their travel choices; to substitute car trips with another mode, such as public transport, walking or cycling; reduce the distance travelled by car; or eliminate the need for some journeys.

The voluntary behaviour change methodologies used to implement travel behaviour programs deliver a wide range of advantages, including personal health and well-being, social, economic, environment and road safety benefits.



The Approach

The Strategy is guided by a suite of fundamental approaches to vehicle emissions reductions, a series of policy principles and several identified roles of the South Australian Government.

Additionally, given the purpose of the Strategy is to increase the proportion of low emission vehicles on our roads, it is important to be clear on what constitutes a low emission vehicle.

Reducing Vehicle Emissions

Broadly, the three ways to reduce a vehicle's emissions are:

1. **Improved fuel efficiency**, employing advances such as lightweighting, homogenous charge compression ignition, and common rail diesel engines.
2. **Use of lower emission fuels**, including renewable fuels (such as biodiesel and ethanol) and gaseous fuels (such as natural gas and liquefied petroleum gas).
3. **Electrified drivetrains**, including hybrid vehicles, plug in hybrid vehicles, purely electric vehicles and fuel cell vehicles.

Individual low emission vehicles may employ more than one of the above approaches.

Promoting fuel efficient vehicles and maintenance offers the broadest coverage and significant potential. For example, if Australians had purchased new light vehicles with best-in-class fuel efficiency during 2010, the national average new light vehicle greenhouse gas emissions would have been 36% lower⁸.

This potential notwithstanding, completely removing emissions from our transport activities requires a transition to renewable and low emission energy sources, whether they are biofuels, biogas, renewable electricity or other renewably-generated fuels.

Acknowledging the 'drop-in' potential of some biofuel blends, moving to renewable and low emission energy sources at a large scale requires significant vehicle technology, infrastructure and market adaption. The aim of the Strategy, which operates only to 2016, is to pave the way for a smooth and effective transition.

To support and increase the potential of these approaches, the Government will also focus on research, development and commercialisation and broad community engagement.



⁸ National Transport Commission, May 2011, *Carbon Dioxide Emissions from New Australian Vehicles 2010: Information Paper*

Low Emission Vehicle Definition

For the purposes of the Strategy, a low emission vehicle is a road-based vehicle that has relatively low operational greenhouse gas emissions (full fuel cycle) and relatively low operational air toxic emissions.

The definition is qualitative to acknowledge that a range of vehicle types and sizes are within the scope of the Strategy, and that quantitative definitions, where required, may vary depending on the nature and coverage of each initiative delivered.

The definition does not include emissions associated with production and disposal of the vehicle, as embodied emissions:

- Are rarely objectively reported and not reliably inferred
- Tend to be the minor part of the lifetime emissions of a vehicle (in the order of 10% of a conventional vehicle, with fuel use and fuel production accounting for the other 90%)
- Are similar, in an absolute quantum, for various technology types. Low emission vehicles have a higher proportion of their lifecycle emissions as embodied emissions mostly because their operational emissions are much lower than a typical vehicle.

Policy Principles

The following policy principles have guided the selection of Strategy actions:

The automotive sector is highly globalised. The Australian automotive sector has remained competitive by specialising and leveraging the strengths of the large global automakers' deployment of common platforms in multiple markets.

A consistent response to low emission vehicles is desirable across jurisdictions and between markets.

South Australia's Low Emission Vehicle Strategy is one part of ensuring South Australia's mobility needs are met. The Strategy complements other efforts to reduce our need for private passenger transport and to increase freight transport efficiency.

Low emission vehicles represent an opportunity for our industry and our community overall.

Transport policy and energy policy are converging.

The electrification of transport and expanding use of gaseous fuels represent a paradigm shift for both the stationary energy and transport energy sectors. Governments, regulators, utilities, manufacturers and consumers will need to re-evaluate their ways of working.

Whenever possible, policy choices do not 'pick winners' or, conversely, 'pick losers', but provide an environment where innovation can flourish and the focus remains on emissions abatement and improved air quality potential, rather than the low emission vehicle technology by which it occurs.

A diversity of energy sources should be encouraged.

While our current energy supply chains have proven to be highly resilient, a managed approach to risks, regardless of their probability of occurrence, suggests that diversifying from a reliance on petroleum based fuels for transport will be beneficial in the long term.

The Roles of Government

The following roles are identified for the South Australian Government:

Leader

The South Australian Government is able to set strategic priorities for the state and bring together business and the community to work towards those priorities.

The Government also has the capacity to influence public awareness and opinion through the provision of timely, relevant information.

Consumer

Government operates a large fleet of road vehicles, including passenger vehicles, light commercial vehicles, buses and other heavy vehicles. Decisions made about the fleet not only affect new vehicle sales but, particularly for light vehicles, also flow through to the used car market.

Information Provider

Government has the capacity to distribute information, raise awareness and nurture community understanding of low emission vehicles and the opportunities they offer.

Advocate

Some matters are more appropriately dealt with at a national level, others at a local government level. The South Australian Government can be an effective advocate for change in inter-jurisdictional and national forums, and to ensure that key issues are prioritised and addressed at the appropriate level.

Facilitator

The South Australian Government facilitates advancement through its active involvement in industry partnerships, research, innovation, commercialisation and economic development policy initiatives.

Government initiates and fosters activity without necessarily having a direct service delivery or investment role.

Regulator

The South Australian Government is responsible for driver licensing and motor vehicle registration, assessment of vehicles and vehicle transfers.



The Strategy

These Strategic Themes reflect the three Direct Approaches to reducing vehicle emissions outlined earlier, as well as Enabling Approaches to maximise the opportunities and benefits for South Australia.

Figure 2: Five Strategic Themes



Goals

Improved Fuel Efficiency

The National Transport Commission’s measure of the carbon dioxide emissions for new light vehicles sold provides an insight into the performance of new light vehicles and, by extension, gives a hint to the overall fleet performance over time.

The target is for the South Australian fleet-average emissions to better the national rates of emissions reduction.

Additionally, the South Australian Government light vehicle fleet will reduce the in-service greenhouse emissions intensity of its light vehicle fleet by 10% per kilometre by 2014/15.

Success will also be measured, for both light and heavy vehicles, by the rate of emissions reduction in fleets that participate in programs under the Strategy.

Renewable and Low Emission Fuel Use

The most suitable measure is the amount of alternative fuels used in South Australia, noting external factors cause fluctuations in total transport demand.

Accordingly, the South Australian Government will work towards increasing the proportion of SA road transport energy, on a pre-blended energy content basis, sourced from renewable and low emission fuels.

Electrification of the Drivetrain

The Government is aiming to see an increase in the number of ‘stand-alone’ hybrid electric vehicles and plug-in electric vehicles registered in South Australia. The latter will be supported by a network of publicly-accessible recharging stations, based in the metropolitan area and in regional centres according to need.

Delivery

The Department of Planning, Transport and Infrastructure (DPTI) and the Department of the Environment, Water and Natural Resources (DEWNR) will jointly lead the Low Emission Vehicle Strategy Steering Group, comprising key stakeholders, to oversee delivery of the Strategy.

It is expected the Steering Group will meet several times per annum to monitor progress on the Strategy, set direction and coordinate reporting.

Reporting

DPTI and DEWNR will formally report to Cabinet on the progress and outcomes of the Strategy. Cabinet will be presented with a final report on the success of the Strategy in 2016, and an interim report in 2014.

The public will be able to track the performance indicators for the Strategy on the Internet. DPTI will update performance indicators as practicable.

Table 1: Summary of Performance Indicators and Targets

Performance Indicator [source]	Target / desired trend
Greenhouse gas emissions per kilometre for new SA light vehicles [A]	Exceed the national average reduction rate
In-service greenhouse gas emissions intensity of SA Government light vehicles [B]	Reduced by 10% per km by 2014/15
In-service greenhouse gas emissions intensity of Strategy-participant light and heavy vehicle fleets [C]	Reducing
Proportion of renewable fuels, on a pre-blended energy content basis, used in road vehicles in SA [D]	Increasing
Number of stand-alone hybrid electric vehicles registered in South Australia [E]	Increasing
Number of plug-in electric vehicles registered in South Australia [E]	Increasing
Number of publicly accessible electric vehicle recharge points in SA [F]	Increasing



Information Sources:

- A. National Transport Commission, Carbon Dioxide Emission from New Australian Vehicles (annual report)
- B. Fleet SA, Department of Treasury and Finance (SA)
- C. Participant fleet reports
- D. Industry survey
- E. DPTI's motor vehicle registration database (TRUMPS)
- F. Survey of electric vehicle recharging infrastructure providers

Strategic Theme 1: Promote Fuel Efficient Vehicles and Maintenance

The South Australian Government will encourage and assist vehicle operators to reduce emissions by promoting the acquisition and use of fuel efficient vehicles and encouraging vehicle maintenance for optimum performance.

A well-selected and properly maintained vehicle uses less fuel, costs less to run, emits fewer greenhouse gas emissions and has less impact on urban air quality.

Innovative vehicle and engine technologies are increasingly available in the Australian market. These include lightweighting, more gearbox ratios, improved aerodynamics, variable valve timing, common rail diesel engines, homogeneous charge compression ignition, and turbocharging.

Opportunities to improve the fleet's fuel efficiency aren't limited to buying new vehicles. All vehicles perform more efficiently when subject to appropriate maintenance schedules. There are also opportunities to improve fuel efficiency of existing vehicles with aftermarket technologies, such as low rolling resistance tyres and low friction lubricants.

The South Australian Government has committed to reducing the greenhouse emissions intensity of its light vehicle fleet, as measured in service, by 10% per kilometre by 2014/15.

The Government will also seek to assist private motorists and private sector managers of light and heavy vehicle fleets to improve fuel efficiency by strategically adopting more fuel efficient vehicles, improved driving techniques and effective vehicle maintenance practices.

The South Australian Government has recently introduced regulations to remove gross polluting vehicles from our roads. Vehicle owners who do not undertake scheduled maintenance of their vehicles will now face the risk of having their vehicle defected, pending appropriate servicing.

The Government will also provide information to develop motorist and industry awareness of innovative and fuel efficient vehicles.



Strategic Theme 2: Progress Renewable and Low Emission Fuels

The Government will facilitate increased use of renewable and low emission fuels in South Australia, including ethanol, biodiesel, natural gas and LPG.

The range of available fuels is rapidly expanding. Renewable fuels can be produced from a range of sources, including agricultural and animal by-products, waste and algae.

Many vehicles operating today are compatible with renewable fuel blends, essentially allowing lower emissions fuels to be 'dropped in' to much of the existing fleet. Some newer vehicles are compatible with a wide range of renewable fuel blends, such as the Flex Fuel Holden Commodore which can run on up to 85% ethanol.

Converting vehicles to use gaseous fuels can be a cost-effective emissions reduction option for those that cover significant distances. An increasing number of factory-built LPG-fuelled cars are entering the Australian market.

The SA Government will assist vehicle operators and motorists to determine the best fuel option by providing information on the range of fuels available and promoting the financial and greenhouse gas reduction benefits of renewable and low emission fuels.

The South Australian Government will explore the potential for standardised point-of-sale information on fuels.

The South Australian Government will also facilitate alternative fuel pilots and demonstrations and publish the results, including its own experience of using biofuels and natural gas in the public transport bus fleet, to build community confidence in these fuels.

Finally, the South Australian Government will continue to work with other jurisdictions, particularly the Australian Government through its Alternative Fuels Strategy, to encourage a shift to alternative, low emission fuels.



Strategic Theme 3: Establish Electric Vehicles

The South Australian Government will endeavour to remove information, policy and market barriers to electric vehicles and, accordingly, increase the number of electric vehicles on our roads.

Electric vehicles are rapidly advancing around the world, particularly in the light vehicle segment, in which it has been estimated there will be 119 stand-alone hybrid, plug-in hybrid and purely electric vehicle variants in production around the world by 2012⁹.

Stand alone hybrid electric vehicles run on conventional fuels, but harvest waste energy to charge a battery which powers an electric traction motor. Plug-in hybrid vehicles operate in a similar way but also permit off-board recharging of the battery, thereby running on both conventional fuels and mains electricity. Purely electric vehicles have no internal combustion engine and run entirely on electric power.

Vehicles operating in electric-only mode have no drivetime emissions, though upstream emissions do exist. When recharged with renewably generated electricity or GreenPower™, however, they may be regarded as zero emission vehicles.

Plug-in electric vehicles require recharging infrastructure, including both private and publicly accessible options. The South Australian Government will encourage the installation of public recharging infrastructure in strategic locations and, where necessary, implement standards for private recharging infrastructure.

The Government will provide information on electric vehicles and recharging infrastructure to develop motorist, community and industry awareness and acceptance. This will include publishing results of its own Electric Vehicle Demonstration Project, facilitating further EV pilots and evaluation, and encouraging early-adopters to share their experience.

The South Australian Government will work with utility providers to project electric vehicle impacts on electricity supplies and, if appropriate, identify and promote electric vehicle recharging regimes that deliver downward price pressure on electricity tariffs and facilitate increased renewable electricity generation.

The Government will also collaborate with other jurisdictions with a view to delivering nationally-consistent responses to electric vehicles.



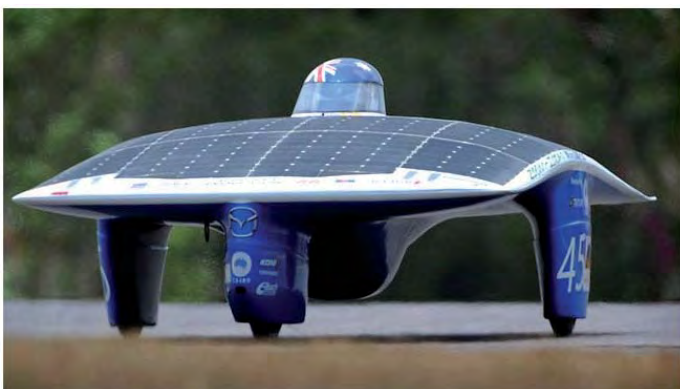
⁹ Deutsche Bank, 2009, Electric Vehicles: Plugged In 2, Figure 1, page 6

Strategic Theme 4: Research, Development and Commercialisation

The Government will support research, development and commercialisation opportunities for South Australia relating to low emission vehicles and fuels.

The Government will investigate opportunities to upgrade the South Australian motor vehicle registration database to enable it to more efficiently capture and report on, among other things, data about the fleet pertaining to efficiency and emission levels.

The Government will also project the impacts of emerging electric and natural gas fuelled vehicles on stationary energy supply chains, and vice versa. This will complement Australian Energy Market Commission work in identifying any barriers to electric and natural gas fuelled vehicles.



Case Study: AutoCRC

The South Australian Government has supported the AutoCRC, a collaboration of Australian universities researching auto and transport issues.

The University of South Australia is a member of the AutoCRC, and has undertaken research relating to electric vehicle potential in SA.

Government support to date has included \$700,000 in funding, with a total commitment of over \$1 million.

The Government will continue to support advanced research into low emission vehicles and fuels in South Australia.

Case Study: World Solar Challenge

The World Solar Challenge, having run its 11th race in 2011, continues to draw high calibre Australian and international competitors.

While the vehicles are not likely to be on our roads outside of the race, innovation underpinning their design is building corporate knowledge on factors such as aerodynamics, lightweighting, batteries and electric drivetrains. This knowledge ultimately finds its way into our everyday vehicles.

The South Australian Government will continue to provide industry support where needed to help commercialise new lower emission vehicles, components or support products.

Strategic Theme 5: Support and Connect the Community

The Government will provide information and resources to the community to assist in choosing, fuelling, charging, maintaining and driving low emission vehicles.

A key part of the transition to low emission vehicles will be the development of public awareness, acceptance and confidence in new vehicles and fuels in South Australia.

An appropriately skilled motor trades industry is crucial in a smooth transition to emerging low emission vehicle technologies. Government will consult with the industry to investigate opportunities for pre- and post-trade training module development.

Additionally, it will be important for activities carried out as part of the Low Emissions Vehicle Strategy to be consistent with and complementary to other State Government initiatives designed to reduce emissions from transport. This includes urban and transport planning reforms (the 30 Year Plan for Greater Adelaide), road infrastructure projects, public transport extension and modernisation, and promotion of travel behaviour change.

The South Australian Government will continue to collaborate with other jurisdictions to ensure its activities are harmonised with efforts around Australia to reduce vehicle emissions.

Case Study: Green Zone Drive Event

The first Green Zone Drive held in South Australia in October 2011 provided the community with the opportunity to test drive low emission production vehicles.

Participants were accompanied by a representative of the car company during the drive, who provided details on the environmental friendliness of the vehicle and the company's approach to sustainability and reducing emissions.

The Government will develop a range of media, including web and mobile applications, to provide current and authoritative information on reducing vehicle emissions to motorists and fleet managers.





**Government
of South Australia**

www.sa.gov.au/transport/lowemissionvehicles

July 2012
