

Customer-Led Network Revolution

Customer Engagement Plan

Version 7.1

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Version history

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Change control

The material changes in this version relative to version 6 are as follows:

Sections	Changes
Paragraph 20, 31, 36, appendix 4	In relation to engaging customers in publicity about the project

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1. Introduction

- 1 The Customer-Led Network Revolution is a collaborative project undertaken by Northern Powergrid, British Gas, Durham Energy Institute (Durham University) and EA Technology. Over a three-year period, Northern Powergrid and its partners will be trialling smart-grid solutions on the electricity distribution network as well as creating smart-enabled homes to give customers more flexibility over the way they use and generate electricity.
- 2 The project is based in the Northern Powergrid distribution services area covering the Northeast, Yorkshire and northern Lincolnshire and will involve residential customers, small and medium enterprises (SMEs) and some larger industrial and commercial (I&C) customers across urban and rural geographies.
- 3 The project will put customers in major cities like Durham, Leeds, Newcastle and Sheffield, as well as those in some of the more sparsely populated parts of the country, at the forefront of the low-carbon agenda. This £54 million project has received £27 million funding via the Low Carbon Networks Fund.
- 4 As part of the British Gas roll-out of smart meters, the project will feature around 14,000 customers in the Northeast and Yorkshire with smart meters. In addition, around 2,500 customers taking part will also have either solar photovoltaic (PV) panels, heat pumps or provision for charging electric vehicles installed at their properties.
- 5 Although the intention was originally to focus attention solely on British Gas's customers in the Northern Powergrid licence area, we now know there to be insufficient numbers of such customers with the relevant characteristics for some aspects of the project. There may therefore be a need to engage directly with customers who buy their electricity from another supplier. In some cases of extreme customer scarcity (e.g. heat pumps and EVs), it may also be necessary to recruit trial participants (both BG and non-BG customers) outside of the trial's core geographical area, to ensure that meaningful learning outcomes can be achieved. The approach adopted for engagement with non-British Gas (non-BG) customers and/or out of area customers will so far as possible be the same as for in area BG customers. Any differences in approach to customer engagement customers are set out in Appendix 4.
- 6 Knowledge gained from these customers will be extended to the whole of the UK using data from up to around 200,000 smart meters. Although the new technologies being trialled by the project will be located in Northern Powergrid's distribution services area, the project is designed such that the knowledge generated will be applicable across Great Britain.
- 7 As well as exploring the impact on electricity demand of customers using solar PV panels, electric vehicles and heat pumps, the project will explore the use of new technology on the electricity network and commercial arrangements between suppliers, distributors and customers. The project will assess the potential for new network technology and flexible customer response to facilitate speedier and more economical take-up by customers of low-carbon technologies.
- 8 Durham University will be providing academic rigour to the project through its multi-disciplinary Durham Energy Institute. The results will help the industry make sure the electricity networks can handle the mass introduction of solar PV panels, electric cars and other low-carbon technologies. All the results from the project will be published and therefore made freely available for use by others in the industry.

- 9 All personal data used in the project will be managed in order to comply with the Data Protection Act. Data used will be anonymised wherever possible and its treatment will also comply with British Gas's own Smart-Meter Customer Charter, a copy of which can be found as Appendix 2 to this document. The same standards will be applied whether or not the customers are British Gas customers.
- 10 For the purpose of this document Learning Outcomes 1 and 2 of the project are discussed, as these contain the various trials that involve customer engagement:
 - Learning Outcome 1 (LO1): What are current, emerging and possible future customer (load and generation) characteristics?
 - Learning Outcome 2 (LO2): To what extent are customers flexible in their load and generation, and what is the cost of this flexibility?
- 11 More detailed information on the project can be found on the project website at www.networkrevolution.co.uk.

2. Customer participation

2.1 Customer groups

- 12 Various customer types are to be involved in the project. These include residential customers, community groups, small and medium enterprises and large industrial and commercial customers.
- 13 The vast majority of customers actively involved in the project will be sourced from British Gas's customer base. Therefore the majority of engagement and interaction with customers for project purposes will be carried out by British Gas.
- 14 In a limited number of instances, it will be necessary to engage directly with customers in the project that are not those of British Gas. One such case is with a small number of industrial and commercial load and/or large distributed generation customers for
 - understanding the influence of the April 2010 tariff reform on I&C customers; and
 - involvement in demand-response related trials and research.
- 15 Where this is the case, those customer relationships will be managed directly by Northern Powergrid on a case-by-case basis, either directly or through the services of market aggregators or Durham Energy Institute. The overall methodology for engagement with these customers will follow the principles described in this document where British Gas is managing the customer contact.
- 16 There may also be a need to engage directly with domestic customers who are not those of British Gas, for the reasons given in paragraph 5 above. Any differences in approach to customer engagement for non-BG customers are set out in Appendix 4. Material and call centre advice will be branded with the project brand, and so will be the same for non-BG customers as for British Gas (BG) customers. Test cell terms & conditions will have different variations to cover non-BG customers' data protection needs. Whilst interaction with such customers will be the responsibility of British Gas on behalf of the project, no attempt will be made to recruit these customers to be supplied with electricity by British Gas, nor will different tariff offerings be made to them. To protect against this eventuality, staff involved in non-BG customer

recruitment will be given extensive training in the importance of recruiting customers to the project only and to ensure that electricity supply by British Gas is not discussed in any conversations. The risk of this occurrence, however, is considered low as the recruitment of non-BG supply customers is only required for test cells where they are not required to be supplied by British Gas so there is no incentive or need to encourage or transfer them to a British Gas electricity supply. Also, in the majority of cases, the staff involved in non-BG customer recruitment will not have access to the main British Gas account creation/management systems.

- 17 With a view to maximising the numbers of electric-vehicle user participants onto the trials, customers will also be sought via joint working with Charge your Car in the Northeast of England. The Customer Engagement Plan specific to this arrangement is detailed in Appendix 6 to this document.

2.2 General scope and approach

- 18 Customer engagement includes all aspects of customers' involvement with the programme:
 - Establishing which customers need to be engaged;
 - Planning customer selection and approach;
 - Developing and implementing initial engagement plans;
 - Bringing customers into the programme;
 - Keeping customers engaged in the programme;
 - Managing customer issues and questions; and
 - Managing customers who are leaving the programme.
- 19 Generic material will be developed and used and there will be common themes to the approach to each customer group. However, the customer engagement strategy for each group will be tailored specifically to the needs of customers therein.
- 20 A flow chart detailing the customer engagement process for this project is attached as Appendix 1 to this document. In addition to this generic process that applies to all customers, a small number of customers may be involved in publicity about the project.
- 21 The scope and scale of the project means that there will be many items of customer-facing material required. This will be produced in line with the schedule attached in Appendix 4 to this document. Appendix 5 refers to specific documents for non-BG customers, where these differ from those for BG customers.

2.3 Monitoring customers' existing load and generation patterns – Learning Outcome 1

- 22 British Gas already has a good understanding of the number of customers who already have smart meters and / or low-carbon technologies in their homes. Given this number is significant, the aspiration is to include their data in the Customer-Led Network Revolution project where possible. Most of the monitoring requires no explicit customer engagement since the data is already collected via the smart meter. However, in some instances, in the monitoring trials, we will need to work with customers either to install additional monitoring equipment or ask them for more information on their energy use or production. In such instances, the overall process for customer engagement is relevant. Non-BG customers may be recruited to the trials for this Learning Outcome in order to extend the demographic range of data available.
- 23 For I&C customers involved in the monitoring trials, the project will use half hourly data from Northern Powergrid's systems. For most customers, no explicit customer engagement is required. However, a small subset of these customers will be identified and requested to take part in work to explore the influence of the April 2010 tariff reform.

2.4 Trialling customers' flexibility in load and generation – Learning Outcome 2

- 24 Where we plan to involve customers in behaviour-changing tariffs (time of use, restricted hours, direct control), those customers will actively be enrolled in the project. This holds as true for customers with smart meters only as it does for customers with a smart meter plus some form of low-carbon technology. The content of customer information material is as described above (i.e. general information and information tailored to suit the needs of the specific customer group). Non-BG domestic and SME customers may be recruited to the trials for this Learning Outcome in order to increase the number of participants.
- 25 For each of the above groups, British Gas will provide customers with printed and electronic materials and there will be a level of interaction with agents from British Gas's customer contact centres. In addition, in more complex cases where the implications of the technology / tariff combination are likely to be greater (for example where a direct control tariff is being implemented) it is likely that British Gas's field staff will visit the customer in person to ensure the customer understands the situation fully and knows what to do if further support is required.
- 26 Note that, during the new customer process, the project will look to collect customer email addresses. Where customers are happy to share and allow the project to communicate with them electronically, the project will leverage email communications where possible. This will allow more frequent and timely communication as well as links to the project website.
- 27 For the I&C and DG customers involved in the flexibility trials, the project will use half hourly data from Northern Powergrid's systems and data collected by commercial aggregators. In addition, we will engage with approx. 100 I&C or DG customers to carry out demand-response research designed to establish what barriers to entry exist for such a scheme and to understand how much demand-side response flexibility exists in the marketplace.

2.5 Customer consent

- 28 In our interactions with customers we are mindful of the concerns and sensitivity voiced by many people as part of the smart meter rollouts being undertaken in the UK and internationally. We understand that to deliver a successful project we will need to build and maintain the trust of customers who agree to take part in our trials. The management of consents will play a key part in creating this positive relationship with trial participants.
- 29 Consent is effectively already in place for the BG customers who are participating in the monitoring trials where their involvement is limited to the project utilising data from their smart meter. Where electricity consumption data can be obtained on a business-as-usual basis from British Gas's smart metering customers, the Privacy Notice (contained in customers' supply terms and conditions) allows personal information held about customers to be used for, amongst other things, analysis and research purposes. Therefore, there is already a basis for using British Gas's customer data (including where such analysis is undertaken by third parties under contract with British Gas).
- 30 Similarly, for half hourly metered I&C and DG customers participating in the monitoring trials where their involvement is limited to the project using data from their half hourly meter, no explicit consent is required.
- 31 Consequently, it is anticipated that the project will seek additional consent from customers in the following categories
- Non-BG customers participating in any trial
 - Customers providing additional qualitative information on their energy use or production;
 - Customers accommodating additional monitoring equipment;
 - Customers who enrol in smart tariffs such as Time of Use, Restricted Hours, Direct Control;
 - Those customers purchasing low-carbon technologies from British Gas; and
 - Those customers involved in publicity about the project.
- 32 These groups include customers who will be in receipt of a Customer-Led Network Revolution project tariff subsidy.
- 33 Prior to formal enrolment in the trial, we will provide customers with all relevant information about the project including its background, objectives, timelines and an overview of the consortium members involved in its delivery. The need for generation and consumption data and a high-level overview of the analysis that will be done will be explained. In enrolling in the project, customers will give consent for the use of their data in the ways detailed in that documentation.
- 34 Before contacting British Gas customers to establish whether they want to participate in the trial, we will check whether or not they have already opted out of receiving marketing information. We will then remove any such customers who have opted out from the list of potential project participants and so will not contact those customers for the purposes of the project. Subsequent phases of the customer recruitment process, including the sale of a tariff, technology or both, will contain a

marketing opt out option for customers, who can elect to opt out of receiving marketing information from that time.

- 35 We will only be contacting non-BG customers who have given their consent via other routes (e.g. as a tenant of a registered social landlord (RSL), they will have been put forward for potential heat pump installation or retrospective monitoring; therefore the RSL will manage and take responsibility for consent). Alternatively, they will have come in via another route where they have given prior permission (e.g. a Plugged-in Places' EV or other such publicly-funded programme) via other data sharing/contact agreements.
- 36 To obtain consent from a customer to participate in publicity, British Gas will telephone the customer and explain what this would involve and will make it clear that their participation in the project will be unaffected by their decision about whether or not to participate in publicity. If the customer agrees in the telephone conversation to take part in publicity, British Gas will write to the customer confirming what this may entail, which parties are involved, how their personal data will be handled, that the customer may opt out at any point, and how to withdraw their consent.

2.6 Treatment of customer data

- 37 All customer data will be anonymised during the Customer-Led Network Revolution project data management process. Consequently, data within the Customer-Led Network Revolution project cannot and will not be used to tailor marketing strategies for individual customers.
- 38 The key information extracted from the British Gas systems is electricity consumption data associated with a particular Meter Point Administration Number (MPAN). No name or address data will be extracted. Voltage, current and other power quality data will be collected alongside this once available. The MPAN will then be removed and replaced with a randomly generated unique identifier created by British Gas, which will be recorded against that customer and will be used for the duration of the project. All meter read data will also be supplied against the unique identifier.
- 39 The process will be broadly similar for non-BG customers. They will be given a unique identifier number as with BG customers for use during the duration of the trial. No name or address data will be passed on to Durham Energy Institute for the purposes of studying consumption (but this will clearly be needed to invite customers on to the trial in the first instance, and will be used by British Gas and Durham Energy Institute for the purposes of customer surveys and in-depth social interviews respectively). For further information, please see the Data Protection Strategy.
- 40 In terms of linking this to the monitoring data (which comes from a different system but which all needs to be linked together), the same unique identifier as will be used above will be loaded in and associated with the corresponding customer. As such, whenever extracts of monitoring data are taken they will link through the common unique identifier. No sensitive customer data will ever be shared and British Gas staff not involved in the project will not have access to consumption data from non-BG customers.
- 41 For I&C and DG customers involved in the trials, consumption data is collected by Northern Powergrid and analysed by Northern Powergrid and Durham Energy Institute. It will not be available to British Gas.

3. Engaging customers

42 Domestic and SME trial participants will be primarily identified through one of the following routes:

Route	Customer type: supplier and location			
	BG in area	BG out of area	Non-BG in area	Non-BG out of area
British Gas existing smart-metered customers and the smart meter roll out programme	Yes	Yes		
Commercial sales by British Gas of new low-carbon technologies to individuals (see sections 3.2 to 3.5)	Yes	Yes	Yes	Yes
British Gas community energy saving programme (CESP) low-carbon technologies provided for communities (see section 3.6)	Yes	Yes	Yes	Yes
Installations of low-carbon technologies by other installers in the Northeast and Yorkshire & Humber regions (also see section 3.6)	Yes		Yes	
'Friendlies' (employees of project partners) will be invited to participate via self-registration on a special page on the CLNR website in response to a call put out via internal channels (company emails circulars/newsletters etc.)	Yes	Yes	Yes	Yes
Existing relationships with Registered Social Landlords (RSLs) both within region and outside of region for both BG and non-BG customers (for access to both existing installed heat pumps and new installations). RSL's will authorise and make the introductions in the case of existing installations and will strike a contract sale for multiple units in the case of new units ¹	Yes	Yes	Yes	Yes

¹ N.B. in these cases, non-BG customers will **not** become BG electricity supply customers

Route	Customer type: supplier and location			
	BG in area	BG out of area	Non-BG in area	Non-BG out of area
Stakeholder contacts with 'Plugged-in Places' electric vehicle partnership programmes will be used to access potential trial participants	Yes	Yes	Yes	Yes
Stakeholder contacts with community energy groups and other relevant third parties will be used to access potential trial participants via their networks of existing low-carbon technologies installations and potential new installations	Yes	Yes	Yes	Yes
BG regional relationships managers will work with local authorities, community groups and other interested parties to build a base of prospective interested 'group' participants	Yes	Yes	Yes	Yes

3.1 Installation of additional monitoring equipment

- 43 In order to gain a detailed understanding of customers' electricity usage, some customers will consent to have monitoring equipment installed on the premises in addition to the British Gas smart meter, or for non-BG customers, in addition to their existing meter. The additional monitoring will comprise "in-line" monitoring and/or smart plugs and (in the case of non-BG customers) a secondary meter for "whole-house" monitoring. This will be required for trial participants other than British Gas customers with plain single tariffs (e.g. prepayment or economy 7).
- 44 In all instances where this is the case, customers will be provided with details of this equipment installation (including an indicative timescale for it to remain in situ) before they consent to take part in the trial. Additional monitoring equipment will be installed by the equipment supplier under contract with British Gas and, where appropriate and wherever possible, will be combined with the installation of either a low-carbon technology (as set out in sections 3.2 to 3.5 below) or a British Gas smart meter to minimise disruption to the customer. The equipment will be left installed in the customer's premises for the duration of the trial, after which the installer will make arrangements with the customer for its decommissioning and removal.

3.2 British Gas commercial sales overview

- 45 Outside of the project, British Gas is engaged in commercial sales of low-carbon technologies. This sales channel is being used as a route to identify customers who wish to participate in the Customer-Led Network Revolution. The commercial sales activities are not funded or subsidised by the project.
- 46 The following sections detail the headlines for the British Gas sales processes associated with each of the relevant technologies, and explain where Customer-Led Network Revolution project participation fits in.

3.3 Solar photovoltaics sales process overview

47 British Gas's existing sales process for solar photovoltaics will be applied to the project. The key steps in this project are as follows:

- Potential customers (as identified by Durham Energy Institute and British Gas's customer insight team) will initially be contacted directly via mail.
- Customers who respond positively to this and contact British Gas's operations centre accordingly will be taken through a high-level suitability assessment (Google maps is used to check the size and alignment of their roof etc.) by British Gas operations centre staff.
- If a customer is found to be suited to the installation then a visit by a member of British Gas's Energy Experts team will be arranged so that a more detailed systems assessment and quote can be completed.
- Customers who decide to proceed at this stage will be assigned an account manager who arranges all details associated with the install - for scaffolding to be erected the day before the installation is due, for all parts to be delivered to the site etc and for all relevant installers to be present on the day.
- At this stage, the option to participate in the Customer-Led Network Revolution project will be presented to the customer, and the implications of doing so will be fully explained to them. Customers who show an interest to participate in the project will be presented with the various tariff options and incentives available to them through participation and allowed to select the one of most interest.
- Once the installation is complete the monitoring phase will begin.
- All customers enrolled in the project will receive a 'welcome pack' detailing information about the project, the technologies, data gathering and codes of practice.
- Customers will be provided with the relevant telephone contact details and email addresses so that they have a point of contact should further information or support be needed during their participation in the project.

3.4 Air-source heat pumps (ASHP) sales process overview

48 The domestic and SME sales approach will follow a broadly similar path to that outlined above for solar PV (i.e. direct mail of prospects, interested customers who contact the operations centre will be walked through an initial suitability assessment, a visit will be arranged with an Energy Expert etc). However, there will be some minor variations in some cases and some alternative approaches which may also apply:

- BG staff will be invited to take part in the project and purchase heat pumps using the discount supported by DECC (as outlined elsewhere in this document) via a similar process to the "friendlies" recruitment process outlined elsewhere in this document. If they express an interest they will be loaded in to the survey booking and energy expert visit process as above for the solar PV process;
- BG energy experts, operating within region on a business-as-usual BG insulation/home energy assessment visits will be given training in how to

identify properties which are potentially suitable for an ASHP. Customers will be made aware of the project trials and potentially discounted ASHP and, if interested, will be referred for a detailed survey by a specifically-trained energy expert in a similar process to the solar PV process outlined above.

- The majority of new ASHP sales associated with the DECC grant and included the project are likely to come through the local authority/housing association and registered social landlord routes. In these cases, the main route in to the project will be via the above bodies who will engage with their own tenants and identify suitable and interested potential customers (both BG and non-BG). These authorities will also explain the project and participation in it. BG engineering teams will conduct a high-level “property-type” survey initially with the cooperation of the authority to refine the list of potentially suitable properties for ASHP installation. Subsequently, the engineers will carry out detailed technical surveys of individual properties at which point the tenant will be advised whether their property is suitable, given the opportunity to accept or decline the offer, and participation in the appropriate test cell will be offered as part of the installation process. In all these cases, the relevant authority will purchase the heat pump via one central contract.

3.5 Electric vehicles sales process overview

- 49 The British Gas strategy for selling electric vehicle domestic charging points involves an arrangement with a vehicle manufacturer to promote and sell charge point installation at their dealerships. They will also sell via leasing companies and directly to customers. British Gas will continue to investigate similar arrangements with other electric-vehicle manufacturers.
- 50 In terms of customer engagement, at the end of the sales process the option to join the Customer-Led Network Revolution project will be presented to customers, as will the various different tariff options and their respective implications. Customers will be given time to think through the information presented, and they will be given contact details for people with a full understanding of the trial should they want to discuss further before making a decision.

3.6 CESP and other installations

- 51 One of the key aspirations of British Gas is to work with Community groups in the area to ‘normalise’ new technology and increase the likely uptake of these options by residential customers.
- 52 Through engagement of local partners we will have access to a range of communities and customers who are keen to take part in trials or who already have equipment installed (and therefore have an established energy consumption profile). These partners are generally involved in initiatives involving the installation of low-carbon technologies throughout a local community and so will, together with customers taking part in British Gas’s CESP projects, be the source of customers for trials that require clusters of customer participants. These projects may also provide a useful source of non-BG customers.
- 53 This approach should allow us to leverage CESP plans for local community engagement benefitting the community, the CESP project and the Customer-Led Network Revolution project. The project will do this via the existing Community Energy team within British Gas and Northern Powergrid’s regional contacts who have strong existing relationships with Local Authorities and Housing Associations.

- 54 Where installations of either solar photovoltaics or air-source heat pumps are undertaken by British Gas in conjunction with a local authority or housing association, the local authority or housing association energy advisor will then approach those tenants to establish whether they want to be involved in the trial. The energy advisor will utilise materials already developed for customer information and enrolment as described in sections 3.3 and 3.4 above. As is the case with all customer enrolment in this trial, it will be up to the individual customer to decide whether they would want to be involved in the trial.
- 55 Where the project has identified existing solar photovoltaic or air-source heat-pump installations, British Gas will work with the housing association or local authority to identify customers to approach for inclusion in the trial. As per the process described above, the local authority or housing association energy advisor will liaise with the tenant to explain the purpose of the trial and to gain their consent to participate should they wish to do so.
- 56 British Gas will work with housing associations and local authorities to ensure that vulnerable customers are identified and an assessment is made on a case-by-case basis of the appropriateness of including such customers in the trial.

3.7 Customer demographics

- 57 The demographic of customers participating in the study will be developed collectively between Durham Energy Institute and British Gas. The project seeks to achieve a broad representation of different customer demographics. Ultimately, the mix of customers participating will be impacted by those adopting the new low-carbon technologies being studied.
- 58 The extent to which different customer groups actively participate in the study and change their behaviours, and what factors influence this will be researched by Durham Energy Institute and British Gas collectively. Durham Energy Institute's research will include holding discussions with customers, including visits to their premises.
- 59 All research carried out by Durham Energy Institute will be in adherence with university research ethics guidelines and ethics approval will be secured before any work takes place. A research ethics and data protection monitoring form prepared by Durham Energy Institute included as Appendix 3 to this document. This describes how ethical issues will be managed by Durham Energy Institute and is used to ensure that the research undertaken by Durham Energy Institute as part of the project meets acceptable ethical standards.

4. Customer propositions

- 60 For the trials, customer propositions largely comprise tariffs and monitoring/control equipment that are suited to the different low-carbon technologies being used by customers.
- 61 For domestic and SME customers, there are two main groupings:
- Where there are low-carbon technologies installed (heat pumps, solar PV or electric vehicles) the proposition is a package of a low-carbon technology with enhanced metering/control equipment, plus subsidised tariff.
 - Where there are no low-carbon technologies such as heat pumps, solar PV or electric vehicles, the proposition is a package of subsidised tariff and enhanced metering.
- 62 For industrial & commercial customers the proposition will comprise additional meter/control equipment, plus subsidised tariff. The proposition is likely to be provided to the customer by a market aggregator.

5. Ongoing communications with customers

- 63 We understand that maintaining engagement with customers over lengthy trials is key to ensuring the delivery of results and to demonstrating the core tenet of our project – that successful engagement of customers will be critical to deployment of technologies required for the success of the UK’s Low Carbon Transition Plan.
- 64 During the course of their involvement participating customer groups are to be surveyed by British Gas to understand more about their energy usage and to determine current and emerging trends in energy use. Some in-depth survey analysis of consenting customers will be carried out by Durham Energy Institute.
- 65 In addition, participating customers will be kept up to date via the project website and associated social media (e.g. Twitter, Blogs, forums, Q&A section etc.). The website will be used as a means of updating customers on project developments and encouraging their feedback, as well as a means of engaging with the wider stakeholder group. It could provide a useful feed into the research.
- 66 Key messages and content for ongoing communications will include:
- progress against objectives;
 - technology and local community highlights;
 - progress of Smart Metering and the UK’s Low Carbon Transition plan;
 - feedback of results; and
 - customer support services, such as home moves.
- 67 We recognise that these ongoing communications are essential in our attempt to ensure that customers remain interested and engaged in the trial for the required duration. In addition, we propose to make payments to customers of a joining fee and a completion fee to add an additional incentive for customers to sign up and to continue to participate for the required trial duration. These fees will also provide compensation for allowing installations (e.g. electricity usage monitors) into customers’ premises. These fees will be by means of shopping vouchers. . Details of these payments and the required trial durations will be explained in prospective trial literature provided to customers who express an interest in taking part.

6. Priority Services Register (PSR) customers

6.1 Involvement of PSR customers

- 68 The previous version of this document outlined an approach to PSR customers which was based primarily on not actively approaching them but accepting them on to the trial if they contacted British Gas through general recruitment activities. In such circumstances PSR customers will have the implications of the trial explained to them in full prior to acceptance and would only be in “monitoring” test cells (i.e. none of the “intervention” cells). Visits to premises would also be kept to a minimum with passwords used to ensure safe & secure access.
- 69 In order to generate the learning necessary from the trials and following stakeholder engagement activity to test appetite, it is now planned to change this previous policy for heat pump customers. For all other customers, the policy in paragraph 68 will still be followed i.e. not actively seeking PSR customers, but incorporate the specified controls where PSR customers wish to participate.
- 70 Heat pumps are often found in registered social landlord (RSL) situations. This is because RSLs take advantage of a range of funding opportunities and are also inclined to take more strategic views on building refurbishment, payback periods and low-carbon heating provision. In order to obtain data from heat pump installations, the project is accessing a significant proportion of trial participants through this route. In such situations the proportion of PSR and fuel poor customers is relatively high.
- 71 It is recognised that PSR customers and fuel poor customers are not the same; the former relating to customers with a particular vulnerability to power cuts and not necessarily in fuel poverty, but there is a significant degree of overlap. It makes sense therefore to ensure that the project adopts a sensitive approach to all PSR customers as well as to customers who have been identified as fuel poor in some other way e.g. identified by the RSL.
- 72 We propose to recruit PSR and fuel poor customers on to heat pump test cells via the RSL channels. In most cases, RSLs will approach BG to include such customers as they are keen to see them benefit from a new heat pump (DECC R&D funding has been secured to support discounted installations) as they perceive them to offer a potential benefit to tenants (improved thermal comfort and lower heating bills). It is possible that, as a result of BG marketing activity, some PSR/fuel poor customers may contact BG about a new HP purchase. However, this is considered unlikely as the cost of a new HP is likely to be prohibitive. The approach to fuel poor customers outlined below has been developed in close consultation with RSLs from within the region who have experience of using heat pumps with fuel poor customers in their properties (all of whom are actively seeking to deploy heat pumps with fuel poor customers):
- Northern Powergrid will pre-screen the tenants of all properties put forward by an RSL for potential new or existing heat pumps against its PSR.
 - The BG team will use this information, together with the RSL’s own vulnerability risk criteria (e.g. known income factors, welfare payments, health issues, criminal/anti-social behaviour records etc.);
 - A high-level risk assessment will be conducted with the RSL as to the overall suitability of identified tenants for a heat pump:

- a. Using the above information, an initial pre-screen of tenant suitability (from a vulnerability perspective) will be carried out at a desktop-level (alongside ongoing technical screening) in conjunction with the RSL. Tenants identified as unsuitable at this stage will not be taken any further forward;
 - b. Properties which have both been identified as technically suitable and also having occupants who are also considered suitable for project participation will be taken to the next stage of risk/technical assessment: a specific survey involving property entry. Post this survey, assessors will make an assessment of technical suitability and will also provide a final assessment of their perception of tenant suitability for participation (and any test-cell specific considerations). This stage will be a useful subjective check and balance against the first stage and will seek to identify whether or not there would be any concerns over whether the tenant might struggle to operate the HP controls correctly for example or might abuse the equipment etc.
- All tenants and properties will be assessed to establish whether or not they are suitable for participation in one of the 'intervention' test cells (12, 13 or 14²);
 - Only in cases where the RSL is comfortable with the specific tenants identified being placed on the above test cells will this proceed;
 - Tenants who receive a heat pump will be given a detailed, face-to-face briefing after heat pump installation of the details of the test cell they are on;
 - BG will monitor heat pump performance in detail for the first month after installation and/or the first month inside the heating season to assess whether or not it is actually being used sufficiently to provide heating
 - a. In the case of identified low usage, the issue will be flagged up to the technical team in the first instance for investigation on the assumption that there has been either a fault with the HP or the monitoring equipment;
 - b. If, once an on-site investigation has been conducted, no fault has been detected, the issue of low-consumption will be flagged up to the relevant RSL who may wish to take remedial action/work with the tenant to understand their concerns/why they are not using the HP fully.
 - c. If appropriate to do so, during the technical assessment stage, further advice may be given on HP operation for optimum performance, comfort and cost efficiency to the tenant.
- 73 PSR and fuel poor customers participating in the heat pump trials will receive the same heat pump operations and project communications materials as other customers on the same trials. Although, these will not be specifically tailored to their needs, they will cover details of how to maximise performance from heat pumps and therefore financial savings
- 74 The above provides a detailed illustration of the general point made in paragraph 51.

6.2 Joining Northern Powergrid's Priority Services Register

- 75 If a loss of electricity impacts customers for medical or mobility reasons, or a family member has needs someone would like to raise, customers may be added to the Priority Services Register by calling 0800 169 7602 or by going online at www.northernpowergrid.com/page/powercuts/priority.cfm.

² Note that the 'risk' for these test cells is generally considered to be low as the design and operation of the thermal store HP should mean that customers do not notice any effects of the planned interventions for these test cells. Therefore, these are not truly service interruptions/power cut-outs in reality.

7. Work affecting customers' power supplies

7.1 Notification

- 76 For work on the meter or the customer's own electrical system, customers will be notified well in advance of when installation engineers would like to come and install equipment, and will have plenty of time to highlight if it is not convenient, and to suggest when would be better for them. Where work at customers' premises relates to the installation of solar photovoltaic (PV) panels, heat pumps or electric-vehicle charging points, this installation may involve switching off the customer's electricity supply whilst installation takes place. The details of this and indicative duration for any such interruption will be clearly defined in the information provided by British Gas to those customers as part of the sales process.
- 77 With regards to any proposed interruption to the supply of a customer whilst carrying out installations of a smart meter, the Smart Energy expert will advise the customer that the electricity supply will be turned off whilst the installation takes place. On average this takes no longer than 30 minutes.
- 78 It is not envisaged that the project will necessitate significant numbers of interruptions to supply associated with work on the distribution system feeding the customers' premises. If there is a need to interrupt the supply of electricity to customers, Northern Powergrid will follow its standard processes for prearranged interruptions in accordance with electricity guaranteed standard 4 – notice of supply interruption.
- 79 In such cases, with regard to customers whose premises are directly connected to its network, Northern Powergrid will aim to give each of them who will be affected by a deliberate interruption of supply on its network at least two days' notice, in writing, of its intention to interrupt the supply. This notice will state the day of the deliberate interruption. If any vulnerable customers (on Northern Powergrid's Priority Services Register) are to be affected by the interruption to power supplies, they will be individually contacted to ensure that they are not adversely impacted.
- 80 If customers on an inset network are to be affected by any deliberate interruption of supply on Northern Powergrid's network, Northern Powergrid will aim to give the distributor concerned at least five days' notice, in writing, of its intention to interrupt the supply.
- 81 Northern Powergrid's standard processes for prearranged interruptions include the provision of statutory payments to customers should these minimum standards not be met.
- 82 Further, to the above standard processes, where customers' power supplies are interrupted by Northern Powergrid to carry out work on the network associated with the CLNR project then the following additional communication will take place:
- The letter advising customers of the interruption will include general detail on the project;
 - Consideration will be given to informing community representatives (e.g. MPs, councillors); and

- Northern Powergrid contact centre operators to be provided with general information on the CLNR project as well as location-specific information when interruptions are to take place.

7.2 Safety

- 83 We will ensure that installations of all equipment comply with British Gas's Smart Meter Customer Charter and all relevant licence conditions, regulations and codes of practice.
- 84 For peace of mind, all people working on the project will show identification to prove that they are who they say they are. British Gas engineers will show customers their identification when they arrive. They will also make sure the customer's premises is left in a similar state 'as found' as far as is reasonably possible. The project's standard for taking care of customer's premises is based upon the smart meter code of practice and the CLNR terms and conditions document will inform the customer as to how to complain if dissatisfied with the level of care taken.
- 85 Full health and safety checks and assessments will be undertaken prior to any installation work. British Gas's Smart Energy Experts will carry out a risk assessment before starting work at any customer's property. Electrical safety checks will, for example, verify that the polarity on the intake at the meter is correct. British Gas will also carry out safety checks on the cut out fuses and on the general condition of the metering equipment.
- 86 Post installation, a Health & Safety, Operation and Maintenance manual will be left with the customer. This will detail hazards, emergency shutdown via isolation switch and will contain test certificates and warranties.

8. Facilities to handle enquiries and complaints

8.1 Website

- 87 More detailed information on the project is available on the project website www.networkrevolution.co.uk. The website already has a facility to ask questions or for comments to be logged with the project team. We will add to the website a facility designed specifically to allow people to register an interest in participating in the project, and data collected in this way will be handled by British Gas.

8.2 Telephone and email

- 88 Details of dedicated contact telephone numbers and email addresses and specific details of procedures to deal with customer queries and complaints will be included in the welcome pack and trial documentation received by trial participants when they opt to participate in the project.
- 89 Each trial participant will be assigned a unique identification code, which will be used to flag to British Gas customer service agents that they are participating in the trial. This will enable British Gas customer service agents to ensure that the trial participants receive the specialist level of support they require by directing queries or complaints to the relevant areas dependent on the nature of the enquiry.
- 90 The customer service agents will receive all inbound calls for British Gas customers. For the Customer-Led Network Revolution trial British Gas will keep the inbound contact process as normalised as possible. This will make the management of information and reporting more consistent, as well as adhering to British Gas regulated processes, such as the Ofgem complaints procedure.

- 91 Customers specific to the Customer-Led Network Revolution (including non-BG customers) will have calls routed through to the British Gas contact centre based in Leeds. A decision tree will be used to aid the customer service agents on whether the customer needs to be routed to another area. The operatives dealing with this inbound line will be largely the same as those who have recruited for CLNR so will be well versed in it and will have access to the various other technical support lines as required to pass through issues (e.g. monitoring equipment failure, smart meter enquiries etc.).
- 92 Customer complaints will follow the procedures already in place. If an enquiry is of a technical nature related to the smart meter system it remains with the case handler but resolution of the enquiry remains with the technical team.
- 93 If the enquiry is related to low-carbon technology (heat-pump or solar PV) it will be routed to the British Gas New Energy contact centre, also based in Leeds.
- 94 The appropriate contact information will be contained within the Customer-Led Network Revolution education pack, in the form of an email address and telephone contact numbers.
- 95 We recognise that trial participants may call Northern Powergrid instead. Northern Powergrid call centre staff will be briefed on the project and the appropriate way to handle the call which will, except in an emergency or loss of supply situation, be to redirect the customer to the dedicated numbers and email addresses described above.

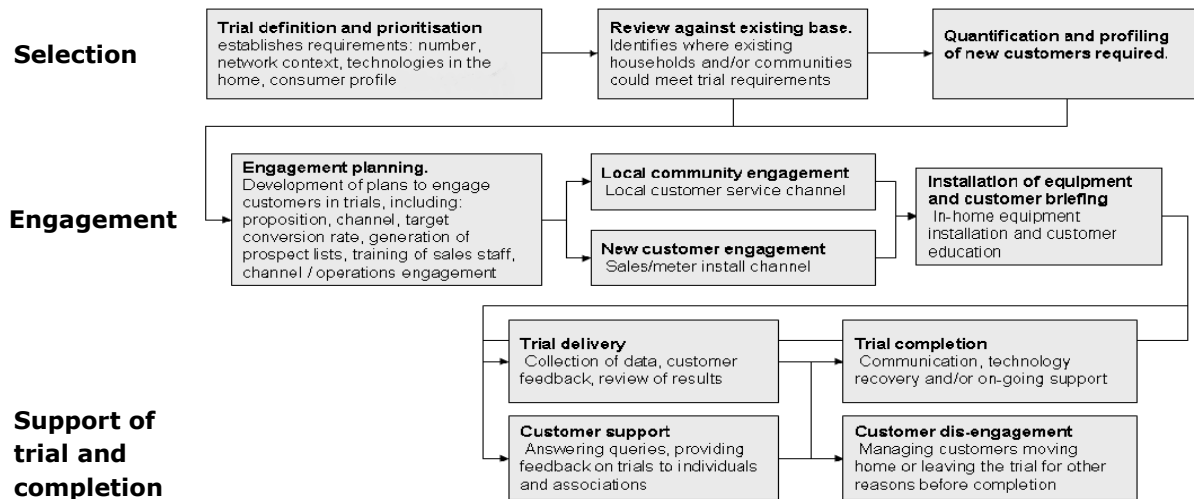
8.3 Specialist enquiries assistance

- 96 The Customer-Led Network Revolution Project team will handle specialist enquiries, whether these come via the website enquiry form or by referral from British Gas customer service agents. The project team will aim to acknowledge such queries by the end of the next working day, with more detailed response in five working days.

9. Concluding the trial

- 97 We understand that customers who are engaged in trials will leave before the completion of our test programmes for a number of reasons – moving home, changing supplier, changes of circumstance. Customers wishing to leave the trials early will go through a similar process as those leaving at the end of the trial, although it is anticipated that specific steps will be taken depending on their reason for leaving (for example, customers might not receive the full tariff subsidy if they decide to leave the trial in the very early stages).
- 98 Whether a customer leaves individually or because we complete our trial, we will establish processes and terms for their transition to standard tariff agreements and for ongoing support or return of equipment deployed. Where customers have purchased equipment as part of the trial these terms will be included as part of their initial engagement contract.
- 99 Towards the end of the trials, customers will be contacted and the trial conclusion process will be explained in full (return to 'normal' tariff, removal of monitoring equipment etc).

Appendix 1 – The customer engagement process



Appendix 2 - British Gas smart meter customer charter



SMART METER CUSTOMER CHARTER

The smart meter revolution is set to be the biggest shake-up in the energy market since the introduction of North Sea Gas in the 1970's. As Britain's leading energy company we intend to be at the forefront of that revolution – ensuring that our customers understand what a positive impact this new technology will have, how it will make their lives easier, save them money and help the environment. That's why we have put together this domestic charter. If we don't live up to it let us know.

Everything we do will be focused on making things trouble-free for you.

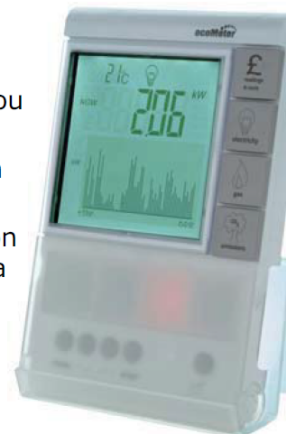
- You'll know well in advance when we'd like to come and fit your meters, so you have plenty of time to tell us if it is not convenient – and when would be best for you.
- For your peace of mind, our engineers will show you their identification when they arrive. They'll also make sure your home is left just as they found it, they'll protect any surfaces, carpets etc and will clear away any mess.
- To make life as easy as possible for you – now and in the future – your In Home Display will be portable, so you can choose to position it wherever is best for you.
- We won't leave you to work it out for yourself and you won't be dazzled by jargon. We'll make sure that everything is clear and easy to understand. We'll show you how to use your smart meters and In Home Display and leave an easy to follow user guide. And everything will be checked to make sure it is working properly before we leave – as you'd expect.
- Should you have any problems you can call our smart meter team. They'll help resolve any issues and if they can't fix things remotely over the phone they'll come to your home.
- If you move into a home where the previous resident had our smart meters and left the In Home Display behind, we'll give you all the information you need to get the best from them and help you choose the best tariff and payment methods to suit your needs.
- Nothing will need to change in terms of when and how you pay for your energy.

Our smart meter technology will give you more choice & control.

- When your smart meters are in place you'll be free to stay on your existing tariff – or choose a new one that suits your needs better.
- You'll be able to switch between credit and Pay As You Go Energy™ tariffs quickly and easily.
- Having a smart meter will not affect your right to change supplier, as our meters will use publicly available technology.
- And if you don't want to have smart meters installed yet just tell us. But remember, that it is likely that you will need to have them fitted by 2020.

We'll give you the tools and advice to help you save energy and money.

- You'll get a free In Home Display – so you can easily see the energy you are using and where you can make savings.
- When they come to fit your smart meters our engineers can give you on the spot energy efficiency advice – just ask, they'll be happy to help.
- And you can visit britishgas.co.uk/ee, where you'll find an entire section devoted to helping you save energy and money – with hints and tips, a free personalised Energy Savers Report, our Energy Savers Store and more. Or you can call our dedicated energy efficiency hotline.



Pay As You Go Energy™ customers will be able to benefit from smart technology too.

- If you switch to Pay As You Go Energy™ we'll let you know how this works with smart meters and show you the easiest ways to buy your energy.
- If you run out of credit in the evening or on a Bank Holiday your supply won't be interrupted – because we understand it might be difficult to top up at those times.
- If your meter is switched to pay as you go we'll do it during normal working hours – to give you time to top up. And we'll ensure that an initial emergency credit is provided too – just in case.
- If we need to move you on to a Pay As You Go Energy™ tariff we will attempt to contact you. If there are any signs of vulnerability we will do what we can to visit you to see how we can help
- New customers with meters in pay as you go mode and no credit can simply call our 24 hour telephone emergency service and we'll restore the energy supply over the phone.
- We will not remotely disconnect any occupied properties unless there are concerns about your safety.

Your data will be protected.

- Your personal and energy use data will be in safe hands. It will only be used fairly, we will comply with all data protection laws and will protect your information from misuse.
- If you want more details about your energy consumption just let us know, we'll offer you flexible options in how we provide it to you.
- You'll be free to use any data about your energy use – without any restrictions from us.
- Any previous owner's debt will be removed from the meter and the meters reset as soon as we are told that there is a new occupier.
- If you leave British Gas we'll make sure we don't have access to any of your future data and will not retain a connection with your meters.

We take the needs of our vulnerable customers very seriously.

- If, when we come to fit your smart meters, we think you could benefit from any of our programmes for vulnerable customers we'll let you know.
- And if you are vulnerable we will do all we can to make sure your payment methods, metering and display equipment are right for you. We'll also ensure that you fully understand how your smart meters can help save you money.

Appendix 3 - Durham Energy Institute research ethics and data protection monitoring form

Research Ethics and Data Protection Monitoring Form

Research involving humans and environmental impacts by all academic and related staff and students in the department is subject to University requirements for ethics and data protection review. The Department's Research Ethics and Data Protection Peer Review Group will assess research against the guidelines given by the British Sociological Society Association and the Natural Environment Research Council.

It is a requirement that prior to the commencement of all research that this form be completed and submitted to the Department's Research Ethics and Data Protection Peer Review Group. The Peer Review Group will be responsible for issuing certification that the research meets acceptable ethical standards and will, if necessary, require changes to the research methodology or reporting strategy.

A copy of the research proposal detailing methods and reporting strategies is attached ☐

Name of principal investigator or main applicant: PI Phil Taylor (Engineering); CIs Sandra Bell (Anthropology) **Harriet Bulkeley** (Geography), and Janusz Bialek (Engineering)

Title of research project: **Customer Led Network Revolution**

Main subject area: Human Physical **Interdisciplinary**

Questionnaire

		YES	NO	
1.	Does your research involve living human subjects?	X		
2.	Does your research involve only the analysis of large, secondary and anonymised datasheets?			
3a.	Will you give your informants a written summary of your research and its uses?	X		If NO, please provide further details and go to 3b
3b.	Will you give your informants a verbal summary of your research and its uses?	X		If NO, please provide further details
4.	Does your research involve contemporary covert surveillance (for example, participant observation)?		N	If YES, please provide further details
5a.	Will your information <i>automatically</i> be anonymised in your research?	Y		If NO, please provide further details and go to 5b
5b.	IF NO Will you explicitly give <i>all</i> your informants the right to remain anonymous?			If NO, why not?
6.	Will monitoring devices be used openly and only with the permission of informants?	Y		If NO, why not?
7.	Will your informants be provided with a summary of your research findings?	Y		If NO, why not?
8.	Will your research be available to informants and the general public without authorities restrictions placed by sponsoring authorities?	Y		If NO, please provide further details
9.	Have you considered the implications of your research intervention on your informants?	Y		Please provide full details
10.	Are there any other ethical issues arising from your research?		N	If YES, please provide further details

Further details (please include any potential risks to the environment from your research and the steps taken to address the consequent ethical issues):

As part of a consortium of commercial and research organisations under the umbrella of the Customer Led Network Revolution project, DEI will be undertaking various different research tasks. Researchers in the Department of Geography will be involved in three main research activities: reviewing evidence and policy concerning the factors that shape energy use; developing and analysing a survey for use with a large sample of households and businesses concerning the factors that shape their energy use; and conducting in-depth research with households and small businesses concerning their energy use and its relation to their everyday practices. The broad outline of the project as it has been agreed so far by the partners is provided in the attached working document, though the precise nature of these tasks and their timing may be subject to change.

Ethical issues arise primarily from the survey and in-depth household/small business research components of this project. The survey will be conducted by British Gas and will be subject to their policies and procedures on data protection, including automatic anonymity, communication of the purpose and findings of research, and compliance with the Data Protection Act. Details of the procedures which will be put in place are attached.


In terms of the in-depth research, which will take place with a small sample of households and businesses, participants will also be subject to the same standards of anonymity and data protection as those involved with the survey. In addition, feedback on this element of the research project will be supplied to this group of participants.

There are several potential implications for those involved in the research project. First, as participants may be asked to subscribe to different financial arrangements for paying for their energy some participants might have the potential to be exposed to financial hardship as a result of the project. DEI understand that this risk will be averted by the corporate partners involved in the project guaranteeing that no financial losses will be encountered by participants in the trial. Second, offering participants greater clarity in terms of the nature of their energy use in the home could lead to adverse impacts in terms of conflicts over the cost and use of energy within households/businesses. The research team will work with participants to provide them with information about how the costs of energy use can be reduced and provide insights into what sorts of conflicts can arise and how they can be managed in generic terms. Finally, working in the home and in small businesses around energy use will bring the research team into contact with many very personal aspects of daily life – washing, food, hygiene and so on – and the researchers involved will receive guidance on how to conduct research in these contexts. Should the research team become aware of circumstances that are a cause for concern they will raise this matter discreetly with the households and relevant authorities as appropriate.

Continuation sheet YES/NO (delete as applicable)

Declaration

I have read the Departmental Guidance on Research Ethics and Data Protection and believe that, where appropriate, the research proposal complies fully with the requirements of the documents listed (Appendices B-F) and The Durham University Principles for Data Protection (http://www.dur.ac.uk/data.protection/dp_principles/). I will not deviate from the methodology or reporting strategy without further permission from the Department's Research Ethics and Data Protection Peer Review Group.

Signed.......... Date 9th March 2011

Submissions without a copy of the research proposal will not be considered.

Appendix 4 – Timeline for release of customer engagement materials

Customer Engagement Plan					
Test Cell	Detail	Customer Group	Customer numbers	Information that will be provided to customers	Target date
1	Basic profiling of regular smart meter customers	regular domestic	9,000	<ul style="list-style-type: none"> • Smart Data Opt-Out letter • Customer Enrolment Direct Mail of Test Cell 1 • Response and opt-out receipt 	• End December 2011
		regular small commercial	2,250	<ul style="list-style-type: none"> • Smart Data Opt-Out letter • Customer Enrolment Direct Mail of Test Cell 1 • Response and opt-out receipt 	• End December 2011
2	Enhanced profiling of regular smart meter customers	regular domestic	600	<ul style="list-style-type: none"> • CLNR Awareness Pack • CLNR Leave Behind (1 pager) • Expression of Interest Webform • Customer Focused Web FAQs/Guide • Customer Enrolment 	• End of April 2012
		regular small commercial	150	• As above	• Beginning Feb 2012
3	Enhanced profiling HP on flat-rate tariff:	domestic, HP	600	<ul style="list-style-type: none"> • ASHP operation manual • CLNR Awareness Pack • Test-Cell-Specific Ts & Cs • CLNR Leave Behind (1 pager) 	• End April 2012
4	enhanced profiling μ CHP on flat-rate tariff	domestic, μ CHP	20	<ul style="list-style-type: none"> • MicroCHP Web FAQs/Guide - CLNR Site • MicroCHP information • Customer Enrolment 	• End April 2012

Customer Engagement Plan					
Test Cell	Detail	Customer Group	Customer numbers	Information that will be provided to customers	Target date
5	Enhanced profiling PV	domestic, PV	150	<ul style="list-style-type: none"> • PV Web FAQs/Guide - CLNR Site • Customer Enrolment 	<ul style="list-style-type: none"> • Feb 2012
6	Enhanced profiling EV on flat-rate tariff	domestic, EV	150	<ul style="list-style-type: none"> • EV Web FAQs/Guide - CLNR Site • CLNR Dealer Pack • Existing EV Customer Contact Letter • Customer Enrolment 	<ul style="list-style-type: none"> • April 2012
9	Pure ToU tariff, general load	regular domestic	600	<ul style="list-style-type: none"> • Time of Use (ToU) Education Pack • Time of Use (ToU) Web information • Customer Enrolment • Customer First Bill (Q1, 2012) 	<ul style="list-style-type: none"> • End of Feb 2012
		regular small commercial	150	<ul style="list-style-type: none"> • As above 	<ul style="list-style-type: none"> • As above
10	Restricted hours tariff, general load	regular domestic	600	<ul style="list-style-type: none"> • Restricted hours Education Pack • Restricted hours Web information • Customer Enrolment • Customer First Bill (Q1, 2012) 	<ul style="list-style-type: none"> • TBC pending technical solution and further investigations
		regular small commercial	150	<ul style="list-style-type: none"> • As above 	<ul style="list-style-type: none"> • As above
11	Direct control, general load	regular domestic	600	<ul style="list-style-type: none"> • Direct Control (DC) Education Pack • Direct Control Web information • Customer Enrolment 	<ul style="list-style-type: none"> • TBC pending technical solution and further investigations
		regular small commercial	150	<ul style="list-style-type: none"> • As above 	<ul style="list-style-type: none"> • As above

Customer Engagement Plan					
Test Cell	Detail	Customer Group	Customer numbers	Information that will be provided to customers	Target date
12	Pure ToU tariff, heat pumps	domestic, HP	600	<ul style="list-style-type: none"> ● ASHP operation manual ● CLNR Awareness Pack ● Test-Cell-Specific Ts & Cs ● ASHP TOU Education material ● CLNR Leave Behind (1 pager) 	● End April 2012
13	Restricted hours tariff, heat pumps	domestic, HP	150	<ul style="list-style-type: none"> ● ASHP operation manual ● CLNR Awareness Pack ● Test-Cell-Specific Ts & Cs ● ASHP RH Education material ● CLNR Leave Behind (1 pager) 	● End April 2012
14	Direct control, heat pumps	domestic, HP	150	<ul style="list-style-type: none"> ● ASHP operation manual ● CLNR Awareness Pack ● Test-Cell-Specific Ts & Cs ● ASHP DC Education material ● CLNR Leave Behind (1 pager) 	● End April 2012
15	Pure ToU tariff, domestic EV	domestic, EV	50	N/A – test cell cancelled	
16	Restricted hours tariff, domestic EV	domestic, EV	50	<ul style="list-style-type: none"> ● CLNR Awareness Pack ● Test-Cell-Specific Ts & Cs ● EV RH Education material ● CLNR Leave Behind (1 pager) ● Smart Chargepoint operation manual 	● May 2012

Customer Engagement Plan					
Test Cell	Detail	Customer Group	Customer numbers	Information that will be provided to customers	Target date
17	Direct control domestic EV	domestic, EV	50	N/A – test cell cancelled	
20	Within-premises balancing	domestic, PV	600	<ul style="list-style-type: none"> • PV Web FAQs/Guide - CLNR Site • Customer Selection - PV Owners • Customer Enrolment 	<ul style="list-style-type: none"> • Feb 2012
any			<100	Publicity consent letter	October 2013

Appendix 5 – Modifications concerning non-BG customers

Non-BG customers may be recruited to the following trials:

- Enhanced profiling for general residential customers, for heat pump customers, for PV customers and for EV customers
- Direct control propositions involving either hot water load, wet white goods, heat pumps load or EV load
- Within premises balancing propositions involving PV

All written material and call centre advice will be branded with the project brand, and so will be substantially the same for non-BG customers as for BG customers. The exceptions to this are:

- Some invitation letters may be modified slightly
- Test cell terms & conditions will have different variations to cover non-BG customers' data protection needs

Whilst interaction with such customers will be the responsibility of British Gas on behalf of the project, no attempt will be made to recruit these customers to British Gas, nor will different tariff offerings be made to them.

	test cell no	customer type	proposition	Metering	non-BG customer participants?
LO1	1a	Residential - basic profile	flat rate	regular smart meter	
LO1	1b	Business - basic profile	flat rate	regular smart meter	
LO1	2a	Residential - enhanced profile	flat rate	enhanced	yes
LO1	2b	Business - enhanced profile	flat rate	enhanced	
LO1	3	Heat pump - enhanced profile	flat rate	enhanced	yes
LO1	4	Micro-CHP - enhanced profile	flat rate	enhanced	
LO1	5	Photo Voltaic - enhanced profile	flat rate	enhanced	possible
LO1	6	Electric vehicles - enhanced profile	flat rate	enhanced	yes
LO2	9a	Residential - time of use	TOU	enhanced	
LO2	9b	Business - time of use	TOU	enhanced	
LO2	10a (HW)	Residential - hot water (restricted hours)	restricted hours	enhanced	
LO2	10a (WWG)	Residential - wet white goods (restricted hours)	restricted hours	enhanced	
LO2	10b	Business - restricted hours	restricted hours	enhanced	
LO2	11a (HW)	Residential - hot water (direct control)	direct control	enhanced	possible
LO2	11a (WWG)	Residential - wet white goods (direct control)	direct control	enhanced	possible

	test cell no	customer type	proposition	Metering	non-BG customer participants?
LO2	11b	Business - direct control	direct control	enhanced	
LO2	12	Heat pump - time of use	TOU	enhanced	
LO2	13	Heat pump - restricted hours	restricted hours	enhanced	
LO2	14	Heat pump - direct control	direct control	enhanced	yes
LO2	16	Electric vehicles - restricted hours	restricted hours	enhanced	
LO2	20 (Auto)	PV - automatic within premises balancing	balancing tariff	enhanced	possible
LO2	20 (IHD)	PV - IHD within premises balancing	balancing tariff	enhanced	possible

Although non-BG customers will not be recruited to time of use or restricted hours trials, where they are as part of a cluster containing both BG and non-BG customers, all customers within the clusters will be made aware that the BG customers may be offered a choice of tariffs.



Customer Engagement Plan

Appendix 6 – Electric Vehicle Trials

Version 1

20 September 2012



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1. Introduction

- 1 The Customer-Led Network Revolution is a collaborative project undertaken by Northern Powergrid, British Gas, Durham Energy Institute (Durham University) and EA Technology. Over a three-year period, Northern Powergrid and its partners will be trialling smart-grid solutions on the electricity distribution network as well as creating smart-enabled homes to give customers more flexibility over the way they use and generate electricity.
- 2 Charge your Car (CYC) is the Northeast's Plugged in Places project, which has been operating in the Northeast since 2010. Funded by the Office for Low Emission Vehicles, the Government initiative aims to install 1,000 electric vehicle charging points by 2013 in a range of locations including in public, on street, in workplaces and in the home.
- 3 The partnership of both projects is advantageous to all. CLNR can maximise the involvement of existing and potential EV drivers for the benefit of the project. Charge your Car is already engaging with electric vehicle drivers in the region to install EV charging points in the driver's home and the combination of the two projects gives a greater incentive for the home owner to be involved.
- 4 As part of the Charge your Car roll-out of electric vehicle charging points, the project will engage with up to 150 customers in the Northeast to encourage the take-up of both charging points and an additional smart meter in their homes. These smart meters will be able to collect data from the entire house and the data will be monitored remotely. These meters are for data collection only and cannot be used as a billing meter.
- 5 Durham Energy Institute will be providing academic rigour to the project through its multi-disciplinary Durham Energy Institute. The results will help the industry make sure the electricity networks can handle the mass introduction of electric cars. All the results from the project will be published and therefore made freely available for use by others in the industry.
- 6 All personal data used in the project will be managed in order to comply with the Data Protection Act.

2. Customer participation

2.1 Customer groups

- 7 The vast majority of customers involved in this project will be 'Early Adopters'. The cost of purchasing an electric vehicle is still very high and therefore we have seen the main customer base coming from affluent individuals and businesses as part of their company car, pool or fleet.
- 8 The vast majority of customers actively involved in the project will be sourced from the Charge your Car database and through the dealerships who are the main point of contact with the customer.
- 9 There is also the opportunity to engage with Nissan who will be manufacturing the Nissan LEAF in Sunderland from February 2013 to promote the scheme to their customers.

- 10 We will not actively recruit Priority Services Register (PSR) customers nor do we anticipate, because of the demographics of electric-vehicle user customers, that we will receive applications from PSR customers.

2.2 General scope and approach

- 11 Customer engagement includes all aspects of customers' involvement with the programme:
- Establishing which customers need to be engaged;
 - Planning customer selection and approach;
 - Developing and implementing initial engagement plans;
 - Bringing customers into the programme;
 - Keeping customers engaged in the programme;
 - Managing customer issues and questions; and
 - Managing customers who are leaving the programme.
- 12 Generic material will be developed, using key messages and consistent branding to ensure continued customer awareness of the trial.
- 13 A flow chart detailing the customer engagement process for this project is attached as Appendix 1 to this document.

2.3 Customer consent

- 14 Charge your Car will be the point of contact for the project until 31 December 2013 and the first port of call with the customer. Customers can contact Charge your Car in person, by telephone or in writing by email or post. Customers will be contacted in order to arrange appointments at mutually convenient times.
- 15 Initial communication with the customers will be via a leaflet to market the proposition. This will be available to the customer in either hard copy or electronic format. This will provide the means for customers to express an interest in the proposition by contacting Charge your Car using an email link provided in the leaflet.
- 16 The customer will then be sent a welcome email from Charge your Car, which will provide them with a link to a pre-survey questionnaire. The purpose of the questionnaire is to collect the customer's contact details and to collect some information on the customer's premises to feed into the installation process. The premises information will be used to ascertain whether the customer's specific arrangements are suited to the installation of the charge point and monitoring equipment. If a customer's specific installation fails to meet pre-determined criteria for installation then they will be notified by Charge your Car via email at that point that they cannot proceed with the installation.
- 17 For customers suited to the installation, the customer will be provided with a hard copy of the Funding Agreement (attached as Appendix 3), which they will be asked to sign and return to Charge your Car. Once the Funding

Agreement has been signed and returned to Charge your Car, installation of the equipment can proceed.

- 18 In our interactions with customers we are mindful of the concerns and sensitivity voiced by many people as part of the smart meter rollouts being undertaken in the UK and internationally. We understand that to deliver a successful project we will need to build and maintain the trust of customers who agree to take part in our trials. The management of consents will play a key part in creating this positive relationship with trial participants.
- 19 Customers will therefore sign a Funding Agreement in which they give their consent to take part in the trial before any activity takes place. A copy of the Agreement is attached as Appendix 3 to this document. Section 2.1 of this Agreement sets out what the customer is consenting to in detail. This allows the smart meter data and any attribute data generated from customer surveys to be shared with Durham Energy Institute for their analysis as well as their contact details to facilitate Durham Energy Institute's conducting of in-depth social interviews.
- 20 The customer's consent is described in the funding agreement as:
 - Their agreement to permit Us (and the Installer acting on Our behalf) to carry out the Services (as set out in the Grant Offer) upon their property and
 - Their agreement to operate the Charging Equipment in accordance with the Agreement.
 - And their agreement to participate in the smart charging trials which will include:
 - monitoring of user initiated EV charging events and its impact on the whole house energy consumption; and
 - invitations to complete two online surveys (at the beginning and near the end of 2013) and take part in face to face interviews relating to their electric vehicle charging experiences.
- 21 The associated marketing material will also provide customers with all relevant information about the project including its background, objectives, timelines and an overview of the consortium partners involved in its delivery. The materials will give the customer and overview of what will be required of them when they agree to take part in the trial and will emphasise the fact that the electricity usage data will be gathered remotely from the charge point.

2.4 Treatment of customer data

- 22 In signing up to the Charge your Car proposition, the customer will be providing consent for data from the trials (consumption and survey) to be provided to Durham Energy Institute for analysis. In addition, customer participants' names and addresses will also be provided to Durham Energy Institute to facilitate the undertaking of in-depth social interviews with the trial participants. This is the extent to which trial participants' personal data will be shared.

- 23 Durham Energy Institute will store all name and address data separately and securely with access restrictions to ensure that only those staff involved in the project in either analysing the data and/or undertaking customer surveys have access to this data.
- 24 Charge your Car and Durham Energy Institute staff not involved in the project will not have access to trial participants' personal data.
- 25 Personal data within the Customer-Led Network Revolution project will never be used for any other purposes than the trial.

3 Engaging customers

- 26 Domestic trial participants will be primarily identified through one of the following routes:

Route	Communications channels
Through the Charge your Car member database to capture any EV drivers who have not yet installed a domestic charge point	Through the Charge your Car members e-newsletter At Charge your Car members' events
Through the dealerships to capture new EV drivers	A dedicated piece of print which will be distributed through the dealership's own point-of-sale channels
Through the forthcoming EV awareness campaign	Details of the trial project and the grant offer will be highlighted through the new microsite

3.1 Equipment and Installation

Equipment

- 27 All customers will receive a POD Point home charge point which is 230 volt / single phase AC 16 Amp with a captive cable.
- 28 All charge points available as part of this trial meet European safety & functionality standards for electrical devices. All wiring of POD Point has been designed in accordance with British Standards and has been functionality tested for safety using BS EN 61010 & BS EN 61557 approved equipment All variants of POD Point Home have been tested and CE marked to the standards necessary for sale of electrical goods in the European Union..
- 29 The charging point will be connected to an EDM I Mk7C smart meter to monitor charge-point usage.
- 30 In addition, the household will be fitted with an EDM I Mk7C smart meter in order to understand the impact of the energy consumption of the entire home and to meet the needs of the CLNR project.

Installation

- 31 Charge your Car has contracted with G4S to undertake the charge point and smart meter installation activities, following a robust public procurement exercise. All installations are undertaken by competent operators.
- 32 The customer will be contacted by the installer G4S by phone to arrange an appropriate time and date for any installation works.
- 33 The equipment will be left installed in the customer's premises for the duration of the trial. Following the trial, the home charging unit and smart meter recording EV charging data, grant funded by the Charge your Car project, will remain in the home for permanent use by the customer. This will continue collecting data for three years after installation to meet the criteria of Charge your Car's grant funding as set out by the Office for Low Emission Vehicles. The second smart meter recording whole-house consumption data, funded by CLNR, will be removed at the end of the CLNR trial.
- 34 The customer process is described in sections 3 and 4 of our Funding Agreement (attached).

4 Customer propositions

- 35 For the trials, the customer will receive a POD Point home charge point, allowing them to charge their electric vehicle in a safe and secure manner. The value of this charge point is £500.
- 36 This trial also includes the installation of the charge point which has an estimated value of £400 - £560.
- 37 Two smart meters will also be installed at the point of installation, allowing for data to be read remotely for use by Durham Energy Institute.

5 Ongoing communications with customers

- 38 We understand that maintaining engagement with customers over lengthy trials is key to ensuring the delivery of results.
- 39 Once the individual has completed and returned their funding agreement and prior to the installation process commencing, the individual will receive an information pack welcoming them to the trial and explaining all the elements of the project. This will identify appropriate helpline numbers for all elements of the project including general support, installation support (installation contractor) and surveys (Durham Energy Institute).
- 40 Following installation and at the beginning of the programme, the customer will then be contacted by Charge your Car to take part in an on-line survey which has been developed by Durham Energy Institute. The results of this survey will be held securely as per Durham Energy Institute's Data Protection Policy (in Appendix 2 to this document).
- 41 Qualitative surveys will also take place with consenting customers at the beginning and end of the project through Durham Energy Institute. This will be arranged at a time and place to suit the individual and again will be subject to Durham Energy Institute's data protection policy.

- 42 During the course of their involvement customer data will be analysed by Durham Energy Institute to help understand more about their energy usage and to determine current and emerging trends in energy use.

6 Work affecting customers' power supplies

6.1 Notification

- 43 The customer will be contacted by the installer G4S by phone to arrange an appropriate time and date for any installation works.
- 44 For work to install the charge point, customers will be notified in advance of when installation engineers would like to come and install equipment, and will have plenty of time to highlight if it is not convenient, and to suggest when would be better for them.
- 45 During the installation of the charge point, there may be a need to switch off the customer's electricity supply whilst installation takes place. The details of this and indicative duration for any such interruption will be clearly defined at the time of survey prior to installation.
- 46 With regards to any proposed interruption to the supply of a customer whilst carrying out installation or removal of a smart meter, the installer will advise the customer that the electricity supply will be turned off whilst the installation or removal takes place. On average this takes no longer than 30 minutes.
- 47 It is not envisaged that the project will necessitate interruptions to supply associated with work on the distribution system feeding the customers' premises.

6.2 Safety

- 48 The installation will be carried out according to the relevant edition of BS7671 IET wiring regulations and additional codes of practice such as the IET Code of Practice for Electric Vehicle Charging Equipment.
- 49 On arrival at the property, installation engineers will show customers their identification to prove that they are who they say they are. They will also make sure the customer's premises is left in a similar state 'as found' as far as is reasonably possible.
- 50 Post installation, a Health & Safety, Operation and Maintenance manual will be left with the customer. This will detail hazards, emergency shutdown via isolation switch and will contain test certificates and warranties.

7 Facilities to handle enquiries and complaints

- 51 Any queries received by Charge Your Car related to EV charging equipment or installation works will be handled by the Charge Your Car team. Any customers with general enquiries about the CLNR project will be redirected to the trial helpline number on 0800 980 8156. All of this information will be provided in the welcome pack we provide to each customer at the point of equipment commissioning.

7.1 Website

www.leadthecharge.org.uk

7.2 Telephone and email

Project helpline:

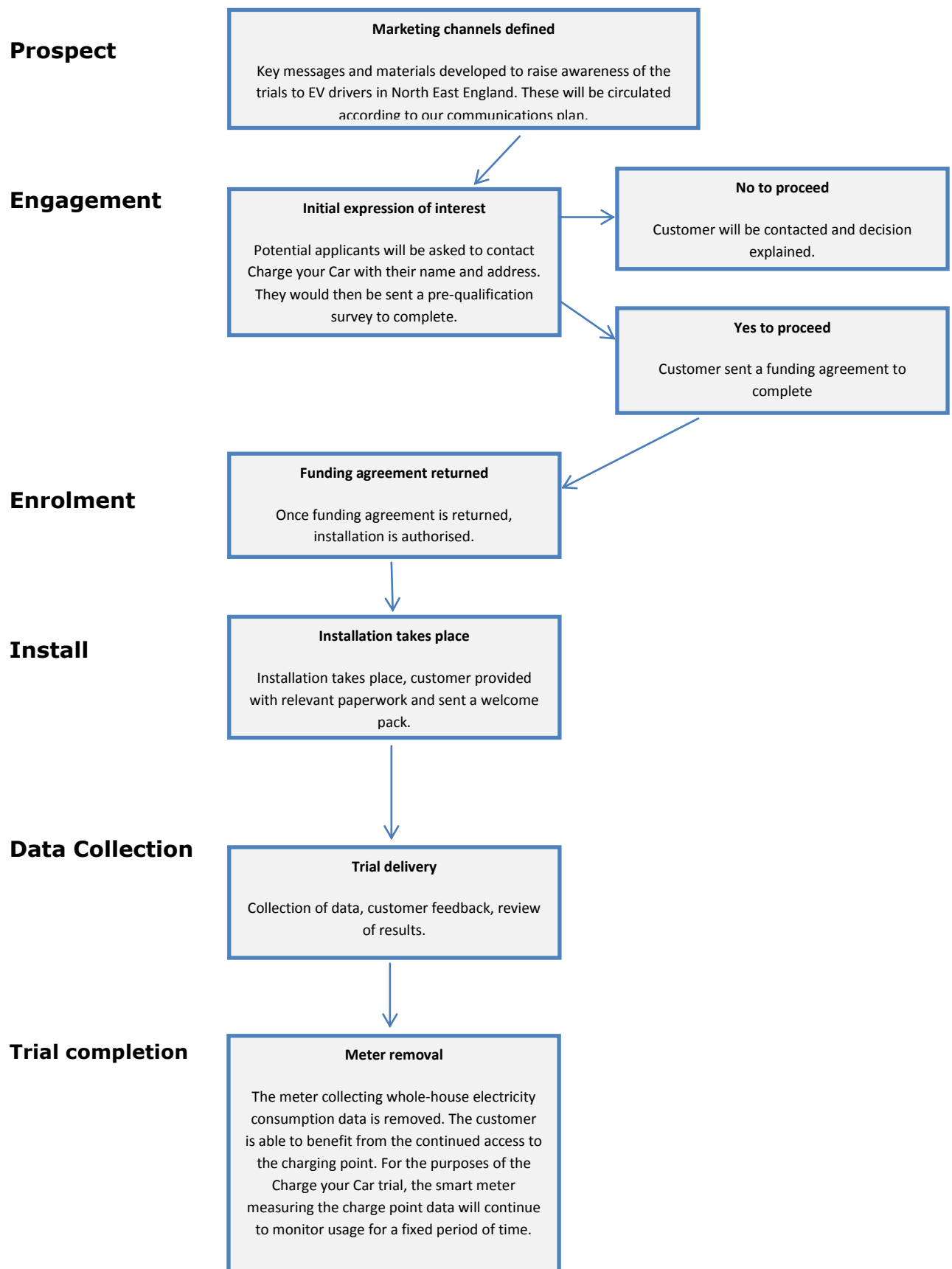
0191 490 2474

chargeyourcar@gateshead.ac.uk

8 Concluding the trial

- 52 We understand that customers who are engaged in trials may leave before the completion of our test programmes for a number of reasons – moving home, changes of circumstance. Customers wishing to leave the trials early must notify us in writing of their intention to do so and we will act accordingly based on their reasons for leaving. These conditions are set out in section 10 of our Funding Agreement with the customer.
- 53 Towards the end of the trials, customers will be contacted and the trial conclusion process will be explained in full. This will include the removal of the smart meter collecting electricity consumption data for the whole house.

Appendix 1 – The customer engagement process



Appendix 2 – Durham Energy Institute research ethics and data protection monitoring form

Research Ethics and Data Protection Monitoring Form

Research involving humans and environmental impacts by all academic and related staff and students in the department is subject to University requirements for ethics and data protection review. The Department's Research Ethics and Data Protection Peer Review Group will assess research against the guidelines given by the British Sociological Society Association and the Natural Environment Research Council.

It is a requirement that prior to the commencement of all research that this form be completed and submitted to the Department's Research Ethics and Data Protection Peer Review Group. The Peer Review Group will be responsible for issuing certification that the research meets acceptable ethical standards and will, if necessary, require changes to the research methodology or reporting strategy.

A copy of the research proposal detailing methods and reporting strategies is attached ☐

Name of principal investigator or main applicant: PI Phil Taylor (Engineering), CIs Sandra Bell (Anthropology), Harriet Bulkeley (Geography), and Janusz Bialek (Engineering)

Title of research project: **Customer-Led Network Revolution**

Main subject area: Human Physical **Interdisciplinary**

Questionnaire

		YES	NO	
1.	Does your research involve living human subjects?	X		
2.	Does your research involve only the analysis of large, secondary and anonymised datasheets?			
3a.	Will you give your informants a written summary of your research and its uses?	X		If NO, please provide further details and go to 3b
3b.	Will you give your informants a verbal summary of your research and its uses?	X		If NO, please provide further details
4.	Does your research involve contemporary covert surveillance (for example, participant observation)?		N	If YES, please provide further details
5a.	Will your information <i>automatically</i> be anonymised in your research?	Y		If NO, please provide further details and go to 5b
5b.	IF NO Will you explicitly give <i>all</i> your informants the right to remain anonymous?			If NO, why not?
6.	Will monitoring devices be used openly and only with the permission of informants?	Y		If NO, why not?
7.	Will your informants be provided with a summary of your research findings?	Y		If NO, why not?
8.	Will your research be available to informants and the general public without authorities restrictions placed	Y		If NO, please provide further details

	by sponsoring authorities?			
9.	Have you considered the implications of your research intervention on your informants?	Y		Please provide full details
10.	Are there any other ethical issues arising from your research?		N	If YES, please provide further details

Further details (please include any potential risks to the environment from your research and the steps taken to address the consequent ethical issues):

As part of a consortium of commercial and research organisations under the umbrella of the Customer Led Network Revolution project, DEI will be undertaking various different research tasks. Researchers in the Department of Geography will be involved in three main research activities: reviewing evidence and policy concerning the factors that shape energy use; developing and analysing a survey for use with a large sample of households and businesses concerning the factors that shape their energy use; and conducting in-depth research with households and small businesses concerning their energy use and its relation to their everyday practices. The broad outline of the project as it has been agreed so far by the partners is provided in the attached working document, though the precise nature of these tasks and their timing may be subject to change.

In terms of the in-depth research, which will take place with a small sample of households and businesses, participants will also be subject to the same standards of anonymity and data protection as those involved with the survey. In addition, feedback on this element of the research project will be supplied to this group of participants.

Finally, working in the home and in small businesses around energy use will bring the research team into contact with many very personal aspects of daily life – washing, food, hygiene and so on – and the researchers involved will receive guidance on how to conduct research in these contexts. Should the research team become aware of circumstances that are a cause for concern they will raise this matter discreetly with the households and relevant authorities as appropriate.

Declaration

I have read the Departmental Guidance on Research Ethics and Data Protection and believe that, where appropriate, the research proposal complies fully with the requirements of the documents listed (Appendices B-F) and The Durham University Principles for Data Protection (http://www.dur.ac.uk/data.protection/dp_principles/). I will not deviate from the methodology or reporting strategy without further permission from the Department's Research Ethics and Data Protection Peer Review Group.

Signed.....

Date 9th March 2011

Appendix 3 – Charge Your Car Domestic Charger Funding Agreement



DOMESTIC CHARGER SUPPLY FUNDING AGREEMENT: Phase 2 Domestic Equipment

WELCOME

Thank you for your interest in domestic electric vehicle charging technology. As part of this innovative project you will:

- become the host of Charging Equipment (as defined in Schedule 1 of this Agreement),
- participate in a trial to investigate the use of Smart Meters with Electric Vehicle charging equipment, and
- provide Data to Us which will inform future projects.

This Agreement sets out the relationship which shall exist between You, as a host of Charging Equipment, and Charge Your Car Limited. It sets out the terms and conditions upon which the Charging Equipment is provided to You and how the works to fit the Charging Equipment shall be carried out. Please review the agreement and if you wish to accept the offer and participate in the project please:

- complete Schedule 3 (if appropriate – please see clause 7);
- complete Your Details on Page 16; and
- sign this agreement on Page 16.

Please sign two copies of this agreement and return one to the address below and keep a dated copy for your own records.

Josey Wardle

josey.wardle@gateshead.ac.uk

Charge Your Car Project Manager

SASMI, Washington Road, Sunderland, Tyne and Wear SR5 3NS

Please note that you must return ONE signed copy of this agreement before any work is undertaken.

We ask that you raise any issues regarding this agreement with Josey Wardle.

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This Agreement dated 2012 is made between **You** and **Us**.

BACKGROUND

- (A) This Agreement sets out the basis upon which We will provide You with the Electric Vehicle Charging Equipment and carry out ancillary work, to enable You to use the Charging Equipment at Your property.

1 OFFER

1.1 We make an offer to You of a grant for:

- A preliminary Property Assessment;
- the Charging Equipment;
- Installation up to a maximum of £560 subject to survey as described below.

(the "Offer") and in return You agree to operate the Charging Equipment in accordance with the terms of this Agreement and to provide the Data to Us.

Our Installer, G4S Utility Services (UK) Ltd, will then:

- Carry out a detailed Property Assessment to ensure that the installation will be covered by our scope of work.
- Provide us, as Charge your Car, quotation for the work required and if acceptable by us carry out the above works.
- If any additional rewiring work is required they will come back to You with a quotation for any additional work.

1.2 You may accept this offer within a period of 25 Business Days from the date of this Agreement after which time the Offer shall automatically lapse and may not be accepted.

1.3 The parties agree that the value of the grant is up to a maximum sum of £1,460 and that We shall fulfil the Offer (or any part of the Offer) where it funds another organisation to provide the relevant service/equipment to You.

1.4 The Customer- Led Network Revolution project will also provide a Data Logging Device to You in order to monitor whole house energy use as part of their electric vehicle energy trial. This Data Logging Device will be installed by G4S in conjunction with the Charging Equipment, it will remain the property of Northern Powergrid and will be removed by G4S after December 2013.

2 ACCEPTANCE OF OFFER

2.1 By accepting the Offer You:

- 2.1.1** agree to each term and condition of the Grant as set out in this Agreement; and
- 2.1.2** agree to permit Us (and/or the Installer acting on Our behalf) to carry out the Services (as set out in the Offer) upon Your property and You agree to operate the Charging Equipment in accordance with this Agreement.
- 2.1.3** agree to participate in the smart charging trials which will include:
 - i.** Us monitoring user initiated charging events and its impact on the whole house energy consumption
 - ii.** You will be asked to complete two online surveys (at the beginning and near the end of 2013) and take part in face to face interviews relating to your electric vehicle charging experiences. This forms the basis of the trial.

And following further consultation with You, agree to participate in:

- iii.** remotely downloaded "Charging Incentives" to the Smart Meter to encourage You to use off-peak charging
- iv.** remotely downloaded "Control Events" to initiate off-peak charging at a pre-determined time.

Please Note:

The smart charging trials have a "charge me now" function to enable users to initiate a charge immediately if required. i.e You can override the remote controls if required.

3 SCOPING WORK

- 3.1** Once We have received one signed copy of this Agreement from You, We shall within a reasonable time engage the Installer to contact You to arrange a mutually convenient time to visit You and carry out the Property Assessment and to provide Us with an Installation quotation.
- 3.2** Once a mutually convenient time is agreed, You shall allow Us (and/or the Installer acting on Our behalf) on to Your property, if required, to carry out the Property Assessment and to show the Installer Your proposed Location for the Charging Equipment.
- 3.3** The Property Assessment will allow the Installer to establish whether the Location is suitable for Charging Equipment (taking into account all issues including the potential costs of Rewiring). The Property Assessment will not identify the position of Hidden Infrastructure and therefore You will need to provide such information in accordance with clauses 4.2 to 4.5 of this Agreement.
- 3.4** Following the Property Assessment the Installer inform Us that the Location is suitable and provide Us with a quotation for the Installation and Commissioning of the Charging Equipment. The decision about the suitability of your property will be made by the Installer (on the basis of anticipated costs of Rewiring, Location and any Hidden Infrastructure).

3.5 If the Installer concludes:

3.5.1 that the Location is suitable and you inform the Installer that you wish to proceed, the Installer shall contact You to arrange a convenient time for the Rewiring and Installation; or

3.5.2 that the Location is unsuitable:

- i. The Installer may give You the opportunity to submit to Us an alternative Location (on Your property) for the Charging Equipment, within 15 Business Days, which the Installer may then consider having carried out another Property Assessment;
- ii. The installer may give you the opportunity to Request a quotation for additional rewiring work which would be needed to ensure that your location is suitable;
- iii. Upon the Installer informing Us that the Property is unsuitable or that You no longer wish to proceed, We may terminate the Agreement (and You will accept that the other elements of the Offer do not need to be provided); or
- iv. You may within 5 Business Days of Us making Our decision, elect to terminate the Agreement by providing written notice to Us, (in which case We will not be obliged to provide the other elements of the Offer to You).

4 REWIRING, INSTALLATION AND COMMISSIONING

Rewiring and installation

4.1 The Parties acknowledge that Rewiring may be necessary for the proper operation of the Charging Equipment during the Scheme. You agree to the Rewiring and installation and shall allow Us (and or the Installer) on to Your property at a mutually convenient time to carry out the Services. Once the Rewiring is completed to the satisfaction of the Installer, You own and are thereafter responsible for all the wiring of Your property.

Earth Rod

4.2 The Parties acknowledge that depending upon the Location, it may be necessary to install an Earth Rod on Your property to assist the safe operation of the Charging Equipment and associated wiring. Further information about the Earth Rod can be found at Appendix 1.

4.3 If as a result of any information received through the Property Assessment or otherwise, the Installer determines that an Earth Rod is required, You shall allow the Installer on to Your Property to carry out the necessary work.

4.4 You shall not be charged for the cost of purchasing and affixing the Earth Rod.

4.5 To carry out the Earth Rod works it shall be necessary to rely upon Your representations about the location of all Hidden Infrastructure in Your property and therefore You acknowledge that the Installer shall not be responsible for any damage to Hidden Infrastructure or for any Losses which may arise from damage to Hidden Infrastructure.

Commissioning

- 4.6** You shall not use the Charging Equipment before a Commissioning Certificate has been issued. You acknowledge that using or allowing use of the Charging Equipment before a Commissioning certificate is issued, may damage the Charging Equipment, cause personal injury or even death.
- 4.7** You shall allow Us (and/or the Installer) to visit Your property to Commission the Charging Equipment prior to the start of the Scheme.
- 4.8** If the Commissioning is successful, the Installer shall issue a Commission Confirmation to You and Us for the Charging Equipment.
- 4.9** If the Commissioning is unsuccessful the Installer shall issue a notice of rejection to You and Us stating the reasons why the installation is defective:
- 4.9.1** where the Installer has failed to install the Charging Equipment correctly they will install and re-commission the Charging Equipment; or
- 4.9.2** where the Installation has failed due to a fault on the part of the manufacturer the Installer shall contact the manufacturer to remedy the issue.
- 4.10** Risk and title shall pass in the Charging Equipment to You at the first occasion the Charging Equipment arrives at Your property. You shall own the Charging Equipment from this point and once operational are required to maintain and operate the Charging Equipment in accordance with this Agreement.

De-Commissioning

- 4.11** After the end of December 2013 We will instruct G4S to contact You again to agree a suitable appointment time to remove the Data Logging Device which monitors whole house energy use and is owned by Northern Powergrid.

5 OPERATION OF THE CHARGING EQUIPMENT

- 5.1** You agree, in return for Our Grant, to operate the Charging Equipment in a safe and responsible manner at no cost to others for not less than 3 years after the date of this agreement.
- 5.2** From the date of Installation of the Charging Equipment You:
- 5.2.1** shall use the Charging Equipment in accordance with the manufacturers' guidance;
- 5.2.2** shall not open, repair, tamper with or in any way make any changes to the Charging Equipment;
- 5.2.3** shall take all reasonable steps to ensure that the Charging Equipment is only used for charging suitable electric vehicles in accordance with the Charging Equipment manufacturers' guidance; and
- 5.2.4** shall use all reasonable endeavours to ensure that any Third Parties who enter the Property do not use the Charging Equipment in any manner which is not in accordance with the current manufacturer's guidance.
- 5.3** We are not responsible for the day to day operation of the Charging Equipment. As it will be Your Charging Equipment upon arrival at Your property it will be Your responsibility to verify that the combination of the

electrical load required to charge Your electric vehicle and the existing electrical load on the site are appropriate and do not exceed the capacity of the incoming supply and/or the associated protective elements, such as fuse controls.

6 MAINTENANCE OF THE CHARGING EQUIPMENT

- 6.1** You shall maintain the Charging Equipment in Satisfactory Condition at all times.
- 6.2** You shall, at Your own cost, take all reasonable steps to promptly repair any damage or rectify any failures that affect the Charging Equipment (regardless of how these were caused).
- 6.3** You agree to maintain the Charging Equipment in accordance with manufacturer's requirements and the Charging Equipment shall be serviced every 12 months, as defined in Appendix 2, at Your cost.
- 6.4** If for whatever reason in the first 3 years of this Agreement the Charging Equipment cannot be returned to Satisfactory Condition within 10 days of the damage, failure or other defect occurring, unless You have had agreement in writing from Us to the contrary, You agree to replace the Charging Equipment at Your own cost (subject to any claims made by You in respect of any applicable warranty).
- 6.5** Where the use of the Charging Equipment fails due to the existing wiring at Your property, You must ensure this is repaired at Your cost.

7 STATE AID

Where You carry out any business activities, the provision of the Grant is assessed to be within Article 107(1) of the Treaty on the Funding of the EU ("TFEU") and therefore is conditional upon Us receiving a valid De Minimis (EC 1998/1996) declaration prior to the award of the Grant. The declaration can be found at Schedule 3. If you are signing the agreement as an individual there is no need to complete Schedule 3.

8 LIABILITY

Charging Equipment Warranty

- 8.1** Save to the extent required by law, We do not give any warranty as to the condition, suitability or performance of the Charging Equipment or any of the other Services provided under the Offer;

Material Conditions of Grant

- 8.2** You acknowledge that each of the following is a material condition of grant:-
- 8.2.1** You have full capacity to enter into this Agreement and to fulfil all obligations which arise under it;
 - 8.2.2** You have read this Agreement and taken appropriate legal advice where you are unsure of any terms, conditions or obligations;
 - 8.2.3** You have an existing Proprietary Interest in the Property and shall, before the Services are started, have obtained all necessary consents for the Grant to be carried out;

- 8.2.4** You agree that We shall not be obliged to provide any elements of the Grant where We have reasonable grounds to believe such steps are not necessary for Your operation of the Charging Equipment.
- 8.2.5** You will own or have will have regular access to a compatible electric vehicle.
- 8.2.6** before You use the Charging Equipment You shall read the manufacturers' guidance on using the Charging Equipment.

The Grant

- 8.3** In respect of the Grant:
 - 8.3.1** We shall not be responsible for any damages or Losses incurred in the Scheme or providing the Grant;
 - 8.3.2** We shall not be required to remove any of the equipment provided under this Agreement at the end of the Scheme or make good any works involved in the delivery of the Grant; and
 - 8.3.3** the Parties agree that any claim for damages or losses under this Agreement shall be limited to £150.

Personal Injury and Death

- 8.4** Nothing in this Agreement will operate to exclude or restrict a party's liability (if any):
 - 8.4.1** for death or personal injury resulting from its negligence or by the negligence of a person for whom it is vicariously liable (negligence being as defined in Section 1(1) Unfair Contract Terms Act 1977); or
 - 8.4.2** for any matter for which it is not permitted by law to exclude or limit, or to attempt to exclude or limit its liability.
 - 8.4.3** The amount of Our liability for any such matter will not be taken into account in assessing whether the financial limit in clause 8.3.3 has been reached.

9 DATA

- 9.1** All data generated or collected by the Charging Equipment shall be and shall remain at all times the property of Us.
- 9.2** You will not access, use or transfer the Data other than in accordance with Our instructions .
- 9.3** The Data will be published by Us at such times and in such manner as We may from time to time determine.
- 9.4** The Parties acknowledge and agree that We may share the information with Our partners (including the Low Carbon Networks Fund project for the North East of England "The Customer Led Network Revolution" and Durham Energy Institute who will undertake the data analysis, online surveys and face to face interviews on behalf of this project). However, agreements will be in place with any such organisation to ensure that any published results only contain anonymous data and your data will not be used for any other purposes than this project.

10 TERMINATION

- 10.1** Our rights of termination set out in this Agreement are in addition to and not in substitution for any rights of termination which may exist at common law.

- 10.2** We may terminate this Agreement with immediate effect by providing written notice to You and the Installer, upon:-
- 10.2.1** three months' written notice, for whatever reason;
 - 10.2.2** on or at any time after the occurrence of a Termination Event.
- 10.3** For the purposes of this Agreement a Termination Event is any one or more of the following:-
- 10.3.1** You committing a material breach of an obligation under this Agreement which is incapable of remedy;
 - 10.3.2** You fail to provide the Data;
 - 10.3.3** an Insolvency Event occurs; and/or
 - 10.3.4** You fail to take reasonable steps to keep the Charging Equipment in Satisfactory Condition
- each of which shall be a Termination Event.
- 10.4** A material breach can be remedied if You can comply with the relevant obligation in all respects within ten days.
- 10.5** For the avoidance of doubt, if this Agreement provides that there is a remedy period before a right of termination can be exercised and the party in breach remedies the relevant breach after expiry of that remedy period, the other party will be entitled to exercise the right of termination notwithstanding such remedy.

Effects of Termination

- 10.6** Any expiry or termination of this Agreement for whatever reason shall not affect any rights or liabilities of either Party which have accrued on or before the date of termination or expiry.
- 10.7** Upon the termination of the Agreement due to a Termination Event, You shall return the value of the Grant to Us within 25 days of receiving notice of termination. Default interest shall accrue thereafter.
- 10.8** The provisions of this Agreement expressed to have effect after termination or expiry shall do so following termination or expiry for any reason.

11 PUBLICITY

- 11.1** We have the right to publicise the Grant and You agree to acknowledge Us and the Office of Low Emission Vehicles in any publicity materials you produce in association with the Grant, Charging Equipment or the Scheme. The timing and form of the publicity arrangements must be agreed with Us in advance and all materials must be approved by Us in advance.
- 11.2** You shall use Our logo and that of the Office of Low Emission Vehicles on all materials and publicity where Your logo is included, along with the words "This project received funding from Charge Your Car Limited and the Office of Low Emission Vehicles" in the design of any printed or presentation material produced in association with the Grant, the Charging Equipment or the Scheme.
- 11.3** Our approval should be sought prior to the creation and publication of any such publicity materials described in this clause 11.

- 11.4** We grant You a royalty free non-exclusive licence to use Our logo for the purposes set out in this Agreement and for the duration of this Agreement.
- 11.5** You shall not, and agree to use Your best endeavours to procure that any subcontractors (and in the case of corporate members use reasonable endeavours to ensure that Your staff) shall not, knowingly do or omit to do anything in relation to this Agreement or through the course of their other activities, which may bring Our standing or the Office of Low Emission Vehicles into disrepute.

CHARGING EQUIPMENT TRANSFER

- 11.6** Prior to or upon any transfer by You of a Proprietary Interest in the Property upon which the Charging Equipment is located and/or of the Charging Equipment to a Third Party, You shall procure that such Third Party agrees, in terms reasonably satisfactory to Us, to be bound by the terms of this Agreement in respect of the Charging Equipment, including, but not limited to be bound by the obligations arising under clauses 7, 8 and 11. In the event that You fail to procure such agreement from such Third Party by the date of the transfer of the Proprietary Interest there shall be deemed to be a Termination Event.
- 11.7** Notwithstanding the duration of this Agreement, if at any time during the period commencing on the date of the successful Commissioning and ending on the third anniversary of the date of this agreement, You transfer any interest for value to any Third Party for an amount greater than the Maximum Amount You shall pay to Us the excess within 20 Business Days of the transfer becoming effective.

12 ASSIGNMENT TO SUCCESSOR ORGANISATION

- 12.1** We shall be entitled to assign, novate or otherwise transfer or dispose of Our rights and obligations under this Agreement to any other body (including a private sector organisation) which substantially performs any of the functions that are performed by Us.

13 SEVERANCE

If any term of this Agreement is found by any court or body or authority of competent jurisdiction to be illegal, unlawful, void or unenforceable, such term will be deemed to be severed from this Agreement which will continue in full force and effect.

14 DEFINITIONS AND ADDITIONAL PROVISIONS

The contents of schedule 1 and 2 shall apply as if set out here.

15 TERM OF CONTRACT

Unless terminated in accordance with clause 10, the Agreement shall continue from the date of this Agreement until 31 March 2016 ("the Term").

SCHEDULE 1 (DEFINITIONS)

In this Agreement, each of the following shall, unless otherwise stated, have the following meanings:-

“Agreement”	this grant agreement, and the Schedules and Appendices accompanying it;
“Business Days”	a day other than a Saturday, Sunday or public holiday in England when banks are open for business;
“Charging Equipment”	<p>electric vehicle charging device comprising:</p> <ul style="list-style-type: none">▪ An intelligent charge point (Pod Point Home), and an EDM Smart Meter with GSM modem<ul style="list-style-type: none">○ Note, this additional smart meter in no way affects the existing metrology or energy supply contracts at your property, it is used solely for the purposes of this trial. <p>which attach to the electrical supply and which shall be subject to the terms of this Agreement;</p>
“Customer-Led Network Revolution”	a partnership of four organisations – Northern Powergrid, British Gas, Durham University and EA Technology – working with Ofgem – to ensure that electricity networks and suppliers have a greater understanding of households’ future energy needs;
“Commission Confirmation”	written confirmation from the Installer to Us and You, that the Commissioning of the applicable Charging Equipment has been successful;
“Commission”	<p>such tests and inspections as shall be agreed between Us and the Installer from time to time to determine that the Installation has been undertaken to the required standard and is functioning correctly, and “Commissions” “Commissioned” and “Commissioning” shall be construed accordingly;</p>
“Data”	the data collected by the Charging Equipment in relation to the use of the Charging Equipment and its impact on the household’s energy consumption by EV Users (which for the avoidance of doubt shall be supply side information rather than car side);
“Data Logging Device”	in addition to the smart meter included in the Charging Equipment We will also install a second Smart Meter with GSM modem to help us gather whole house energy data needed to support the Customer-Led Network Revolution electric vehicle energy trial. This device is owned by and labelled as Northern Power Grid’s property and will be removed after Dec 2013;
“Earth Rod”	a device which provides an electrical reference bond to earth so as to form a TT earthing system;
“Grant”	the grant set out in Clause 1. This grant is being provided by Charge your Car and the Customer-Led Network Revolution;

“Hidden Infrastructure”	all buried, enclosed, covered or otherwise hidden wiring, pipes and otherwise including without limitation any items which cannot be identified by any of the Parties to this Agreement even with reasonable visual inspection of the Property;
“Insolvency Event”	<p>any or all of the following:-</p> <ul style="list-style-type: none">a) You become insolvent or are unable to pay Your debts as they fall due or fail or admit in writing Your inability generally to pay Your debts as they become due;b) a moratorium is declared in respect of Your indebtedness;c) You cease or threaten to cease to carry on Your business or substantially the whole of Your business;d) You are dissolved or struck off;e) a petition is presented for Your winding up, liquidation or bankruptcy and such petition results in the making of an order for Your winding up, liquidation or bankruptcy or is not dismissed, discharged, or stayed within 15 Business Days of the presentation thereof; or <p>the appointment of a receiver, administrative receiver, administrator, nominee, supervisor or similar officer in respect of Yourself or any of Your assets;</p>
“Installer”	the agent selected by Us to carry out the Services in accordance with the Procurement Regulations 2006 (as amended);
“Installation”	the installation of the applicable Charging Equipment at the Location and “Installed” shall be construed accordingly;
“Maximum Amount”	an amount equal to the market value of the Charging Equipment (depreciated at an annual rate of 40% against its initial value of £1,000);
“Location”	the location at which particular Charging Equipment is to be situated;
“Losses”	all liabilities, costs (including the cost of complying with any direction, regulation, requirement or request made by or under or by virtue of any legislation (primary or secondary), order of any government department (or by-law), expenses, damages and losses including any direct, indirect or consequential losses, loss of profit, loss of reputation and all interest, penalties and legal and other professional costs and expenses;
“Point”	one electrical outlet to which the Charging Equipment is attached for the purpose of charging an EV, and “Points” shall be construed accordingly;
“Property”	Your property (in which You hold a Proprietary Interest that allows You to authorise the Services) including any buildings and land;
“Property Assessment”	a study of a proposed Location, conducted by the Installer, to determine the Location’s suitability and to assess the costs associated with the location of the Charging Equipment including Rewiring, Installation and Commissioning;
“Proprietary Interest”	a leasehold or freehold interest;

“Rewiring”	electrical rewiring works to the wiring in Your property to enable the fixing of a Point so that the Charging Equipment may be attached;
“Satisfactory Condition”	clean, working, free from minor damage or defects, fit for purpose, in safe operating condition and in accordance with guidelines issued by Us from time to time;
“Scheme”	the use and demonstration of the Charging Equipment for the purposes of promoting EV use and the Charge Your Car programme;
“Services”	the services to be carried out under this Agreement including the Property Assessment, Rewiring, Installation and Commissioning of the Charging Equipment;
Signing / signed	duly executed in accordance with the law of England and Wales;
“Termination Event”	as defined in clause 10;
“Third Party”	any person who is not a party to this Agreement, and “Third Parties” shall be construed accordingly;
“Upgrade”	any changes, modifications, improvements, additions to the Charging Equipment, the Software or Hardware;
“Us”	means Charge Your Car Limited and “We” and “Our” shall be interpreted accordingly;
“Use”	use of the Charging Equipment;
“You”	[INSERT HOST NAME] and “Your” shall be interpreted accordingly.

SCHEDULE 2 (ADDITIONAL PROVISIONS)

1 INTERPRETATION

In this Agreement:-

- 1.1** any gender includes any other gender;
- 1.2** the singular includes the plural and vice versa;
- 1.3** the recitals, the Schedules and the Appendices form part of this Agreement;
- 1.4** any reference to a statute or statutory provision includes a reference to any modification, amendment, replacement, consolidation or re-enactment of the provision from time to time in force and all subordinate instruments, orders or regulations made under it from time to time;
- 1.5** a reference to any of the parties includes, where appropriate, persons deriving title under it;
- 1.6** general words shall not be given a restrictive interpretation by reason of their being preceded or followed by words indicating a particular class of acts, matters or things and each reference to "includes" or "including" shall be construed without limitation;
- 1.7** references to a person acting "directly or indirectly" include acting alone or jointly with or by means of any other person;
- 1.8** references to any document (including this Agreement) or a provision thereof shall be construed as a reference to that document or provision as from time to time supplemented, varied or replaced;
- 1.9** references to writing include any method of reproducing words in a legible and non-transitory form;

2 FREEDOM OF INFORMATION

- 2.1** You acknowledge that We are subject to the requirements of the Code of Practice on Government Information, Freedom of Information Act 2000 ("FOIA") and the Environmental Information Regulations and shall assist and cooperate Us to enable Us to comply with Our Information disclosure obligations.
- 2.2** You shall and shall procure that Your sub-contractors shall:

2.2.1 transfer to Us requests for information or an apparent request under the Code of Practice on Access to Government Information, FOIA or the Environmental Information Regulations ("Requests for Information") that it receives as soon as practicable and in any event within two Business Days after receiving a Request for Information;

2.2.2 provide Us with a copy of all Information in its possession, or power in the form that We require within five Business Days (or such other period as the We may specify) of Our request; and

2.2.3 provide all necessary assistance as reasonably requested by Us to enable them to respond to the Request for Information within the time for compliance set out in section 10 of the FOIA or regulation 5 of the Environmental Information Regulations.

2.3 We shall be responsible for determining in Our absolute discretion and notwithstanding any other provision in this Agreement or any other agreement whether any information is exempt from disclosure in accordance with the provisions of the Code of Practice on Government Information, FOIA or the Environmental Information Regulations.

2.4 In no event shall You respond directly to a Request for Information unless expressly authorised to do so by Us.

2.5 You acknowledge that (notwithstanding the provisions of this paragraph 2 (Freedom of Information)) We may be obliged under the FOIA, or the Environmental Information Regulations to disclose information concerning you or the activities and obligations under this Agreement:

2.5.1 in certain circumstances without consulting you; or

2.5.2 following consultation with Yourself and having taken their views into account;

provided always that where paragraph

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applies We take reasonable steps, where appropriate, to give You advanced notice, or failing that, to draw the disclosure to Your attention after any such disclosure.

3 DEFAULT INTEREST

If a party fails to pay any sum due and payable under or in relation to this Agreement by the due date, interest at the rate prescribed in accordance with the Late Payment of Commercial Debts (Interest) Act 1998 shall accrue on the unpaid amount from the due date to the date of actual payment (after as well as before judgment). Interest shall be calculated on the basis of a year of 365 days and for the actual number of days elapsed, shall accrue from day-to-day, and shall be compounded quarterly.

4 EXPIRY

Upon expiry or termination of this Agreement for any reason the relevant provisions of clauses 4.1, 4.5, 4.6, 5.2, 5.3, 6, 8, 9, 10.3, 10.4, 11 and 12 and the Schedules shall continue in force without limit of time.

5 FORCE MAJEURE

5.1 If any party is prevented, hindered or delayed from or in performing any of its obligations under this Agreement by any event which is beyond the reasonable control of a party and which event affects that party's performance, including acts of God, war, terrorism, fire, and natural disasters, excluding industrial action of the party obliged to perform or insufficiency of funds ("Force Majeure Event") then:

5.1.1 that party's obligations under this Agreement shall be suspended for so long as the Force Majeure Event continues and to the extent that party is so prevented hindered or delayed;

5.1.2 as soon as reasonably possible after commencement of the Force Majeure Event the party prevented, hindered or delayed from fulfilling its obligations shall notify the others of the occurrence of the Force Majeure Event, the date of commencement of the Force Majeure Event and the effects of the Force Majeure Event on its ability to perform its obligations under this Agreement;

5.1.3 the party prevented, hindered or delayed from fulfilling its obligations by a Force Majeure Event shall use all reasonable efforts to mitigate the effects of the Force Majeure Event upon the performance of its obligations under this Agreement; and

5.1.4 as soon as reasonably possible after the cessation of the Force Majeure Event the party prevented, hindered or delayed from fulfilling its obligations by a Force Majeure Event shall notify the other parties in writing of the cessation of the Force Majeure Event and shall resume performance of its obligations under this Agreement and take all reasonable steps to recover any slippage.

6 RIGHTS OF THIRD PARTIES

Except as provided in this Agreement, this Agreement does not create, confer or purport to confer any benefit or right enforceable by any person not a party to it.

7 ENTIRE AGREEMENT AND AMENDMENTS

7.1 This Agreement constitutes the entire agreement between the parties and supersedes any prior agreement or arrangement in respect of its subject matter and:

7.1.1 neither party has entered into the Agreement in reliance upon, and it shall have no remedy in respect of, any representation or statement (whether made by the other party

- or any other person) which is not expressly set out in the Contract;
- 7.1.2** nothing in this **Condition 7.1** shall be interpreted or construed as limiting or excluding the liability of either party for fraud or fraudulent misrepresentation.
- 8 REMEDIES ARE CUMULATIVE**
- The rights and remedies provided by this Agreement are cumulative and (unless otherwise provided in this Agreement) are not exclusive of any rights or remedies provided by law or in this Agreement.
- 9 FURTHER ASSURANCE**
- Each party shall at the request and cost of the other execute all deeds and other documents, and do all things that the other may require (acting reasonably) in order to give effect to the terms of this Agreement.
- 10 WAIVER**
- Any failure or neglect by Us to enforce any of the provisions of this Agreement will not be construed nor deemed to be a waiver of that party's rights and does not affect the validity of the whole or part of this Agreement nor prejudice that party's rights; any waiver by either party of its rights under this Agreement does not operate as a waiver in respect of any subsequent breach.
- 11 INVALIDITY**
- If any provision of this Agreement is held to be illegal, invalid or unenforceable in whole or part, that provision shall to that extent be deemed not to form part of this Agreement and the legality, validity and enforceability of the remainder of this Agreement shall be unaffected.
- 12 NOTICES**
- 12.1** Any notice or other communication given under or in connection with the Contract shall be in writing and:
- 12.1.1** sent by pre-paid first class post to that party's address; or
- 12.1.2** delivered to or left at (but not, in either case, by post) that party's address.
- and, in the case of any notice or other communication to be given to CYC, marked for the attention of the specified representative of CYC. The address and representative for CYC and the address for the User are those detailed in the Application Form, and may be changed by the relevant party giving at least 15 Business Days notice in accordance with this **Condition 12**.
- 12.2** Any notice or communication given in accordance with **Condition 12.1** shall be deemed to have been served:
- 12.2.1** if given as set out in **Condition 12.1.1**, at 9.00 a.m. on the second Business Day after the date of posting;
- 12.2.2** if given as set out in **Condition 12.1.2**, at the time the notice or communication is delivered to or left at that party's address.
- 13 RELATIONSHIP BETWEEN PARTIES**
- 13.1** Unless expressly provided otherwise, all representations, warranties, undertakings, covenants and obligations entered into by Us are made, given and entered into by Us in relation only to Us and Our liability in respect of any breach of any such representation, warranty, undertaking, covenant or obligation shall extend only to any loss or damage arising from Our own breach.
- 13.2** Nothing in this Agreement is intended to or shall be deemed to constitute any party the agent or partner of any other party. No party shall have any authority to make any commitments on any other party's behalf.
- 14 GOVERNING LAW AND JURISDICTION**
- 14.1** The Contract and any non-contractual obligations arising out of or in connection with it will be governed by English law.
- 14.2** Each party agrees that the courts of England and Wales have exclusive jurisdiction to determine any dispute arising out of or in connection with the Contract (including in relation to any non-contractual obligations).

SCHEDULE 3 (DE MINIMIS DECLARATION)**ONLY COMPLETE IF YOU ARE AN ORGANISATION WHICH CARRIES OUT TRADABLE
ACTIVITIES: INDIVIDUALS / COUNCILS NEED NOT COMPLETE THIS FORM.**

The European Commission sets limits on the levels of assistance which the public sector can provide to businesses ("State Aid Law"). It is proposed that the Grant will comply with State Aid Law by applying the De Minimis exemption under EC Regulation 1998/2006 as published in the Official Journal of the European Union on 28 December 2006.

Under the De Minimis exemption a business undertaking can receive up to €200,000 of De Minimis aid in the current financial year and the two previous financial years. The value of the award is approx €2,000. Undertakings active in the road transport sector can receive up to €100,000 over such a period.

You may choose to set out previously received De Minimis aid below. For the avoidance of doubt, not all awards from public sector organisations in a three year period need to be set out, only those which have been expressly stated to be "De Minimis" awards.

Body providing the assistance/aid	Value of assistance	Date of assistance	Nature of assistance

DECLARATION

You confirm that You have not received more than €200,000 of De Minimis aid (unless the limit is set at €100,000 in respect of undertakings active in the road transport sector) during the current fiscal year and the previous two fiscal years (including the €2,000 Grant).

You are not a business "in difficulty" as defined at 2.1 of the Community Guidelines and State Aid for Rescuing and Restructuring Firms in Difficulty (2004/C22/02) at the date of this declaration.

The information set out above is accurate for the purposes of the De Minimis exemption.

SIGNATURE:

NAME:

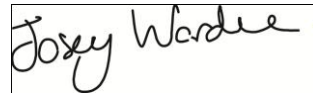
BUSINESS:

POSITION:

DATE:

AS WITNESS of which the parties have executed this Agreement on the date specified above

Signed by Josey Wardle



Duly authorised for and on behalf of

Charge Your Car (North) Limited

Signed by

You

YOUR DETAILS :

Full Name (please print)

Full Address

Address of Charging Equipment (if different from the address above)

Version 2

Daytime telephone number

Email address

APPENDIX 1 - EARTHING OF SUPPLIES FOR ELECTRIC VEHICLES

Understanding the problem

Most electricity distribution systems use the neutral conductor as an earth return path, in the event of faults, to earth (PME system) instead of supplying a separate conductor for the earth. However, this means that a failure in the neutral conductor itself can cause a rise in voltage on the neutral and hence on earthed metalwork of any appliances.

This risk is mitigated in two ways:

- By earthing the neutral conductor at several points along the route and at the ends. This is something the electricity supply company will already have done; or
- By “bonding” earthed metalwork in the area to create a protected area within which there can be no differences in potential- an “Equipotential” zone.

Electrical equipment which is to be used outside the protected area, such as lawn mowers, are “double insulated” so that there is no exposed metalwork that could become live in the event of such a neutral fault.

However, if a protected area cannot be created by the bonding of metalwork, then the earth conductor of the premises is not connected to the supply neutral, but to a separate earth spike. This spike is a rod, typically 1.5 metres or so in length which is driven into the ground at or close to the point where the supply enters the building.

Examples of situations where a separate earth is installed are:

1. Farm Buildings
2. Marinas
3. Caravan Parks

These are good examples of where the equipotential bonding approach cannot be used to create a protected area.

Application to Electric Vehicles

With an electric vehicle, the bodywork is normally metallic and bonded to the incoming earth conductor so the car cannot be double insulated in the way that a lawn mower is at this time. The bodywork is connected to the earth conductor as in any other “appliance”. This means the car will not necessarily be within the protected area created by the equipotential bonding unless it is within a garage which is supplied from the general house wiring and has been bonded in the same way.

A dedicated charging unit is being offered and there are two options for protecting this:

Garages: Where the car is to be recharged within a garage which is part of the main building and hence part of the existing house wiring and adequately bonded, there is no need for further earthing, Driveway or remote garage: If the car is to be recharged outside on a driveway through a wall mounted dedicated charger or at a garage or outbuilding remote from the main supply, then the charger should not be connected to the main supply earth, but an earth spike and RCD protection should be installed. This is commonly referred to as a TT earthing system. However, there must be no opportunity for the simultaneous contact between two different equipotential areas by an individual. For example if the car and charger are on one earth system and the house is on another (including the garage door) and the car owner should be in contact with both the car body and the garage door when the neutral fault occurs, there is a potential for a shock to occur.

What this means to you, the user:

- a. The installer will carry out a site survey and establish what the existing earthing solution is, for example TN-C-S (PME), TN-S or TT and ensure it already meets the requirements of BS7671. For example, equipotential bonding is in place and adequate. If it is an existing TNS or TT system, then a charge point can normally be installed without further modification to your earthing.
- b. If it is a TN-C-S (PME) system, they will assess the proposed location for the EV charge controller.
 - I. If the charger and the vehicle are both located within the existing equipotential zone (i.e. the car will always be charged in an attached garage). Then, subject to item 1. above, the existing earthing will be deemed to be adequate and a charge point installation will **be allowed**.
 - II. If the charger is located on an external wall of the main building and either it, the charging plug or the vehicle in its normal charging location are likely to be jointly accessible with any bonded metal work from the existing equipotential zone, the installation of a dedicated charge point will normally **be rejected**. The installer, in discussion with yourself, may be able to identify alternative locations or solutions to help resolve this problem.
 - III. If the charger is located on an external wall of the main building and either it or the vehicle in its normal charging location are unlikely to be jointly accessible with any bonded metal work from the existing equipotential zone a charge point installation will normally **be allowed**. A new separate TT earthing solution will be required. i.e an earth spike will need to be installed at the same time as the charger.
 - IV. If the charger is located in a separate garage and you have a TN-C-S system, a new separate TT earthing solution will be required. i.e an earth spike will need to be installed at the same time as the charger. The installer will also need to ensure that

any existing electrical services in the garage etc are bonded to the new TT earthing point. A charge point installation will normally **be allowed**.

- c. If you have any information which you believe may be material to the assessment above, please inform the Installer at the earliest opportunity. Note it is your responsibility to identify the location of subterranean services (water, gas, electricity and drains). The Installer will not take responsibility for repairing any damage to these services should an earth rod strike one during installation.
- d. Note, In the cases I – IV in section b. above:
- The installer will carry out a risk assessment to identify the likelihood of simultaneous contact between the vehicle and the existing equipotential zone. Details of this will be recorded in the installation certificate.
 - You will be advised as to where it is safe to charge your vehicle, this will normally be quite close to the charge point and will normally be either in a garage **or** outdoors
 - You must not make modifications to the location of the charge point without having the installation re-assessed
 - You must not install new electrical equipment or electrically bonded items such as gas pipes, water pipes etc in the vicinity of the vehicle or the charger without having the installation re-assessed

You will be left with instructions for safe use of the charging point. These should be retained and handed on to any future owners of the charging equipment.

APPENDIX 2 – MAINTENANCE REQUIREMENTS FOR YOUR CHARGING EQUIPMENT

Things you can do yourself

- Trip test the RCD(s) by pushing the test button on the units every 3-6 months
- Inspect the cable and gun for damage due to dropping etc. Verify the outer insulation of the cable has no visible damage. These checks should be carried out at least every month.
- Inspect the charge point housing for impact damage, vandalism or any damage to the water seal once a month.

Annual service requirements

These tasks should only be carried out by Suitably Qualified Persons, who are defined as a contractor or contracting company which is a member of one or more of the following organisations :

- a. the Electrical Contractors Association (ECA);
- b. the National Inspection Council for Electrical Installation Contracting (NICEIC);
 - Measure the earth loop impedance of the installation and confirm that satisfactory earthing is still in place
 - Verify correct operation of the RCD(s) using an RCD tester (measuring the trip times etc and verifying that they are within specification)
 - Inspect the cable and gun for any excessive wear or damage
 - Inspect the housing and water seals
 - Verify the integrity of the insulation on the flying lead (megger test)
 - Provide a certificate of annual inspection with values for earth loop impedance, insulation resistance and RCD tripping values. A copy must be sent to us for our records.