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Jump-starting New Zealand's electric vehicle future – touching hearts to drive change

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Summary

As a country with a more than 80%[i] renewable electricity supply New Zealand should be the poster-child for electric vehicles (EVs).

With transport producing 40%[ii] of New Zealand's energy-related greenhouse gas emissions, the Government and its partners are working to get people out of fossil-fuelled vehicles and into EVs.

Under the New Zealand Government's Electric Vehicle Programme, the Energy Efficiency and Conservation Authority (EECA) is running a five year information campaign. The government's EV Programme does not include vehicle purchase price subsidies for EVs.

The programme picked up on learnings from other jurisdictions, such as the E-motive programme in British Columbia, Canada[iii]. It is focused on raising awareness and understanding of EVs, and uses community outreach to get the public to experience EV driving to help normalise EVs.

The campaign emphasises that EVs are "fun, good for New Zealand" and "fast, quiet and cheap to run". This paper will take you through the campaign development, how its different elements aim to change public perceptions of EVs, and the campaign outcomes sought.

An information campaign image

EV sales in New Zealand are now more than doubling each year and are around 1% of vehicle sales.

Keywords: Electric vehicles, EECA, New Zealand Government

1 Background

New Zealand, similar in size to Norway, has a population of 4.75m people and a national light vehicle fleet of over 3.5m[iv], making it one of the highest per capita of car ownership in the world.

The country has unique factors that make EVs a good option – there's no local car industry industry so New Zealand can take new technology as soon as it's available in other countries. Also about half the cars that join the fleet every year are used imports from Japan and the UK, which means more affordable EVs can come onto the market. New EV models are somewhat limited, however, as New Zealand is a right-hand drive country and is a very small market on a global scale.

Transport in New Zealand uses around 40% of New Zealand's energy consumption and produces 40% of energy-related emissions (17% of the country's total greenhouse gas emissions - around half of our emissions come from agriculture). Since 1990 greenhouse gas emissions from road transport increased by 78%.[v]

EVs offer a significant opportunity and a relatively cost-effective way to reduce New Zealand's carbon emissions. New Zealand has an 85% renewable electricity supply, and is on track to meet a Government target of 90% by 2025[vi]. There is sufficient consented renewable generation waiting to be built to meet demand should all vehicles in New Zealand be electric.

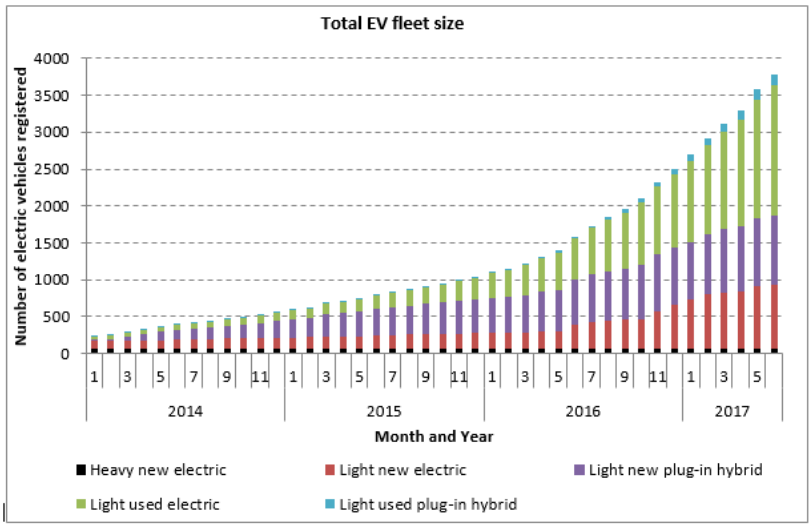
New Zealand has one of the most advanced competitive electricity markets in the world. For instance 76%[vii] of homes have smart meters and more than 20 electricity retailers to choose from. There are examples of highly innovative market pricing models offered by retailers, including consumers choosing to select electricity pricing which varies on a half hourly basis with alerts sent to smartphones when pricing is particularly low or high. Many retailers offer special time-of-use tariffs exclusively to EV owners.

Infographics developed to highlight key facts

Aside from our abundant renewable electricity, New Zealand has high levels of off-street parking, in fact 85%[viii] percent of homes have off-street parking, meaning electric vehicles can be easily charged overnight at home.

Average commuting distances also support EV consideration. New Zealand motorists drive on average 29 kilometres per day[ix]. Average commutes in urban centres are even shorter, at about 22 kilometres[x] a day—a distance the more affordable electric vehicles can handle easily without recharging.

While total EV numbers are low they are more than doubling yearly without purchase price subsidies provided.



Ministry of Transport graph showing data to the end of May 2017

Electric vehicle uptake is more than doubling each year in New Zealand. May saw the highest number of new registrations in a single month bringing the total number of EVs in New Zealand to more than 3,700. EV sales are currently around 1% of all new entrants to the New Zealand fleet.

Contributing to this improvement, and giving it momentum, is a Government Electric Vehicle Programme, launched in May 2016. The programme has 10 initiatives to help achieve its goal to double the number of EVs on New Zealand roads each year to reach 64,000 by 2021, requiring a year on year doubling from just 2,000 EVs as of late 2016[xi]. New Zealand's Ministry of Transport is providing detail about the overall programme in its separate paper to this conference, titled *Electric vehicles in New Zealand – opportunities, challenges and responses.*

A key plank of the EV Programme is an information campaign run by EECA, a government agency tasked with improving New Zealand's energy efficiency and use of renewable energy.

The campaign is aimed at engaging and exciting New Zealanders about electric vehicles and overcoming information barriers. It includes an advertising campaign, a community outreach programme, a website, and support collateral. All elements leverage the powerful campaign look and feel, "*Electric Vehicles: Drive the Future*".

Electric Vehicles
Drive the Future

Information campaign logo

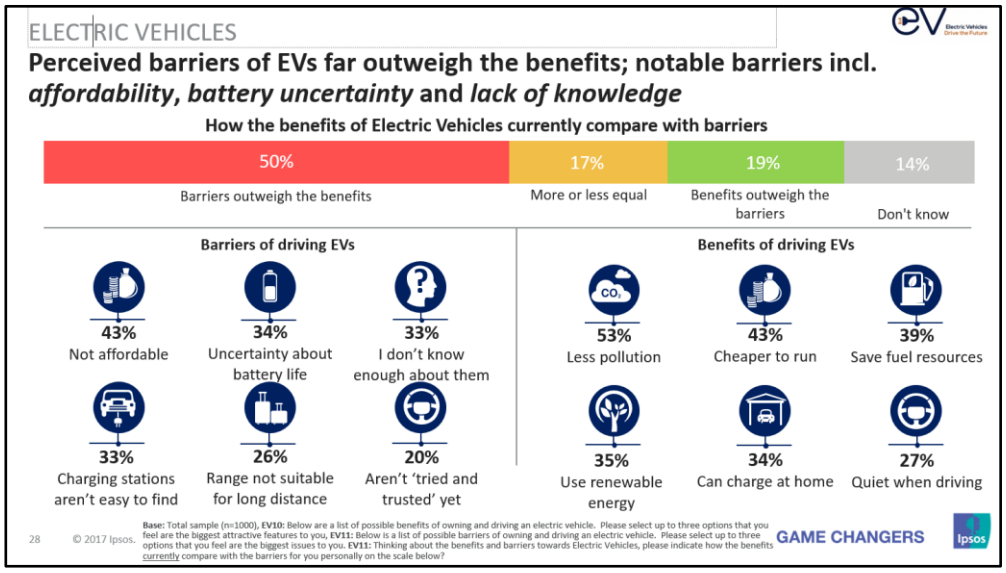
2. Campaign development

Consumer EV market research is helping to develop a more in-depth understanding around public perceptions and barriers, and refine campaign messaging and channels accordingly.

Our initial research[xii] shows the EV market in New Zealand is very much in its infancy, and while there is a basic understanding, and interest from the general public, there are also high levels of misunderstanding, and a number of myths and misconceptions are prevalent.

From the EECA Consumer Monitor (April-June 2017), we know that:

- Favourability towards electric vehicles has increased to 54% (up from 47% to Dec 2016)
- Confidence of an EV to meet needs has increased to 48% (up from 42% to Dec 2016)
- Agreement that EVs are the way of the future has increased to 70% (up from 64% to Dec 2016)



Ipsos research commissioned by EECA

We have also done some research into New Zealanders' relationships with their vehicles. We found:

* Driving is part of New Zealanders' DNA, and anything that restricts the freedom that driving provides is viewed negatively. EVs fall into this space as they are unknown, as opposed to internal combustion engine vehicles which are known and familiar. We need to encourage people to reconsider their driving patterns,

and how an EV could likely fulfil their needs (particularly as a secondary vehicle given New Zealand's high levels of multiple car ownership[xiii]).

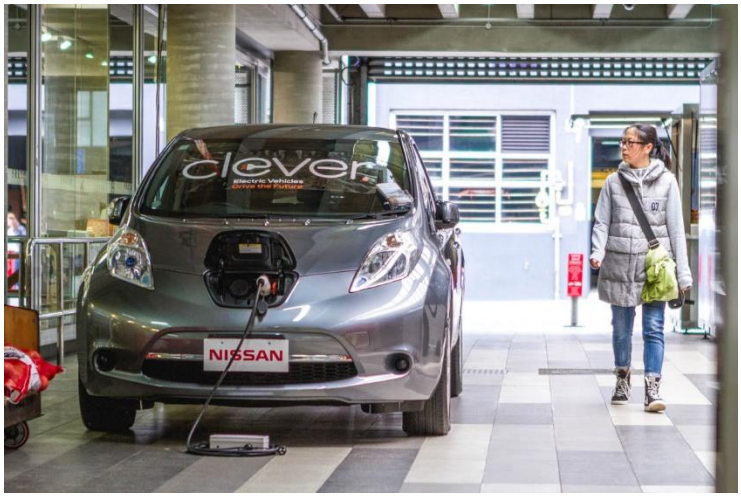
* Purchasing any vehicle is a risky decision, requiring extensive research. At this stage in their evolution, EVs represent a considerably riskier decision. We need to break down each perceived barrier through the provision of consistent and trustworthy information.

* EVs lack visibility (cars and charging) perpetuating perceptions that they're not normal, and not here. There is a need to increase visibility.

An information campaign image highlighting how easy charging at home is

For the five year campaign, the core objective is to overcome information barriers through increasing awareness, understanding and favourability of EVs.

Based on learnings from other jurisdictions, and subsequently affirmed by our own market research, the campaign needs to convey the excitement and benefits of EVs, while also providing people with the information they need to buy, drive, charge and maintain EVs.



A community outreach event

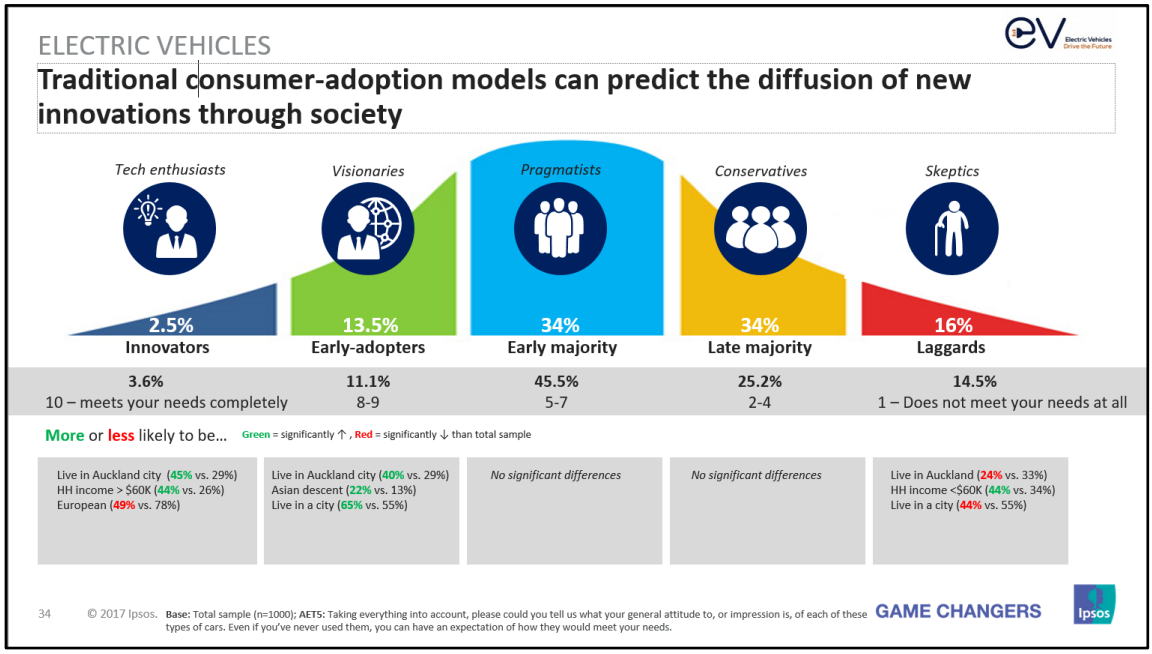
It also focussed on using current EV owners as ambassadors, developing shared collateral to help with promotions and events, identify and leverage events to provide driving experiences and leverage others' communications channels.[xiv]

Reflecting the importance of public/private collaboration in achieving the programme targets, the New Zealand Government has developed a 'New Zealand Inc' approach. This approach brings together the private sector, local and central government, and EV advocates to build confidence that EVs are part of New Zealand's future.

As with the introduction of any new technology, the information campaign has to take consumers through the classical consumer decision-making process:

1. Awareness (that EVs are 'normalised', and a developing understanding of EVs)
2. Interest (that EVs move into the consideration set, alongside ICEs)
3. Desire (that EVs become a preferred choice, with an associated intention to purchase)
4. Action (actual purchase, either new or used)

The EV Information Campaign focused initially on consumers. In the context of the traditional technology adoption curve, current and targeted EV purchasers could best be described as innovators (risk takers, with more extreme motivations and greater financial means). The information campaign focuses primarily on early adopters, as EVs move towards mainstream adoption/appeal. This group is largely driven by environmental or technological motivations. Economic motivations will become increasingly important as the market develops and total cost of ownership improves.



Ipsos research commissioned by EECA

We are still in stage one of the campaign which is to run five years. The campaign focus is on raising awareness, increasing familiarity and building excitement about EVs in general. This will lead to more EVs being visible on the road and more New Zealanders considering a purchase.

Image from information campaign used to highlight renewable energy

Key campaign messages include:

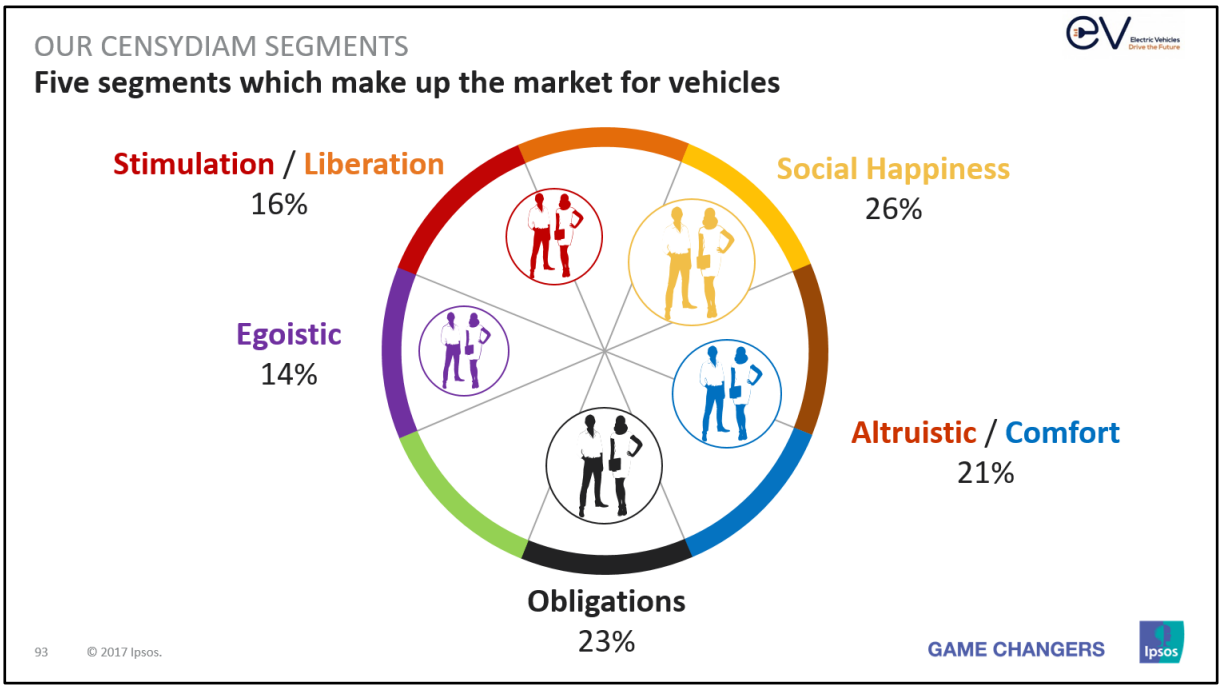
- Drive the future.
- If you haven't already seen an electric vehicle quietly driving on our roads you will soon. More and more charging stations are appearing around the country and it's starting to feel like the future is here, now.
- There's a reason why people love to drive EVs - if you've ever driven one you'll know why; you can't help smiling at the smooth ride, the instant acceleration and the calm silence of an electric motor. Driving an EV is a lot like driving any other car, but a lot more fun.
- EVs are cheaper to run and maintain – you pay the equivalent of 30 cents a litre (estimate based on a residential off-peak charge rate, and will vary. Petrol costs about NZ$2 a litre).

Infographics to highlight cost benefits of charging at home

The focus in the near term (years 2-3) remains on 'priming' the market, growing awareness and understanding amongst the target audience we expect to be most influential. It is not a call to action campaign, a premature call to action campaign risks disillusionment and negative word of mouth.

In outer years (4-5), focus will shift to a call to action campaign (reflecting annual registration targets), including an intervention-based media strategy targeting those actively in the market. We expect that by this point supply side barriers (EV price and model choice) will have substantially reduced.

A motorway in Aucklan



Ipsos research commissioned by EECA

Recent market research has developed a behavioural segmentation of the vehicle market and identified different groups with different motivations and triggers to action. We are working now on how to use this market and which segments to tackle first.

Distinct segments, identified as most receptive to EV messaging include:

- Obligations — people who make very pragmatic decisions based on cost;
- Altruistic/comfort — people focused on family above all and,
- Egoists — people who are more likely to be wealthy, childless and younger.

This segmentation model has allowed us to prioritise and target specific audiences with messaging tailored to each.

3. Campaign implementation to date

The core campaign elements include:

- Campaign branding – an "EV: Drive the Future" brand identity has been created as an umbrella EV programme brand, for use across all government agency EV activity, but also made available to the private sector.
- Advertising campaign (media) – a television ad produced to raise awareness used a hearts and minds message of protecting our environment, and harnessing our abundant renewable energy.
  https://www.youtube.com/watch?v=-GqsNO6Sq50 TV ad
  https://www.youtube.com/watch?v=yc8ZBleTwHU TV ad 2
- Sponsored articles which ran in mainstream media print publications.
  Examples include a story which showcased ride experiences in a Green Cabs' EV.
- Authoritative information such as a life cycle analysis to ISO standards that we used to generate key messages such as 80% reduction in CO2. Another piece of work was a report we commissioned about battery life used for messaging and to respond to queries.

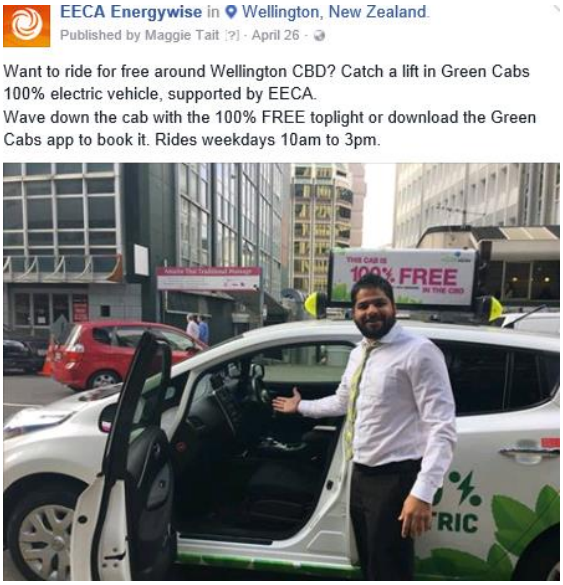
An outreach event

- Community outreach – we work with partners to provide the public and businesses with "see/ride/drive" opportunities. These with with associated media opportunities, help to break down perception issues of EVs. Existing owners are being harnessed as advocates.

  A good example is our work with the Better New Zealand Trust. Working together we have delivered 118 separate events offering over 5000 rides and drives to people in the past nine months.

  Earlier this year they ran the Leading the Charge road trip in which a convoy of 14 EVs travelled the length of the country and attended events along the route. The public had at least 2,600 rides and drives in EVs as part of the event. The majority of these were given in Christchurch, Wellington and Auckland, including at the event marking the 100th anniversary of the Motor Trade Association.

- Stakeholder engagement – a key part of the government programme is the adoption of an 'New Zealand Inc' approach, reflecting the importance of the public and private sectors working closely together, requiring close collaboration and communications.



An image of a Facebook post supporting a private's company's EV promotion

- Collateral – printed materials to support community outreach events, and tailored to each of the core target audiences.

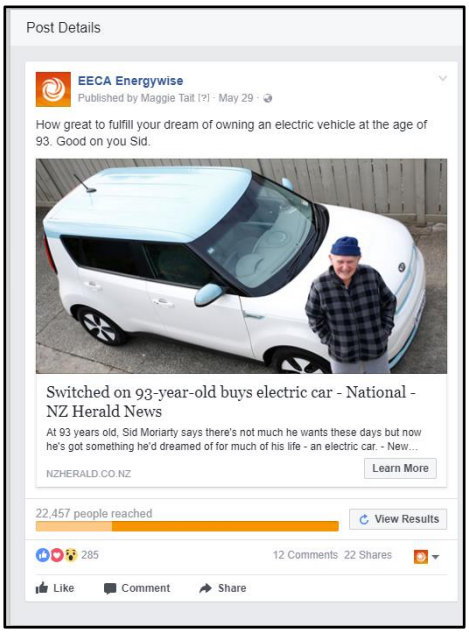
An image used in an information campaign brochure

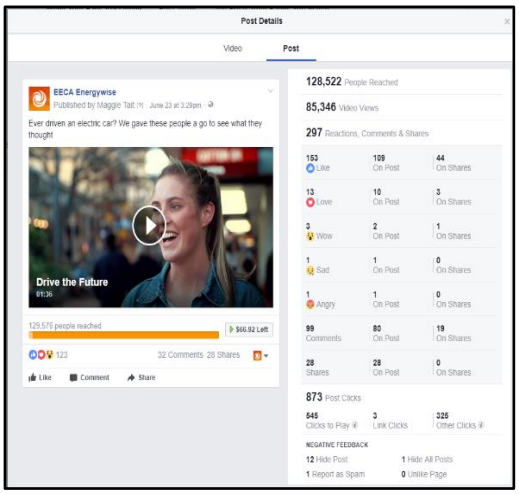
- Web portal (& tools) – the EV web portal (www.electricvehicles.govt.New Zealand) is a 'one-stop-shop' for information on EVs in New Zealand. The portal aggregates rather than duplicates existing content from a wide range of websites.

- A comprehensive total cost of ownership tool – so fleet buyers can see the value of investing in an EV. The tool includes all new ICE vehicles available in the New Zealand market, which will be an useful on-going tool for fleet managers. https://www.eeca.govt.New Zealand/resources-and-tools/research-publications-and-resources/transport-publications-and-resources/#electric-vehicles

- Video content –increasingly sought after by consumers, short-form videos are being used to excite the general public, and address common areas of concern. Content is being shared via the portal, social media, and stakeholder channels.
  https://www.youtube.com/watch?v=U42VpSguCg0&feature=youtu.be (Ever driven an electric vehicle?)
  https://www.youtube.com/watch?v=Ban8FTtinJs (Driving electric every day)
  https://www.youtube.com/watch?v=JUpfwusQboM (Charging the future)

- Social media – sharing EV items is important to create a sense that these are an increasingly viable option and to reach early adopters.

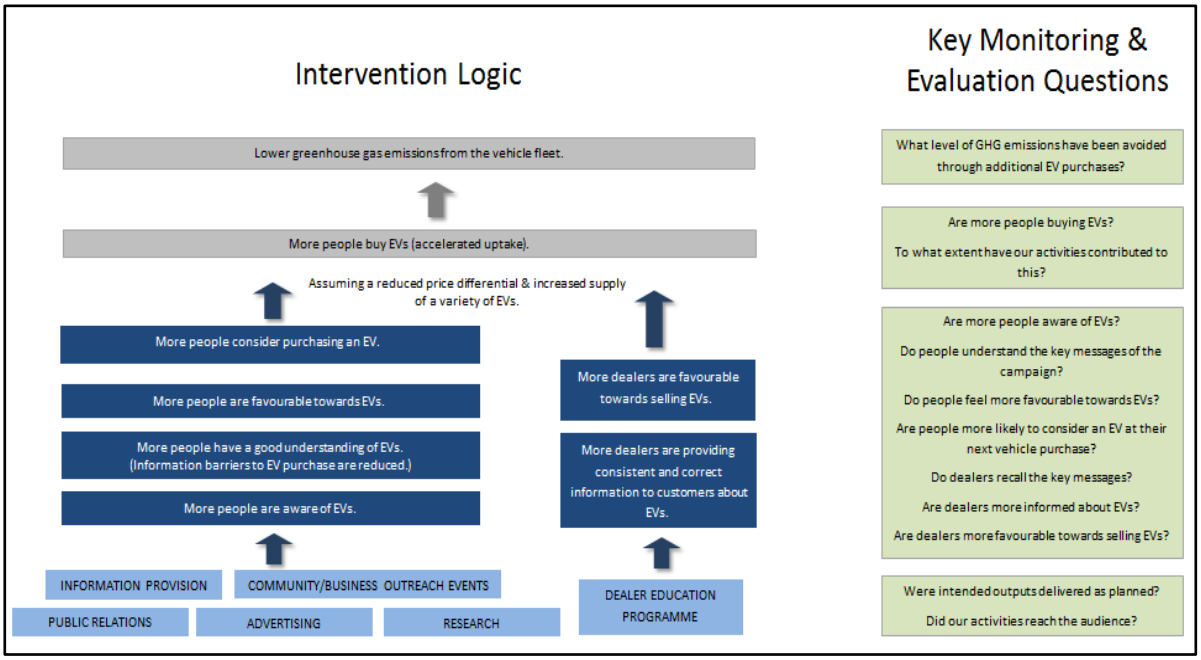




4 Measuring effectiveness

Changing attitudes to EVs is a necessary prerequisite to increasing EV sales but is not sufficient on its own. Increased EV uptake is the result of many factors including price, charging infrastructure, increased variety of vehicle classes, in addition to increased awareness and more favourable attitudes. Our campaign supports the wider government EV package and the activities of the industry to contribute to an overall increase in EV uptake. While we track EV sales and GHG emissions reductions, it is for this reason that we assess the success of our information campaign by tracking changes in the attitudes and behaviours of the people we're targeting.

EECA has developed an evaluation and monitoring framework for its programme, to assess and monitor the effectiveness of the overall information campaign. A simplified version of our intervention logic and key performance questions is shown below.



5 Conclusions and next steps

Key to the programme's success is being clear that we are in an education process focused on raising awareness and changing attitudes. The way to do this is by appealing to people's sense of fun and offering an experience of driving an EV that breaks down prevailing misconceptions far more effectively than simply being told what the benefits are.

This year, the advertising/promotion elements of the campaign will pick up pace as our approach to segmentation is developed. The community outreach programme planning for the year will see an increasing frequency of events across the entire country.

We will also be looking at how to engage more with the business sector. This market accounts for 70% of new vehicle sales in New Zealand, which subsequently create the second hand market after the lease period expiry (3-4 years). This audience will be more receptive to sustainability messaging (corporate responsibility) and TCO (total cost of ownership) justification than the consumer market which is much more sensitive to sticker price parity. New EV pricing remains a considerable barrier.

We also intend to work more with dealers. They represent a very important part of the purchase process, and currently could largely be characterised as ill-informed and unmotivated about promoting and selling EVs, which in turn, impacts upon the supply funnel.

As with the introduction of any new technology, we are very conscious of the extensive challenge ahead of us. However, the campaign launch has been very successful, and has provided a solid platform from which the information campaign will evolve across the five years. Consumer Monitor results show steady improvements across favourability, confidence around EVs being able to meet needs and agreement that EVs are the way of the future.

Authors

Maggie Tait, Senior Communications Advisor at the Energy Efficiency & Conservation Authority (EECA). Responsible for all communication aspects relating to the EV Information Campaign.

Paul Williams, Senior Marketing Advisor at the Energy Efficiency & Conservation Authority (EECA). Responsible for all marketing aspects relating to the EV Information Campaign.

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[xiii] Ipsos research commissioned by EECA June 2017