

Improving Fuel Efficiency of Heavy and Light Commercial Fleets in New Zealand

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Introduction....

The presentation is based on work undertaken within the "Fleet Commitment work programme".

A one year funded pro active approach, working in partnership with industry.

Looking at new and enhanced initiatives for the NZ Context, focused on light and heavy commercial vehicle fleets.

Co-ordinated by MoT, supported by NZTA.

Origins of the Work Programme...

2004 review of fleet energy use covering:

Light Vehicle Energy Use (TERNZ 2004)

Heavy Vehicle Efficiency (TERNZ 2004)

Quantified energy used by and characteristics of the fleet
Surveyed operators and other stakeholders
Review of NZ and overseas initiatives
Recommended initiatives that would assist fleet owners save fuel

Lets look at the background...

Points of interest

Transport energy use and demand for transport services is growing (+74% by 2031- NFDS).

Fleets dominated by small to medium enterprises.

Need to optimise the use of the current fleet to deliver short to medium gains.

Background....

Points of interest

Freight transport operators running on slim margins.

Information on fuel efficiency is dispersed.

Fleet management knowledge disappearing due to skills shortage and inappropriate training

Fuel efficient driver development buried within a wider training programme.

Starting the programme – key points....

Appointment of 2 project managers

Determine activities and plan of works

Straw poll to test fleet operators appetite for change

Test the urban myth that only locally developed programmes work

Look for commercial levers and Involve stakeholders

Training capacity

Focus on fleet operators – get commitment

Activities within the work programme....



- Desktop research – heavy and light fleets
- Research into fuel efficiency attitudes
- Trial of interventions
- Workshops
- Develop recommendations.

Desktop research....

Revisited earlier work

Updated existing knowledge base

International programmes shown to be well developed

Similar levels of fuel efficiency findings across many countries

Duplication of effort was evident

Attitudinal Research....

To understand the New Zealand situation

In depth face to face surveys

- 6 Key industry influencers
- Stratified sample 54 commercial fleets

300 telephone surveys of commercial fleets

300 roadside surveys of commercial drivers

Fleets involved in trials...

	Light vehicles	Heavy vehicles	Buses and Coaches
Trial 1.		<ul style="list-style-type: none"> • Rural general freight • Tipper trucks 	<ul style="list-style-type: none"> • Tour coach
Trial 2.		<ul style="list-style-type: none"> • Urban general freight • Refrigerated linehaul 	<ul style="list-style-type: none"> • Urban bus
Trial 3.	<ul style="list-style-type: none"> • Company cars 	<ul style="list-style-type: none"> • Dangerous Goods linehaul 	<ul style="list-style-type: none"> • School bus

Trial 1....

Based on the UK Safe and Fuel Efficient Driving Programme

Content well focused

Very high level of driver satisfaction with training

Instructor very positive and supportive of drivers

Emphasis on block changing, anticipating situations ahead, adopting a relaxed driving style, pre-trip inspection etc.

Well developed package but would need to be customised to NZ conditions if used here

Range of improvements in fuel use and gear changes



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Trial 2....

Based on an NZ Training providers programme

Feedback from drivers on practical session very positive

Re-assessment of driver 6 weeks after training found marked improvement in drivers' attitude and all-round driving behaviour

For bus fleets: fewer passenger complaints



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Trial 3....

Based on a toolkit folder and presentation

Savings varied from no-change to 30% reduction

The driver that made the greatest saving focussed on not exceeding 100km/h, tyre pressures, minimising need to brake and not using cell phone

Less time now spent idling

Change in maintenance priorities

Improving fuel monitoring procedures



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Case study – Fuel Delivery....

Over last 2 to 3 years achieved:

- 17.8% reduction in fuel consumption (l/100km)
- 50% reduction in incidents
- 99% reduction in 90km/h speed exception reports from vehicle instrumentation

Four main factors addressed:

- Management / leadership
- Drivers
- Journey
- Vehicles (selection and maintenance)



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Case Study – Actions Taken....

Developed vision document

Monthly monitoring (fuel cards and end of month speedometer readings)

Reporting by management team to monthly driver forum

Adjustments to driver workload in consultation with clients

Training including all new staff

Focus on continuous improvement



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Findings from workshops

Held in 3 main locations.

Attended by fleet operators, driver trainers (internal and external), industry representatives.

Consolidated feedback reflected results from other survey

Need to get on with things (point of highest oil price?)



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Research Findings....

High level of desire to become more fuel efficient.

Need for an authoritative and credible source of information.

Key barriers to attaining better fuel efficiency include allocation of sufficient management and supervisory time.

High level of driver interest in how fuel efficient they are.

International findings similar to the NZ environment.

Strong link between fuel efficient driving and safe operations.



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Proposed way forward...

3 Tiered programme approach

Tier 1: An industry liaison and delivery of awareness programme to market the benefits of fuel efficiency to key sectors of the heavy and light commercial fleets;

Tier 2: Development and delivery of a Fleet Best Practise Programme based on global programmes and solid business cases to encourage operators to commit to the programme. This should also include a dynamic website; and

Tier3: Driver training programme; development and delivery of New Zealand Safe and Fuel Efficient Driving (SAFED) for the heavy and light fleet, Fuel Champion training and Fleet Master Classes for owners, managers and fleet administrators.



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Proposed way forward...

Support for approach from industry.

Programme must be scalable – small to large, simple to complex and consistent.

Use multiple delivery channels and partner with stakeholders – key stakeholder advisory groups.

The key message....Savings in fuel use

10% savings are achievable through a combination of:

Safe and fuel efficient driving

Company commitment by introducing good management practices

Fuel monitoring

Fuel efficient vehicle selection

Vehicle maintenance management

Journey planning

10% saving = **15% to over 35% increase in bottom line profit**