TOOL BOX TALKS
Eco Driving

Tool Box Talk 10 | Eco Driving
Fact Sheet

NRSPP NATIONAL ROAD SAFETY PARTNERSHIP PROGRAM

Did you know...

- Eco-driving can save 10-15% of fuel consumption[4]
- Over 10 seconds of idling uses more fuel than restarting your engine.
- Unnecessary weight from your vehicle and roof racks can add between 10% and 30% to fuel consumption[3].
- 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 (CO_2) 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[1].

Benefits of Eco Driving

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

Improved Driver Practices

Eco-driving instructions to a new improved driving style include[1];

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

Emerging Technologies

Recent developments in technologies include;

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

7 key Principles of Eco-driving[3]

1. Plan your trip in advance through journey management
2. Remove unnecessary equipment, weight and air resistance from your vehicle
3. Maintain tyre pressure at the recommended level
4. Accelerate and decelerate smoothly
5. Use momentum and speed efficiently
6. Use the air conditioner, and other electrical equipment sparingly
7. Regularly service your vehicle

- In Australia 14% of greenhouse gas emissions are produced by vehicle pollution[2].
- Between 2010 to 2020 emissions from commercial vehicles are predicted to increase by 27% [2].

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

References

1. Canel, A 2008, Road Safety and Eco-driving, Directorate – General for Energy and Transport, viewed 19 September 2018

2. 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

4. ecodriver.org