

**NEXT GENERATION
NETWORKS**

Marketing and PR Report
October 2018
Electric Nation



| | | |
|---------------|---|--|
| Report Title | : | Electric Nation Marketing and PR Report October 2018 |
| Report Status | : | Final |
| Project Ref | : | 104060 Electric Nation |
| Date | : | 19.12.2018 |

| Document Control | | |
|-------------------------|-------------|-------------|
| | Name | Date |
| Prepared by: | Karen Platt | 24.10.2018 |
| Reviewed by: | Nick Storer | 23.04.2018 |
| Approved (WPD): | R Duke | 19.12.2018 |

| Revision History | | |
|-------------------------|--------------|---------------------|
| Date | Issue | Status |
| 24.10.2018 | 0.1 | DRAFT |
| 29.10.2018 | 0.2 | For external review |
| 19.12.2018 | 0.3 | Final |
| | | |

Table of Contents

| | |
|---|----|
| Table of Contents | 3 |
| 1 Introduction | 5 |
| 2 Marketing and PR Aims and Objectives | 6 |
| 3 Marketing and PR Strategy | 7 |
| 4 Activity in this Reporting Period | 8 |
| 5 Next steps | 12 |
| Appendix 1 – Project description and summaries from Marketing and PR Strategy | 13 |
| Appendix 2 – Newsletter to disseminate learning | 14 |
| Appendix 3 – Website Project News Items | 18 |

DISCLAIMER

Neither WPD, nor any person acting on its behalf, makes any warranty, express or implied, with respect to the use of any information, method or process disclosed in this document or that such use may not infringe the rights of any third party or assumes any liabilities with respect to the use of, or for damage resulting in any way from the use of, any information, apparatus, method or process disclosed in the document.

© Western Power Distribution 2018

No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means electronic, mechanical, photocopying, recording or otherwise, without the written permission of the Future Networks Manager, Western Power Distribution, Herald Way, Pegasus Business Park, Castle Donington. DE74 2TU. Telephone +44 (0) 1332 827446. E-mail WPDInnovation@westernpower.co.uk

Glossary

| Abbreviation | Term |
|--------------|---|
| BEIS | Department for Business, Energy & Industrial Strategy |
| DfT | Department for Transport |
| EV | Electric Vehicle |
| LCNI | The Low Carbon Network and Innovation Conference |
| LCV | The Low Carbon Vehicle Event |
| Ofgem | Office of Gas and Electricity Markets |
| OLEV | Office for Low Emission Vehicles |
| PR | Public relations |
| SMMT | Society for Motor Manufacturers and Traders |
| WPD | Western Power Distribution |

1 Introduction

This report provides a comprehensive overview of all marketing and public relations (PR) activity that has taken place for the Electric Nation project (the Project) from July to October 2018. EA Technology manages all aspects of marketing and PR for the Project on behalf of Western Power Distribution (WPD) and its project partners and suppliers. Automotive Comms delivers strategic direction and all associated marketing and PR services for the Electric Nation project.

1.1 Electric Nation

Electric Nation is the customer-facing brand of CarConnect, a Western Power Distribution and Network Innovation Allowance funded project. WPD's collaboration partners in the project are EA Technology, DriveElectric, Lucy Electric GridKey and TRL.

Electric Nation, the world's largest electric vehicle (EV) trial, is revolutionising domestic plug-in vehicle charging. By engaging 500-700 plug-in vehicle drivers in trials, the project is answering the challenge that when local electricity networks have 40% - 70% of households with electric vehicles, at least 32% of these networks across Britain will require intervention.

The project is developing and delivering a number of smart charge solutions to support plug-in vehicle uptake on local electricity networks. A key outcome will be a tool that analyses plug-in vehicle related stress issues on networks and identifies the best economic solution. This 'sliding scale' of interventions will range from doing nothing to smart demand control, from taking energy from vehicles and putting it back into the grid, to traditional reinforcement of the local electricity network where there is no viable smart solution.

The development of the project deliverables is being informed by a large-scale trial involving plug-in vehicle drivers that will:

- Expand current understanding of the demand impact of charging at home on electricity distribution networks of a diverse range of plug-in electric vehicles - with charge rates of up to 7kW+, and a range of battery sizes from 20kWh to 80kWh+.
- Build a better understanding of how vehicle usage affects charging behaviour.
- Evaluate the reliability and acceptability to EV owners of smart charging systems and the influence these have on charging behaviour. This will help to answer such questions as:
 - Would charging restrictions be acceptable to customers?
 - Can customer preference be incorporated into the system?
 - Is some form of incentive required?
 - Is such a system 'fair'?
 - Can such a system work?

The results of this project will be of interest and will be communicated to the GB energy/utility community, UK government, the automotive and plug-in vehicle infrastructure industry and the general public.

2 Marketing and PR Aims and Objectives

2.1 To support recruitment - overview

A key aim of marketing and PR under the Electric Nation project is to demonstrably support DriveElectric's customer recruitment goals to achieve 500-700 WPD customers recruited into the project trials by summer 2018. To this end, weekly project management telephone calls organised and facilitated by EA Technology between itself, Automotive Comms and DriveElectric have ensured that the marketing activity has provided the recruitment campaign with the tools that it needs in order to boost and maintain customer engagement in the project. Now that the recruitment stage of the project is now complete these calls are held bi-weekly. WPD is invited onto these calls on an ad hoc basis to keep the WPD team informed, engaged and updated as required.

2.2 To support dissemination - overview

Formal reporting and dissemination of information and results, being technical where appropriate, is required to relevant government-related organisations such as Ofgem, OLEV, BEIS and DfT, as well as the utilities (including all GB distribution network operators, energy suppliers and generators), energy industry and consultants. The primary message to these stakeholders is focused on progress and results of the trial, and technical measures that can be adopted around electric vehicle demand management, and potentially vehicle to grid technologies.

More general and less technical cross-sector and customer dissemination of information and results will be directed to Government, public sector, academic and professional bodies and institutions, and to the general public to an extent.

3 Marketing and PR Strategy

The marketing and PR strategy underpins all communications and dissemination activity for Electric Nation. It establishes a uniform approach to describing the project, its funding mechanism and key collaboration partners, together with both a long and short summary for the project (Appendix 1), as well as the key communication messages for use by all project partners and suppliers.

3.1 Communication with trial participants

As the project moves further into the demand management phase with its customers, management of trial participants' expectations continues to be critical. EA Technology is supporting DriveElectric's engagement with trial participants through provision of timely and appropriate letters and email communications, as well as information on 'closed' web pages on the project website, offering information on the Greenflux and CrowdCharge apps. Planning is also underway for the communication of end of trial arrangements to participants and promote completion of the final trial survey.

4 Activity in this Reporting Period

During this period, activity has been geared towards:

- Dissemination of early learning at events such as CENEX Low Carbon Vehicle (LCV) Conference, MRS Utilities Conference and Low Carbon Network and Innovation (LCNI) Conference
- First public demonstration of the Network Assessment Tool
- Project newsletter issued updating stakeholders on early project learning, a printed copy of which was taken to CENEX LCV
- Project newsletter issued to project participants
- News items published on the project website highlighting project news,
- Leaflet created highlighting project learning so far. This leaflet will be used at exhibitions through the Autumn
- Planning for further learning dissemination as the project enters its final stage.

4.1 PR and event presence to support dissemination - activity

Nick Storer from EA Technology presented latest findings from the Electric Nation project at the CENEX LCV Conference at Millbrook on 12th and 13th September. Electric Nation was also represented on the WDP stand where the project team answered lots of enquiries about Smart Charging, effects of EV's on the distribution network and findings so far. The Electric Nation model proved to be a popular talking point with exhibition attendees. This was reported on the project website:

<http://www.electriconation.org.uk/2018/09/18/electric-nation-at-the-cenex-low-carbon-vehicle-2018-event/>



Figure 1: The Electric Nation Stand at Cenex LCNI

Nick Storer from EA Technology and Nicole McNab from Impact Utilities presented on the Electric Nation project at the MRS Utilities Conference on 4th October.

Nick Storer from EA Technology presented latest findings from the Electric Nation project at the LCNI Conference at Telford on 16th and 17th October. Electric Nation was also represented on the EA Technology and the WPD stands,



Figure 2: Nick Storer presenting the interim project findings at Low Carbon Network and Innovation Conference, 16 October 2018

There was also much interest in the Network Assessment Tool that was demonstrated at LCNI.



Figure 3: Demonstrating the Network Assessment tool at Low Carbon and Innovation Conference, 16 October 2018

A leaflet 'The Real-World Smart Charging Trial – What We've Learnt so Far' was produced to be disseminated at Low Carbon Network and Innovation Conference and the WPD 'Balancing Act' conference in November. A copy of this leaflet is can be found on the project website.

<http://www.electricnation.org.uk/resources/>

4.2 PR and event presence to support dissemination - planning

EA Technology and WPD have been working together closely to plan the projects presence at the Balancing Act Conference to be held in Bristol on 21st November. The conference will focus on EV Readiness. A member of the Electric Nation team will provide a presentation on the project at this event.

Planning is underway about events to disseminate final project learning. The project team are identifying relevant events to attend and speak at throughout 2019 as well as discussing other dissemination methods.

4.3 Newsletter

A newsletter was circulated to over 500 stakeholders on 12th September. A copy of the newsletter can be found in Annex 2. The newsletter contained:

- Early analysis of app usage
- Installation of the final smart charger
- A preview of project attendance at LCV
- A link to the Smart Charging video created by WPD

4.4 Social media

Social media is recognised as a key tool to support both trial participant recruitment activity and dissemination in the Electric Nation project. All project-related social media activity is supported by a WPD approved Social Media Policy, which has been circulated to all project partners and suppliers.

4.4.1 Twitter

Responsibility for managing the Twitter account is split between EA Technology and DriveElectric. This approach maintains the delineation between DriveElectric and its customer interface role, and EA Technology, which must have no direct communication with customers, as per the project's Customer Engagement Plan.

EA Technology is responsible for:

- Maintaining a pipeline of relevant EV-industry related news tweets (and retweets)
- Tweeting news directly linked to the Electric Nation Twitter account
- Tweeting Electric Nation project updates to support learning dissemination activities on behalf of the project and its partners / suppliers

During June 2018 it was decided that a Social Media Contractor would be better placed to manage the Electric Nation twitter account. The Contractor is regularly updated with project news by members of the Electric Nation team and provided with project learning

and highlights to turn into tweets. A fortnightly schedule of tweets is agreed in advance, with the flexibility to alter arrangements as necessary.

DriveElectric is responsible for:

- All customer interaction and communications through the Electric Nation Twitter account. This includes responding to all queries, complaints and comments in general in a timely manner
- Monitoring the Electric Nation Twitter account on a daily basis to enable timely responses, and to manage unwanted contacts
- Scheduling daily / bi-daily tweets to support recruitment activities
- Tweeting about Electric Nation EV test drive events and related recruitment activities

The Electric Nation Twitter account (@ElectricNation_) was launched at LCV 2016 to align with the official launch of the project and its recruitment activity. To date, the Electric Nation Twitter account has 1,780 followers, an increase of 89% since the last reporting period. The achieves a good level of retweet activity, including regular retweets by WPD, the Office for Low Emission Vehicles, and project partners and suppliers.

Table 4.1: Twitter activity increase from last reporting period

| Item | Last reporting period | Current reporting period | % increase |
|-------------------|------------------------------|---------------------------------|-------------------|
| Twitter Followers | 1,780 | 2,044 | 15% |

4.4.2 Facebook

Electric Nation has a Facebook page that is customer-facing and is therefore managed by DriveElectric, albeit its set up was supported by Automotive Comms to ensure branding and message were in line with strategy. Progress on this front is reported under separate cover by DriveElectric.

4.5 Project News reports

In this reporting period there have been four items of project news produced on the [project news](#) section of the website, and disseminated via Twitter. However, these have not been circulated to the wider PR agencies..

5 Next steps

The Project team at EA Technology will continue to work alongside project partners to ensure that all marketing and PR activity supports partners to achieve their deliverables. Trial recruitment has come to a close, so that communication and marketing activity will now focus on dissemination of learning and managing any issues that may arise with trial participants in PR terms.

A strategy is being developed to effectively disseminate learning from the Electric Nation project. It is expected that this may include attendance at industry events throughout 2019 such as:

- A project specific learning dissemination event
- Fully Charged
- Low Vehicle Partnership Conference
- Cenex LCV
- Low Carbon Network and Innovation Conference

The project team are also considering the production of other learning material such as videos and hosting interactive webinars.

Appendix 1 – Project description and summaries from Marketing and PR Strategy

Uniform project description – to be included in all project communications

Electric Nation is the customer-facing brand of CarConnect, a Western Power Distribution (WPD) and Network Innovation Allowance funded project. WPD's collaboration partners in the project are EA Technology, DriveElectric, Lucy Electric GridKey and TRL.

Long summary

The Electric Nation project will develop and deliver a number of smart charge solutions to support plug-in vehicle uptake on local electricity networks. A key outcome will be a tool that analyses plug-in vehicle related stress issues on networks and identifies the best economic solution. This 'sliding scale' of interventions will range from doing nothing to smart demand control, from taking energy from vehicles and putting it back into the grid, to traditional reinforcement of the local electricity network where there is no viable smart solution.

The development of the project deliverables will be informed by a large-scale trial involving plug-in vehicle drivers that will:

- 1. Expand current understanding of the demand impact of charging at home on electricity distribution networks of a diverse range of plug-in electric vehicles - with charge rates of up to 7kW, and a range of battery sizes from 20kWh to 80kWh+.*
- 2. Build a better understanding of how vehicle usage affects charging behaviour.*
- 3. Evaluate the reliability and acceptability to customers of controlling the demand for electricity/taking energy from vehicles and putting it back into the grid.*

The results of this project will be of interest and will be communicated to the GB energy/utility community, to UK government, to the automotive and plug-in vehicle infrastructure industry and to the general public.

Short summary

Electric Nation, the world's largest EV trial, is revolutionising domestic plug-in vehicle charging. By engaging 500-700¹ plug-in vehicle drivers in trials, the project is answering the challenge that when local electricity networks have 40% - 70% of households with electric vehicles, at least 32% of these networks across Britain will require intervention. Electric Nation is pioneering our electric future.

¹ Updated from '500' in the first strategy draft, June 2016, to '500-700' in a marketing strategy update session, October 2016.

Appendix 2 – Newsletter to disseminate learning



SMART CHARGING APP - EARLY INDICATIONS OF EV DRIVER USAGE

Electric Nation trial participants have been given the opportunity to interact with smart charging systems through apps; early findings show that smart charging override is an important function, but only for a minority of EV drivers.

[READ MORE](#)



FINAL EV SMART CHARGER IS INSTALLED FOR THE FULLY RECRUITED ELECTRIC NATION PROJECT

The Electric Nation project has installed its final smart charger as part of its trial with electric vehicle (EV) owners. The project will now be assessing the smart charging technology and feedback from trial participants.

[READ MORE](#)



COME AND VISIT ELECTRIC NATION AT LCV2018

The Electric Nation project will have a presence on the Western Power Distribution stand C3 206 at the Cenex-LCV2018 annual national low carbon vehicle event which takes place at Millbrook, 12th-13th September 2018...

[READ MORE](#)



NEW WPD SMART CHARGING VIDEO

Western Power Distribution has produced an animated video about the growth of electric vehicles and smart charging which can be viewed on the Electric Nation home page:

www.electricnation.org.uk

[READ MORE](#)

[VISIT THE ELECTRIC NATION WEBSITE](#)

If you no longer wish to receive email communications regarding Electric Nation [unsubscribe here](#)

COLLABORATION PARTNERS

**WESTERN POWER
DISTRIBUTION**
Serving the Midlands, South West and Wales



Electric Nation is the customer-facing brand of CarConnect, a Western Power Distribution (WPD) and Network Innovation Allowance funded project. WPD's collaboration partners in the project are EA Technology, DriveElectric, Lucy Electric GridKey and TRL.



JOIN THE CONVERSATION @ELECTRICNATION_

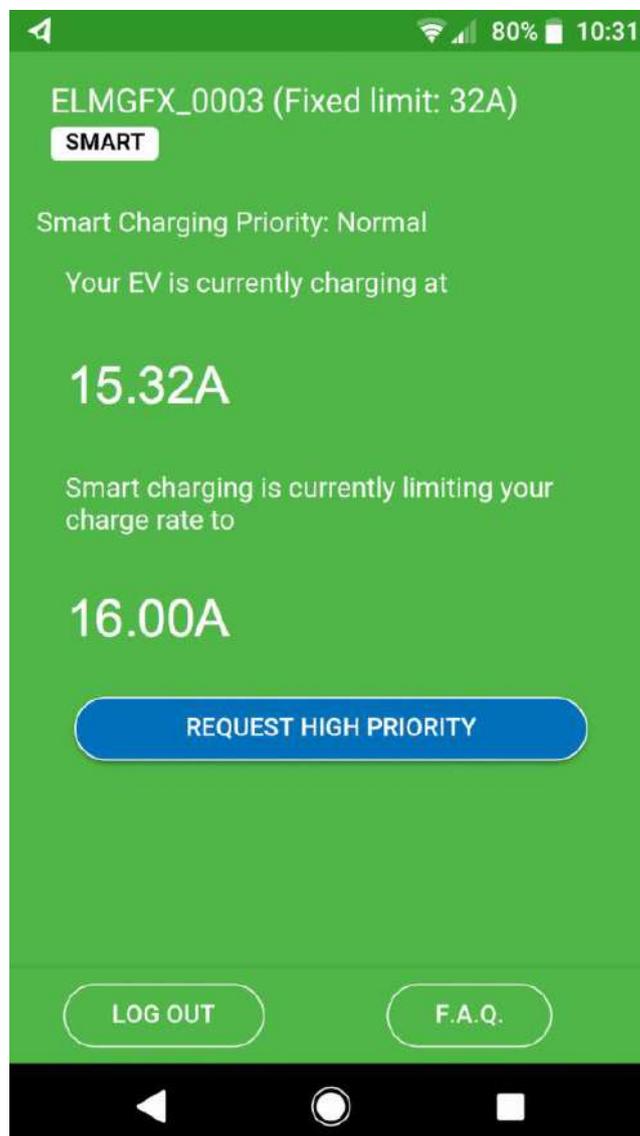
Appendix 3 – Website Project News Items

Published since last report

6 SEPTEMBER 2018

SMART CHARGING APP – EARLY INDICATIONS OF EV DRIVER USAGE

Electric Nation trial participants have been given the opportunity to interact with smart charging systems through apps; early findings show that smart charging override is an important function, but only for a minority of EV drivers.



Over spring and summer, 248 Electric Nation trial participants have been given the opportunity to interact with the GreenFlux smart charging system through a mobile phone app.

The app allows EV drivers to request 'High Priority' charging – meaning that their charger would be excluded from demand management events and would charge at its maximum rate. High Priority only has an effect when a demand management event occurs. These events happen when the power drawn by all EVs on charge exceeds the capacity limit for the trial group (typically from 17:30 – 19:00 on weekdays).

Also, 209 trial participants in the other arm of the trial, under the CrowdCharge smart charging system, have been given the opportunity to use an alternative web app. The CrowdCharge web app demonstrates a different way of interacting with the smart charging system; trial participants can enter journey plans to help the system optimise energy delivery to those with the greatest short-term need. This trial began in July 2018 and results will be published later in 2018.

In terms of usage, 40% of the GreenFlux group didn't use the app at all, and 15% only used it once – suggesting that a high proportion of trial participants are not concerned by smart charging events.

Trial participants have also been surveyed regarding their experience of using the app (there have been 149 respondents to date). Of the 70% who said they'd tried the app the following reasons were given for its use:

- 2% didn't want to wait for charging to start
- 57% used it for individual journey requirements
- 36% just tried it to test it
- 5% used it for other reasons, including wanting to ensure they utilised their home PV generation when charging their EV (although this is not a feature of the app).

High Priority requests were made for transactions throughout the day but only 27% of requests on week days, and 9% on weekends, were made for transactions starting in the peak period (17:30-19:00).

Our early conclusion from this element of the Electric Nation smart charging trial is that having the ability to override smart charging events is an important function that a small minority of EV drivers will use from time to time, with an even smaller minority using it habitually. The effect of this small group of users on other drivers charging during peak demand periods, who therefore have a reduced share of the remaining group capacity, will be minimal.

6 SEPTEMBER 2018

COME AND VISIT ELECTRIC NATION AT LCV2018

The Electric Nation project will have a presence on the Western Power Distribution stand C3 206 at the Cenex-LCV2018 annual national low carbon vehicle event which takes place at Millbrook, 12th-13th September 2018.



Nick Storer will also be presenting about the latest Electric Nation project findings at the event 11:00 on 12th September ('E-Mobility Learning from Large Scale Projects for Transport' session).

Cenex-LCV2018 is expected to attract nearly 4,000 delegates and includes a comprehensive seminar programme, a technology exhibition with broad business-to-business focus, a Ride & Drive in a test track environment, and networking activities.

Highlights of the two-day event include:

- Keynote presentations by Rt Hon Richard Harrington, Parliamentary Under-Secretary of State Industry & Energy; Dr Graham Hoare OBE, Ford Motor Company and Automotive Council Technology Group; Ian Constance, Advanced Propulsion Centre; and Dr Ian Campbell, InnovateUK.
- Over 90 senior figures from the industry, including the Ford Motor Company, McLaren and the National Grid, will join other innovators, experts and policy-makers to review and discuss the future of low carbon vehicles and supporting energy infrastructure in the event's largest-ever seminar programme. Topics include trends in electric vehicles (EVs) and e-mobility, ultra-low emission vehicle (ULEV) policy and market trends, and smart charging solutions for EV business fleets.

- The Low Emission Truck Stop is hosted by Innovate UK and the LowCVP – showcasing cutting-edge examples of clean and low carbon trucks and vans. Winners of the low emission freight and logistics trial funding competition will be showing their vehicles and speaking to visitors about their innovative projects and technologies on display. Robert Llewellyn from Fully Charged will lead the vehicles in a convoy, which will depart from the steering pad at 3:45pm on Day 2 of the event.
- A Connected and Autonomous Vehicles Showcase, sponsored by Meridian Mobility and supported by The Centre for Connected and Autonomous Vehicles, Innovate UK and Department for International Trade, will be launched. This new event feature offers UK companies, universities and project consortia the opportunity to showcase the latest developments and results from UK Connected and Autonomous Vehicle projects.
- The Ride and Drive offers the opportunity to put the latest vehicles through their paces on Millbrook's unique testing track facilities.

To review the full list of speakers and seminars at Cenex's 11th low carbon vehicle event, LCV2018, visit <https://www.cenex-lcv.co.uk/seminars>, or follow @LCV_event on Twitter.

To register free of charge for Cenex-LCV2018, please click here: www.cenex-lcv.co.uk

18 SEPTEMBER 2018

ELECTRIC NATION AT THE CENEX LOW CARBON VEHICLE 2018 EVENT

Electric Nation was represented on the Western Power Distribution stand at the Cenex Low Carbon Vehicle (LCV) 2018 event which took place at Millbrook Proving Ground on 12-13 September, and Nick Storer gave a presentation about the project in the 'E-Mobility Learning from Large Scale Projects for Transport' session.



Smart charging, as being trialled by the Electric Nation project, was especially relevant at the LCV2018 event because the technology that could support it in the future is being mandated in the government's Automated and Electric Vehicles Bill.

There was lots of interest in Electric Nation, with a steady stream of visitors to the stand wanting to find out more about the project, what smart charging is, why it is needed, and to find out more about preliminary results from the trial.

Nick Storer, Electric Nation's Project Manager, explained in his presentation how increasing numbers of electric vehicles in the coming years could place strain on local electricity networks, and in some instances, why the networks may require upgrading. Ultimately this might lead to electricity cables under local roads having to be replaced, requiring roads to be dug up, with potential disruption and cost implications. Smart charging could provide an alternative solution to this problem.

Nick explained how the Electric Nation project was trialling EV smart charging (demand management) systems with trial participants, and preliminary results so far suggest that

very few people had been adversely impacted when these events had occurred. Apps have been available to allow some participants to interact with the smart charging systems on trial. A number of participants had used the CrowdCharge 'journey planning' function to enable the system to manage their charging. However, few people had used the 'request high priority' function of the GreenFlux system to override demand management.

Electric Nation is still in the trial phase, with full results from the project due to be communicated in 2019. One area that the project will be looking at is whether incorporating a time of use tariff – such as having charging costs as 10p per kWh overnight compared to 30p at peak times – will be a big enough incentive to shift people's charging from peak times, and as a result, will the whole peak EV charging problem go away?

[Read a review of the LCV2018 event here.](#)

