

# Public Attitudes towards Electric Vehicles in Northern Ireland, 2014/2015







Public Attitudes towards Electric Vehicles in Northern

Ireland, 2014/2015

**About this report** 

This report presents data from the 2014/15 Continuous Household Survey (CHS) in

relation to the Public Attitudes towards Electric Vehicles in Northern Ireland. While a

set of questions on the awareness of and attitudes towards ecars was asked in the

September 2012 Omnibus Survey, this was the first year that this question set was

included in the CHS and this is the first such report produced by the Central

Statistics and Research Branch (CSRB) in the Department for Regional

Development (DRD) from this survey.

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#### Introduction

The ecarNI Project introduced an electric vehicle charging infrastructure to Northern Ireland. The introduction of this infrastructure means that 334 electric vehicle charging points have been installed in many towns and cities across Northern Ireland. Until recently, the Department for Regional Development (DRD) and Department of the Environment (DoE) were the joint leaders of a consortium of public and private sector organisations involved in the initial phase of the project, which was to develop a network of public charging points around Northern Ireland. Following the completion of this phase, responsibility for the operation, maintenance and development of the charge point network has been transferred to the Electricity Supply Board (ESB) with effect from 30 July 2015. This will allow the Electric Vehicle charging network to be run commercially within the electricity sector.

The ecar team within the two Departments is now set to concentrate on other aspects of ecars, such as the delivery of the public sector estate infrastructure and policy development to support the growth of ultra low emission vehicles for both private and business use in Northern Ireland.

#### Uses of the Data

Work undertaken on the ecarNI project has, to date, focussed on providing an infrastructure for potential users of Electric Vehicles. This survey was commissioned to obtain information on people's attitudes towards electric cars. It is planned to use the results to address barriers to the uptake of low emission vehicles and to inform policy on how to design measures which would encourage the uptake of low emission vehicles across Northern Ireland.

A set of questions on awareness of and attitudes towards e-cars was asked in the September 2012 Omnibus Survey. The question set used in the Continuous Household Survey is a subset of these questions and is the first time that this question set has been asked in the CHS. While the surveys are not directly comparable due to differing methodologies, 2012 results have been discussed for illustrative purposes.

# **Key Points**

# Likelihood of Next Vehicle Purchase Being an Electric Car

- The 2014/15 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.
- More females (95%) than males (92%) indicated that they were 'not at all likely' to buy an electric car as their next vehicle.
- Those with 'all other qualifications' (95%) were more likely than those educated to degree level or higher (92%) to indicate that they were 'not at all likely' to buy an electric car.

#### **Car Access**

- Almost seven out of ten respondents (68%) own/have access to a car/ van
  which they can drive with a further 5% owning/having access to more than
  one car/ van. 4% of respondents hold a driving licence but had no access to
  a car while almost a quarter (24%) of respondents did not have a driving
  licence.
- Respondents in the 25-34 (71%) and 35-49 (77%) and 50-64 (71%) age categories were more likely to own/have access to a car/ van than those aged 16-24 (40%) and those aged 65 and over (62%) while those aged 16-24 were more likely to state 'No, I don't have a driving licence' than any other age group.
- Males (74%), respondents without a disability (74%), those with dependants (73%), the economically active (77%) and those living in rural areas (77%) were more likely to own/have access to a car/ van than females (63%), those with a disability (52%), those without dependants (64%), the economically inactive (56%) and those in urban areas (63%).

# **Vehicle Purchase Influencing Factors**

- Among respondents, the biggest influencing factors when purchasing a vehicle were 'buying price' (49%), followed by 'reliability' (16%).
- Buying price was the most frequently given response among all groups but was particularly important to those aged 16-24 (61%) and those with dependents (52%).
- Among 16-24 year olds, 'Insurance' was indicated by 17% as being their biggest influencing factor when considering a vehicle purchase, higher than any other age group.
- 'Size number of people it can carry and the boot space' was indicated as the biggest influence to a higher proportion of those with dependents (8%) and those educated to degree level or higher (8%).

# **Electric Car Purchase Influencing Factors**

- The most popular factors that would encourage respondents to purchase an electric car were 'Low Running Costs' (39%), '£5,000 grant towards purchase of an Electric Vehicle' (33%), 'No vehicle tax' (30%), 'No carbon emissions' (25%) and 'No requirement to pay for petrol or diesel' (23%). Over four in ten respondents (41%) of respondents said that none of the options would encourage them to buy an electric car.
- In terms of what factors would discourage the purchase of an electric car, over half of respondents (53%) were discouraged by the 'need to recharge your vehicle' with a further 52% stating 'Vehicle range' and 46% stating 'Purchase Price'. 'Over a tenth (12%) said that none of the options listed would discourage them from buying an electric car.

#### **Car Access**

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

# Car/Van ownership/access

Almost seven out of ten respondents (68%) own/have access to a car/ van which they can drive with a further 5% owning/having access to more than one car/ van. 4% 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.

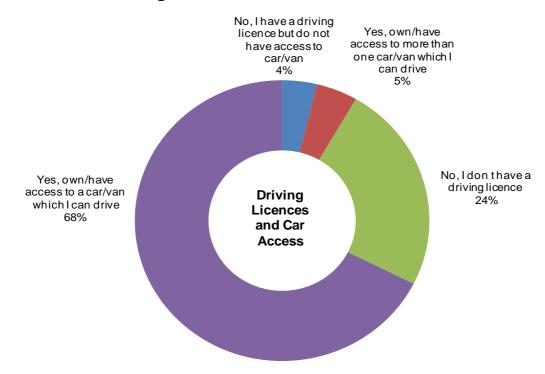


Figure 1: Access to a car or van

Base = 3,349

Respondents in the 25-34 (71%), 35-49 (77%) and 50-64 (71%) age categories were more likely to own/have access to a car/ van than those aged 16-24 (40%) and those aged 65 and over (62%) while those aged 16-24 were more likely to state 'No, I don't have a driving licence' than any other age group.

Males (74%), respondents without a disability (74%), those with dependants (73%), the economically active (77%) and those living in rural areas (77%) were more likely to own/have access to a car/ van than females (63%), those with a disability (52%),

those without dependants (64%), the economically inactive (56%) and those in urban areas (63%).

Females (29%), those with a disability (39%), those without dependants (28%), the economically inactive (38%) and those living in urban areas (29%) were more likely to answer 'No – I don't have a driving licence' than males (17%), those without a disability (18%), those with dependants (18%), those who are economically active (13%) and those living in rural areas (14%).

# Three Biggest influencing factors when considering a vehicle purchase

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 are the most pressing when considering a vehicle purchase. By far the most popular response was 'buying price' (49%), followed by 'reliability' (16%)

These results are similar to the 2012 Omnibus survey which found that the top 3 responses were 'buying price' (45%), 'reliability' (21%).

Respondents were then asked for their second biggest influencing factor when considering a vehicle purchase. The most common of these were 'reliability' (23%), 'miles per gallon' (21%) and 'buying price' (14%).

When asked for their third biggest influencing factor, 'miles per gallon' was the most frequently given response (21%), followed by 'reliability' (16%) and a further 13% stated 'insurance'.

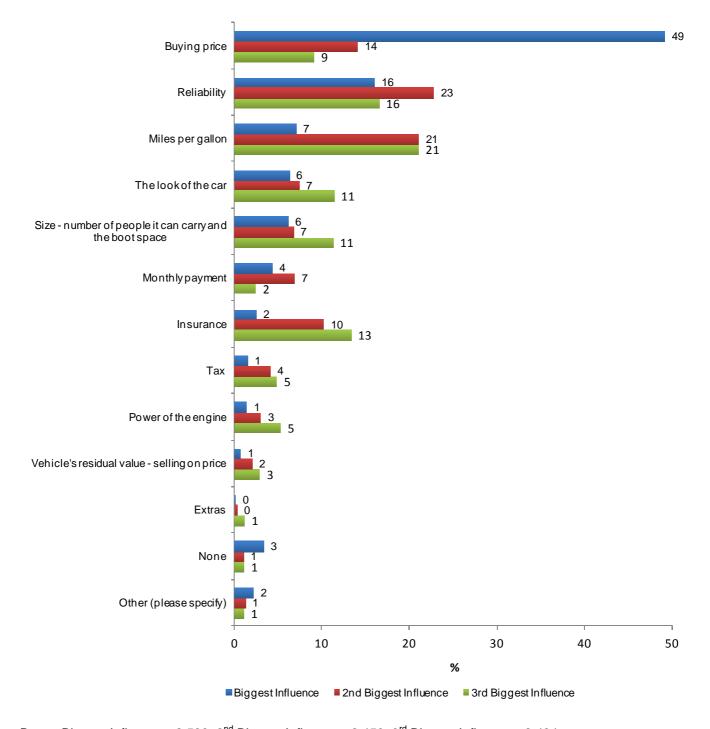


Figure 2: Biggest influencing factors when considering a vehicle purchase

Base: Biggest Influence= 2,533; 2<sup>nd</sup> Biggest Influence= 2,450; 3<sup>rd</sup> Biggest Influence= 2,434

Unsurprisingly ,'buying price' was the most frequently given response among all groups as the biggest influencing factor when considering a vehicle purchase but was particularly important to those aged 16-24 (61%) and those with dependents (52%).

Among 16-24 year olds, 'Insurance' was indicated by 17% as being their biggest influencing factor when considering a vehicle purchase, higher than any other age group.

Respondents with dependants (8%) and those educated to degree level or higher (8%) were more likely that those without dependants (4%) and those with all other qualifications (5%) and no qualifications (4%) to say 'Size - number of people it can carry and boot space' is the biggest influence factor when considering a vehicle purchase.

When considering the 2<sup>nd</sup> biggest influencing factor for vehicle purchases, there were some differences between groups. Males were more likely to state 'miles per gallon' (25%) than females (18%) while females (11%) were more likely to state 'insurance' than males (9%).

The most frequently stated 2<sup>nd</sup> biggest influencing factor among 16-24 year olds was 'insurance' (24%), higher than all other age groups.

'The look of the car' featured much higher as the 3<sup>rd</sup> biggest influencing factor among 16-24 year olds (23%) when compared to all other age groups.

Respondents who have dependants (15%) and females (13%) were more likely to state 'Size - number of people it can carry and the boot space' as the 3<sup>rd</sup> biggest influencing factor when considering a vehicle purchase when compared to those without dependants (8%) and males (10%).

# Please indicate which of the following options would encourage you to buy 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' (39%), '£5,000 grant towards purchase of an Electric Vehicle' (33%), 'No vehicle tax' (30%), 'No carbon emissions' (25%) and 'No requirement to pay for petrol or diesel' (23%). Over four in ten respondents (41%) of respondents said that none of the options would encourage them to buy an electric car.

In 2012, the most popular responses were 'low running costs' (54%), 'No Vehicle tax' (46%), '£5,000 grant towards purchase of an Electric Vehicle (43%), 'No carbon emissions' (32%) and 'No requirement to pay for petrol or diesel' (32%). Almost a quarter (23%) of respondents said that none of the options would encourage them to buy an electric car.

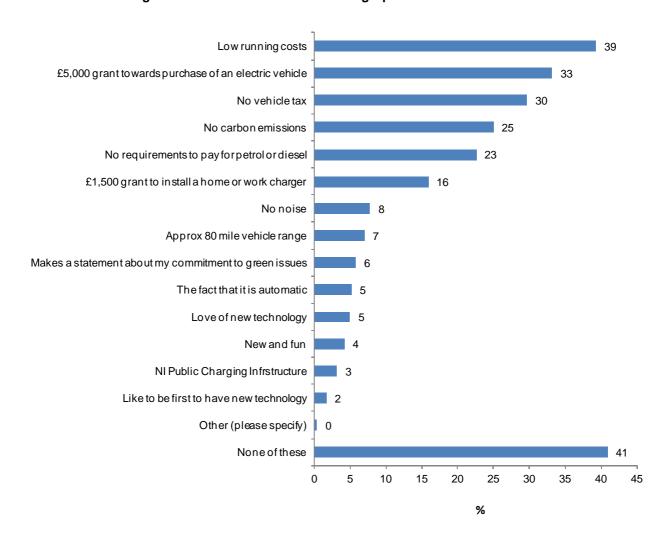


Figure 3: Factors that would encourage purchase of an electric car

Base= 2,521

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

Males were more likely than females to say that '£5,000 grant towards purchase of an electric vehicle' (36% versus 31%), 'No Vehicle tax' (32% versus 28%), '£1,500 grant to install a home or work charger' (19% versus 14%) and 'love of new technology' (8% versus 2%) would encourage them to buy an electric car, whereas

females were more likely than males to say that 'none of these' options (44% versus 38%) 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' (41% versus 33%), a '£5,000 grant towards purchase' (35% versus 28%), 'no vehicle tax' (31% versus 25%), 'no requirements to pay for petrol or diesel' (24% versus 18%) and '£1,500 grant to install a home or work charger' (17% versus 13%). Those with a disability were more likely to say that 'none of these' options would encourage them (47% versus 39%) to buy an electric car.

When comparing the answers of respondents with and without dependants, it was found that those with dependants were more likely to indicate financial reasons as encouragement to purchase an electric car i.e. 'Low Running Costs' (43% versus 37%), '£5,000 grant towards purchase of an Electric Vehicle' (38% versus 29%), 'No vehicle tax' (34% versus 26%), 'No carbon emissions' (27% versus 23%), 'No requirement to pay for petrol or diesel' (27% versus 19%), '£1,500 grant to install a home or workplace charger' (19% versus 14%) and '80 mile vehicle range' (8% versus 6%). Those without dependants were more likely to say 'the fact that it is automatic' (6% versus 4%) and that 'none of these' (44% versus 37%) options 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' (45% versus 30%), '£5,000 grant towards purchase of an Electric Vehicle' (39% versus 23%), 'no vehicle tax' (35% versus 21%), 'no carbon emissions' (28% versus 19%), 'no requirement to pay for petrol or diesel' (26% versus 16%), £1,500 grant to install a home or workplace charger' (19% versus 10%), 'no noise' (9% versus 6%) and '80 mile vehicle range' (8% versus 5%). Those who are economically inactive were more likely to say that none of these options would encourage them to buy an electric car (54% versus 33%).

When considering the responses of urban and rural dwellers, urban dwellers were more likely to be encouraged by 'love of new technology' than their rural counterparts (6% versus 4%) while rural dwellers were more likely to say that 'none of these' options would encourage them to buy an electric car (44% versus 39%).

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' (53% versus 31% and 39%), '£5,000 grant towards purchase of an Electric Vehicle' (44% versus 24% and 33%), 'No vehicle tax' (38% versus 22% and 32%), 'No carbon emissions' (33% versus 17% and 25%), 'No requirement to pay for petrol or diesel' (30% versus 13% and 25%) and '£1,500 grant to install a home or workplace charger' (20% versus 12% and 17%) are options that would encourage them to buy an electric car. Conversely, those with no qualifications (53%) and those with all other qualifications (39%) were more likely to state that nothing would encourage them to buy an electric car compared to those with degree level education or higher (27%).

# Please indicate which of the following options would discourage you from buying 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. Over half of respondents (53%) were discouraged by the 'need to recharge 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.

In 2012, almost half of respondents (49%) were discouraged by the 'time it takes to charge a vehicle' (wording has been slightly changed from the 2012 question). The next most popular deterrent was 'Purchase Price' (47%) followed by 'Battery Life' (40%), 'Vehicle Range' (26%) and 'The size of the car and boot' (18%). Almost a tenth (9%) said that none of the options listed would discourage them from buying an electric car.

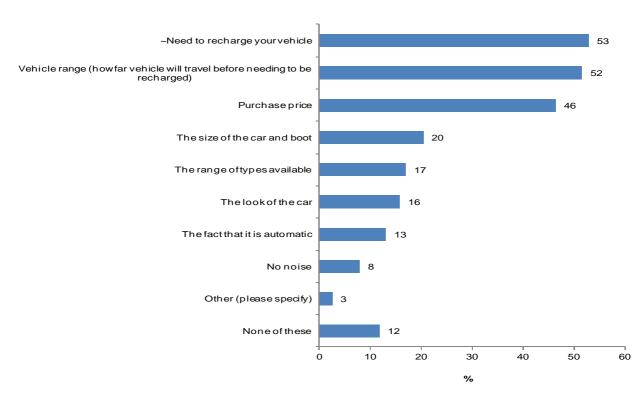


Figure 4: Factors that would discourage purchase of an electric car

Base= 2,513

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

 $<sup>\</sup>sim$  There was a wording change to this response in the CHS. In the 2012 Omnibus Survey, it read 'Time required to re-charge your vehicle'.

Those aged 16-24 were more likely than any other age group to say that the 'look of the car' and 'the fact this it is automatic' would discourage them. Those aged 65 and over were less likely than the 16-24, 25-34 and the 35-49 age groups to state that 'purchase price' and more likely to say that 'none of these' things 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' (58% versus 46%), 'purchase price' (50% versus 43%) and the 'range of types available' (21% versus 13%) while females were more likely than males to say that nothing would discourage them from buying an electric vehicle (14% versus 10%).

Respondents without a disability when compared to those with a disability were more likely to state that the 'look of the car' (17% versus 12%) would discourage them, while those with a disability were more likely to state that nothing would discourage them from buying an electric car (14% versus 11%).

# How likely are you to buy an Electric Car as your next vehicle?

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'. A further 6% answered 'quite likely' while 1% answered 'Very likely'.

These results are similar to 2012 when it was found that 92% of respondents answered 'not at all likely', 7% indicated that they were 'quite likely' and less than 1% indicated that they were very likely.

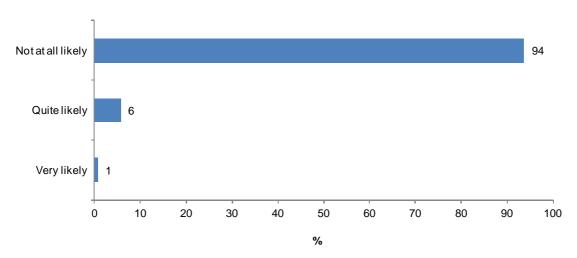


Figure 5: Likelihood of buying electric car as next vehicle

Base=2,125

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.

More females (95%) than males (92%) indicated that they were 'not at all likely' to buy an electric car as their next vehicle.

A higher proportion of those aged 65 and over (96%) than those aged 35-49 (93%) and 50-64 (92%) said that they were 'not at all likely' to buy an electric car as their next vehicle.

Those with 'all other qualifications' (95%) were more likely than those educated to degree level or higher (92%) 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 2014/15 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. DRD placed questions related to Public Attitudes towards Electric Vehicles for the first time in the 2014/2015 CHS. The questions relating to electric vehicles can be found in Appendix 4 of this publication. The dataset contains the records for 3,349 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 and Personnel. 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 Practice<sup>1</sup>.

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

 $<sup>^{1}\,\</sup>underline{\text{http://www.statisticsauthority.gov.uk/assessment/code-of-practice/code-of-practice-for-official-statistics.pdf}$ 

genders cannot simply be explained by random chance or sample error. When a 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**

Urban and rural areas have been classified 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 ranging from 4,500 to under 75,000.
- 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 ranging from less than 1,000 to under 4,500 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 attainted or the nearest equivalent. These responses were then collated into the following broad classificatory groups:

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

'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:

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% confidence interval = 
$$p + /- 1.96 * s.e. (p)$$

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 4 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

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

Table 2: Biggest influencing factor when considering a vehicle purchase

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

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

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

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

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

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

	All		A	ge Grou	ıp		Ge	nder	Disabil	ity Status	Rural Areas							est Educat ualification	
Response	Respondents	16 24	25 34	35-49	50 64	65 and over	Male	Fem ale	Has Disability	No Disability	Has Dependants	No Dependants		Economically Inactive	Urban	Rural	No Qualificati ons	Degree level or higher	All other quals
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Buying price	49	61	48	51	47	46	48	50	47	50	29	28	50	48	48	50	52	48	51
Monthly payment	4	4	9	5	4	1	3	5	4	4	22	22	6	2	5	3	5	6	4
Vehicles residual value - selling on price	1	1	0	1	0	1	1	0	0	1	39	43	1	1	1	0	1	1	1
Reliability	16	6	12	13	17	24	17	15	18	15	16	14	15	18	16	16	12	14	15
Tax	1	0	2	1	2	1	2	1	2	1	11	11	2	1	2	1	2	1	2
Insurance	2	17	3	2	1	1	2	3	1	3	23	25	3	2	2	2	2	2	3
Miles per gallon	7	1	7	7	8	7	7	7	8	7	3	5	7	8	7	7	9	7	7
The look of the car	6	4	7	7	7	5	6	6	5	7	44	37	7	5	6	6	5	7	6
Extras	0	1	0	0	0	0	0	0	0	0	5	11	0	0	0	0	0	0	0
Pow er of the engine	1	0	1	1	2	2	2	1	1	1	8	14	1	1	1	2	1	2	1
Size - number of people it can carry and the boot space	6	2	8	8	5	5	5	7	5	6	5	12	6	6	6	7	4	8	5
Other (please specify)	2	1	1	1	3	3	3	1	3	2	19	3	2	3	2	2	1	2	2
NONE	3	3	1	3	4	5	3	4	5	3	0	1	2	6	4	3	7	2	2
Base number (All persons aged 16 and over)	2,533	142	417	709	696	569	1187	1346	596	1932	1387	1146	1600	933	635	385	279	745	1120

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

	All		A	ge Grou	īb		Ge	ender Disability Status Dependant Status					Econom	Economic Activity Ru			Highest Educational Qualifications		
Response	Respondents		25-34	35-49	50-64	65 and over	Male	Female	Has Disability	No Disability	Has Dependant	No s Dependants	Economically Active	Economically Inactive	Urban	Rural	No Qualificati ons	Degree level or higher	All other quals
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Love of new technology	5	11	6	5	6	2	8	2	4	5	5	5	6	3	6	4	5	7	5
Makes a statement about my commitment to green issues	6	8	5	6	7	4	6	6	5	6	5	6	6	5	6	6	2	10	5
New and fun	4	11	5	5	4	1	4	4	3	5	5	4	5	3	4	5	3	5	5
Like to be first to have new technology	2	5	2	2	2	1	2	1	1	2	2	2	2	1	2	2	1	1	3
£5,000 grant towards purchase of an Electric Vehicle	33	40	38	41	34	18	36	31	28	35	29	38	39	23	34	32	24	44	33
No requirements to pay for petrol or diesel	23	37	27	29	22	9	24	22	18	24	19	27	26	16	23	22	13	30	25
Low running costs	39	51	49	47	36	24	41	38	33	41	37	43	45	30	41	37	31	53	39
No vehicle tax	30	43	36	37	28	14	32	28	25	31	26	34	35	21	31	28	22	38	32
Approx 80 mile vehicle range	7	5	7	9	8	4	8	6	6	7	6	8	8	5	7	7	6	8	8
NI Public Charging Infrstructure	3	4	3	4	3	2	4	3	2	3	3	3	4	2	4	3	2	5	3
£1,500 grant to install a home or w orkplace charger	16	19	17	22	15	8	19	14	13	17	14	19	19	10	16	15	12	20	17
No noise	8	13	8	10	7	4	8	7	7	8	7	8	9	6	8	8	5	9	9
No carbon emissions	25	27	29	30	25	16	25	25	22	26	23	27	28	19	26	24	17	33	25
The fact that it is automatic	5	6	4	5	7	5	5	6	6	5	6	4	5	5	6	4	3	7	5
Other (please specify)	0	1	0	0	0	1	1	0	1	0	1	0	0	0	1	0	0	0	1
None of these	41	23	32	32	42	62	38	44	47	39	44	37	33	54	39	44	53	27	39
Base number (All persons aged 16 and over)	2,521	142	414	705	692	568	1182	1339	594	1924	1390	1141	1591	930	1545	976	277	742	1115

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

	All		А	ge Grou	ıp		Ge	nder	Disabili	ty Status	Dependa	nt Status	Economi	c Activity		n and Areas	_	est Educat ualificatior	
Response	Respondents	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 Qualificati ons	Degree level or higher	All other quals
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Need to recharge your vehicle	53	60	52	52	51	55	51	54	52	53	53	53	53	53	52	54	52	52	53
Vehicle range (how far vehicle will travel before needing to be recharged)		56	50	52	54	48	58	46	48	53	50	53	55	46	50	54	43	59	51
Purchase price	46	52	50	50	45	40	50	43	44	47	45	49	49	41	47	46	43	48	50
No noise	8	9	9	6	8	8	10	6	8	8	8	8	8	7	7	9	9	6	9
The look of the car	16	35	19	18	13	9	17	15	12	17	15	17	18	12	15	17	14	16	19
The range of types available	17	23	21	20	14	12	21	13	15	17	15	19	20	12	17	18	16	20	17
The size of the car and boot	20	21	28	23	19	13	20	20	20	21	16	26	22	17	21	19	19	21	23
The fact that it is automatic	13	26	15	12	12	12	13	13	13	13	13	13	14	12	13	13	12	11	15
Other	3	1	2	2	3	2	3	2	4	2	2	3	3	2	2	3	1	3	3
None of these	12	8	8	8	13	19	10	14	14	11	14	10	8	18	11	12	19	8	10
Base number (All persons aged 16 and over)	2,513	141	413	700	693	566	1182	1331	593	1917	1377	1136	1589	924	1540	973	273	741	1113

Table 8: Likelihood of buying electric car as next vehicle

	(%)
Not at all likely	94
Quite likely	6
Very likely	1
Base	2,125

# **Appendix 4: 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 either were either very likely or quite likely to buy an electric car as their next vehicle.

# **Appendix 5: 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 CAR NIRIAGE 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 -> [CAR3OTH]
  16. None -> [CAR4]

# [CAR3OTH] 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  $\dots$  **RUNNING PROMPT** 

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