



JULY 2018 EECA Electric Vehicle Fleet Manager Understanding Business Research **PREPARED FOR: EECA PREPARED BY: IPSOS CONTACT: INFORMATION WITHHELD UNDER** SECTION 9(2)(A)





EECA ELECTRIC VEHICLE FLEET MANAGER UNDERSTANDING **Executive Summary (i)**

When boiled down to the fundamental level, the purpose of a vehicle that is owned or leased by a company is to facilitate everyday business activities, thus saving time and money.

Fleet managers still generally opt for traditional fuel vehicles, because petrol and diesel vehicles offer fleet managers a degree of certainty around meeting the basic needs of the business, and therefore are the most considered vehicles by some distance. For EVs to seriously enter the consideration of fleet managers, the mental barrier of uncertainty must be overcome.

Given that saving time is an inherent aspect of a vehicle being 'fit for purpose', as it currently stands, EVs are often viewed as not fulfilling this requirement. This is due to their potentially disruptive impact on the day-to-day activities of a business (e.g. cars not having sufficient driving distance, drivers needing to charge their vehicles throughout the working day, etc.), which could therefore lose both time and money for the business.

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EECA ELECTRIC VEHICLE FLEET MANAGER UNDERSTANDING **Executive Summary (ii)**

Assurances need to be made around the ability of EVs to fulfil key purchase decision-making criteria. Fit for purpose, reliability, and overall costs are the key decision-making criteria for fleet managers. As it currently stands, fleet managers exhibit a lack of confidence in the ability of EVs to tick these boxes, and as long as these concerns persist, it is likely that EVs will continue to struggle to achieve widespread consideration.

Ultimately, **EVs must be able to provide the assurance that a switch will not lead to a loss of time** (and as a result, a loss of earnings). EVs could look to make inroads into the consideration set of fleet managers by positioning the adoption of vehicles as a gradual change (so they can get a sense of how 'they work') and focussing on businesses with mainly passenger vehicles (so range anxiety is less of an issue).

Something for tomorrow, but not for today. Compared with the 2015 study, we can see some encouraging improvements around the consideration and perception of electric vehicles. However, the vast majority of fleet managers still view EVs as something they will adopt in time, as opposed to a serious contender for work vehicles in the present day.

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RESEARCH OBJECTIVES AND METHODOLOGY

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RESEARCH OBJECTIVES Why and how we're conducting this research

RESEARCH OBJECTIVES

- Understand if the barriers for private fleets have shifted or changed and how EECA might be able to influence and support purchasing decisions when it comes to electric vehicles.
- How do businesses monitor and / or audit their fleets (telematics, etc.), how often do they audit?
- What is their current infrastructure (number of carparks, carpark types, etc)? How does infrastructure impact their decisions, e.g. number of carparks, do they understand the impact of installing chargers and would that be a factor in their purchasing decisions?
- Their feelings towards sustainability / carbon reduction / climate change as an organisation and how that impacts purchasing decisions for vehicles.
- What would they like to know about the impact of bringing EVs into the fleet that they currently don't have information on?
- How does the residual price of EVs impact their decision-making?

- Their attitude towards electric vehicles (align with consumer measures, e.g. familiarity, consideration, favourability, etc.).
- Consideration sets for purchase of vehicles, e.g. fit for purpose, safety, reliability, etc.
- How many cars are in their fleets? How long do they expect to keep these vehicles? Do they understand the running costs and total cost of ownership of electric vehicles, and how would they determine this?
- Do they own or lease their fleet vehicles and what factors are considered in making this decision?
- Who are the decision-makers and influencers of fleet purchase?

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RESEARCH METHODOLOGY AND SAMPLES The research approach and samples





Qualitative Research Fleet Manager interviews (n=12)

- Interviews were 1 hour long.
- Interviews were held in Auckland.
- Interviews were conducted from 30th April until 11th May.
- We spoke to a variety of fleet managers with different vehicle types and vehicle arrangements, i.e. pool vehicles.

Vehicles Managed:	5-9 vehicles	10-19 vehicles	20+ vehicles	TOTAL INTERVIEWS
Number of Interviews:	n=3	n=3	n=6	n=12

Note: Quantitative outputs on the report are denoted by the colour orange. Qualitative outputs are denoted by the colour blue.

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SAMPLE PROFILE – QUANTITATIVE STAGE Who we spoke to in the quantitative study





respondents

21 minutes

average duration

Role in Business



41% Senior Manager 22% Business Owner

- 12% Other Managers
- **10%** Fleet Manager
- **Finance Manager** 7%
- Other 8%



Number of Employees

- 13% 15 people or less **18%** 16 to 29 people 12% 30 to 49 people
- 20% 50 to 100 people
- 37% More than 100 people





Company Sector

- **30%** Construction
- **13%** Manufacturing
- 11% Transport, Postal and Warehousing
- Agriculture, Forestry and Fishing 7%
- Electricity, Gas, Water and Waste 6%
- 6% Professional, Scientific and **Technical Services**
- **4%** Accommodation and Food Services
- Wholesale Trade 4%
- **3%** Healthcare
- **Retail Trade** 2%
- Financial and Insurance Services 2%
- Rental, Hiring and Real Estate 2%
- 2% Education
- Mining 1%
- Telecommunications 1%
- 6% Other



Company Sector (GROUPED)

Energy Efficiency and Conservation Authority Te Tari Tiaki Pūngao

34% Production, Sales and Transport 30% Construction 22% Professional 14% Primary Industries



Importance of Sustainability / Carbon Reduction to Company

13% Unimportant 28% Neutral 57% Important 2% Don't Know

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PROFILING THE CURRENT FLEET

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EEOA Energy Efficiency and Conservation Authority Te Tari Tiaki Pūngao



Over half of businesses have fleets that comprise vehicles that use different fuel types, with 8% already having non-traditional fuel types



S3 Approximately how many light vehicles are currently operated by your company? / F1 Which of the following best describes how the light vehicles in the fleet of your company are fuelled?

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Base: Total sample (n=200)





The majority of businesses choose to own their fleet vehicles, with most having a range of different vehicle types within their fleet



F3 Which of the following ownership types does your vehicle fleet fall? / S4 Which of the following light vehicle types are operated by your company?

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Similar to the pattern of fleets having a mixture fuel and vehicle types, fleets also have a mixture of purposes for their vehicles



F4 How many light vehicles in your fleet would fall into each of the following categories?

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(n=73)



As expected, lease vehicles are on a shorter replacement cycle compared to those owned; anecdotally, preference for lease vs. own tends to be cyclical in nature



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Fleets with passenger / SUV vehicles are the largest opportunity for at-work charging; they also tend to have lower average distances travelled



F14 Which of the following best describes where the vehicles of your fleet typically are during a work day? / **F7** Thinking about the average light vehicle currently operated by your company, approximately how many kilometres would they travel in a typical <u>day</u>?



GAME CHANGERS

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The majority of businesses have off-street private parking in uncovered dedicated bays for their fleet, which indicates charging points could be installed



F5 Approximately, how many car parks do you have available on-site at your work premises specifically for the light vehicle fleet? / F6 And what type of parking does your fleet primarily have access to when at work?



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CURRENT FLEET Section summary and implications for EV uptake



Traditional fuel types dominate fleet composition, with only 8% of companies having non-traditional fuel type vehicles in their fleet. ICE vehicles appear to be entrenched.



The majority of fleets are of mixed composition in terms of vehicle type and vehicle purpose. Therefore, the adoption of EVs could be positioned as a progressive or partial process, rather than a whole-scale process for an entire fleet.



Fleets that contain passenger vehicles appear to be the most likely target for EV uptake, as they tend to be the vehicle types that spend more time on work premises and travel on average shorter daily distances.



Companies appear to have sufficient parking for their fleets, and with the majority of these being private off-street parking, the installation of on-site charging stations is a possibility.





Vehicles ultimately save businesses time, which is intrinsically linked to the 3 key criteria of fleet vehicle choice; if they fail to meet these, it could cost time and

The fundamental purpose of a vehicle for a business is to facilitate daily business activities.

Ultimately, this facilitation leads to time efficiency and an increase in production.

With time seen as a cost to the business, anything that impacts this is seen as a potential negative.

Although time was not explicitly discussed in relation to fleet decision-making, it was implicitly linked to the top-3 criteria of fleet vehicle choice:

- 1. Fit for purpose
 - 2. Reliability
 - 3. Costs

And if a potential vehicle didn't meet any of these 3 top criteria, it would simply not be a serious contender in their vehicle choice, as it could end up being a cost to the business. Fit for purpose with the purpose of the purpose of

GAME CHANGERS

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Clearly fit for purpose and reliability are top-tier factors for fleet managers when purchasing or leasing a new vehicle, whilst carbon emissions is the lowest



F15 On a scale from 1 to 5 where 1 is 'not at all important' and 5 is 'extremely important', please tell me how important or unimportant each factor was in the most recent fleet purchase or lease decision made by your company / the company you work for? **GAME CHANGERS**



19 © 2018 lpsos. Base: Total sample (n=200). *Note: Asked only of some respondents.

FLEET DECISION-MAKING Fit for purpose, reliability and costs are seen as closely related and are typically viewed as non-negotiables when purchasing a fleet vehicle



The vehicle needs to be suitable for the type of work it is used for, along with the employee and their role.

Assessing whether a vehicle is fit for purpose covers a wide range of factors, including driving distance, fuel type, vehicle size, storage size, driver's habits, etc. Ultimately, it is whether the vehicle can do the job that will be required of it for its role.



"For one guy that does work on commission, we gave him a Nissan NV200s because he only needs to chuck a few bits and pieces in the back."



Related to 'fit for purpose', managers are looking for reliable vehicles that will take employees from A to B on a consistent basis and will do the job required of them without breaking mechanical issues.

Although reliability is somewhat a given with modern vehicles, there is a propensity towards using diesel vehicles because they perceive them as being 'unbreakable cars'.



"We're looking for a brand with reliability, to cover long driving distances, hence the master lease with Toyota."



Although split out in the quantitative study, qualitatively managers see costs as a group of factors under the broad umbrella of total cost of ownership.

Up-front costs, on-going fuel use and maintenance costs are considered, although with new vehicles the latter is often covered by a service agreement.

Residual cost is not a huge consideration, as vehicle replacement is fairly frequent.

"We always review driver / owner costs so we aren't placing them in a position that the cost to do business is high. Fuel use is a major component of that. So we want to ensure that fuel efficiency is high."





Other factors are still relevant when acquiring a new vehicle outside of the three key criteria, although their importance varies according to industry type

SAFETY RATINGS

Fleet managers consider health and safety to be important when purchasing or leasing a new vehicle.

However, most think that safety features are an inherent characteristic of new vehicles, so not something that needs to be especially specified unless of particular concern.

> "Most of the cars we buy already have up-to-date safety features. Safety features come into play when recommending a car to one of our clients."

DISCOUNTS

Discounts are more relevant to managers that purchase new vehicles.

Some of these managers will wait for specials to purchase a new vehicle. Fleet managers buying second-hand vehicles regularly check Trade Me for a vehicle that may be of interest to them.

> "[When I look at buying a new car] I'd wait until the new model comes out, so that I can get a discount on the old one (Nov / Dec time)."

BRAND OR MODEL

Specifying a particular brand or model relates in part to vehicle purpose, reliability and manufacturer support, as well as how it reflects on the image of a business.

Client-facing employees or companies with a premium image tend to be more concerned with the brand / model of vehicle they own.

> "In the past we've had different makes and models, but it hasn't suited us that well. Hence only using Mercedes Sprint."

CARBON EMISSIONS

Some fleet managers are considering the environment in their purchases due to company policy, but for the most part businesses do not directly consider this as a criterion for vehicle choice.

However, desire for a fuelefficient vehicle by proxy leads to lower carbon emissions.







For now, three quarters of fleet managers would not be likely to consider battery EVs the next time they need to buy or lease a vehicle for the business



F2 Thinking about your next vehicle purchase or lease for the business, how likely is it that the business will consider the following vehicle types?





While over half of businesses haven't considered electric vehicles for their fleet at all, this figure is substantially lower than it was in 2015

Consideration of Electric Vehicles				
Electric vehicles haven't been considered for the fleet at all	55%	69%		
Electric vehicles were considered for the fleet, but aren't considered viable	25%	16%		
Electric vehicles are currently under consideration for the fleet	12%	6%		
The fleet has electric vehicles, but there are no plans to add more for the foreseeable future	2%	3%		
The fleet has electric vehicles & there are currently plans to add more, but not go all-electric yet	2%	3%		
The fleet has electric vehicles & there are currently plans to go all-electric	2%	0%		
The entire fleet is already electric	0%	0%		
Something else	0%	0%		
I don't know	2%	2%		

EV5 Which of the following best describes how much or little electric vehicles have been considered as replacements for light vehicle fleet of your company?



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FLEET DECISION-MAKING



Fleets with trade vehicles only are the most resistant to EVs, while mixed fleets with mainly passenger vehicles are more open to considering them



S4A Out of 100, approximately what percentage of the overall vehicle fleet is each of the following vehicle types? / **F2** Thinking about your next vehicle purchase or lease for the business, how likely is it that the business will consider the following vehicle types?

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Base: Total sample (n=200). *Warning: Low base size.

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Companies with strong values around sustainability and carbon reduction are more likely to consider purchasing an EV, but consideration levels are still



F2 Thinking about your next vehicle purchase or lease for the business, how likely is it that the business will consider the following vehicle types? / **C3** Lastly, how would you rate the importance of sustainability or carbon reduction to the values and actions of your company, on a scale from 1 to 5 where 1 is 'not very important and 5 is 'very important'?

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Managers with fleets that drive less than 50km on an average day are more likely to consider electric vehicles, as are those not in construction or primary industries



F2 Thinking about your next vehicle purchase or lease for the business, how likely is it that the business will consider the following vehicle types? / **C1** Which sector does your company primarily operate in? / **F7** Thinking about the average light vehicle currently operated by your company, approximately how many kilometres would they travel in a typical <u>day</u>?

Base: Total sample (n=200). Note: 3 respondents travel more than 400km. *Warning: Low base size.





FLEET DECISION-MAKING Section summary and implications for fleet decision-making



Saving time (and money) is implicitly linked to the three key criteria fleet managers consider when looking to purchase or lease a vehicle. Vehicles that fail to meet any one of these will invariably be perceived as potentially costing the business time and money, and will not be seriously considered by fleet managers even if it meets other key criteria.



Vehicles that fulfil these basic criteria will then be assessed on other factors including safety, discounts, brand / model, and carbon emissions. Fleet managers rely on this secondary set of factors to decide between the vehicles that are able to facilitate the needs of the business first and foremost.



Diesel vehicles are the most likely fuel type to be considered by fleet managers for their next vehicle purchase / lease, followed by petrol vehicles. These vehicle types are 'tried and tested' and known to meet their needs; whereas on the other hand, electric vehicles are not considered by three quarters of fleet managers as they are an unknown risk.



Mixed fleets, companies with strong sustainability values, fleets with vehicles that travel less than 50km per day on average, and industries outside of construction and primary industry all tend to be more open to considering electric vehicles. However, consideration levels are still comparatively low and therefore some distance away from being a serious purchase option.





Fleet managers are more familiar with EVs than the general population, but considerably less favourable to and confident that they can meet their needs



EV1 How would you rate your familiarity with Electric Vehicles? / **EV2** How favourable or unfavourable is your overall opinion or impression of Electric Vehicles for business use? / **EV3** To what extent are you confident that Electric Vehicles can meet the needs of your business? / **EV4a** Why are you not confident that Electric Vehicles can meet your business needs? / **EV4b** Why are you confident that Electric Vehicles can meet your business needs?

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Having relatively high familiarity levels with EVs is not unexpected for fleet managers, as vehicle knowledge is a key requirement of their job

Familiarity with EVs (Business)						
	Unfamiliar	Know just a little	Familiar	Mean		
	21%	36%	43%	3.3		

All the fleet managers interviewed were aware of the presence of electric vehicles in New Zealand. The majority also had fairly high levels of familiarity with EVs in terms of availability, benefits and perceived limitations.

This is not surprising, given that for most keeping up to date with vehicle developments is part of their job, plus they have a degree of personal interest in vehicles in general.

Several fleet managers, particularly those with a fleet of over 20 vehicles, have investigated electric vehicles as a viable option for their business.

Managers with smaller fleets tend to think of EVs as being a potential choice in the future, and have not seriously investigated their suitability for their business.

"The range is fairly limited. They're the small Nissan Leaf type vehicle and they're quite expensive for what they are. Essentially you're paying for a lot of your fuel costs up-front."

"The distance that some of the sales reps drive in a day exceeds the single charge of EVs that are available. That's why pure EVs are not in the consideration yet based on what I know."

EV1 How would you rate your familiarity with Electric Vehicles? © 2018 lpsos. **Base:** Total sample (n=200)

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The main disadvantages of EVs cited by fleet managers are *travel distance* and *access to recharge points*, which are the same disadvantages cited 3 years ago



EV2 How favourable or unfavourable is your overall opinion or impression of Electric Vehicles for business use? / **EV6** What do you consider to be the main benefit or benefits, if any of electric vehicles over purely petrol / diesel powered vehicles? / **EV7** What do you consider to be the main disadvantage or disadvantages, if any of electric vehicles over purely petrol / diesel powered vehicles?



Base: Total sample (n=200). Note: Only responses 5% and above are shown.



Over half of fleet managers are not confident that EVs can meet their businesses needs, commonly citing *impracticality* and the *range of models available* as key reasons for this



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EV3 To what extent are you confident that Electric Vehicles can meet the needs of your business? Base: Total sample (n=200) / EV4a Why are you not confident that Electric Vehicles can meet your business needs? Base: Those who are not confident that EVs can meet business needs (n=115) / EV4b Why are you confident that Electric Vehicles can meet your business needs? Base: Those who are confident that EVs can meet business needs (n=48). Note: Only responses 5% and above are shown





ELECTRIC VEHICLES Fleet managers' low confidence in EVs is caused by their disbelief in EVs' ability to meet all three key criteria



While fleet managers are somewhat familiar with EVs, they are not very favourable towards them and their confidence levels are very low because the majority perceive them as not be able to meet their business needs. They can see that EVs are starting to gain traction in the residential market, but fleet managers apply a different set of criteria when purchasing or leasing a business vehicle, which leads EVs to being seen as:

- Not fit for purpose. Not having the range of vehicles types, nor, more importantly, perceived as being capable of travelling an adequate distance.
- Not reliable. Existing vehicle types require little worry about running out of fuel, but an EV has to have sufficient charge to meet the day's needs, relies upon employees to remember to charge, etc., or else time (aka money) could be wasted while waiting for a vehicle to charge.
- Would probably save costs if there were a suitable option, but right now there isn't. Fleet managers are aware of potential savings from lower fuel costs and would be prepared to pay more due to total cost of ownership efficiencies once up-front costs come down, but despite this, EVs fail on the other two criteria.

While the transition to EVs is seen as the future, at this stage the majority of fleet managers do not consider them to be viable alternatives.

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Confidence is a key driver in determining whether a business is likely to consider electric vehicles for its fleets



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Base: Total sample (n=200)

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Being *cheaper to run* is for the most part an accepted feature of EVs, whilst *driving range* and *wide range of models* are clearly two aspects that people feel EVs do not possess



EV8 Now I'm going to read out a list of statements about electric vehicles from a business perspective, please tell me how strongly do you agree or disagree with each of the following statements.



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Over half of businesses believe that EVs will be cheaper to 'recharge' than petrol vehicles, showing considerable increases since 2015



EV12 How would the annual electricity cost for running an electric vehicle compare with the annual fuel cost for petrol cars of the same age?




Fleet managers are still uncertain of how the annual servicing / maintenance costs of EVs compare to those of petrol vehicles



EV13 How would the annual servicing / maintenance cost for running an electric vehicle compare with the servicing / maintenance cost for petrol cars of the same age?

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Ipsos. **Base:** Total sample – 2018 (n=200), 2015 (n=199)

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Overall, awareness of charging points is higher than 2015 and only 18% believe that it will be very difficult to install charging points at their place of work



EV9 In which of the following places do you think you can charge an electric vehicle? / **EV10** If you were to get electric vehicles for your fleet, how easy would it be to install charging points at your work premises? **Base:** Total sample (n=200)

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© 2018 lpsos. **EV11** Is the potential need to install charging points at work something that has impacted your consideration of purchasing or leasing electric vehicles for your fleet before now? **Base**: Total sample, excluding those who answered 'don't know' at EV10 (n=186)





ELECTRIC VEHICLES Section summary and implications for EV uptake



Compared with the general population sample from the Consumer Monitor, fleet managers are more familiar with electric vehicles. However, they are less favourable towards them and confident that they will be able to meet their needs, indicating that EVs are currently viewed as more appropriate for personal as opposed to business use.



This lack of confidence stems from the notion that EVs are simply not yet at the stage where they can meet the needs of a business. Specifically, fleet managers have concerns around the travel distance, range of models available, and the infrastructure currently in place (e.g. access to charging stations). The upfront cost of EVs also still represents a barrier to consideration.



As it currently stands, EVs are very much see as 'for the future' as opposed to 'for now'. Consideration of EVs is up 14pt compared with the 2015 study, and we can also see improvements in the overall awareness of charging stations and the perception of EVs being cheaper to run than petrol vehicles. So while perceptions are generally moving in the right direction, EVs are still viewed as an option to consider for the future instead of an alternative that can meet present-day business needs.



CURRENT FLEET



Over half of fleet managers do not use Telematics or GPS to monitor their fleet and within this group, fuel cards and fuel usage reports are the most common form of monitoring







CURRENT FLEET Some 80% of fleet managers say they audit their fleet, with just under half of those undertaking some kind of audit at least every 12 months



F10 Do you undertake audits of your fleet? by audits I mean where you look at what vehicles are needed for the business in terms of use, needs,

etc., and recommendations are made off the back?? **Base:** Total sample (n=200)

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^{SOS.} **F11** How often do you undertake audits? **Base:** Those who undertake audits (n=160)



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Safety rating becomes a more important factor as distance driven per day increases for the purchasing / leasing of vehicles for business fleets



F15 On a scale from 1 to 5 where 1 is 'not at all important' and 5 is 'extremely important', please tell me how important or unimportant each factor was in the most recent fleet purchase or lease decision made by your company / the company you work for? / F7 Thinking about the average light vehicle currently operated by your company, approximately how many kilometres would they travel in a typical <u>day</u>?

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Base: Total sample (n=200). Note: 3 respondents travel more than 400km. *Warning: Low base size. **Note: Asked only of some respondents.



Those in primary industries were significantly more likely to believe that a *high safety rating* is an important factor when purchasing / leasing fleet vehicles



F15 On a scale from 1 to 5 where 1 is 'not at all important' and 5 is 'extremely important', please tell me how important or unimportant each factor was in the most recent fleet purchase or lease decision made by your company / the company you work for? / **C1** Which sector does your company primarily operate in?

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Travel distance is a key disadvantage for all and as driving distance increases, *access to recharge stations* becomes more of a prevalent disadvantage



EV7 What do you consider to be the main disadvantage or disadvantages, if any of electric vehicles over purely petrol / diesel powered vehicles? / **F7** Thinking about the average light vehicle currently operated by your company, approximately how many kilometres would they travel in a typical <u>day</u>?

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Fleet managers with vehicles that travel less than 50km a day are more likely to believe that a main benefit of electric vehicles are the *savings* associated



EV6 What do you consider to be the main benefit or benefits, if any of electric vehicles over purely petrol / diesel powered vehicles? / **F7** Thinking about the average light vehicle currently operated by your company, approximately how many kilometres would they travel in a typical day?

Base: Total sample (n=192). **Note:** 3 respondents travel more than 400km. ***Warning:** Low base size.





Professionals are more *favourable* towards EVs; however, this does not flow through to confidence they can meet their needs



EV1 How would you rate your familiarity with Electric Vehicles? / **EV2** How favourable or unfavourable is your overall opinion or impression of Electric Vehicles for business use? / **EV3** To what extent are you confident that Electric Vehicles can meet the needs of your business?



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Base: Total sample (n=200). *Warning: Low base size.



Fleet managers' *favourability* and *confidence* regarding EVs decrease as the travel distance their fleet travels increases



EV1 How would you rate your familiarity with Electric Vehicles? / **EV2** How favourable or unfavourable is your overall opinion or impression of Electric Vehicles for business use? / **EV3** To what extent are you confident that Electric Vehicles can meet the needs of your business? / **F7** Thinking about the average light vehicle currently operated by your company, approximately how many kilometres would they travel in a typical <u>day</u>?

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Fleet managers with fleets that drive 100 to 400kms were less likely to believe that EVs have a *driving range that is suitable for their businesses needs*



EV8 Now I'm going to read out a list of statements about electric vehicles from a business perspective, please tell me how strongly do you agree or disagree with each of the following statements? / **F7** Thinking about the average light vehicle currently operated by your company,

approximately how many kilometres would they travel in a typical <u>day</u>? © 2018 lpsos.

Base: Total sample (n=200). Note: 3 respondents travel more than 400km. *Warning: Low base size.

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Those with a mixed fleet with mainly trade are less likely to believe that EVs can be *easily serviced*, *charged quickly* and have a *suitable driving range*



EV8 Now I'm going to read out a list of statements about electric vehicles from a business perspective, please tell me how strongly do you agree

or disagree with each of the following statements? / F3 Which of the following ownership types does your vehicle fleet fall?



© 2018 lpsos. Base: Total sample

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Base: Total sample (n=200). ***Warning:** Low base size.



Longer travel distances and a *reduction in initial costs* are the most important changes required for businesses to consider EVs



EV14 Thinking about all the reasons your business might have against using electric vehicles, can you tell me what would the most important thing that you would need to be convinced has changed to consider them more as an option? / **EV14A** Is there anything else needs to happen before electric vehicles can be a more attractive fleet vehicle option?

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Contacts

Information withheld under section 9(2)(a)





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DRAFT QUARTERLY REPORT: Q1 JUL-SEP 2018

EECA Consumer Monitor

PREPARED FOR: EECA

PREPARED BY: IPSOS

CONTACT: INFORMATION WITHHELD UNDER SECTION 9(2)(A)





RESEARCH OBJECTIVES & METHODOLOGY

AME CHANGERS



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RESEARCH OBJECTIVES & METHODOLOGY Research objectives

- EECA's Consumer Monitor tracks the awareness, attitudes and behaviours of New Zealanders in relation to energy efficiency, conservation and renewable energy. It provides a snapshot of what New Zealanders are thinking.
 - These trends have been monitored in varying degrees since March 2008.
- The EECA Consumer Monitor for Jul-Sep 2018 measured:
 - Awareness of all main EECA brands.
 - Recall and impact of the EV Brand Ad module.
 - Recall and impact of the *3 Essentials* campaign.
 - Continued tracking of attitudes and perceptions towards Electric Vehicles.
 - Tracking of the effectiveness of the EECA EV campaign (from December 2017).
 - How consumers seek information about energy-efficient practices.
 - Tracking of the effectiveness of the EECA Rightware campaign (from July 2018).



RESEARCH OBJECTIVES & METHODOLOGY Research methodology

- EECA's Consumer Monitor is conducted via an online survey. This quarter (July to September 2018), the sample comprises a general population sample from the Research Now panel (n=754).
- The sample is randomly selected based on the 2013 Census data.
- The margin of error on a sample size of 754 is ±3.57% for estimates of 50% at the 95% confidence interval.
- This report contains quarterly and 12-month rolling figures. The 12-month rolling data increases the sample size per measure to n=3,011 for the year to Sep 2018, with a margin of error of ±1.79% for estimates of 50% at the 95% confidence interval.
- The sample is weighted to be representative of the 2013 Census by age, gender and region.
- Interviews were collected from 4th July to 2nd October 2018 and the average interview duration was approximately 20 minutes.
- For the NZ population calculations, the figure used is 4,909,790 from the Statistics NZ estimate as at 9th October 2018.
- Please note that all 12-month rolling figures show the yearly results on a quarterly basis (i.e. the year to March 2013, followed by the year to June 2013, and so on).

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Green is sig. \uparrow , Red is sig. \downarrow than previous quarter

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ELECTRIC VEHICLES Familiarity, favourability and confidence in Electric Vehicles have remained fairly stable this quarter



EV3 How would you rate your familiarity with Electric Vehicles? / EV4 How favourable or unfavourable is your overall opinion or

impression of Electric Vehicles? / EV5 To what extent are you confident that Electric Vehicles can meet your needs?

© 2018 lpsos. **Base:** Total sample

6



Familiarity and *favourability* towards Electric Vehicles have remained fairly stable this quarter; both measures sit at a higher level than the same period last year



EV3 How would you rate your familiarity with Electric Vehicles? / EV4 How favourable or unfavourable is your overall opinion or



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7



GAME CHANGERS

Confidence remains stable this quarter; *travel distance* continues to be the largest concern amongst those not confident that Electric Vehicles can meet their needs



Vehicles can meet your needs?

8

⁵ Base: Total sample / Those not confident about RVs (n=173). Note: Only responses 3% and above shown.

Ipsos



Consideration of EVs has softened following a historic high last quarter, whilst consideration of PHEVs and hybrids has reached new historic highs





ELECTRIC VEHICLES Belief that the benefits of EVs outweigh the barriers has remained stable; considerers of EVs are more likely to believe that benefits outweigh barriers



EV13 Thinking about the benefits and barriers towards Electric Vehicles, please indicate how the benefits currently compare with the barriers for you personally on the scale below.

10 © 2018 lpsos. Base: Jul '17-Sep'18 – Current car owners / Intended owners

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Green is sig. au, Red is sig. $ar{ar{ar{ar{b}}}}$ than Total

11

All measures have remained fairly stable this quarter; *affordability* has reached its highest score since tracking of this metric began

	/ehicles	les								
	State			cilicics	Apr-	Jan-	Oct-	Jul-	Apr-	Jan-
Holistic considerations	Don't kn	ow 📕 Disagr	ree 📕 Neutral	Agree	Jun'18	Mar'18	Dec'17	Sep'17	Jun'17	Mar'17
Positive for environment	8% 6% 19	%	67%		71%	70%	72%	71%	75%	67%
Way of the future	9% 6% 18	3%	67%		70%	70%	70%	69%	70%	65%
Product technology										
Day-to-day driving needs	19%	15% 20%	46%)	47%	46%	46%	45%	44%	N/A
Just as powerful	25%	19%	20% 3	6%	35%	33%	29%	31%	28%	N/A
Range of appealing designs	23%	20%	30%	27%	25%	26%	27%	26%	22%	N/A
Better driving experience	28%	14%	34%	24%	22%	25%	22%	21%	19%	20%
Wide range of models	25%	26%	24%	25%	22%	21%	22%	21%	16%	21%
Long-distance driving needs	23%	39%	20%	18%	18%	19%	18%	19%	18%	N/A
Affordable price	17%	50%	17%	16%	15%	14%	12%	14%	13%	14%
	1770	30/0	1770	10/0						

EV6 For each of the following statements, please select the answer that best describes how you feel about Electric Vehicles.

© 2018 lpsos. Base: Total sample: Jul-Sep '18 (n=754), Apr-Jun '18 (n=760), Jan-Mar '18 (n=748), Oct-Dec '17 (n=749), Jul-Sep '17 (n=753), Apr-Jun '17 GAME CHANGERS (n=754), Jan-Mar '17 (n=754), Jan-Mar '17 (n=749)



Green is sig. $m \uparrow$, Red is sig. $m \downarrow$ than previous quarter



% Agree

Over time there has been a gradual increase in positive views about the provision of complementary and downstream infrastructure for EVs

% Agree Complementary Apr-Jan-Oct-Jul-Apr-Jun' 18 Mar'18 Dec'17 Sep'17 Jun'17 Mar'17 infrastructure Don't know Disagree Neutral Agree Cheaper to run than petrol 52% 52% 50% 55% 20% 54% 57% 19% Easy to charge at home 28% 41% 22% 45% 43% 41% 40% 37% Charged quickly 29% 31% 100 21% 29% 26% 27% 27% 26% Public charging easy to find 33% 26% 18% 23% 24% 23% 21% 19% 18% Downstream infrastructure Reliable engine tech 27% 26% 38% 8% 39% 41% 37% 39% 40% Cheaper to maintain 29% 26% 34% 38% 35% 35% 32% 37% Easily found for purchase 32% 30% 28% 27% 23% 32% 23% 19% 26% Easily serviced 36% 13% 24% 26% 23% 25% 23% 20% 27% Common sight on NZ roads 13% 45% 23% 19% 17% 18% 14% 13% 9%

Statements about Electric Vehicles (cont.)

EV6 For each of the following statements, please select the answer that best describes how you feel about Electric Vehicles.

Base: Total sample: Jul-Sep '18 (n=754), Apr-Jun '18 (n=760), Jan-Mar '18 (n=748), Oct-Dec '17 (n=749), Jul-Sep '17 (n=753), Apr-Jun '17 GAME CHANGERS © 2018 lpsos. (n=754), Jan-Mar '17 (n=749)



Energy Efficiency and

Conservation Authority

Jan-

54%

N/A

20%

N/A

N/A

28%

N/A

N/A

N/A

Green is sig. \uparrow , Red is sig. \downarrow than previous quarter

12



Recall of any EV advertising has remained fairly stable this quarter; TV remains the most recalled channel, whilst online and outdoor media has softened



EV1 Have you seen or heard any advertising for Electric Vehicles in the past 3 months? / EV2 Where did you hear or see advertising for Electric Vehicles?

13 © 2018 lpsos. Base: Total sample: Oct-Dec '17 (n=749), Jan-Mar '18 (n=748), Apr-Jun '18 (n=760), Jul-Sep '18 (n=754) / Those who recall advertising





EV 'Drive the Future' page views follow a similar trend to <u>any</u> EV advertising views





ELECTRIC VEHICLES Summary – Electric Vehicles

- Familiarity, favourability and confidence in EVs have remained fairly stable this quarter, after historic highs for familiarity and favourability last quarter.
 - > Confidence has remained stable after recovering from a decline in Jan-Mar '18.
 - > Travel distance and access to charging stations are key reasons cited for lack of confidence in Electric Vehicles.
- Consideration of PHEVs and hybrid vehicles has increased this quarter, both reaching historic highs.
 - > Consideration of BEVs has softened slightly this quarter, after achieving a historic high last quarter.
 - > Price and recharging concerns remain major deterrents for not considering an Electric Vehicle.
- Perceptions of EVs have remained fairly stable this quarter.
 - Encouragingly, looking at longer-term trends sees complementary and downstream infrastructure measures improving, illustrating the changing views towards the viability of EVs.
- Awareness of <u>any</u> EV advertising has softened this quarter after achieving a historic high last quarter.

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CAMPAIGN PERFORMANCE MEASURES Summary – Key Marketing Assets Performance Measures

• EV campaign

- ⇒ Recall of the video component of the campaign has built further this quarter, reaching its highest point in September 2018.
- ⇒ Key takeouts of the campaign are that EVs are *cost effective* and have a *suitable driving range / battery life*.
- ⇒ The EV campaign has influenced viewers positively *gave you a good feeling about EVs* and *the ad was enjoyable to watch* having the highest scores among the ad diagnostic measures.





Contacts

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GAME CHANGERS

At Ipsos we are passionately curious about people, markets, brands and society. We deliver information and analysis that make our complex world easier and faster to navigate and inspire our clients to make smarter decisions.

We believe that our work is important. Security, simplicity, speed and substance apply to everything we do.

Through specialisation, we offer our clients a unique depth of knowledge and expertise. Learning from different experiences gives us perspective and inspires us to boldly call things into question, to be creative.

By nurturing a culture of collaboration and curiosity, we attract the highest calibre of people who have the ability and desire to influence and shape the future.

"GAME CHANGERS" – our tagline – summarises our ambition.







ELECTRIC VEHICLES CENSYDIAM SEGMENTATION

Electric Vehicles Segmentation Report

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RESEARCH OBJECTIVES



Understand people's relationship with their car to identify how EVs can be positioned to meet the motivational needs of car owners







KEY FINDINGS FROM THE QUALITATIVE PHASE



METHODOLOGY **PHASE I : Qualitative Research**





2-hour in-home interviews with decision or joint decision-maker for car purchase (some knowledge of EVs required for bulk of interviews)

30 interviews in Auckland (20)/Christchurch (10), conducted in December 2016/January 2017



People with a household income level greater than \$60,000 PA

	Young singles/ couples	Singles/ couples	Younger families	Older families	Empty nesters/ older couples	Retirees	TOTAL
Urban – Auckland	3	3	4	4	3	3	20
Urban – Christchurch	2	1	2	2	2	1	10
TOTAL	5	4	6	6	5	4	30





QUAL SUMMARY (I) Car category context



• Cars represent a lifeline to mobility

- Anything that places restriction on that freedom will be seen as undesirable.

• Car purchasing is a RISKY decision

- People will avoid car choices that are deemed risky.
- Even when choosing among familiar technology, it is a highly complex process involving a lot of research to make the right choice.
- Easy access to a trusted source of information that helps consumers in their search to compare car options will be important to remove uncertainty about new technology.



QUAL SUMMARY (II) Motivational landscape for cars



- In order to be a viable option, a car has to functionally deliver what people need to fit/suit one's lifestyle
 - To become a viable option, an EV needs to match or exceed the functional benefits of ICE vehicles.
- In order to be an attractive option, a car needs to psychologically connect with deeper underlying emotional benefits
 - People's current perceptions of EV owners is that they are for people who are motivated by particular set of needs, skewed towards a particular motivation in the market.
 - They will not be encouraged to investigate, let alone buy, an EV until they feel it has broader appeal, that it can be driven by someone 'like them'.
- Effort is required to adopt new technologies and for large scale uptake the benefits must considerably outweigh potential risks.
 - Generally new products based on innovative technology require more learning and research effort than for existing products.





CHANGERS

QUAL SUMMARY (III)

The importance of creating an EV eco-system



Alongside meeting category expectations, holistic benefits of EVs (such as good for the environment) tap into higher order esteem needs and support the positive establishment of EVs in people's mental network about cars.

HOWEVER



Consumers will be reluctant to adopt EVs until all aspects of the eco-system are in place to address their fundamental needs.







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QUAL SUMMARY (IV)



In order to move from favorability to consideration, familiarity with the EV ecosystem needs to improve

- Despite a favorable view of EVs, they are currently not part of the consideration set when people buy a car.
 - Cars are already perceived as a risky purchase and lack of familiarity with EVs equals a major risk.
 - Current perception of barriers far outweigh benefits.
 - Opportunity to educate people about the EV technology so that they can see tangible benefits directly applicable to their lives will be key to ensure EVs become part of the consideration set.
- Lack of a visible eco-system to support EVs reinforces the perception that EV will be an option in the future
 - Opportunity to help visualize EVs and the EV infrastructure as much as possible : "the future is actually here and it is no longer in a 'trial stage'"
- Tech enthusiasts and visionaries likely to be the primary target segments
 - They have more **disposable income** and can **afford to make somewhat risky choices.**
 - They will over-look a weak eco-system in order to own an EV for psycho-social benefits.





CAR AND ELECTRIC VEHICLE LANDSCAPE



SAMPLE PROFILE **Sample characteristics**









61% Household no kids **37%** HH with kids (under 18) **38%** HH with kids (any age) 16% HH with kids (under 5) 8% Younger couple no kids 13% Single person HH 24% Older couple no kids

Base: Total sample (n=1000); QB: Which of the following best describes your age group?; QC: Which of the following best describes your gender? Q123: **GAME CHANGERS** Which ethnic group or groups best describe you?; Q124: Which one of the following best describes where you live?; Q121: Which of the following best describes your total household income before tax?; Q122: Which of the following best describes your household?; Q127: Which of the following best



10

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describes your home?

Electric Vehicles Drive the Future

SAMPLE PROFILE

Car ownership and car use characteristics



?

Note: In general people were unable to accurately estimate their KMs travelled on an average day or average weekend.



Note: At home charging capability includes: In a garage, In a carport, In an indoor carpark, In an outdoor carpark, NETT indoors



11 © 2017 Ipsos. Base: Total sample (n=1000), Those who drive to work (n=514) C1: How many cars do you currently own (or jointly own) within your household?; C3: Thinking about the car that you own and drive regularly (i.e. at least once a week), please tell us what type of car it is? U5a: Where do you typically park it at home? U5b: Where do you typically park it at work?



SAMPLE PROFILE Car ownership characteristics





12 © 2017 lpsos. Base: Total sample (n=1000),); C5: Thinking about the car that you own and drive regularly (i.e. at least once a week), please tell us what body type it has?; GAME CHANGERS C9: Please tell us the car's engine size (in litres)?; C7: Please tell us what year the car was manufactured?; C6a: How did you take ownership of it?; C8: How much did you pay for your car?



ATTITUDES TOWARDS DIFFERENT ENGINE TYPES



Familiarity towards electric engine types is generally weaker than *favorability* and *consideration*, which is a different pattern compared to ICE vehicles



Note: Familiarity, favorability and consideration figures are top two box percentages

13 © 2017 Ipsos. Base: Total sample (n=1000); AET1: How would you rate your familiarity with the following types of cars? ; AET2: How favourable or unfavourable is your overall opinion or impression of the following types of cars? ; N4: There are a number of different types of vehicles currently being sold in New Zealand. Thinking about your next vehicle purchase, how likely are you to consider the following vehicles?





have seen one on the road and just over 10% saying to have ridden in one

Actions done in the past year

Seen advertising for EVs

Seen an EV on NZ roads

Seen media coverage about EVs

Seen a public charging station



The level of engagement with EVs is encouraging, with 1/3 of NZers claiming to

ELECTRIC VEHICLES



39%

34%

33%

30%





15



Perceived barriers of EVs far outweigh the benefits; notable barriers incl. *affordability, battery uncertainty* and *lack of knowledge*

How the benefits of Electric Vehicles currently compare with barriers



Base: Total sample (n=1000), EV10: Below are a list of possible benefits of owning and driving an electric vehicle. Please select up to three options that you feel are the biggest attractive features to you, EV11: Below is a list of possible barriers of owning and driving an electric vehicle. Please select up to three options that you fortist the lagrest issues to you. EV11: Thinking about the benefits and barriers towards Electric Vehicles, please indicate how the benefits currently compare with the barriers for you personally on the scale below?

GAME CHANGERS Ipsos



NZ'ers don't know how EV and ICE running costs compare and generally underestimate the cost savings



How the running costs of Electric Vehicles compare with ICE

4% 5% 5%
5% 5%
12%
12%
1270
7%
7 /0
5%
51%
51%

Cost more to run Cost about the same to run Cheaper to run by less than 10% Cheaper to run by 10-25%

Cheaper to run by 26-50% Cheaper to run by 51-80% Cheaper to run by 81% or more

I don't know







51% Don't know

GAME CHANGERS



16 © 2017 Ipsos. Base: Total sample (n=1000); EV15: Thinking about the cost to run an electric vehicle compared to a similarly-sized petrol vehicle, how do you think the running costs compare?

ELECTRIC VEHICLES Who do they perceive to be an EV owner?





People who are comfortably well-off.	52%
People who do their bit for the community.	45%
People who are trend-setters.	44%
People who are unafraid to be quirky in their choices.	42%
People who take comfort in making sensible decisions.	42%
People who want to portray their success to others.	22%
People who strive to live an organized life.	21%
People who are not attached to their vehicle.	21%
People where safety is paramount.	16%
People who are family-oriented.	13%



ELECTRIC VEHICLES The Electric Vehicle eco-system of innovation

Electric Vehicles

We asked a series of agree / disagree statements that cover all aspects of the eco-system

Remember...

These statements for the most part are measuring how EVs meet the basic requirements of a vehicle... not how they are better!







Holistic statements such as *positive for the environment* and *way of the future* have the strongest level of agreement

Statements about Electric Vehicles

Holistic considerations		Don't know	Disagree	Neutral	Agree	
Positive for environment	7% 6% 1	.2%		75%		
Way of the future	7% 6%	16%		71%		
Product technology		Don't know	Disagree	Neutral	Agree	
Day-to-day driving needs	24%	17%	6 20%		39%	
Just as powerful	27%		28%	22%		23%
Range of appealing designs	27%		24%	29%		20%
Better driving experience	32%	0	15%	34%		19%
Wide range of models	31%		28%	2	6%	15%
Long distance driving needs	28%		40%		19%	13%
Affordable price	24%		47%		18%	11%

Note: Statements ranked in order of 'agree'







Consumers are less convinced about the complementary and downstream infrastructure needed to support electric vehicles

Statements about Electric Vehicles (cont.)



Complementary infrastructure	■ D	on't know	Disagree	e Neutral	Agre	e
Cheaper to run than petrol	22%	8%	19%		51%	
Easy to charge at home	33%		11%	24%		32%
Charged quickly	37%		18%	25	5%	20%
Public charging easy to find	23%		45%		18%	14%



Downstream infrastructure	■ Don't know	Disagree	Neutral	Agree
Reliable engine tech	31%	9%	28%	32%
Cheaper to maintain	34%	12%	24%	30%
Easily found for purchase	27%	26%	24%	23%
Easily serviced	42%	13%	28%	17%
Common sight on NZ roads	15%	57%		18% 10%

Note: Statements ranked in order of 'agree'

© 2017 Ipsos. Base: Total sample (n=1000); EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles? 20 Please select one answer per statement,





Traditional consumer-adoption models can predict the diffusion of new innovations through society



More or less likely to be... Green = significantly \uparrow , Red = significantly \downarrow than total sample

Live in Auckland city (45% vs. 29%) HH income > \$60K (44% vs. 26%) Directionally more likely to be Asian (22% vs. 13%) Live in Auckland city (4 Asian descent (22% vs. Live in a city (65% vs. 5)	% vs. 29%) No significant differences 3%) %)	No significant differences	Live outside of Auckland (76% vs. 67%) HH income <\$60K (44% vs. 34%) Live in a town or rural area (56% vs. 45%) Less likely to be Asian (6% vs. 13%)
--	--	----------------------------	--



21 © 2017 Ipsos. Base: Total sample (n=1000); AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each of these GAME CHANGERS types of cars. Even if you've never used them, you can have an expectation of how they would meet your needs.

HOW DO WE UNDERSTAND WHAT DRIVES THE SUITABILITY OF A VEHICLE? We use the Ipsos Bayes Net (IBN) Driver Analysis

IBN looks at the relationship between the desired outcome (EV can meet my needs) and belief statements about Electric Vehicles. The IBN helps us understand...

The relative <u>strength</u> of different statements; the <u>relationship</u> between statements; and the <u>direction</u> of these relationships.

This allows <u>targeting</u> of key drivers of 'meeting my needs' to influence Electric Vehicle uptake

WHAT TO FOCUS ON

Identifies which beliefs to focus on to grow a acceptance of EVs.



Drivers of 'EV meeting my needs'



AND HOW TO FOCUS ON THEM

Understands how people associate and connect the statements together, which assists with developing action plans.





HOW DO WE INFLUENCE THE UPTAKE OF ELECTRIC VEHICLES?



To improve their uptake, key area of focus is to improve perceptions they have a *suitable range for day to day driving* and maintain they are the *way of the future*

We looked at how various statements about Electric Vehicles are related to 'meeting my needs', and how they relate to all the other statements. This gives us the <u>rank</u> and <u>strength</u>.



23 © 2017 Ipsos. Base: Total sample (n=1000); AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each of these types of cars. Even if you've never used them, you can have an expectation of how they would meet your needs. EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles?



WHAT PERCEPTIONS SHOULD WE FOCUS ON IMPROVING?



Features such *suitable range for day-to-day driving, cheaper to maintain, reliable engine* and *better driving experience* are top priorities to improve perceptions



24 © 2017 Ipsos. Base: Total sample (n=1000); AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each of these GAN types of cars. Even if you've never used them, you can have an expectation of how they would meet your needs. EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles?

HOW DO WE INFLUENCE THE UPTAKE OF ELECTRIC VEHICLES? Ipsos Bayes Net (IBN) Driver Analysis

Recap: Across all the different statements, we looked at how the various statements are related to in 'meeting my needs', and how they relate to all the other qualities. This gives us the <u>linkages</u>.



Drivers of influence - relationships and directions









INTRODUCING CENSYDIAM













THE CENSYDIAM APPROACH



Along the way, they make choices based upon the set of the set of



In order to be successful a product or brand must resonate with people's deeper human motivations.





HUMAN MOTIVATIONS CAN BE FRAMED ACCORDING TO TWO DIMENSIONS North/South – the 'me' dimension: RELEASE or CONTROL





Top of model / North The desire to let go, be impulsive, be high spirited





Bottom of model / South

The strive for control, be rational and suppress your feelings





HUMAN MOTIVATIONS CAN BE FRAMED ACCORDING TO TWO DIMENSIONS West/East – the 'social' dimension: STAND OUT or FIT IN





Left / West

The desire to assert oneself, stand out and dominate

West is more about ME





Right / East

The desire for companionship, bonding and fit with others

East is more about WE





THE CENSYDIAM FRAMEWORK

These two dimensions lead to eight core motivations







Power is about the need to be the best. It relates to the desire I have to be respected, praised and acknowledged for the choices I make and for the successes I have achieved in my life. The Power dimension reflects my social status and the need to be an authority and a leader of others.





Belonging is all about being surrounded by people who accept me as I am, as an equal and who make me feel welcome. Belonging is about the need to be part of society or a group we really feel part of. Part of this is linked to following norms and traditions just because we are part of that culture or group. It is about togetherness, brotherhood, camaraderie, taking care of others, being taken care of by others, and doing good and feeling good.





Enjoyment is all about maximising the pleasure I get out of life and enjoying myself without worrying about the consequences. I can go a little crazy, overindulge myself and lose all inhibitions. I am spontaneous, follow my instincts and live for the moment. The purpose of consumption is abundance and enjoyment. It is impulsive and sometimes excessive or even manic.





Control is about keeping myself in check and hiding my emotions and feelings. It is not that I don't have emotions, I just don't want to let them out or let them be seen by others. There are times when I want to try to be as cool, calm and collected as possible. There are also moments when I like to be completely in control, to keep things in order, have discipline and stick to a routine which feels quite comfortable and safe. This gives me a sense of stability and structure.





Conviviality is all about wanting to be connected with other people. For me, meeting people is a joy. I love having good times with good friends and loved ones. Interacting and sharing experiences means letting go of any differences we might have. It is about opening up emotionally, being romantic or allowing others to be part of your life – on or offline.





Recognition is about feeling unique, special and ahead of the pack. The Recognition dimension reflects the need to stand out from the crowd and break from convention. Recognition is all about being proud of one's own special ability and competence, intellectually, culturally and materially.








Vitality is about adventure, testing your boundaries and discovering new things. It taps into the need we have to step outside our comfort zone, to explore our environment and to achieve independence (away from others). It is when we travel and experience the exotic and the unusual to be stimulated and excited. Vitality is all about experiencing freedom, passion, and adventure, buzzing about, spending energy, and feeling very much alive and kicking.





Security is about the experience of relaxation, tranquillity and safety. These are the moments one feels the need to retreat and recharge. One is looking for an experience that soothes, comforts and takes away the stresses and strains of hectic daily life. These are the times one withdraws to a physical or mental space that is free from worry and responsibility – an almost childlike state of feeling safe and cared for.







UNDERSTANDING CAR OWNERSHIP NEEDS IN THE MARKET



CATEGORY CONTEXT

A car is a necessity and an expression of who I am











CENSYDIAM FRAMEWORK Defining the dimensions for cars



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DEFINING THE MOTIVATIONAL LANDSCAPE FOR CARS



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8 motivations to support ones lifestyle





HOW TO READ THE CENSYDIAM FRAMEWORK



Using these motivations we further profile according to three different layers within each motivation in order to develop the segmentation



SEGMENTATION SOLUTION

Understanding car ownership needs in the market

Makes me feel happy.				People who embrace spontaneity in their live	s .	
Allows me to have fun while driving	g			reopie who embrace spontaneity in their ne	<u>.</u>	
Gives me moments of liberation fro	om daily obligations			People who are always fun to be around.		
Helps me share happy times with o	thers.			People who dedicate time for friends.		
Gives me a way to bring people tog	ether.				··· ·	
Helps me feel connected with frien	ds and loved-ones.			People who value the strong bonds of family/	friends.	
Helps me blend in with my commu	nity.			People who are family-oriented.		
Makes me feel like a responsible m	ember of society.					
Helps me take care of my family.				People who do their bit for the community.		
Allows me to have some quiet Me-	time.			People where safety is paramount.		
Makes me feel taken care of.				People who take comfort in making sensible o	decisions.	
Helps me practically do what I need	to do.					
Simply allows me to get from A to I	3.			People who are not attached to their vehicle.		
Makes me feel like I made a pragm	atic choice about how I spend my	FUNCTIONALITI	ES WANTED IN A CAR	People who strive to live an organized life.		
money.			Taskaslassiskast		Thatian	
Helps me feel a little bit different.	Cargo capacity		lechnology that	low fuel emissions) Technology that improves cost efficiency (fuel efficiency, mileage estimator)		
Makes me feel sophisticated.	Passenger seating (# of seats)		Technology that			
Holps mo to domonstrate my succe			estimator)			
Allows me to own the read	Economical engine		Service/manufac	turor warranty	-	
Makes me feel respected by others	Sporty design		Availability of an	Availability of spare parts and repair spacialist		
Supports me on my outdoor adven	Elegant design		Availability of sp	Availability of spare parts and repair specialist		
Makes me feel exhilarated.	Roomy/spacious interior		Towing bar / Roc	IOWING DAT / KOOT FACKS		
Helps me push my boundaries.	Leather seats		Luxury features			
	Technology that enhances convenience (e.g. k	ey less start,	European brand			_
39 © 2017 Ipsos.	finger lock, park assist)		Wide network fo	or servicing		
	Technology that enhances drivability (engine p	performance,	Stylish interior			
	torque, cruise control)			Kid friendly interior		
	lechnology that enhances comfort (e.g. air co	nditioning, heated	Futuristic design	1		
	[seat, Bluetooth, sun-root]		Bright colour ext	terior	1	
lechnology that enhances safety (e.g. air bags, rear-view		Muted colour ex	-			
	camera, sensor departure lane)				-	





Ipsos



Five segments which make up the market for vehicles in New Zealand







SEGMENT PRIORTISATION



SEGMENT PRIORITISATION



We need to decide which segments to target



- We can't target all segments!
- We need to prioritise which to target, based on factors such as...
 - Most open to purchasing EVs
 - More able to afford an EV
 - Practicality for marcomms
 - Etc...



SEGMENT PRIORITISATION Which segment(s) to prioritise?





Note: Familiarity, favorability and consideration figures are top two box percentages

49 © 2017 Ipsos. Base: Total sample (n=1000), Social happiness (n=263), Obligations (n=231), Stimulation / Liberation (n=159), Egoistic (n=138), Altruistic / Comfort (n=209) ; AET1: How would you rate GAME CHANGERS your familiarity with the following types of cars? ; AET2: How favourable or unfavourable is your overall opinion or impression of the following types of cars? ; N4: There are a number of different types of vehicles currently being sold in New Zealand. Thinking about your next vehicle purchase, how likely are you to consider the following vehicles?







EGOISTIC SEGMENT







EGOISTS





EGOISTS



A symbol of my success

People who tend to measure success based on their professional achievement. They want to show the world they have worked hard and achieved something in their life. They thrive when they feel in command and above the crowd. Cars give them the means to feel empowered on the road and respected by others at the same time.







LAYERS OF MOTIVATIONS **Key motivations defining the EGOIST segment**





DEMOGRAPHICS

54



ا%

18%

15%

/ rather

not say

40%

25%

GAME CHANGERS

Egoists are comparatively younger, live in Auckland, have a HH income >\$100,000 and live in an apartment



Base: Total sample (n=1000), Egoists (n=138); QB: Which of the following best describes your age group?; QC: Which of the following best describes your © 2017 lpsos. gender? Q123: Which ethnic group or groups best describe you?; Q124: Which one of the following best describes where you live?; Q121: Which of the following best describes your total household income before tax?; Q122: Which of the following best describes your household?; Q127: Which of the following best describes your home?



Green = significantly ↑ significantly \downarrow than total sample

CAR OWNERSHIP

Egoists tend to own multiple cars; while most have petrol cars, egoists are less likely to own a petrol vehicle



Total sample Egoists 94% 88% 12%

Type of cars in household

Petrol vehicle **Diesel vehicle** 5% 1% Hybrid vehicle 3% <1% Plug-in hybrid 2% <1% Battery EV



© 2017 Ipsos. Base: Total sample (n=1000), Egoists (n=138); C1: How many cars do you currently own (or jointly own) within your household?; C3: Thinking about the car GAME CHANGERS 55 that you own and drive regularly (i.e. at least once a week), please tell us what type of car it is?

CAR OWNERSHIP



Egoists tend to spend more on vehicles, have newer cars and are more likely to purchase brand new vehicles





6 © 2017 lpsos. Base: Total sample (n=1000), Egoists (n=138); C5: Thinking about the car that you own and drive regularly (i.e. at least once a week), please tell us what body GAME CHANGERS type it has?; C9: Please tell us the car's engine size (in litres)?; C7: Please tell us what year the car was manufactured?; C6a: How did you take ownership of it?; C8: How much did you pay for your car?

CAR USAGE



Egoists are more likely to use their primary car for work, while secondary cars are more likely to be used for leisure activities



Main differences in usage (secondary cars)





57 © 2017 Ipsos. Base: Total sample (n=1000), Egoists (n=138); Egoists with secondary cars (n=47), Total sample with secondary cars (n=252); U1: Please tell us what you use GAME CHANGERS your car for?

YOUR NEXT CAR



Egoists are more likely to say they will replace their cars within the next 5 years; spend more than \$30k; regular update & newer technology are common triggers

When intend to replace						
(the	e car you use most often)	Total				
Next 5 years	7	3% 59%				
Next 5 to 10 years	5%	9%				
More than 10 years	3%	2%				
I don't know	5%	9%				
I have no plans to replace this car	8%	13%				
Arr (those	ount looking to spe	nd				
(thos	e looking to replace their	^{cars)} Total				
NETT less than 30k	e looking to replace their 36%	^{cars)} Total 50%				
NETT less than 30k NETT 15 - 30k	e looking to replace their 36% 29%	^{cars)} Total 50% 27%				
NETT less than 30k NETT 15 - 30k NETT 30 - 60k	29%	^{cars)} Total 50% 27% 11%				
NETT less than 30k NETT 15 - 30k NETT 30 - 60k NETT 60k +	e looking to replace their 36% 29% 22% 8%	rcars) Total 50% 27% 11% 2%				

Factors prompting	g you to replace car		
(the car you	use most often)		Total
It would be part of a regular upgrad	e	31%	21%
I want newer technolog	y	31%	21%
My current car's mileag	e	28%	29%
I would like to treat / reward myse	f	28%	17%
My current car would be too ol	d	27%	34%
My current car no longer suits my need	S	24%	28%
I would prefer the style of another ca	r 21	%	13%
It would become too costly to maintai	n 21	%	40%
I would prefer a different make of ca	r 19%		10%
Reliability of my current ca	r 16%		27%

Note: top 10 responses of the Egoists shown in chart

Green = significantly $m \uparrow$, Red = significantly $m \downarrow$ than total sample

© 2017 Ipsos. Base: Total sample (n=1000), Egoists (n=138); Those looking to replace their cars total (n=870), Egoists (n=127); N2: When do you intend to replace this car? GAME CHANGERS 58 ; N5 When you replace it, how much would you be looking to spend? ; N3: Excluding theft and extensive damage (i.e. write-off), what factors would likely prompt you to replace your car?



YOUR NEXT CAR



Egoists use a combination of online & in person information sources; they are more likely to attend a car show



Note: top 5 responses of the Equists shown in chart



GAME CHANGERS 59 © 2017 lpsos. Base: Total sample (n=1000), Egoists (n=138); N6: If you had to replace your car tomorrow, what would be your most important sources of information in choosing which car to buy?:



ATTITUDES TOWARDS DIFFERENT ENGINE TYPES



Egoists have significantly higher familiarity and consideration for BEVs, whilst lower levels for petrol vehicles



Note: Familiarity, favorability and consideration figures are top two box percentages

GAME CHANGERS © 2017 |DSOS. Base: Total sample (n=1000), Egoists (n=138) ; AET1: How would you rate your familiarity with the following types of cars? ; AET2: How favourable or 60 unfavourable is your overall opinion or impression of the following types of cars? : N4: There are a number of different types of vehicles currently being sold in New Zealand. Thinking about your next vehicle purchase, how likely are you to consider the following vehicles?





Egoists have overall lower barriers and are more likely to see *vehicle aesthetics* and *limited body types* as barriers



61

How the benefits of Electric Vehicles currently compare with barriers

Egois t Total samp	ts ple	41% (50%)	2	2 0 % 17%	//)	29% (19%)		10% (14%)
		Barriers outweigh the benefits	More o	r les	ss equal	Benefits outweigh the barriers	Do	on't know
		Top 3 Barriers				Main differences		
	31%	Dublic charging stations are not easy to find				Are not an affordable price	30%	43%
+	33%	Public charging stations are not easy to find			I	don't know enough about them	24%	33%
	200/				U	ncertainty about the battery life	23%	34%
	30% 43%	Are not available at an affordable price			Ran	ge not suitable for long distance	18%	26%
					Do not	have a wide range of body types	16%	10%
?	24%	I don't know enough about them to consider t	hem			Are odd looking	13%	7%
	33%				Unsu	re about environmental benefits	12%	7%
	Pag	a: Total cample (n=1000) Eggists (n=128); EV10; Below are a list of possible here	ofits of owning a	nd dr	iving an electric veh	icle. Blasse select up to three		



GAME CHANGERS



Egoists have higher overall benefits, are less likely to value *reduced pollution* & *home charging; innovation* & *acceleration* are more likely to be benefits



How the benefits of Electric Vehicles currently compare with barriers

Egois Total sam	ts ple	41% (50%)		2 0% ^{17%)}	29% (19%)		10% (14%)
		Barriers outweigh the benefits	More o	r less equal	Benefits outweigh the barriers	Do	n't know
		Top 3 Benefits			Main differences		
	41% 43%%	Cheaper to run			Produce less pollution	35% 23%	53% 34%
	37% 39%	Save fuel resources			Use an innovative technology	21%	15%
	35% 53%	Produce less pollution / gas emissions			Accelerate faster than petrol cars	15%	0%

Base: Total sample (n=1000), Egoists (n=138); EV10: Below are a list of possible benefits of owning and driving an electric vehicle. Please select up to three options that you feel are the biggest attractive features to you; EV11: Below is a list of possible barriers of owning and driving an electric vehicle. Please select up to three options that you feel are the biggest issues to you. EV13: Thinking about the benefits and barriers towards Electric Vehicles, please indicate how the benefits <u>currently</u> compare with the barriers for you personally on the scale below? EV15: Thinking about the cost to run an electric vehicle compared to a similarly-sized oetrol vehicle. how do you think the running costs compare?



significantly Υ , Red = significantly ψ than total sample

62

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Compared with the total, *Egoists* agree more with the *product technology* statements and less so with the *holistic considerations* statements

Holistic considerations	Don't know	Disagree	Neutral	Agree	Don't know (total level)	Disagree (total level)	Neutral (total level)	Agree (total level)
Positive for environment	7% 7% 21%		65%	5	7%	6%	12%	75%
Way of the future	8% 12% 1	9%	61	%	7%	6%	16%	71%
		Egoist s	egment					
Product technology	Don't know	Disagree	Neutral	Agree				
Day to day driving needs	19% 12%	28%		41%	24%	17%	20%	39%
Just as powerful	15% 26	%	24%	35%	27%	28%	22%	23%
Better driving experience	17% 19%	6 3	0%	34%	32%	15%	34%	19%
Range of appealing designs	15% 2 5	%	31%	29%	27%	24%	29%	20%
Wide range of models	20%	27%	24%	29%	31%	28%	26%	15%
Affordable price	15%	36%	20%	29%	24%	47%	18%	11%
Long distance driving needs	18%	33%	23%	26%	28%	40%	19%	13%

Statements about Electric Vehicles

Note: Statements ranked in order of 'Agree'

63 © 2017 Ipsos. Base: Total sample (n=1000) & Egoistic segment (n=138); EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles? Please select on answer per statement





Compared with the total, *Egoists* agree more with the *downstream infrastructure* statements as well as *quick charging* and *easy to find public charges*

Don't know Disagree Neutral Agree **Complementary infrastructure** Don't know Disagree Neutral Agree (total level) (total level) (total level) (total level) Cheaper to run than petrol 14% 12% 54% 22% 8% 19% 51% Easy to charge at home 27% 12% 32% 11% 24% 32% Charged quickly 22% 17% 31% 37% 25% 20% 18% 29% Public charging easy to find 16% 35% 23% 45% 18% 14% **Egoist segment Downstream infrastructure** Don't know Neutral Disagree Agree 45% Cheaper to maintain 20% 13% 34% 12% 24% 30% Reliable engine tech **18%** 9% 44% 31% 9% 28% 32% 36% Easily found for purchase 18% 22% 27% 26% 24% 23% 28% 16% 30% Easily serviced 42% 13% 28% 17% Common sight on NZ roads 9% 42% 25% 15% 57% 18% 10%

Statements about Electric Vehicles (cont.)

Note: Statements ranked in order of 'Agree'

64 © 2017 Ipsos. Base: Total sample (n=1000) & Egoistic segment (n=138); EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles? Please select one answer per statement



HOW DO WE INFLUENCE THE UPTAKE OF ELECTRIC VEHICLES?



To improve their uptake, key area of focus is to improve perceptions that they have a *suitable range for day to day driving* and *are the way of the future*

We looked at how various statements about Electric Vehicles are related to 'meeting my needs', and how they relate to all the other statements. This gives us the <u>rank</u> and <u>strength</u>.

Suitable range for day-to-day driving	Tier 1
Way of the future	
Cheaper to maintain	
Reliable engine	Tior 2
As powerful as petrol cars	Tier Z
Better driving experience	
Wide range of models	
Easily serviced	
Cheaper to run	
Suitable range for long distance driving	
Easy to charge at home	
Can be charged quickly	
Easily found for purchase	
Wide range of designs	
Positive for the environment	
Charging stations easy to find	
Common sight on NZ roads	
Affordable price	

65 © 2017 Ipsos. Base: Egoists (n=138); AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each of these types of GAME CHANGERS cars. Even if you've never used them, you can have an expectation of how they would meet your needs. EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles?



WHAT PERCEPTIONS SHOULD WE FOCUS ON IMPROVING?



Features such as reliable engine, suitable day-to-day driving range & cheaper to *maintain* are top priorities to improve perceptions



© 2017 Ipsos. Base: Egoists (n=138); AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each of these types GAME CHANGERS 66 of cars. Even if you've never used them, you can have an expectation of how they would meet your needs. EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles?







ALTRUISTIC COMFORT SEGMENT





OBLIGATIONS ALTRUISTIC COMFORT









ALTRUISTIC COMFORT



A safe haven and a reflection of my responsibilities

It's for people who are not risk-takers and feel some responsible with caring for everyone around them. They like to feel protected both physically and mentally. They enjoy the comfort of the routine or things that are predictable. They care about issues beyond their immediate needs or personal preferences. Cars provide them with a barrier from the outside world and gives them a means to take care of people.







LAYERS OF MOTIVATIONS



Key motivations defining the ALTRUISTIC COMFORT segment

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Y	-	
		<u> </u>
I		Ι.

Makes me feel protected.



Makes me feel taken care of.

Makes me feel like a responsible member of society.

Emotional Benefits

(How it should make me feel)

Social Identity (What it should reflect upon me)

People who take comfort in making sensible decisions.



M

ŧ**M**ŧ

People where safety is paramount.

People who are family-oriented.



Functional Characteristics (How it should help me)



Technology that enhances comfort (e.g. air conditioning, heated seat, sun-roof)

Technology that enhances safety (e.g. air bags, rear-view camera, sensor departure lane)



Technology that improves cost efficiency (fuel

efficiency, mileage estimator)





DEMOGRAPHICS

Altruistic Comfort are more likely to have an income over \$60K





61% 61% Household no kids
37% 37% HH with kids (under 18)
38% 38% HH with kids (any age)
12% 16% HH with kids (under 5)
10% 8% Younger couple no kids
10% 13% Single person HH
24% Older couple no kids

GAME CHANGERS



Base: Total sample (n=1000), Altruistic / Comfort (n=209) ; QB: Which of the following best describes your age group? ; QC: Which of the following best 71 © 2017 Ipsos. describes your gender? Q123: Which ethnic group or groups best describe you? ; Q124: Which one of the following best describes where you live? ; Q121: Which of the following best describes your total <u>household income</u> before tax? ; Q122: Which of the following best describes your household? ; Q127: Which of the following best describes your home?

CAR OWNERSHIP Number and type of vehicles owned is similar to the average





Type of cars in household

Green = significantly $m \uparrow$, Red = significantly $m \downarrow$ than total sample



GAME CHANGERS

72 © 2017 lpsos. Base: Total sample (n=1000), Altruistic / Comfort (n=209); C1: How many cars do you currently own (or jointly own) within your household?; C3: Thinking about the car that you own and drive regularly (i.e. at least once a week), please tell us what type of car it is?

CAR OWNERSHIP



Altruistic Comfort are more likely to own an *SUV* and tend to spend slightly more on their vehicles



ireen = significantly \uparrow , Red = significantly \downarrow than total sample



6 2017 lpsos. Base: Total sample (n=1000), Altruistic / Comfort (n=209); C5: Thinking about the car that you own and drive regularly (i.e. at least once a week), please tell us what body type it has?; C9: Please tell us the car's engine size (in litres)?; C7: Please tell us what year the car was manufactured?; C6a: How did you take ownership of it?; C8: How much did you pay for your car?
CAR USAGE



Altruistic Comfort tend to use their primary car for running errands and leisure activities; while secondary cars are more likely to be used for leisure activities

Main differences in usage (the car you use most often)



Main differences in usage (secondary cars)







YOUR NEXT CAR



Majority plan to replace their cars in next 5 years; more likely to replace for greater fuel efficiency, newer technology or improved safety



Factors prompting you to replace car

(the car you use most often)



Note: top 10 responses of the Altruistic / Comfort shown in chart

GAME CHANGERS



75 © 2017 lpsos. Base: Total sample (n=1000), Altruistic / Comfort (n=209) ; Those looking to replace their cars total (n=870), Altruistic / Comfort (n=191); N2: When do you intend to replace this car? ; N5 When you replace it, how much would you be looking to spend? ; N3: Excluding theft and extensive damage (i.e. write-off), what factors would likely prompt you to replace your car?

YOUR NEXT CAR



They are more likely to visit a dealership, manufacturer website, non government websites & online – discussion forums



Note: top 5 responses of the Altruistic / Comfort shown in chart

GAME CHANGERS

Green = significantly \uparrow , Red = significantly \downarrow than total sample

76 © 2017 lpsos. Base: Total sample (n=1000), Altruistic / Comfort (n=209); N6: If you had to replace your car tomorrow, what would be your most important sources of information in choosing which car to buy?;

ATTITUDES TOWARDS DIFFERENT ENGINE TYPES



More likely to *consider* hybrids; *favorability* towards BEVs is strong, but there is room for improvement in *familiarity* and *consideration*



Note: Familiarity, favorability and consideration figures are top two box percentages

77 © 2017 Ipsos. Base: Total sample (n=1000), Altruistic / Comfort (n=209); AET1: How would you rate your familiarity with the following types of cars?; AET2: How favourable or unfavourable is your overall opinion or impression of the following types of cars?; N4: There are a number of different types of vehicles currently being sold in New Zealand. Thinking about your next vehicle purchase, how likely are you to consider the following vehicles?

GAME CHANGERS

Green = significantly 个

, **Red** = significantly \downarrow than total sample



Generally on par with the total sample on strength of barriers, affordability, access to public charging stations & battery life / replacement are largest barriers

How the benefits of Electric Vehicles currently compare with barriers

/ Altruistic comfort Total samp	/ le	53% (50%)	14% (17%)	11% (14%)	
		Barriers outweigh the benefits	More or less equal	Benefits outweigh the barriers	Don't know
		Top 3 Barriers		Main differences	
	47% 43%	They are not available at an affordable price	٨	lo significant differences	
	36% 33%	Public charging stations are not easy to find			
	35% 34%	Uncertainty about battery life and replacement			



Base: Total sample (n=1000), Altruistic / comfort (n=209); EV10: Below are a list of possible benefits of owning and driving an electric vehicle. Please select up to three options that you feel are the biggest attractive features to you; EV11: Below is a list of possible barriers of owning and driving an electric vehicle. Please select up to three options that you feel are the biggest issues to you. EV13: Thinking about the benefits and barriers towards Electric Vehicles, please GAME CHANGERS © 2017 lpsos. indicate how the benefits currently compare with the barriers for you personally on the scale below? EV15: Thinking about the cost to run an electric vehicle compared to a similarly-sized petrol vehicle, how do you think the running costs compare?





Generally on par with the total sample on strength of benefits, *less pollution, cost savings* & *reduced fuel resources* are largest recognised benefits

How the benefits of Electric Vehicles currently compare with barriers

Altruistic comfort Total sam	Altruistic / 53% comfort (50%)		14% (17%)	22% (19%)	11% (14%)
		Barriers outweigh the benefits	More or less equal	Benefits outweigh the barriers	
		Top 3 Benefits		Main differences	
	57% 53%	Produce less pollution / gas emissions	٨	No significant differences	
	48% 43%	Cheaper to run			
C 0 ₂	38% 39%	Save fuel resources			

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Base: Total sample (n=1000), Altruistic / comfort (n=209); EV10: Below are a list of possible benefits of owning and driving an electric vehicle. Please select up to three options that you feel are the biggest attractive features to you ; EV11: Below is a list of possible barriers of owning and driving an electric vehicle. Please select up to three options that you feel are the biggest attractive features to you ; EV11: Below is a list of possible barriers of owning and driving an electric vehicle. Base : Total sample (n=1000), Altruistic / comfort (n=209); EV10: Below are a list of possible barriers of owning and driving an electric vehicle. Base : Total sample (n=1000), Altruistic / comfort (n=209); EV10: Below are a list of possible barriers of owning and driving an electric vehicle. Base : Total sample (n=1000), Altruistic / comfort (n=209); EV10: Below are a list of possible barriers of owning and driving an electric vehicle. Base : Total sample (n=1000), Altruistic / comfort (n=209); EV11: Below is a list of possible barriers towards Electric Vehicles, please Base : Total sample (n=1000), Altruistic / comfort (n=209); EV11: Thinking about the cost to run an electric vehicle compared to a similarly-sized petrol vehicle, how do you think the running costs compare?





The Altruistic Comfort segment are more likely to agree with the *Holistic considerations,* but there's scope to address *price* and *long-distance driving*



Statements about Electric Vehicles

Note: Statements ranked in order of 'Agree'

80 © 2017 Ipsos. Base: Total sample (n=1000) & Altruistic/Comfort segment (n=209); EV6: For each of the following statements please select the answer that best describes GAME CHANGERS how you feel about Electric Vehicles? Please select one answer per statement





Agreement with *infrastructure statements* is broadly in line with the total average, there's scope for EECA to fill the *infrastructure knowledge* gap

Statements about Electric Vehicles (cont.) Don't know Disagree Neutral Agree **Complementary infrastructure** Don't know Neutral Disagree Agree (total level) (total level) (total level) (total level) 7% 54% 22% 8% 19% 51% Cheaper to run than petrol 12% 34% 33% 11% 24% 32% Easy to charge at home 19% 20% 37% 18% 25% Charged quickly 44% 23% 45% 18% 14% Public charging easy to find Altruistic/Comfort segment **Downstream infrastructure** Don't know Disagree Neutral Agree 9% 36% 31% 9% 28% 32% Reliable engine tech 10% 34% 12% 24% 30% Cheaper to maintain 30% 22% 27% 26% 24% 23% Easily found for purchase 12% 17% 42% 13% 28% 17% Easily serviced 60% 15% 57% 18% 10% Common sight on NZ roads

Note: Statements ranked in order of 'Agree'

81 © 2017 Ipsos. Base: Total sample (n=1000) & Altruistic/Comfort segment (n=209); EV6: For each of the following statements please select the answer that best describes GAME CHANGERS how you feel about Electric Vehicles? Please select one answer per statement



HOW DO WE INFLUENCE THE UPTAKE OF ELECTRIC VEHICLES?



To improve their uptake, key area of focus is to improve perceptions that they provide a *better driving experience* and have a *suitable range for day to day driving*

We looked at how various statements about Electric Vehicles are related to 'meeting my needs', and how they relate to all the other statements. This gives us the <u>rank</u> and <u>strength</u>.



82 © 2017 Ipsos. Base: Altruistic / Comfort (n=209); AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each of these types of cars. Even if you've never used them, you can have an expectation of how they would meet your needs. EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles?

WHAT PERCEPTIONS SHOULD WE FOCUS ON IMPROVING?



pso

Driving range, charging accessibility, engine reliability & better driving experience are the top priorities for improvement



83 © 2017 Ipsos. Base: Altruistic / Comfort (n=209); AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each of these types of cars. Even if you've never used them, you can have an expectation of how they would meet your needs. EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles?





OBLIGATIONS SEGMENT







OBLIGATIONS







OBLIGATIONS



Just gets me from A to B

It's for pragmatic people who like to feel productive. They tend to see life as a series of obligations they need to cross-off their list. Some may even get a sense of accomplishment from getting things done. They are more likely to make decisions based on a combination of practicality and affordability. Cars are just a tool to do what they need to do in the most effective and affordable way. When it comes to cars, being pragmatic can be an intrinsic element of a person value system or just imposed by a lack of finances.







LAYERS OF MOTIVATIONS Key motivations defining the OBLIGATIONS segment





DEMOGRAPHICS



Obligations are more likely to have a HH income less than \$60k, be over 65 years old and have no children in their HH



Base: Total sample (n=1000), Obligations (n=231) ; QB: Which of the following best describes your age group? ; QC: Which of the following best describes your gender? Q123: Which ethnic group or groups best describe you? ; Q124: Which one of the following best describes where you live? ; Q121: Which of the following best describes your household? ; Q127: Which of the fol





CAR OWNERSHIP

Obligations are more likely to own a petrol vehicle and tend towards to being single car households





Type of cars in household

Green = significantly \uparrow , Red = significantly \downarrow than total sample



© 2017 lpsos. Base: Total sample (n=1000), Obligations (n=231); C1: How many cars do you currently own (or jointly own) within your household?; C3: Thinking about the GAME CHANGERS 89 car that you own and drive regularly (i.e. at least once a week), please tell us what type of car it is?

CAR OWNERSHIP



Obligations are more likely to own *hatchbacks* with *smaller engines*, they are less likely to own newer vehicles that are priced over \$30K

Body type of car(s)		Engine size(s) (in lit	tres)		How acquired vehicle(s)	
Hatchback 46%	37%	NETT less than 2L	68%	51%	I bought it - brand new 16%	19%
Sedan 34%	32%	NETT 2 - 3L range 30%		40%	I bought it - used 84%	84%
Station wagon 14%	14%	NETT 3L + 9%		15%	It was given to me 6%	5%
suv 9%	17%	I don't know / NA 6%		10%	I don't know / other 0%	1%
		Year of manufactur	e(s)		Amount paid for car(s)	
carrier 7%	9%	NETT 2010 or 21%		31%	NETT less than 15k 77%	73%
Ute / pick-up truck 5%	5%	NETT 2000-2009	61%	60%	NETT 15-30k 26%	27%
Sports car 1%	4%	NETT Pre-2000 30%		24%	NETT 30-60k 6%	13%
Other 0%	10/				NETT 60k+ 2%	3%
	1/0				DK / prefer not to say 5%	3%



90 © 2017 lpsos. Base: Total sample (n=1000), Obligations (n=231) ; C5: Thinking about the car that you own and drive regularly (i.e. at least once a week), please tell us what GAME CHANGERS body type it has? ; C9: Please tell us the car's engine size (in litres)? ; C7: Please tell us what year the car was manufactured? ; C6a: How did you take ownership of it? ; C8: How much did you pay for your car?

CAR USAGE



Main car is more likely to be used for running errands, while those who owned a secondary vehicles tend to use these for *leisure activities*

Main differences in usage (the car you use most often)



Main differences in usage (secondary cars)



Leisure activities 36% (43%)



© 2017 lpsos. Base: Total sample (n=1000), Obligations (n=231); Obligations with secondary cars (n=48), Total sample with secondary cars (n=252); U1: Please tell us what GAME CHANGERS 91 vou use vour car for?



YOUR NEXT CAR



Obligations are less likely to plan to replace their car within 5 years and intend to spend less than 15K; *costliness* & *reliability* are common triggers to replace



Factors prompting you to replace car

(the car you use most often)

It would become too costly to maintain / service		48%	40%
My current car would not be reliable enough	35%		27%
My current car would be too old	33%		34%
My current car's mileage would be too high	30%		29%
My current car would no longer suit my needs	28%		28%
I would want greater fuel-efficiency	24%		23%
It would be part of a regular upgrade	16%		21%
I would want newer technology in my car	14%		21%
I would want a safer car	13%		13%
I would like to treat / reward myself	10%		17%

Note: top 10 responses of Obligations shown in chart



92 © 2017 lpsos. Base: Total sample (n=1000), Obligations (n=231) ; N2: When do you intend to replace this car? ; N5 When you replace it, how much would you be looking to GAME CHANGERS spend? ; N3: Excluding theft and extensive damage (i.e. write-off), what factors would likely prompt you to replace your car?

YOUR NEXT CAR



Obligations use a combination of *online* & *in person* information sources, they also rely on their own *personal knowledge / experiences*



(next car)

No significant differences

Note: top 5 responses of the Obligations shown in chart



93 © 2017 lpsos. Base: Total sample (n=1000), Obligations (n=231); N6: If you had to replace your car tomorrow, what would be your most important sources of information GAME CHANGERS in choosing which car to buy?;

Main differences

ATTITUDES TOWARDS DIFFERENT ENGINE TYPES



More likely to have a high level of *favorability* towards BEVs, but are less likely to be *familiar* towards BEVs, PHEVs and Hybrids



94 © 2017 Ipsos. Base: Total sample (n=1000), Obligations (n=231); AET1: How would you rate your familiarity with the following types of cars?; AET2: How favourable or unfavourable is your overall opinion or impression of the following types of cars?; N4: There are a number of different types of vehicles currently being sold in New Zealand. Thinking about your next vehicle purchase, how likely are you to consider the following vehicles?





Generally on par with the total sample on strength of barriers, obligations more likely to feel that *affordability* is a barrier towards owning a BEVs

How the benefits of Electric Vehicles currently compare with barriers

Obligations53%Total sample(50%)Barriers outweigh the benefits		53% (50%)		15% (17%)	16% (19%)	16 (14	%)	
			More or less equal	Benefits outweigh the barriers	Don't	know		
		Top 3 Barriers			Main differences			
	54%	% <u>-</u>		Are	e not an affordable pric	e 54%	43%	
	43%	They are not available at an allordable price		l'm unsure a	bout the environmenta benefit	1 3%	7%	
	39% 33%	Public charging stations are not easy to find						
?	38% 33%	I don't know enough about them to consider them						
	Bas	e: Total sample (n=1000), Obligations (n=231); EV10: Below are a list of possible benefits of own	ng ar	nd driving an electric vehicle. Pleas	se select up to			4

© 2017 Ipsos. Please select up to three options that you feel are the biggest attractive features to you; EV11: Below is a list of possible barriers of owning and driving an electric vehicle. Indicate how the benefits <u>currently</u> compare with the barriers for you personally on the scale below? EV15: Thinking about the cost to run an electric vehicle compared to a similarly-sized petrol vehicle, how do you think the running costs compare?



95 @

96



Generally on par with the total sample on strength of benefits, reduced pollution, cheaper to run & using renewable energy most widely recognised benefits

How the benefits of Electric Vehicles currently compare with barriers

Obligatic Total sam	Obligations 53% Total sample (50%)		15% (17%)	16% (19%)	16% (14%)
		Barriers outweigh the benefits	More or less equal	Benefits outweigh the barriers	Don't know
		Top 3 Benefits		Main differences	;
CO2	57% 53%	Produce less pollution / gas emissions	Νά	o significant difference	S
	43% 43%	Cheaper to run			
	40% 35%	Use renewable energy			
	Base:	Total sample (n=1000), Obligations (n=231); EV10: Below are a list of possible benefits of ownin	g and driving an electric vehicle. Pleas	se select up to	

three options that you feel are the biggest attractive features to you; EV11: Below is a list of possible barriers of owning and driving an electric vehicle. © 2017 Ipsos. Please select up to three options that you feel are the biggest issues to you. EV13: Thinking about the benefits and barriers towards Electric Vehicles, please GAME CHANGERS indicate how the benefits currently compare with the barriers for you personally on the scale below? EV15: Thinking about the cost to run an electric vehicle compared to a similarly-sized petrol vehicle, how do you think the running costs compare?





Obligations are more likely vs total to agree that EVs have a driving range for their day-to-day needs, but less so for design and an affordable price

Holistic considerations	Don't know	Disagree	Neutral	Agree		Don't know (total level)	Disagree (total level)	Neutral (total level)	Agree (total level)
Positive for environment	9% <mark>5%</mark> 9%		77%			7%	6%	12%	75%
Way of the future	8% <mark>4% 12%</mark>		76%			7%	6%	16%	71%
		Obligation	ns segment						
Product technology	Don't know	Disagree	Neutral	Agree					
Day to day driving needs	22% 149	% 18%		46%		24%	17%	20%	39%
Just as powerful	31%	27%	2	3%	19%	27%	28%	22%	23%
Better driving experience	35%	14%	36	%	15%	32%	15%	34%	19%
Range of appealing designs	36%	23%	6	28%	13%	27%	24%	29%	20%
Wide range of models	34%	26%	0	28%	12%	31%	28%	26%	15%
Long distance driving needs	31%		44%	16	% 9%	28%	40%	19%	13%
Affordable price	26%		53%		15% 6%	24%	47%	18%	11%

Statements about Electric Vehicles

Note: Statements ranked in order of 'Agree'

97 © 2017 Ipsos. Base: Total sample (n=1000) & Obligations segment (n=231); EV6: For each of the following statements please select the answer that best describes how you GAME CHANGERS feel about Electric Vehicles? Please select one answer per statement



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Agreement with the *infrastructure* statements were broadly in line with the total, there's scope to address the *infrastructure* knowledge barriers



Statements about Electric Vehicles (cont.)

Note: Statements ranked in order of 'Agree'

98 © 2017 Ipsos. Base: Total sample (n=1000) & Obligations segment (n=231); EV6: For each of the following statements please select the answer that best describes how you GAME CHANGERS feel about Electric Vehicles? Please select one answer per statement



Green = significantly \uparrow , Red = significantly \downarrow than total sample

HOW DO WE INFLUENCE THE UPTAKE OF ELECTRIC VEHICLES?



To improve their uptake, key area of focus is to improve perceptions that they are the *way of the future* and *are cheaper to maintain*

We looked at how various statements about Electric Vehicles are related to 'meeting my needs', and how they relate to all the other statements. This gives us the <u>rank</u> and <u>strength</u>.



99 © 2017 Ipsos. Base: Obligations (n=231); AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each of these types of cars. Even if you've never used them, you can have an expectation of how they would meet your needs. EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles?

WHAT PERCEPTIONS SHOULD WE FOCUS ON IMPROVING?



Being *cheaper to maintain* is the key feature to focus on to improve perceptions, having a *suitable day-to-day driving range* perception can also be strengthened



100 © 2017 Ipsos. Base: Total sample (n=1000), Obligations (n=231) ; AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each of these types of cars. Even if you've never used them, you can have an expectation of how they would meet your needs. EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles?





SOCIAL HAPPINESS SEGMENT









Social happiness







SOCIAL HAPPINESS



A means for sharing happiness

It's for people who are social. People are the most important thing with their lives. They have a need to feel connected with others. Enjoyment is not so much about doing things, it is about sharing experiences, moments and building memories with friends and families. Cars give them the means to connect with people who matter to them (both during the journey or as a destination).







LAYERS OF MOTIVATIONS Key motivations defining the SOCIAL HAPPINESS segment



Social Identity (What it should reflect upon me)

People who are family-oriented.

People who value the strong bonds of family/friends.

People who dedicate time for friends.

Emotional Benefits How it should make me feel



Helps me take care of my family.



Helps me feel connected with friends and loved-ones.

Helps me share happy times with others.



Functional Characteristics (How it should help me)

14

Ĩ

Passenger seating (# of seats)

Cargo capacity

Kid friendly interior





DEMOGRAPHICS



12%

15%

/ rather

not say

Social happiness are more likely to be female, have a HH income under \$60k and have children









CAR OWNERSHIP



Slightly more likely to own a petrol vehicle, with nearly half being multiple car households





Type of cars in household

106 © 2017 lpsos. Base: Total sample (n=1000), Social Happiness (n=263); C1: How many cars do you currently own (or jointly own) within your household?; C3: Thinking GAME CHANGERS about the car that you own and drive regularly (i.e. at least once a week), please tell us what type of car it is?



CAR OWNERSHIP



Social happiness are more likely to have a people carrier, purchase used cars, and spend less than 15K on their car

Body type of car(s)		Engine size(s) (in litres)		How acquired vehicle(s)	
Hatchback 38%	37%	NETT less than 2L 48%	51%	I bought it - brand new 10%	19%
Sedan 24%	32%	NETT 2 - 3L range 42%	40%	I bought it - used 91%	84%
Minivan /	9%	NETT 3L + 10%	15%	It was given to me 5%	5%
Station wagen	1.40/	I don't know / NA 15%	10%	I don't know / other 0%	1%
Station wagon 18%	14%				
		Year of manufacture(s)		Amount paid for car(s)	
SUV 14%	17%	Year of manufacture(s)		Amount paid for car(s)	
SUV 14%	17%	NETT 2010 or 25%	31%	Amount paid for car(s) NETT less than 15k	73%
SUV 14% Sports car 3%	17% 4%	Vear of manufacture(s) NETT 2010 or later 25% NETT 2000-2009 68%	31% 60%	Amount paid for car(s) NETT less than 15k 88% 2 NETT 15-30k 23% 2	73% 27%
SUV 14% Sports car 3% Ute / pick-up truck 3%	17% 4% 5%	Vear of manufacture(s) NETT 2010 or later 25% NETT 2000-2009 68% NETT Pre-2000 22%	31%60%24%	Amount paid for car(s) NETT less than 15k 88% 2 NETT 15-30k 23% 2 NETT 30-60k 5% 2	73% 27% 13%
SUV 14% Sports car 3% Ute / pick-up truck 3%	17% 4% 5%	Year of manufacture(s) NETT 2010 or later 25% NETT 2000-2009 68% NETT Pre-2000 22%	31%60%24%	Amount paid for car(s) NETT less than 15k 88% 2 NETT 15-30k 23% 2 NETT 30-60k 5% 2 NETT 60k+ 0% 1	73% 27% 13% 3%
SUV14%Sports car3%Ute / pick-up truck3%Other2%	17% 4% 5% 1%	Vear of manufacture(s) NETT 2010 or later 25% NETT 2000-2009 68% NETT Pre-2000 22%	31%60%24%	Amount paid for car(s) NETT less than 15k 88% 7 NETT 15-30k 23% 2 NETT 30-60k 5% 2 NETT 60k+ 0% 2 DK / prefer not to say 2%	73% 27% 13% 3%



107 © 2017 Ipsos. Base: Total sample (n=1000), Social happiness (n=263) ; C5: Thinking about the car that you own and drive regularly (i.e. at least once a week), please tell us what body type it has? ; C9: Please tell us the car's engine size (in litres)? ; C7: Please tell us what year the car was manufactured? ; C6a: How did you take ownership of it? ; C8: How much did you pay for your car?

CAR USAGE



Social happiness were less likely to use their main car for work and more likely to use it for carrying friends or family

Main differences in usage (the car you use most often)



Main differences in usage

(secondary cars)

No significant differences





YOUR NEXT CAR



More likely to replace their car to when it no longer meets their needs and would intend to spend a relatively lower amount





109 © 2017 lpsos. Base: Total sample (n=1000), Social happiness (n=263) ; Those looking to replace their cars total (n=870), Social happiness (n=220); N2: When do you intend to replace this car? ; N5 When you replace it, how much would you be looking to spend? ; N3: Excluding theft and extensive damage (i.e. write-off), what factors would likely prompt you to replace your car?


YOUR NEXT CAR



More likely to use *social resources*; less likely to use *manufacturer websites*, *motoring publications* & *attend car shows*



Note: top 5 responses of the Egoists shown in chart



GAME CHANGERS

110 © 2017 Ipsos. Base: Total sample (n=1000), Social happiness (n=263); N6: If you had to replace your car tomorrow, what would be your most important sources of information in choosing which car to buy?;

ATTITUDES TOWARDS DIFFERENT ENGINE TYPES



Lower *familiarity* towards diesel, PHEV and BEV; potentially contributing to lower *favorability* for BEVs and lower *consideration* towards diesel vehicles



Note: Familiarity, favorability and consideration figures are top two box percentages

111 © 2017 Ipsos. Base: Total sample (n=1000), Social happiness (n=236) ; AET1: How would you rate your familiarity with the following types of cars? ; AET2: How favourable or unfavourable is your overall opinion or impression of the following types of cars? ; N4: There are a number of different types of vehicles currently being sold in New Zealand. Thinking about your next vehicle purchase, how likely are you to consider the following vehicles?





Generally on par with the total sample on strength of barriers, with affordability & lack of knowledge / certainty towards BEVs the most common barriers



How the benefits of Electric Vehicles currently compare with barriers

S	ocial happiness Total sample	48% (50%)	17% (17%)	17% (19%)	18% (14%)
1		Top 3 Barriers	More or less equal	Main difference	s
	44% 43%	They are not available at an affordable price		No significant difference	25
	38% 33%	I don't know enough about them to consider them			
	36% 34%	Uncertainty about battery life and replacement			
	Ba	se: Total sample (n=1000). Social happiness (n=263): EV10: Below are a list of possible benefits (of owning and driving an electric	vehicle. Please select up	





113



Generally on par with the total sample on strength of benefits, *less pollution*, *saving fuel resources* & *cheaper to run* are the most widely recognised benefits

How the benefits of Electric Vehicles currently compare with barriers

Social happiness Total sample	48% (50%)	17% 17% (17%) (19%)		18% (14%)
	Barriers outweigh the benefits	More or less equal	Benefits outweigh the bar	riers Don't know
	Top 3 Benefits		Main difference	S
55% 53%	Produce less pollution/gas emissions		No significant difference	es
44% 39%	Save fuel resources			
43% 43%	Cheaper to run			

Base: Total sample (n=1000), Social happiness (n=263); EV10: Below are a list of possible benefits of owning and driving an electric vehicle. Please select up to three options that you feel are the biggest attractive features to you; EV11: Below is a list of possible barriers of owning and driving an electric vehicle. Please select up to three options that you feel are the biggest issues to you. EV13: Thinking about the benefits and barriers towards Electric Vehicles, please GAME CHANGERS indicate how the benefits currently compare with the barriers for you personally on the scale below? EV15: Thinking about the cost to run an electric vehicle compared to a similarly-sized petrol vehicle. how do you think the running costs compare?





Compared with the total, Social Happiness are generally less likely to agree with the *product technology* statements

	Holistic considerations	Don't know	Disagree	Neutral	Agree		Don't know (total level)	Disagree (total level)	Neutral (total level)	Agree (total level)	
	Positive for environment	9% 7% 13%		71%			7%	6%	12%	75%	
	Way of the future	7% 6% 17%		70%			7%	6%	16%	71%	
		S	ocial Happi	ness segme	ent						
þ	Product technology	Don't know	Disagree	Neutral	Agree						
	Day to day driving needs	28%	17%	22%	33%		24%	17%	20%	39%	
	Range of appealing designs	32%	19%	329	% 1	7%	27%	24%	29%	20%	
	Just as powerful	32%	30%	,)	22% 1	6%	27%	28%	22%	23%	
	Better driving experience	38%	11%	369	% 1	.5%	32%	15%	34%	19%	
	Wide range of models	37%	229	6	29%	12%	31%	28%	26%	15%	
	Long distance driving needs	34%	3	5%	21%	10%	28%	40%	19%	13%	
	Affordable price	30%	4	2%	19%	9%	24%	47%	18%	11%	

Statements about Electric Vehicles

Note: Statements ranked in order of 'Agree'

114 © 2017 Ipsos. Base: Total sample (n=1000) & Social Happiness segment (n=263); EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles? Please select one answer per statement





Compared with the total, Social Happiness are also generally less likely to agree with the *infrastructure* statements

				•	-					
Complementary infrastructure	Don't know	Disagree	Neutral	Agree		Don't know (total level)	Disagree (total level)	Neutral (total level)	Agree (total level)	
Cheaper to run than petrol	27%	7% 19%		47%		22%	8%	19%	51%	
Easy to charge at home	32%	13%	25%	3	30%	33%	11%	24%	32%	
Charged quickly	42%	1	8%	24%	16%	37%	18%	25%	20%	
Public charging easy to find	27%	429	%	19%	12%	23%	45%	18%	14%	
	S	Social Happi	ness segm	ent						
Downstream infrastructure	Don't know	Disagree	Neutral	Agree						
Reliable engine tech	35%	8%	31%		26%	31%	9%	28%	32%	
Cheaper to maintain	39%	14%	259	%	22%	34%	12%	24%	30%	
Easily found for purchase	34%	20%	24	%	22%	27%	26%	24%	23%	
Easily serviced	46%		15%	26%	13%	42%	13%	28%	17%	
Common sight on NZ roads	19%	53%		20	% 8%	15%	57%	18%	10%	

Statements about Electric Vehicles (cont.)

Note: Statements ranked in order of 'Agree'

115 © 2017 Ipsos. Base: Total sample (n=1000) & Social Happiness segment (n=263); EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles? Please select one answer per statement



HOW DO WE INFLUENCE THE UPTAKE OF ELECTRIC VEHICLES?



To improve their uptake, key area of focus is to improve perception they can be *charged quickly* and have a *suitable range for day-to-day driving*

We looked at how various statements about Electric Vehicles are related to 'meeting my needs', and how they relate to all the other statements. This gives us the <u>rank</u> and <u>strength</u>.



116 © 2017 Ipsos. Base: Social Happiness (n=263); AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each of these types of cars. Even if you've never used them, you can have an expectation of how they would meet your needs. EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles?



WHAT PERCEPTIONS SHOULD WE FOCUS ON IMPROVING?



Features such as *can be charged quickly, suitable day-to-day driving range* & providing a *better driving experience* are top priorities to improve perceptions



statements please select the answer that best describes how you feel about Electric Vehicles?





STIMULATION LIBERATION SEGMENT









Stimulation Liberation







STIMULATION LIBERATION



Pushes my boundaries and gives me freedom

It's for people who tend have a positive view of life, and have a keen sense of adventure and get a thrill out of pushing their boundaries. Having fun and taking a break from the mundane is an important to them, which invariably means enjoying the outdoors. Having a car gives them the freedom to live their lives to the fullest, supporting their need for adventure.







LAYERS OF MOTIVATIONS Key motivations defining the STIMULATION LIBERATION segment







DEMOGRAPHICS



Stimulation Liberation are more likely to be male, have no kids and live out of Auckland





Base: Total sample (n=1000) Stimulation / Liberation (n=159); QB: Which of the following best describes your age group?; QC: Which of the following best © 2017 lpsos. describes your gender? Q123: Which ethnic group or groups best describe you?; Q124: Which one of the following best describes where you live?; Q121: Which of the following best describes your total household income before tax?; Q122: Which of the following best describes your household?; Q127: Which of the following best describes your home?





CAR OWNERSHIP



Stimulation Liberation are more likely to own a diesel vehicle and less likely to own a petrol car





123 © 2017 lpsos. Base: Total sample (n=1000), Stimulation / Liberation (n=159); C1: How many cars do you currently own (or jointly own) within your household?; C3: Thinking about the car that you own and drive regularly (i.e. at least once a week), please tell us what type of car it is?



CAR OWNERSHIP



Larger engine sizes, Utes / pick-up truck and vehicles *manufactured prior to 2000* are more common among Stimulation Liberation



124 © 2017 lpsos. Base: Total sample (n=1000), Stimulation / Liberation (n=159); C5: Thinking about the car that you own and drive regularly (i.e. at least once a week), please GAME CHANGERS tell us what body type it has?; C9: Please tell us the car's engine size (in litres)?; C7: Please tell us what year the car was manufactured?; C6a: How did you take ownership of it?; C8: How much did you pay for your car?



CAR USAGE



Less likely to use their main car for *running errands* & directionally less likely to use their secondary car for *carrying friends or family*

Main differences in usage (the car you use most often)



Main differences in usage (secondary cars)



Carrying friends or family **33%** (44%)



125 © 2017 lpsos. Base: Total sample (n=1000), Stimulation / Liberation (n=159); Stimulation / Liberation with secondary cars (n=47), Total sample with secondary cars (n=252) GAME CHANGERS ; U1: Please tell us what you use your car for?

YOUR NEXT CAR



Treat / reward myself is more likely a prompt to replace their vehicle while *car safety* is cited less often





126 © 2017 lpsos. Base: Total sample (n=1000), Stimulation / liberation (n=159); Those looking to replace their cars total (n=870), Stimulation / liberation (n=135); N2: When do you intend to replace this car?; N5 When you replace it, how much would you be looking to spend?; N3: Excluding theft and extensive damage (i.e. write-off), what factors would likely prompt you to replace your car?





YOUR NEXT CAR Stimulation Liberation use a combination of *online* & *in person* information sources



Note: top 5 responses of the Stimulation / Liberation shown in chart



127 © 2017 lpsos. Base: Total sample (n=1000), Stimulation / Liberation (n=159); N6: If you had to replace your car tomorrow, what would be your most important sources of GAME CHANGERS information in choosing which car to buy?;

ATTITUDES TOWARDS DIFFERENT ENGINE TYPES



Stimulation Liberation has higher *familiarity*, *favorability* & *consideration* towards diesel vehicles, while all three dimensions are lower for hybrids, PHEVs and BEVs



Note: Familiarity, favorability and consideration figures are top two box percentages

© 2017 IDSOS. Base: Total sample (n=1000), Stimulation / Liberation (n=159); AET1: How would you rate your familiarity with the following types of cars? ; AET2: How 128 favourable or unfavourable is your overall opinion or impression of the following types of cars? : N4: There are a number of different types of vehicles currently being sold in New Zealand. Thinking about your next vehicle purchase, how likely are you to consider the following vehicles?

GAME CHANGERS

significantly 个

, **Red** = significantly \downarrow than total sample

129



Generally on par with the total sample on strength of barriers, *affordability* is less of a concern, while *battery life* and *long range distance* are key barriers

How the benefits of Electric Vehicles currently compare with barriers

Stimulation / Liberation Total sample		53% (50%)		19% (17%)	15% (19%)	1 (1	3% ^{L4%)}
		Barriers outweigh the benefits		More or less equal Ben	efits outweigh the bar	iers Do	on't know
		Top 3 Barriers		Mai	n differences		
Ē	39%			Are not a	an affordable price	34%	43%
	34%	Uncertainty about battery life and replacement		Driving range not suita	able for day-to-day needs	14%	9%
	34% 43%	They are not available at an affordable price					
	31% 26%	They have a driving range that is not suitable for long distance travelling					
	Bas	e: Total sample (n=1000), Stimulation / Liberation (n=159); EV10: Below are a list of possible ben	efits of	f owning and driving an electric vehicle. P	lease		





Generally on par with the total sample on strength of benefits, reduced pollution, financial savings and less fuel resources are top three benefits cited

How the benefits of Electric Vehicles currently compare with barriers

Stimulation / Liberation Total sample		53% (50%)	19% (17%)	15% (19%)	13% (14%)
·		Barriers outweigh the benefits	More or less equal Ben	efits outweigh the ba	rriers Don't know
		Top 3 Benefits	Mai	n differences	
C 02	51% 53%	Produce less pollution / gas emissions	No signij	ficant differences	
	37% 43%	Cheaper to run			
	37% 39%	Save fuel resources			
	Base:	Total sample (n=1000). Stimulation / Liberation (n=159): EV10: Below are a list of possible ber	nefits of owning and driving an electric vehicle. P	lease	

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select up to three options that you feel are the biggest attractive features to you; EV11: Below is a list of possible barriers of owning and driving an electric © 2017 Ipsos. vehicle. Please select up to three options that you feel are the biggest issues to you. EV13: Thinking about the benefits and barriers towards Electric Vehicles, please indicate how the benefits currently compare with the barriers for you personally on the scale below? EV15: Thinking about the cost to run an electric vehicle compared to a similarly-sized petrol vehicle, how do you think the running costs compare?



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Stimulation Liberation generally disagree more with the *product technology* statements compared with the total average

Don't know Disagree Neutral Agree Holistic considerations Don't know Disagree Neutral Agree (total level) (total level) (total level) (total level) Positive for environment 8% 4% 7% 6% 12% 75% Way of the future 8% 8% 63% 7% 6% 16% 71% Stimulation/Liberation segment Product technology Don't know Disagree Neutral Agree 21% Day to day driving needs 24% 17% 20% 39% Just as powerful 32% 27% 28% 23% 22% Range of appealing designs 17% 34% 27% 24% 29% 20% 25% 13% Better driving experience 32% 15% 34% 19% 39% Wide range of models 31% 28% 26% 15% 46% Long distance driving needs 28% 40% 19% 13% 51% 7% Affordable price 24% 47% 18% 11%

Statements about Electric Vehicles

Note: Statements ranked in order of 'Agree'

131 © 2017 Ipsos. Base: Total sample (n=1000) & Stimulation/Liberation segment (n=159); EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles? Please select one answer per statement



GAME CHANGERS



Although agreement with the *infrastructure* statements were broadly in line with the total, this segment are more likely to disagree with *easy-to-find charging*

Complementary infrastructure	Don't know	Disagree	Neutral	Agree	Don't know (total level)	Disagree (total level)	Neutral (total level)	Agree (total level)
Cheaper to run than petrol	23% 9%	6 20%		48%	22%	8%	19%	51%
Easy to charge at home	32%	10%	24%	34%	33%	11%	24%	32%
Charged quickly	33%	22%	2	5% 20%	37%	18%	25%	20%
Public charging easy to find	19%	569	%	14% 11%	23%	45%	18%	14%
	Stin	nulation/Lik	peration se	gment				
Downstream infrastructure	Don't know	Disagree	Neutral	Agree				
Reliable engine tech	29%	12%	28%	31%	31%	9%	28%	32%
Cheaper to maintain	34%	14%	26%	26%	34%	12%	24%	30%
Easily found for purchase	24%	34%		24% 18%	27%	26%	24%	23%
Easily serviced	38%	179	6	29% 16%	42%	13%	28%	17%
Common sight on NZ roads	13%	64%		14% 9%	15%	57%	18%	10%

Statements about Electric Vehicles (cont.)

Note: Statements ranked in order of 'Agree'

132 © 2017 Ipsos. Base: Total sample (n=1000) & Stimulation/Liberation segment (n=159); EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles? Please select one answer per statement



HOW DO WE INFLUENCE THE UPTAKE OF ELECTRIC VEHICLES?



To improve their uptake, key area of focus is to improve perceptions that they have a suitable range for day-to-day driving

We looked at how various statements about Electric Vehicles are related to 'meeting my needs', and how they relate to all the other statements. This gives us the <u>rank</u> and <u>strength</u>.



133 © 2017 Ipsos. Base: Stimulation / Liberation (n=159); AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each GAME CHANGERS of these types of cars. Even if you've never used them, you can have an expectation of how they would meet your needs. EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles?



WHAT PERCEPTIONS SHOULD WE FOCUS ON IMPROVING?



Features such as *driving range, reliability, range of models* and being a *better driving experience* are top priorities to improve perceptions



134 © 2017 Ipsos. Base: Stimulation / Liberation (n=159); AET5: Taking everything into account, please could you tell us what your general attitude to, or impression is, of each GAME CHANGERS of these types of cars. Even if you've never used them, you can have an expectation of how they would meet your needs. EV6: For each of the following statements please select the answer that best describes how you feel about Electric Vehicles?

GETTING THE MOST FROM THIS SESSION Stimulation Liberation





What are two things I've learnt about this segment?	What does this mean for promoting EVs?
 Male / no kids. Technology fans. Care for the environment. Large / powerful cars. Like to take risks. 	





Contacts

Information withheld under section 9(2)(a)





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GAME CHANGERS

At Ipsos we are passionately curious about people, markets, brands and society. We deliver information and analysis that makes our complex world easier and faster to navigate and inspires our clients to make smarter decisions.

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"GAME CHANGERS" - our tagline - summarises our ambition.







SEPTEMBER 2018 EECA Lighting Attitudes

PREPARED FOR:	EECA
PREPARED BY:	IPSOS
CONTACT:	INFORMATION WITHHELD UNDER SECTION 9(2)(A)



GAME CHANGERS



EECA LIGHTING ATTITUDES Table of Contents



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EECA LIGHTING ATTITUDES



EXECUTIVE SUMMARY

- Energy-efficient lighting options (CFL and LED) have higher stated penetration rates in NZ homes compared to incandescent light bulbs.
- People are prepared to pay between \$5 and \$6.50 for an average-strength LED light bulb.
- Overall, the majority of people would be unconcerned if incandescent light bulbs were no longer available and just under a fifth believe that it would present an issue for them.
 - People with lower incomes tend to be less positive about this potential change and people living in older homes (pre-1950) are more likely to say they will face difficulties.
 - If LED light bulbs were discontinued, the majority would be concerned and 39% say it would present issues for them.
- *Cost / price* is the main factor cited by those who say they will face difficulties if incandescent bulbs were discontinued.
- Encouragingly, if incandescent bulbs were discontinued, LED bulbs would be the majority's next choice.
 - If LED bulbs were discontinued, CFLs would be the majority's next choice, indicating that efficient lighting is the social norm amongst New Zealanders.

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RESEARCH OBJECTIVES AND METHODOLOGY

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RESEARCH OBJECTIVES AND METHODOLOGY Why and how we're conducting this research



RESEARCH BACKGROUND AND OBJECTIVES

- In December 2017, Ipsos completed an update on consumer understanding and attitudes to lighting (EECA Energy Efficiency Lighting Update). Since that research was completed, EECA has started initial work on potential lighting project and has a small number of follow-up questions to that research.
- This research examines the following:
 - How much would people be prepared to pay for a LED light bulb?
 - How would people feel if incandescent light bulbs were no longer available in supermarkets and hardware stores?
 - What practical difficulties, if any, would this cause?
 - What types of light bulbs would people switch to?
 - Would people just not replace bulbs?
 - How would they feel angry, neutral, positive?

RESEARCH METHODOLOGY

- A online survey of 1,003 people who are responsible for the purchase of light bulbs accessed via an online sample.
- Interviews were completed from 30th August to 3rd September 2018 with an average interview duration of 8 minutes.
- The margin of error on a sample size of 1,003 is ±3.09%. For the NZ population the figure used is 4,901,507 from the Statistics NZ estimate as at 5th September 2018.



SAMPLE PROFILE We interviewed the following people...





- Ethnic group
- 71% NZ European9% Other European
- 6% NZ Maori
- 6% Other Asian
- 5% Chinese
- 4% Indian
- 3% Pacific People
- 3% Others

Living arrangement

- 62% Homeowner
- 32% Renter
- **6%** Other living arrangements



Time in current home 15% Less than 1 year

- **36%** 1-5 years
- **18%** 5-10 years **20%** 10-20 years
- **11%** More than 20 years



Income





Household type

- 42% Household with children
- 25% Older couple, no kids at home
- 15% Single / one-person household
- **10%** Younger couple without kids
- 7% In a flatting arrangement

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1% Other



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IGHT BULB USAGE



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LIGHT BULB USAGE

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CFL bulbs have the highest levels of household penetration, followed by LED bulbs; incandescent bulbs have the lowest levels of consideration





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LIGHT BULB USAGE



LED light bulbs have the highest reported levels of use, followed by CFL bulbs



LB2: And how much of the lighting in and around your home would each of the following light bulbs?

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LIGHT BULB PRICING



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BP1a: How much do you think the average cost is for a 60W incandescent light bulb? / BP2a: How much do you think the average cost

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Base: Total sample (n=1,003)

is for a 60W equivalent LED light bulb?





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LIGHT BULB PRICING Van Westendorp's Price Sensitivity Meter (PSM)

We used the Van Westendorp pricing method to analyse the price range in which customers may buy a product or service. The optimal range of prices lies between the Point of Marginal Cheapness and the Point of Marginal Expensiveness.



IEE@ LIGHT BULB PRICING Results indicate that people are prepared to pay between \$5 and \$6.50 for **LED light bulbs**

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PB2b: At what price would you consider this product so expensive that you would never consider buying it? / PB2c: At what price would you consider the price of this product so low that you would question its quality? / PB2d: At what price would you consider the price of this product starting to get expensive – not out of the question, but you'd need to give some thought to buying it? / PB2e: At what price would GAME CHANGERS you consider the price of this product to be a bargain – a great buy for the money?

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Base: Total sample (n=1,003)

LIGHT BULB PRICING Results indicate that people are prepared to pay \$1.80-\$2.50 for incandescent light bulbs



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you consider the price of this product to be a bargain – a great buy for the money? Base: Total sample (n=1,003)



EECA LIGHTING ATTITUDES



LIGHT BULB PRICING SUMMARY

- When it comes to estimating the pricing of light bulbs, there is a wide range of estimates, which indicates that in general most people are unsure about the cost of light bulbs, whether it be LED or incandescent.
 - Regardless, there is a perception that LED light bulbs are considerably more expensive than incandescent light bulbs.
- Van Westendorp's price sensitivity meter suggests that people are prepared to pay \$5 to \$6.50 for a LED light bulbs, while for incandescent bulbs people are prepared to pay far less at between \$1.80 and \$2.50.
 - There is already a willingness amongst people to pay more for LED light bulbs, implying an accepted knowledge that they cost comparatively more and have more benefits compared to incandescent light bulbs.

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On average most people would not have an issue with incandescent light bulbs no longer being available



would you feel if incandescent light bulbs were no longer available?

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© 2018 lpsos. Base: Total sample (n=1,003)

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There seem to be relationships with income levels, age, home age and ownership regarding the concern over the discontinuation of incandescent light bulbs



BD1a: On a scale from 1 to 10, where 1 means this wouldn't bother you at all and 10 means this would matter to you a lot, how would you feel if incandescent light bulbs were no longer available?

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Base: Total sample (n=1,003).





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BD1c: Can you tell us what difficulties or problems this would cause you? **Base:** Those who would have difficulties if incandescent bulbs **GAME CHANGERS** were no longer available (n=180). **Note:** Only problems with >5% shown.





The discontinuation of incandescent bulbs appears to be a greater issue for those whose home was built before 1949



BD1b: And if incandescent light bulbs were no longer available, would this be a major inconvenience or problem for you?



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Base: Total sample (n=1,003)





More people would feel concerned if LED light bulbs were no longer available than for incandescent light bulbs



BD2a: On a scale from 1 to 10, where 1 means this wouldn't bother you at all and 10 means this would matter to you a lot, how would you feel if LED light bulbs were no longer available?

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People with higher incomes and newer homes tended to be the most concerned about the discontinuation of LED light bulbs



BD2a: On a scale from 1 to 10, where 1 means this wouldn't bother you at all and 10 means this would matter to you a lot, how would you feel if LED light bulbs were no longer available?



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Base: Total sample (n=1,003).

LIGHT BULB DISCONTINUATION Almost 40% of people said they would face difficulties if LED light bulbs were discontinued, with a wide range of factors cited LED Bulbs If LED bulbs were no longer available, would Difficulties / problems caused? (n=383) this be an issue? Currently used in the household Don't know 21% Yes No Higher power bills 19% Energy efficiency 17% 10% Bulb life 13% 39% Cost / Cost saving 13% These are good / better than other bulbs 11% Have to replace existing bulbs 10% 51% Light brightness 8% Need to find alternative 8% Inconvenience / an issue 7% BD2b: And if LED light bulbs were no longer available, would this be a major inconvenience or problem for you? Base: Total sample (n=1,003) **GAME CHANGERS**

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BD2c: Can you tell us what difficulties or problems this would cause you? Base: Those who would have difficulties if LED bulbs were no longer available (n=383). Note: Only problems with >5% shown.



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As income rises and age of home lowers, there is an increase in difficulties faced if LED bulbs were no longer available



BD2b: And if LED light bulbs were no longer available, would this be a major inconvenience or problem for you?

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Base: Total sample (n=1,003)



Encouragingly, ³/₄ of people would switch to LEDs if incandescents were no longer unavailable; if LEDs were no longer available, they would switch to CFLs



BD1d: And if incandescent light bulbs were no longer available, which of the following light bulb types would you be most likely to buy instead to replace them? / **BD2d:** And if LED light bulbs were no longer available, which of the following light bulb types would you be most likely to buy instead to replace them?



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© 2018 lpsos. **Base:** Those aware of the various light bulb types

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EECA LIGHTING ATTITUDES



LIGHT BULB DISCONTINUATION SUMMARY

- Overall, the majority of people would be unconcerned if incandescent light bulbs were no longer available.
 - There is a link between household income and level of concerns, with lower incomes tending towards concern with incandescent bulbs being discontinued and higher incomes tending towards concern if LEDs were discontinued.
 - Far more people would be concerned if LED light bulbs were discontinued.
- Just under a fifth of people believe that it would be an issue for them if incandescent light bulbs were discontinued.
 - Price / cost is the main difficulty / problem cited, with people in older homes (pre-1950s) more likely to say it would present issues for them.
 - Far more people believe it would be an issue if LED light bulbs were discontinued (39%), with those on high incomes and in newer homes (post-2005) saying it would present issues for them.
- Encouragingly, if incandescent light bulbs were discontinued, the majority of people would switch to the most energy-efficient option in the market for their lighting needs, namely LED bulbs.
 - Similarly, if LEDs were discontinued, people would tend to switch to the next energy-efficient option of CFLs.

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Contacts

Information withheld under section 9(2)(a)





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DECEMBER 2017

EECA Energy-Efficient Lighting Update

PREPARED FOR: EECA

PREPARED BY:

CONTACT:

IPSOS Information

withheld under section 9(2)(a)





EECA ENERGY-EFFICIENT LIGHTING UPDATE Executive Summary



LIGHT BULB USAGE

- Versus 2014, awareness, consideration and usage for LEDs have all improved substantially. The results for CFL are broadly stable though usage has eased.
- 42% say they use LEDs more vs 3 years ago, though most users are low users or flirt users.
- 33% have never used LEDs before often citing *cost* and *fittings* as being barriers.
- Although 28% intend to stop using incandescent bulbs, there are still a sizeable proportion who intend to keep buying these bulbs.

LED use has grown significantly in recent years, which indicates that in terms of marketing, education, and engagement, the market is nearing a tipping point where this is no longer required. The remaining scope lies in low/non-users who are wedded to incandescent bulbs. This segment's main barrier to use is up-front costs, they accept low energy use benefits.

ATTITUDES ABOUT BULBS

- Versus 2014, energy-efficient lighting is more important (65%, up 8 points) and more appealing (71%, up 8 points).
- Versus 2014, the appeal of LEDs has grown to become the most appealing bulb type in 2017, while appeal of CFLs declined significantly.
- The most appealing qualities of LED and CFL bulbs are *lower power bills* and *longevity*. But for incandescent bulbs it's about being *cheap to buy* and *fit for purpose*.

The majority of people accept the superiority and benefits of LEDs, with up-front costs the main barrier amongst lower users who tend to be female, renters and low-income. As part of a strategy to overcome this barrier, LED bulbs could be repositioned for this group as an 'appliance', an investment that they can take with them when they shift homes.

LED BULBS & EE LIGHTING

- Supermarkets are a common shopping channel for light bulbs.
- In the home, LEDs are more likely to be used in higher-usage areas (bedrooms, kitchen / dining areas, lounge / living areas).
- 47% believe the benefits of LEDs outweigh the barriers, but 25% believe the opposite.
- Indicatively versus 2014, people are more positive about the benefits of energy-efficient bulbs, but more see *price* and *suitable fittings* as a barrier.

There may be scope to better inform people about LED bulbs by addressing concerns around costs vs. benefits and light fittings. Supermarkets are a valuable channel for in-store communications, but hardware stores are presently a major channel for LED bulb purchase which may require attention. With further price drops expected in 2018, the costbenefit equation may change.







04	Research Objectives & Methodology
07	Light Bulb Usage
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RESEARCH OBJECTIVES & METHODOLOGY





RESEARCH OBJECTIVES & METHODOLOGY Why & how we're conducting this research



RESEARCH OBJECTIVES

- Provide an updated understanding of the role of efficient lighting in the home.
- Measure known and identify potentially unknown barriers towards efficient lighting options among NZ consumers to understand if there has been a shift in perceptions.
- Understand whether people are happy with current energy-efficient lighting alternatives (particularly LEDs) vs. incandescent.

RESEARCH METHODOLOGY

- Online survey of a randomly-selected general population sample from the Research Now panel (n=502).
- Interviews were completed from 16th to 20th November 2017, the average interview duration was 13 minutes.
- The data wasn't weighted because sampling quotas were managed to ensure a sample representative of the 2013 Census for age, gender and region.
- The margin of error on a sample size of 502 is ±4.37%. For the NZ population the figure used is 4,837,817 from the Statistics NZ estimate as at 11 December 2017.



SAMPLE PROFILE



We interviewed a nationally representative sample for this study based on age, gender & region





65% Homeowner29% Renter6% Other living arrangements



20% Northern Regions (excl. AKL)33% Auckland Region23% Central Regions24% Southern Regions



7% NZ Maori

- 69% NZ European
- 9% Other European
- 2% Pacific Islander
- 5% Chinese
- 4% Indian
- 5% Other Asian



37% \$60,000 or less
7% \$60,001 to \$70,000
17% \$70,000 to \$100,000
10% \$100,001 to \$120,000
6% \$120,001 to \$140,000
8% \$140,001 or more
16% Don't know / Refused



41% Household with children
17% Single / one-person household
9% In a flatting arrangement
21% Older couple, no kids at home
10% Younger couple without kids





LIGHT BULB USAGE

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LIGHT BULB FUNNEL



Awareness, consideration & usage of LEDs improved significantly since 2014, but there is still scope to convert more who consider using LEDs into users



^{*}Note: 2014 EECA Change In State research

EL9: Using the options below, which best describes what you use in your home currently?

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HIGH LEVEL USAGE IN HOME

9

Accompanying increased acceptance & use of LEDs, there has been a corresponding increase in rejection of incandescent lightbulbs



*Note: 2014 EECA Change in State research. Proportions for each bulb type weren't specifically asked in 2014.

EL9: Using the options below, which best describes what you use in your home currently? / EL9b: And how much of the lighting in and © 2017 lpsos around your home would each of the following light bulbs. **Base:** Total sample (n=502)





Energy Efficiency and

Conservation Authority Tari Tiaki Piingag

WHO ARE THE DIFFERENT BULB USER TYPES?



Incandescent high users skew towards females, younger & renters; LED low / non-users skew towards female, lower-income households & renters; LED high users skew towards males, aged 50+, higher-income households & homeowners

18% of the market are incandescent high users (I.B. high) 65% of the market are LED low / non-users (LED low / non) 19% of the market are LED high users (LED high)

Gender	Total (n=502)	I.B. high (n=90)	LED low / non (n=327)	LED high (n=97)
Male	48%	38%	43%	53%
Female	52%	62%	57%	47%
Age group	Total (n=502)	I.B. high (n=90)	LED low / non (n=327)	LED high (n=97)
18-29 years	21%	31%	22%	21%
30-39 years	16%	21%	17%	19%
40-49 years	19%	12%	20%	11%
50-64 years	25%	20%	23%	28%
65 years+	19%	16%	18%	22%
Ethnicity	Total (n=502)	I.B. high (n=90)	LED low / non (n=327)	LED high (n=97)
European	77%	89%	80%	73%
Maori	7%	7%	6%	8%
Pacific	2%	1%	2%	1%
Asian	14%	4%	12%	21%

Household type		Total (n=502)		I.B. high (n=90)		LED low / non (n=327)		LED (n=	high 97)
Younger couple, no kids			10%		12%		10%		%
HH with youngest child unde	er 5yo	12	!%	13	3%	12%		10	%
HH with youngest child 5-13	уо	11	.%	11	L%	11	%	79	6
HH with youngest child 14-1	7уо	7	%	1	%	6	%	6%	6
HH with youngest child 18yo)+	12	%	11%		9%		21	%
Older couple, no kids		21	.%	12%		18	8%	27	%
Living alone		17	%	18%		21	%	79	6
Flatting		9%		19%		12%		49	6
Extended family	0%		0%		0%		19	6	
Others		1%		2%		1%		29	6
Annual household income	To (n=	Total (n=502)		high :90)	LED I non (r	ow / 1=327)	LED (n=	high 97)	
Low (up to \$60k)	37	7%	36	5% 42%		2%	30)%	
Mid (\$60-100k)	23	3%	29	9%		23%		5%	
High (\$100k+)	High (\$100k+) 24		1% 14		4% 19		32	.%	
Home ownership	lome ownership To (n=5		tal I.B. H 502) <u>(</u> n=		high LED =90) non (I		LED (n=	high 97)	
Owner	65	5%	50)%	% 59'		74	1%	
Renter	29	9%	40)%	36	36%		%	
Other	6	%	10%		5%		7	%	lps

LED & CFL – CHANGES OVER PAST 3 YEARS



Although incandescent use is waning & LED use is rising, a third of those aware of LEDs have never used them, suggesting there is still room to encourage their trial & adoption



LED USAGE COMPARED TO 3 YEARS AGO



Main drivers of increased use are *energy efficiency* & *replacement*; the barriers indicate there's scope to better inform people's perceptions around *costs* & *light fittings*

	6%	19%		42%	34%					
e	I use these	I use these about the		I use these more now		I have never used these				
ED Bulbs n=474)	less now	same								
	Why using LED	s less?	(n=28*)	Why using LEDs more?	(n=198)	Why never used LEDs?	(n=160)			
	Cost of LEDs is	high	14%	Energy-efficient, power saving	28%	Cost, too expensive	17%			
Dislike light LEDs produce		14%	Replacing old bulbs with LEDs	25%	Fittings don't suit LEDs	17%				
	Reduced need, only need for certain lights Issues with fittings / switches		14%	Longer-lasting	14%	Don't know enough about LEDs	12% 11%			
			7%	Cost-effective longer term	13%	No need / no use for LEDs				
	New house		7%	Better light quality	10%	Haven't considered LEDs	9%			
	Changed to and	other bulb type	7%	LEDs are better bulbs	8%	Dislike the light LEDs produce	4%			
	"They give out awful lighting." "Not as much use for them." "The cost of the bulbs."			"They are cheaper to run and last	t longer."	"Expensive. When the price comes down I will seriously consider them "				
				"Their energy efficiency, their bri	ghtness, the fact	 "I am not sure we have the correct fittings for them "Don't know much about them or what value they would have." 				
				that they are available in many n	nore fittings now."					
				"We replaced previous lights with they became less expensive."	h these fittings -					
	*Cautio	on: Small base (n<30)								

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NLQ4b: You told us that the proportion of LED bulbs in your home **increased / stayed the same / decreased,** compared to 3 years ago, please can you tell us how come? **Base:** Those aware of each bulb NLQ3, NLQ4b based on applicable respondents



CFL USAGE COMPARED TO 3 YEARS AGO



Close to half of those people who say they are using CFLs less are switching towards LEDS rather than slipping back towards inefficient lighting options

	25%		25% these about the same	36% I use these	more now	d these	
CFL Bulbs	Why using CFLs less?	(n=119)	Why using CELs more?	(n=176)	Why never used CELs?	(n=69)	
(11–404)	Changing to LEDs	37%	Energy-efficient, power saving	33%	Prefer / use / changed to LED	13%	
	Dislike light CFLs produce	12%	Replacing old bulbs with CFLs	18%	Prefer / use other types	10%	
	Prefer LEDs	9%	Longer-lasting	16%	Cost, too expensive	9%	
	Bulbs are expensive	8%	Cost-effective longer-term	15%	Toxic materials, radiation, mercury	9%	
	Not energy-efficient	8%	Moved house	7%	I don't like how CFLs look	9%	
	Issues with fittings / switches	6%	Better for the environment	7%	Don't know enough about CFLs	9%	
	Not reliable / durable	6%					
	"LED are a better option, they're more environmentally friendly, they last longer, the light is better and they don't contain mercury, so as our CFL bulbs die, they're being replaced with LED." "I stopped purchasing them because LEDs last longer and are as cheap to buy."		"They are cost efficient and proa hours of bulb life."	luce longer	"We switched to LEDs a long time ago and didn't have a need for them." "Quite happy with the current bulbs we have been using since shifting to this house."		
			"Because they are more energy a and cheaper to run."	efficient			
			"Last longer, so I try to buy them need to replace bulbs."	n when I			



NLQ4a: You told us that the **proportion of CFL bulbs** in your home **increased / stayed the same / decreased,** compared to 3 years ago, please can you tell us how come? **Base:** Those aware of each bulb NLQ3, NLQ4a based on applicable respondents



FUTURE INTENT



LEDs have the highest levels of stated continued use or intention to replace compared to other bulb types; only a fifth of the market actively reject LED bulbs



*Note: 2014 EECA Change in State research, please note that 'Don't know' wasn't an option.

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EL11: And thinking about the following types of light bulbs that you currently use or don't use in your home, how likely are you to continue to use, start using if you haven't already, or stop using? **Base:** Total sample – 2017 (n=502), 2014 (n=507)



COMPARING BULB USAGE WITH FUTURE INTENT



LEDs users are committed to using LEDs & CFL users are shifting in that direction as well; but there's still scope to increase momentum away from incandescent bulb usage

	LED Bulk	users		CFL Bul	b users	Incandescent Bulb users		
	All users '17 (n=253)	All users '14* (n=98)		All users '17 All users '14* (n=327) (n=383)		All users '17 (n=290)	All users '14* (n=309)	
LED bulbs								
I plan to continue using these	81%	70%		38%	17%	35%	18%	
I plan to start using when I need replacement bulbs	13%	23%		22%	35%	20%	30%	
I plan to stop using these bulbs	3%	7%		4%	9%	3%	11%	
CFL bulbs								
I plan to continue using these	27%	58%		64%	79%	43%	52%	
I plan to start using when I need replacement bulbs	8%	6%		8%	14%	13%	23%	
I plan to stop using these bulbs	27%	15%		23%	8%	16%	8%	
Incandescent bulbs								
I plan to continue using these	20%	21%		22%	24%	46%	46%	
I plan to start using when I need replacement bulbs	4%	2%		5%	4%	7%	7%	
I plan to stop using these bulbs	28%	42%		34%	36%	42%	47%	

*Note: 2014 EECA Change in State research

EL9: Using the options below, which best describes what you use in your home currently? / EL11: And thinking about the following types

of light bulbs that you currently use or don't use in your home. How likely are you to continue to use, start using if you haven't already, or **GAME CHANGERS** stop using? **Base:** Re-based on total sample – 2017 (n=502), 2014 (n=507)



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COMPARING BULB PROPORTIONS WITH FUTURE INTENT

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High users of incandescent bulbs are fairly steadfast in their commitment to continued use, but there is potential to shift use amongst those whose incandescent usage is lower

		LED	Bulb user	s	CF	CFL Bulb users			Incandescent Bulb users		
	Total '17 (n=502)	Low users (n=76)	Flirt users (n=78)	High users (n=97)	Low users (n=87)	Flirt users (n=95)	High users (n=142)	Low users (n=113)	Flirt users (n=83)	High users (n=90)	
LED bulbs											
I plan to continue using these	43%	71%	78%	91%	54%	46%	23%	45%	42%	13%	
I plan to start using when I need replacement bulbs	19%	17%	18%	6%	8%	21%	30%	24%	22%	16%	
I plan to stop using these bulbs	4%	5%	3%	0%	5%	2%	4%	4%	4%	1%	
CFL bulbs											
I plan to continue using these	43%	50%	27%	8%	48%	60%	77%	49%	55%	26%	
I plan to start using when I need replacement bulbs	10%	11%	8%	7%	11%	7%	6%	7%	17%	16%	
I plan to stop using these bulbs	17%	14%	44%	24%	30%	31%	13%	26%	13%	3%	
Incandescent bulbs											
I plan to continue using these	27%	32%	23%	8%	33%	28%	11%	35%	40%	69%	
I plan to start using when I need replacement bulbs	5%	7%	5%	2%	5%	8%	1%	6%	7%	7%	
I plan to stop using these bulbs	28%	30%	36%	20%	31%	40%	32%	52%	48%	23%	

EL9: Using the options below, which best describes what you use in your home currently? / EL11: And thinking about the following types

© 2017 Ipsos. of light bulbs that you currently use or don't use in your home. How likely are you to continue to use, start using if you haven't already, or GAME CHANGERS stop using? Base: Re-based on total sample (n=502)




Energy Efficiency and Conservation Authority Te Tari Tiaki Pūngao

ATTITUDES TOWARD DIFFERENT LIGHT BULB TYPES

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ATTITUDE TOWARDS ENERGY-EFFICIENT LIGHTING



The *importance* & *appeal* of energy-efficient lighting have improved significantly, suggesting that people have bought into & are receptive to messaging around lighting

Energy-Efficient Lighting Importance (10pt scale)



Energy-Efficient Lighting Appeal (10pt scale)



*Note: 2014 EECA Change in State research

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© 2017 lpsos. **EL1:** Thinking about energy-efficient lighting, how important is it to you to use energy-efficient lighting in your home? / **EL4a:** How appealing is the overall idea of energy-efficient lighting to you? **Base:** Total sample

Green is sig. \uparrow , Red is sig. \downarrow than 2014



THE IMPORTANCE OF ENERGY-EFFICIENT LIGHTING



GAME CHANGERS

It is clear that the importance people place in efficient lighting is part of the pathway to LED use; high users of incandescent place a significantly lower level of importance on this

Energy-Efficient Lighting Importance (10pt scale)



pso

EL1: Thinking about energy-efficient lighting, how important is it to you to use energy-efficient lighting in your home?

© 2017 Ipsos. Base: Total sample (n=502)

THE APPEAL OF ENERGY-EFFICIENT LIGHTING

Energy-Efficient Lighting Appeal (10pt scale)



regarding energy-efficient lighting, with the highest level amongst high LED users



GAME CHANGERS

pso

EL4a: How appealing is the overall idea of energy-efficient lighting to you? Base: Total sample (n=502)

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APPEAL OF DIFFERENT LIGHT BULBS



At a total market level, LED bulbs are the most appealing light bulb to *meet people's lighting needs,* improving since 2014 & mostly at the expense of CFL bulbs



*Note: 2014 EECA Change in State research

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© 2017 lpsos. *EL4b:* How appealing are the different types of light bulbs below in terms of meeting your lighting needs? *Base:* Those aware of the light bulb type



APPEAL OF DIFFERENT LIGHT BULBS



However, when split by segments of interest, the appeal of LEDs still has scope to improve amongst LED low / non-users & incandescent high users





GAME CHANGERS

EL4b: How appealing are the different types of light bulbs below in terms of meeting your lighting needs?

© 2017 Ipsos. Base: Those aware of the light bulb type

PERCEIVED VALUE OF DIFFERENT LIGHT BULBS



Lower power bills & *longer-lasting bulbs* are generally accepted benefits of LEDs; but there's room to challenge perceptions about *being fit for purpose* & *quick to light up*



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© 2017 lpsos. **EL6:** Now think about what you value most from... **Base:** Those aware of the light bulb type



PERCEIVED VALUE OF DIFFERENT LIGHT BULBS



Across user types, the 1st & 2nd most valuable attributes of each bulb type are consistent, indicating a broader value proposition needs to develop for high incandescent users

Most valuable 2 nd most valuable 3 rd most valuable			Bulbs			CEI	Bulbs			Incandes	crent Bulbs	
	Total (n=474)	I.B. high (n=83)	LED non / low (n=299)	LED high (n=97)	Total (n=484)	I.B. high (n=82)	LED non / low (n=319)	LED high (n=90)	Total (n=490)	I.B. high (n=90)	LED non / low (n=322)	LED high (n=94)
Lower power bills	61%	47%	56%	72%	61%	54%	64%	51%	14%	21%	16%	12%
Quality of the light produced	33%	33%	32%	31%	15%	18%	16%	13%	26%	20%	25%	26%
Brightness	34%	35%	34%	36%	14%	18%	16%	12%	36%	37%	36%	35%
Fit for purpose	30%	39%	30%	28%	22%	21%	20%	21%	45%	48%	47%	44%
Light bulbs last longer	51%	46%	49%	53%	45%	44%	45%	43%	16%	26%	16%	16%
Quickly lights up to full strength	23%	23%	22%	28%	6%	6%	6%	2%	37%	31%	39%	31%
Easy to dispose of	10%	13%	11%	5%	4%	2%	3%	7%	25%	20%	24%	28%
Inexpensive to buy	20%	30%	21%	24%	16%	17%	16%	20%	70%	77%	71%	64%
Safe for use	20%	14%	19%	24%	11%	11%	10%	14%	18%	19%	17%	19%
Better for the environment	1%	1%	1%	0%	1%	1%	1%	0%	0%	0%	0%	0%



EL6: Now think about what you value most from... *Base:* Those aware of the light bulb type





SHOPPING FOR LIGHT BULBS LED bulb buyers are significantly less likely to shop for LEDs at supermarkets; however, supermarkets remain a valuable channel for EECA in-store marcoms





GAME CHANGERS

NLQ7a: Please can you tell us where you usually buy your light bulbs? Base: Total sample (n=502) NLQ7b: Please can you tell us where you usually buy your LED light bulbs? Base: LED bulb users (n=253)

LED USAGE BY ROOMS



There is scope for EECA to persuade more people to use LEDs more widely in higher-usage areas of the home, particularly *bedrooms*, *kitchen / dining areas*, *bathrooms* & *hallways*



NLQ2: Can you tell us about the proportion of LED bulbs you use in? Base: LED bulb users (n=253)

GAME CHANGERS



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REASONS FOR BUYING LEDS Virtually all benefits of LED bulbs are seen as positive reasons to buy, thus indicating that there is scope to build perceptions beyond accepted *lower energy costs* & *lasting longer*

Don't know if this is a valid reason	1 - This is not a good reason to buy LED bulbs						
2	3 - This is a good reason, but doesn't encourage me to buy						
4	5 - This is a really good reason to buy LED bulbs						
LED bulbs help me lower my energy costs	9% <mark>5%</mark>	12%	20%		50%		
LED bulbs last longer than traditional bulbs	9% <mark>7%</mark>	14%	18%		50%		
LED bulbs reduce the hassle of having to	9% <mark>6%</mark>	18%	219	%	429	%	
change bulbs so frequently							
IED hulbs provide high-quality lighting	11% 6%	17	% 2	4%	37	7%	
	11/0 0/0	17	/0 2		57	/0	
I'm reducing my impact on the environment							
through efficient energy use	10% <mark>6%</mark>	189	<mark>%</mark> 199	%	43%	6	
I can make savings from using LED bulks that							
justifies paying more to purchase them	10% <mark>7%</mark>	1	<mark>9%</mark> 2	21%	37	7%	
LED bulbs do not contain toxic materials	18%	6% <mark></mark>	18%	17%	38	3%	
LED bulbs last longer and withstand more	16%	8%	20%	20%	3	3%	
harsh conditions							
LED hulbs can produce a full range of colours	100/	110/	70/ 7	00/	1.60/	10%	
LED Duins can produce a full range of colours	19%	11%	70 Z	070	10%	19%	

Nett reason to buy (4 or 5) "The quality of light from these bulbs is great for 70% both bathroom and kitchen use." 68% "They look better than some bulbs that are 63% available." 61% "There is a better shelving arrangement when buying LED bulbs." 61% *"Since LED bulbs produce less heat than other"* 59% bulbs, they can be used in environments where heat can be dangerous." 54% 53% "They are compact and fit in to existing sockets."

QLT9: Please tell us to what extent you feel that these are good reasons for you to buy LED bulbs. Base: Those aware of LED bulbs (n=474)

28 © 2017 Ipsos. QLT9a: Is there anything else that you feel are good reasons to buy LED bulbs? Base: Those who had another good reason for purchasing GAME CHANGERS LEDS (n=107)

35%



REASONS AGAINST BUYING LEDS Upfront costs & sufficient savings are two areas EECA can better educate consumers about LEDs, although neither are barriers stopping the majority of those aware of LEDs

 Don't know if this is a valid concern 2 4 	■ 1 - 3 - ■ 5 -	This is not a conc This is a concern This is a major co	ern for m but would oncern and	e at all d not stop d is stoppi	me N ng me	ett barri (4 or 5)
It's hard to justify the extra cost of LED bulbs	13%	20% 10%	22%	17%	18%	35%
The savings aren't sufficient enough	15%	20% 10%	22%	16%	17%	33%
here aren't any LED bulbs that work in my light fitting	19%	32%	8%	14% 11	16%	27%
I don't think LED bulbs give me the lighting I need in certain rooms	19%	27%	10%	19%	15% 10%	25%
Shopping for LED bulbs is difficult	16%	29%	12%	18%	16% 9%	25%
LED bulbs don't last as long as claimed	23%	20%	13%	21%	13% 10%	23%
Don't put out enough light	18%	29%	11%	20%	14% 8%	22%
It is hard to find a LED bulb that performs as I need	19%	29%	11%	19%	13% 9%	22%
Don't look nice in light fittings	16%	36%	9%	20%	11% 8%	19%
Dislike the light produced	17%	34%	12%	18%	10% 9%	19%
LED bulbs do not work with my dimmers	26%	6 349	6	7% <mark>15%</mark>	8% 10%	18%

"Finding them at the right price; I will only purchase if they had a major sale."



"As time goes by, the LED bulbs will become dimmer (not as bright) significantly."

"Comparing relative light levels between what has been traditional (wattage) and the new (lumens) so a correct equivalent lighting level can be obtained."



"The rating of LED bulbs in terms of lumens, as opposed to equivalent incandescent ratings, make buying the right bulb difficult."

"They have a horrible hard light. I bought some LED Christmas lights, and even with coloured covering they look harsh."

QLT6: Please tell us to what extent you feel that these are concerns that stop you from buying LED bulbs. Base: Those aware of LED bulbs (n=474)





BENEFITS VS. BARRIERS



While people have bought into the benefits of LEDs outweighing the barriers, there's scope for EECA to address concerns around *costs, savings* & *compatible* light fittings

How the benefits of LEDs currently compare with barriers Note: This wasn't asked in historic research.								
		25%	16%		47%			12%
U W	Barri	ers outweigh the benefits	More or less equal		Benefits outweigh the barriers			Don't know
		Top-3 Barriers					Top-3 Benefits	
	35%	It's hard to justify the ex	tra cost of LED bulbs		Ì	70%	I believe that LED bulbs help energy costs	me lower my
	33%	The savings from LED bu enough to pay so much	lbs aren't sufficient more for them			68%	LED bulbs last longer than tr bulbs	aditional
	27%	There aren't any LED bul in my light fittings	bs that work			63%	LED bulbs reduce the hassle change bulbs frequently	of having to



BENEFITS VS. BARRIERS – INCANDESCENT HIGH USERS VS. TOTAL



Incandescent high users find barriers outweigh the benefits by over 2 to 1; a sizeable proportion don't believe in the longer-term cost benefit of using LED bulbs



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NLQ6: Thinking about the benefits and barriers towards LED bulbs, please indicate how the benefits currently compare with the barriers

© 2017 Ipsos. for you personally. Base: Those aware of LED bulbs (n=474), Incandescent High Users aware of LED bulbs (n=83)



BENEFITS VS. BARRIERS – LED LOW / NON-USERS VS. TOTAL



LED low / non-users are more divided, suggesting further work is required to convince them of the long-term *financial* benefits, given they believe they help lower energy costs



NLQ6: Thinking about the benefits and barriers towards LED bulbs, please indicate how the benefits currently compare with the barriers

© 2017 lpsos. for you personally. Base: Those aware of LED bulbs (n=474), LED Low / Non-Users aware of LED bulbs (n=299)

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BENEFITS VS. BARRIERS – LED HIGH USERS VS. TOTAL For LED high users the barriers are small relative to the benefits





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NLQ6: Thinking about the benefits and barriers towards LED bulbs, please indicate how the benefits currently compare with the barriers © 2017 Ipsos. for you personally. **Base:** Those aware of LED bulbs (n=474), LED High Users (n=97)



REASONS FOR BUYING LEDS / ENERGY-EFFICIENT BULBS



Indicatively the market today is more positive about the benefits of LED bulbs than it was about energy-efficient lighting 4 years ago, particularly in terms of *lighting quality*

Note: We surveyed people in the EECA Consumer Monitor Jul-Sep 2013 using similar statements, but asked in terms of energy-efficient lighting. As a result, wave-on-wave comparisons are indicative only.

Benefits of LED bulbs, % T2B agree it's a benefit on a 5pt scale	2017 (n=474)	Benefits of EE bulbs, % T2B agree it's a benefit on a 5pt scale*	2013* (n=762)	Change
LED bulbs help me lower my energy costs	70%	I believe that EE light bulbs help me lower my energy costs	60%	+10%
LED bulbs last longer than traditional bulbs	68%	I believe that EE bulbs last longer than traditional bulbs	58%	+10%
LED bulbs reduce the hassle of having to change bulbs so frequently	63%	I believe EE light bulbs reduce the hassle of having to change bulbs so frequently	53%	+10%
LED bulbs provide high-quality lighting	61%	I believe EE bulbs provide high-quality lighting	35%	+27%
I'm reducing my impact on the environment through efficient energy use	61%	I'm reducing my impact on the environment through efficient energy use	53%	+8%
I can make savings from using LED bulbs that justifies paying more to purchase them	59%	I can make savings from using EE bulbs that justifies paying more to purchase them	52%	+7%
LED bulbs do not contain toxic materials	54%	Not available	N/A	N/A
LED bulbs last longer and withstand more harsh conditions	53%	Not available	N/A	N/A
LED bulbs can produce a full range of colours	35%	Not available	N/A	N/A

*Note: Sourced from EECA Consumer Monitor Jul-Sep '13.

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7 Ipsos. *QLT9:* Please tell us to what extent you feel that these are good reasons for you to buy LED bulbs (2017) / energy-efficient light bulbs (2013)? **Base:** 2017 – Those aware of LED bulbs (n=474), 2013 – Total sample (n=762)



REASONS AGAINST BUYING LED BULBS / ENERGY-EFFICIENT BULBS



Indicatively, there's scope to better inform people about the *costs* vs. benefits of LEDs & how to find LEDs that *work with their existing light fittings*

Note: We surveyed people in the EECA Consumer Monitor Jul-Sep 2013 using similar statements, but asked in terms of energy-efficient lighting. As a result, wave-on-wave comparisons are indicative only.

Barriers for LED bulbs, % T2B agree it's a benefit on a 5pt scale	2017 (n=474)	Barriers for EE bulbs, % T2B agree it's a benefit on a 5pt scale*	2013* (n=762)	Change
It's hard to justify the extra cost of LED bulbs	35%	It's hard to justify the extra cost of EE bulbs	25%	+10%
The savings from LED bulbs aren't sufficient enough	33%	The savings from EE bulbs aren't sufficient enough	22%	+11%
There aren't any LED bulbs that work in my light fitting	27%	There aren't any EE bulbs that work in my light fitting	25%	+2%
I don't think LED bulbs give me the lighting I need in certain rooms	25%	I don't think EE bulbs give me the lighting I need in certain rooms	26%	-1%
Shopping for LED bulbs is difficult	25%	Not available	N/A	N/A
LED bulbs don't last as long as claimed	23%	Not available	N/A	N/A
LED bulbs don't put out enough light	22%	EE bulbs don't put out enough light	21%	+1%
It is hard to find a LED bulb that performs as I need	22%	It is hard to find an EE bulb that performs as I need	22%	=
LED bulbs don't look nice in light fittings	19%	Spiral and stick efficient light bulbs don't look nice in light fittings	25%	-6%
Dislike the light produced	19%	I don't like the light that EE bulbs produce	20%	-1%
LED bulbs do not work with my dimmers	18%	Not available	N/A	N/A

*Note: Sourced from EECA Consumer Monitor Jul-Sep '13.

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psos. QLT6: Please tell us to what extent you feel that these are concerns that stop you from buying LED bulbs (2017) / energy-efficient bulbs GAME CHANGERS (2013)? Base: 2017 – Those aware of LED bulbs (n=474), 2013 – Total sample (n=762)





Contacts

Information withheld under section 9(2)(a)









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GAME CHANGERS

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APPENDIX – PROFILING BULB USERS & CFL USAGE IN THE HOME





58% of the market PROFILE OF INCANDESCENT BULB USERS (I)



Demographically, users of incandescent bulbs are broadly similar to the NZ rep average, but are slightly more likely to be of European ethnicity

Gender	Total (n=502)	I.B. users (n=290)
Male	48%	46%
Female	52%	54%
Age group	Total (n=502)	I.B. users (n=290)
18-29 years	21%	20%
30-39 years	16%	17%
10.10		
40-49 years	19%	19%
40-49 years 50-64 years	19% 25%	19% 25%
40-49 years 50-64 years 65 years+	19% 25% 19%	19% 25% 19%

Ethnicity	Total (n=502)	l.B. users (n=290)
European	77%	82%
Maori	7%	7%
Pacific	2%	1%
Asian	14%	10%

Type of area	Total (n=502)	l.B. users (n=290)
City	66%	69%
Town	26%	24%
Rural	8%	7%

NZ region	Total (n=502)	l.B. users (n=290)
Auckland	33%	30%
Northern (excl. AKL)	20%	19%
Central	23%	24%
Southern	24%	27%

Home ownership	Total (n=502)	l.B. users (n=290)
Owner	65%	64%
Renter	29%	29%
Other	6%	7%

Annual household income	Total (n=502)	l.B. users (n=290)
Low (up to \$60k)	37%	38%
Mid (\$60-100k)	23%	24%
High (\$100k+)	24%	21%

Household type	Total (n=502)	l.B. users (n=290)
Younger couple, no kids	10%	10%
HH with youngest child under 5yo	12%	12%
HH with youngest child 5-13yo	11%	12%
HH with youngest child 14-17yo	7%	6%
HH with youngest child 18yo+	12%	9%
Older couple, no kids	21%	20%
Living alone	17%	18%
Flatting	9%	11%
Extended family	0%	0%
Others	1%	2%



58% of the market PROFILE OF INCANDESCENT BULB USERS (II)



Aside from being heavy users of incandescent bulbs, they tend to lag behind the NZ average in terms of LED bulb usage; however, their CFL usage is broadly in line with the national average, albeit few high users

NLQ7a Shopping for light bulbs	Total (n=502)	I.B. users (n=290)	NLQ7b Shopping for LED bulbs	Total (n=502)	I.B. users (n=290)
Supermarket	84%	90%	DIY chain store	28%	22%
DIY chain store	46%	42%	Supermarket	27%	22%
ighting specialist	19%	18%	Lighting specialist	15%	13%
L9 Light bulb usage	Total (n=502)	l.B. users (n=290)	NLQ3 LED usage now vs. 3 years ago	Total (n=502)	I.B. users (n=290)
ncandescent	58%	100%	A lot more	28%	20%
CFL	65%	66%	Slightly more	11%	13%
ED	50%	41%	About the same	18%	19%
luorescent	20%	21%	Slightly less	2%	3%
lalogen	34%	38%	A lot less	3%	3%
EL9 Light bulb	Total	I.B. users	Never used	32%	43%
consideration	(n=502)	(n=290)	EL11 LED future	Total	I.B. users
ncandescent	67%	100%	intention	(n=502)	(n=290)
CFL	80%	85%	Continue using	43%	47%
LED	79%	74%	Start using / use more	19%	28%
Fluorescent	37%	37%	Stop using	4%	4%
Halogen	55%	59%	Don't know	13%	21%

EL9b Light bulb proportions in the home		Total (n=502)	l.B. users (n=290)	
	Low / non-users	23%	40%	
Incandescent	Flirt-users	17%	29%	
	High-users	18%	31%	
	Low / non-users	18%	21%	
CFL	Flirt-users	19%	26%	
	High-users	28%	19%	
	Low / non-users	16%	17%	
LED	Flirt-users	16%	16%	
	High-users	19%	8%	
	Low / non-users	17%	18%	
Fluorescent	Flirt-users	2%	2%	
	High-users	1%	1%	
	Low / non-users	25%	27%	
Halogen	Flirt-users	7%	9%	
	High-users	3%	2%	



18% of the market PROFILE OF INCANDESCENT BULB HIGH USERS (I)



Demographically, high users of incandescent bulbs are more likely to be younger, renters, flatting & of European ethnicity; they also skew towards being females

Gender	Total (n=502)	I.B high (n=90)
Male	48%	38%
Female	52%	62%
Age group	Total (n=502)	I.B high (n=90)
18-29 years	21%	31%
18-29 years 30-39 years	21% 16%	31% 21%
18-29 years 30-39 years 40-49 years	21% 16% 19%	31% 21% 12%
18-29 years 30-39 years 40-49 years 50-64 years	21% 16% 19% 25%	31% 21% 12% 20%
18-29 years 30-39 years 40-49 years 50-64 years 65 years+	21% 16% 19% 25% 19%	31% 21% 12% 20% 16%

Ethnicity	Total (n=502)	I.B high (n=90)
European	77%	89%
Maori	7%	7%
Pacific	2%	1%
Asian	14%	4%

Type of area	Total (n=502)	I.B high (n=90)
City	66%	66%
Town	26%	27%
Rural	8%	7%

NZ region	Total (n=502)	I.B high (n=90)
Auckland	33%	29%
Northern (excl. AKL)	20%	19%
Central	23%	29%
Southern	24%	23%

Home ownership	Total (n=502)	I.B high (n=90)
Owner	65%	50%
Renter	29%	40%
Other	6%	10%

Annual household income	Total (n=502)	I.B high (n=90)
Low (up to \$60k)	37%	36%
Mid (\$60-100k)	23%	29%
High (\$100k+)	24%	14%

Household type	Total (n=502)	I.B high (n=90)
Younger couple, no kids	10%	12%
HH with youngest child under 5yo	12%	13%
HH with youngest child 5-13yo	11%	11%
HH with youngest child 14-17yo	7%	1%
HH with youngest child 18yo+	12%	11%
Older couple, no kids	21%	12%
Living alone	17%	18%
Flatting	9%	19%
Extended family	0%	0%
Others	1%	2%



18% of the market PROFILE OF INCANDESCENT BULB HIGH USERS (II)



High users of incandescent bulbs are less likely to use or consider other types of bulbs, particularly LEDs & CFLs; the majority have never used LEDs before

NLQ7a Shopping for light bulbs	Total (n=502)	I.B high (n=90)
Supermarket	84%	96%
DIY chain store	46%	27%
Lighting specialist	19%	6%
EL9 Light bulb usage	Total (n=502)	I.B high (n=90)
Incandescent	58%	100%
CFL	65%	33%
LED	50%	17%
Fluorescent	20%	8%
Halogen	34%	17%
EL9 Light bulb consideration	Total (n=502)	I.B high (n=90)
Incandescent	67%	100%
CFL	80%	66%
LED	79%	58%
Fluorescent	37%	23%
Halogen	55%	47%

NLQ7b Shopping for LED bulbs	Total (n=502)	I.B high (n=90)
DIY chain store	28%	7%
Supermarket	27%	9%
Lighting specialist	15%	3%
NLQ3 LED usage now	Total	I.B high
vs. 3 years ago	(n=502)	(n=90)
A lot more	28%	8%
Slightly more	11%	6%
About the same	18%	9%
Slightly less	2%	2%
A lot less	3%	4%
Never used	32%	63%
EL11 LED future	Total	I.B high
intention	(n=502)	(n=90)
Continue using	43%	13%
Start using / use more	19%	16%
Stop using	4%	1%
Don't know	13%	28%

EL9b Light bulb proportions n the home		Total (n=502)	I.B high (n=90)
	Low / non-users	23%	0%
Incandescent	Flirt-users	17%	0%
	High-users	18%	100%
	Low / non-users	18%	22%
CFL	Flirt-users	19%	8%
	High-users	28%	3%
	Low / non-users	16%	93%
LED	Flirt-users	16%	4%
	High-users	19%	2%
	Low / non-users	17%	6%
Fluorescent	Flirt-users	2%	1%
	High-users	1%	1%
	Low / non-users	25%	13%
Halogen	Flirt-users	7%	2%
	High-users	3%	1%





Demographically, LED users are more likely to be home owners living in higher-income households

Gender	Total (n=502)	LED users (n=253)
Male	48%	53%
Female	52%	47%
Age group	Total (n=502)	LED users (n=253)
18-29 years	21%	19%
30-39 years	16%	15%
40-49 years	19%	18%
50-64 years	25%	28%
65 years+	19%	20%

Ethnicity	Total (n=502)	LED users (n=253)
European	77%	74%
Maori	7%	7%
Pacific	2%	1%
Asian	14%	17%

Type of area	Total (n=502)	LED users (n=253)
City	66%	66%
Town	26%	25%
Rural	8%	9%

NZ region	Total (n=502)	LED users (n=253)
Auckland	33%	37%
Northern (excl. AKL)	20%	19%
Central	23%	19%
Southern	24%	25%

Home ownership	Total (n=502)	LED users (n=253)
Owner	65%	75%
Renter	29%	19%
Other	6%	6%

Annual household income	Total (n=502)	LED users (n=253)
Low (up to \$60k)	37%	27%
Mid (\$60-100k)	23%	25%
High (\$100k+)	24%	34%

Household type	Total (n=502)	LED users (n=253)
Younger couple, no kids	10%	9%
HH with youngest child under 5yo	12%	13%
HH with youngest child 5-13yo	11%	12%
HH with youngest child 14-17yo	7%	8%
HH with youngest child 18yo+	12%	15%
Older couple, no kids	21%	25%
Living alone	17%	9%
Flatting	9%	6%
Extended family	0%	1%
Others	1%	2%



50% of the market PROFILE OF LED BULB USERS (II)



Aside from being heavier users of LED bulbs, they're more likely to continue using LEDs & usage has increased a lot in the past 3 years; they're less likely to use incandescent & CFL bulbs

NLQ7a Shopping for light bulbs	Total (n=502)	LED users (n=253)
Supermarket	84%	76%
DIY chain store	46%	57%
Lighting specialist	19%	29%
EL9 Light bulb usage	Total (n=502)	LED users (n=253)
Incandescent	58%	47%
CFL	65%	57%
LED	50%	100%
Fluorescent	20%	28%
Halogen	34%	44%
EL9 Light bulb consideration	Total (n=502)	LED users (n=253)
Incandescent	67%	58%
CFL	80%	75%
LED	79%	100%
Fluorescent	37%	43%
Halogen	55%	60%

NLQ7b Shopping for LED bulbs	Total (n=502)	LED users (n=253)
Supermarket	28%	56%
DIY chain store	27%	54%
Lighting specialist	15%	29%

NLQ3 LED usage now vs. 3 years ago	Total (n=502)	LED users (n=253)
A lot more	28%	54%
Slightly more	11%	17%
About the same	18%	24%
Slightly less	2%	2%
A lot less	3%	2%

EL11 LED future intention	Total (n=502)	LED users (n=253)
Continue using	43%	81%
Start using / use more	19%	13%
Stop using	4%	3%
Don't know	13%	4%

9b Light bulb prop the home	portions	Total (n=502)	LED users (n=253)
	Low / non-users	23%	26%
Incandescent	Flirt-users	17%	15%
	High-users	18%	6%
	Low / non-users	18%	21%
CFL	Flirt-users	19%	18%
	High-users	28%	18%
	Low / non-users	16%	31%
LED	Flirt-users	16%	31%
	High-users	19%	38%
	Low / non-users	17%	24%
Fluorescent	Flirt-users	2%	2%
	High-users	1%	2%
	Low / non-users	25%	33%
Halogen	Flirt-users	7%	8%
	High-users	3%	3%



Green is sig. \uparrow , Red is sig. \downarrow than total

15% of the market PROFILE OF LED LOW USERS (I)



Demographically, LED low users are more likely to live in mid-income households & are generally more likely to be females & homeowners

Gender	Total (n=502)	LED low (n=76)
Male	48%	41%
Female	52%	59%
Age group	Total (n=502)	LED low (n=76)
18-29 years	21%	20%
30-39 years	16%	17%
40-49 years	19%	18%
50-64 years	25%	27%
50-64 years 65 years+	25% 19%	27% 18%

Ethnicity	Total (n=502)	LED low (n=76)
European	77%	79%
Maori	7%	5%
Pacific	2%	1%
Asian	14%	16%

Type of area	Total (n=502)	LED low (n=76)
City	66%	68%
Town	26%	20%
Rural	8%	12%

NZ region	Total (n=502)	LED low (n=76)
Auckland	33%	35%
Northern (excl. AKL)	20%	21%
Central	23%	18%
Southern	24%	26%

Home ownership	Total (n=502)	LED low (n=76)
Owner	65%	72%
Renter	29%	25%
Other	6%	3%

Annual household income	Total (n=502)	LED low (n=76)
Low (up to \$60k)	37%	22%
Mid (\$60-100k)	23%	32%
High (\$100k+)	24%	33%

Household type	Total (n=502)	LED low (n=76)
Younger couple, no kids	10%	8%
HH with youngest child under 5yo	12%	17%
HH with youngest child 5-13yo	11%	13%
HH with youngest child 14-17yo	7%	5%
HH with youngest child 18yo+	12%	13%
Older couple, no kids	21%	26%
Living alone	17%	9%
Flatting	9%	8%
Extended family	0%	1%
Others	1%	0%



15% of the market PROFILE OF LED LOW USERS (II)



LED low users are more likely to use fluorescent & halogen bulbs & are more likely to be high users of CFLs; over the past 3 years LED usage is about the same to slightly more, while the majority plan to continue using LEDs

NLQ7a Shopping for light bulbs	Total (n=502)	LED low (n=76)
Supermarket	84%	91%
DIY chain store	46%	53%
Lighting specialist	19%	25%
EL9 Light bulb usage	Total (n=502)	LED low (n=76)
Incandescent	58%	63%
CFL	65%	74%
LED	50%	100%
Fluorescent	20%	34%
Halogen	34%	58%
EL9 Light bulb	Total	LED low
consideration	(n=502)	(n=76)
Incandescent	67%	72%
CFL	80%	89%
LED	79%	100%
Fluorescent	37%	46%
Halogen	55%	72%

NLQ7b Shopping for LED bulbs	Total (n=502)	LED low (n=76)
Supermarket	28%	55%
DIY chain store	27%	62%
Lighting specialist	15%	24%

NLQ3 LED usage now vs. 3 years ago	Total (n=502)	LED low (n=76)
A lot more	28%	29%
Slightly more	11%	24%
About the same	18%	39%
Slightly less	2%	3%
A lot less	3%	4%

EL11 LED future intention	Total (n=502)	LED low (n=76)
Continue using	43%	71%
Start using / use more	19%	17%
Stop using	4%	5%
Don't know	13%	7%

9b Light bulb proportions the home		Total (n=502)	LED low (n=76)
	Low / non-users	23%	32%
Incandescent	Flirt-users	17%	20%
	High-users	18%	12%
	Low / non-users	18%	17%
CFL	Flirt-users	19%	13%
	High-users	28%	43%
	Low / non-users	16%	100%
LED	Flirt-users	16%	0%
	High-users	19%	0%
	Low / non-users	17%	28%
Fluorescent	Flirt-users	2%	3%
	High-users	1%	4%
	Low / non-users	25%	46%
Halogen	Flirt-users	7%	4%
	High-users	3%	8%

GAME CHANGERS



Green is sig. abla , Red is sig. $ar{\downarrow}$ than total

65% of the market PROFILE OF LED LOW & NON-USERS (I)



Demographically, LED low / non-users are more likely to be renters; they're also generally more likely to be female & living in lower-income households

Gender	Total (n=502)	LED low / non (n=327)
Male	48%	43%
Female	52%	57%
Age group	Total (n=502)	LED low / non (n=327)
18-29 years	21%	22%
30-39 years	16%	17%
40-49 years	19%	20%
50-64 years	25%	23%
65 years+	19%	18%

Ethnicity	Total (n=502)	LED low / non (n=327)
European	77%	80%
Maori	7%	6%
Pacific	2%	2%
Asian	14%	12%

Type of area	Total (n=502)	LED low / non (n=327)
City	66%	67%
Town	26%	25%
Rural	8%	8%

NZ region	Total (n=502)	LED low / non (n=327)
Auckland	33%	30%
Northern (excl. AKL)	20%	22%
Central	23%	24%
Southern	24%	24%

Home ownership	Total (n=502)	LED low / non (n=327)
Owner	65%	59%
Renter	29%	36%
Other	6%	5%

Annual household income	Total (n=502)	LED low / non (n=327)
Low (up to \$60k)	37%	42%
Mid (\$60-100k)	23%	23%
High (\$100k+)	24%	19%

Household type	Total (n=502)	LED low / non (n=327)
Younger couple, no kids	10%	10%
HH with youngest child under 5yo	12%	12%
HH with youngest child 5-13yo	11%	11%
HH with youngest child 14-17yo	7%	6%
HH with youngest child 18yo+	12%	9%
Older couple, no kids	21%	18%
Living alone	17%	21%
Flatting	9%	12%
Extended family	0%	0%
Others	1%	1%





65% of the market PROFILE OF LED LOW & NON-USERS (II)



LED low / non-users are more likely to shop for bulbs at the supermarket, they're more likely to use, consider & be high users of incandescent & CFL bulbs; they are also more likely to have never used LEDs before

NLQ7a Shopping for	Total	LED low /	NLQ7b Shopping for	Total	LED low /	EL9b Light bulb proportions		Total	LED low /
light buibs	(n=502)	non (n=327)	LED builds	(n=502)	non (n=327)	in the nome		(n=502)	non (n=327)
Supermarket	84%	92%	Supermarket	28%	13%		Low / non-users	23%	23%
DIY chain store	46%	40%	DIY chain store	27%	14%	Incandescent	Flirt-users	17%	18%
Lighting specialist	19%	13%	Lighting specialist	15%	6%		High-users	18%	26%
0 0 0 0 0 0 0 0 0			0 - 0 - 1						
FIG Light hulb usage	Total	LED low /	NLQ3 LED usage now	Total	LED low /		Low / non-users	18%	15%
LES EIGHT BUID USUGE	(n=502)	non (n=327)	vs. 3 years ago	(n=502)	non (n=327)	CFL	Flirt-users	19%	18%
Incandescent	58%	67%	A lot more	28%	8%		High-users	28%	40%
CFL	65%	73%	Slightly more	11%	10%				
LED	50%	24%	About the same	18%	18%		Low / non-users	16%	100%
Fluorescent	20%	17%	Slightly less	2%	3%	LED	Flirt-users	16%	0%
indorescent	2070	1770		270	570		High-users	19%	0%
Halogen	34%	32%	A lot less	3%	5%		_		
EL9 Light bulb	Total	LED low /	Never used	32%	49%		Low / non-users	17%	14%
consideration	(n=502)	non (n=327)	EL11 LED future	Total	LED low /	Fluorescent	Flirt-users	2%	2%
Incandescent	67%	75%	intention	(n=502)	non (n=327)		High-users	1%	1%
CFL	80%	87%	Continue using	43%	21%				
IFD	79%	68%	Start using / use more	19%	23%		Low / non-users	25%	24%
	1570			1370	2370	Halogen	Flirt-users	7%	5%
Fluorescent	37%	34%	Stop using	4%	5%		High-users	3%	4%
Halogen	55%	55%	Don't know	13%	19%				





16% of the market PROFILE OF LED FLIRT USERS (I)



Demographically, LED flirts are more likely to be males, homeowners & living in higherincome households; they're also generally more likely be aged 40-49 & living in households with school-aged kids

Gender	Total (n=502)	LED flirts (n=78)
Male	48%	64%
Female	52%	36%
Age group	Total (n=502)	LED flirts (n=78)
18-29 years	21%	18%
30-39 years	16%	10%
40-49 years	19%	26%
50-64 years	25%	27%
65 years+	19%	19%

Ethnicity	Total (n=502)	LED flirts (n=78)
European	77%	68%
Maori	7%	6%
Pacific	2%	1%
Asian	14%	15%

Type of area	Total (n=502)	LED flirts (n=78)
City	66%	71%
Town	26%	21%
Rural	8%	9%

NZ region	Total (n=502)	LED flirts (n=78)
Auckland	33%	42%
Northern (excl. AKL)	20%	14%
Central	23%	15%
Southern	24%	28%

Home ownership	Total (n=502)	LED flirts (n=78)
Owner	65%	80%
Renter	29%	14%
Other	6%	6%

Annual household income	Total (n=502)	LED flirts (n=78)
Low (up to \$60k)	37%	28%
Mid (\$60-100k)	23%	21%
High (\$100k+)	24%	36%

Household type	Total (n=502)	LED flirts (n=78)
Younger couple, no kids	10%	3%
HH with youngest child under 5yo	12%	13%
HH with youngest child 5-13yo	11%	17%
HH with youngest child 14-17yo	7%	12%
HH with youngest child 18yo+	12%	12%
Older couple, no kids	21%	24%
Living alone	17%	12%
Flatting	9%	6%
Extended family	0%	0%
Others	1%	3%



lpsos

Green is sig. au , Red is sig. $ar{ar{}}$ than total

16% of the market PROFILE OF LED FLIRT USERS (II)



LED flirts are more likely to be users of halogen bulbs; most are using LEDs slightly to a lot more compared with 3 years ago & most intend to continue using LEDs

NLQ7a Shopping for light bulbs	Total (n=502)	LED flirts (n=78)
Supermarket	84%	81%
DIY chain store	46%	55%
Lighting specialist	19%	28%
EL9 Light bulb usage	Total (n=502)	LED flirts (n=78)
Incandescent	58%	60%
CFL	65%	67%
LED	50%	100%
Fluorescent	20%	28%
Halogen	34%	53%
EL9 Light bulb consideration	Total (n=502)	LED flirts (n=78)
Incandescent	67%	68%
CFL	80%	83%
LED	79%	100%
Fluorescent	37%	49%
Halogen	55%	69%

NLQ7b Shopping for LED bulbs	Total (n=502)	LED flirts (n=78)
Supermarket	28%	51%
DIY chain store	27%	59%
Lighting specialist	15%	29%

NLQ3 LED usage now vs. 3 years ago	Total (n=502)	LED flirts (n=78)
A lot more	28%	49%
Slightly more	11%	26%
About the same	18%	21%
Slightly less	2%	3%
A lot less	3%	1%

EL11 LED future intention	Total (n=502)	LED flirts (n=78)
Continue using	43%	78%
Start using / use more	19%	18%
Stop using	4%	3%
Don't know	13%	1%

.9b Light bulb prop the home	portions	Total (n=502)	LED flirts (n=78)
	Low / non-users	23%	28%
Incandescent	Flirt-users	17%	27%
	High-users	18%	5%
	Low / non-users	18%	17%
CFL	Flirt-users	19%	37%
	High-users	28%	13%
	Low / non-users	16%	0%
LED	Flirt-users	16%	100%
	High-users	19%	0%
	Low / non-users	17%	23%
Fluorescent	Flirt-users	2%	5%
	High-users	1%	0%
	Low / non-users	25%	36%
Halogen	Flirt-users	7%	17%
	High-users	3%	0%

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19% of the market PROFILE OF LED HIGH USERS (I)



Demographically, LED high users are more likely to live in households with adult children; they also generally skew towards being male, aged 50+, Asian ethnicity, homeowners, higher-income households & empty-nesters

Gender	Total (n=502)	LED high (n=97)
Male	48%	53%
Female	52%	47%
Age group	Total (n=502)	LED high (n=97)
18-29 years	21%	21%
30-39 years	16%	19%
40-49 years	19%	11%
50-64 years	25%	28%
65 years+	19%	22%

Ethnicity	Total (n=502)	LED high (n=97)
European	77%	73%
Maori	7%	8%
Pacific	2%	1%
Asian	14%	21%

Type of area	Total (n=502)	LED high (n=97)
City	66%	59%
Town	26%	33%
Rural	8%	8%

NZ region	Total (n=502)	LED high (n=97)
Auckland	33%	34%
Northern (excl. AKL)	20%	20%
Central	23%	23%
Southern	24%	23%

Home ownership	Total (n=502)	LED high (n=97)
Owner	65%	74%
Renter	29%	19%
Other	6%	7%

Annual household income	Total (n=502)	LED high (n=97)
Low (up to \$60k)	37%	30%
Mid (\$60-100k)	23%	25%
High (\$100k+)	24%	32%

Household type	Total (n=502)	LED high (n=97)
Younger couple, no kids	10%	15%
HH with youngest child under 5yo	12%	10%
HH with youngest child 5-13yo	11%	7%
HH with youngest child 14-17yo	7%	6%
HH with youngest child 18yo+	12%	21%
Older couple, no kids	21%	27%
Living alone	17%	7%
Flatting	9%	4%
Extended family	0%	1%
Others	1%	2%



19% of the market PROFILE OF LED HIGH USERS (II)



LED high users are less likely to use incandescent or CFL bulbs & are more likely to shop for their bulbs at DIY chain stores or lighting specialists; most are using LEDs a lot more than 3 years ago & the vast majority will continue using LEDs

NLQ7a Shopping for light bulbs	Total (n=502)	LED high (n=97)
Supermarket	84%	61%
DIY chain store	46%	62%
Lighting specialist	19%	33%
EL9 Light bulb usage	Total (n=502)	LED high (n=97)
Incandescent	58%	25%
CFL	65%	36%
LED	50%	100%
Fluorescent	20%	24%
Halogen	34%	27%
EL9 Light bulb consideration	Total (n=502)	LED high (n=97)
Incandescent	67%	38%
CFL	80%	56%
LED	79%	100%
Fluorescent	37%	35%
Halogen	55%	43%

NLQ7b Shopping for LED bulbs	Total (n=502)	LED high (n=97)
Supermarket	28%	60%
DIY chain store	27%	44%
Lighting specialist	15%	34%

NLQ3 LED usage now vs. 3 years ago	Total (n=502)	LED high (n=97)
A lot more	28%	79%
Slightly more	11%	5%
About the same	18%	14%
Slightly less	2%	0%
A lot less	3%	1%

EL11 LED future intention	Total (n=502)	LED high (n=97)
Continue using	43%	91%
Start using / use more	19%	6%
Stop using	4%	0%
Don't know	13%	3%

9b Light bulb prop the home	portions	Total (n=502)	LED high (n=97)
Incandescent	Low / non-users	23%	20%
	Flirt-users	17%	3%
	High-users	18%	2%
	Low / non-users	18%	28%
CFL	Flirt-users	19%	6%
	High-users	28%	2%
LED	Low / non-users	16%	0%
	Flirt-users	16%	0%
	High-users	19%	100%
Fluorescent	Low / non-users	17%	23%
	Flirt-users	2%	0%
	High-users	1%	1%
	Low / non-users	25%	22%
Halogen	Flirt-users	7%	4%
	High-users	3%	1%

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CFL USAGE BY ROOMS



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CFLs are more often used in the *bedrooms, lounge / living areas, kitchen / dining areas* & *hallways,* which are often higher-usage areas; usage is often lower in *bathrooms* & *outdoors,* which are often lower-usage areas



NLQ1: Can you tell us about the proportion of CFL bulbs you use in?

Base: CFL bulb users (n=327)

53

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JULY 2018 EECA-Led LineTrust Evaluation

PREPARED FOR:EECAPREPARED BY:IPSOSCONTACT:INFORMATION WITHHELD UNDER

SECTION 9(2)(A)



EEE@A Energy Efficiency and Conservation Authority Te Tari Tiaki Pūngao

EECA LED LINETRUST EVALUATION Table of Contents





EECA-LED LINETRUST EVALUATION



EXECUTIVE SUMMARY

- **Overall, the campaign can be considered a success.** The vast majority of people felt this was a worthwhile initiative, while the offer has led to an increase in intended uptake of LED bulbs and experiences using the bulbs have been predominantly positive.
- Reaction to the LED bulbs among First-Time LED Users was particularly positive. First-Time LED Users strongly felt this was a worthwhile initiative and were more likely to believe that LED bulbs *provide high-quality lighting*, which perhaps is a feature that can be mentioned in communications.
- Encouraging the trial of LED bulbs is a key aspect of promoting the uptake of LED lighting. First-Time LED Users and Existing LED Users rated LEDs much more positively than LED Non-Users. Future campaigns should focus on challenging LED Non-Users to switch light bulb types and communicating how non-LED lightbulbs waste money.
- Undersupply of light bulbs was an issue preventing some people from redeeming the offer. This is reflected by the fact that over a third of Non-Redeemers did not redeem because LineTrust had run out of light bulbs by the time they arrived. Given the appetite for the offer, having sufficient supplies available goes without saying.



RESEARCH OBJECTIVES AND METHODOLOGY

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RESEARCH OBJECTIVES AND METHODOLOGY Why and how we're conducting this research



RESEARCH BACKGROUND AND OBJECTIVES

 In April 2018 EECA worked with LineTrust South Canterbury on a promotion to offer customers five Ecobulb LED light bulbs for free. There was a two-day window on 27th and 28th April to collect them, and in the end all of the available 45,000 led bulbs were given out to local customers.

This study examines the following:

- How successful this approach was in getting people to install LED light bulbs in their homes and the benefits arising as a result.
- To what extent this approach has reached people who have not tried LED light bulbs before, and the reactions of people who have now tried the bulbs.

RESEARCH METHODOLOGY

- A CATI survey of 300 household ratepayers accessed by a telephone list was conducted in the South Canterbury region.
- Interviews were completed from 21st to 29th June 2018 with an average interview duration of 11 minutes.
- The margin of error on a sample size of 300 is ±5.66%. For the NZ population the figure used is 4,887,740 from the Statistics NZ estimate as at 2nd July 2018.

SAMPLE PROFILE We interviewed the following people...







Income

50% \$60,000 or less
11% \$60,001 to \$70,000
14% \$70,001 to \$100,000
8% \$100,001 to \$120,000
4% \$120,001 to \$140,000
3% \$140,001 or more
10% Don't know / Refused



Household type

20% Household with children
25% Single / one-person household
1% In a flatting arrangement
53% Older couple, no kids at home
0% Younger couple without kids
1% Other

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SEGMENTS Redemption type segments





SEGMENTS LED user status segments





OVERALL EVALUATION OF THE LED LINETRUST OFFER

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OVERALL EVALUATION Overall, most believe that the free LED offer was a worthwhile initiative



 OE1: To what extent do you agree or disagree that this free LED offer was a worthwhile initiative from LineTrust South Canterbury?

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 Base: Total sample (n=300)

OVERALL EVALUATION



Those who redeemed and used the LEDs were more likely to strongly agree that the free LED offer was worthwhile



OE1: To what extent do you agree or disagree that this free LED offer was a worthwhile initiative from LineTrust South Canterbury?

11 © 2018 Ipsos. Base: Total sample (n=300)



OVERALL EVALUATION



First-Time LED Users had a particularly favourable view on the initiative, while LED Non-Users were less likely to believe it was worthwhile



OE1: To what extent do you agree or disagree that this free LED offer was a worthwhile initiative from LineTrust South Canterbury?







NR1: Can you tell me why you did not take up the offer for free LED light bulbs? / **NR2:** And can you tell me the main reason why you did not take up the offer?

13 © 2018 lpsos. **Base:** Non-Redeemers (n=136)

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Energy Efficiency and

OVERALL EVALUATION - REDEEM AND USE

There has been an encouraging response amongst redeem and use, with a high rate of LED bulbs replacing non-LED bulbs in high-usage rooms



RU2: How many light bulbs have you replaced with the new LED light bulbs you received? / **RU3:** And how many of those LED light bulbs to bulbs replaced non-LED light bulbs in your home? / **RU4:** Which room(s) or area(s) of your home did you put those new LED light bulbs, and how many bulbs did you put in each room?



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Base: Redeem and Use (n=129)

se (n=129)

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Redeem and Use

OVERALL EVALUATION – REDEEM AND USE Just under half of those who used the LED bulbs did so for the first time, with most of these respondents having a positive experience

Yes No ■ 10 - Extremely positive ■ 9 ■ 8 ■ 7 ■ 6 ■ 5 ■ 4 ■ 3 ■ 2 ■ 1 - Extremely negative Those who 46% 21% 5% answered 'Yes' It sounds like you haven't had a particularly positive experience with your new LED light bulbs, can you tell me how come that's the case? 44% 56% "With one LED being faulty (blinking), this has influenced my thinking about them." "They didn't have the size wattage. They only had the one size 9 watt, which was equivalent to a 100W incandescent bulb, which wasn't correct to what they are comparing to." "Two have burnt out already." **RU5:** Was this the first time you've used LED lighting in your home? **Base:** Redeem and Use (n=129) RU6: Given this was the first time you've used LED lighting in your home, how positive or negative has your experience been with using them? Base: First-Time LED Users (n=57)

First time using LED lighting?

Experience of first time using LED lighting

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15

© 2018 lpsos. **RU7**: It sounds like you haven't had a particularly positive experience with your new LED light bulbs, can you tell me how come that's the case? **GAME CHANGERS Base**: First-Time LED Users who had a negative experience (n=4)



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Energy Efficiency and

OVERALL EVALUATION - REDEEM AND USE

Only a small portion of those who used the LED bulbs experienced issues with them, while the majority did not see a reduction in their power bill



```
Noticed a reduction in your power bill?
```

■ Yes ■ No ■ Too soon to tell ■ Don't know



RU8: Have you experienced any issues with the new LED light bulbs, e.g. stopped working? / **RU9:** And since replacing your light bulbs with the new LED light bulbs, have you noticed any reduction in your power bill? **Base:** Redeem and Use (n=129)







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OVERALL EVALUATION - REDEEM AND NOT USE

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Base: Redeem and Not Use (n=35)

Just under half of those who redeemed and did not use the LED bulbs did so because they were waiting for existing light bulbs to need replacing



RN1: Can you tell me why you haven't used any of the new LED light bulbs yet? / **RN2:** And can you tell me the main reason why you haven't used them yet?





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Use



OVERALL EVALUATION SUMMARY AND IMPLICATIONS Overall the campaign can be considered a success, with results underlining the importance of supply and the importance of encouraging trial

- Overall, the campaign has been largely successful. The vast majority (84%) of those who received the voucher believed that the offer was a worthwhile initiative.
- Non-Redeemers were less likely to feel positive about the campaign. Their experience was impacted by the undersupply of light bulbs and overwhelming demand for the offer. Some 43% of Non-Redeemers didn't take up the offer because LineTrust had run out of light bulbs, whilst the time / date of redemption did not suit for 20% of them.
- The offer has increased usage of LED light bulbs in the home. Of those who redeemed and used the LED light bulbs, the majority (93%) replaced non-LED bulbs.
- The campaign has led to positive uptake among first-time users. Some 88% of first-time users had a positive experience using their LED light bulbs, emphasising the importance of encouraging trial to change opinions.
- The majority of Redeemers who have not used their new LED lightbulbs are waiting for their existing bulbs to need replacing (49%) or they are yet to get around to replacing them (29%). Getting these people to replace now to avoid wasting money instead of waiting needs to be included in messaging to assist with triggering change.





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HOUSEHOLD LIGHTING LED bulbs were the most common bulb in households, followed by traditional incandescent bulbs



EL1: Which of the following types of light bulbs do you have in your home? / EL2: And of all the light bulbs in your home, how many would you say are [INSERT LIGHT BULB TYPE]? Would you say only a few, about a quarter, around a half, most of them, or virtually all of them? **GAME CHANGERS**



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Base: Total sample (n=300)



LED Non-Users are the least likely to purchase LED bulbs in the future, indicating that trial is an important factor in encouraging future use



you say...? 21 © 2018 Ipsos. **Base:** Total sample (n=300)

GAME CHANGERS

Green is sig. \uparrow , Red is sig. \downarrow than Total



HOUSEHOLD LIGHTING The majority are likely to purchase an LED bulb in the future, with key reasons for this being *lower energy costs* and *longevity* of LED bulbs

Likelihood to purchase an LED bulb



Can you tell me what is impacting your likelihood to purchase? **Base:** Likely to purchase (n=252)



Among the likely LED purchasers, First-Time LED Users were significantly more likely to believe that LED bulbs *provide high-quality lighting*





Those who redeemed the voucher and used the LED bulbs were more likely to believe that *the pros of LEDs completely outweigh the cons*



ELG: And thinking about the pros and cons of using LED bulbs, for you personally, how do the pros currently compare with the cons?



© 2018 Ipsos. Would you say...? Base: Total sample (n=300)

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Even among LED Non-Users, the view on LED bulbs is generally favourable, with this group also more likely to lack an opinion about LED bulbs



ELG: And thinking about the pros and cons of using LED bulbs, for you personally, how do the pros currently compare with the cons? Would you say...?



GAME CHANGERS

Green is sig. \uparrow , Red is sig. \downarrow than Total

© 2018 lpsos. Base: Total sample (n=300)

25

Energy Efficiency and Conservation Authority Te Tari Tiaki Pūngao IEE@ **PROFILE OF LED FIRST-TIME USERS** Most First-Time LED users were older couples with no children living at home (63%)

First-Time LED Users



andar	

Gender	(n=300)	(n=57)
Male	48%	51%
Female	52%	49%

Total

First-Time User

Age group	Total (n=300)	First-Time Use (n=57)
Nett 25-44	6%	7%
Nett 45-64	36%	33%
Nett 65+	58%	60%

Type of area	Total (n=300)	First-Time User (n=57)	\$100,001 to \$120,000 \$120,001 to \$140,000
City or town	83%	77%	More than \$140.000
Rural	17%	23%	

Home ownership	Total (n=300)	First-Time User (n=57)
Owner	98%	93%
Renter	2%	5%
Other	0%	2%

Total household income per year	Total (n=300)	First-Time User (n=57)
\$60,000 or less	50%	54%
\$60,001 to \$70,000	11%	16%
\$70,001 to \$100,000	14%	12%
\$100,001 to \$120,000	8%	2%
\$120,001 to \$140,000	4%	4%
More than \$140,000	3%	2%

Household situation
Younger couple - no children
HH - youngest child under 5
HH - youngest child 5-13
HH - youngest child 14-17
HH - youngest child 18+
Older couple - no children or none living at home
Single / one-person HH
In a flatting arrangement
Other

	Total (n=300)	First-Time User (n=57)
dren	0%	0%
er 5	1%	0%
	8%	7%
7	5%	5%
	6%	4%
n or	53%	63%
	25%	19%
t	1%	2%
	1%	0%



PROFILE OF EXISTING LED USERS Existing LED Users are more prevalent among those with a total household income of over \$70,000 and those aged 45-64

Existing LED Users

Total (n=300)	Existing Users (n=176)	Home ownership	Total (n=300)	Existing Users (n=176)	Household situation	Total (n=300)	Existing Use (n=176)
48%	52%	Owner	98%	98%	Younger couple - no children	0%	0%
52%	48%	Renter	2%	2%	HH - youngest child under 5	1%	1%
		Other	0%	0%	HH - youngest child 5-13	8%	9%
Total	Existing Users				HH - youngest child 14-17	5%	5%
(n=300)	(n=176)	Total household	Total	Existing Users	HH - youngest child 18+	6%	9%
6%	7%	income per year	(n=300)	(n=176)	Older couple - no children or	53%	56%
36%	40%	\$60,000 or less	50%	41%	Single / one person HH	25%	100/
58%	53%	\$60,001 to \$70,000	11%	9%	In a flatting arrangement	1%	10/0
		\$70,001 to \$100,000	14%	17%	Othor	10/	10/
Total	Existing Users	\$100,001 to \$120,000	8%	11%	Other	1%	1%
(n=300)	(n=176)	\$120,001 to \$140,000	4%	5%			
83%	84%	More than \$140,000	3%	4%			
17%	16%						
	Total (n=300) 48% 52% Total (n=300) 6% 36% 58% Total (n=300) 83% 17%	Total (n=300) Existing Users (n=176) 48% 52% 52% 48% 52% 48% 52% 48% 52% 48% 52% 48% 52% 48% 52% 48% 52% 48% 52% 48% 52% 48% 53% 7% 36% 40% 58% 53% Total (n=300) Existing Users (n=176) 83% 84% 17% 16%	Total (n=300) Existing Users (n=176) Home ownership 48% 52% Owner 52% 48% Renter 52% 0ther Total (n=300) Existing Users (n=176) Total household income per year 6% 7% 36% 40% 58% 53% 58% 53% 58% 53% 58% 53% 58% 5100,001 to \$100,000 \$70,001 to \$100,000 \$100,001 to \$120,000 \$100,001 to \$140,000 \$120,001 to \$140,000 More than \$140,000	Total (n=300) Existing Users (n=176) Home ownership Total (n=300) 48% 52% Owner 98% 52% 48% Renter 2% Other 0% 0% Total (n=300) Existing Users (n=176) Total household income per year Total (n=300) 6% 7% 560,000 or less 50% 58% 53% \$60,001 to \$70,000 11% \$70,001 to \$100,000 14% \$120,001 to \$140,000 4% 83% 84% More than \$140,000 3%	Total (n=300) Existing Users (n=176) Home ownership Total (n=300) Existing Users (n=176) 48% 52% Owner 98% 98% 52% 48% Covner 98% 98% 6% 7% Other 0% 0% 58% 53% S60,000 or less S60,001 to \$70,000 11% 9% 58% 53% \$100,001 to \$120,000 14% 17% 683% 84% More than \$140,000 3% 4%	Total (n=300) Existing Users (n=176) Home ownership Total (n=300) Existing Users (n=176) Household situation 48% 52% Owner 98% 98% 98% Younger couple - no children 52% 48% Other 0% 0% HH - youngest child 15-13 Total (n=300) Existing Users (n=176) Total household income per year Total household income per year Total (n=300) Existing Users (n=176) HH - youngest child 18+ 6% 7% 560,000 or less 50% 41% Sigle / one-person HH in a flatting arrangement 58% 53% 5100,001 to \$120,000 8% 11% Other 70.001 to \$100,000 \$100,001 to \$120,000 8% 11% Other 17% 16% 84% 3% 4% 5%	Total (n=300) Existing Users (n=176) Home ownership Total (n=300) Existing Users (n=176) Household situation Total (n=300) 48% 52% 0wner 98% 98% 98% Younger couple - no children 0% 52% 48% Cher 2% 2% H+ - youngest child under 5 1% 0ther 0ther 0% 0% HH - youngest child 14-17 5% 6% 7% Total household income per year Total household income per year Total household income per year 50% 41% HH - youngest child 18+ Older couple - no children or HH - youngest child 18+ Older couple - no children or ine living at home 53% 58% 53% 50,000 or less 50% 41% 5% 500,001 to \$100,000 11% 9% 11% 0ther 25% 100,001 to \$100,000 \$100,000 8% 11% 0ther 1% 11% 9% 11% 5% 0ther 1% 100,001 to \$100,000 8% 11% 0ther 1% 11%

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PROFILE OF LED NON-USERS LED Non-Users are more likely to earn less than \$60,000 per year and live in a single / one-person household

LED Non-Users



Female	52%	64%
Age group	Total (n=300)	Non-Use (n=67)
Nett 25-44	6%	3%
Nett 45-64	36%	30%
Nett 65+	58%	67%

Total

(n=300)

48%

Non-Users

Type of area	Total (n=300)	Non-Users (n=67)	
City or town	83%	85%	
Rural	17%	15%	

Home ownership Owner

Renter Other

Total household income per year \$60,000 or less \$60,001 to \$70,000 \$70,001 to \$100,000 \$100,001 to \$120,000 \$120,001 to \$140,000 More than \$140,000

р	Total (n=300)	Non-Users (n=67)
	98%	99%
	2%	1%
	0%	0%

	Total (n=300)	Non-Users (n=67)
	51%	<mark>72%</mark>
	11%	12%
	14%	6%
0	8%	4%
0	4%	0%
	3%	1%

Household situation			
Younger couple - no children			
HH - youngest child under 5			
HH - youngest child 5-13			
HH - youngest child 14-17			
HH - youngest child 18+			
Older couple - no children or none living at home			
Single / one-person HH			
In a flatting arrangement			
Other			

Total (n=300)	Non-Users (n=67)	
0%	0%	
1%	0%	
8%	7%	
5%	3%	
6%	1%	
53%	34%	
25%	51%	
1%	1%	
1%	1%	



HOUSEHOLD LIGHTING SUMMARY AND IMPLICATIONS



Usage of LED bulbs in the South Canterbury region is high; emphasis should be put on educating non-users about the benefits of LED light bulbs

- Overall, usage of LED light bulbs is considerably high. Three-quarters of respondents have LED light bulbs in their home.
- The majority of First-Time LED Users and Existing LED Users are likely to purchase an LED bulb next time they are required to purchase a bulb.
- Perceived benefits of LED light bulbs are that they help lower energy costs, they last longer than traditional light bulbs and they provide high-quality lighting. Their disadvantages are that it's hard to justify the extra cost of LED bulbs and people are happy with what they currently use. These views are more prevalent amongst LED Non-Users, who tend to have lower incomes, and therefore the value proposition case also needs to be made.
- The results suggest First-Time LED Users have noticed an increase in lighting quality after replacing their bulbs.
 First-Time LED Users were significantly more likely to believe that LED bulbs provide high-quality lighting.
- There is a degree of unawareness among LED Non-Users of the benefits and disadvantages of LED light bulbs. Future campaigns should focus on non-users and educating this group on the overall benefits of LED light bulb usage, as well as how using non-LED lightbulbs is wasting money – especially as they tend to be lower income.

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APPENDIX

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There is little difference between the three groups in terms of the areas in which they typically have lighting on during the winter hours of 6pm and 9pm



APPENDIX



Living areas and kitchens are the main areas in the home where people typically have lighting on between the hours of 6pm and 9pm in winter





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Contacts

Information withheld under section 9(2)(a)

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GAME CHANGERS

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Landlords Market Understanding

Understanding landlords' knowledge of insulation requirements of the Residential Tenancies Act

Information withheld under section 9(2)(a)



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Draft Report 10-04-17






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Final Summary and Conclusions



Appendix: Fully insulated landlords



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Appendix: Community Card Holders

Contacts





THE STARTING POINT



The law changes to the Residential Tenancies Act are now in force.

Residential rental homes in New Zealand will be required to have insulation.

Social housing (where tenants pay an income-related rent) must be insulated by 1 July 2016 and all other rental homes by July 2019.

Landlords are required to provide a statement on the tenancy agreement for any new tenancy commencing from 1 July 2016 about the location, type and condition of insulation in the rental home. Installing conductive foil insulation in residential and rental homes is now banned.

EECA wishes to support an early uptake of insulation compliance for rental properties by running a communication campaign. Several communication hypotheses have been developed based on the existing research findings (EECA Consumer Monitor and Ogilvy Landlord report), but more research is needed to fully understand the needs and motivations of landlords, in particular 'Ma and Pa' type investors.



EECA'S CHALLENGE



Identifying the most relevant communication messages to accelerate the uptake of compliance with the new insulation requirements for rental properties



EECA wishes to support an early uptake of insulation improvements for rental properties by running a communication campaign that will promote the insulation funding programme "Warm-up New Zealand: Healthy Homes".

Impact of EECA's campaign



To reach this objective, EECA needs to have a deeper understanding of landlords' needs and motivations. The findings will be used to identify the messages that resonate most with landlords in order to educate and encourage them to be in early compliance with the new insulation requirements. 'Ma and Pa' landlords will be an important target group. How to help drive early compliance?



This will enable EECA to best strategize on where to focus its effort to drive early compliance with the new insulation requirements of the Residential Tenancies Act, and greater uptake of the WUNZ subsidy.



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THE STARTING POINT We interviewed a specific segment of interest and not the entire landlord market



We spoke to landlords who own at least one **free-standing** property (e.g. not an apartment)



We also deliberately sampled a small number of landlords who had **fully insulated in the last 12 – 24 months** as a specific group of interest.



Had a least one property that was **built before 2000.**



Amongst those landlords with a portfolio of properties, they would be asked questions on relevant properties only. e.g. a landlord has one out of three properties before 2000, they would only be asked about that one property assuming it fits the criteria of fee-standing and not fully insulated.



Had at least one property that is **not fully insulated** (e.g. ceiling and underfloor insulation where possible can be improved).







THE STARTING POINT CONT. Where applicable results are looked at in three different ways





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Profiling: Landlord approach to Rental Investment





WHO ARE AMATEURS?



Amateurs are starting out on their 'landlord journey', often they have evolved into that position through circumstance rather than intended design



They are more likely to be 40 to 49 years.

They are slightly more likely to be female.

They are slightly more likely to have an income under \$100,000 per year.



Almost all own a stand-alone house.

Improving floor insulation is a comparatively bigger issue recognised by this group.

They are more likely to have no properties fully insulated.

ATTITUDES



When asked what was their motivation to buy a new rental, they were slightly more likely to say:

- It was their first home.
- They bought it for family use.





AMATEURS & THEIR RENTAL PROPERTIES



As 'ma and pa' investors, they are more likely to be hands-on and reactive with their management, and tend to have 'shallow' relationships with their tenants

MANAGING RENTAL



They are slightly more likely to manage their own properties

The factors looked at when something needs improvement is due to urgency and the quality of work they can get.

KEEPING INFORMED



Slightly less likely to be members of the PIA.

Their top 3 sources of information are:

- News media
- Property manager
- Family / friends

They are also more likely to seek advice from consumer information websites, such as ENERYWISE, and their lawyers.

TENANTS



Slightly more likely to have tenants that stay for less than 2 years.

They are also less likely to know if their tenants have a CSC.







WHO ARE SEMI-PROFESSIONALS? Semi-professionals are well into their 'landlord journey', having a portfolio of different rental property types and their approach is more as a business



They are more likely to be 50-64 years.

They are slightly more likely to be male.

They are slightly more likely to have an income over \$140,000 per year.



They are more likely to own a property in the city and have a range rentals homes, including semidetached homes or units.

Improving both ceiling and floor insulation is recognised issue for this group, but are more likely to have their properties fully insulated.

ATTITUDES



When asked what was their motivation to buy a new rental, they were more likely to say:

- Income for retirement.
- Based on how it fits with my overall portfolio of investments.







SEMI-PROFESSIONALS & THEIR RENTAL PROPERTIES They are less likely to be hands on with their properties and take a longer term view on maintenance, but tend to have 'deeper' relationships with tenants

MANAGING RENTAL



They are slightly more likely to manage their properties through a property manager.

The main factor they look at when upgrading or maintaining the home is keeping the property in good condition.



They are slightly more likely to be members of the PIA

Their top 3 sources of information are:

- Property manager
- MBIE
- Mainstream and news media

They are also more likely to get their information from landlord associations, MBIE and a property manager.

TENANTS



They are slightly more likely to have tenants that stay with them for over 2 years.

They are also likely to know they have tenants who hold a CSC.

Potentially having a property manager assists them in having more knowledge about their tenants CSC status.





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AMATEURS AND SEMI-PROFESSIONAL PROFILING SUMMARY The two landlord types require different levels of messaging and support, and will be reached via different channels

	AMATEURS	SEMI-PROFESSIONALS
Level of support	Amateurs will need more support when it comes to both awareness and compliance.	Semi-professionals are generally more informed, so will require less support in regards to awareness, and set focus on understanding compliance obligations.
Method of tonality	Messaging should be that EECA is here to help ensure you are compliant with your rental property and that planning now is better than leaving until the last minute, esp. if your tenant is a CSC card holder.	Tonality needs to be more of a reminder to get things done, rather than an educational tool. Also that WUNZ funding is limited, so getting in now is important.
Media Channel	Given that mass media is a dominant channel for staying informed, ATL is a suitable avenue for these types of landlords to drive greater awareness.	Property managers will be a key channel, so they too will need to know about current funding availability for their landline clientele.





Current status of rental properties and intentions to upgrade insulation





A NOTE ABOUT INSULATION STATUS

Actual insulation status may not reflect what is self-reported

For the purposes of this study, a house is fully insulated if it meets the RTA requirements of ceiling and floor insulation (where possible).

Meeting legal requirements of insulation status is self-reported by the landlord

Further to this, requirements around R-values are not explored.



Overall, this means that the status of insulated rental properties could be over-stated due to lack of factual knowledge by the landlord. This in itself presents a different opportunity for EECA to address.





INSULATION STATUS BY SEGMENT Amateur landlords are more likely to have no properties that are fully insulated, with underfloor a particular area of improvement compared to semi-professionals

Property portfolio by segment







INTENTION TO UPGRADE INSULATION BY SEGMENTS Properties in terms of amateurs are presently either undecided or don't intend to upgrade ceiling or underfloor insulation; floor has lower levels of intention to upgrade

Intention to upgrade ceiling insulation

I plan to install or upgrade in 22% 48% the next 12 months I plan to install or upgrade but not in the next 12 23% months I don't know or I'm undecided if I will install or 39% 27% upgrade ceiling / underfloor insulation I don't ever plan to buy, 5% install or upgrade ceiling insulation

Intention to upgrade underfloor insulation

I plan to install or upgrade in 25% 30% the next 12 months I plan to install or upgrade but not in the next 12 31% 17% months I don't know or I'm undecided if I will install or 35% 36% upgrade ceiling / underfloor insulation I don't ever plan to buy, 9% 17% install or upgrade underfloor insulation



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UNDERSTANDING MOTIVATIONS AND BARRIERS Landlord & EE@A Amongst those 59% intending to install, regulations are the main driver for this, although there is also an emotional driving of wanting to benefit tenants

Why are you intending to install or upgrade insulation in one or more of your properties? - Spontaneous



Mb1a. Can you tell me in a bit more detail what prompted you to plan to install or upgrade ceiling / underfloor insulation in one or more of your rental properties? **Base:** Those who plan to install or upgrade insulation for at least one property (n=117)

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UNDERSTANDING MOTIVATIONS AND BARRIERS Landlord Landlord And when prompted with a list of possible reasons, importance of rational (compliance) and emotional (tenant benefits) drivers are even more notable

Key reasons why you're planning to install or upgrade insulation - Prompted



MB2a/b. And which of the following are the key reasons you are planning to install or upgrade your ceiling / underfloor insulation? Base: Those who plan to upgrade / maintained insulation (n=117)



UNDERSTANDING MOTIVATIONS AND BARRIERS Landlord & EECA 99% of those who are undecided or not intending to install, cite costs as the key reason, followed by having other forms of insulation and structural issues

Why you're undecided or unlikely to install or upgrade ceiling or underfloor insulation? - Spontaneous



MB1b. Can you tell me in a bit more detail why you're undecided about ceiling / underfloor insulation in one or more of your rental properties? **Base:** Those who are undecided to install or upgrade insulation for at least one property (n=96)



GAME CHANGERS



And when prompted with a list of possible reasons, there is greater nuance around barrier of costs, with indifference and inaccessibility still notable

Key reasons why you're undecided or unlikely to install or upgrade insulation - Prompted

NETT Cost	35%			
I don't have enough money or the cost is too much	18%			
I am not willing to invest any more in this house	15%			
We intend to sell the home soon so this isn't really worth it	11%			
I'm not convinced of the payback (ability to charge a higher rent)	10%			
Other competing expenses are priorities compared to this.	7%			
It is not a problem or I don't think I need to at this stage	34%			
Inaccessibility to the ceiling and / or underfloor space	31%			
I haven't really thought about it until now	15%			
It is too difficult to install or too disruptive	15%			
I'm not convinced of the payback (less turnover of tenants)	8%			
I just don't want to do it	7%			
I'm unsure about the benefits for my tenants	6%			







SECTION SUMMARY There is a clear opportunity to encourage landlords, especially amateurs, of the need to upgrade insulation in their rental properties



Amateur landlords are a larger target of concern given comparatively lower levels of full insulation and future intention to insulate; whereas semi-professionals for the most part have higher intention levels in regards to compliance and taking action

However, across landlord types there is a reticence towards upgrading underfloor, which means this aspect of insulation will need to be highlighted in communications as something that is required



Those intending in the near future are being prompted by compliance to the RTA Although there is a emotional prompt which could be highlighted as a secondary benefit in communications.



Those undecided or unwilling to upgrade cite cost, indifference or inaccessibility as reasons for their inaction

They need to be guided to overcome each of these barriers through more knowledge about WUNZ funding (where possible), making them care (through a non-compliance 'stick') and that legally they are required to do this.





Awareness of the Residential Tenancies Act and WUNZ funding







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UNDERSTANDING OF THE NEW LEGAL REQUIREMENTS Landlord & Landlord &

What do you know about your new legal requirements?

NETT Insulation			70%		"	The property must be fully inculated and dry with			
Compulsory insulation needs to be installed		54	1%		а	means for heating it."			
Ceiling & underfloor insulation required	12%				"	Need working smoke alarms installed, long-life			
Disclose information about insulation installed	8%				ba no	atteries and a photoelectric sensor. Insulation is ow required."			
Compulsory smoke & fire alarms installed		39%							
Regulations in force by July 2019	8%			7	st	All rentals have to have smoke alarms and tatements from the landlord regarding the extent			
Health & safety - habitable housing	7%			h	as to be ceiling and underfloor insulation by July				
Regulations in force by a certain date	4%				r r	hake it help tenants not to be evicted easily."			
Other	4%			5	"F	Properties have to be insulated ceiling and			
Don't know or no response	12%				ui of	nderfloor by a certain date (which I'm not sure)."			
* Note: Only statements above 4% charted									



Energy Efficiency and Conservation Authority COMPLIANCE WITH THE LEGAL REQUIREMENTS Landlord & property in the second second

Are your properties compliant?

25

Property compliance by rental property insulation status







Respondents were then presented with this: "As part of the new Residential Tenancies Act, residential rental homes in New Zealand will be required to have ceiling and/or underfloor insulation where practically applicable by July 2019.

Landlords will be required to disclose the extent of insulation in their properties as part of the Tenancy Agreement from 1 July 2016."



Landlord AWARENESS OF THE TENANCIES ACT AND WUN7 There are high levels of importance and confidence, but there is still about 20% of landlords who do not think it is important or are confident that they will comply

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Confidence that you will comply with the new insulation requirements by 2019



AWARENESS OF THE TENANCIES ACT AND WUNZ Landlord & Landlord Those 4% who are 'not confident at all' will comply cite mainly financial barriers

Reasons why landlords are NOT confident they will not comply by 2019



A7B. Can you tell me why you're not confident with your ability to meet this timeline? **Base:** Those who are not confident they will meet the requirements by 2019 (scores 1-2)





Respondents were then presented with this: "Government subsidies are available to upgrade insulation of rental properties via the program Warm Up New Zealand: Healthy Homes until the end of June 2018."



AWARENESS OF GOVERNMENT SUBSIDIES Landlord & EEOA Some 40% of landlords know next to nothing about WUNZ subsidies, showing a clear need for further communications about their availability

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A8a. Government subsidies are available to upgrade insulation of rental properties via the program Warm Up New Zealand: Healthy Home until the end of June 2018. Which of the following statements best describes how much you know about it? **Base:** Total sample **GAME CHANGERS** (n=245)

INTENTION TO UTILISE GOVERNMENT SUBSIDIES Landlord & EECA WITH When presented with WUNZ subsidy offer and RTA requirements, ~60% of landlords report they will comply ASAP, which shows a role for communications



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Properties INTENTION TO UTILISE GOVERNMENT SUBSIDIES Stated intention to upgrade ceiling / underfloor insulation almost doubles once people are informed of the WUNZ subsidy offer







AWARENESS OF THE TENANCIES ACT AND WUNZ 41% said they would wait until the last minute to install or upgrade insulation. Options to assist with reducing the cost will motivate landlords to install quicker

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What would motivate you to install insulation sooner rather than later?



A9b. What would motivate you to install insulation sooner rather than later? **Base:** Those who will wait until last minute to take advantage of the subsidy or to comply with the new legal requirements (n=101)

AWARENESS OF THE TENANCIES ACT AND WUNZ Professional installers & trades people will be a route for landlords to ensure they comply, therefore are a channel to engage with making aware of WUNZ subsidy



Sources of information



A10. How do you intend to ensure you comply with the new insulation requirements. **IS1.** If you were seeking advice / information about installing / upgrading the insulation of your rental properties who would you seek information from? **Base:** Total sample (n=245)



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AWARENESS OF THE TENANCIES ACT AND WUNZ Tenants are not a strong prompter for landlords to get their properties properly insulated

Did your tenants asked you to improve insulation in their rental unit?







AWARENESS OF THE RESIDENTIAL TENANCIES ACT AND WUNZ FUNDING A high proportion are not fully cognizant of RTA requirements, with nearly half believing properties are compliant with insulation standards when they are not

Most landlords have heard of the RTA, which means there is no need to educate the market that it exists.

Close to three-quarters claim they are aware of the legal requirements, which again suggests the market is well-informed.

Two-thirds believe their properties are compliant with RTA requirements.

However, when self-reported insulation status is checked against compliance, this is not the case. A high number will unknowingly be not compliant, unless prompted to check, which could be a major obstacle to overcome if they believe the 'job is done'.





AWARENESS OF THE RESIDENTIAL TENANCIES ACT AND WUNZ FUNDING The high level of confidence to comply with requirements presents potential problems that need to be addressed



Most landlords are confident that they will meet the requirements of the RTA by 2019, but given current low levels of compliance in regards to insulation, this could mean the following:

- 1. Given they are unaware their properties are not compliant due to insulation, they could be caught out.
- 2. Between now and 2019 deadline, there could be a huge rush to insulate to meet requirements that the market may not be able to manage if it occurs within a short space of time.



WUNZ awareness can be improved to ensure more landlords are motivated to take up the offer, and when made aware it is a clear motivator to install ASAP.

- Particularly given that cost reduction is reported as one way to motivate them to install sooner rather than later.
- This could also assist with bringing forward insulation intention and smooth out any demand in the market.



Specialist installers could possibly be one of the key channels that could be used to inform and comply, along with EECA / ENERGYWISE who is the second most important key information source.




Final summary and conclusions

GAME CHANGERS



FINAL SUMMARY AND CONCLUSIONS Lack of compliance with RTA and lack of knowledge of WUNZ subsidy presents an opportunity for EECA/ENERGYWISE to educate the landlord market



Despite stated knowledge and compliance with RTA, actual (and self-reported) property insulation status indicates there is a major disconnect and a large number of landlords will not be compliant This could be a potential block to engagement with any RTA messaging and therefore communications would have to break through this by inertia by highlighting the fact that many landlords are assuming they are compliant when they are not.



There is, however, an openness to compliance as when landlords are presented with the insulation requirements of the RTA stated importance of having an insulated property and stated intention to upgrade is high.

- This suggest that messaging can trigger action, although the exact extent of that action is difficult to forecast.
- Hence, wrapping up messaging with layers of non-compliance (stick), tenant benefits (emotion) and not missing out on potential subsidy (loss aversion) may provide additional impetus to actually taking action.



WUNZ subsidy availability also needs promoting, as there tends to be a relationship between knowledge and intention to upgrade insulation.



Professional installers are one potential route for landlords to check that they comply (and potentially upgrade), and could also play a role communicating WUNZ subsidies, but there could be issues regarding trustworthiness

Property managers are also an avenue to specifically target semi-professional landlords.



FINAL SUMMARY AND CONCLUSIONS Both amateur and semi-professional landlords present opportunities and challenges that EECA/ENERGYWISE can address to achieve compliance by 2019

AMATEUR (80%)

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In general, amateur landlords require more support and guidance regarding how to ensure their rental properties are RTA compliant and that assistance is available (e.g. WUNZ) should they qualify

EECA / ENERGYWISE is well placed to deliver this message as it is ٠ already a source for providing information regarding insulation and 'mass media' is one of the dominant channels that amateurs use to keep up to date.

Amateurs are also less compliant with insulation requirements for their rental properties compared to semi-professionals, which means they will be a harder group to shift.

Any campaign would need to highlight that underfloor insulation is key requirement of the RTA and to be exempted the underfloor of the property has to be 'truly inaccessible' or they run the risk of not being compliant.

SEMI-PROFESSIONAL (20%)

Semi-professional landlords require less guidance in ensuring their rental properties are compliant with the RTA.

They show higher levels of awareness about the current and new insulation legal requirements. As well as higher levels of compliance.

Semi-professional landlords show higher levels of motivation with many indicating that it is important to be fully installed and that they intend to comply with the new legal requirements ASAP, so they will be an easier group to shift.

Most of these landlords are on their way to meet the deadline of being fully insulated by 2019. This means that EECA can focus raising awareness of WUNZ and leverage the cost reduction benefit to motivate them to install insulation sooner rather than later.



Functional (compliance) and emotional (tenant benefit) benefits of compliance would be an effective combination in communicating the need to insulate, as these are current drivers for both landlord types.







Appendix: Fully insulated landlords







FULLY INSULATED LANDLORDS



date, follow new legislation and for the well-being of their tenant What prompted you to install or upgrade insulation? - Spontaneous

Landlords would have recently installed insulation to keep their properties up to

Landlord Reference Conservation Authority Te Tari Tiaki Püngao



FULLY INSULATED LANDLORDS Their decision to install insulation would have been influenced by the new legal requirements of the RTA, as well as some advertising by ENERGYWISE or EECA



FI2. Which of the following did you see or hear that influenced you to install insulation? Base: Those who have fully installed insulation GAME CHANGERS





How did you manage the installation of the new insulation?



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Landlord Te Tari Tiaki Pungao FULLY INSULATED LANDLORDS The statements agreed upon by landlords as being a result from installing insulation are compliance with the RTA and offering a warm home for tenants

The result from installing or improving insulation in your rental properties



FI4. As a result of installing / improving the insulation of your rental properties, to what extent do you agree with the following statements. Base: Those who have fully installed insulation in the last 12 months (n=34)



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Appendix: Priorities for managing rental properties





Which of the following best describes how you manage your rental properties? regarding the ...?

involved in the selection of tenants and maintenance of their properties

Most respondents manage their own rental properties and feel that they are



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PRIORITIES FOR MANAGING RENTAL PROPERTIES

How involved are you with the decisions







PRIORITIES FOR MANAGING RENTAL PROPERTIES Landlord Landlord Landlord Landlord Termination of the Most of the factors considered by landlords are to do with the condition of the property and future benefits and costs

Factors to consider when improving or upgrading rental property





PRIORITIES FOR MANAGING RENTAL PROPERTIES Landlord & Landlord & Landlord with the set money aside for maintenance or renovations of their rental properties, most would set aside under \$5k per year







PRIORITIES FOR MANAGING RENTAL PROPERTIES Landlord & Landlord Prople consult a wide variety of sources but news and media are still the most prominent source of information

Influential information when making a decision - in relation to tenant





PRIORITIES FOR MANAGING RENTAL PROPERTIES Landlord & Landlord At the total level, most tenants stay over 2 years and almost a third hold a CSC. Also, landlords are more likely to see their tenants as customers







53 @

PRIORITIES FOR MANAGING RENTAL PROPERTIES property in the property in the property in the property in the property is the prop







PRIORITIES FOR MANAGING RENTAL PROPERTIES Landlord & Landlord & Comparison of landlords claim to 'understand a lot' about the legal requirements in regards to their rental properties





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sample

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PRIORITIES FOR MANAGING RENTAL PROPERTIES Landlord Detailed awareness of the RTA and the new legal requirements





Energy Efficiency and Conservation Authority PRIORITIES FOR MANAGING RENTAL PROPERTIES

Landlord & property



Property compliance amongst segments and insulation status



A5. Based on your current knowledge, are your property rentals compliant with current legal requirements? **Base:** Total sample (n=245) **A5.** Based on your current knowledge, are your property rentals compliant with current legal requirements? **Base:** are your properties compliant: Total sample (n=245), property compliance by rental property insulation status (n=413)

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PRIORITIES FOR MANAGING RENTAL PROPERTIES Landlord & Landlord Intention to hire a professional and using EECA/ENERGYWISE as a source of information by segments and insulation status



A10. How do you intend to ensure you comply with the new insulation requirements. **IS1.** If you were seeking advice / information about installing / upgrading the insulation of your rental properties who would you seek information from? **Base:** Total sample (n=245)



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DEMOGRAPHICS Demographic sample composition

Base: Total sample (n=245)





- 5% Younger couple without children
- 6% Other



2% Rest of Upper NI
40% Auckland City
29% Rest of Lower NI
10% Wellington
11% Canterbury
8% Rest of the SI







Appendix: Community Services Card (CSC) Holders





Landlord COMMUNITY SERVICE CARD HOLDERS A relationship exists between awareness of WUNZ and tenant's CSC status, but even among landlords who know the CSC status there is still a third that don't know

Does your tenant have a CSC?



Awareness of WUNZ if landlord is aware their tenant is a CSC holder



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T2. To your knowledge, do any of your (current / recent) tenants hold a Community Services Card? A8a. How much do you know about GAME CHANGERS

WUNZ? Base: Does your tenant have a CSC (n=245)

COMMUNITY SERVICE CARD HOLDERS property in COMMUNITY SERVICE CARD HOLDERS Appears to be a relationship between knowledge of tenants CSC status and intention to upgrade ceiling, although this pattern does not exist for underfloor



Intention to install underfloor insulation



Does your tenant hold a CSC?

T2. To your knowledge, do any of your (current / recent) tenants hold a Community Services Card? **I1.** Which of the following best describes your intention to install or upgrade the insulation in your own house and / or your rental? **Base:** Ceiling: n= 152, underfloor: n=186



GAME CHANGERS

Contacts

Information withheld under section 9(2)(a)





