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Individuals perceptions of electric vehicles and related policy: Findings from an online experiment

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Individuals perceptions of electric vehicles and related policy: Findings from an online experiment*

Siobhan Hutchings†

Abstract

We use an online experiment and survey to establish that consumers are misinformed about electric vehicles and that correcting misinformation has little impact on preferences for electric vehicles but some impact on electric vehicle policy preferences. Specifically, correcting misperceptions does not change consumers' willingness to support pro-electric vehicle government initiatives but does cause specific EV policies to be preferred more or less. We estimate the effect of correcting misinformation by employing two information treatments: an informative narrative and a fact sheet. These treatments successfully make electric vehicle perceptions more accurate, but neither narratives nor fact sheets are more successful at correcting misperceptions. We determine preferences using survey questions, relying on indirect and incentivised questions to rule out the influence of social desirability bias on participants' responses.

Keywords: Consumer preferences; Behavioral economics; Electric vehicles; Survey experiments, Information treatments.
JEL classifications: C83; C90; D12; D83; D91; L62; Q48.

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1 Introduction

Transitioning from internal-combustion vehicles (ICVs) to battery electric vehicles (EVs) has been promoted to reduce CO2 emissions and address the climate crisis (Brady and O'Mahony, 2011). Many governments have supported this transition and implemented policies encouraging switching to EVs (Zhang et al., 2014). However, despite governments' efforts, there is little consensus amongst the general public on whether EVs and EV policy are wanted. Differences in consumers' understanding of EV characteristics have been purported as a significant contributor to the division in public opinion. Literature suggests misperceptions cause individuals to underestimate EV benefits and systematically bias consumers against EVs (Wicki et al., 2023). These misperceptions may extend to influence policy preferences and cause consumers to misunderstand the value or effectiveness of EV policies. For these reasons, understanding the effect of EV knowledge and information on preferences is essential.

A growing body of research highlights an association between EV misperceptions and preferences (see Wicki et al. (2023) for a review). However, the existing literature does not rely on experimental techniques to test the effect of changing consumer perceptions on preferences and, therefore, does not convincingly establish a causal relationship. In addition, this research does not consider the effect of these misperceptions on policy preferences.

This paper uses an online experiment involving 704 Australian residents to explore the following question: Do information treatments correct misperceptions and result in reassigning preferences for EVs and EV policies? The experiment collects data on participants' EV perceptions alongside preferences for EVs and policy. Participants are provided with information treatments containing exact statistics about the characteristics of EVs and ICVs. The information contained in these treatments relates to (1) vehicle price, (2) charging costs, (3) lifetime emissions, (4) electricity costs, (5) public charging stations, and (6) charging time. We hypothesise that if individuals are well-informed, their demand for EVs and policies will not be affected. However, preferences could change if information treatments improve participants' understanding of EVs.

This paper also asks a second research question: Does framing of information (narrative versus simple fact sheet framing) influence EV understanding differently and subsequently affect preferences differently? In our experiment, participants are provided one of two information treatments: (1) a simple fact sheet and (2) facts framed as narrative. Both treatments provide the same hard facts; what differs is that the narrative treatment provides these facts with a surrounding storyline. We hypothesise that respondents are able to relate to information when it is presented as a nar-

rative. This helps individuals retain the information better than if presented as purely hard facts. Therefore, we hypothesise that narratives will better correct misperceptions and subsequently significantly affect preferences.

Our results show that individuals hold significant misperceptions about EV characteristics. We find that exposure to information treatments shifts perceptions closer to the actual values. However, we need to find evidence that the degree to which misperceptions are corrected differs depending on whether information treatments are framed as a narrative or a simple fact sheet. Ultimately, these findings suggest that information treatments are an effective means to correct misperceptions, but framing of information does not significantly affect misperceptions. We also find that information treatments have little significant effect on respondents' support for EVs or governments employing EV policy. These findings imply no systematic bias against EVs on account of misperceptions. Information treatments cause consumers to prefer different EV policies, suggesting that correcting misperceptions influences the perceived effectiveness of different policies. Misperceptions influence is a critical consideration for future research on EV and non-EV policy preferences.

A challenge in using survey responses to gauge EV preferences is that social desirability bias could influence responses. Specifically, respondents could overstate EV preferences due to a desire to appear environmentally conscious. To address this concern, we use incentivised indirect questions asking respondents their preferences for EVs and what they believe others' preferences are for EVs in their area. We offer monetary incentives for accurately guessing others' preferences to encourage truthful responses. Contradictory to expectations, respondents believed others were more willing to purchase and pay for EVs. This could reflect media and marketing efforts surrounding EVs, which encourage the public to believe EVs are more popular than they are.

Australia is an ideal setting for this study because there is a need to understand why Australian consumers (so far) have been slow to uptake EVs. In 2021, only 2.8% of Australia's car sales were electric. These sales are low relative to other OECD countries: 17% of sales in Europe, 5% in the USA and 4.4% in New Zealand (National Transport Commission, 2022). This suggests a need for research into understanding Australians' preferences to inform policymakers. Our results on existing support for EVs and policy may be specific to the Australian context. However, findings regarding the role of misperceptions and information treatments are widely applicable to other settings.

The main contribution of this paper to the existing literature is to provide causal evidence using experimental methods to determine whether or not a link exists between EV misperceptions and

EV preferences. Several studies have found that consumers have a poor understanding of EV technology and frequently misunderstand EVs' safety, cost, range and charging process (Axsen et al., 2015, 2017; Dimitropoulos et al., 2013; Krause et al., 2013; Lane and Potter, 2007). Research suggests these misunderstandings tend to result in consumers underestimating the advantages of EVs (Krause et al., 2013). These negative misperceptions have the potential to systematically bias consumers against purchasing EVs. Several papers support this theory; Axsen and Kurani (2012) link hybrid vehicle adoption to knowledge, Wang et al. (2018) link EV misperceptions to unwillingness to purchase and Egbue and Long (2012) link EV misperceptions to low EV acceptance. These papers largely rely on surveys and observational studies to identify an association between misperceptions and EV acceptance. Our paper complements these existing studies by providing convincing evidence for a causal relationship with experimental methods. Using information treatments to influence consumers' EV knowledge experimentally allows us to establish a clear link between information (or imperfect information) and EV preferences.

A few papers look at the effect of information treatments on EV (or hybrids) preferences and adoption. These papers primarily address misperceptions in lifetime costs and fuel economy (Electric Vehicle Council, 2023) or couple information treatments with experience of EVs not segregating the effect of an information-only intervention (Aravena and Denny, 2021). There is one exception, Wicki et al. (2023) a randomised controlled trial on the effect of information treatments on Swiss ICV drivers' adoption of EVs. The findings from this paper were inconclusive because of insufficient sample size, the treatments being too dense with information and selection bias caused by participants volunteering to receive EV information. This research addresses these concerns by relying on a simplified information treatment and ensuring participants are blind to the focus of the research on EVs. Furthermore, unlike Wicki et al. (2023) this research extends to consider the effect of information treatments on EV policy preferences.

There is extensive literature detailing the effect of policies on EV preferences. These existing studies are mainly choice experiments that test whether consumers are more likely to prefer/purchase an EV if offered with a policy incentive. For example, these experiments ask individuals "would you buy an ICV or an EV with a $1,000 tax cut" (Hackbarth and Madlener, 2013; Hess et al., 2012; Hoen and Koetse, 2014; Mau et al., 2008; Potoglou and Kanaroglou, 2007; Qian and Soopramanien, 2011). Limited research measures consumers' preferences for different types of EV policies or consumers' willingness to dedicate the government budget to EV policy. This research addresses this gap in the literature and provides empirical insight to policymakers about the consequences of policy intervention and the effect on preferences.

Thirdly, this paper contributes to existing research on the effect of information treatments and correcting misperceptions on policy preferences. Some notable studies have tested the effect of information treatments on policy preferences in immigration (Alesina et al., 2018), income distribution (Cruces et al., 2013) and international redistribution (Nair, 2018). There is little research on the effect of EV misperceptions on preferences for EV policies. As already established, research suggests that consumers need to be more informed about EVs. These misperceptions will likely affect the policies consumers believe are beneficial or valuable. This could result in consumers mistakenly preferring and supporting specific policies. For example, if a consumer mistakenly believes there are few EV public charging stations in their area, they might support building charging infrastructure. If these misperceptions were corrected, they could view this policy as being an unnecessary use of tax or government budget. This study considers the influence of incomplete information and provides insight into the role misperceptions have on policy preferences.

This paper also contributes to existing literature investigating the effects of narratives and information framing. Very few economic papers explore the use of information represented as a narrative on perceptions (Haaland et al., 2023). Studies have found there are communicational benefits from delivering information as narratives for indoor radon (Golding et al., 1992), vaccinations (Betsch et al., 2011), cancer prevention behaviours (Kreuter et al., 2007) and gene editing (Yang and Hobbs, 2020). Studies find that simply reframing information and providing the same facts in a passive, first-person story can affect attitudes (Yang and Hobbs, 2020). There are different explanations for the effects of information reframing. Golding et al. (1992) suggested that narratives are more familiar and, therefore, more digestible. Similarly, Yang and Hobbs (2020) suggested that information is understood more as a story, but it is also more engaging and memorable. This study will test these findings' applicability to the EV context and provide further insights to researchers and policy markers about the significance of framing information interventions.

This paper's final contribution is considering how social desirability bias may influence individuals' reported preferences for EVs. Social desirability bias results in respondents altering how they answer questions to appear socially acceptable or desirable (Fisher, 1993). Adopting an EV is often perceived as pro-environmental and pro-social behaviour, (Li et al., 2017). Previous research suggests that respondents overstate their willingness to pay and preferences for EVs due to social desirability bias (Jabeen et al., 2018; Smith et al., 2017). For this reason, we rely on indirect questions that ask respondents whether and to what extent they believe others in their area prefer EVs and EV policies. Indirect questioning (also known as inferred valuation) is a tool employed to measure preferences without the influence of social desirability bias (Fisher, 1993). This technique is built upon two ideas: (1) because people do not know others' preferences, their beliefs about

other preferences are based on their own, (2) people do not derive social utility from misrepresenting others' beliefs, and so social desirability bias does not influence responses to indirect questions (Carson and Louviere, 2011). Indirect questioning has been shown to reduce the incidences of pro-social responses. Sometimes, offering respondents monetary incentives for correctly guessing others' beliefs resulted in fewer pro-social responses (Carson and Louviere, 2011). Testing this idea in the EV context, this research investigates the difference between consumers' responses about their own EV preferences and policies and their beliefs about others' EV preferences and policies when offered a monetary incentive for accurately guessing others' beliefs.

In summary, we are testing the following four research questions: Q1: What are perceptions of EV characteristics? Q2: Do information treatments align EV perceptions with facts? Q3: Will information treatments framed as a narrative more effectively align perceptions with facts than a simple fact-sheet treatment? Q4: Do information treatments influence preferences for EVs and EV policy? Q5: Does indirect questioning with incentivised survey methods elicit EV preferences that differ from individuals who directly stated EV preferences?

2 Conceptual Framework and Hypotheses

Q1: What are perceptions of EV characteristics?

In line with previous studies we expect to observe misperceptions about EVs' (relative to ICVs). The majority of previous studies did identify misperceptions amongst consumers outside of Australia but we assume that globally EVs' are a relatively misunderstood good on account of their newness. Specifically, we expect to observe the following perceptions across the following areas:

- Underestimation of operating and maintenance costs as seen in Krause et al. (2013),
- Accurate perceptions of purchase price as seen in Krause et al. (2013),
- Overestimation of EV charger costs on account of consumers tendency to inflate EV costs and this being perceived as an add-on cost which consumers may have considered or researched less,
- Inaccurate perception of number of public charging stations as this is information that would likely only become known after extensive search,
- Inaccurate perceptions of an EVs' lifetime CO2 emissions as this is a fairly intangible characteristic of EVs' which is likely not common knowledge,

- Overestimation of an EVs' charging time as this has been suggested as a common misconception of consumers (Electric Vehicle Council, 2023)

H1: Individuals hold misperceptions about EV characteristics.

Q2: Do information treatments align EV perceptions with facts?

Using our experimental design we can draw conclusions about the treatment effect of information on EV misperceptions (relative to ICVs). Fact sheets have been shown to be effective at correcting misperceptions in immigration (Alesina et al., 2018) and EV smart charging (Lagomarsino et al., 2022).

H2: Misperceptions of EVs' are less likely with exposure to information treatments.

Q3: Will information treatments framed as a narrative more effectively align perceptions with facts than a simple fact-sheet treatment?

Information presented in a narrative has been found to be more engaging and comprehensible than fact sheets (Yang and Hobbs, 2020). Subsequently, we expected to see EV misperceptions corrected with exposure to information as a fact sheet but more significantly corrected with exposure to narratives.

H3: Narrative treatments are more successful at correcting misperceptions about EVs' than simple fact-sheet treatments.

Q4: Do information treatments influence preferences for EVs and EV policy?

We have established that we expect to see significant misperceptions about EV characteristics. To understand the potential of misperceptions to influence consumers decision making we rely on a simple conceptual framework. The details of this framework and the role of misperceptions are detailed below.

In this framework, consumer i derive a utility of $U^i(EV)$ from purchasing an EV. This utility can be described as a function of the costs and benefits of purchasing an EV. In our information treatments we specifically target seven characteristics of EVs which influence utility derived from consumption; purchase price (P), maintenance costs (M), charger cost (C), recharging costs (R), charging time (T), accessibility of charging stations (S) and emissions (E). We can assume consumers make

decisions to maximise their utility by considering these seven features and other non-tested features (Z). Thus, utility of consumer i can be depicted as $U^i(EV) = u(P,M,C,R,T,S,E,Z)$. Consider the case where it is possible for a consumer to misperceive the price of EVs, they would perceive price as $(1+b_P^i)P$ as opposed to P. If $b^i > 0$ than the consumer overestimates the price, $b_P^i < 0$ the consumer underestimates the price and $b_P^i = 0$ the consumer accurately estimates the price. A consumer could hold misperceptions about all of our tested features[1] which would mean percieved utility from purchasing an EV would look like,

$$\tilde{U^i}(EV) = u((1+b_j^i)j, Z) \quad \forall\, j \in \{P,M,C,R,T,S,E\} \tag{1}$$

We can assume the decision to purchase an EV is a result of consumers comparing the utility from purchasing an ICV relative to purchasing an EV. The difference in utility between these two choices would be,

$$du^i = \tilde{U^i}(EV) - \tilde{U^i}(ICV) \tag{2}$$

If $du^i > 0$, the larger the perceived benefit from adopting an EV over an ICV, the greater $\tilde{U^i}(EV)$ is compared to (ICV) the more consumers are willing to purchase and pay for an EV. If $du^i > 0$, their is a perceived cost from adopting an EV over an ICV, the smaller $\tilde{U^i}(EV)$ is compared to (ICV) the less consumers are willing to purchase and pay for an EV.

In this model we see how misperceptions increase or decrease consumer's percieved utility from purchasing an EV over an ICV. If b_P^i, b_M^i, b_C^i or $b_R^i > 0$ this means individuals overestimate the financial costs of EVs, resulting in lower anticipated utility derived from purchase. If $b_T^i > 0$ consumers overestimate the inconvenience of charging and underestimate utility. If $b_S^i < 0$, consumers underestimate accessibility of public charging and underestimate utility. Finally, if $b_E^i > 0$ consumers overestimate CO2 emissions produced by EVs, underestimate the environmental benefits of purchasing an EV and the associated utility. These relationships are shown in Table 1.

Overall, we expect individuals do overestimate the costs of EVs and underestimate the benefits of EVs as observed in Krause et al. (2013). Consequently, individuals are currently biased against EVs as seen in the third column of Table 1. We expect information treatments will correct misperceptions, correct bias against EVs and increase overall preferences for and willingness to purchase EVs'.

H4a: Preference for EVs' likely to increase with exposure to information treatments.

[1] Consumers could hold more misperceptions that we do not test but to simplify our model we do not consider the possibility of these misperceptions.

Table 1: Relationship between perceptions and perceived utility of EV purchase

	<0	**= 0**	**>0**
b_P^i, b_M^i, b_C^i **or** b_R^i	$\uparrow \tilde{U}^i(EV)$ bias towards EVs	no effect on $\tilde{U}^i(EV)$ no bias	$\downarrow \tilde{U}^i(EV)$ bias against EVs
b_T^i	$\uparrow \tilde{U}^i(EV)$ bias towards EVs	no effect on $\tilde{U}^i(EV)$ no bias	$\downarrow \tilde{U}^i(EV)$ bias against EVs
b_S^i	$\downarrow \tilde{U}^i(EV)$ bias against EVs	no effect on $\tilde{U}^i(EV)$ no bias	$\uparrow \tilde{U}^i(EV)$ bias towards EVs
b_E^i	$\uparrow \tilde{U}^i(EV)$ bias towards EVs	no effect on $\tilde{U}^i(EV)$ no bias	$\downarrow \tilde{U}^i(EV)$ bias against EVs

We hypothesise with information exposure increasing preferences for EVs' we would also observe an increase in support for government EV policy. This is expected because individuals will become more likely to purchase EVs, more likely to benefit from government assistance and self-interest is shown to motivate support for policy intervention (Pitlik et al., 2011).

We also expect that the EV information sheet and narrative interventions will cause participants to readjust their preferences for EV and EV policies depending on previous misconceptions.

H4b: Exposure to information treatments increases support for EV policy and changes policy preferences

Q5: Does indirect questioning with incentivised survey methods elicit EV preferences that differ from individuals who directly stated EV preferences?

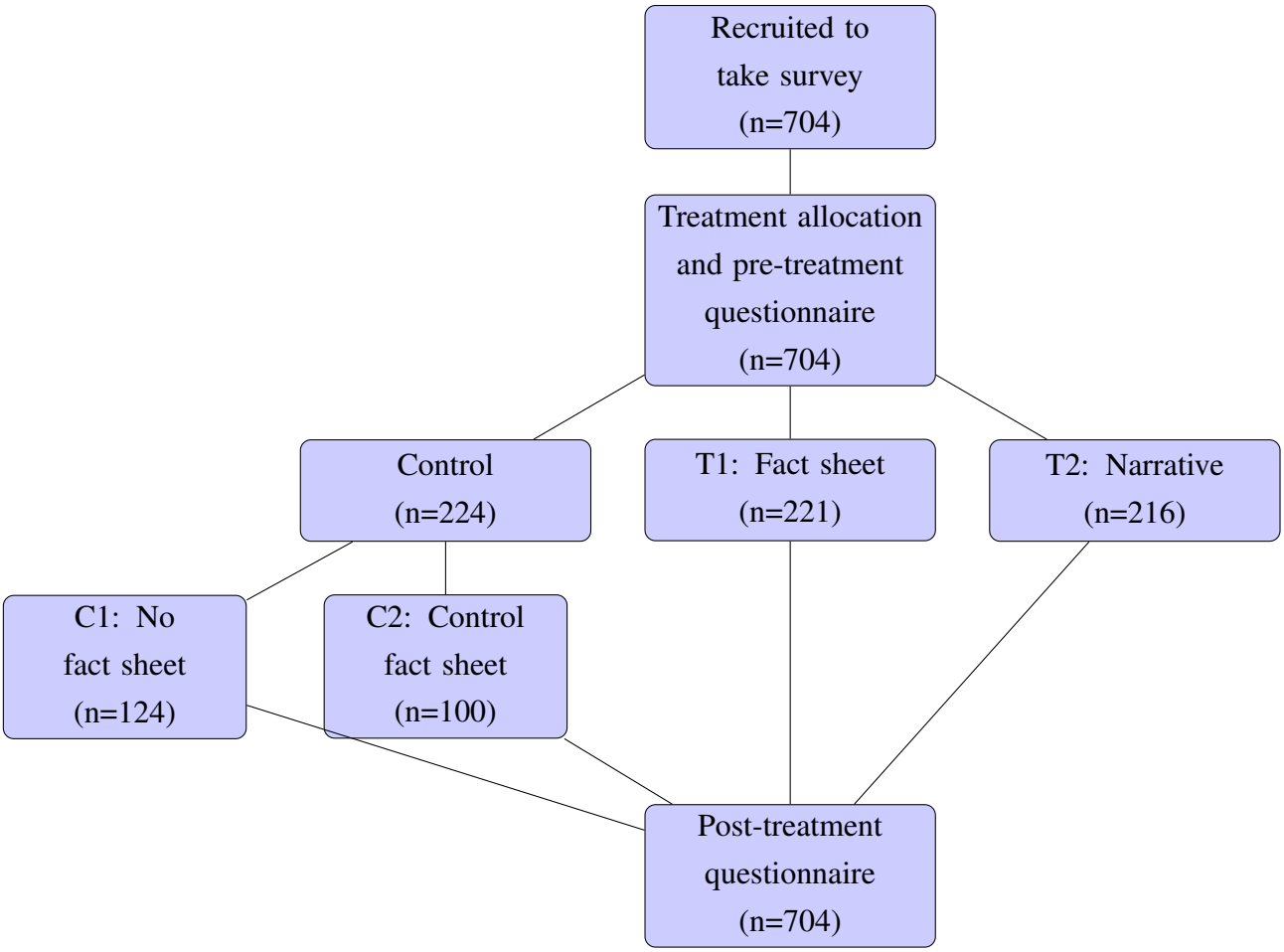
Adopting EVs is often perceived as pro-environmental and pro-social behaviour, (Li et al., 2017). Respondent's on account of social desirability bias may overstate their willingness to purchase, preferences for EVs' and policies. Indirect questioning involves asking respondents what they believe others would think or do. Indirect questioning provides respondents distance from their answers and is suggested to overcome social desirability bias (Durmaz et al., 2020). Consequently, we expected participants will give different answers when asked to report their own willingness to purchase EVs' and support EV policies (direct question) than when asked what they expect from others (indirect question). Specifically, we expected responses to direct questions to indicate more pro-EV beliefs than responses to indirect questions.

H5: Participants will state others in their city or rural area prefer EVs' less than themselves.

3 Experimental Design

Our online experiment involves information treatments and a questionnaire collecting information on demographics, perceptions and preferences for EVs. The experiment is designed to allow within- and between-subject comparisons. The experimental design, information treatments and sample characteristics are described in detail below.

The survey and information treatments were specifically created for this experiment by the research team and programmed by Pureprofile. Pureprofile is a research and recruitment platform. The experiment was piloted with Pureprofile to ensure no major flaws that could prevent respondents from accurately understanding material or answering questions. The experiment consists of three sections: (1) baseline questionnaire, (2) treatments, (3) post-treatment questionnaire. The details are provided below.



3.1 Baseline questionnaire

First, participants read and complete the consent form. Next, participants are assigned to groups and complete a pre-treatment questionnaire which includes a series of questions on demographics and respondents initial preferences for EVs. The survey as it was presented to Melbourne respondents is shown in Appendix D. Ordinal questions are used to capture respondents willingness to purchase an EV and willigness to pay (WTP) additional for an EV.

3.2 Information treatments

Respondents in the treated groups are provided with information about the features of EVs and ICVs. Information provided was about average vehicle prices, fuel/electricity costs, maintenance costs, life cycle CO2 emissions, public recharging/refueling times. Information on the number of public recharging and petrol stations in respondents state/territory was also included. This information was reflective of Australian vehicles and obtained from academic and government sources

[2].

Information treatments appear on respondents devices as a series of five click-through screens. In the "T1: fact sheet" treatment respondents were presented this information as abstract facts without context or narrative tools. In the "T2: narrative" treatment respondents are presented this same information in a story format. The story follows two characters; the first character purchases an EV and the second character purchases an ICV. The differences in the two information treatments can be observed in Figure 1, which depicts the two treatments as they would appear to a Victorian respondent. The layout and visual imagery were comparable across treatments to ensure text form was the only difference between groups.

3.3 Post-treatment questionnaire

After treatment and following pre-treatment questionnaire all participants are asked about their vehicle usage habits and preferences. These questions are designed to provide insight into the traits which could drive EV and policy preferences. Next participants complete questions where they indicate perceptions about EVs. The majority of these questions referenced information provided to the treatment groups. These questions allowed us to ascertain misperceptions and the degree to which information treatments corrected misperceptions between subjects. Figure 2 is how this perception question was asked for cost of EV charging.

Following this, participants are again asked how willing they were to purchase an EV and their WTP. It is possible that previous questions which asked participants to consider EV qualities resulted in them reassessing preferences. To account for this possibility we ask all groups for their preferences pre- and post- treatments allowing us to compare responses within- and between- subjects and isolate the treatments effect on preferences.

Finally, participants were asked for policy preferences, their support for governments encouraging EV uptake and preferences for specific policies. Participants are presented with nine policies currently proposed to encourage EV uptake and asked to select and rank three see Figure 3. Next, participants are asked how much of a set budget they would direct towards EV policy over other areas of government spending see Figure 4.

Indirect questions

[2]Information for treatments was soured from; API (nd); ATAP (2013); Commonwealth of Australia (2019); Eckermann (Erik); Electric Vehicle Council (2022); Ma et al. (2012); Md Arif Hasan (2019); NSW Government (nd); Queensland Government (2023); Schmidt (2023); Statista (2022)

A

	Purchase price	Fuel/Electricity costs	Maintenance costs	CO2 emissions in life cycle incl. production	Public refuelling stations in your state
Battery Electric Vehicles	Average $62,000-$67,000 price range for small to large vehicles. The installation of an at home (level 2) charger costs $1,000-$4,000	Estimated $500 per year ($0.04/km) in electricity costs.	Estimated $400AUD/year.	Vehicle with average grid intensity expected to produce 270 g of CO2 per km.	VIC has 400 public charging stations. Public charging takes 10 minutes to 2 hours to charge a car.
Internal Combustion Vehicles (Petrol and Diesel)	Average $19,000-$41,000 price range for small to large vehicles.	Estimated $2,000 per year ($0.1/km) in fossil fuel costs.	Estimated $800AUD/year.	Expected to produce 330 g of CO2 per km.	VIC has 1000 petrol stations. Average refuelling time is 2 minutes.

Fact Sheet VIC (EVs and ICVs) – Screen 5

B

	Before Purchase	Day of Purchase	1 month after	6 months after	1 year after
Emma is looking to buy a new electric vehicle.	Emma decides to buy an electric vehicle that produces 270g CO2 per km compared to the 330g a similar internal combustion vehicle produces.	After making the purchase, Emma drives home to greet the electricians installing her new car's charger. She pays them between $1,000-$4,000.	Emma has been charging her car at home for the price of electricity; roughly $500 a year.	Emma plans a road trip across VIC. On her trip she stops to recharge at some of the 400 public charging stations in VIC. Some stations take 10 mins others 2 hrs.	Emma gets maintenance done to her car and she pays the mechanic $400.
Susan is looking to buy a new petrol vehicle vehicle.	Susan decides not to buy an electric vehicle for $62,000-$67,000 instead she buys an internal combustion vehicle for between $19,000-$41,000.	After making the purchase, Susan drives home to park.	Susan has been refuelling her car at local petrol stations for the advertised price of petrol. Yearly she pays about $2,000.	Susan plans a road trip across VIC. On her trip she stops to refuel for 2 mins at some of the 1,000 petrol stations in VIC.	Susan gets maintenance done on her car she pays the mechanic $800.

Year in the Life of two Vehicle Owners (VIC) – Screen 5

Figure 1: Information treatments provided to treatment groups: (A) "fact sheet" treatment (B) "narrative" treatment

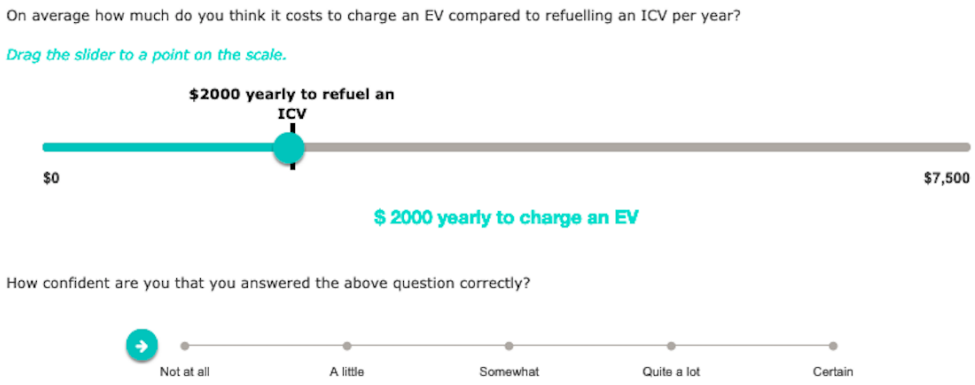


Figure 2: Survey question asking participants for perceptions of EV refuelling costs

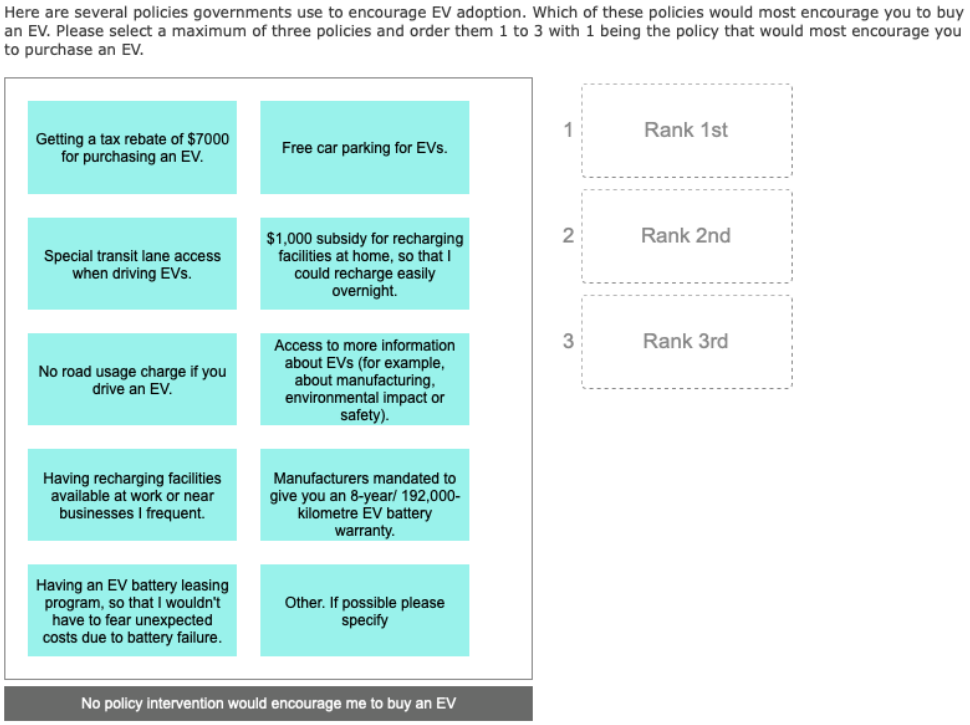


Figure 3: Survey question asking participants to rank policy preferences

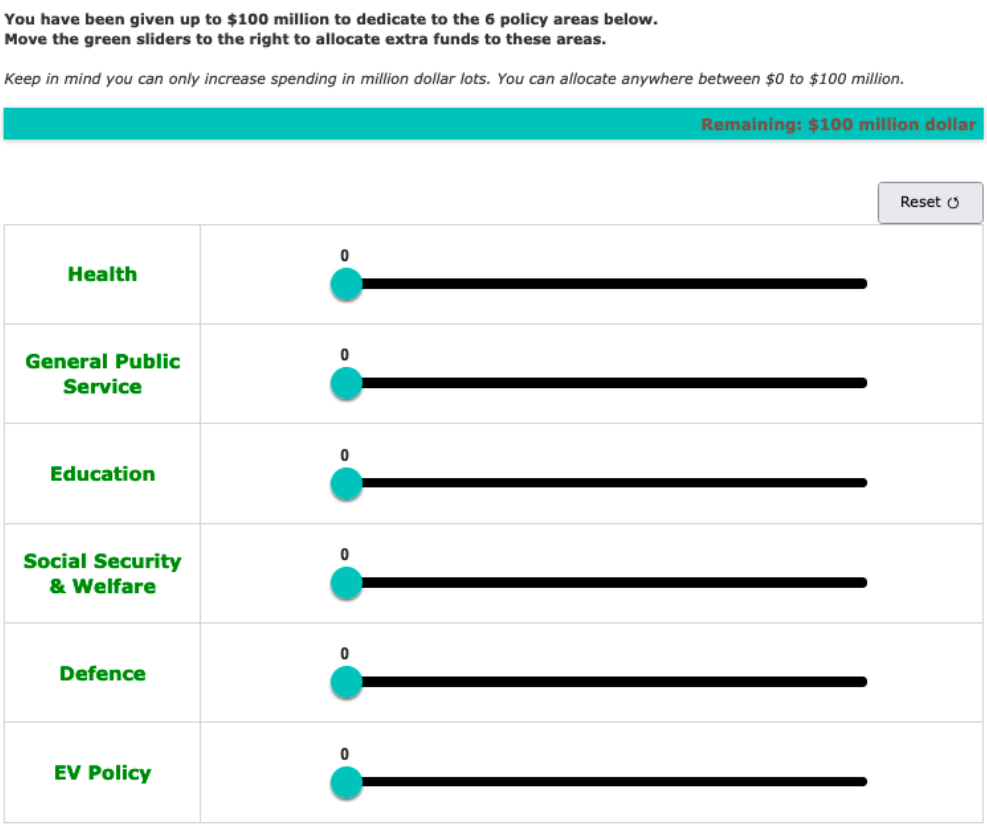


Figure 4: Survey question asking participants to allocate money to areas of government spending

To test for the effect of indirect incentivised questions we asked participants their personal preferences (for example, "how likely would you be to purchase an EV?"). Then, participants were asked what they believe the most common response was in their state's capital city or regional areas depending on where the participant lives. Three indirect questions were asked for questions pertaining to: (1) willingness to purchase EV, (2) WTP additional for EV, (3) most preferred EV policies. Our analysis focuses on indirect questions pertaining to willingness to purchase and pay. Participants were told one of these three questions would be randomly selected and if they correctly determined the most common response for this selected question they would be paid $2.

3.4 Recruitment and treatment allocation

The survey was completed by 704 respondents in September 2023. To be eligible, participants needed to be Australian residents, above 18 years old and Drivers Licence holders. This is to ensure respondents are familiar with vehicles and likely to consider purchasing vehicles. The sample size 704 was determined by power calculations to ensure a minimal detectable treatment effect of 0.3, with an alpha of 0.05 and 80% power. Participants are recruited from Pureprofile's panel of Australian online workers. Pureprofile's Australian panel consists of 558,015 Australian residents, who hold a Pureprofile account. The survey was in English. To be recruited participants respond to a post on their personal Pureprofile "news feed". This post was a generic message stating "share your thoughts and get paid". Importantly, the message did not mention the project's EV focus to reduce the possibility of selection bias. To preserve external validity, participants were recruited to represent the Australian population by gender, location (state and rural versus city), age and income (annual household). Overall, we were successful in obtaining a representative sampling except our sample was more educated and had higher earnings (see appendix Table B1 for more detail).

Participants were assigned with stratified randomisation across gender, location (state and rural versus city), age and income (annual household) using the least-fill method. The least-fill method entails sorting respondents into the control or treatment group with the least number of respondents and dependent on whether the group needs additional respondents of that gender, age, income or location. Treatment or control groups close when they contain the pre-determined recquired number of respondents and required number of responses from that location, of that gender, age and income. This method ensures control and treatment groups are comparable. This resulted in 233 participants in T1 and T2, 107 participants in C1 and 131 C2 as shown in Figure 3.

Numerous quality control checks were taken throughout the survey by Pureprofile and during analysis. Firstly, Pureprofile assigns a rating to all online workers depending on their responses across Pureprofile surveys. Responders whose rating falls below a certain threshold are prevented from participating. Additional data quality checks are conducted using digital fingerprinting, unique survey IDS, cookie checks, GeoIPs and CAPTCHA to check for robots. Post-survey data was also analysed for survey straightlining. Straightlining is when respondents answer every question the same, for example, always selecting the middle option or the first option. We also emphasised participants' social responsibility to respond accurately for the sake of furthering research with the following statement: "Please read this information carefully this is very important for the success of our research". We record the time it took participants to complete the survey. We then exclude 28 responses, these were the 2% slowest and 2% fastest times from responses. This is to ensure that participants who were either distracted by tasks or rushed do not influence responses this is following method seen in (Alesina et al., 2018). Results when the slowest and fastest responses were included did not significantly differ from results when excluded. Finally, participants were asked: "In your honest opinion, should we use your responses, or should we discard your responses since you did not devote your full attention to the questions so far?" If respondents answered "no" they were excluded from our analysis, 15 responses were excluded for answering "no". As a result, our analysis contained responses from 661 respondents, 221 in T1, 216 in T2, 100 in C1 and 124 C2.

Table B2 shows that balance is achieved across treatment groups for all important demographic characteristics except for education, whether respondent is an early adopter and proximity of a power outlet to place car is typically parked. As the joint test of equivalence across all observed demographic characteristics is rejected we control for these variables during analysis.

4 Results

4.1 Misperceptions about EVs

Previously we define b_j^i as the degree to which respondent i misperceive the true EV quality j. We can calculate misperceptions as a percentage of the true value:

$$100 \times b_j^i = \frac{\tilde{j}_i - j}{j} \times 100 \tag{3}$$

Where $\tilde{j}_i$ is the respondents belief about average EV costs, emissions, charging time and public charging stations.

Figure 5 depicts average perceptions of price related EV characteristics by treatment and control group. The error bars show the 95% confidence intervals. The left bar of this Figure shows that on average, the control group respondents hold significant misperceptions about the costs related to EVs. In percentage terms, respondents overestimate EVs recharging cost, cost of servicing and cost of charger by 373%, 110% and 113% of the true value respectively. Less extreme misperceptions were observed in vehicle price. On average respondents underestimated vehicle price by 28.7% of the true price. Figure 6 demonstrates perceptions about non-price related EV features. Again, looking at the control group, signifcant misperceptions are observed with regards to EV charging times and the number of public charges. Respondents overestimated charging time by 150% and the number of public charging stations by 73.1%. Interestingly, little misperceptions were observed regarding the emissions of EVs. On average, respondents only overestimate emissions by 1.3%.

Overall, these findings are aligned with our expectations that consumers mostly overestimate costs related to EVs. There is the exception of perceptions regarding the number of public charging stations, which we found consumers overestimated on average. As expected we observed relatively accurate perceptions of vehicle price but contrary to expectations consumers also held largely accurate perceptions of EVs CO2 emissions.

4.2 Treatments effect on misperceptions

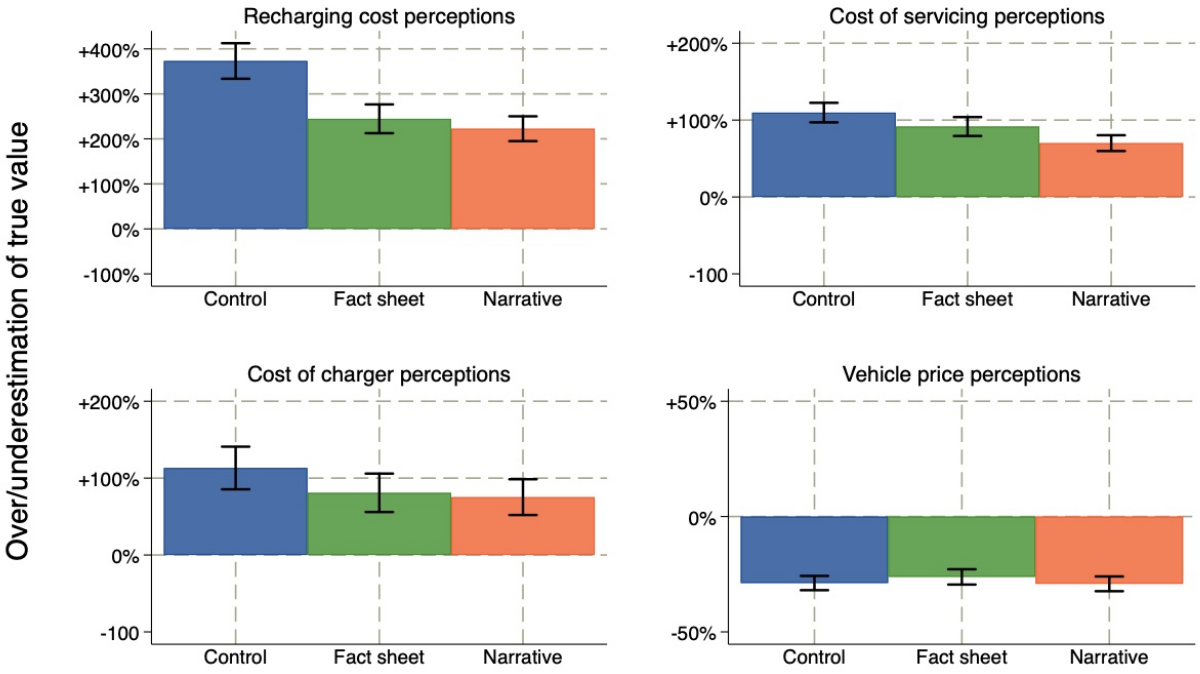
The average perceptions of EV qualities within the treatment groups is also shown in Figure 5 and Figure 6. It is clear that overall perceptions within the fact sheet and narrative treatment are closer to the true value than perceptions within the control group. To test this empirically we regress the absolute values of b_j^i on treatment group, controlling for observables. The specification for these regressions are:

$$abs(100 \times b_j^i) = \tau_j Factsheet_i + \gamma_j Narrative_i + \beta' \boldsymbol{X_i} + \varepsilon_i \tag{4}$$

Where $Factsheet_i$ and $Narrative_i$ are treatment indicators and $\beta' \boldsymbol{X_i}$ is a vector of controls.

Table 2 reports the regression results. We observe a negative treatment effect on misperceptions across all treated EV perceptions except misperceptions regarding number of stations. Negative treatment effect suggest that assignment to the narrative or fact sheet group reduced the degree to which respondents misperceived qualities related to EVs. The effect of treatment on misperceptions is largely statistically significant and this significance largely holds when conducting multi-

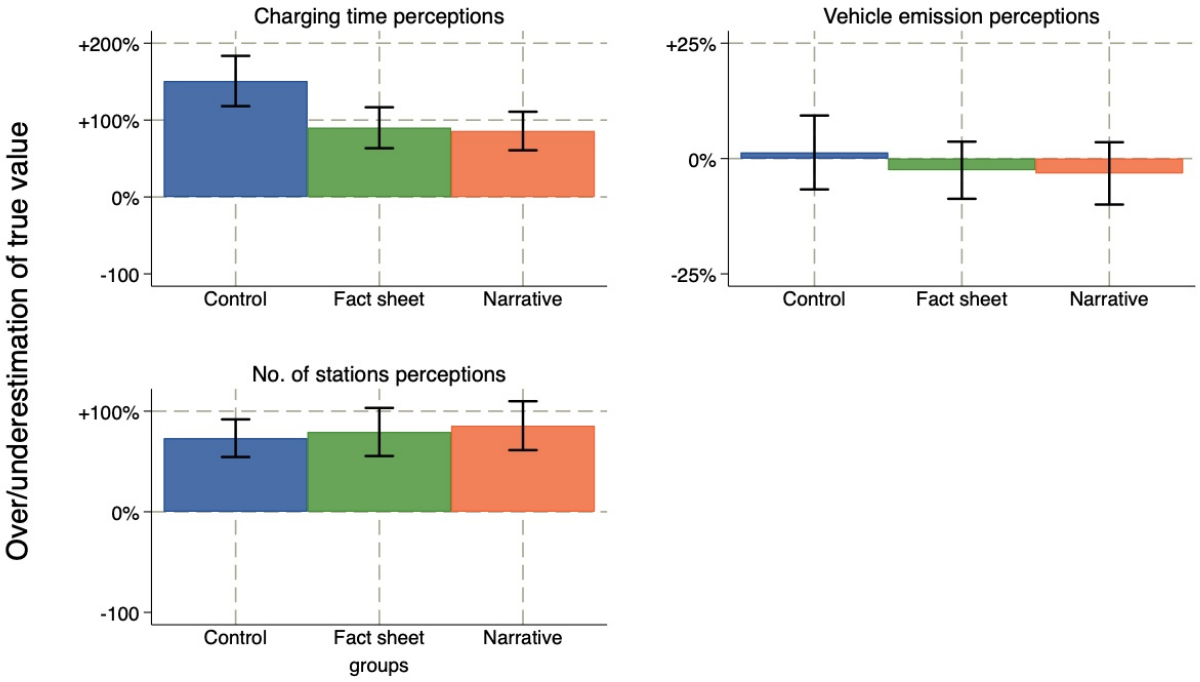
Figure 5: Price misperceptions across control and treatment groups (mean)



ple hypothesis testing see Appendix Table C1 for more detail. There are two exceptions; firstly we observe a quantitatively insignificant effect of receiving a fact sheet on price misperceptions, the treatment effect of -3.45 which is observed suggests that treatment shifts perceptions approximately $2.23 closer to the true value. We also fail to reject at 10% significance that information treatments have an impact on respondents misperceptions about the number of public charging stations in their state. This could be because "number of stations" is a relatively foreign metric and therefore, more difficult to recall.

Participants in the information treatment still held misperceptions about EV qualities. In some cases these misperceptions were significant. Take the perception of annual recharging cost as an example. The average annual recharging cost of an EV is $500. Those in the fact sheet were told this but on average they perceived this cost to be $1,723 and those in the narrative group perceived this cost to be $1,613. This suggest information treatments do not perfectly overcome EV misperceptions. This persistence of incorrect beliefs could be for several reasons. Firstly, only 36.20% of respondents in the factsheet treatment and 43.60% in the narrative stated "yes," they believed the information in the treatments was accurate; others stated "no," but the vast majority were "unsure." Respondents' distrust in the information likely influenced the responsiveness of their perceptions to treatments. Secondly, respondents were likely unable to recall accurate EV perceptions due to

Figure 6: Non-price perceptions across control and treatment groups (mean)



memory failure, attention slips and other cognitive limitations.

Treatment effect of fact sheet compared to narrative treatment

T-tests comparing the treatment effects across treatment groups are shown in Table 3. We observe little statistical difference across the two groups. Furthermore, the differences we observe do not suggest one treatment was more effective at correcting misperceptions than the other. Misperceptions regarding vehicle price, emissions and number of stations were less severe in the narrative treatment but misperceptions regarding charging time, recharging costs, servicing costs and maintenance costs were more extreme. This suggests framing information as a story does not significantly influence perceptions more than framing information as a simple fact sheet.

Table 2: Treatment effect on misperceptions

	Recharging cost misp.		Servicing cost misp.		Charger cost misp.		Vehicle price misp.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A. Price misperceptions								
T1: Fact sheet	-127.1***	-126.8***	-19.04**	-16.86**	-25.08	-25.95	-3.660*	-3.453*
	(25.41)	(26.10)	(8.114)	(8.522)	(16.43)	(17.17)	(2.016)	(2.065)
T2: Narrative	-151.6***	-149.7***	-40.94***	-40.86***	-29.65*	-23.42	-0.535	-1.194
	(24.15)	(24.82)	(7.465)	(7.761)	(15.76)	(16.31)	(1.933)	(1.941)
Controls	No	Yes	No	Yes	No	Yes	No	Yes
R^2	0.07	0.11	0.04	0.07	0.01	0.03	0.01	0.09
Observations	661	661	661	661	661	661	661	661
	Charging time misp.		CO2 emissions misp.		No. of stations misp.			
	(9)	(10)	(11)	(12)	(13)	(14)		
Panel B. Other misperceptions								
T1: Fact sheet	-44.74**	-45.10**	-14.82***	-14.82***	-7.465	-4.847		
	(18.62)	(19.58)	(3.166)	(3.394)	(13.72)	(14.66)		
T2: Narrative	-53.60***	-62.02***	-10.54***	-11.57***	2.709	2.023		
	(18.23)	(18.96)	(3.211)	(3.373)	(13.69)	(14.23)		
Controls	No	Yes	No	Yes	No	Yes		
R^2	0.016	0.043	0.035	0.055	0.000	0.023		
Observations	661	661	661	661	661	661		

*p<0.05, **p<0.01, ***p<0.001. Robust standard errors in parentheses. This table reports OLS estimates for treatment allocation effect on $abs(100 \times b^i_j)$. Controls include respondent's gender, education, age, income, whether they live in a rural location, whether they own a hybrid or electric vehicle, whether the respondent is an early adopter, considers climate change a threat, distance of power point to their car park and time they typically own a car for.

Table 3: Difference in treatment effect across treatment groups

	T1: Fact sheet mean	T2: Narrative mean	Diff
Recharging cost misp.	248.9	224.3	24.52
Servicing cost misp.	98.93	77.04	21.89**
Charger cost misp.	80.88	75.24	5.634
Vehicle price misp.	28.08	31.21	-3.125
Charging time misp.	142.7	133.9	8.860
CO2 emissions misp.	34.61	38.89	-4.282
No. of stations misp.	102.3	112.4	-10.17
Observations	221	216	

*p<0.05, **p<0.01, ***p<0.001. Robust standard errors in parentheses. This table reports OLS estimates for treatment allocation effect on $abs(100 \times b^i_j)$. Controls include respondent's gender, education, age, income, whether they live in a rural location, whether they own a hybrid or electric vehicle, whether the respondent is an early adopter, considers climate change a threat, distance of power point to their car park and time they typically own a car for.

4.3 Treatments effect on EV and policy preferences

To determine the effect treatment on EV and policy preferences we rely on a series of logit and OLS models. The general modelling approach is:

$$\boldsymbol{Y_i} = \tau_j Factsheet_i + \gamma_j Narrative_i + \boldsymbol{\beta}' \boldsymbol{X_i} + \varepsilon_i \tag{5}$$

Where $\boldsymbol{Y_i}$ refers to a series of outcome variables and $\boldsymbol{X_i}$ is a series of relevant observables that are controlled for in our analysis.

Effect on willingness to purchase and pay for EVs

Table 4 displays the logit estimates for treatment effect on respondents willingness to purchase an EV as their next vehicle and willingness to pay additional for an EV. Willingness to purchase an EV is measured by participants response to the question; "Assuming you were buying a vehicle, how likely is it you would buy an EV?" to which they could respond "Not at all", "A little", "Somewhat", "Quite a lot" or "Certain I would buy an EV". Willingness to pay for an EV is measured by participants response to the question; "Suppose you have decided to buy a car. You would pay AT MOST __ additional to get an electric vehicle." to which they could respond "I would not pay anymore to get an EV", "Less than $5,000", "Between $5,000-$9,999", "Between $10,000-$14,999", "Between $15,000-$19,999", "Between $20,000-$24,999" or "More than $25,000".

Overall we find little evidence that treatment influences willingness to purchase or pay for an EV. We did observe a statistically significant effect of the narrative treatment on willingness to purchase and pay at the 10% level but no significant results were detected when controlling for relevant observable variables.

Table 4: Treatment effect on stated willigness to purchase and pay

	Willigness to purchase (1)	Willigness to purchase (2)	Willigness to pay (3)	Willigness to pay (4)
T1: Fact sheet	0.110	0.189	0.179	0.219
	(0.185)	(0.195)	(0.151)	(0.166)
T2: Narrative	0.312*	0.278	0.256*	0.209
	(0.185)	(0.198)	(0.143)	(0.149)
Controls	No	Yes	No	Yes
R^2	0.344	0.376	0.246	0.258
Observations	661	661	661	661

*p<0.05, **p<0.01, ***p<0.001. Robust standard errors in parentheses. This table reports ordered logit estimates for treatment allocation effect on willigness to purchase and pay for EVs, dependent variables explained in Appendix A. Controls include respondent's gender, education, age, income, whether they live in a rural location, whether they own a hybrid or electric vehicle, whether the respondent is an early adopter, considers climate change a threat, distance of power point to their car park and time they typically own a car for.

Effect on support for EV policy

We measured respondents support for government intervention by asking the question; "How much should the government do to encourage the adoption of electric vehicles?" to which they could respond "Nothing at all", "Not much", "Some", "Quite a lot" or "All possible". We find treatment has no significant impact on respondents willingness to support government intervention. The two most left panels of Table 5 shows logit estimates for treatments effect on how much respondents believe the government should intervene, no significant effects were observed.

We also asked respondents if they were given $100 million, how much money would they dedicate to each of six policy areas see Figure 4. The six policy areas were; general public service, health, education, social security & welfare, defence and EV policy. In Figure 7 we can observe what budget areas respondents dedicated this hypothetical 100 million dollars to. We observe a sizeable willingness to spend money on EV policy. On average respondents dedicated 9%-10% of their budget to EV policy that is about $9-$10 million per respondent. This money is dedicated towards EV policy over general public service, defence, education, health and social security. We find little evidence of treatment having a sizeable influence on how much budget respondents dedicated to EV policy. In the two most right panels of Table 4 the estimates of an OLS, regressing EV spending on treatment are reported. The only significant result indicates receiving fact sheet treatment increases EV spending by $1.539. This is a marginally small amount and unlikely to be economically significant.

Figure 7: Assignment of additional funds to gov budget areas by control group

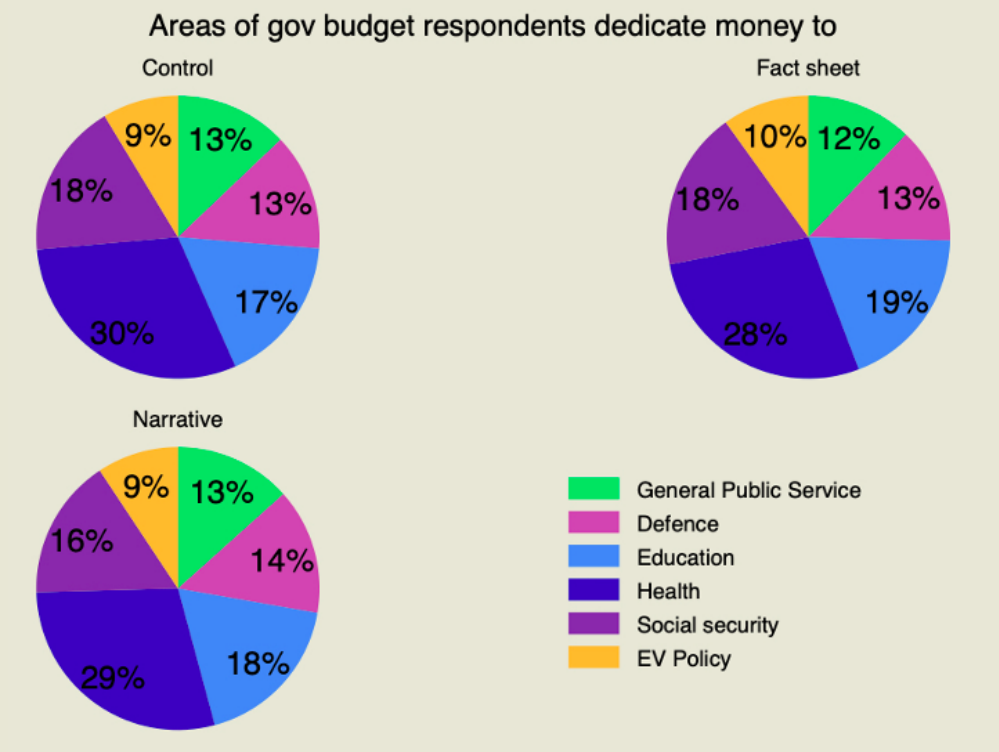


Table 5: Treatment effect on support for gov intervention

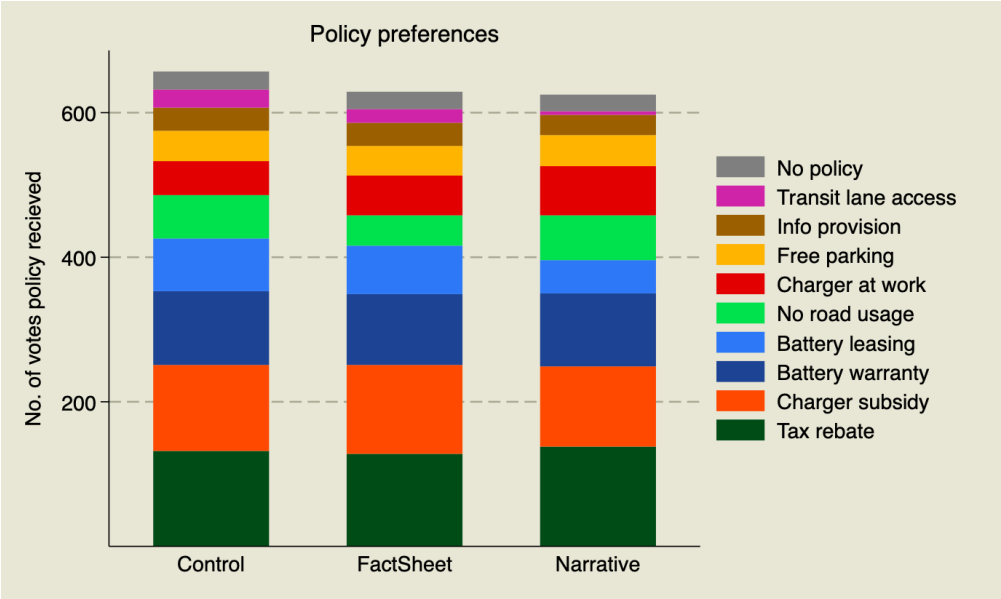
	Support gov intervention (1)	Support gov intervention (2)	Spending towards EV policy (3)	Spending towards EV policy (4)
T1: Fact sheet	0.028	0.051	1.455	1.539*
	(0.167)	(0.182)	(0.894)	(0.868)
T2: Narrative	-0.098	-0.178	0.769	1.180
	(0.170)	(0.178)	(1.010)	(0.986)
Controls	No	Yes	No	Yes
R^2	0.000	0.053	0.004	0.127
Observations	661	661	661	661

*p<0.05, **p<0.01, ***p<0.001. Robust standard errors in parentheses. Esimates (1)-(2) report ordered logit estimates for treatment allocation effect on support for government intervention. Estimates (3)-(4) report OLS estimates for treatment allocation effect on money dedicated to EV policy. Dependent variables explained in Appendix A. Controls include respondent's gender, education, age, income, whether they live in a rural location, whether they own a hybrid or electric vehicle, whether the respondent is an early adopter, considers climate change a threat, distance of power point to their car park and time they typically own a car for.

Effect of treatment EV policy preferences

Figure 8 reports the number of votes respondents cast for each EV policy. Few participants voted for "no policy", the vast majority preferring some policy. Financial incentives received the most support, tax rebates or battery subsidies. A small number of respondents indicated "information provision" as a preferred policy. This is interesting because despite observing little effect of information treatments on respondents willingness to purchase or pay, a few respondents themselves believe information would encourage adoption. Assignment to treatment group did not cause a

Figure 8: EV policies control group preferred



shift in policy preferences for the majority of policies except significant shifts were seen in the likelihood individuals would select battery leasing, transit lane access, recharging stations at work and no road usage as one of their most preferred policies. The logit estimates are shown in Table 5 these estimates represent the change in log-odds of a respondent selecting a given policy. We saw significant effect of being in the narrative treatment on policy preferences. The log odds of a respondent selecting battery leasing decreases by 0.647 if they are in the narrative group. This could be a result of battery life not being mentioned in the fact sheet which could have caused individuals interest to be shifted elsewhere. Battery life was excluded from information treatment on account of lack of sufficient research on the life of EV batteries and the complexity of this information making it unsuited to our simple information treatments. The log odds a participant selects transit lane access decreases by 1.743 if they are in the narrative group. Log odds of selecting recharging stations at work increases by 0.442 if in narrative group. There is potential that the story line behind the narrative treatment caused respondents to recognise that convenience of charging at work. Finally, log odds participants select no road usage as their preferred policy decreases by 0.524 if in fact sheet group.

Table 6: Effect of treatment on EV policy preferences

	Battery leasing		Transit lane access		Recharging stations at work		No road usage if own EV	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
T1: Fact sheet	-0.0870	-0.0655	-0.100	0.0940	0.308	0.154	-0.458**	-0.524**
	(0.206)	(0.223)	(0.340)	(0.367)	(0.231)	(0.253)	(0.232)	(0.240)
T2: Narrative	-0.633***	-0.647***	-1.648***	-1.743***	0.527**	0.442*	0.119	0.0349
	(0.225)	(0.238)	(0.557)	(0.555)	(0.227)	(0.242)	(0.215)	(0.226)
Controls	No	Yes	No	Yes	No	Yes	No	Yes
R^2	0.012	0.037	0.123	0.123	0.008	0.028	0.010	0.027
Observations	661	661	661	661	661	661	661	661

*p<0.05, **p<0.01, ***p<0.001. Robust standard errors in parentheses. This table shows logit estimates for treatment effect on whether respondents selected a given policy as one of their three most preferred options. Outcome variables described in Appendix A.

4.4 Effect of indirect and incentivised questions

Table 7: Difference in responses when question asked directly versus indirectly and incentivised

	Control			T1: Fact sheet			T2: Narrative		
	Direct	Inirect	Diff	Direct	Indirect	Diff	Direct	Indirect	Diff
Willigness to purchase	1.61	2.87	-1.26***	1.71	2.87	-1.16***	1.77	3.09	-1.32***
Willingness to pay	2.05	3.21	-1.16***	2.05	3.08	-1.03***	2.35	3.39	-1.05***
Observations	224	224		221	221		216	216	

*p<0.05, **p<0.01, ***p<0.001. This table shows t-test results comparing within-subject answers to direct versus indirect questions. Outcome variables described in Appendix A. Willingness to purchase, direct and indirect responses coded: 0="not at all", 1="a little", 2="somewhat", 3="quite a lot", 4="certain I would buy an EV." Willingness to pay, direct and indirect responses coded: 0="I would not pay anymore to get an EV", 1="Less than $5,000", 2="Between $5,000-$9,999", 3="Between $10,000-$14,999", 4="Between $15,000-$19,999", 5="Between $20,000-$24,999", 6="More than $25,000".

Table 7 reports results from t-tests comparing individuals responses when asked for their own willingness to purchase and pay for EVs with individuals responses when asked for their belief about others willingness to purchase and pay for EVs. Contrary to expectations, we observe with statistical significance at the 1% level that respondents believed others more willing to purchase EVs and more willing to pay additional for EVs. This could suggest social desirability bias is not influencing our results as individuals are not overstating their EV preferences in comparison to others. No statistically significant difference was identified in responses to indirect questions made by the treatment groups compared to the control group.

5 Discussion

In our research, we classify our critical findings into six categories: (1) existence of misperceptions, (2) successful correction of misperceptions, (3) no effect of framing on misperception correction, (4) little effect of information treatments on EV preferences, (5) significant preferences for government intervention is not affected by information treatments but preferences for specific policies is influenced by treatment, (6) respondents believe others to prefer EVs more than themselves. These findings are discussed in this section.

Firstly, we find consumers hold significant misperceptions about EVs, which tend to result in the overestimation of the costs of EV ownership. Specifically, we find a significant overestimation of maintenance, recharging and servicing costs alongside a significant overestimation of charging time. Perceptions which bias consumers against EVs. We observe consumers underestimating the price of EVs and overestimating accessibility of public charging, which could bias consumers towards EVs. The positively skewed misperceptions are fewer and less significant than the negatively skewed misperceptions. Hence, it is probable the majority of respondents are negatively biased against EVs on account of misperceptions.

Secondly, we observe that information treatments do correct misperceptions to a significant degree. Interestingly, even when provided with information treatments, respondents still held misperceptions about EV characteristics. This persistence of incorrect beliefs is likely a product of respondents hesitancy to fully trust the information treatments and cognitive limitations. Despite this, our findings speak to the usefulness of information treatments. Policymakers could rely on information provision to address EV misperceptions. It is also possible that the effectiveness of information treatments extends to other environmental or new technology products, which future research could investigate. However, more research should be done on the exact role distrust and cognitive limitations have on information treatments effectiveness.

Thirdly, contrary to expectations, we find no significant effect of information framing as a narrative or a fact sheet on misperceptions. This suggests that narrative framing is no more effective at correcting misperceptions in the short term than simple fact sheets. Future research could explore whether framing has a long-term effect on misperceptions. There may be memory-retention benefits to narratives, which could be observable in a follow-up survey.

Fourth, exposure to information treatments and correction of misperceptions has little impact on EV preferences. This suggests that misperceptions are irrelevant to consumers' decision to

purchase an EV. Tying this back to our conceptual framework, this would suggest that the misperceptions we successfully corrected (maintenance costs, recharging costs, servicing costs and charging time) did not significantly impact the perceived utility of purchasing an EV relative to ICV. This might be because consumers' perceptions of other EV costs and benefits were more important (for example, personal preference, what friends purchase or other untested features) or the gap between perceived utility from EV purchase and utility from ICV purchase was too significant for us to observe a meaningful shift in preferences. This contradicts our expectations and suggests that information provision would be an unsuccessful policy approach to encourage EV adoption. Our research only asks respondents if, following treatment, they immediately reassessed EV preferences. While we do not see an immediate reassessment, we could see a reassessment of preferences in the long term. For example, in reaction to corrected misperceptions, consumers could become more open to EVs and engage in more research and active consideration. This is a potential area of future research.

Another potential area for future research is to consider how information treatments influence how confident consumers are that their perceptions of EVs are accurate. When consumers are provided information it is likely we observe two changes: (1) more accurate perceptions, (2) consumers are more confident that their perceptions are accurate because they have been told so by an outside source. Our research ignores the possibility of this second effect. However, it is possible this confidence could result in consumers being more willing to make decisions based on their perceptions This confidence being a mechanism through which information treatments influence preferences.

Fifth, we observe significant support for government policy, with the majority indicating a belief that the government should intervene. Respondents also showed a willingness to spend on EV policy over other policy areas, dedicating 8.50%-9.96% of a $100 million budget across the control and treatment groups to EV policy. Support for EV policy was not influenced by information treatments suggesting misperceptions do not prevent individuals from seeing value in EV policy. This signals to policymakers in Australia a desire and willingness to support policy initiatives.

In line with our hypotheses, we observe a shift in preference for specific policies amongst the treated groups. Consumers preference for battery leasing, select transit lane access, no road usage reduced whilst preferences for recharging stations at work increased. This is significant, it suggests policy preferences elicited from surveys could be biased on account of misperceptions. This could create a gap between consumers' preferred policies subject to misperceptions and those preferred if perceptions were accurate. This could be incredibly influential if respondents' behaviour only reflects their preferences after correcting misperceptions. For example, respondents initially state

they do not want more public charging at work with misperceptions. When they start considering purchasing an EV seriously, they gain more knowledge about EVs and realise the current public charging at work policy needs to be revised before it is viable for them to purchase an EV, so they do not purchase an EV. Future research on policy choices should consider this effect, and regulators should consider this possibility when making policy decisions.

Finally, we found that contrary to expectations, consumers' preferences appear uninfluenced by social desirability bias. Consumers state they expect others to be more willing to purchase and willing to pay more for EVs relative to themselves. Media coverage and efforts by activists and government groups to promote EVs may have perpetuated the idea that EVs are more popular than they are. This disconnect could be an area of future research.

6 Conclusion

Our findings suggest that policymakers and EV promoters should consider the existence of significant EV misperceptions. These misperceptions may not be a significant barrier to adoption but they do influence consumers preferences for specific EV policies. The finding that misperceptions influence policy preferences could be applicable to other policy contexts. It is therefore, important governments consider how misperceptions may be influencing stated preferences for policies to avoid sub optimal policies. Finally, our research shows policymakers can rely on information treatments to correct mispercpetions whether it be framed as a narrative or simple fact sheet.

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A Variable Definitions

Variables correspond survey questions, survey questions, responses and how coded in analysis are listed below.

Balance and control variables

How do you identify?

$Gender_i = 1$ if "Female", 0 otherwise.

Which category best describes your highest level of education?

$Education_i = 1$ if respondent selected “Undergraduate Degree”, “Master’s Degree”, “Doctoral Degree” or “Professional Degree (JD, MD, MBA)”, 0 otherwise.

What is your age?

$Age_i =$ numeric value.

What was the total income of your household, before taxes last year?

$Income_i = 1$ if "Less than $25,000", 2 if "$25,000 - $49,999", 3 if "$50,000 - $74,999", 4 if "$75,000 - $99,999", 5 if "$100,000 - $124,999", 6 if "$125,000 - $149,999", 7 if "Greater than $150,000".

In what type of region do you live?

$Urbam_i = 1$ if "Urban", 0 otherwise.

I frequently am one of the first to adopt new technologies.

$EarlyAdopter_i = 1$ if “Strongly Disagree”, 2 if “Disagree”, 3 if “Somewhat Disagree”, 4 if “Neither Agree nor Disagree”, 5 if “Somewhat Agree”, 5 if “Agree”, 7 if “Strongly Agree”.

If your response to the previous question was one or more, please indicate the number of each vehicle type your household currently owns.

$BEVOwner_i = 1$ if respondent selected “Battery Electric (BEV)”, 0 otherwise.

$HybridOwner_i = 1$ if respondent selected “Plug-in Electric Hybrid”, 0 otherwise.

Do you think climate change is a threat to society?

$ClimateThreat_i = 1$ if “None”, 2 if “Minor”, 3 if “Major”, 4 if “Catastrophic” and 5 if “Uncertain”.

To what extent do you believe humans are responsible for climate change?

To what extent do you believe humans are responsible for climate change?

$HumanEffectClimate_i = 1$ if “None”, 2 if “1-15%”, 3 if “16-25%”, 4 if “26-50%”, 5 if “51-75%” and 6 if “76-100%”.

How much personal responsibility do you believe you have in mitigating climate change?

$PersonalResponsabilityClimate_i = 1$ if “None”, 2 if “not at all responsible”, 3 if “a little responsible”, 4 if “somewhat responsible”, 5 if “quite a lot responsible” and 6 if “completely responsible”.

On average, how far do you usually drive each day?

$Kmsweekly_i = 1$ if "don't drive at all or rarely drive", 2 if "less than 5 kilometres", 3 if "5 – 19 kilometres", 4 if "20 – 34 kilometres", 5 if "35 – 49 kilometres", 6 if "50 kilometres or more".
How long do you typically keep a car before getting a different one?
$Timekeepcar_i = 1$ if "I've only owned one car", 2 if "1 - 3 years", 3 if "4 - 6 years", 4 if "7 - 9 years", 5 if "10 years or more".
How far is the nearest available power outlet to wherever you do/could park a car at home?
$Distoutlet_i = 1$ if "0-3 meters", 2 if "3-7 meters", 3 if "8-15 meters", 4 if "Over 15 meters", 5 if "No power source available".

Willingness to purchase and pay, direct and indirect variables

Assuming you were buying a new vehicle, what is the likelihood you would purchase an EV?
$PreBuyIntent_i = 1$ if "not at all", 2 if "a little", 3 if "somewhat", 4 if "quite a lot" and 5 if "certain I would buy an EV".
$DirectBuyIntent_i = 1$ if "not at all", 2 if "a little", 3 if "somewhat", 4 if "quite a lot" and 5 if "certain I would buy an EV".
When we asked the previous question to others in your [rural/urban respondents state] which response do you believe was most frequently selected? If you correctly select the most preferred policy and this question is randomly selected (out of three) you will receive $2.
$IndirectBuyIntent_i = 1$ if "not at all", 2 if "a little", 3 if "somewhat", 4 if "quite a lot" and 5 if "certain I would buy an EV".
Suppose you have decided to buy a new car. You would pay AT MOST _ additional to get an electric vehicle.
$PreWTP_i = 0$ if "I would not pay anymore to get an EV", 1 if "Less than $5,000", 2 if "Between $5,000-$9,999", 3 if "Between $10,000-$14,999", 4 if "Between $15,000-$19,999", 5 if "Between $20,000-$24,999" and 6 "More than $25,000".
$DirectWTP_i = 0$ if "I would not pay anymore to get an EV", 1 if "Less than $5,000", 2 if "Between $5,000-$9,999", 3 if "Between $10,000-$14,999", 4 if "Between $15,000-$19,999", 5 if "Between $20,000-$24,999" and 6 "More than $25,000".
When we asked the previous question to others in your [rural/urban respondents state] which response do you believe was most frequently selected? If you correctly select the most preferred policy and this question is randomly selected (out of three) you will receive $2.
$IndirectWTP_i = 0$ if "I would not pay anymore to get an EV", 1 if "Less than $5,000", 2 if "Between $5,000-$9,999", 3 if "Between $10,000-$14,999", 4 if "Between $15,000-$19,999", 5 if "Between $20,000-$24,999" and 6 "More than $25,000".

Perception of EV features variables

How much do you think it costs to charge an EV compared to refuelling an ICV? How much do you think it costs to service an EV compared to an ICV? The most popular charger for an EV is a wall box charger. How much do you think its costs to install and purchase this charger? How many public charging stations for EVs do you think there are in your state compared to petrol stations? What do you the CO2 emissions are for an EV over its lifetime (including production and use) compared to an ICV? How much do you think it costs to buy a new EV costs compared to an ICV? How long do you think it takes to charge an EV?
$\tilde{j}_i =$ numeric value.

Support for government intervention variables

How much should the government do to encourage the adoption of electric vehicles?
$SupportGovIntervention_i = 0$ if "nothing at all", 1 if "not much", 2 if "some", 3 if "quite a lot" and 4 if "all possible".
You have been given $100 million dollars to dedicate to the 6 policy areas below. Move the green sliders to allocate extra funds to these areas. Keep in mind you can only increase spending in million dollar lots. You can allocate anywhere between $0 to $100 million.
$EVPolicySpending_i =$ numerical value.

Support for specific government policies variables

Here are several policies governments use to encourage EV adoption. Which of these policies would most encourage you to buy and EV. Please select a maximum of three policies.
$Taxrebate_i =$1 if selected "Getting a tax rebate of $7000 for purchasing an EV.", 0 otherwise.
$Batterylease_i =$1 if selected "Having a EV battery leasing program, so that I wouldn't have to fear unexpected costs due to battery failure.", 0 otherwise.
$Batterywarranty_i =$1 if selected "Having a 8-year/ 192,000-kilometre EV battery warranty.", 0 otherwise.
$Transitlaneaccess_i =$1 if selected "Having a 8-year/ 192,000-kilometre EV battery warranty.", 0 otherwise.
$Freeparking_i =$1 if selected "Free car parking for EV's.", 0 otherwise.
$Infoaccess_i =$1 if selected "Access to more information about EV's (for example, about manufacturing, environmental impact or safety). ", 0 otherwise.
$Chargeatwork_i =$1 if selected "Having recharging facilities available at work or near businesses I frequent.", 0 otherwise.
$Chargeathome_i =$1 if selected "Having recharging facilities at home, so that I could recharge easily overnight.", 0 otherwise.
$Noroadusage_i =$1 if selected "No road usage charge if you drive an EV.", 0 otherwise.

$Nopolicy_i = 1$ if selected "No policy intervention would encourage me to buy an EV. ", 0 otherwise.

B Sample demographics and balance

Table B1: Sample characteristics compared to nation

	Sample (n=661)	Australian population
Age (median)	47	38
Female (%)	51.4	50.8
Annual household income, before tax (%)		
<$50,000	23.0	50.3
$50,000-$124,999	46.0	31.2
>$125,000	31.0	18.5
Completed undergraduate degree or above (%)	57.5	32.1
Urban (%)	74.6	66.9
State or territory (%)		
NSW	32.1	31.8
VIC	26.3	25.6
QLD	20.4	20.3
SA	7.0	7.0
WA	10.3	10.5
ACT	1.7	1.8
TAS	1.7	2.2
NT	0.6	0.9
Kilometres driven a week (%)		
<30 km	11.4	-
30-230 km	64.2	-
>230 km	24.3	-
Own a BEV (%)	1.5	2.3

National data from ABS (2021), ABS (2022) and ADA Dataverse (2022). On account of national data availability figures include those under 18 and income brackets in Australian population are: <$51,948, $51,948-$103,948 and >$103,948.

Table B2: Balance across treatment and control groups

	C1 and C2		Control and T1		Control and T2		T1 and T2	
	C1 mean	C1-C2	Control mean	Control-T1	Control mean	Control-T2	T1 mean	T1-T2
Female	0.56	0.01	0.55	0.06	0.55	0.05	0.49	-0.01
Income	4.17	0.08	4.13	-0.14	4.13	-0.17	4.27	-0.03
Urban	1.24	-0.05	1.23	-0.00	1.27	0.05	1.27	0.05
Age	46.69	47.15	0.03	(14.09)	47.15	-0.91	47.11	-0.94
Education	3.70	-0.00	3.70	0.05	3.70	-0.16*	3.65	-0.21**
Early adopter	3.96	-0.26	4.08	0.22	4.08	-0.07	3.86	-0.29*
BEV Owner	0.00	0.00	0.00	-0.02**	0.00	-0.02	0.02	-0.00
Hybrid Owner	0.05	-0.01	0.06	-0.01	0.06	0.60	0.07	-0.01
See clim. change as threat	3.98	0.03	3.96	0.01	3.96	0.19*	3.95	0.18
Think humans cause clim. change	3.65	-0.02	3.66	-0.05	3.66	-0.04	3.71	0.01
Personal responsibility to fix clim. change	2.09	-0.08	2.94	-0.15	2.94	0.00	3.09	0.16
Kms driven weekly	2.92	-0.23	3.02	0.07	3.02	-0.13	2.95	0.08
Time keep car for	3.63	0.01	3.62	0.21*	3.62	0.14	3.42	-0.07
Prox. of outlet to car park	2.61	0.20	2.58	-0.21	2.58	0.06	2.79	0.27*
Initial willingness to purchase	3.01	0.07	2.97	-0.05	2.97	-0.05	3.02	-0.00
Initial WTP	3.19	0.29	3.06	0.14	3.06	-0.11	2.93	-0.25
Joint test (p-value)	0.741		0.059		0.253		0.070	

*p<0.05, **p<0.01, ***p<0.001. This table t-tests comparing relevant observables across treatment and control groups.

C Robustness testing: Multiple hypothesis testing

Table C1: Treatment effect on misperceptions adjusted for multiple hypothesis testing

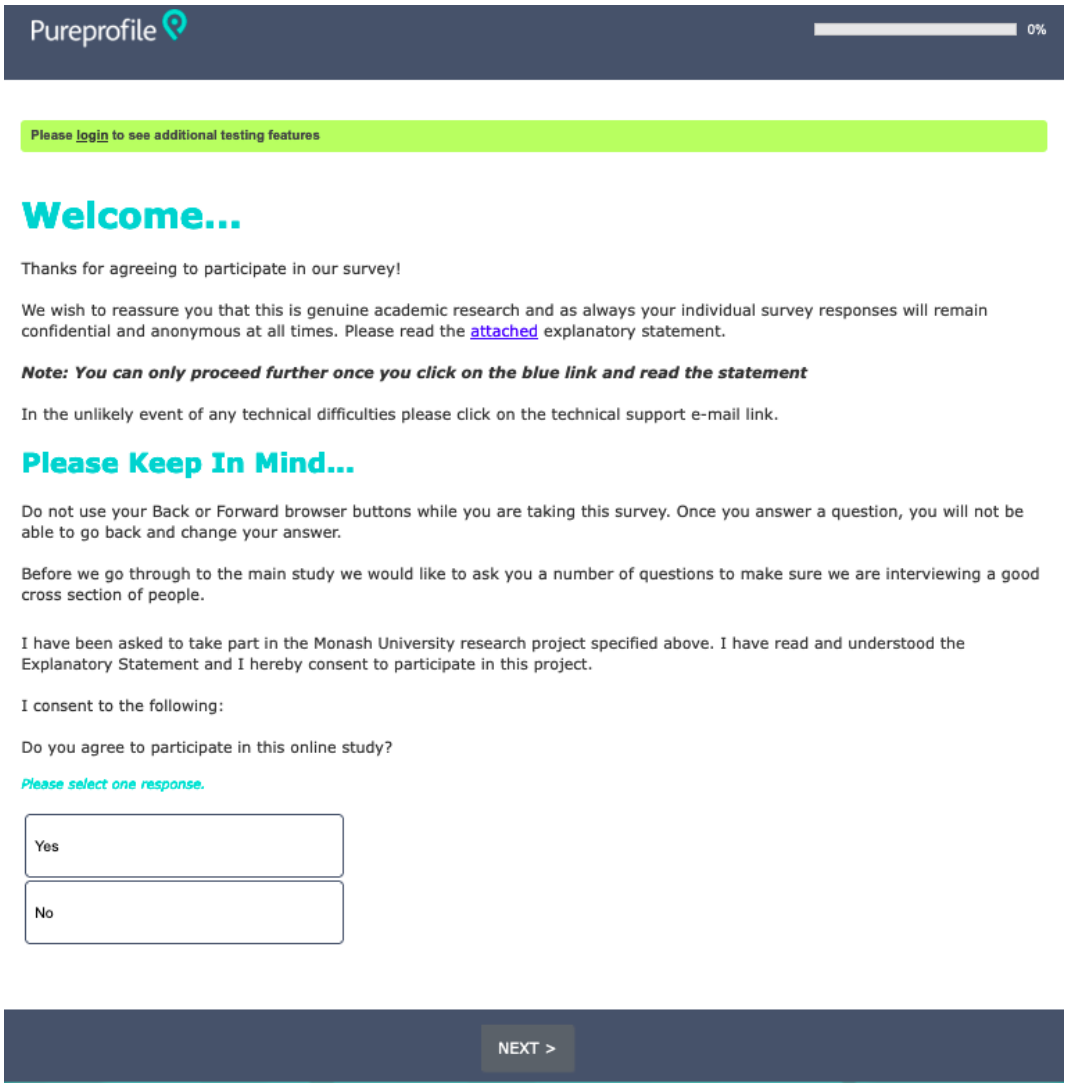
	Recharging cost misp.	Servicing cost misp.	Charger cost misp.	Vehicle price misp.
	(1)	(2)	(3)	(4)
Panel A. Price misperceptions				
T1: Fact sheet	-127.1***	-19.04	-25.08	-3.660
T2: Narrative	-151.6***	-40.94***	-29.65	-0.535
Observations	661	661	661	661
	Charging time misp.	CO2 emissions misp.	No. of stations misp.	
	(5)	(6)	(7)	
Panel B. Other misperceptions				
T1: Fact sheet	-44.74	-14.82***	-7.465	
T2: Narrative	-53.60**	-10.54**	2.709	
Observations	661	661	661	

*p<0.05, **p<0.01, ***p<0.001. This table reports estimates for treatment allocation effect on $abs(100 \times b^i_j)$ whilst considering multiple testing. Bonferroni's adjustment was used to determine significance. Controls were not included.

D Survey

Below is an example of how the survey would appear for a Melbourne participant. For information about how treatments appear for other regions, please contact researcher. The survey design was influenced by previous surveys on electric vehicle preferences, (Krupa et al., 2014), (Rapson and Muehlegger, 2021).

D.1 Pre-treatment questionnaire


Pureprofile
0%
Please login to see additional testing features
Welcome...
Thanks for agreeing to participate in our survey!
We wish to reassure you that this is genuine academic research and as always your individual survey responses will remain confidential and anonymous at all times. Please read the attached explanatory statement.
Note: You can only proceed further once you click on the blue link and read the statement
In the unlikely event of any technical difficulties please click on the technical support e-mail link.
Please Keep In Mind...
Do not use your Back or Forward browser buttons while you are taking this survey. Once you answer a question, you will not be able to go back and change your answer.
Before we go through to the main study we would like to ask you a number of questions to make sure we are interviewing a good cross section of people.
I have been asked to take part in the Monash University research project specified above. I have read and understood the Explanatory Statement and I hereby consent to participate in this project.
I consent to the following:
Do you agree to participate in this online study?
Please select one response.
Yes
No
NEXT >

Pureprofile 2%

What is your age?

Please type your age in the box below.

How do you identify?

Please select one response.

Male | Female | Non-binary | My gender isn't listed. I identify as: | Prefer not to say

What is your postcode?

Please type in your postcode in the box below.

NEXT >

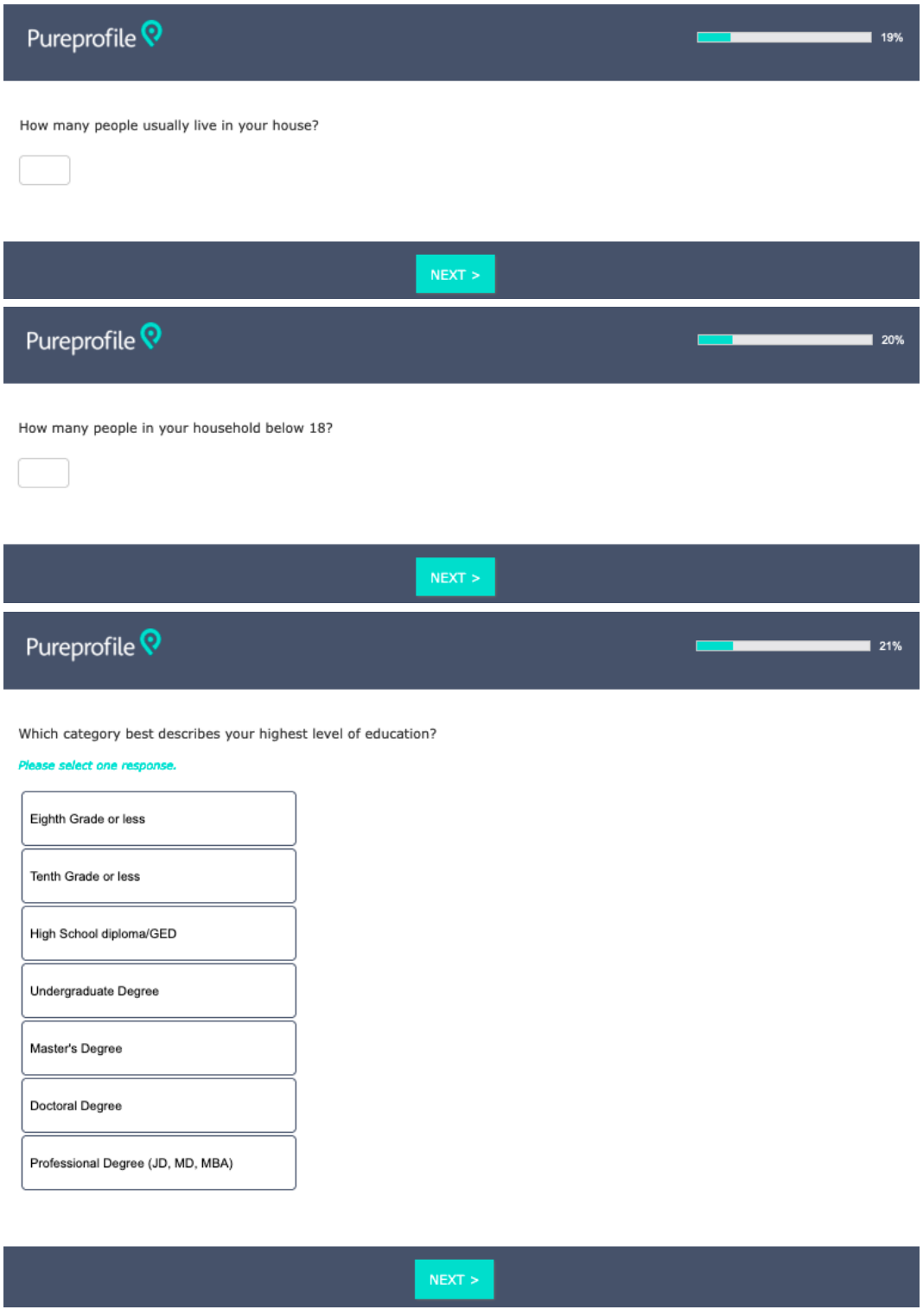
Pureprofile 18%

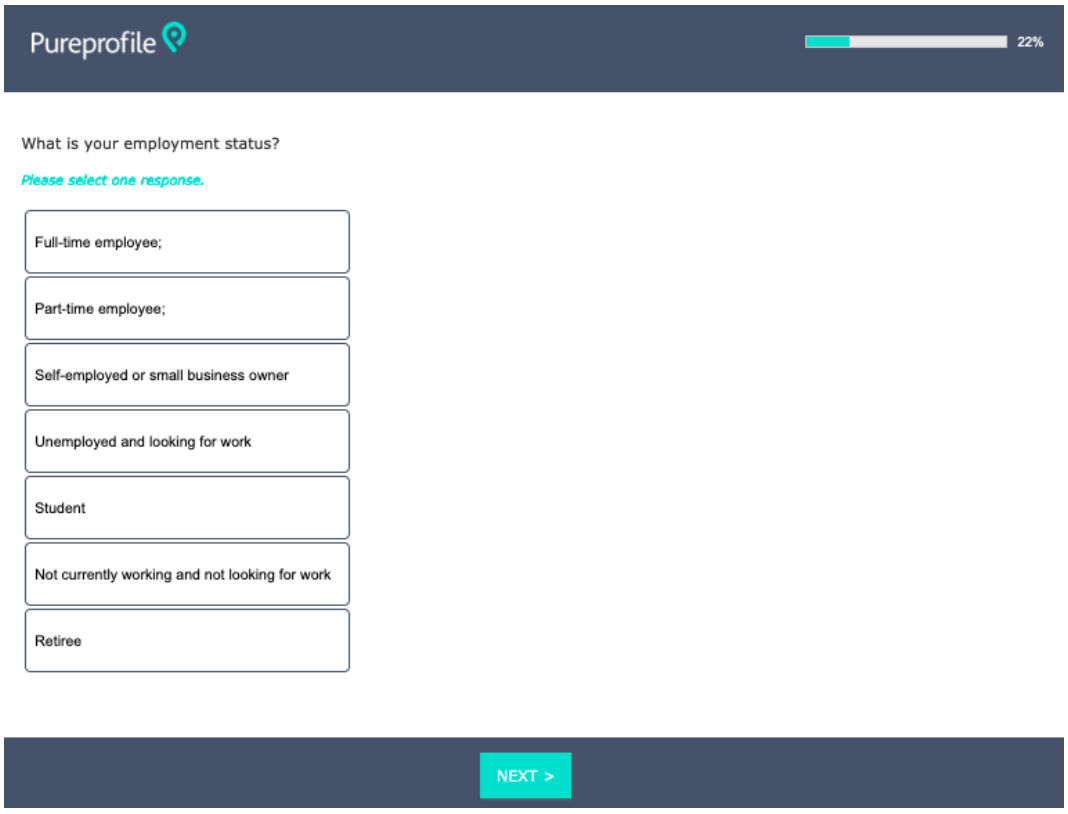
What was the total income of your household, before taxes last year?

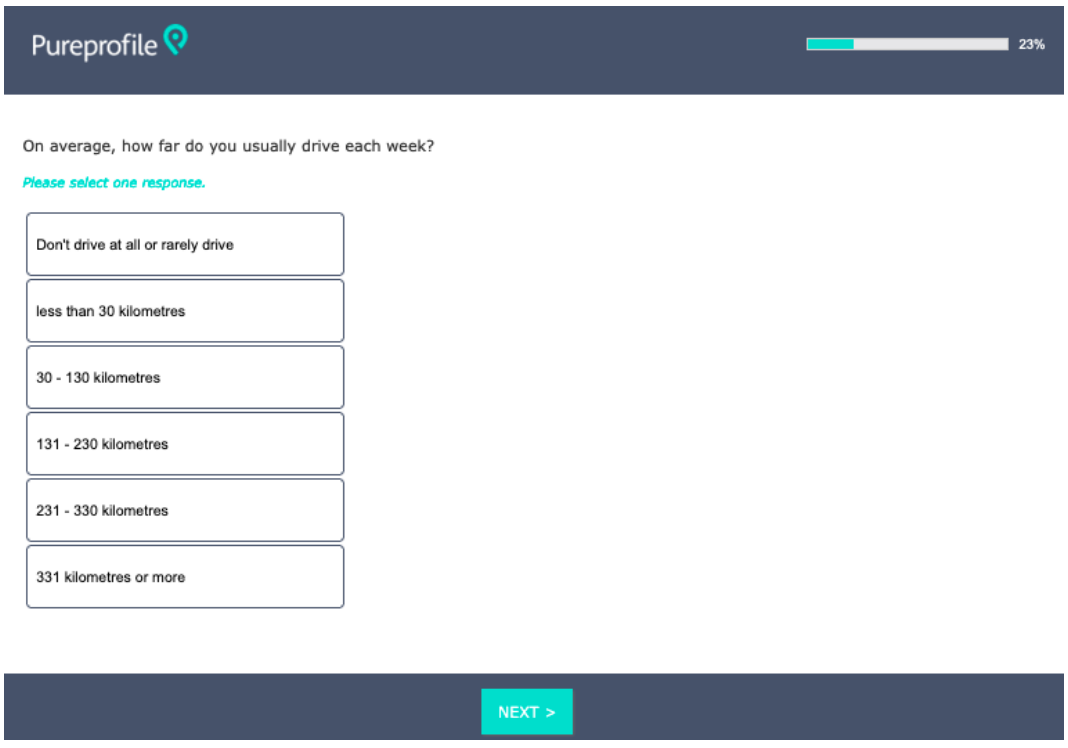
Please select one response.

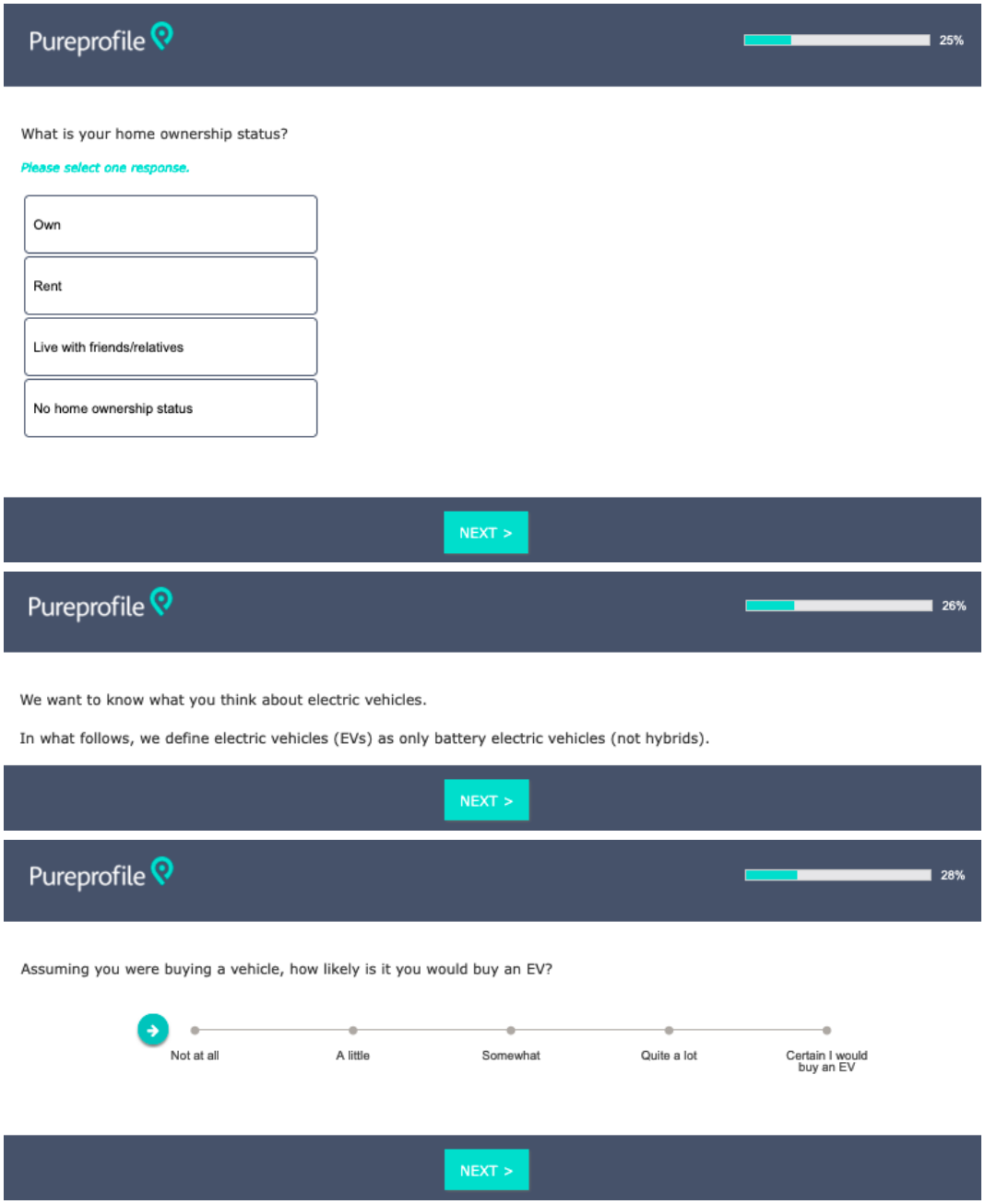
- Less than $25,000
- $25,000 - $49,999
- $50,000 - $74,999
- $75,000 - $99,999
- $100,000 - $124,999
- $125,000 - $149,999
- Greater than $150,000

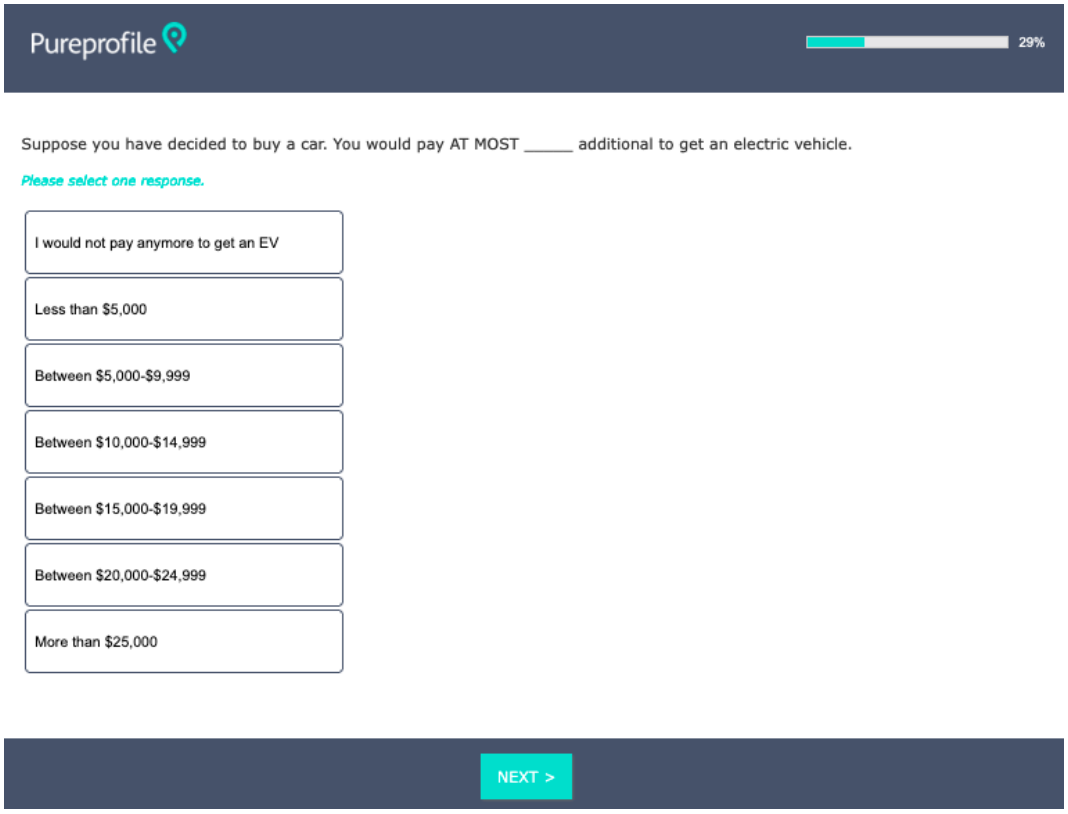
NEXT >


Pureprofile
19%
How many people usually live in your house?
NEXT >
Pureprofile
20%
How many people in your household below 18?
NEXT >
Pureprofile
21%
Which category best describes your highest level of education?
Please select one response.
Eighth Grade or less
Tenth Grade or less
High School diploma/GED
Undergraduate Degree
Master's Degree
Doctoral Degree
Professional Degree (JD, MD, MBA)
NEXT >


Pureprofile
22%
What is your employment status?
Please select one response.
Full-time employee;
Part-time employee;
Self-employed or small business owner
Unemployed and looking for work
Student
Not currently working and not looking for work
Retiree
NEXT >


Pureprofile
23%
On average, how far do you usually drive each week?
Please select one response.
Don't drive at all or rarely drive
less than 30 kilometres
30 - 130 kilometres
131 - 230 kilometres
231 - 330 kilometres
331 kilometres or more
NEXT >


Pureprofile
25%
What is your home ownership status?
Please select one response.
Own
Rent
Live with friends/relatives
No home ownership status
NEXT >
Pureprofile
26%
We want to know what you think about electric vehicles.
In what follows, we define electric vehicles (EVs) as only battery electric vehicles (not hybrids).
NEXT >
Pureprofile
28%
Assuming you were buying a vehicle, how likely is it you would buy an EV?
Not at all
A little
Somewhat
Quite a lot
Certain I would buy an EV
NEXT >



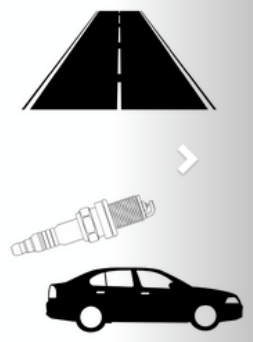
D.2 Information treatments

Below is the final panel of each information treatment and the control information treatment as it would be observed by a Victorian respondent in each group. Following this we have corresponding comprehension questions. We show C2: Treatment, T1: Fact sheet and F2: Narrative, in that order.

Pureprofile 31%

We would like to present you with a story about the history of the automobile. Please click-through and read the screens. Please read this information carefully this is very important for the success of our research. At the end we will ask you some questions.

Ancient times to 1884	1885 to 1918	1919 to 1945	1946 to 1979	1980 to 2000
Prior to automobiles animal drawn transportation was used for short trips with few people. Steam engines were invented and used to power the first land vehicle. Otto invented the two- and four-stroke gas engines. These engines would later be used in early automobiles.	Automobiles started to be run by fuel rather than gas because it was easier to carry on the vehicle. Automobile industry began with Benz and Daimler individually creating and selling new automobile varieties.	With new developments in production processes automobiles could be produced more cheaply. This saw the invention of automobiles targeted towards the middle class. American manufacturers and to a lesser extent British manufacturers dominate the automobile industry.	Automobiles were now being mass produced by a larger number of sellers. Governments began placing legislation on vehicles fuel consumption and exhausts.	Rising living standards and the growth of the road network caused increased demand for personal vehicles. Development of vehicles with new engines, driving systems and fuel types.



The History of the Automobile – Screen 5

NEXT >

Pureprofile 35%

Which regions dominated the automobile industry in 1919 to 1945?

Please select one response.

- Japan and Germany
- Japan and USA
- USA and Britain
- Germany and Britain
- Germany and USA

NEXT >

Pureprofile 35%

What was the benefit of using liquid fuel over gas in early automobiles?

Please select one response.

- Liquid fuel was more accessible to manufacturers.
- Liquid fuel was more affordable.
- Liquid fuel was more environmentally friendly.
- Liquid fuel took up less storage space.

NEXT >

Pureprofile 36%

In what year range did the mass-production of automobiles begin?

Please select one response.

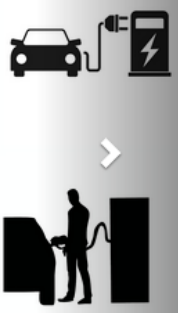
- 1864-1884
- 1885-1918
- 1919-1945
- 1945-1979
- 1980-2000

NEXT >

Pureprofile 31%

We would like to present you with some information about Electric Vehicles (EVs) and Internal Combustion Vehicles (ICVs). In what follows, internal combustion vehicles (ICVs) refer to cars with engines that run by igniting fuels such as petrol, diesel or natural gas. Please click-through and read the screens. Please read this information carefully this is very important for the success of our research. At the end we will ask you some questions.

	Purchase price	Fuel/Electricity costs	Maintenance costs	CO2 emissions in life cycle incl. production	Public refuelling stations in your state
Battery Electric Vehicles	Average $62,000-$67,000 price range for small to large vehicles. The installation of an at home (level 2) charger costs $1,000-$4,000	Estimated $500 per year ($0.04/km) in electricity costs.	Estimated $400AUD/year.	Vehicle with average grid intensity expected to produce 270 g of CO2 per km.	VIC has 400 public charging stations. Public charging takes 10 minutes to 2 hours to charge a car.
Internal Combustion Vehicles (Petrol and Diesel)	Average $19,000-$41,000 price range for small to large vehicles.	Estimated $2,000 per year ($0.1/km) in fossil fuel costs.	Estimated $800AUD/year.	Expected to produce 330 g of CO2 per km.	VIC has 1000 petrol stations. Average refuelling time is 2 minutes.



Fact Sheet VIC (EVs and ICVs) – Screen 5

NEXT >

Pureprofile 31%

Which of the following options is closest to the average price range of a regular ICV?

Please select one response.

- $8,000-$48,000
- $18,000-$40,000
- $28,000-$50,000
- $38,000-$75,000
- $40,000-$150,00

NEXT >

Pureprofile 31%

Which of the following options is closest to the average cost of charging an EV for a year?

Please select one response.

- $100
- $250
- $500
- $750
- $1000

NEXT >

Pureprofile 32%

Which of the following options is closest to the estimated maintenance cost of an ICV?

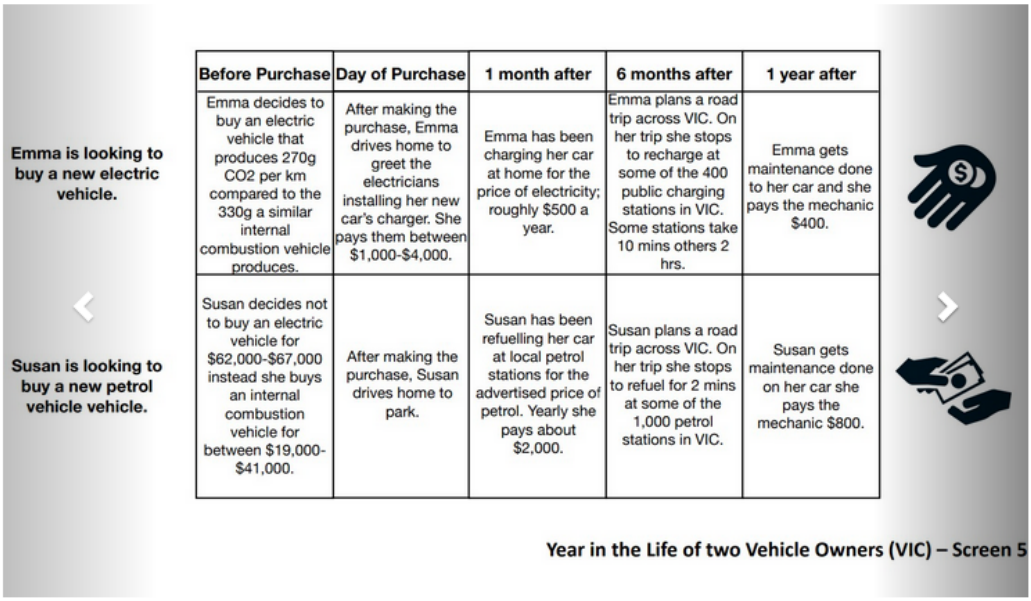
Please select one response.

- $1000-$1,199
- $1,200-$1,399
- $1,400-$1,599
- $1,600-$1,799
- $1,800-$1,999

NEXT >

Pureprofile 31%

We would like to present you with a story about an electric vehicle (EV) and Internal Combustion Vehicle (ICV) owner. Please click-through and read the screens. In what follows, internal combustion vehicles (ICVs) refer to cars with engines that run by igniting fuels such as petrol, diesel or natural gas. Please read this information carefully this is very important for the success of our research. At the end we will ask you some questions.



NEXT >

Pureprofile 33%

Select all of the locations that were mentioned as places Emma charges her electric vehicle.

Please select all that apply.

- [ ] Highway public charging station
- [ ] Shopping centre charging station
- [ ] At work
- [ ] At home
- [ ] Petrol station

NEXT >

Pureprofile 33%

How much did it cost Susan to have maintenance done on her petrol vehicle?

Please select one response.

- Less than Emma
- Same as Emma
- More than Emma

NEXT >

Pureprofile 34%

What qualities were Emma and Susan looking for in their new vehicle?

Please select one response.

- Emma wants a vehicle with low emissions and Susan wants a vehicle with large boot capacity.
- Emma wants a vehicle with a high safety rating and Susan wants a vehicle with low emissions.
- Emma wants a vehicle with low emissions and Susan wants a vehicle for a low price.
- Emma wants a vehicle for a low price and Susan wants a vehicle from a well-regarded brand.

NEXT >

D.3 Post-treatment questionnaire

Pureprofile 36%

Do you believe the information provided in this fact sheet is accurate?

Please select one response.

- Yes
- No
- Unsure

NEXT >

Pureprofile 37%

I frequently am one of the first to adopt new technologies.

Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree nor Disagree | Somewhat Agree | Agree | Strongly Agree

NEXT >

Pureprofile 38%

How many vehicles are owned or leased in your household?

Please select one response.

- 0
- 1
- 2
- 3
- 4 or more

NEXT >

Pureprofile 39%

If your response to the previous question was one or more, please indicate the number of each vehicle type your household currently owns.

Hybrid	
Electric motor bike / Scooter	
Moto bike / Scotter	
Diesel Vehicle	
Petrol Vehicle	
Battery Electric (BEV)	
Plug-In Electric Hybrid	
	Total: 0

NEXT >

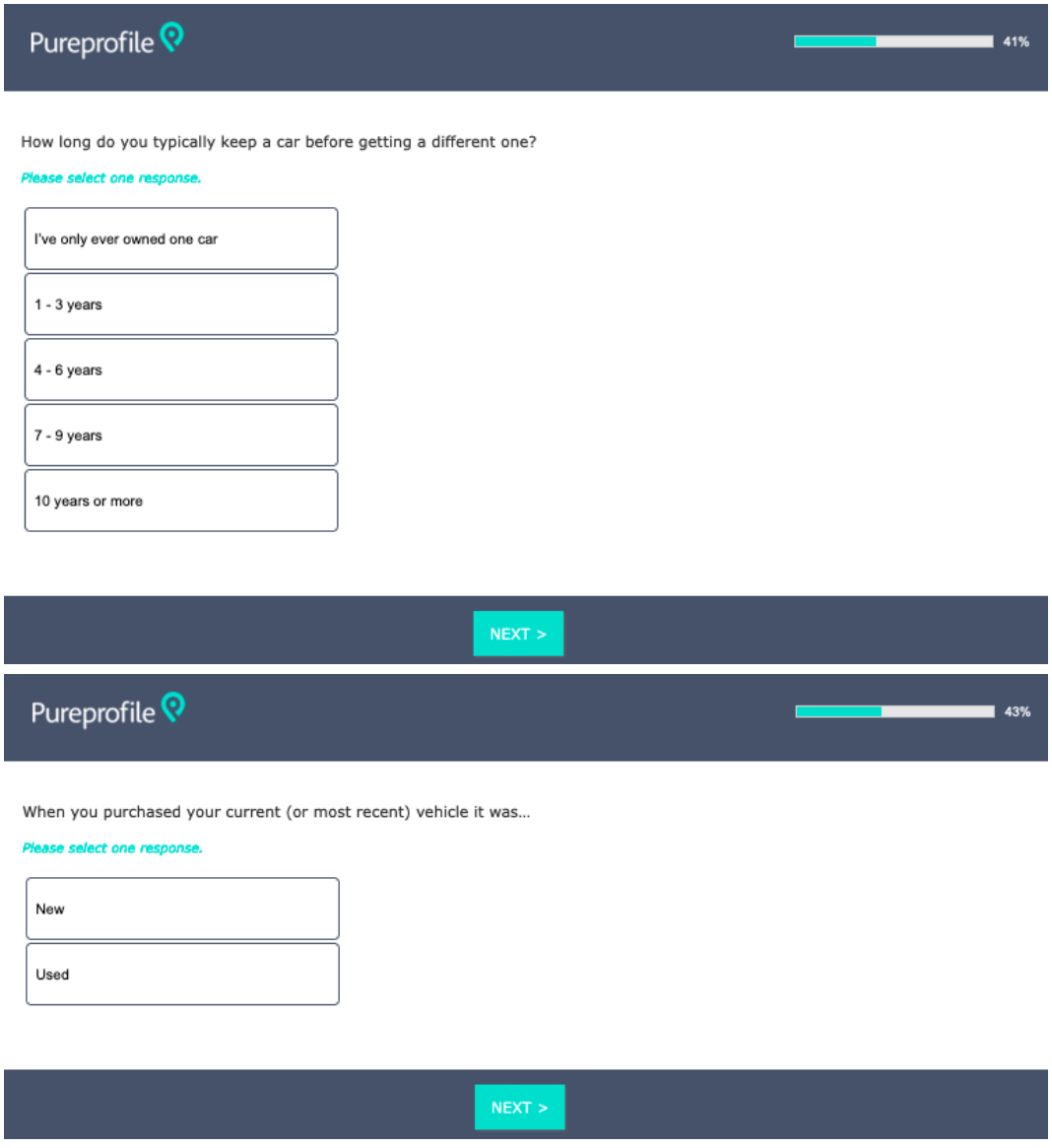
Pureprofile 40%

If you own one or more vehicles where do you typically park your vehicles(s)?

Please select all that apply.

- Carpark (assigned)
- Garage (detached or attached)
- Carport
- Driveway
- Carpark (unassigned
- Street Parking

NEXT >


Pureprofile
41%
How long do you typically keep a car before getting a different one?
Please select one response.
I've only ever owned one car
1 - 3 years
4 - 6 years
7 - 9 years
10 years or more
NEXT >
Pureprofile
43%
When you purchased your current (or most recent) vehicle it was...
Please select one response.
New
Used
NEXT >

Pureprofile 44%

When you acquired your most recent vehicle that is primarily for your use, how did you pay for the vehicle?

Please select one response.

- I financed it.
- It was a gift.
- I leased it.
- It's a company-owned vehicle.
- I paid cash.

NEXT >

Pureprofile 45%

How likely are you/someone in your immediate household to purchase a new or used vehicle within the next 2 years (by the end of 2025)?

Not at all | A little | Somewhat | A lot | Very likely

NEXT >

Pureprofile 47%

How far is the nearest available power outlet to wherever you do/could park a car at home?

Please select one response.

- 0-3 meters
- 3-7 meters
- 8-15 meters
- Over 15 meters
- No power source available

NEXT >

Pureprofile 48%

If you were to purchase a vehicle in the near future, to what degree do you think the following factors would influence your vehicle choice?

Environmental impact.	Select one...
Types of vehicles I see on the road	Select one...
Power/performance	Select one...
Proximity/quality of dealership for service.	Select one...
Efficiency (Kilometres driven before Refuelling/Recharging)	Select one...
Brand	Select one...
What acquaintances, friends and/or family own	Select one...
Vehicle price	Select one...

What vehicle class would you plan to buy?

Please select all that apply.

4WD | Sedan | Convertible | Hatchback | Van | Station Wagon | Coupe/Sports

Ute | SUV | Other

NEXT >

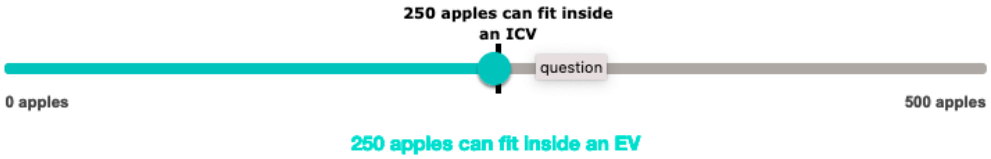
Pureprofile 51%

In what follows, internal combustion vehicles (ICVs) refer to cars with engines that run by igniting fuels such as petrol, diesel or natural gas.

We want to know what you believe about EV features. Move the slider to the left or right to indicate your beliefs.

To begin please try answering this example question. Let us pretend you are told 250 apples can fit inside an average ICV. Let us also pretend you believe that 200 apples fit inside an average EV. Move the blue slider to "200 apples can fit inside an EV" to indicate your belief.

Drag the slider to a point on the scale.



250 apples can fit inside an EV

NEXT >

Pureprofile 52%

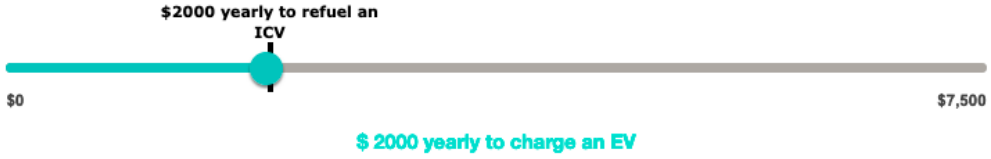
In the following questions, we will ask you to move the slider in a similar way to indicate your beliefs.

NEXT >

Pureprofile 53%

On average how much do you think it costs to charge an EV compared to refuelling an ICV per year?

Drag the slider to a point on the scale.



How confident are you that you answered the above question correctly?

NEXT >

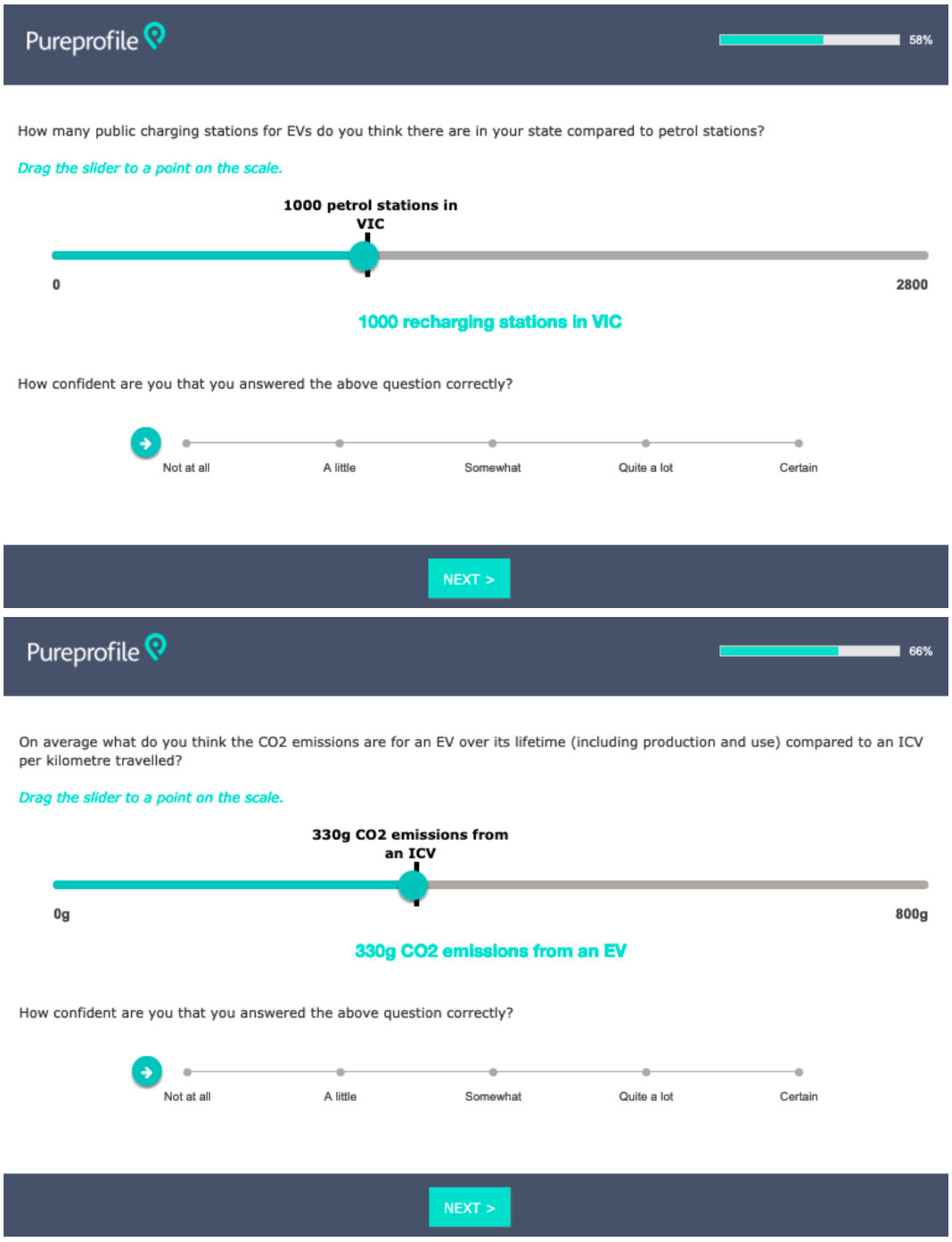
Pureprofile 55%

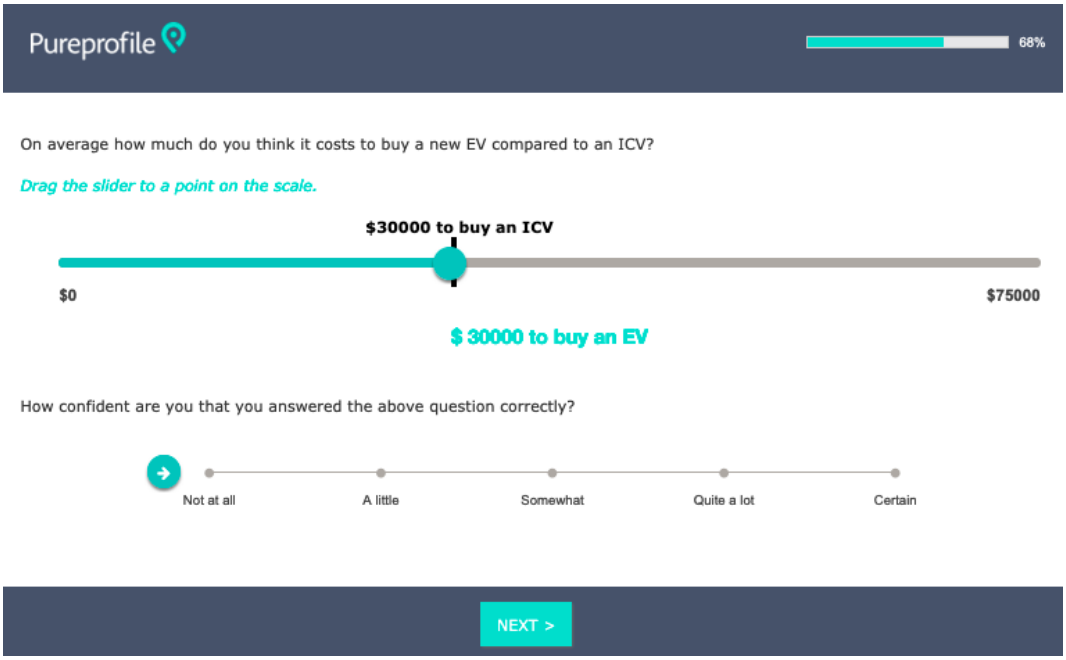
Per visit how much do you think it costs on average to service an EV compared to an ICV?

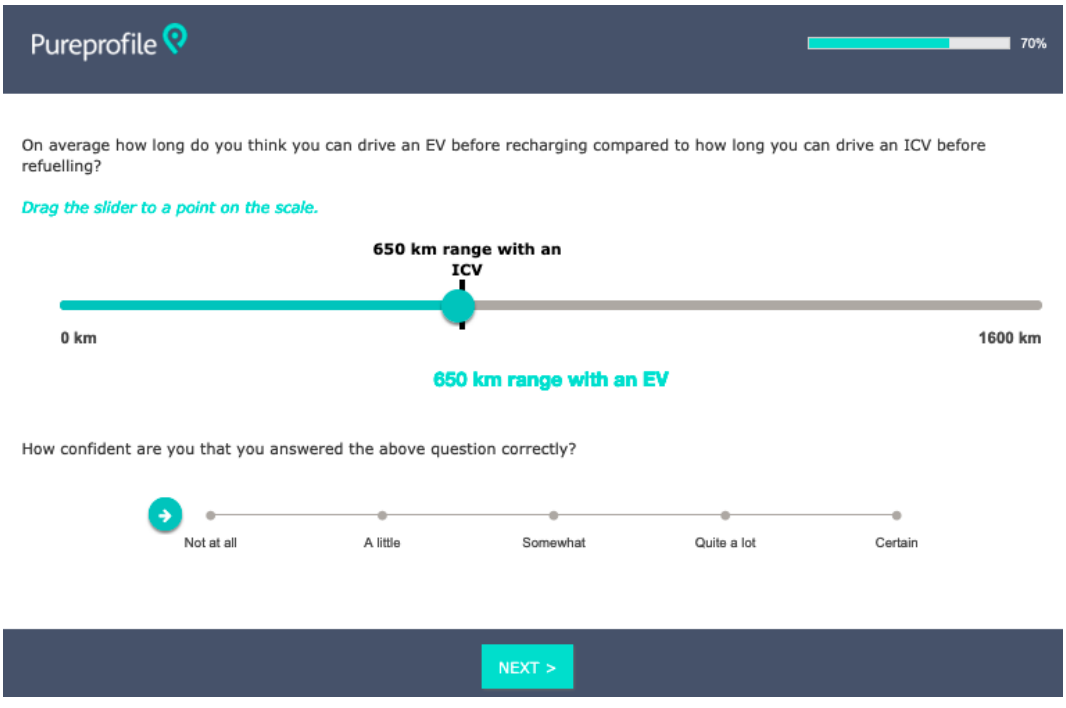
Drag the slider to a point on the scale.

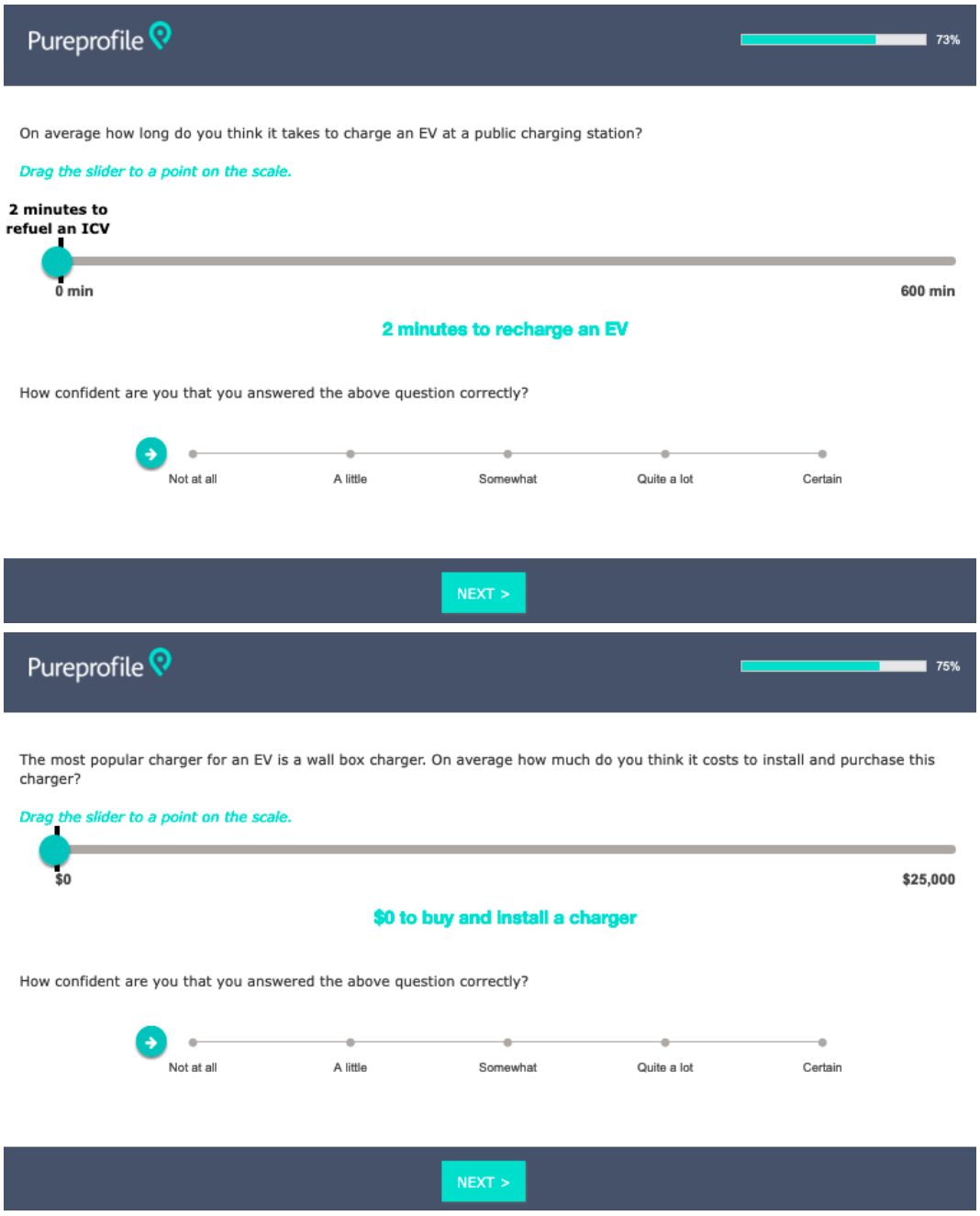
How confident are you that you answered the above question correctly?

NEXT >


Pureprofile
58%
How many public charging stations for EVs do you think there are in your state compared to petrol stations?
Drag the slider to a point on the scale.
1000 petrol stations in VIC
0
2800
1000 recharging stations in VIC
How confident are you that you answered the above question correctly?
Not at all
A little
Somewhat
Quite a lot
Certain
NEXT >
Pureprofile
66%
On average what do you think the CO2 emissions are for an EV over its lifetime (including production and use) compared to an ICV per kilometre travelled?
Drag the slider to a point on the scale.
330g CO2 emissions from an ICV
0g
800g
330g CO2 emissions from an EV
How confident are you that you answered the above question correctly?
Not at all
A little
Somewhat
Quite a lot
Certain
NEXT >


Pureprofile
68%
On average how much do you think it costs to buy a new EV compared to an ICV?
Drag the slider to a point on the scale.
$30000 to buy an ICV
$0
$75000
$ 30000 to buy an EV
How confident are you that you answered the above question correctly?
Not at all
A little
Somewhat
Quite a lot
Certain
NEXT >


Pureprofile
70%
On average how long do you think you can drive an EV before recharging compared to how long you can drive an ICV before refuelling?
Drag the slider to a point on the scale.
650 km range with an ICV
0 km
1600 km
650 km range with an EV
How confident are you that you answered the above question correctly?
Not at all
A little
Somewhat
Quite a lot
Certain
NEXT >


Pureprofile
73%
On average how long do you think it takes to charge an EV at a public charging station?
Drag the slider to a point on the scale.
2 minutes to refuel an ICV
0 min
600 min
2 minutes to recharge an EV
How confident are you that you answered the above question correctly?
Not at all
A little
Somewhat
Quite a lot
Certain
NEXT >
Pureprofile
75%
The most popular charger for an EV is a wall box charger. On average how much do you think it costs to install and purchase this charger?
Drag the slider to a point on the scale.
$0
$25,000
$0 to buy and install a charger
How confident are you that you answered the above question correctly?
Not at all
A little
Somewhat
Quite a lot
Certain
NEXT >

Pureprofile 78%

Assuming you were buying a vehicle, how likely is it you would buy an EV?

Not at all | A little | Somewhat | Quite a lot | Certain I would buy an EV

When we asked the previous question to others also in **Melbourne** which response do you believe was most frequently selected?

If you are correct and this question is randomly selected (out of three) you will receive $2.

Not at all | A little | Somewhat | Quite a lot | Certain I would buy an EV

NEXT >

Pureprofile 80%

How important are each of the following aspects of EV's, in terms of how this would impact your comfort level in purchasing/leasing an EV, assuming it had all the other features you desired?

The ecological and/or political costs for manufacturing the battery.	Select one...
The ecological costs of battery disposal.	Select one...
Purchase price.	Select one...
The replacement cost of the battery, should it fail.	Select one...
Limited choice of available models.	Select one...
Delays in delivery time.	Select one...
Difficulties in getting the EV engine serviced or repaired.	Select one...
Home not being suitable for home charging	Select one...
The availability of public charging locations	Select one...
The lifetime of the battery.	Select one...

NEXT >

Pureprofile 82%

Suppose you have decided to buy a car. You would pay AT MOST _____ additional to get an electric vehicle.

Please select one response.

- I would not pay anymore to get an EV
- Less than $5,000
- Between $5,000-$9,999
- Between $10,000-$14,999
- Between $15,000-$19,999
- Between $20,000-$24,999
- More than $25,000

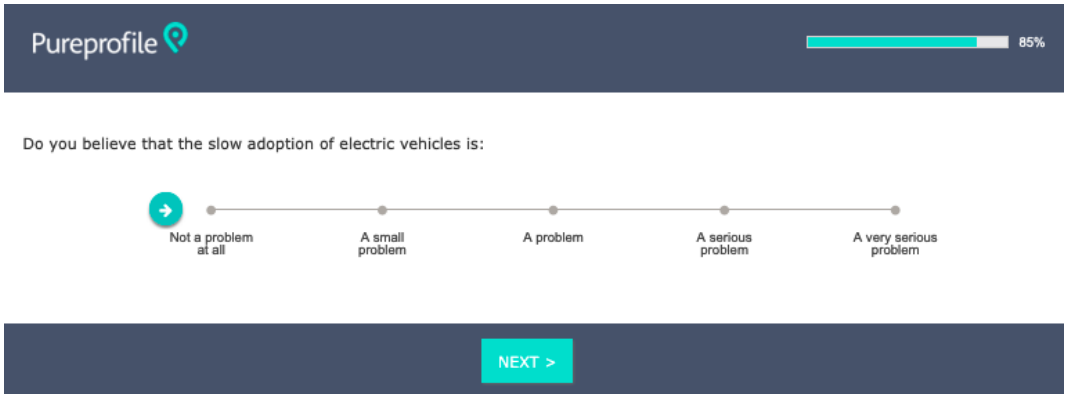
When we asked the previous question to others also in **Melbourne** which response do you believe was most frequently selected?

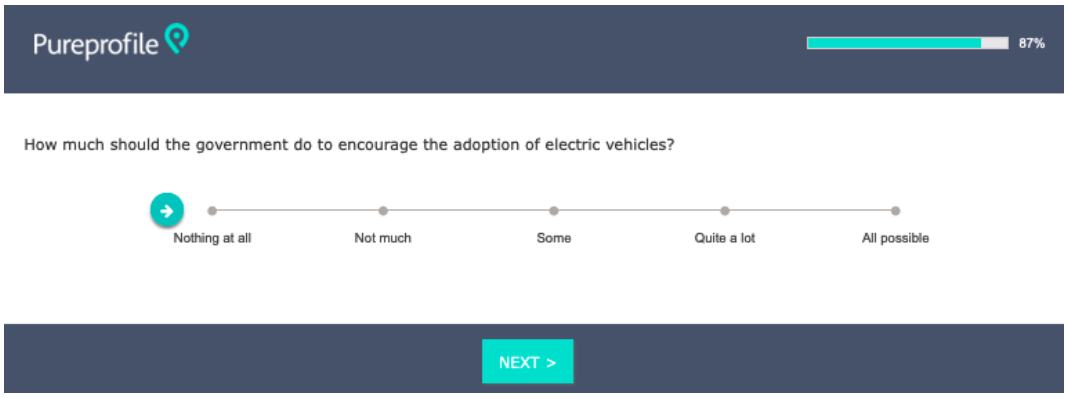
If you are correct and this question is randomly selected (out of three) you will receive $2.

Please select one response.

- I would not pay anymore to get an EV
- Less than $5,000
- Between $5,000-$9,999
- Between $10,000-$14,999
- Between $15,000-$19,999
- Between $20,000-$24,999
- More than $25,000

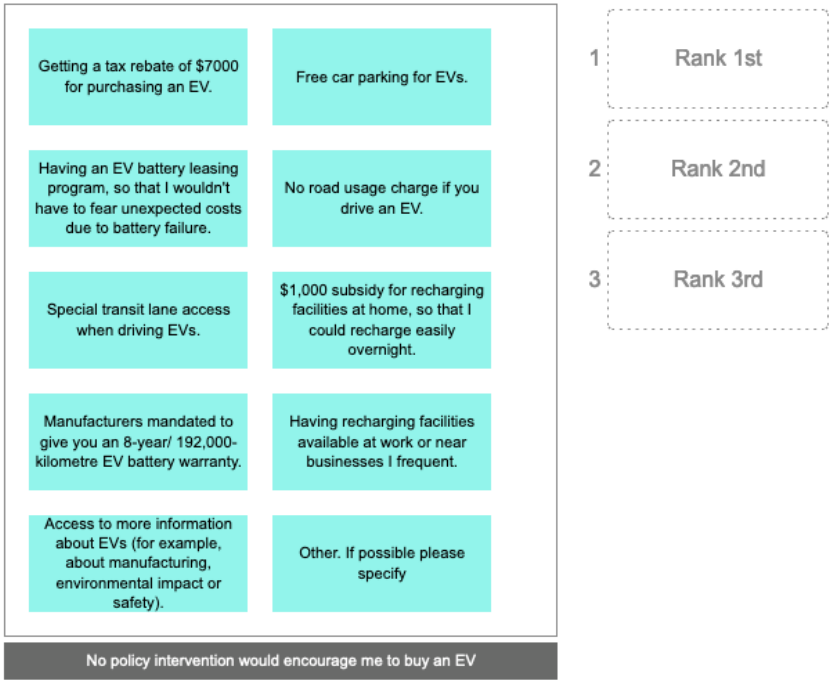
NEXT >


Pureprofile
85%
Do you believe that the slow adoption of electric vehicles is:
Not a problem at all
A small problem
A problem
A serious problem
A very serious problem
NEXT >


Pureprofile
87%
How much should the government do to encourage the adoption of electric vehicles?
Nothing at all
Not much
Some
Quite a lot
All possible
NEXT >

Pureprofile 88%

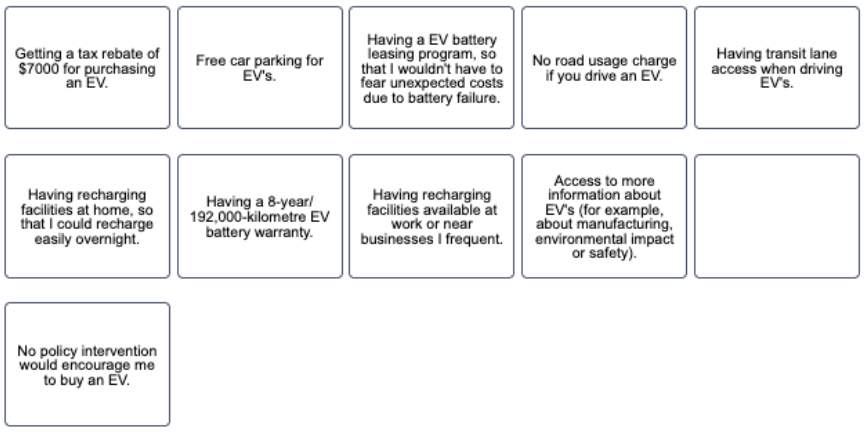
Here are several policies governments use to encourage EV adoption. Which of these policies would most encourage you to buy an EV. Please select a maximum of three policies and order them 1 to 3 with 1 being the policy that would most encourage you to purchase an EV.



We asked the previous question to others also in **Melbourne**. What policy do you believe others most frequently ranked number 1 as their most preferred policy?

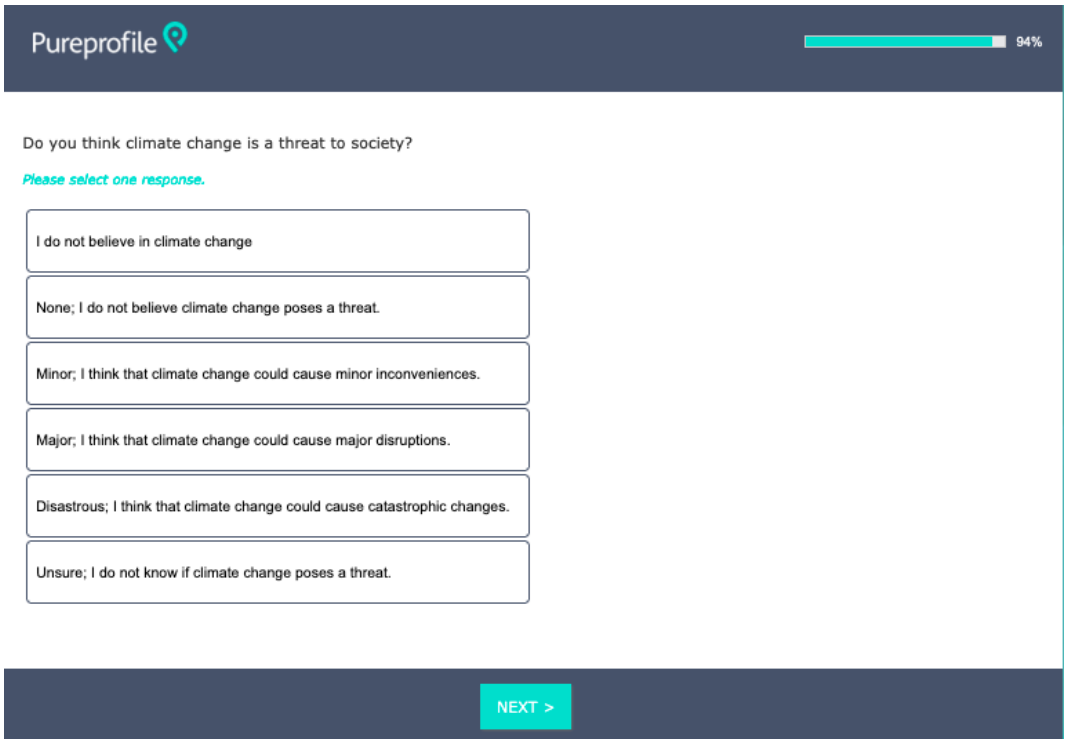
If you correctly select the most preferred policy and this question is randomly selected (out of three) you will receive $2.

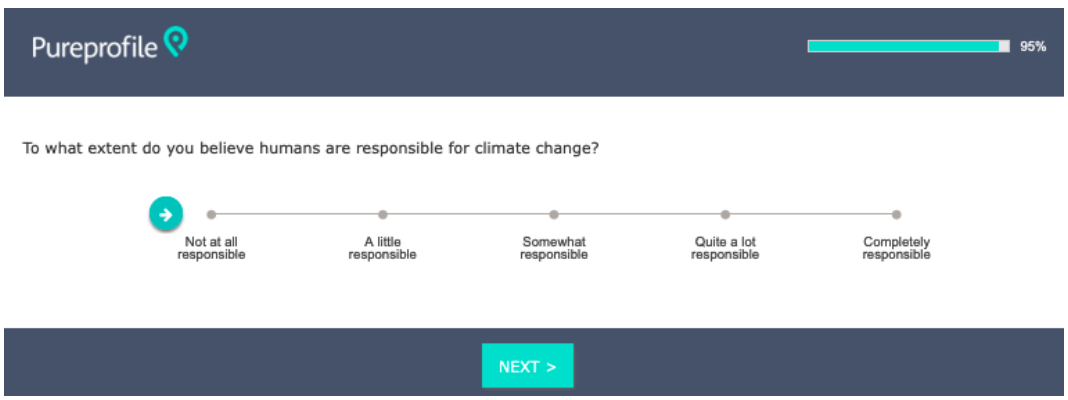
Please select one response.

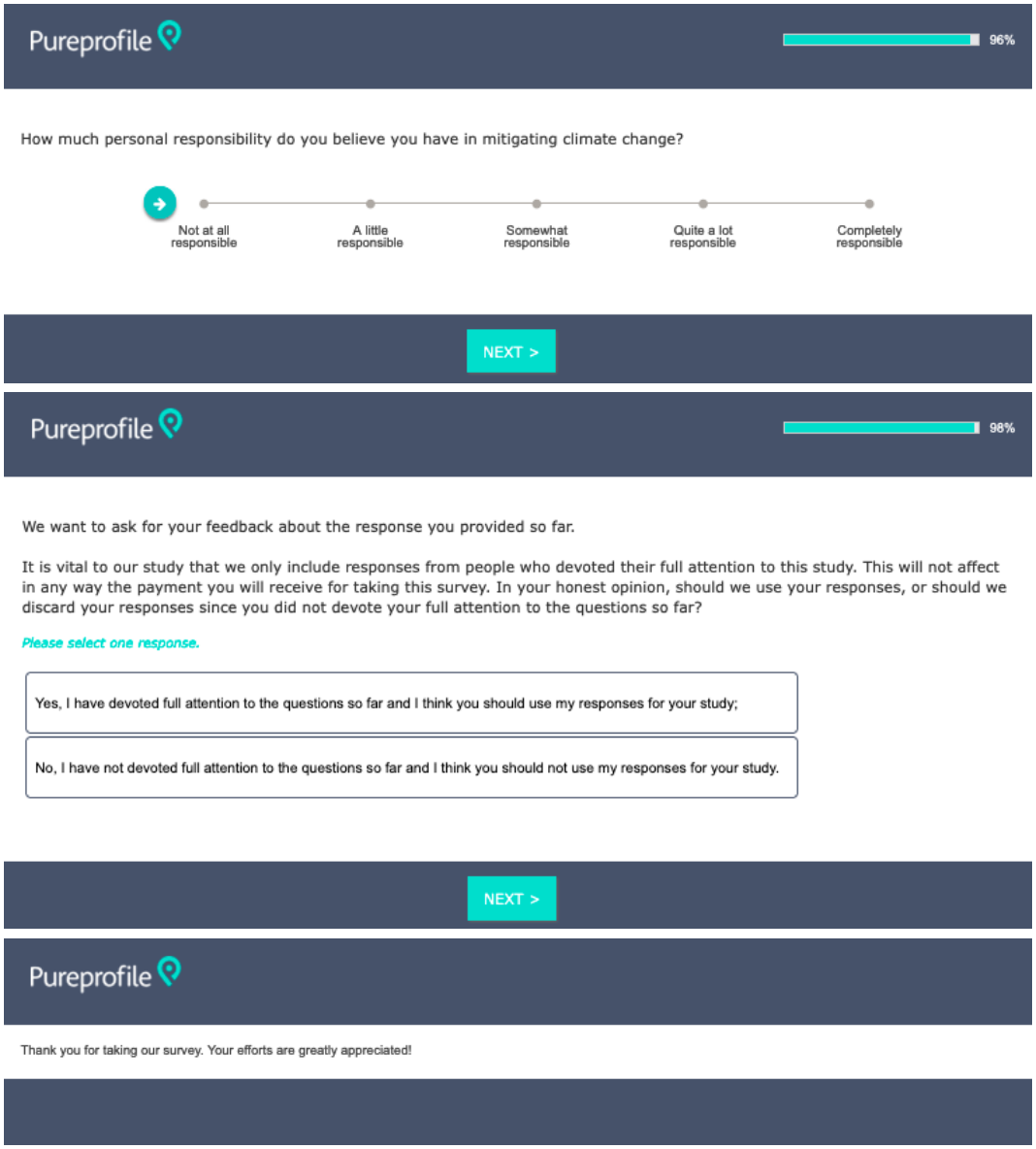


NEXT >


Pureprofile
91%
You have been given up to $100 million to dedicate to the 6 policy areas below.
Move the green sliders to the right to allocate extra funds to these areas.
Keep in mind you can only increase spending in million dollar lots. You can allocate anywhere between $0 to $100 million.
Remaining: $100 million dollar
Reset
General Public Service
0
Health
0
Education
0
Social Security & Welfare
0
Defence
0
EV Policy
0
NEXT >


Pureprofile
94%
Do you think climate change is a threat to society?
Please select one response.
I do not believe in climate change
None; I do not believe climate change poses a threat.
Minor; I think that climate change could cause minor inconveniences.
Major; I think that climate change could cause major disruptions.
Disastrous; I think that climate change could cause catastrophic changes.
Unsure; I do not know if climate change poses a threat.
NEXT >


Pureprofile
95%
To what extent do you believe humans are responsible for climate change?
Not at all responsible
A little responsible
Somewhat responsible
Quite a lot responsible
Completely responsible
NEXT >


Pureprofile
96%
How much personal responsibility do you believe you have in mitigating climate change?
Not at all responsible
A little responsible
Somewhat responsible
Quite a lot responsible
Completely responsible
NEXT >
Pureprofile
98%
We want to ask for your feedback about the response you provided so far.
It is vital to our study that we only include responses from people who devoted their full attention to this study. This will not affect in any way the payment you will receive for taking this survey. In your honest opinion, should we use your responses, or should we discard your responses since you did not devote your full attention to the questions so far?
Please select one response.
Yes, I have devoted full attention to the questions so far and I think you should use my responses for your study;
No, I have not devoted full attention to the questions so far and I think you should not use my responses for your study.
NEXT >
Pureprofile
Thank you for taking our survey. Your efforts are greatly appreciated!