

## You can be an eco-driver by implementing these practical tips:

- Keep your car well serviced.
- Check your tyre pressure at least once a month.
- Remove unnecessary weight by unloading items from your boot or back seat.
- Use the air conditioner in moderation.
- Stop the engine instead of idling if possible. Turn off engine when stopped for longer than 60 seconds.
- Drive smoothly and avoid speeding.
- When accelerating gear up as early as possible to the highest gear.
- Look ahead and try to anticipate traffic flow.
- Walk, cycle, car pool or take public transport to your destination.
- Keep track of your fuel consumption.
- Stay within the speed limit. By exceeding the speed limit you not only risk a fine, but the increased speed utilizes extra fuel unnecessarily (Covary, 2010).
- Accelerate gently and keep your speed constant. Aggressive driving can increase travel consumption by 37% (Baltutis, 2010).

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## For more information

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Eco-driving is applicable to **EVERYONE**. You don't need any specific training. Businesses looking to save money on fuel costs for their fleet vehicle, individuals wanting to help improve air quality, reduce wear and tear on their cars and cut their fuel costs can all benefit from eco-driving (South Yorkshire Clean Air Campaign, 2006).

## For more information, contact:

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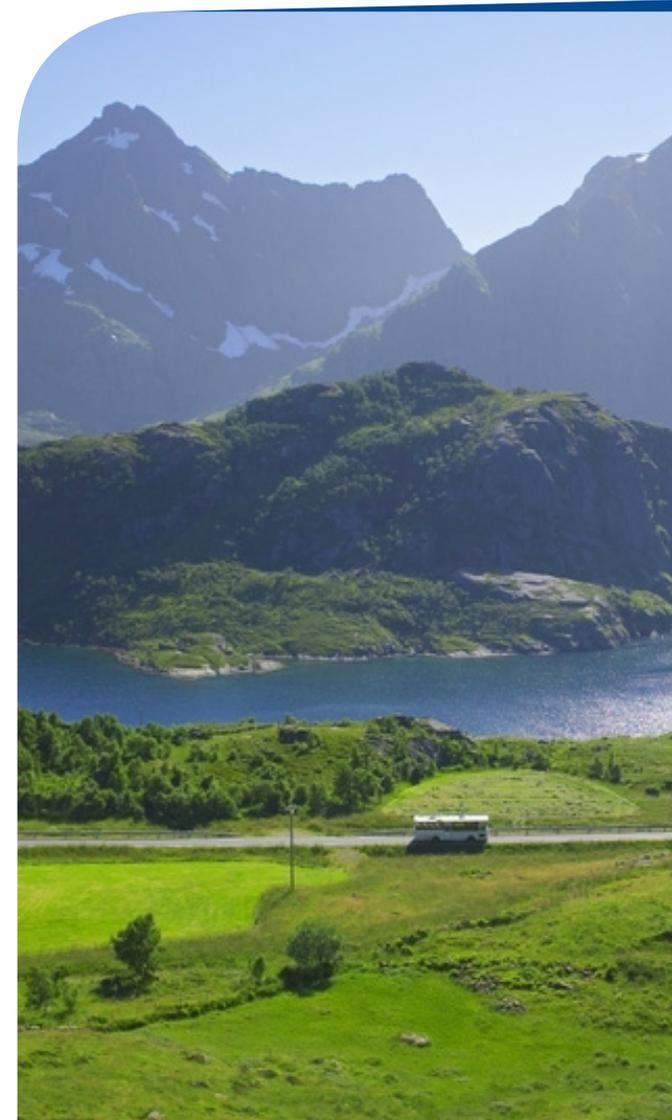
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Environmental Affairs &  
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Air Quality Benefits of Eco-driving

## Provincial Response to Air Pollution From Vehicle Emissions



This brochure is the initial step towards an eco-driving transport programme for all transport sectors within the Province and is aimed at providing practical tips and benefits of eco-driving in order to improve air quality and alleviate climate change.

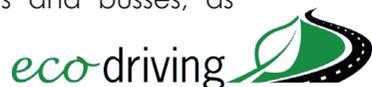
The Western Cape Department of Environmental Affairs and Development Planning's response to its provincial obligation to improving air quality has been the development of an Air Quality Management Plan (AQMP). One of the targets in the AQMP is the reduction of emissions such as of Particulate Matter (PM<sub>10</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon dioxide (CO<sub>2</sub>), volatile organic compounds (VOCs) and sulphur dioxide (SO<sub>2</sub>) related to transport.

In 2010, the City of Cape Town (CoCT) in conjunction with the Provincial government and South African Petroleum Industry Association (SAPIA) initiated an eco-driving training pilot project. The key objective of this training was to promote fuel efficient driving habits, which will result in fuel savings, as well as reduction in harmful vehicle emissions and an improvement in urban air quality (Covary, 2010).

Subsequently, a number of initiatives are being undertaken to ensure the long term success of this eco-driving training initiative. For more information visit: <http://www.capetown.gov.za/en/Pages/Green-Goal2010puts20certifiedecodriventaxisontheroad.aspx>

### What is eco-driving?

Eco-driving is a driving style aimed at preventing environmental degradation by reducing fuel consumption and greenhouse gas emissions, which in turn saves money (Baltutis, 2010). Eco-driving offers benefits for drivers of private cars, company cars, lorries and busses, as well as fleet owners (Treatise, 2005).



Various driving behaviours such as maintaining a steady speed, avoiding heavy acceleration and deceleration, anticipating traffic flow ahead, and minimising idling time form part of eco-driving. Eco-driving is applicable to road transport and saves 5 to 10% fuel on average, without an increase of travel time (Treatise, 2005).

### Why do we need to implement eco-driving habits in our daily routine?

Eco-driving can assist in effectively reducing fuel consumption thereby reducing harmful vehicle emissions and pollutants such as CO<sub>2</sub> which is one of the greenhouse gases that contributing to climate change. Motor vehicle usage has a significant impact on the atmosphere by releasing pollutants that contribute to the slow, but steady increase in average world temperature, commonly known as global warming (Drumheller *et al.*, 2001).

Motor vehicles are effectively the largest growing contributors of air pollution in urban communities throughout the world (Drumheller *et al.*, 2001). In most cases about 60 % of the carbon monoxide (CO) and 30 % of the nitrogen oxide (NO<sub>x</sub>) emissions that are released into the atmosphere can be traced to the use of motor vehicles (Drumheller, *et al.*, 2001). Vehicle emissions have negative effects on the environment by forming air pollution, which can result in negative health effects (GE Capital Solutions, 2011).

Throughout Europe, around 25% of the total carbon footprint comes from transport and pollution related deaths from local air quality have increased to 32 000 per year (GE Capital Solutions, 2011 ).

By reducing the concentration of CO<sub>2</sub> and other vehicle emissions in the atmosphere we would be making a positive contribution to alleviate climate change and improve air quality. The initiation and implementation of eco-driving projects within the public and private sectors, as well as voluntary organisations, will improve air quality in the long run.



## What is Sustainable Transport?



Sustainable transport (or green transport) refers to any means of transport with a low impact on the environment. These include walking and cycling, transit oriented development, green vehicles, car sharing and building or protecting urban transport

systems that are fuel-efficient, space-saving and promoting healthy lifestyles. Sustainable transport systems can make a positive contribution to the environmental, social and economic sustainability (Rodrigue and Comtois, 2011). Sustainable driving is complimentary to eco-driving in reducing climate change and detrimental air quality impacts.

### What are the benefits of eco-driving?



#### Environmental and Social Benefits

- Reduces greenhouse gas emissions in particular (CO<sub>2</sub>) and serves as climate change mitigation.
- Reduces ambient noise levels.
- Contributes to cleaner cities.
- Facilitates more responsible driving.



#### Health Benefits

- Reduces air pollution impact on human health.
- Aids in an improved quality of life.



#### Safety and Financial Benefits

- Improves road safety as the number of accidents due to safer driving habits will decrease.
- Saves fuel and money in the long term.
- Lower vehicle maintenance costs.
- Reduce costs associated with accidents
- Reduces medical costs associated with air pollution impacts on health (Baltutis, 2010).