

Case Studies: Fleet Efficiency



Overview

Making changes to the way you operate your fleet can offer notable fuel economy and cost savings, as long as they are tailored to your particular organisation. The following case studies demonstrate some successful fleet efficiency improvement practices adopted by well known organisations.

Freight and Logistics Operations

The US Environmental Protection Agency's [SmartWay Freight Program](#) has achieved emissions savings of up to 30% within large scale, inter-modal freight operations and significant financial benefits by reducing fuel consumption and operating times.

The Welsh [Freight Best Practice Organisation](#) has many case studies, tools and guides on efficient fleet practices. [One study](#) demonstrated savings of \$55k per annum in a 100 vehicle mixed fleet, by implementing an action plan that addressed fuel consumption, vehicle utilisation and specification, and driver training.

A UK [fuel management study](#) found that accurately recording the fuel performance of fleet vehicles was crucial to informing business decisions around efficiency measures. The outlay of good data gathering tools was easily recouped in the near term.

In Australia, [Toll Logistics](#) has identified efficiency and emission reduction opportunities are possible through the optimisation of pickups and deliveries, evaluating alternative fuels, assessing higher productivity vehicles, and driver education.

The Sainsbury's supermarket chain in the UK demonstrated substantial reductions in emissions and vehicle running time by altering its time-of-day delivery schedules, with the added benefit of reducing noise impacts on its local community. The [study](#) was also able to show that savings were possible with no upfront capital costs.

Light Vehicle Fleets

An Australian fleet management consulting firm [reported](#) operational savings of \$1.6m per annum in a fleet of 450 vehicles by optimising vehicle utilisation, pooling, selection / profile, accessories, and leasing arrangements.

[Idaho County Fleet](#) in the US has boosted its vehicle fuel economy and significantly improved its emissions profile through alternative vehicle and fuel use, and idle reduction management. It estimates eliminating over 600 tons of CO₂ emissions annually, improving fuel economy by up to 2.6 kilometres per litre.

Further information:

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Implementing route optimisation software is another way to address inefficiencies in your fleet. [Studies](#) show there are substantial gains to be made in mileage reduction, load consolidation, loading time, route elimination and on-time performances.

Similarly, vehicle tracking systems can play an important role in identifying how best to maximise your fleet's efficiency. Britain's [Royal Mail](#) fleet has implemented vehicle tracking and has generated a reduction in fuel consumption of over 10%.

Tyres and Maintenance

Maintaining tyre inflation and selecting low rolling resistance tyres are well known fuel saving practices. A series of [case studies](#) presented by the Freight Best Practice Organisation demonstrate that fuel reductions in freight operations could be as much as 13%.

Transport Canada evaluated the benefits of an [automatic tyre pressure control system](#) on fuel economy, under differing road surface conditions. It found as road surfaces deteriorated, the system provided increasing fuel benefits.

Another Transport Canada study on the [Evaluation of Fuel-reducing Technologies for Trucks](#) found fuel efficiency improved by up to 5 per cent when low rolling resistance tyres were used in combination with aero-dynamic drag reductions.

A [study](#) by the Oakridge National Laboratory found that the use of single wide-base truck tyres in place of the traditional dual-wheel setup can result in up to a 3% saving in fuel use.

Alternatively, the New South Wales Green Truck Partnership experienced some inconclusive results when evaluating the benefits of a [manual tyre inflation management trial](#), due to a great degree of variability in data collected from participating vehicles.

See Also:

- [Case Study: Ecodriving](#)
- [Case Study: Alternative Fuels](#)
- [Case Study: Electric and Hybrid Vehicles](#)
- [Case Study: Biodiesel – Adelaide Metro bus fleet](#)

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