



e-mobility NSR

NORTH SEA REGION ELECTRIC MOBILITY NETWORK

NEWSLETTER ISSUE 2 | 2012

REVIEW:
Future of
fast charging



PREVIEW:
Introducing the
information centres



UPCOMING: INTERNATIONAL CONFERENCE ON ELECTRIC MOBILITY AND CHARGING TECHNOLOGIES 2012

25TH OCTOBER 2012, GOTHENBURG SWEDEN

Editorial

DEAR READER,



Prof. Walter Leal

Welcome to the second newsletter of the North Sea Electric Mobility Network (E-Mobility NSR) project. The project's aim is to improve e-mobility in the North Sea Region. The Interreg North Sea Region project E-Mobility NSR will help to create favourable conditions to promote the common development of e-mobility in the North Sea Region. Transnational support structures in the shape of a network and virtual routes are envisaged as part of the project, striving towards improved accessibility and wider use of e-mobility in the North Sea Region countries.

The newsletter includes reports on the project's activities and events held over the last six months, as well as information about upcoming activities. It also contains an introduction to the first E-Mobility Information Centres (EMICs) that have been set up within the partner countries.

"The field of e-mobility is a fast-moving area within transport, generating high interest from stakeholders in various sectors. We are glad that our consortium consists of highly motivated partners who have joined forces to contribute to the deployment of sustainable mobility to create truly transnational networks of stakeholders."

We hope that you find the information provided by the project valuable and we invite you to join our activities. Enjoy your reading!

Enjoy the reading,

Prof. Walter Leal,
lead partner E-Mobility NSR



Photos: Lindholmen Science Park

On 25 October 2012, the Swedish E-Mobility NSR partner Lindholmen Science Park (LSP) organises a large public event on "Electric Mobility and Charging Technologies" at the Lindholmen Conference Centre in Gothenburg, Sweden. The organizers expect more than 100 participants from the Scandinavian as well as further European countries. Covering many related themes from policy to technology to latest experiences with electric vehicles, the organizers aim to attract international participants from industry, academia and government. Thematically, the one-day conference presents latest developments and technologies from a range of perspectives. Drawing from experiences of a European consultation which had been con-

ducted in the frame of the E-Mobility NSR project as well as detailed insights from a Swedish



government agency, the speakers of the first set of presentations provide an outlook on today's charging infrastructure policies and technologies. The second set of presentations deals with the human factor of e-mobility: The perceptions and experiences of electric vehicle users. The session continues with an industry speaker who will offer a glimpse on the future of electric cars. In their presentation, the host organisation then introduces a further theme by elaborating on the outlook for the electrification of heavy transport. Speakers from Swedish authorities and industry then showcase best practices on current ways and technological means how this electrification may be achieved. The final session is devoted to the electrification of public transport.



European Union



The European Regional Development Fund



Hamburg: ELECTRIC VEHICLES FAST CHARGING IN THE NSR

On 15th March 2012, the two project teams from Lindholmen Science Park as well as Hamburg University of Applied Sciences joined forces to organise a specialist workshop. More than 40 international participants, among them many stakeholders from e-mobility related sectors, such as utilities and the automotive sector, came to Hamburg to share experiences and inform colleagues about the future of fast charging for e-vehicles in the North Sea Region. The one-day workshop provided insights on the latest news in the development and provision of fast charging technology solutions for e-vehicles (also referred to as "quick charging" in some countries).

During the first half of the day, speakers from industry, service providers, the automotive industry, technology transfer organisations and local authorities presented current initiatives, projects and new developments. In the afternoon session, the e-mobility partners showcased current country experiences on fast charging, elaborated on the challenge of defining a unified standard and described the outlook for future developments and solutions. At the end of the workshop, participants discussed perceived and existing barriers to further deployment of fast charging within the NSR, and presented the results of their discussions to the plenary.



Participants showed a high level of interest during the workshop on EV Fast Charging in Hamburg (Photos: HAW Hamburg)

Newcastle: EV BATTERY TECHNOLOGIES, PUBLIC USER EXPERIENCES AND PUBLIC POLICY IMPLICATIONS

On 29 March 2012 the Second E-Mobility NSR Partner Meeting took place in Newcastle, where the project partners were formally welcomed by Prof. Peter Golding, Prof. Vice Chancellor for Research and Innovation. Jon Jordan, the UK National Contact for the Interreg IVb programme, also took part in the meeting.

He testified that the partnership appears to be making good progress and the project has all the hallmarks of success.

On 30 March 2012 the transnational E-Mobility NSR Expert Seminar and Public Event took place. In the morning, a half-day Transnational Expert/Industry Meeting on Electric Vehicles, Battery and Smart Charging Technologies brought industry experts, innovative vehicle and workforce skills developers together with experts from academic and research institutions to allow them to exchange experiences and assess potential ways forward. Speakers came from local and also Scottish industry, with delegates not only from the region but across the country (such as from the Centre for Excellence for Low Carbon and Fuel Cell Technologies, and the National Renewable Energy Centre). There were over 50 delegates at this event.

In the afternoon, a public transnational meeting on User Experiences, Engagement and Public Policy Implications followed, involving over 50 delegates from all over the north-east of England, largely attracted by media coverage. The meeting explored current and forward-looking policy designs, looked at the situation in the United States, and reviewed the ongoing SWITCH EV national trial evaluations. Regional policymakers

with national and sometimes global connections were invited as speakers.

Both parts of the day were filled with interesting debate and questions, and the audience appeared to be fully engaged. Two students of Geography and Environment attending the transnational day undertook to write an assessed report on the subject of students and their perceptions of e-mobility, and by doing a survey came to the conclusion that most students have a lack of knowledge of and familiarity with EVs. For the respondents this seemed to be the biggest barrier to considering buying an EV when in employment. But just a few weeks earlier, in March, Nissan exhibited their electric car, the Nissan Leaf, as part of the University's activities for Climate Week. Since the E-Mobility NSR event, Northumbria University has joined the North-East's £7.8 million Plugged in Places scheme, and has installed two charging points on campus; the University has also now signed up to the Electric Vehicle trial, designed to collect data on ultra-low carbon vehicles. As part of this trial we are offering an electric vehicle to our staff to replace their own internal combustion engine vehicle (petrol or diesel) for a period of 28 days, asking them to commute to work with a Peugeot iOn.



E-Mobility NSR project partners in Newcastle (Photo: Northumbria University)

Delft: EUROPEAN CONSULTATION ON E-MOBILITY WITH POLICYMAKERS ACROSS THE NSR

On 11 May 2012, Delft University of Technology, Netherlands, hosted a European consultation on e-mobility. The objective of this meeting of experts was to exchange knowledge and expertise gained from municipal experiences with policies to stimulate e-mobility. Policymakers from various cities across the North Sea Region discussed the effectiveness, efficiency and feasibility of a wide range of policy measures. In terms of methodology, a Group Decision Room system was applied to structure the discussion. This approach enabled participants to contribute to the discussion anonymously. A survey was made of successful and less successful policy measures, which were then categorised, discussed and ranked. One of the issues that was debated most anima-

tedly during the meeting was the question of the extent to which (local) governments should help businesses (such as car makers or charging pole manufacturers) to sell their EVs, equipment and services. Opinions differed on whether public money should be applied to support these, basically private, parties, and if so, for how long. Another question that emerged from the discussion was whether newly developed urban areas should include a standard EV infrastructure or should merely be delivered ready to 'plug in' different types of EV infrastructure in the future. Furthermore, the more general question arose of whether policies should be technology-neutral (focusing on, for example, a reduction in CO₂ levels) or technology-specific (focusing on a specific type of vehicle).

On the whole, it was a lively and interesting discussion. The results of the European Consultation will spark further investigation of the effectiveness and feasibility of local e-mobility policies. A report on the meeting in Delft is available on the E-Mobility NSR website.



Participants of the European Consultation in Delft (Photo: TU Delft)



Høje-Taastrup & Hamburg: INTRODUCING THE E-MOBILITY INFORMATION CENTRES (EMICs)

Within the **E-Mobility NSR project**, information centres – so-called **EMICs (Electric Mobility Information Centres)** – will be set up within the North Sea Region. The EMICs will be established either on already existing or planned infrastructure and aim to facilitate the transition to electric mobility throughout the North Sea Region. The following section briefly introduces the EMICs in Høje-Taastrup and Hamburg.

EMIC IN HOEJE-TAASTRUP



Graphic of the E-Mobility NSR EMIC in Denmark



Interior view of the EMIC to be opened in Hedehusene

The Høje-Taastrup EMIC, located in the Greater Copenhagen area, is currently in the implementation phase and is planned to be opened in autumn 2013. As can be seen in the picture above, Høje-Taastrup Kommune (HTK) has already identified the physical location for the EMIC.

- 1 The physical EMIC embraces a virtual EMIC: both are closely connected with the aim of reaching external e-mobility users. The overall purpose of the virtual EMIC – taking the form of a user-friendly website and Smartphone apps – is to help both private citizens and companies in making the right choice about available e-mobility solutions.
- 2 Furthermore, the website is seen as a practical link between suppliers and consumers, as well as a template for other partners in the North Sea Region. The physical EMIC will be offering a range of information to visitors on local, national and transnational e-mobility matters and solutions.
- 3 The house will function as a living showcase with a range of high end e-bikes, e-scooters and e-vehicles, and may act as inspiration in terms of urban mobility concepts, and high tech technologies on the e-mobility scene. Finally, we will offer charging possibilities for all e-vehicles.

To be opened in
autumn 2012 at:

Hedehusene Station
Hovedgaden 437C
DK-2640 Hedehusene



EMIC IN HAMBURG

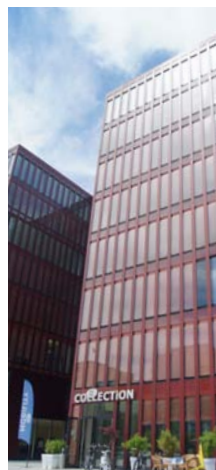


E-Collection – the EMIC in Hamburg

HAW Hamburg's E-Mobility Information Centre cooperates with an existing EMIC. The Hamburg EMIC is located in the HafenCity, one of the most prominent inner-city waterfront development projects in the world.

Hamburg's EMIC, "E-Collection", was set up in October 2010 as an independent branch of the o.m.t. GmbH, Lübeck, a leading company for electric mobility solutions and a source of inspiration for urban mobility concepts, integrating sustainability with lifestyle and high-tech products. Moreover, it hosts the Hamburg chapter of the national electric mobility association ("Bundesverband Elektromobilität") and is actively engaged in the e-mobility scene in the Hamburg metropolitan area and beyond.

E-Collection organises information events; it showcases a range of e-vehicles, including cars, scooters, and bikes, as well as further technologies relating to electric mobility; and provides a range of information for visitors on local, national and transnational e-mobility themes and initiatives, such as this E-Mobility NSR project.



Open for the public at:

E-COLLECTION
Am Sandtorkai 50
20457 Hamburg



UPCOMING ACTIVITIES

12th August 2012 | MUNICH

e-miglia 2012

20th-22nd Sept 2012 | BOZEN

Klimamobility2012

08th-10th Oct 2012 | STUTT GART

F-Cell & Battery & Storage

23rd-24th Oct 2012 | GOTHENBURG

Project partner meeting

25th Oct 2012 | GOTHENBURG

International Conference on
Charging Infrastructure Technologies

23rd-25th Oct 2012 | MUNICH

eCarTec München

19th-22nd Nov 2012 | BRUSSELS

European Electric Vehicle Congress

05th-08th Mar 2013 | HOEJE-
TAASTRUP

Conference on Experiences of EV Users



Subscribe to our electronic newsletter on the website to receive the latest information on upcoming project activities, relevant events, e-mobility studies and more:

www.e-mobility-nsr.eu

Hamburg University of Applied Sciences
Faculty of Life Sciences

Research and Transfer Centre
'Applications of Life Sciences'

Prof. Dr. (mult.) Dr. h.c. (mult.) Walter Leal
Franziska Mannke
Natalie Fischer

Lohbrügger Kirchstrasse 65
21033 Hamburg, Germany

Tel.: 0049 (0)40 42875-6324

Fax: 0049 (0)40 42875-6079

E-mail: e-mobility@ls.haw-hamburg.de

Web: www.haw-hamburg.de/ftz-als.html

NEWCASTLE: A HOTSPOT FOR BIKING INNOVATION

Looking back to the days of Stephenson and his 'Rocket', the North-East of England has long been recognised for transport innovations. It now seems to be making a name for itself in innovative vehicles of the two-wheeled variety. 2010 saw the launch of Scratchbikes, a simple, low-cost bike sharing scheme. With 150 bikes and a beautifully simple text system, students and staff at Newcastle University have loved the convenience and freedom offered by the scheme (www.scratchbikes.co.uk). 2011 saw the system expanded to 20 stations across Newcastle-upon-Tyne with support from Newcastle NE1 Limited, a Business Improvement District (BID) company.

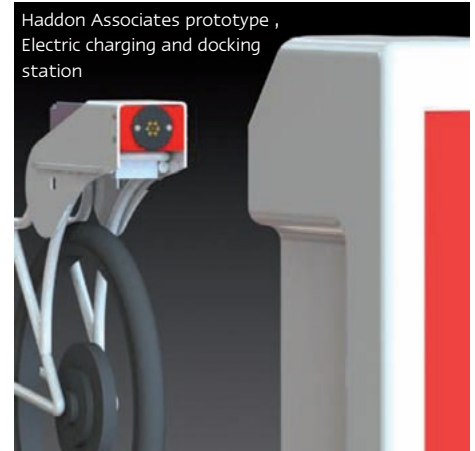
In 2011, Haddon Associates (www.haddonassociates.com) initiated a trial of electric bikes with Newcastle University staff. The trial has been a success, with staff getting to meetings quicker by bike than in a car and even starting to cycle to work – which many would never have considered without that helpful battery.

This year, Scratchbikes have now launched the Grand Scheme (www.grandscheme.co.uk) to enable them to deliver their simpler technology and lighter infrastructure to more cities. Their patented technology is a brand new approach to bike sharing, offering GPS tracking, wireless communications, motion sensors and solar charging to deliver low-cost bike sharing for Smart Cities.

Meanwhile Haddon Associates have been collaborating with Durham University engineers to design electric bicycle charging/locking stations, and with Northumbria University Interface Design teams to develop mobile interfaces. The two companies intend to combine their flexible technologies to bring electric bike sharing to more users in more cities.



Pollution exposure monitoring system at Newcastle University (Photo: Newcastle University)



▶ Please contact andy@haddonassociates.com if you are interested in collaborating



AMSTERDAM METROPOLITAN REGION ELECTRIC PROJECT LAUNCHED



Photo: Amsterdam Metropolitan Region

On January 2012 the MRA electric project began, focusing on stimulating the introduction of electric mobility in the Amsterdam Metropolitan Region (MRA). The project's activities include launching a website connecting and presenting the online information already available on electric mobility. Its aim is primarily to answer FAQs of municipalities within the MRA, and to inform consumers, citizens and private parties. Data collection is currently taking place. Furthermore, the MRA project has gathered input and informed MRA

municipalities on electric mobility activities through a networking session on 5th June 2012. During this session Maarten Linnenkamp and Peter van Deventer presented the role of governance and opportunities for governments in the transition to electric mobility, for example the 'Green Deal' that the MRA is going to close with the national government. The project's aim is to stimulate the purchase of electric vehicles and set up charging infrastructure in municipalities within the Amsterdam Metropolitan Region.