



# **Tool Box Talk 10 | Eco Driving**Fact Sheet



PROGRAM

# Did you know...

- o Eco-driving can save 10-15% of fuel consumption
- o Over 10 seconds of idling uses more fuel than restarting your engine.
- o Unnecessary weight from your vehicle and roof racks can add between 10% and 30% to fuel consumption<sup>3</sup>.
- o Air conditioning overuse can significantly increase fuel consumption.

#### **Background**

Eco-driving uses energy-efficient driving techniques to reduce fuel consumption, trip cost savings, reduction in Carbon Dioxide (CO2) emissions as well as a reduction in levels of noise from the vehicle.

Eco-driving offers road safety benefits, as drivers have a greater anticipation for risks and exhibit less erratic driving behaviours<sup>1</sup>.

#### **Benefits of Eco Driving**

- o Reduce fuel consumption
- o Environmentally and climate friendly
- o Reduction in maintenance costs
- o Increased road safety
- o Longer life-span for brakes and tyres
- o Increase comfort for drivers and passengers.

## **Improved Driver Practices**

Eco-driving instructions to a new improved driving style include<sup>1</sup>;

- o Maintain a consistent speed
- o Use cruise control
- o Early up shifting on gear changes low RMP
- o Block shifting on gear changes
- o Anticipate traffic flow
- o Limit the use of the brakes
- o Decelerate smoothly
- o Check your tyre pressure regularly.

#### **Emerging Technologies**

Recent developments in technologies include:

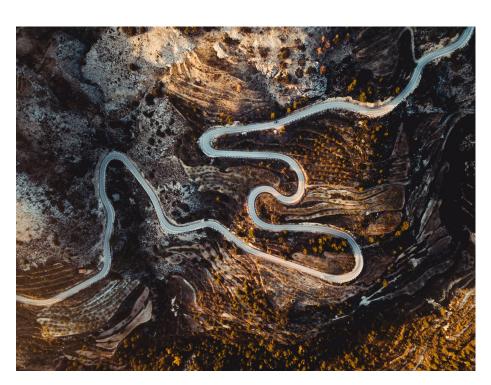
- o Hybrid vehicles
- o Electric vehicles
- o Autonomous vehicles
- o Regenerative braking
- o Efficient aerodynamic modelling.

## 7 key Principles of Eco-driving<sup>3</sup>

- Plan your trip in advance through journey management
- Remove unnecessary equipment, weight and air resistance from your vehicle
- Maintain tyre pressure at the recommended level
- 4. Accelerate and decelerate smoothly
- Use momentum and speed efficiently
- Use the air conditioner, and other electrical equipment sparingly
- 7. Regularly service your vehicle
  - o In Australia 14% of greenhouse gas emissions are produced by vehicle pollution<sup>2</sup>.
  - o Between 2010 to 2020 emissions from commercial vehicles are predicted to increase by 27% <sup>2</sup>.







For Case Study examples of Eco-Driving benefits see the NRSPP's Thought Leadership on the Interface between Eco-Driving and Safe Driving

#### References

- Canel, A 2008, Road Safety and Eco-driving, Directorate – General for Energy and Transport, viewed 19 September 2018
- Department of Environment and Conservation 2011, EcoDriver's Handbook Clean Run – Eco Drive Toolkit. Department of Environment and Conservation, Kensington, WA.
- 3. Toyota Australia n.d., EcoDriving
  Guide Eco Driver, viewed 5
  October 2018
- 1. <u>ecodriver.org</u>