

Public Attitudes towards Electric Vehicles in Northern Ireland, 2015/2016

Findings from the Continuous Household Survey 2015/2016



Issue No: 2
Date of Publication: 13 April 2017
Theme: Transport
Reporting Period: 1 April 2015 - 31 March 2016

Issued by:
Analysis, Statistics and Research Branch
Department for Infrastructure
Room 4-13c
Clarence Court
10-18 Adelaide Street
Belfast
BT2 8GB

Contact: John McCann
Telephone: 028 9054 0981 (Text relay prefix 18001)
Email: ASRB@infrastructure-ni.gov.uk
URL: <https://www.infrastructure-ni.gov.uk/articles/electric-cars-research>

Contents	
List of Figures	1
Introduction	2
Key Points	3
1. Car Access	5
2. Vehicle Purchase Influencing Factors	6
3. Electric Car Purchase Influencing Factors	9
4. Likelihood of Next Vehicle Purchase being an Electric Car	14
Appendix 1: Technical Notes	15
Appendix 2: Data Tables	20
Appendix 3: Confidence Interval	26
Appendix 4: Questionnaire	27



© Crown copyright 2017

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v.3.

To view this licence visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3/
or email: psi@nationalarchives.gsi.gov.uk

Where we have identified any third party copyright information, you will need to obtain permission from the copyright holders concerned.

This publication is also available at
<https://www.infrastructure-ni.gov.uk/articles/electric-cars-research>

Any enquiries regarding this document should be sent to us at:

Analysis, Statistics and Research Branch
Department for Infrastructure
Clarence Court
10-18 Adelaide Street
Belfast
BT2 8GB

Tel: +44 (0)28 9054 0800

Email: ASRB@infrastructure-ni.gov.uk

List of figures

	Page
Figure 1: Access to a car or van	5
Figure 2: Biggest influencing factors when considering a vehicle purchase	7
Figure 3: Factors that would encourage purchase of an electric car	9
Figure 4: Factors that would discourage purchase of an electric car	12
Figure 5: Likelihood of buying an electric car as next vehicle	14

Introduction

The Department for Infrastructure is committed to encouraging people to drive Ultra Low Emission Vehicles and to use other sustainable transport options such as public transport, walking and cycling.

In 2012 the ecar ni Project consortium introduced electric vehicle charging infrastructure to Northern Ireland with a network of 336 publicly available charge points being installed at 176 locations. The network is now owned and operated commercially by the Electricity Supply Board.

The Department for Infrastructure's ecar team also facilitated the installation of a further 54 electric vehicle charge points in the Public Sector Estate which are individually owned by various Departments and Trusts, some of which are available for public use.

This was the second year that this question set was included in the CHS and the second report produced. However, this is the first release of a report under the departmental banner of the Department for Infrastructure (DfI), which came into existence on 9th May 2016. The former Department for Regional Development (DRD) no longer exists.

This report presents data from the 2015/16 Continuous Household Survey (CHS) in relation to the Public Attitudes towards Electric Vehicles in Northern Ireland.

Uses of the Data

This survey was commissioned to obtain information on people's attitudes towards electric cars. It is planned to use the results to inform policy on how to design measures which would encourage the uptake of low emission vehicles across Northern Ireland and to address barriers to this uptake.

Key Points

Likelihood of Next Vehicle Purchase Being an Electric Car

- The 2015/16 survey found that 6% of respondents indicated that they were 'quite likely' to purchase an electric vehicle while 1% answered 'very likely'. The majority (94%) of respondents said they were 'not at all likely' to buy an electric car as their next vehicle. These percentages are similar to 2014/15.
- Respondents in the 16-24 (97%), 50-64 (94%) and 65 and over (96%) age categories were more likely to indicate that they were 'not at all likely' to buy an electric car as their next vehicle than those in the age categories 25-34 and 35-49 (both 92%).
- More respondents from a rural area (96%) than those from an urban area (92%) indicated that they were 'not at all likely' to buy an electric car as their next vehicle.
- Those with 'no qualifications' (95%) and 'all other qualifications' (94%) were more likely than those educated to degree level or higher (90%) to indicate that they were 'not at all likely' to buy an electric car as their next vehicle.

Car Access

- Almost seven out of ten respondents (69%) own/have access to a car/ van which they can drive while almost a quarter (24%) of respondents did not have a driving licence. Almost one in twenty-five respondents (4%) own/have access to more than one car/ van and 3% of respondents hold a driving licence but had no access to a car. These percentages are similar to 2014/15.
- Respondents in the 25-34 (77%), 35-49 (81%) and 50-64 (78%) age groups were more likely to own/have access to a car/ van than those in the age group 16-24 (44%), and those aged 65 and over (68%). Respondents aged 16-24 (51%) were more likely to state 'No, I don't have a driving licence' than any other age group.
- Males (80%), respondents without a disability (79%), those with dependants (80%), the economically active (83%) and those living in rural areas (85%) were

more likely to own/have access to a car/ van than females (68%), those with a disability (60%), those without dependants (68%), the economically inactive (60%) and those in urban areas (67%).

Vehicle Purchase Influencing Factors

- Among respondents, the biggest influencing factors when purchasing a vehicle were 'buying price' (53%), followed by 'reliability' (16%). These results are similar to the 2014/15 CHS where the top responses were 'buying price' (49%) followed by 'reliability' (16%).
- Buying price was the most frequently given response among all age groups.
- Among 16-24 year olds, 'insurance' was indicated by 13% as being their biggest influencing factor when considering a vehicle purchase, higher than any other age group.
- Respondents aged 65 and over (25%), those with a disability (19%) and those with dependents (18%) were more influenced by reliability.

Electric Car Purchase Influencing Factors

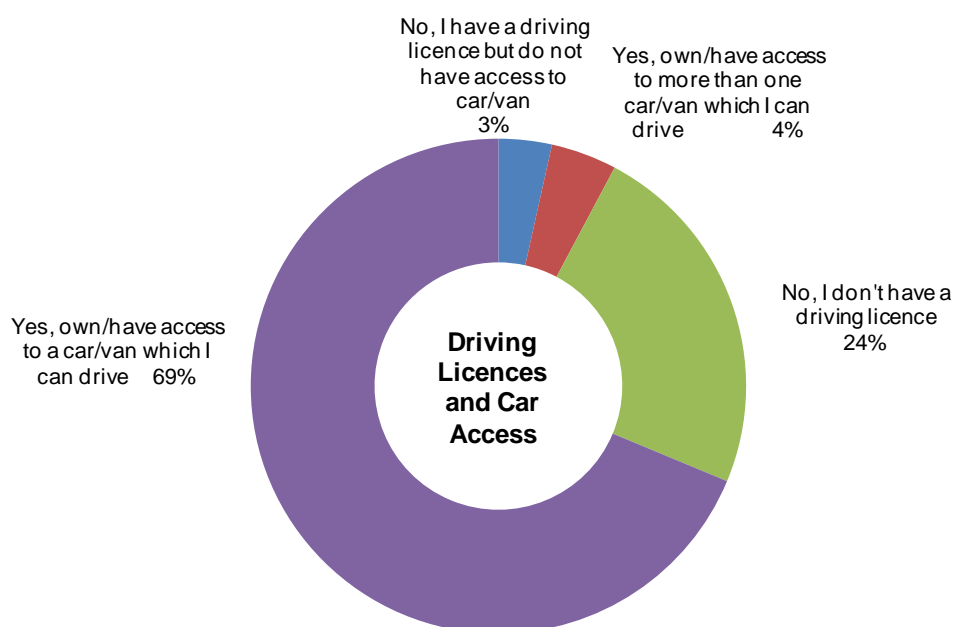
- The most popular factors that would encourage respondents to purchase an electric car were 'low running costs' (36%) '£5,000 grant towards purchase of an electric vehicle' (32%) 'no vehicle tax' (27%) 'no carbon emissions' (22%) and 'no requirement to pay for petrol or diesel' (20%). Almost half of respondents (45%) said that none of the options would encourage them to buy an electric car. These results are similar to 2014/15.
- In terms of what factors would discourage the purchase of an electric car, almost six out of ten respondents (59%) were discouraged by the 'need to recharge your vehicle'. The next most popular deterrent was 'vehicle range' (55%) followed by 'purchase price' (50%). A tenth (10%) said that none of the options listed would discourage them from buying an electric car.

1.0 Car access

To provide context, respondents were asked if they had a driving licence and about their current car/van access:

Almost seven out of ten respondents (69%) own/have access to a car/ van which they can drive, with a further 4% owning/having access to more than one car/ van. 3% of respondents held a driving licence but had no access to a car/van while almost a quarter (24%) of respondents did not have a driving licence. These percentages are similar to 2014/15.

Figure 1: Access to a car or van



Base = 3,340

Respondents in the 25-34 (77%), 35-49 (81%) and 50-64 (78%) age groups were more likely to own/have access to at least one car/ van than those in the age group 16-24 (44%), and those aged 65 and over (68%) while those aged 16-24 (51%) were more likely to state 'No, I don't have a driving licence' than any other age group.

Males (80%), respondents without a disability (79%), those with dependants (80%), the economically active (83%), those living in rural areas (85%) and those whose highest educational qualification is degree level or higher (91%) were more likely to own/have access to a car/ van than females (68%) than those with a disability (60%),

those without dependants (68%), the economically inactive (60%), those in urban areas (67%) and those with all other qualifications (74%) or no qualifications (55%).

Females (29%), those with a disability (35%), those without dependants (28%), the economically inactive (36%), those living in urban areas (29%) and those with educational no qualifications (42%) were more likely to answer 'No – I don't have a driving licence' than males (17%), those without a disability (19%), those with dependants (17%), those who are economically active (14%), those living in rural areas (13%) and those with all other qualifications (22%) or educated to degree level or higher (7%)

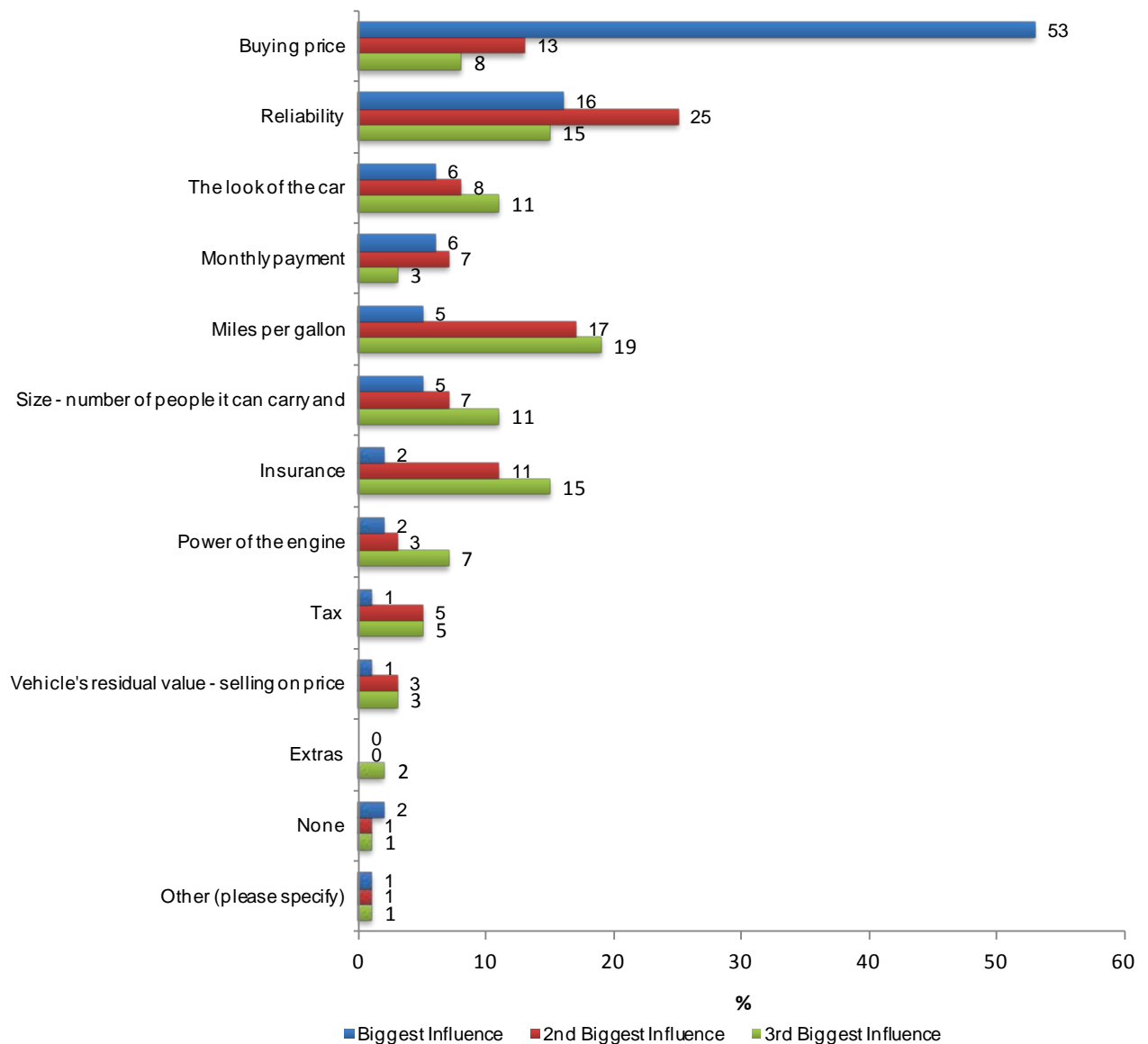
2.0 Vehicle purchase influencing factors

Respondents who owned/had access to at least one car/van or had a driving licence but no access to a car/van were asked what would be their biggest influencing factor when purchasing a vehicle. It is clear that financial factors continue to be the most influential when considering a vehicle purchase. By far the most popular response was 'buying price' (53%), followed by 'reliability' (16%). These results are similar to 2014/15 where the top responses were 'buying price' (49%) followed by 'reliability' (16%).

Respondents were then asked for their second biggest influencing factor when considering a vehicle purchase. The most common of these were 'reliability' (25%) followed by 'miles per gallon' (17%).

When asked for their third biggest influencing factor, 'miles per gallon' was the most frequently given response (19%), followed by 'reliability' and 'insurance' (both 15%).

Figure 2: Biggest influencing factors when considering a vehicle purchase



Base: Biggest Influence= 2,506; 2nd Biggest Influence= 2,448; 3rd Biggest Influence= 2,433

Unsurprisingly 'buying price' was the most frequently given response among all groups as the biggest influencing factor when considering a vehicle purchase.

Among 16-24 year olds, 'insurance' was indicated by 13% as being their biggest influencing factor when considering a vehicle purchase, higher than any other age group 25-34 (4%), 35-49 (2%), 50-64 (1%) and 65+ (1%). Respondents in the 65 and over age group (25%) were more influenced by 'reliability' than all other age groups 16-24 (11), 25-34 (10%), 35-49 (13%) and 50-64 (17%).

Female respondents were more likely to say 'monthly payments' (6%) and 'tax' (2%) than male respondents (5% and 1% respectively). A higher proportion of respondents with a disability (19%), those with no dependents (18%) and those who are economically inactive (19%) than those with no disability (15%), those with dependents (13%) and those who are economically active (14%) stated 'reliability' as the biggest influencing factor when considering a vehicle purchase. Respondents with dependants were more likely to state 'monthly payment' (7%) 'size - number of people it can carry and boot space' (6%) and 'vehicles residual value - selling on price' (1%) than those without dependents (4%, 3% and less than 0.5% respectively). Respondents who are economically active (7%) were more likely than those who are economically inactive (3%) to state 'monthly payment'. Respondents educated to degree level or higher (7%) were more likely than those without dependants (3%) and those with all other qualifications (4%) and no qualifications (2%) to say 'size - number of people it can carry and boot space' is the biggest influencing factor when considering a vehicle purchase.

When considering the 2nd biggest influencing factor for vehicle purchases, there were some differences between groups. Males were more likely to state 'power of the engine' (5%) than females (2%) while females (8%) were more likely to state 'monthly payments' than males (6%). Respondents with a disability (21%) were more likely than those without a disability (15%) to state 'miles per gallon'. Respondents with dependents (9%) and the economically active (8%) were more likely to state 'monthly payments' than those with no dependents (6%) and the economically inactive (5%).

The most frequently stated 2nd biggest influencing factor among 16-24 year olds was 'insurance' (26%), higher than all other age groups 25-34 (13%), 35-49 (10%), 50-64 (9%) and 65+ (9%).

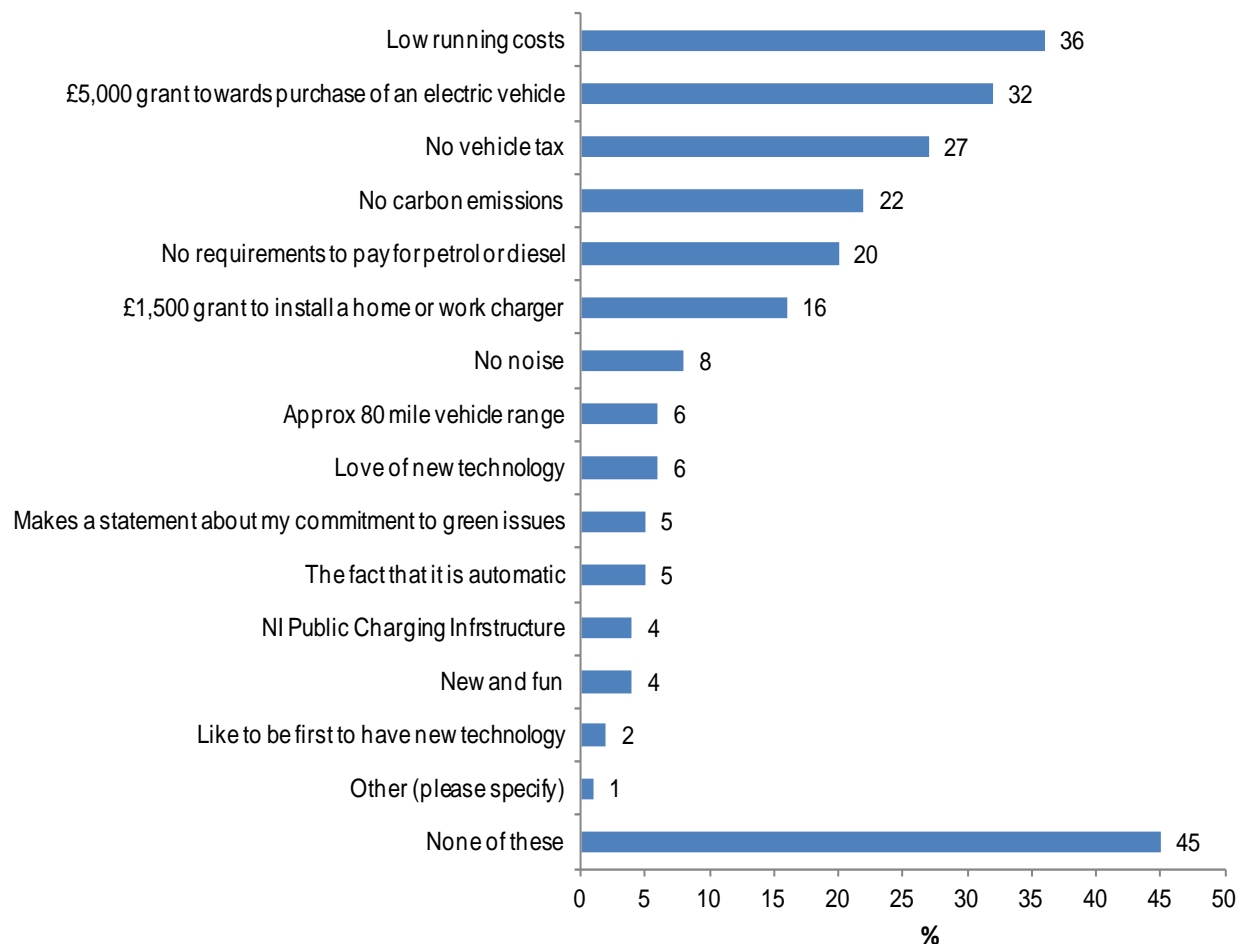
'Insurance' was the most frequently stated 3rd biggest influencing factor when considering a vehicle purchase among 16-24 year olds (26%) and females (17%) higher than all other age groups 25-34 (15%), 35-49 (15%), 50-64 (13%), 65+ (12%) and males (12%).

3.0 Electric Car purchase influencing factors

Factors that would encourage purchase of an Electric Car

Respondents who owned/had access to at least one car/van or had a driving licence but no access to a car/van were asked which of a set of options would encourage them to buy an electric car. The most popular responses were 'low running costs' (36%), '£5,000 grant towards purchase of an electric vehicle' (32%), 'no vehicle tax' (27%), 'no carbon emissions' (22%) and 'no requirement to pay for petrol or diesel' (20%). Almost half of respondents (45%) said that none of the options would encourage them to buy an electric car. These results are similar to 2014/15.

Figure 3: Factors that would encourage purchase of an electric car



Base= 2,507

Percentages may sum to more than 100% due to multiple responses.

Males were more likely than females to say 'love of new technology' (9% versus 4%) and 'like to be the first to have new technology' (3% versus 1%) would encourage them to buy an electric car.

There were several significant differences between those with and without a disability. Those without a disability were more likely to be encouraged by 'low running costs' (39% versus 26%), a '£5,000 grant towards purchase' (35% versus 25%), 'no vehicle tax' (30% versus 19%) and 'no requirements to pay for petrol or diesel' (22% versus 14%). Those with a disability were more likely to say 'the fact that it is automatic' (7% versus 4%). Almost 6 in 10 respondents with a disability said none of the options listed would encourage them to buy an electric car, compared to around 4 in 10 respondents without a disability.

When comparing the answers of respondents with and without dependants, it was found that those without dependants were more likely to answer 'the fact that it is automatic' (5% versus 4%) and 'like to be first with new technology' (3% versus 1%) as factors that would encourage them to buy an electric car.

Those who are economically active were more likely to indicate the following reasons, i.e. 'low running costs' (42% versus 26%), '£5,000 grant towards purchase of an electric vehicle' (38% versus 23%), 'no vehicle tax' (31% versus 20%), 'no carbon emissions' (24% versus 19%), 'no requirement to pay for petrol or diesel' (24% versus 13%), '£1,500 grant to install a home or workplace charger' (18% versus 11%), 'love of new technology' (7% versus 4%) and 'new and fun' (4% versus 3%). Those who are economically inactive were more likely to say that 'none of these' options would encourage them to buy an electric car (57% versus 37%).

When considering the responses of urban and rural dwellers, urban dwellers were more likely than their rural counterparts to be encouraged by 'no carbon emissions' (25% versus 17%), 'no requirements to pay for petrol or diesel' (22% versus 17%), 'no noise' (9% versus 7%), 'love of new technology' (7% versus 4%), 'makes a statement about my commitment to green issues' (7% versus 3%), 'NI public charging infrastructure' (5% versus 3%), and 'new and fun' (4% versus 3%)

Rural dwellers were more likely than urban dwellers to say that 'none of these' options would encourage them to buy an electric car (48% versus 42%).

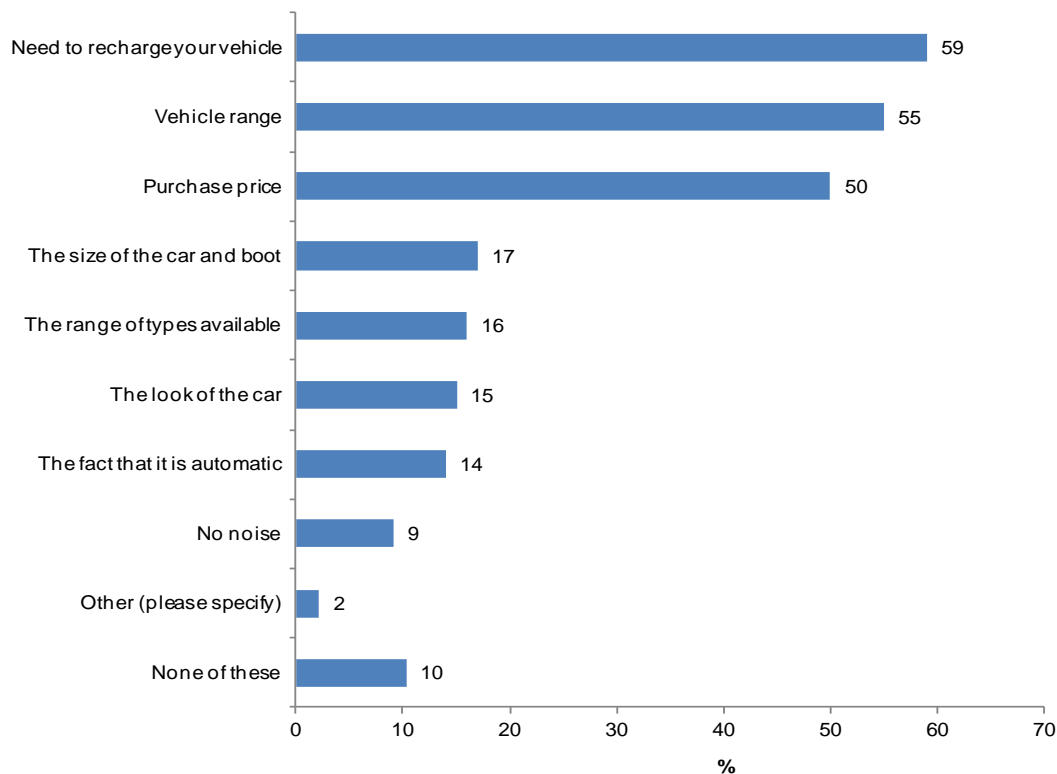
When comparing the answers of respondents by highest educational qualification, it was found that those with degree level education or higher were more likely than those without qualifications or those with all other qualifications to state that 'low running costs' (50% versus 22% and 38%), '£5,000 grant towards purchase of an Electric Vehicle' (44% versus 22% and 33%), 'No vehicle tax' (36% versus 16% and 29%), 'No carbon emissions' (30% versus 11% and 22%), 'No requirement to pay for petrol or diesel' (28% versus 9% and 22%), '£1,500 grant to install a home or workplace charger' (24% versus 9% and 15%), 'love of new technology' (10% versus 3% and 5%), 'approximately 80 mile vehicle range' (10% versus 4% and 6%) and 'NI public charging infrastructure' (7% versus 2% and 4%) are options that would encourage them to buy an electric car. Those with no qualifications (65%) and those with all other qualifications (42%) were more likely to state that nothing would encourage them to buy an electric car compared to those with degree level education or higher (28%).

Factors that would discourage purchase of an electric Car

Respondents who owned/had access to at least one car/van or had a driving licence but no access to a car/van were asked which of a set of options would discourage them from buying an electric car. Almost six out of ten respondents (59%) were discouraged by the 'need to recharge your vehicle'. The next most popular deterrent was 'vehicle range' (55%) followed by 'purchase price' (50%). A tenth (10%) said that none of the options listed would discourage them from buying an electric car.

In 2014/15, over half of respondents (53%) were discouraged by the 'need to charge your vehicle'. The next most popular deterrent was 'vehicle range' (52%) followed by 'purchase price' (46%). Over a tenth (12%) said that none of the options listed would discourage them from buying an electric car.

Figure 4: Factors that would discourage purchase of an electric car



Base= 2,500
 Percentages may sum to more than 100% due to multiple responses.

Those aged 16-24 (28%) were more likely than any other age group to say that the ‘look of the car’ would discourage them. Those aged 65 and over (43%) were less likely than the 25-34 and the 35-49 age groups (56% and 53% respectively) to state ‘purchase price’ and more likely to say that ‘none of these’ factors would discourage them from buying an electric vehicle than any other age group.

Among males and females, there were some differences in factors that would discourage them from buying an electric car. Males were more likely than females to be discouraged by ‘vehicle range’ (60% versus 51%), ‘purchase price’ (53% versus 47%), the ‘range of types available’ (18% versus 15%) and ‘no noise’ (11% versus 7%) while females were more likely than males to say ‘need to recharge your vehicle’ would discourage them from buying an electric vehicle (62% versus 56%).

Respondents without a disability when compared to those with a disability were more likely to state that the ‘need to recharge your vehicle’ (60% versus 56%), ‘vehicle range (how far vehicle will travel before needing recharged)’ (57% versus 51%) and ‘the size of the car and boot’ (18% versus 14%) would discourage them, while those with a disability were more likely to state that ‘none of these’ factors would

discourage them from buying an electric car (13% versus 9%). Respondents with no dependents when compared to those with dependents were more likely to be discouraged by 'the size of the car and boot' (20% versus 15%) while those with dependents were more likely to state that 'none of these' factors would discourage them from buying an electric car (12% versus 9%).

When comparing the answers of respondents by economic activity it was found that those who were economically active were more likely to state 'need to recharge your vehicle' (61% versus 56%), 'vehicle range (how far vehicle will travel' (59% versus 48%), 'purchase price' (52% versus 46%), 'the look of the car' (17% versus 11%), 'the range of types available' (18% versus 13%), 'the size of the car and boot' (19% versus 14%) and 'the fact that it is automatic' (15% versus 12%) while those who are economically inactive were more likely to state that 'none of these' factors would discourage them from buying an electric car (15% versus 7%).

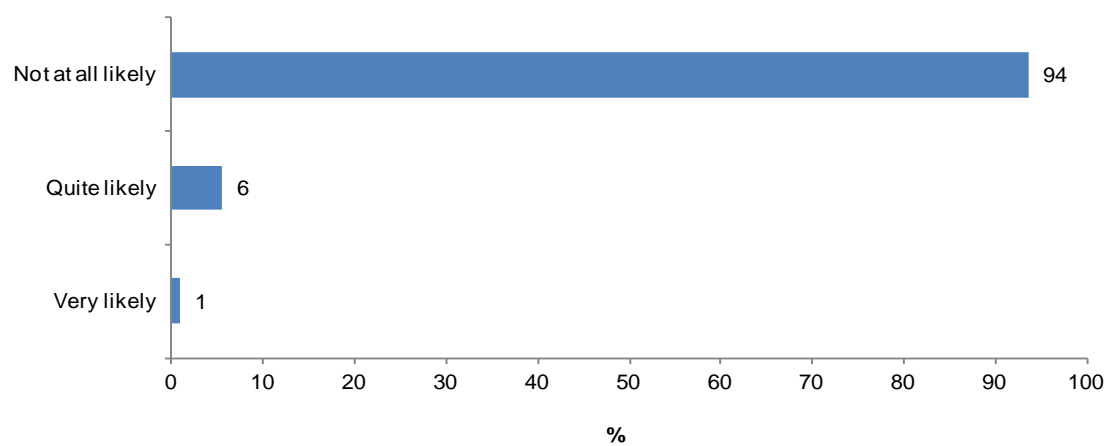
Comparing respondents from urban and rural areas it was found that those from a rural area were more likely than those from an urban area to be discouraged by 'the look of the car' (17% versus 14%) and 'the fact it is automatic' (16% versus 13%) while those from an urban area (51%) were more likely than those from a rural area (47%) to state 'purchase price' as a factor that would discourage them from buying an electric car.

Respondents whose highest educational qualification is degree level or higher were more likely than those with no qualifications and all other qualifications to be discouraged by 'vehicle range (how far vehicle will travel before needing recharged)' (67% versus 40% and 56%) and 'size of the car and boot' (21% versus 14% and 17%) while those with no qualifications (18%) were more likely than those with degree level or higher (4%) and all other qualifications (9%) to state that 'none of these' factors would discourage them from buying an electric car.

4.0 Likelihood of next vehicle purchase being an Electric Car

Respondents who owned/had access to at least one car/van or had a driving licence but no access to a car/van were finally asked how likely they are to buy an Electric Car as their next vehicle. The vast majority (94%) of respondents answered 'Not at all likely'. Just over 1 in 20 answered 'quite likely' while a further 1% answered 'Very likely'. These results are similar to 2014/15.

Figure 5: Likelihood of buying an electric car as next vehicle



Base=2,497

Due to the small numbers who indicated that they were 'quite likely' or 'very likely' to buy an electric car, no further analysis could be carried out.

The following analysis is based on those respondents who said that they are 'not at all likely' to buy an electric car as their next vehicle.

A higher proportion of those in the age groups 16-24 (97%), 50-64 (94%) and aged 65 and over (96%) than those aged 25-34 and 35-49 (both 92%) said that they were 'not at all likely' to buy an electric car as their next vehicle.

A greater proportion of respondents from a rural area (96%) than those from an urban area (92%) indicated that they were 'not at all likely' to buy an electric car as their next vehicle.

Those with no qualifications (95%) and those with all other qualifications (94%) were more likely than those educated to degree level or higher (90%) to indicate that they were 'not at all likely' to buy an electric car.

Appendix 1: Technical Notes

Data Collection

The information presented in this publication derives from the Northern Ireland Continuous Household Survey (CHS), a Northern Ireland wide household survey administered by Central Survey Unit (CSU), Northern Ireland Statistics and Research Agency (NISRA).

It is based on a sample of the general population resident in private households and has been running since 1983. The Survey is designed to provide a regular source of information on a wide range of social and economic issues relevant to Northern Ireland. The nature and aims of CHS are similar to those of the General Household Survey (GHS), which is carried out by the Office for National Statistics (ONS) in Great Britain.

The Department for Regional Development (DRD) commissioned questions related to Public Attitudes towards Electric Vehicles for the first time in the 2014/2015 CHS. On 9th May 2016 the new Department for Infrastructure (DfI) was formed and DRD ceased to exist. DfI commissioned a repeat of these questions in the 2015/2016 CHS. Therefore this is the second time that they have been asked. The questions relating to electric vehicles can be found in Appendix 4 of this publication.

The 2015/16 survey was based on a random sample of 4,500 domestic addresses drawn from the Land and Property Services list of addresses and interviews were sought with all adults aged 16 and over in these households. The dataset contains the records for 3,340 adults aged 16 and over who answered the e-car question set. Questions relating to vehicle purchase and attitudes towards electric cars were asked to those who owned/had access to at least one car/van or had a driving licence but no access to a car/van.

Data Quality

Data were collected by CSU and various validation checks were carried out as part of the processing. CSU is the leading social survey research organisation in Northern Ireland and is one of the main business areas of NISRA, an Agency within the Department of Finance. CSU has a long track record and a wealth of experience in the design, management and analysis of behavioural and attitude surveys in the

context of a wide range of social policy issues. CSU procedures are consistent with the Official Statistics Code of Practice¹.

The CHS sample was assessed and considered to be a representative sample of the Northern Ireland population at the household level.

Whilst data quality is considered to be very good, note that all survey estimates are subject to a degree of error and this must be taken account of when considering results (see notes on sampling error on page 19). This error will be reasonably small for the majority of Northern Ireland level results but care should be taken when looking at results based on smaller breakdowns.

Multiple response questions

Multiple response questions are those for which respondents can give more than one response if they wish. For example, in Question 5 in this report, respondents were asked to list all the factors that would encourage purchase of an electric car. In such questions, when individual percentages are summed they may add to more than 100%. Therefore, the footnote “Percentages may sum to more than 100% due to multiple responses” has been included under the relevant charts within the main body of this publication and under the appropriate data tables in Appendix 2.

Rounding Conventions

Percentages have been rounded to whole numbers and as a consequence some percentages may not sum to 100. 0% may reflect rounding down of values under 0.5.

Significant difference

Significance tests were carried out to determine if there were differences in responses given by various respondent groups. The significance tests were carried out at 5% significance level (range = -1.96 to +1.96) and only differences which were statistically significant ($p < 0.05$) are included in this report. This means that there is at least a 95% probability that there is a genuine difference between responses given by, for example, males and females and the differences between the two genders cannot simply be explained by random chance or sample error. When a

¹ <http://www.statisticsauthority.gov.uk/assessment/code-of-practice/code-of-practice-for-official-statistics.pdf>

significant difference is noted among survey respondents, it is likely that this same difference applies to the Northern Ireland population.

The following respondent groups were considered:

Age group

The age of the respondent is grouped into the following age bands; 16-24, 25-34, 35-49, 50-64, 65 and over.

Gender

Gender of respondent is defined as whether the respondent is male or female.

Disability

The questions used to ascertain whether or not a person has a disability are harmonised with the definition of disability in the Equality Act 2010. This states that a disabled population is classified on the basis of having a long-lasting physical or mental health condition or illness which restricts day-to-day activities. The disabled population in this report are those who have answered yes to both the questions below:

Do you have any physical or mental health conditions or illnesses lasting or expected to last for 12 months or more?

Does your condition or illness / do any of your conditions or illnesses reduce your ability to carry out day to day activities?

Dependant status

Dependant status is defined as whether the respondent has dependants or not.

Economic Activity

Economic Activity is defined as whether the respondent is currently in economically active or not. This is automatically computed from other answers given. Those individuals who are temporarily away from work and those who are on a government

training scheme are included as being economically active. Full-time students are excluded from these figures.

Urban and rural areas

A review of the classification and delineation of settlements established in 2005 has been carried out². It resulted in some changes to the settlement and urban-rural classifications, including that the urban-rural population boundary moved from 4,500 to a population of 5,000.

While previous versions of this report used an urban/rural definition based on Super Output Area (SOA) classification of addresses, this and future publications will use the updated classifications using the statistical classification of settlements defined by the Inter-Departmental Urban-Rural Definition Group.

Bands A to E are classified as Urban. This includes Belfast Metropolitan Urban Area (Band A), Derry Urban Area (Band B) and large, medium and small towns (Bands C-E) with populations greater than or equal to 5,000 people.

Bands F to H are classified as rural. This includes intermediate settlements (Band F), villages (Band G) and small villages, hamlets and open countryside (Band H) with populations of less than 5,000 people and including open countryside.

Highest Educational Qualifications

Highest Educational Qualification was determined by asking respondents to select from a list of recognised qualifications the highest that they had attained or the nearest equivalent. These responses were then collated into the following broad classificatory groups:

- No Qualifications
- Degree level or higher
- All other qualifications

² A 'Review of the Statistical Classification and Delineation of Settlements' was published by NISRA in March 2015 at: <http://www.nisra.gov.uk/archive/geography/review-of-the-statistical-classification-and-delineation-of-settlements-march-2015.pdf>

'Degree level or higher' includes first degrees, higher degrees, post-graduate Diplomas and Certificates etc.

'All other qualifications' includes all other commonly recognised qualifications below degree level e.g. A levels, GCSE/O level grade A*-C, Trade Apprenticeships, other vocational or professional or foreign qualifications etc.

Sampling error

No sample is likely to precisely mirror the characteristics of the population it is drawn from due to both sampling and non-sampling errors. An estimate of the amount of error due to the sampling process can be calculated. For a simple random sample design, the sampling error (s.e.) of any percentage, p, can be calculated by the formula:

$$\text{s.e. (p)} = \sqrt{(p*(100-p)/n)}$$

where n is the number of respondents on which the percentage is based.

Confidence Interval

A 95% confidence interval for the population percentage can be calculated using the formula:

$$95\% \text{ confidence interval} = p \pm 1.96 * \text{s.e. (p)}$$

This means that if 100 similar, independent samples were chosen from the same population, 95 of them would yield an estimate for the percentage, p, within this range of values.

The absence of design effects in the survey means that standard statistical tests of significance can be applied directly to the data. 95% confidence intervals were calculated for the headline figures as detailed in Appendix 3 on page 26.

Other notes

The following should be noted when interpreting figures and tables:

- Detailed tabulations are not provided where the number of respondents is too small to allow meaningful analysis.
- The base number of responses to each question, which is shown in each table, is the unweighted count. The base may vary due to some respondents not answering certain questions.

Appendix 2: Data Tables

Table 1: Access to a car or van

	(%) 2014/15	(%) 2015/16
Yes, own/have access to a car/van which I can drive	68	69
Yes, own/have access to more than one car/van which I can drive	5	4
No, I have a driving licence but do not have access to car/van	4	3
No, I don't have a driving licence	24	24
Base	3,349	3,340

Table 2: Biggest influencing factor when considering a vehicle purchase

	Biggest Influence (%) 2014/15	Biggest Influence (%) 2015/16
Buying price	49	53
Reliability	16	16
The look of the car	6	6
Monthly payment	4	6
Miles per gallon	7	5
Size - number of people it can carry and the boot space	6	5
Insurance	2	2
Power of the engine	1	2
Tax	1	1
Vehicles residual value - selling on price	1	1
Extras	0	0
Other (please specify)	2	1
None	3	2
Base	2,533	2,506

Table 3: Second biggest influencing factor when considering a vehicle purchase

	Second Biggest Influence (%) 2014/15	Second Biggest Influence (%) 2015/16
Reliability	23	25
Miles per gallon	21	17
Buying price	14	13
Insurance	10	11
The look of the car	7	8
Monthly payment	7	7
Size - number of people it can carry and the boot space	7	7
Tax	4	4
Power of the engine	3	3
Vehicles residual value - selling on price	2	2
Extras	0	0
Other (please specify)	1	1
None	1	1
Base	2,450	2,448

Table 4: Third biggest influencing factor when considering a vehicle purchase

	Third Biggest Influence (%) 2014/15	Third Biggest Influence (%) 2015/16
Miles per gallon	21	19
Reliability	16	15
Insurance	13	15
The look of the car	11	11
Size - number of people it can carry and the boot space	11	10
Buying price	9	8
Power of the engine	5	7
Tax	5	5
Monthly payment	2	3
Vehicles residual value - selling on price	3	3
Extras	1	2
Other (please specify)	1	1
None	1	1
Base	2,434	2,433

Table 5: Biggest influencing factor when considering a vehicle purchase by respondent group

Response	All Respondents	Age Group					Gender		Disability Status		Dependant Status		Employment Status*		Urban and Rural Areas		Highest Educational Qualifications		
		16 - 24	25-34	35-49	50-64	65 and over	Male	Female	Has Disability	No Disability	Has Dependants	No Dependants	Economically Active	Economically Inactive	Urban	Rural	No Qualifications	Degree level or higher	All other quals
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Buying price	53	56	57	56	52	47	53	53	50	54	53	53	54	50	52	54	49	52	57
Monthly payment	6	5	8	7	6	2	5	6	5	6	4	7	7	3	6	5	6	7	6
Vehicles residual value - selling on price	1	0	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1
Reliability	16	11	10	13	17	25	16	16	19	15	18	13	14	19	16	16	16	15	14
Tax	1	1	3	1	2	1	1	2	1	1	1	1	1	1	2	1	2	1	2
Insurance	2	13	4	2	1	1	2	2	3	2	2	2	2	2	2	2	3	1	3
Miles per gallon	5	3	2	6	6	5	6	4	4	5	5	5	5	5	4	6	6	4	5
The look of the car	6	7	7	5	7	6	7	6	7	6	7	5	6	7	7	6	7	8	5
Extras	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Power of the engine	2	1	2	1	1	2	2	1	2	2	2	2	1	2	1	2	2	1	2
Size - number of people it can carry and the boot space	5	2	5	6	4	4	4	5	4	5	3	6	4	5	5	4	2	7	4
Other (please specify)	1	0	1	1	1	2	1	1	2	1	1	1	2	1	1	2	1	1	1
NONE	2	2	1	2	2	4	2	3	3	2	2	2	2	3	2	2	3	2	2
Base number (All persons aged 16 and over)	2,506	151	362	733	699	561	1,186	1,320	627	1,877	1,419	1,087	1,582	922	1,534	972	301	659	1,198

* 2 respondents refused to reply

Table 6: Factors that would encourage purchase of an electric car by respondent group

Response	All Respondents	Age Group					Gender		Disability Status		Dependant Status		Employment Status*		Urban and Rural Areas		Highest Educational Qualifications		
		16 - 24	25-34	35-49	50-64	65 and over	Male	Female	Has Disability	No Disability	Has Dependants	No Dependants	Economically Active	Economically Inactive	Urban	Rural	No Qualifications	Degree level or higher	All other quals
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Love of new technology	6	17	10	6	5	2	9	4	5	6	6	6	7	4	7	4	3	10	5
Makes a statement about my commitment to green issues	5	5	4	7	6	3	5	5	6	5	6	5	6	5	7	3	1	8	6
New and fun	4	11	6	4	3	1	3	4	3	4	4	4	4	3	4	3	2	5	4
Like to be first to have new technology	2	6	3	1	2	1	3	1	2	2	3	1	2	1	2	1	1	3	2
£5,000 grant towards purchase of an Electric Vehicle	32	44	40	35	33	19	32	32	25	35	31	34	38	23	34	30	22	44	33
No requirements to pay for petrol or diesel	20	37	30	24	16	10	19	21	14	22	21	20	24	13	22	17	9	28	22
Low running costs	36	54	46	39	37	19	36	36	26	39	35	37	42	26	38	34	22	50	38
No vehicle tax	27	41	37	30	25	15	26	28	19	30	26	29	31	20	27	26	16	36	29
Approx 80 mile vehicle range	6	6	5	7	8	4	7	6	6	6	6	7	7	5	6	6	4	10	6
NI Public Charging Infrastructure	4	7	5	4	4	2	5	3	4	4	5	3	4	3	5	3	2	7	4
£1,500 grant to install a home or workplace charger	16	25	22	16	15	9	17	14	13	16	15	17	18	11	16	15	9	24	15
No noise	8	11	12	8	8	5	8	8	9	8	8	8	8	7	9	7	6	10	8
No carbon emissions	22	26	27	22	24	14	21	23	20	23	23	21	24	19	25	17	11	30	22
The fact that it is automatic	5	5	3	4	5	5	4	5	7	4	5	4	4	6	4	5	3	4	5
Other (please specify)	1	0	1	1	0	1	1	0	1	0	0	1	1	0	1	0	0	1	0
None of these	45	25	30	42	45	63	44	45	56	41	46	43	37	57	42	48	65	28	42
Base number (All persons aged 16 and over)	2,507	150	364	732	700	561	1,185	1,322	627	1,877	1,418	1,089	1,581	924	1,535	972	302	658	1,198

* 2 respondents refused to reply

Table 7: Factors that would discourage purchase of an electric car by respondent group

Response	All Respondents	Age Group					Gender		Disability Status		Dependant Status		Employment Status*		Urban and Rural Areas		Highest Educational Qualifications		
		16 - 24	25-34	35-49	50-64	65 and over	Male	Female	Has Disability	No Disability	Has Dependants	No Dependants	Economically Active	Economically Inactive	Urban	Rural	No Qualifications	Degree level or higher	All other quals
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Need to recharge your vehicle	59	69	61	59	58	57	56	62	56	60	58	60	61	56	58	61	57	62	59
Vehicle range (how far vehicle will travel before needing to be recharged)	55	58	57	57	58	46	60	51	51	57	55	56	59	48	54	57	40	67	56
Purchase price	50	48	56	53	48	43	53	47	46	51	49	50	52	46	51	47	45	53	51
No noise	9	13	9	9	11	7	11	7	10	9	9	10	10	8	8	10	9	8	10
The look of the car	15	28	16	17	14	8	15	14	13	15	14	15	17	11	14	17	12	15	17
The range of types available	16	21	20	18	16	10	18	15	15	17	15	18	18	13	16	17	15	18	17
The size of the car and boot	17	18	21	20	16	11	18	16	14	18	15	20	19	14	16	18	14	21	17
The fact that it is automatic	14	21	19	11	15	11	13	15	13	14	14	14	15	12	13	16	17	15	14
Other	2	0	2	2	2	3	3	1	4	2	2	2	2	3	2	2	2	2	2
None of these	10	8	6	8	9	18	10	11	13	9	12	9	7	15	11	9	18	4	9
Base number (All persons aged 16 and over)	2,500	149	363	729	698	561	1,182	1,318	626	1,872	1,414	1,086	1,576	922	1,532	968	302	657	1,193

* 2 respondents refused to reply

Table 8: Likelihood of buying electric car as next vehicle

	(%) 2014/15	(%) 2015/16
Not at all likely	94	94
Quite likely	6	6
Very likely	1	1
Base	2,125	2,497

Appendix 3: Confidence Intervals

A confidence interval represents the range of values in which the true population value is likely to lie. It is based on the sample estimate and the confidence level.

As the percentages are calculated from a representative sample of the Northern Ireland population (aged 16 and over), a confidence interval can be calculated to estimate the level of uncertainty in the sample estimate.

95% confidence intervals were calculated for those who are quite likely or very likely to buy an electric vehicle. Table 9 below summarizes the confidence intervals for Public Attitudes towards Electric Vehicles in NI.

Table 9: Confidence Intervals for Public Attitudes to Electric Vehicles: Very likely or quite likely to buy an electric car as their next vehicle

	Estimate	95% Confidence Range +/-	Confidence Interval
Very likely or quite likely to buy an electric car as their next vehicle	6%	1	5% - 7%

6% of respondents who owned / had access to at least one car/van or had a driving licence but no access to a car/van said that they were either very likely or quite likely to buy an electric car as their next vehicle. Calculating a 95% confidence interval from the results of the survey, it can be estimated that between 5% and 7% of the Northern Ireland population were either very likely or quite likely to buy an electric car as their next vehicle.

Appendix 4: Questionnaire

Factors influencing Vehicle Purchase

[CAR1] SHOWCARD (ACCESS TO CAR OR VAN)

Do you currently own or have access to drive a car or van?

INCLUDE ANY PROVIDED BY EMPLOYERS IF NORMALLY AVAILABLE FOR PRIVATE USE.

EXCLUDE ANY USED SOLELY FOR THE CARRIAGE OF GOODS.

1. Yes, own/have access to a car/van which I can drive ->

[CARINTRO]

2. Yes, own/have access to more than one Car NI/van which I can drive ->

[CARINTRO]

3. No, I have a driving license but do not have access to car/van ->

[CARINTRO]

4. No, I don't have a driving license -> [INTROB]

[CARINTRO] I would now like to ask you some questions about what factors are important to you when considering a vehicle purchase.

(Continue)

[CAR2a] SHOWCARD (VEHICLE PURCHASE)

Which, if any, of these options would be your BIGGEST influencing factor when considering a vehicle purchase?

1. Buying price
2. Monthly payment
3. Vehicles residual value – selling on price

4. Reliability
5. Tax
6. Insurance
7. Miles per gallon
8. The look of the Car NI
9. Extra
10. Power of the engine
11. Size – the number of people it can carry and the boot space
12. Other -> [CAR2AOTH]
13. None -> [CAR3]

[CAR2AOTH] Please specify the other factor.

[CAR2b] SHOWCARD (VEHICLE PURCHASE)

. . and which would be the second biggest influencing factor for you?

1. Buying price
2. Monthly payment
3. Vehicles residual value – selling on price
4. Reliability
5. Tax
6. Insurance
7. Miles per gallon
8. The look of the Car NI
9. Extra
10. Power of the engine

11. Size – the number of people it can carry and the boot space
12. Other -> [CAR2BOTH]
13. None -> [CAR3]

[CAR2BOTH] Please specify the other factor.

[CAR2c] SHOWCARD (VEHICLE PURCHASE)

. . and which would be the third biggest influencing factor for you?

1. Buying price
2. Monthly payment
3. Vehicles residual value – selling on price
4. Reliability
5. Tax
6. Insurance
7. Miles per gallon
8. The look of the Car NI
9. Extra
10. Power of the engine
11. Size – the number of people it can carry and the boot space
12. Other -> [CAR2COTH]
13. None -> [CAR3]

[CAR2COTH] Please specify the other factor.

[CAR3] SHOWCARD (ELECTRIC CAR ENCOURAGE TO BUY)

Please indicate which of these options, if any, would encourage you to buy an electric car?

CODE ALL THAT APPLY

1. Love of new technology
2. Makes a statement about commitment to green issues
3. New and fun
4. Like to be the first to have new technology
5. £5,000 grant towards purchase of an electric vehicle
6. No requirements to pay for petrol or diesel
7. Low running cost
8. No vehicle tax
9. Approx 80 mile vehicle range
10. NI public charging infrastructure
11. £1,500 grant to install a home or work charger
12. No noise
13. No carbon emissions
14. The fact it is automatic
15. Other -> [CAR30TH]
16. None -> [CAR4]

[CAR30TH] Please specify the other reason.

[CAR4] SHOWCARD (ELECTRIC CAR DISCOURAGE TO BUY)

Please indicate which of these options, if any, would encourage you to buy an electric car?

CODE ALL THAT APPLY

1. Need to recharge your vehicle
2. Vehicle range (how far vehicle will travel before needing to be charged)
3. Purchase price
4. No noise
5. The look of the Car NI
6. The range of types available
7. The size of the Car NI and boot
8. The fact it is automatic
9. Other -> [CAR4OTH]
10. None -> [CAR5]

[CAR4OTH] Please specify the other reason.

[CAR5] How likely are you to buy an electric car as your next vehicle? Is it . . .

RUNNING PROMPT

1. very likely
2. quite likely
3. or not at all likely?