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ENERGY EFFICIENCY & CONSERVATION AUTHORITY

Return on investment in the 2026 Fuel Savings Campaign

Summary report prepared for EECA

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1. Overview

In late March 2026, EECA launched a nationwide fuel savings campaign encouraging New Zealand drivers to adopt simple, low-effort actions to reduce fuel consumption and save money at the pump. The campaign promoted a set of practical driving and vehicle maintenance behaviours that could deliver immediate savings, without limiting how people travel.

Verian was engaged to evaluate the impact of the campaign and to estimate the return on investment (ROI) associated with any observed changes in behaviour. This analysis builds on the approach used for EECA's 2025 Winter Energy Savings Campaign, combining behavioural data from in-campaign monitoring with assumptions about the fuel savings associated with each action.

The ROI presented in this report is based on behaviour change observed in Wave Five of campaign monitoring, which included detailed measures of media consumption, behaviours, and attitudes. Differences in behaviour by likelihood of campaign exposure are used to estimate the proportion of change attributable to the campaign, rather than stated recall of actions taken as a result of the campaign.

The analysis reflects the estimated fuel cost savings attributable to the campaign over Weeks 1 to 7 (while the campaign monitor was in field) rather than over a full year. This approach provides a conservative estimate of impact, limiting the calculation to observed effects during the campaign period.

In addition to monetised benefits, the report also considers non-monetary returns, including shifts in awareness, beliefs, and attitudes toward fuel-efficient driving. The assessment is designed to provide a transparent and conservative estimate of campaign impact, suitable for supporting EECA's internal reporting and external accountability requirements.

2. Assessment

2.1. Scope and objectives of the campaign

In March 2026, EECA launched a nationwide fuel savings campaign aimed at helping New Zealand drivers reduce fuel consumption and manage the cost of fuel. The campaign targeted individuals who drive petrol or diesel vehicles, with a focus on encouraging simple, low-effort actions that can deliver immediate savings without restricting travel.

The target population for both the campaign and this analysis comprises owners and users of light petrol and diesel vehicles in New Zealand. Based on Ministry of Transport fleet statistics, this represents approximately 3.4 million petrol vehicles and 0.9 million diesel vehicles.

The campaign promoted a set of practical fuel-efficient driving and vehicle maintenance behaviours, selected based on evidence of their potential to reduce fuel use. The primary behaviours included:

- Driving at lower speeds
- Accelerating and braking more smoothly
- Reducing idling or switching off the engine when stationary
- Maintaining correct tyre pressure
- Removing roof racks or roof boxes when not needed
- Removing excess weight from the vehicle/lighten your load

These behaviours formed the basis of the ROI analysis. The evaluation focuses on estimating the extent to which the campaign influenced the uptake of these actions among drivers, and the resulting fuel and cost savings across the vehicle fleet.

2.2. Measurement approach, base estimates and potential campaign influence

A formal pre-campaign benchmark was not conducted for this evaluation. While benchmark measurement is often desirable, it was not considered appropriate in this instance due to the rapidly changing fuel price environment. Rising fuel prices were already influencing driver behaviour prior to and during the campaign period, meaning any pre-campaign measure would have been unlikely to provide a stable or reliable baseline.

Instead, behaviour was measured directly during the campaign using survey data collected in Wave Five of the campaign monitor, which surveyed 750 New Zealanders who drive a petrol or diesel vehicle. Respondents were asked early in the questionnaire (prior to any mention of the campaign) whether they had made any changes to the way they drive or use their vehicle to save fuel in the past few weeks, and, if so, which actions they had taken. Those who reported making changes could select from a list of eleven behaviours, or specify other actions taken. Six of these behaviours aligned with the actions promoted in the campaign.

To estimate campaign influence, we developed a measure of likelihood of campaign exposure based on respondents' media consumption. Respondents were asked to report the amount of time they spent each week across a range of channels, including television, radio, online media, social media, and out-of-home exposure. These responses were then weighted using the distribution of campaign media spend across channels to derive an overall exposure score for each respondent.

Respondents were grouped according to their likelihood of exposure to the campaign, ranging from those unlikely to have been exposed (or exposed only infrequently) through to those highly likely to have been exposed. Differences in behaviour between these two groups were used to estimate potential campaign influence, with the low-exposure group serving as a practical baseline for comparison.

This approach offers several advantages over relying on campaign recall or stated behaviour change.

- Measures based on self-reported recall are susceptible to memory bias and can be influenced by prior behaviour, with people already engaged in fuel-saving actions more likely to notice and remember campaign messages.

- Directly asking respondents whether the campaign caused them to change behaviour can lead to overstatement due to social desirability bias.

By contrast, the exposure-based approach provides a more robust and behaviourally grounded estimate of campaign impact. It anchors the analysis in observed behavioural differences across groups with varying levels of likely exposure, rather than relying on self-attribution. While differences between these groups may also reflect underlying characteristics associated with media consumption, this approach better reflects real-world campaign delivery, where exposure is not random and is shaped by individuals' media habits.

Base estimates of behaviour and potential campaign influence for each targeted action are presented in the table on the following page. The base estimates represent the level of behaviour observed among those unlikely to have been exposed to the campaign and therefore reflect the uptake of fuel-saving actions driven by non-campaign influences, such as fuel prices, personal motivation, or wider information sources.

These results are then compared with behaviour among those highly likely to have been exposed to the campaign to estimate the incremental impact attributable to campaign activity. The differences between these groups are converted into an estimate of the number of petrol and diesel vehicles influenced by the campaign, forming the basis for the additionality calculations used in the ROI analysis.

Note that this approach assumes differences are attributable to campaign exposure, although it's possible some other underlying differences between groups may also contribute to observed effects.

Wave Five campaign result	**Base behaviour among the low campaign exposure group**	**Behaviour among those likely to have seen the campaign**	**Campaign influence expressed as a percentage increase on the base behaviour**
Used smooth acceleration and breaking	26.1%	38.1%	46%
Driven at lower speeds	19.1%	34.1%	79%
Checked your tyres are at the correct pressure	13.4%	24.9%	86%
Removed excess weight from the vehicle/lightened your load	12.0%	23.6%	97%
Switched off the engine while waiting, or used stop-start more often	12.5%	13.0%	4%
Removed roof racks or roof boxes when not needed	1.8%	2.8%	56%
Base (n=)	104	476	

Converted to vehicles	**Base*** (low exposure group)		**Multiplier** (percentage increase)	**Additionality**	
	Petrol vehicles	**Diesel vehicles**		**Petrol vehicles**	**Diesel vehicles**
Used smooth acceleration and breaking	884,732	241,129	0.46	404,942	110,365
Driven at lower speeds	646,739	176,265	0.79	507,457	138,305
Checked your tyres are at the correct pressure	453,145	123,502	0.86	390,067	106,311
Removed excess weight from the vehicle/lightened your load	406,842	110,883	0.97	392,432	106,955
Switched off the engine while waiting, or used stop-start more often	424,718	115,755	0.04	14,864	4,051
Removed roof racks or roof boxes when not needed	61,661	16,805	0.56	32,171	8,768

*Based on Ministry of Transport vehicle fleet data, there are approximately 3.4 million petrol vehicles and 0.9 million diesel vehicles in the New Zealand light vehicle fleet.

2.3. Estimate of the benefits

This section describes the monetary and non-monetary benefits of the campaign.

Monetary benefits (fuel cost savings)

The monetary benefits of the campaign are based on estimated reductions in fuel use resulting from changes in driving and vehicle maintenance behaviours. These savings are calculated by combining evidence on how much fuel each action can save with estimates of how many drivers adopted these behaviours because of the campaign.

Fuel consumption and spending

The starting point for the calculation is an estimate of how much fuel a typical vehicle consumes each year, based on national fleet data for petrol and diesel vehicles. This is combined with the average fuel price during the Week Five of the campaign to estimate the cost of fuel for a typical driver that week. These baseline estimates provide a reference point for calculating how much money can be saved when fuel use is reduced.

	Petrol vehicles	Diesel vehicles	Source
Annual fuel consumption (Tj)	83,310	45,290	EECA Energy Use Database*
Annual fuel consumption (litres)	2,368,098,366	1,176,673,009	EECA Energy Use Database*
Cost per litre (week ending 1 May 2026)	$3.24	$3.31	Figure.nz
Annual vehicle kms travelled	31,904,426,188	12,699,507,497	Ministry of Transport fleet stats
Litres per 100kms	7.42	9.27	
Number of light vehicles in NZ fleet	3,386,783	914,326	Ministry of Transport fleet stats
Liters consumer per vehicle each year	721	1,287	
Est. fuel spend per vehicle each year	$2,336.86	$4,259.74	
Liters consumer per vehicle each week	13.87	24.75	
Est. fuel spend per vehicle each week	$44.94	$81.92	

Note: These values are based a 2023 breakdown for light vehicles, as that is the latest available in the EECA Energy Use Database. We would not expect a significant shift to have occurred since then.

Fuel savings behaviour benefits

Each of the behaviours promoted in the campaign is associated with an expected reduction in fuel use. For example, driving at lower speeds, accelerating more smoothly, or maintaining correct tyre pressure are all known to reduce fuel consumption. To ensure the estimates are robust and

conservative, lower-bound estimates of the potential fuel savings from each action are used, based on New Zealand and international evidence.[1]

These savings are applied at the individual vehicle level to estimate how much fuel a driver could save if they adopt one or more of the promoted behaviours. The model assumes that drivers may adopt multiple actions. However, rather than treating these savings as fully additive, the calculation reflects a reducing baseline of fuel use.

In practice, this means that once a driver adopts one behaviour and reduces their fuel consumption, the remaining potential for savings from additional behaviours is smaller. To reflect this, behaviours are applied sequentially, ordered from most commonly adopted to least commonly adopted. This approach assumes that those adopting less common behaviours are also likely to have undertaken more common actions, with each subsequent saving applied to an already reduced level of fuel use. This approach also reduces the risk of overlap in behaviours by applying savings sequentially. However, some overlap in behaviours may still exist in practice.

	Lower bound savings estimate	**Upper bound savings estimate**	**Petrol savings per week, per vehicle (L)**	**Diesel savings per week, per vehicle (L)**
Used smooth acceleration and breaking	10%	40%	1.39	2.47
Driven at lower speeds	7%	14%	0.87	1.56
Checked your tyres are at the correct pressure	1%	2%	0.13	0.23
Removed excess weight from the vehicle/lightened your load	0.2%	1%	0.03	0.05
Switched off the engine while waiting, or used stop-start more often	4%	10%	0.55	0.99
Removed roof racks or roof boxes when not needed	2%	17%	0.27	0.48

Total benefits for Week Five

To estimate the total benefits, these per-vehicle savings are then scaled up using:

- The number of vehicles in the fleet driven by those likely to have been exposed to the campaign
- The proportion of drivers who adopted each behaviour as a result of the campaign

This produces an estimate of the total volume of fuel saved across the fleet. These fuel savings are then converted into monetary savings by applying average fuel prices for petrol and diesel during Week 5 of the campaign. All calculations below are expressed on a Week 5 basis.

	Additionality (vehicles) Week 5		Savings (L) Week 5		Savings ($) Week Five		Total saved (L) Week 5	Total saved ($) Week 5
	Petrol	Diesel	Petrol	Diesel	Petrol	Diesel		
Used smooth acceleration and breaking	283,460	77,255	393,165	191,197	$1,273,855	$632,861	584,362	$1,906,717

[1] See references at https://www.eeca.govt.nz/fuel/

Driven at lower speeds	355,220	96,813	310,400	150,948	$1,005,697	$499,638	461,348	$1,505,334
Checked your tyres are at the correct pressure	273,047	74,418	35,486	17,257	$114,976	$57,121	52,743	$172,096
Removed excess weight from the vehicle/lightened your load	274,702	74,869	7,549	3,671	$24,459	$12,151	11,220	$36,610
Switched off the engine while waiting, or used stop-start more often	10,405	2,836	5,761	2,802	$18,666	$9,274	8,563	$27,940
Removed roof racks or roof boxes when not needed	22,520	6,138	5,998	2,917	$19,433	$9,654	8,914	$29,087
Total							**1,127,151**	**$3,677,784**

Non-monetary benefits

Questions included in the Wave Five campaign monitor also allowed us to test for some of the non-monetary benefits of the campaign. As shown in the table below, those likely to have been exposed to the campaign were more likely (than those in the low exposure group) to agree that even small changes to how they drive feel worth the effort to them, and they were also more likely to have made changes to the way they driver to save on fuel.

Wave Five campaign result	% among the low campaign exposure group	% among those likely to have seen the campaign	Is the difference statistically significant at the 90% level?
% mentioning at least one of the targeted behaviours as a way to save fuel (without any prompting)	26%	32%	No
% made any changes to the way they drive or use vehicle to save on fuel	47%	59%	Yes
% at least quite concerned about fuel prices at the moment	94%	88%	No
% agree they know practical things they can do to use less fuel when driving or using their vehicle	73%	83%	No
% agree saving fuel is something they're motivated to do at the moment	76%	77%	No
% agree even small changes to how they drive feel worth the effort to them	63%	74%	Yes
% agree they feel confident in their ability to make their fuel last longer	51%	62%	No
% agree that given their daily travel needs, it's possible for them to make changes to reduce their fuel use	52%	56%	No
% agree their work, family, or other responsibilities limit how much they can change the way I use my vehicle	63%	52%	No
Base (n=)	104	476	

2.4. Total savings and return on investment (week one to seven)

The total monetary benefits of the campaign are estimated by combining the number of vehicles influenced by the campaign with the expected fuel savings associated with each behaviour. These savings are calculated on Week Five and applied to Week One to Seven of the campaign, when monitoring research was in place.

Adjustment - behaviour ramp-up

We know from the weekly campaign monitor that behaviour tended to ramp up over the course of the campaign. Rather than simply multiplying Week 5 savings by 7, we calculated an adjustment based on the estimated proportion of drivers who stated they had taken at least one action each week in response to the campaign, as shown in the table below. The final multiplier for the first seven weeks of the campaign is 5.8, rather than 7, providing a more conservative estimate of savings.

	% of all petrol and diesel drivers stating they had taken at least one of the targeted actions in response to the campaign	As a proportion of stated behaviour at Week 5
Week One	14%	0.4375
Week Two	22%	0.6875
Week Three	29%	0.9063
Week Four	28%	0.875
Week Five	32%	1
Week Six	29%	0.907
Week Seven	32%	1
Multiplier for seven weeks		**5.8**

Total savings over Week 1 to 7

Across the targeted behaviours, the campaign is estimated to have reduced fuel consumption by **6.6 million litres over Weeks 1 to 7**. When applied to average fuel prices during Week 5 of the campaign ($3.24 for petrol and $3.31 for diesel), this equates to total fuel cost savings **of $21.5 million for New Zealand drivers.**

These estimates reflect only the incremental impact attributable to the campaign, after accounting for underlying behaviour change driven by other factors such as fuel prices. They also apply average fuel prices during Week 5 of the campaign. As such, they provide a conservative estimate of the campaign's direct financial benefit.

	Total saved (L) Week 5	Total saved ($) Week 5	Total saved (L) Week 1 to 7 (Week 5 x 5.8)	Total saved ($) Week 1 to 7 (Week 5 x 5.8)
Used smooth acceleration and breaking	584,362	$1,906,717	3,397,071	$11,084,315
Driven at lower speeds	461,348	$1,505,334	2,681,955	$8,750,961
Checked your tyres are at the correct pressure	52,743	$172,096	306,613	$1,000,448
Removed excess weight from the vehicle/lightened your load	11,220	$36,610	65,225	$212,824
Switched off the engine while waiting, or used stop-start more often	8,563	$27,940	49,778	$162,422
Removed roof racks or roof boxes when not needed	8,914	$29,087	51,822	$169,092
Total	**1,127,151**	**$3,677,784**	**6,552,466**	**$21,380,063**

Return on investment over Week 1 to 7

The total return on investment (ROI) is calculated by comparing these estimated fuel cost savings with the cost of delivering the campaign over Weeks 1 to 7 of $3,091,000. This provides an overall measure of the financial return **$6.92 per dollar spent** on the campaign.

	Media spend and savings over seven weeks
Total media spend for Weeks 1 to 7	$3,091,000
Total saved ($) Weeks 1 to 7	$21,380,063
Return on Investment (savings per media dollar)	$6.92

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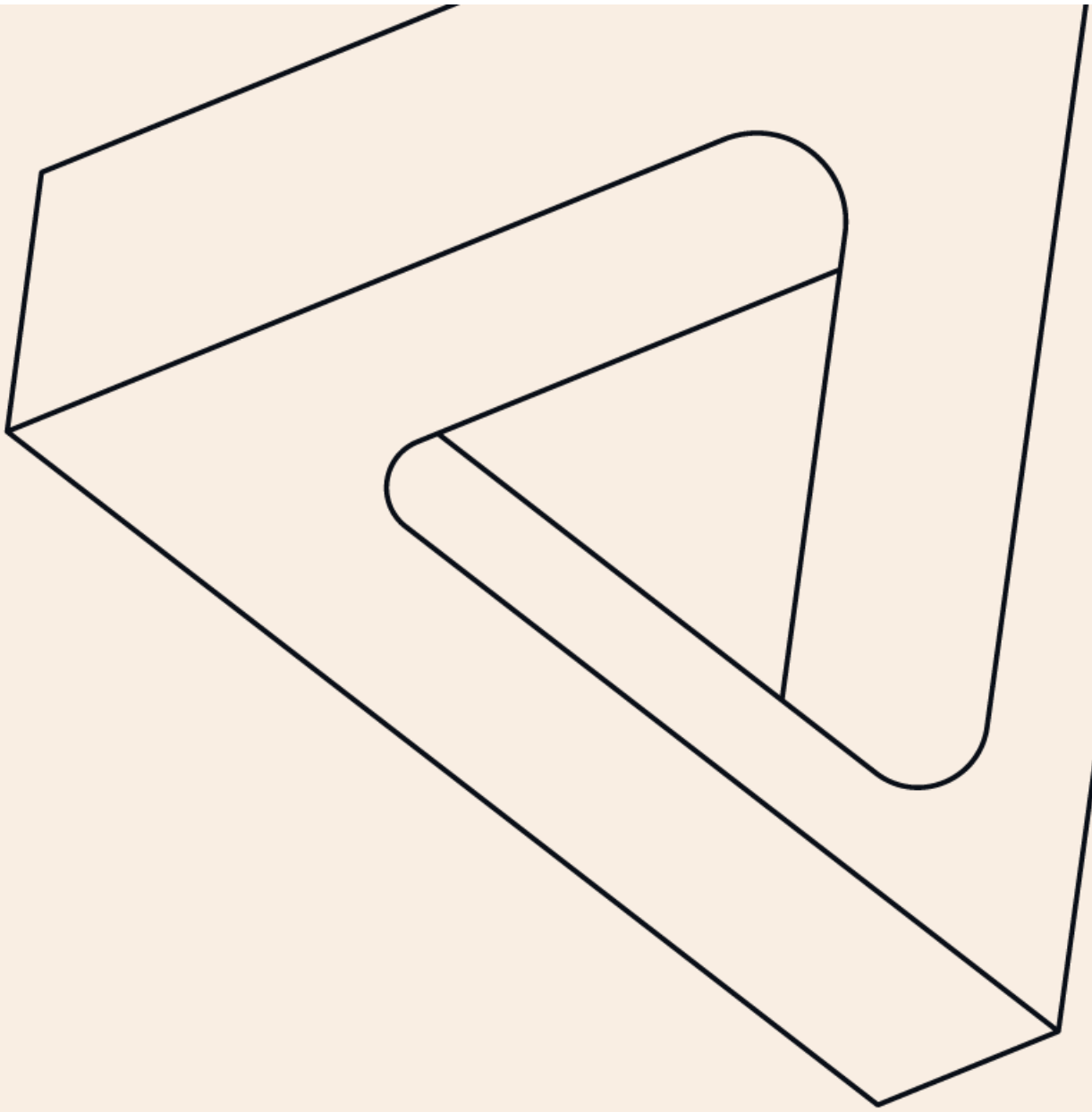

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