



*New South Wales Government*

# CLEANER NSW GOVERNMENT FLEET



## ***Guidelines for Fleet Managers***

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An Initiative of the NSW Government's  
*Cleaner Vehicles Action Plan*

## Purpose of this document

This document explains the responsibilities and requirements of fleet managers under the Cleaner NSW Government Fleet Initiative.

This document is a supplementary guide for fleet managers, which should be read in the context of the Premier's Memorandum (No. 2005-03) "Cleaner NSW Government Fleet" available at [www.premiers.nsw.gov.au](http://www.premiers.nsw.gov.au). The measures and targets for fleet improvement described in this document should be implemented in consultation with your agency's Chief Executive Officer.

Fleet managers should:

- refer to the Government Motor Vehicles Policy, available at: [http://www.premiers.nsw.gov.au/our\\_library/travel/MotorVehiclePolicy2004.doc](http://www.premiers.nsw.gov.au/our_library/travel/MotorVehiclePolicy2004.doc)
- note the Premiers Circular No. 2004-47 *Removal of V8 powered vehicles from Government contract*, available at [www.premiers.nsw.gov.au](http://www.premiers.nsw.gov.au)

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# Acronyms

CCC	Clean Car Calculator
CEO	Chief Executive Officer
CGF	Cleaner NSW Government Fleet
CO <sub>2</sub>	Carbon dioxide
Commerce	Department of Commerce (NSW)
DEC	Department of Environment and Conservation (NSW)
DEUS	Department of Energy, Utilities and Sustainability (NSW)
DoTaRS	Department of Transport and Regional Services (Commonwealth)
EDGAR	Energy Data Gathering and Reporting
ESD	Ecologically Sustainable Development
GEMP	Government Energy Management Policy (NSW)
GHG	Greenhouse Gas
GVM	Gross Vehicle Mass
LPG	Liquefied Petroleum Gas
NO <sub>x</sub>	Oxides of nitrogen
VKT	Vehicle Kilometres Travelled
VOCs	Volatile Organic Compounds

# Executive Summary

Motor vehicles have become an integral part of the NSW society. However, along with the benefits they bring to modern life, there are significant environmental impacts. Cars are the single largest contributor to transport sector greenhouse gas emissions, and their emissions are rising faster than those from any other source. Recent studies suggest that deaths from air pollution in Australia each year are now close to the annual road toll, with motor vehicles being one of the most significant sources of air pollution in our cities.

Strong leadership is needed to reduce the impact of motor vehicle pollution, to re-think the way we use vehicles and to develop the market for cleaner models.

The NSW Government launched the NSW *Cleaner Vehicles Action Plan* in 2001. It is an important part of the Plan that Government leads by example with the introduction of the Cleaner NSW Government Fleet (CGF) initiative for vehicles under 3.5 tonnes GVM or Gross Vehicle Mass.

Under this initiative agencies are required to develop and implement a Fleet Improvement Plan, incorporating specific fleet performance targets from 1 July 2005.

## Government Targets

### 1. Average 'environment performance score' target

Each agency is required to achieve an 'average environment performance' score of:

- **10 out of 20** by end 2005/06 financial year
- **11 out of 20** by end 2006/07 financial year
- **12 out of 20** by end 2007/08 financial year

In 2007 further targets will be set for 2008/09 and 2009/10

The average environment performance score is calculated using the vehicle scoring system adopted for the NSW Clean Car Benchmarks, which rates the greenhouse emissions (measured as CO<sub>2</sub>) and air quality impact (noxious emissions) of vehicles.

### 2. Greenhouse Reduction Target

Greenhouse emissions from transport represent 15% of the total greenhouse emissions in NSW. These emissions have increased by 20% from 1990 to 2002 and are growing strongly. The NSW Government intends to reduce the greenhouse gas emissions associated with the operation of its vehicle fleet (measured as CO<sub>2</sub> from fuel consumption).

Using the baseline of 2004/05 performance, each agency is required to progressively reduce greenhouse gas emissions by:

- **10%** by end 2005/06 financial year
- **15%** by end 2006/07 financial year
- **20%** by end 2007/08 financial year

*This can be achieved by reducing total fuel consumption, including:*

- *Reducing the number of vehicles in the fleet*
- *Reducing vehicle kilometres travelled*
- *Improving fuel efficiency of individual vehicles.*



## Reduced target for Agencies with existing Green Fleets

Agencies with fleets that already meet the average environment performance score, have 50% lower targets for greenhouse emissions recognising that they already have a cleaner fleet. They are required to achieve a greenhouse gas reduction of 5% by 2005/06, 7.5% by 2006/2007 and 10% by 2007/08.

Achievement of targets will be performance-based – whilst agencies are encouraged to consider a package of measures to reduce emissions from their fleet, there will be no requirements for specific fuels, vehicle types or technologies. This will allow fleet managers to optimise fleet mix by category, fuels and usage to meet operational needs, environmental targets and cost savings.

These guidelines have been developed to assist you (as your agency fleet manager) to fulfil your agency's obligations under the CGF initiative.

These requirements have been set out in three simple steps, summarised here

(further details provided in subsequent sections).

### STEP 1: Gather baseline data to determine current fleet performance

**Aim:** To identify your fleet's current environmental performance.

Gather baseline data for your fleet, including:

1. The 'environment performance score' for all vehicles in your fleet (under 3.5 tonnes GVM) using the Clean Car Benchmark scoring system.  
Note the 'environment performance score' of all the vehicles on the Government contract can be found on the Statefleet website at <http://www.statefleet.ogp.commerce.nsw.gov.au/>
2. Using this data calculate the current average environment performance score of your agency's fleet.
3. Determine the annual greenhouse gas emissions (CO<sub>2</sub>) from your fleet from fuel consumption records for vehicles under 3.5 tonnes GVM.

Fuel consumption for vehicles 3.5 tonnes GVM and over will still need to be recorded and reported to Department of Energy, Utilities and Sustainability (DEUS) under the Government Energy Management Policy (GEMP).

### STEP 2: Develop a Fleet Improvement Plan

**Aim:** To develop a Fleet Improvement Plan, which outlines the measures, your agency will take to achieve the policy targets in the three years from 2005/06 to 2007/08.

The Fleet Improvement Plan should set out:

- ⇒ The baseline data of your agency's current vehicle fleet, that is, the profile of the environmental performance of the vehicle fleet using the NSW Clean Car Benchmarks.
- ⇒ Measures to be taken (procurement and operational) to meet the 10%, 15% and 20% greenhouse emissions (CO<sub>2</sub>) reduction targets.

- Measures to be taken (procurement and operational) by your agency to achieve the average environment performance score targets by end of each financial year.
- Results of an audit of the current size of your agency's vehicle fleet to ensure that business needs are the deciding factor for determining the size (and composition) of the fleet.
- Results of an audit of all commercial vehicles and 4WDs to ensure that they are required for an operational purpose.

Your Fleet Improvement Plan should also include a Forward Order Commitment (12 months), detailing your agency's new vehicle requirements by category, for submission to StateFleet.

When considering measures to achieve fleet improvement targets you should use the full range of tools, resources and contacts provided in these guidelines.

Your Fleet Improvement Plan will need to be updated and submitted to DEUS each year.

Your Forward Order Commitment will need to be determined and submitted to StateFleet each year.

### **STEP 3: Report on Progress**

**Aim:** To report to (DEUS) each year on the agency's progress in achieving the policy targets.

1. Report on fleet improvements by 31<sup>st</sup> October each year, as part of the GEMP reporting requirements, including your fleets greenhouse gas emissions and average environment performance score.
2. Current reporting requirements for vehicles 3.5 tonnes GVM and over will continue under GEMP;
3. DEUS will provide a Whole-of-Government report by April in the following year.

# Introduction

## Why clean up the Government fleet?

Pollution, a key by-product of motor vehicle use, has an impact on the local and global environment. Urban air quality continues to be a major health concern with levels of photochemical smog and particulates regularly exceeding air quality standards. These pollutants pose a significant respiratory risk to Australians and motor vehicles are *the* major source of air pollution in cities.

Technological improvements from progressively tighter emission standards have reduced emissions from new motor vehicles individually, but these gains are being eroded by the continuing sales growth of models with poor environmental performance.

On a global scale, burning fuel releases greenhouse gases that are contributing to climate change. Greenhouse emissions from transport represent 15% of the total greenhouse emissions in NSW. These emissions have increased by 20% from 1990 to 2002 and are growing strongly. The NSW Government intends to reduce the greenhouse emissions associated with the operation of its vehicle fleet (measured as CO<sub>2</sub> from fuel consumption). (See Appendix A).

Approximately 12% of all new cars sold in NSW each year (more than 35,000 vehicles) are bought through the NSW Government contract. Most of these vehicles are on-sold into the second hand car market after two years, so there is great potential for the Government to bring about significant greenhouse and air quality benefits through improving the performance of its own fleet. With this purchasing power the Government is also in a unique position to help to stimulate the 'clean' car market by favouring the purchase of models with better environmental performance. The Government also plays a key role in showcasing new vehicle technologies.

However, at present, like all large fleets, the NSW Government fleet is skewed towards larger cars with high fuel consumption and high greenhouse gas and noxious pollutant emissions.

## What is being done?

In November 2001 the Premier announced the NSW *Cleaner Vehicles Action Plan*.

The Action Plan is a package of initiatives to encourage the uptake of cleaner new motor vehicles in order to improve air quality in NSW, reduce fuel consumption and greenhouse gas emissions.

The Cleaner NSW Government Fleet (CGF) program is a key element of the Action Plan, developed to promote Government leading by example.



"We will shift from larger cars with high fuel consumption and greenhouse gas emissions to a cleaner, more fuel-efficient fleet. This will have huge environmental benefits, save taxpayers' money on fuel and help stimulate the "green" car market."

The Hon. Bob Carr, 23 November 2001

The CGF initiative aims to do this by improving the composition, efficiency and performance of the NSW Government light vehicle fleet. Agencies will be required to develop and implement Fleet Improvement Plans incorporating specific targets for reducing fuel consumption and emissions, with a view to meeting operational requirements in a manner that improves environmental performance.

Agencies will be required to report on progress in achieving their targets each year.

## NSW Clean Car Benchmarks

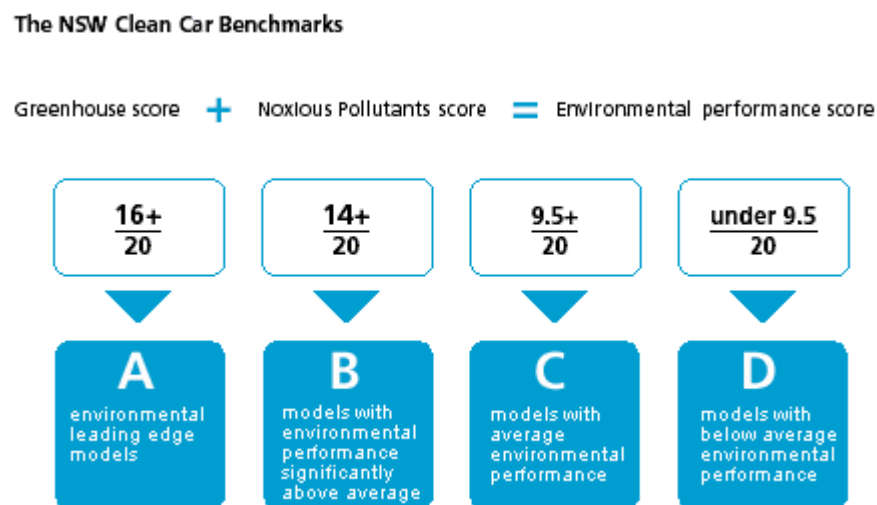
The NSW Clean Car Benchmarks categorise the relative environmental performance of new cars available on the market. The benchmarks apply to all motorised vehicles under 3.5 tonnes GVM with four or more wheels.

When a vehicle is rated using the Clean Car Benchmarks, it is given:

- 🚗 A score out of 10 for noxious pollutants<sup>1</sup> (oxides of nitrogen, fine particulates and hydrocarbons); and
- 🚗 A score out of 10 for greenhouse gas emissions (measured as CO<sub>2</sub> from fuel consumption).

The environment performance score (out of 20) is the sum of the greenhouse score plus the noxious pollutants score. The environment performance score determines whether the vehicle is placed in benchmark category A, B, C or D, as set out in Figure 1:

**Figure 1: The NSW Clean Car Benchmarks**



For more information on the Clean Car Benchmarks see <http://www.epa.nsw.gov.au/air/mve.htm>. For a full list of vehicle environment scores see [www.greenvehicleguide.gov.au](http://www.greenvehicleguide.gov.au).

Benchmark Category	Minimum Required Score	Examples of Vehicle Model
A: Leading edge	16/20	Toyota Prius ( <i>subject to re-evaluation</i> )
B: Significantly above average	14/20	Holden Astra, Vectra and Barina
C: Average	9.5/20	Toyota Camry, Corolla & RAV4, Mitsubishi Magna, Ford Falcon (6 cyl), Holden Commodore V6, Mitsubishi Outlander, Ford Escape (4cyl)
D: Below average	<9.5/20	Toyota Landcruiser, Holden and Ford V8 models

<sup>1</sup> These are regulated emissions from the Australian Design Rules.

# A Cleaner NSW Government Fleet

The Cleaner NSW Government Fleet initiative seeks to lead NSW by example, improving the environmental performance of the Government light vehicle fleet.

## What are the benefits of this initiative?

While the CGF initiative primarily aims to benefit the environment, there are also likely to be benefits for the clean-car market, second-hand car market, government agencies and taxpayers.

### Benefits for agencies and taxpayers

Implementing fleet improvement initiatives not only helps the environment, but can also result in fuel savings and operating-cost reductions. This saves agencies and ultimately taxpayers money.

Better fleet management can result in significant savings.



### Improving the performance of your fleet can save you money!

For example: replacing one Ford Falcon with one Ford Focus could save you approximately \$520 per year in fuel and leasing costs while also saving approximately 1 tonne of CO<sub>2</sub> per year. This means that if a fleet of 50 Ford Falcons were each replaced with a Ford Focus, the savings would be up to \$26,000 per year as well as a reduction of up to 50 tonnes of CO<sub>2</sub>!<sup>2</sup>

## Benefits for the clean-car market

Most manufacturers now offer some vehicles with superior environmental performance.

The NSW Government aims to increase the proportion of low emission vehicles on our roads. That is why it is encouraging the use and development of cars that have emissions performance better than that required under the current Australian Design Rules (ADRs) as well as good fuel economy.



### Government Fleet Managers are in an excellent position to help develop a successful clean-car market in NSW.

Fleet managers who demonstrate a preference for more fuel efficient, low emission vehicles will encourage manufacturers to offer a wider range of these vehicles.

## Benefits for the second-hand car market

As agencies shift to cleaner and more fuel efficient vehicles, this will reduce the impact of the Government fleet on the environment. In addition, these vehicles, often smaller and more economical models, will flow through to the second hand car market as the Government renews its fleet. This will lead to better performing models entering the second-hand car market, models that are often more affordable than the current larger and less fuel efficient models provided by fleets for re-sale.

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<sup>2</sup> Ford Falcon XT (auto sedan), 11.5km/100km (city), 6 cylinder, 4 litre engine, 24-month lease.

Ford Focus CL (auto sedan), 9L/100km (city), 4 cylinder, 2.0 litre engine, 24-month lease.

Sources: Australian Greenhouse Office (2003) Fuel Consumption Guide 2002-2003; and NSW Department of Commerce (2003) StateFleet Leasing Arrangement: indicative lease payment guide, July 2003. Assumptions: average fuel price 90 cents per litre; a fuel consumption of 11.5L/100km emits approximately 26.45kg CO<sub>2</sub>/100km; a fuel consumption of 9L/100km emits approximately 20.7kg CO<sub>2</sub>/100km; and the average Government fleet vehicle travels approximately 20,000km/year.

## Which agencies are required to improve their fleets?

### All General Government Sector Agencies

The implementation of fleet improvement measures and reporting under the CGF Initiative is mandatory for all general government sector agencies. The prime responsibility for the implementation of the initiative lies with the agency's Chief Executive Officer (CEO). However, the practical aspects of implementation will in most cases be your responsibility – as the agency's appointed Fleet Manager.

Public trading enterprises are also strongly encouraged to participate.

### Each agency is responsible for Ecologically Sustainable Development

The basic principles of the CGF initiative are not new for Government agencies. Agencies are already required to include Ecologically Sustainable Development (ESD) objectives in their corporate plans and subsequent business practices, including procurement.



Implementing this initiative will help your agency to achieve Ecologically Sustainable Development through its operations.

The NSW Government Procurement Policy states that products should be “assessed equally and impartially on their demonstrated comparative merits in terms of performance, cost and environmental impacts”.

Improvements to even the smallest fleets will contribute to the Government's overall objective of reducing greenhouse gas emissions and improving air quality.



A fuel consumption reduction goal of 10% for a fleet of 100 vehicles could save around 46 tonnes of CO<sub>2</sub> in one year<sup>3</sup>.

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<sup>3</sup> E.g. 100 cars in the fleet all with 10L/100km fuel consumption. 10% reduction brings fleet down to 9L/100km. All up, this means a reduction of 0.023kg CO<sub>2</sub> for each km each car drives per year. Assuming each car in the fleet drives 20,000km/year, this means that 46,000 kg CO<sub>2</sub> is saved (or 46 tonnes).

# Responsibilities of Fleet Managers

**As directed by the agency CEO, the nominated fleet manager is responsible for the practical implementation of the Cleaner Government Fleet Initiative within their organisation.**

## Who is the 'fleet manager' under this initiative?

Depending on your agency's size and functions, your official role within your organisation may be: energy manager; asset manager; environmental manager; fleet manager; or perhaps even a combination of these roles. If you have been nominated by your CEO as the appropriate officer responsible for implementing the CGF initiative within your organisation, then you are the person referred to as 'fleet manager' in this document.

Many agencies do not have a fleet manager or the functions of a fleet manager have been delegated to more than one person (for example the selection and acquisition of vehicles). In these cases the CEO will nominate one person to be responsible for the practical implementation of the Cleaner Government Fleet Initiative within the organisation.

## What are my responsibilities?

The ultimate responsibility for your agency's performance under the CGF initiative lies with your agency's CEO. However, it is likely that the CEO will delegate the day-to-day responsibility for fleet improvement to you, as the fleet manager.

- You are to determine the current performance of your fleet (Step 1)
- You are to develop and implement a Fleet Improvement Plan in order to reach your targets (Step 2), and submit annually to StateFleet (on 1<sup>st</sup> July), a Forward Order Commitment (12 months), detailing your agency's vehicle requirements by category.
- You are to report annually to DEUS (before 31<sup>st</sup> October), on your agency's progress in meeting nominated targets (Step 3).

A summary of these steps, the "Fleet Manager's Checklist" is available in Appendix B.

The responsibilities listed above should be incorporated into your position description or performance agreement.

## How much extra work is involved?

The new responsibilities outlined in these guidelines are to be incorporated into improved fleet management practices for your agency. Most of the additional work will be in the development and implementation of these improved fleet management practices and many of these practices will require the cooperation of other sections within your agency.

In addition you will be required to annually revisit and update your agency Fleet Improvement Plan.

You will also need to slightly expand your existing monitoring and reporting activities in order to satisfy GEMP requirements that your agency GEMP, to comply with this initiative.

## What options do I have for Fleet Improvement?

It is important to understand that this initiative is focused on outcomes. Actions must be taken to achieve the targets for environmental improvement of fleets, provided that the actions do not adversely impact on your agency's corporate objectives and operational needs.

There are many options, which, if implemented, will improve your fleet performance, and each agency has the flexibility to select the most appropriate strategy, or combination of strategies, to improve environmental performance.

If your agency is not in a position to improve its fleet in-house (e.g. because of staffing or skills constraints), you are encouraged to seek advice from StateFleet, Department of Commerce, or employ the services of a fleet management consultant, who can audit your fleet and provide practical assistance.

# STEP 1: Determine Current Fleet Performance

**In order to improve the environmental performance of your fleet, you will need to know how your fleet currently performs.**

The CGF initiative aims to improve the environmental performance of government fleets by seeking improvements in the following areas:

- Increasing the *average environment performance score* of agency fleets
- reducing total greenhouse gas emissions

The first priority under the CGF initiative is to determine the performance of your fleet over the last financial year, based on these parameters.

Baseline data for greenhouse gas emissions and your fleet's environment performance score is required for the 2004-05 financial year.

## Greenhouse gas emissions

You must determine the current greenhouse gas emissions (CO<sub>2</sub>) for your light vehicle fleet i.e. vehicles <3.5 tonnes Gross Vehicle Mass (GVM).

It is relatively simple to determine total greenhouse gas emissions, by looking over your existing data for 2003-04. You only need to consider vehicles <3.5 t GVM.

You are already providing to DEUS information required to monitor GEMP. This information includes your agency fuel consumption (by type) and vehicle distance travelled. The annual GEMP report already calculates the mass of greenhouse gas emitted (calculated based on your agency's fuel consumption).

You can identify and monitor your annual reduction in fuel consumption and greenhouse gas emissions simply by referring to the annual GEMP report.

From 2004-05 onwards the web-based "Energy Data Gathering and Reporting" system (EDGAR) will be able to provide you with a summary of total and average fuel consumption for light vehicles (<3.5 tonnes GVM) in your fleet, and will also work out the CO<sub>2</sub> emissions based on your fuel consumption. See [www.edgar.gov.au](http://www.edgar.gov.au).

If you need help to accessing or use EDGAR, you should contact the DEUS (see "resources, tools and contacts" in Step 3).

Note that the data currently required under the GEMP divides vehicles into the categories of "passenger vehicles" and "other vehicles." You will now need to further subdivide your GEMP figures into the three categories of:

- passenger vehicles;
- non passenger vehicles under 3.5 tonnes GVM; and
- all other vehicles (that is vehicles over 3.5 tonnes GVM).

## Your Fleet's Environment Performance Score

The average environment performance score provides information on the environmental impact of an agency's fleet by considering a vehicle's greenhouse emissions (measured as CO<sub>2</sub>) and air quality impact (noxious emissions).

At the end of the 2004-05 financial year you should have a list of vehicles and their environment performance scores.

StateFleet's website [www.statefleet.ogp.commerce.nsw.gov.au](http://www.statefleet.ogp.commerce.nsw.gov.au) will provide online tools that will enable clients to view their fleet's environment performance score for vehicles leased through StateFleet. Please contact StateFleet if you require assistance with this online tool (refer to "resources, tools and contacts" in Step 3 for StateFleet contact details).

If you are not a StateFleet managed client and you have vehicles in your fleet that are not leased through StateFleet you should be aware when using the online tools that these vehicles are not included in the StateFleet database.

## STEP 2: Develop a Fleet Improvement Plan

**A Fleet Improvement Plan is to be developed which lists the steps that the agency will adopt to achieve the targets that it has set.**

**A rolling three year Fleet Improvement Plan will be required of all agencies for the 2005-2006 financial year onwards and is to be submitted to DEUS each year, with the first one due by October 2005.**

### What is a Fleet Improvement Plan?

A Fleet Improvement Plan details the *measures*, which the agency will adopt to achieve the agency's fleet improvement targets, which were set in Step 2.

Your Fleet Improvement Plan shows how your agency will achieve the targets required under the CGF initiative.

Your Fleet Improvement Plan is not a static document. It is a plan, which will change to reflect updated fleet data, revised strategies and the progress in meeting your targets.

### Developing your Fleet Improvement Plan



You must develop a Fleet Improvement Plan that outlines how you will achieve the policy targets.

To develop a Fleet Improvement Plan, start with your agency's current fleet performance, which was identified in Step 1. Now compare this current performance with the greenhouse and average environment performance score targets under the policy.

The Fleet Improvement Plan will identify the decisions, actions and policy changes required to improve your current performance and facilitate your future planning and ordering.

Once you have identified a series of actions which will improve your fleet performance, check the effect by using one of the calculators and tools shown later in Table 1. Identifying the steps for improving your fleet improvement and calculating the subsequent effect is an iterative process. You may have to improve the plan several times before you have one that will achieve your fleet improvement targets.

Your Fleet Improvement Plan should be endorsed by your agency's CEO.

### Options for your Fleet Improvement Plan

There are many decisions and actions that will result in improved fleet performance. In developing your Fleet Improvement Plan, you should consider a combination of the available options that will improve your fleet performance without having an impact on your agency's service delivery.

Some of the actions which will increase your fleet's environment performance score and which should be considered for inclusion in your Fleet Improvement Plan are shown below.

## Carefully review vehicle replacements

- ☞ Do you need a replacement vehicle at all? The most effective way to reduce your fuel consumption and emissions is to reduce the number of vehicles in your fleet. As each vehicle in your fleet comes up for renewal, consider whether there is a clear business case for that vehicle. Avoid replacing a vehicle for no other reason than the lessor has advised that the lease is about to expire.
- ☞ Review the vehicle's use as vehicles may be under utilised. In metropolitan areas you can consider the use of cabcharge vouchers or public transport as fuel, time and cost efficient alternatives.

## Select the cleanest and most efficient vehicle

- ☞ When selecting vehicle types, recommend the cleanest, most efficient vehicles. Almost always, the small to medium category vehicles have the lowest operating cost and are the least expensive over the whole of vehicle life. Use the Clean Car Calculator at [www.statefleet.ogp.commerce.nsw.gov.au](http://www.statefleet.ogp.commerce.nsw.gov.au) to search for the cleanest cars available and select your preferred vehicle.
- ☞ Consider whether your vehicle selection suits the use to which the vehicle is put. Consider whole-of-life costs when renewing vehicles so you can select the best environmental performing model for your operational requirement.
- ☞ Under the new policy StateFleet will have a centralised purchasing role. This means that agencies will continue to specify their vehicle requirements based on operational needs but StateFleet will determine the make/model that will be purchased to best meet the specified operational requirements. Wherever possible, StateFleet will supply your preferred choice of vehicle.
- ☞ Order petrol-electric hybrid vehicles where appropriate.
- ☞ Actively consider where in your fleet you could place vehicles with very high environment performance scores. Mandate the use of small, fuel efficient vehicles for CBD fleets.



“Leading by example, the Government will ban the purchase of V8 vehicles on Government contract and set targets for the environmental performance of its fleet.”

The Hon. Bob Carr, 17 November 2004

## Change the mix of your fleet

- ☞ You will be able to improve your fleet's environment performance score by progressively replacing vehicles with low environment scores with vehicles with high environment scores.
- ☞ For example, if your agency's fleet environment performance score is 10/20, you will be able to improve this score by specifying replacement vehicles that rate higher than 10/20. Obviously you should avoid vehicles that will reduce your agency's environment performance score. You can see how your vehicle choice may impact on your fleet's environment performance score by using the online tool provided by StateFleet. ([www.statefleet.ogp.commerce.nsw.gov.au](http://www.statefleet.ogp.commerce.nsw.gov.au)).

## Be realistic in appraising the need for large passenger vehicles:

- ☞ Consider why the agency requires a large 6-cylinder passenger vehicle. Do agency vehicles ever carry passengers and how many?
- ☞ Check whether the vehicle will be required to ever carry loads that might require a large vehicle. Are these loads so large that they require a station wagon?
- ☞ Carefully consider the OH&S implications of the selection of large 6-cylinder vehicles based on a perceived need for vehicle performance. Smaller vehicles are likely to maintain speed limits just as well.
- ☞ Develop a program to systematically replace large passenger vehicles with medium or smaller models.

## Subject requests for 4WD to critical review

- ☞ Assess whether agency staff ever need to “go off a road”. Does the agency require a 4WD? Consider when and where staff really need to go off road.
- ☞ If your agency sometimes uses poor roads (icy, gravel or poorly formed), then seriously consider the use of smaller, all wheel drive vehicles which have excellent and safe handling characteristics with less mass, smaller engines and improved emission scores (AWDs have typical environment scores of 10.5 compared to emission scores of 5 to 9 for larger 4WD).

## Consider the use of alternative fuels

- ☞ Alternative transport fuels can be broadly defined to include ethanol, biodiesel, Liquefied Petroleum Gas (LPG), Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG) and methanol.
- ☞ These fuels vary in their commercial application – some are mainstream and widely available (such as LPG) and some currently supply to ‘niche’ markets. The emission benefits of these fuels vary.
- ☞ If there is an identified business need for a 6-cylinder vehicle, consider the use of alternative fuels that have better environmental performance.
- ☞ Be sure to consider if appropriate refuelling infrastructure is available.



### Case Study - NSW Police save \$1.5 million from LPG

Over the next three years the Police Service will increase its LPG fleet to between 500 and 700 cars. The force aims to have up to 20% of the 3500-car fleet on gas by the end of 2006.

The result will save the force \$1.25 million each year and reduce greenhouse emissions by 420 tonnes. The reduction in CO<sub>2</sub> emissions per vehicle is 0.2 tonne per 10,000km and each vehicle average about 30,000km a year.

The first auto gas cars were introduced into the police force more than 4 years ago and the force has spent the last 2 years trialling 80 general duties cars. The trial is only on 6-cylinder vehicles.

## Reduce private usage of vehicles

- Reducing private use of agency vehicles is crucial. Reducing private use will immediately reduce your total fuel consumption and improve your fleet performance.
- Review a sample of log books and identify the typical driving patterns of agency vehicles. If a vehicle has most of its use at mornings and evenings then the vehicle might be engaged in unauthorised personal transport. In these cases Fleet Managers should contact management at the vehicle's location and request clarification and, if necessary, confirmation, of the nature of the authorisation (for example authorised by CEO or delegate, industrial agreement or government policy).
- Review whether any fleet vehicles have been allocated to individual staff. Vehicles are only allocated to staff if they are part of a salary sacrifice scheme.
- The new policy incorporates changes to the existing rules for business/private use vehicles. The primary consideration of vehicle type must always be for operational requirements regardless of suitability for private use. Where an alternate vehicle is selected from the Government contract, the agency will only contribute up to the level of vehicle required for operational purposes.

### **Salary Sacrifice Arrangements (including Senior Executive Service)**

Where an officer requires a specific vehicle under a salary sacrifice arrangement (business/private) the process will be as follows:

1. The agency will determine the appropriate category of vehicle needed for operational requirements;
2. The officer will select their vehicle of choice from the NSW Government Motor Vehicle contract;
3. The agency will then calculate the difference in charges between the operational vehicle required and the vehicle selected by the officer. The difference is to be paid by the officer.

Where an officer chooses 100% private use, existing arrangements will apply.

- Review parking arrangements for fleet vehicles. If secure parking is not available consider paying for local secure parking or asking those staff who live closest to vehicle location to take vehicle home for secure garaging. This will reduce FBT by reducing private journey kilometres, which attract FBT.

- ☞ Private usage is sometimes incorporated in “broken journeys” (ie home to work journeys which are broken for business purposes). The Australian Tax Office allows<sup>4</sup> broken journeys to be classified as business journeys only if the break in the journey is “where the employee performs substantial employment duties”. Otherwise the journey is a private journey and subject to FBT. Each agency should define what it considers to be “substantial employment duties” (the ATO notes that such activities must be more than simple pick ups, deliveries etc).
- ☞ Monitor log books (running sheets) to identify private travel.
- ☞ Fleet Managers should be wary of arrangements that reduce FBT, but do not reduce vehicle usage, such as moving to commercial vehicles. A reduction in FBT will not reduce greenhouse emissions and will neither be in compliance with Government policy nor a demonstration of good fleet management.
- ☞ Advise agency staff that private vehicle usage is under continuous review.

### **Other options for reduction in vehicle travel**

- ☞ Review the arrangements for staff travelling to meetings and ensure that staff do not travel in separate vehicles to the same meetings or functions.
- ☞ Actively encourage and promote video or teleconferencing as alternatives to meetings.
- ☞ Encourage and provide guidance/assistance on the use of public transport (e.g. keep timetables; advise of Transport Info line (131 500 or [www.131500.com.au](http://www.131500.com.au)).
- ☞ Encourage and provide guidance/assistance with route/journey planning to avoid unnecessary kilometres (e.g. have road maps available for staff, advise of online directory: [www.whereis.com.au](http://www.whereis.com.au)).

### **Maintain your fleet vehicles**

- ☞ Regular maintenance of vehicles will ensure optimal efficiency and environmental performance. Remember that your agency might be financially penalised when a poorly maintained vehicle is offered for resale.

### **Promote good driving practices among staff**

Individual driving habits can make a big difference to the amount of pollution a car produces as well as fuel consumption.

- ☞ Smooth driving helps save fuel. Avoid harsh acceleration and heavy braking (this also promotes safety).
- ☞ Keep your vehicle tuned to the manufacturer’s maintenance guidelines.
- ☞ Don’t ‘warm-up’ your car - it wastes fuel and is unnecessary if the vehicle is tuned.
- ☞ Don’t fill the petrol tank past the first click -expansion of the fuel can result in increased emissions.
- ☞ Remove excess weight from your vehicle (eg equipment in the boot).
- ☞ Keep windows closed to minimise air drag and improve fuel efficiency.
- ☞ Try to reduce idling time - idling for over 30 seconds uses more petrol than it takes to restart the engine. Switch off the engine, if safe to do so, during extended delays.

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<sup>4</sup> ATO Tax Ruling MT 2027.

- ☞ Plan trips so that you have one linked trip rather than multiple trips.
- ☞ Avoid short trips - until your car is at normal operating temperature, it will emit excess pollution.
- ☞ Don't rev the engine.
- ☞ Travel at moderate, steady speeds and avoid high speeds as they result in greater emissions. Driving at speeds above the regulated speed limit will also expose drivers to speeding fines, which will not be met by the agency (traffic infringements are the responsibility of the driver).



**Driving at 110km/h can use up to 25% more fuel than driving at 90km/h<sup>5</sup>.**

- ☞ Avoid peak hour traffic where possible (arrange meetings outside peak hours).
- ☞ Check tyre pressure. Never run at lower than recommended pressure as this can increase fuel consumption.
- ☞ Good driving practices are safe driving practices. Mandate that staff take a break each two hours.
- ☞ If necessary, send drivers to appropriate driver training and assessment and subsequently prohibit poor drivers from driving agency vehicles.

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<sup>5</sup> Australian Government (2003) *Fuel Consumption Guide 2002-2003*  
[www.greenhouse.gov.au/transport/fuelguide](http://www.greenhouse.gov.au/transport/fuelguide)



## Case Study – Central Sydney Area Health Service saves over \$200,000

The Central Sydney Area Health Service (CSAHS) has a fleet of 650 vehicles. Since 1999 the CSAHS has changed the profile of its fleet to reduce greenhouse gas emissions, including a range of initiatives:

- ☞ Reduce the fleet size without compromising work performance;
- ☞ Purchasing more fuel efficient vehicles – reducing the amount of 6 and 8 cylinder vehicles in the fleet, and purchasing smaller 4 cylinder vehicles (1.3 and 1.5 litre vehicles);
- ☞ The use of alternative fuels;
- ☞ Educational programs on fuel use and trip planning to reduce the kilometres travelled by the fleet;
- ☞ Regular fuel use audits; and
- ☞ Investigation of hybrid vehicles.

From 1999 to 2003 its fleet reduced petrol consumption by 30%, and reduced kilometres travelled by 21%.

These reductions contributed to a greenhouse saving of 30% from the fleet, and financial savings of over \$200,000 in 2002/03 compared to 1999/2000 for petrol alone.

In recognition of these initiatives the CSAHS won the Australasian Fleet Managers Association Environment Award 2004.

## Resources, tools and contacts

Table 1: Resources, tools and contacts to help you find further information and assistance for fleet improvement.

Resource	Description	Location
Clean Car Calculator	The Clean Car Calculator (CCC) provides fleet managers with the relative environmental performance of all vehicles on the NSW Government Motor Vehicle Contract. The CCC is a user-friendly, internet-based planning tool to assist fleet managers to assess the environmental impact of their light vehicle fleet.	CCC: <a href="http://www.statefleet.ogp.commerce.nsw.gov.au">www.statefleet.ogp.commerce.nsw.gov.au</a> Methodology: <a href="http://environment.nsw.gov.au/resources/cleancars.pdf">environment.nsw.gov.au/resources/cleancars.pdf</a> Vehicle ratings: <a href="http://www.greenvehicleguide.gov.au">www.greenvehicleguide.gov.au</a>
Fleet Management Guides	There are a few Fleet Management Guidelines available that focus on improved environmental performance. Many of these provide detailed practical tips, which may be of interest to you.	Australasian Fleet Managers Association (AfMA) "Greener Motoring, the how to guide": <a href="http://www.greenermotoring.com.au">www.greenermotoring.com.au</a> UK Department for Transport: "Transport Energy Best Practice - Fleet Management Guide": <a href="http://www.transportenergy.org.uk/downloads/Gpg2106.PDF">http://www.transportenergy.org.uk/downloads/Gpg2106.PDF</a>
Fit-for-Purpose Evaluation	A fit-for-purpose evaluation is a simple process that assists fleet managers in selecting the most efficient vehicle for the intended operational purpose.	AfMA Greener Motoring guidelines (see above)
NSW Government Policies	Government Energy Management Policy (GEMP) Premier's Motor Vehicle Policy	<ul style="list-style-type: none"> <li><a href="http://www.deus.nsw.gov.au/eeg/gemp/">http://www.deus.nsw.gov.au/eeg/gemp/</a></li> <li><a href="http://www.premiers.nsw.gov.au/our_library/travel/MotorVehiclePolicy2004.doc">http://www.premiers.nsw.gov.au/our_library/travel/MotorVehiclePolicy2004.doc</a></li> </ul>
Agency: Department of Energy, Utilities and Sustainability (DEUS)	DEUS can provide agencies with assistance in relation to data collection requirements and use of data systems and repositories (EDGAR). For assistance in reporting CGF data, contact Dr Tadipatri Prasad. For assistance with EDGAR, please refer to the DEUS website or contact Dr Amjad Adil.	Dr. Tadipatri Prasad Ph: (02) 8281 7448 Fax: (02) 8281 7452 <a href="mailto:tadipatri.prasad@deus.nsw.gov.au">tadipatri.prasad@deus.nsw.gov.au</a> Dr. Amjad Adli (02) 8281 7447 (02) 8281 7452 <a href="mailto:amjad.adil@deus.nsw.gov.au">amjad.adil@deus.nsw.gov.au</a> <b>Department of Energy Utilities and Sustainability</b> Level 17, 227 Elizabeth St., Sydney NSW 2000 GPO Box 3889, Sydney NSW 2001 <a href="http://www.deus.nsw.gov.au">www.deus.nsw.gov.au</a>

Resource	Description	Location
<p><u>Agency:</u> StateFleet (Commerce)</p>	<p>StateFleet provides on-line services via their website to assist clients who lease vehicles through StateFleet meet their requirements under the CGF initiative. Clients can access data on their vehicles that will allow them to monitor their progress towards meeting the requirements under the CGF program. The StateFleet website also allows clients to identify better performing vehicles when processing an on-line order or obtaining an on-line lease quote.</p>	<p>John Barlow Ph: (02) 9372 9158 Fax: (02) 9372 7772 Email: <a href="mailto:john.barlow@commerce.nsw.gov.au">john.barlow@commerce.nsw.gov.au</a> StateFleet Level 12, 2-24 Rawson Place Sydney 2000 <a href="http://www.statefleet.ogp.commerce.nsw.gov.au">www.statefleet.ogp.commerce.nsw.gov.au</a></p>
<p><u>Agency:</u> Department of Environment and Conservation (DEC)</p>	<p>DEC can provide Agencies with assistance / further information on the aspects of the environmental scoring system including the 'Clean Car Benchmarks'.</p>	<p>DEC Enquiry Line Ph: 131 555 Email: <a href="mailto:cleanervehicles@dec.nsw.gov.au">cleanervehicles@dec.nsw.gov.au</a> Department of Environment and Conservation (NSW) 59-61 Goulburn Street, Sydney PO Box A290, Sydney South 1232 <a href="http://www.environment.nsw.gov.au">www.environment.nsw.gov.au</a></p>

## STEP 3: Report on Progress

**Agencies are required to report annually to DEUS on achieving their targets and rolling three year fleet improvement plans. This reporting will be done as part of the agency's GEMP reporting requirements.**

Each agency will report on their progress in achieving fleet improvements annually to DEUS. Reporting on the achievement of CGF targets will form part of the existing GEMP annual reporting requirements. Reporting under the CGF initiative is undertaken using the Energy Data Gathering and Reporting system (EDGAR), which is also used by NSW Government agencies to report their energy consumption under GEMP.

### Data already reported under GEMP

As part of GEMP, all NSW government agencies already collect data and report fuel use quantity (and cost) by fuel type and VKT (Vehicle Kilometres Travelled) by vehicle category (i.e. passenger/other). This data is entered into the EDGAR system, which automatically calculates average fuel consumption, fuel intensity (MJ/km and Litres/100km) and greenhouse gas emissions.

### What additional information will I now need to report?

The vehicle categories in EDGAR will be changed to capture Gross Vehicle Mass (GVM). That is, from 2004-05 onwards, you will need to report quantity of fuel used by fuel type (petrol, diesel etc.), VKT and number of vehicles for:

- ⇒ passenger vehicles;
- ⇒ other vehicles of less than 3.5 tonnes; and
- ⇒ other vehicles 3.5 tonnes and over.

Note: previously, you reported data for “passenger” and “other” vehicles only. You will need to be able to segregate your other vehicles into those under 3.5 tonnes and those 3.5 tonnes and over. VKT for other vehicles 3.5 tonnes GVM and over is optional, as it could include trucks, tractors, boats and aircraft.

In addition to fuel consumption data, you will also be required to report your light-vehicle fleet's (<3.5 tonnes GVM) environment performance score.

StateFleet managed clients will be able to access an online tool that automatically calculates their fleet's environment performance score at [www.statefleet.ogp.commerce.nsw.gov.au](http://www.statefleet.ogp.commerce.nsw.gov.au)

Agencies not managed by StateFleet can download an excel spreadsheet to assist them with the calculations at [www.statefleet.ogp.commerce.nsw.gov.au](http://www.statefleet.ogp.commerce.nsw.gov.au). Refer to “Step 1: determine current feet performance” for more detail about fleet environment performance scores and how to calculate them.

## DEUS Reporting Responsibilities

DEUS will prepare a report on whole-of-government fuel use in April each year, as a part of the GEMP report. It will include:

- ▣ Whole-of-Government targets;
- ▣ Scope and methodology;
- ▣ Total fuel use, costs, energy utilisation indices and greenhouse gas emissions by vehicle category;
- ▣ Total fuel use, costs, energy utilisation indices and greenhouse gas emissions by fuel type;
- ▣ Fuel use, costs, energy utilisation indices and greenhouse gas emissions for each agency;
- ▣ Fleet environment performance scores for each agency and for the whole NSW Government;
- ▣ State averages, minimum and maximum values of the fleet performance indicators, fuel intensities (MJ/km, Litres/100km, MJ/vehicle and Litres/vehicle) and greenhouse intensities (kgCO<sub>2</sub>/km and kg/vehicle) for each vehicle category; and
- ▣ Conclusions, including performance against goals.

The report will highlight the contribution of your agency to the wider energy efficiency and fleet improvement achievements within the NSW public sector.

## Timing for Reporting

Under GEMP, you are required to report to DEUS by 31 October each year.

The first reporting year under the CGF initiative is for the financial year 2004/05. Each year NSW agencies will report their fleet information along with GEMP data by 31 October and DEUS will release a whole-of-Government report in April of the following year.

## So, when do I begin?

Immediately! Steps 1 and 2 need action now. You need to ensure that you determine your fleet's current performance to meet the policy targets, so that you can begin improving your fleet this year. Your first report is due at the end of the 2004/05 financial year.

A useful Fleet Manager's Checklist can be found in Appendix B. The checklist will help you to manage the 3 Steps outlined in this document, and outlines when everything is due.

Good luck with improving your fleet and the environment!

## Appendix A: How do motor vehicles affect our environment?

### Motor vehicles affect air quality in our cities

Motor vehicles are the most significant source of urban air pollution<sup>6</sup>. Air pollution can be associated with acute health effects such as asthma and angina. Health studies have also shown associations between air pollution and chronic health problems such as lung cancer, bronchitis, cardiovascular disease – and even death<sup>7</sup>.

Smog is formed when Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NO<sub>x</sub>) (both major pollutants from motor vehicles) react in the presence of sunlight.

Sydney, the Lower Hunter and the Illawarra all occasionally exceeded the national ambient air standards for smog levels. As the populations in these areas continue to expand, the smog levels are also expected to worsen, unless action is taken now to reverse the problem.

### Motor vehicles contribute to climate change

The impact of motor vehicles is not just a problem for people in cities. Australia has the highest per capita greenhouse emissions in the world and transport emissions are rising fast.

Rising concentrations of greenhouse gases (such as CO<sub>2</sub>) affect the overall heat balance of the atmosphere, leading to changes in climate and weather patterns, as well as more extreme events, such as droughts, floods and cyclones. This is commonly referred to as '*Climate Change*'.

In Australia, passenger cars are responsible for more greenhouse gas emissions than any other transport mode, and these emissions are rising.

By 2008-12, emissions from the transport sector as a whole are expected to have risen by 42% from 1990 levels<sup>8</sup>. This increase is significantly greater than Australia's target under the Kyoto Protocol, which requires that we limit greenhouse gas emissions to just 8% above 1990 levels over the same time period.

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<sup>6</sup> In 2002, motor vehicles in the Sydney Region were responsible for 79% of NO<sub>x</sub> and 44% of anthropogenic VOCs (source: DEC (2003) *NSW State of the Environment Report 2003*)

<sup>7</sup> DEC (2003) *NSW State of the Environment Report 2003*

<sup>8</sup> Australian Greenhouse Office (2003) *National Greenhouse Gas Inventory 2001*

## Appendix B: Fleet Manager's Checklist

Action Needed	Due Date	Done
<b>Step 1: Determine Current Fleet Performance</b>		
Determine greenhouse gas emissions (CO <sub>2</sub> ) <ul style="list-style-type: none"> <li>For the first year (for the 2003-04 financial year), use fuel consumption data (as above) and CO<sub>2</sub> emission factors;</li> <li>For subsequent years (from 2004-05 onwards), use summary reports provided by EDGAR.</li> </ul>	1 July 2004  1 July from 2005 onwards	
Determine the average environment performance score of your fleet for the 2004/05 financial year onwards.	1 July from 2005 onwards	
<b>Step 2: Develop a Fleet Improvement Plan</b>		
Develop a Fleet Improvement Plan that outlines your fleet's current performance (Step 1), and measures for achieving the policy targets.  Determine your agency's vehicle requirements by category for 2005/06 (and subsequent years) and submit your Forward Order Commitment to StateFleet.	1 July from 2005 onwards  1 July from 2005 onwards	
<b>Step 3: Report on Progress</b>		
Report to DEUS each year on your agency's progress in achieving fleet improvements – as part of GEMP <ul style="list-style-type: none"> <li>Continue to report fuel use by fuel type and VKT for vehicle category based on GVM (&lt; or &gt; 3.5 tonnes);</li> <li>Report the environment performance score of your light-vehicle fleet (&lt;3.5 tonnes GVM).</li> </ul>	31 October from 2005 onwards	